Board of Governors of the Federal Reserve System

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Accessible Material

October 2012 Tealbook Tables and Charts

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Last update: January 5, 2018

Accessible Material

October 2012 Tealbook A Tables and Charts†

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Line chart, by ratio scale where 2007:Q1 = 100, 2007 to 2014. Data are quarterly averages. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2007 at about 100 and decreases to about 89 by 2008. It increases to about 101 by 2009 and then generally decreases to about 84 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2012 when it begins decreasing at a slower rate. It ends in 2014 at about 85.

Note: Blue shading represents the projection period, which begins in 2012:Q4.

[Box:] The Effects of the 2012 Drought

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Note: The series plotted is an index of farm crop production constructed by chain-weighting USDA estimates of physical production of corn, soybeans, and wheat with corresponding spot prices. Sales of these three crops account for roughly two-thirds of total annual crop sales. The areas shaded yellow, 1974, 1980, 1983, 1988, 1993, and 2012, denote years in which losses from drought were substantial.

Source: USDA data chain-aggregated by FRB staff.

Figure: Crop Price Index

Line chart, by index where June 2012 = 100, 2007 to 2014. The series begins in 2007 at about 60 and generally increases to about 109 by 2008. It decreases to about 57 by 2010 and then generally increases to about 130 by 2012. It then decreases to about 100 by 2014.

Note: Staff aggregate of spot prices for corn, wheat, and soybeans, projected using futures prices. Seasonally adjusted by FRB staff. Blue shading represents the projection period, which begins in 2012:Q4.

Source: Commodity Research Bureau.

Figure: PCE Food and Beverages Price Index

Line chart, by quarterly percent change, annual rate, 2007 to 2014. There is a horizontal line at zero. There are two series, Current Tealbook and June Tealbook. Current Tealbook begins in 2007 at about 5.5 and generally increases to about 9.75 by 2008. It decreases to about -3.8 by 2009 and then generally increases to about 6.2 by 2011. It decreases to about .5 by 2012 and then increases to about 3.9 by 2013. It ends in 2014 at about 1. June Tealbook begins in 2007 at about 5.5, and generally increases to about 9.75 by 2008. It decreases to about -3.8 by 2007 and then generally increases to about 6.5 by 2011. It then decrease to about 1.3 by 2014.

Note: PCE food and beverages refers to off-premises consumption. Blue shading represents the projection period, which begins in 2012:Q4.

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

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2012:Q3		2012:Q4		2013:Q1	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	**1.3**	**2.0**	**1.7**	**2.0**	**2.0**	**1.8**
Private domestic final purchases	2.1	2.1	2.2	3.1	1.3	1.4
Personal consumption expenditures	2.3	2.3	2.2	3.1	1.1	1.1
Residential investment	9.7	14.3	5.5	13.9	10.5	13.4
Business fixed investment	-1.0	-2.5	1.5	.8	.6	1.0
Government purchases	-1.7	.6	-1.1	-1.6	-1.5	-1.5
Contributions to change in real GDP						
Inventory investment[1]	-.1	.1	.2	.0	1.2	.8
Net exports[1]	.0	.0	-.2	-.2	.0	.1
Unemployment Rate[2]	**8.3**	**8.1**	**8.3**	**8.0**	**8.2**	**8.0**
PCE Chain Price Index	**1.9**	**1.7**	**1.7**	**2.1**	**1.2**	**.9**
Ex. food and energy	1.3	1.2	1.5	1.4	1.6	1.6

1. Percentage points. Return to table

2. Percent. Return to table

Recent Nonfinancial Developments (1)

Figure: Real GDP and GDI

Line chart, by 4-quarter percent change, 2003 to 2012. There is a horizontal line at zero. There are two series, Gross domestic product and Gross domestic income. Gross domestic product begins in 2003 at about 1.8 and generally increases to about 4.1 by 2004. It generally decreases to about -4.25 by 2009 and then generally increases to about 2 by 2012:Q2. Gross domestic income begins in 2003 at about 1.25 and generally increases to about 4.1 by 2006. It generally decreases to about -5 by 2009 and then generally increases to about 2 by 2012:Q2.

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

Figure: Change in Private Payroll Employment

Line chart, by thousands of employees, 2003 to 2012. There is a horizontal line at zero. There are two series, Current Tealbook and 3-month moving average. Current Tealbook begins in 2003 at about 50 and generally increases to about 375 by 2005. It generally decreases to about -900 by 2009 and then generally increases to about 100 by September 2012. 3-month moving average begins in 2003 at about -25 and generally increases to about 275 by 2004. It generally decreases to about -800 by 2009 and then generally increases to about 110 by September 2012.

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

Figure: Unemployment Rate

Line chart, by percent, 2003 to 2013. The series begins in 2003 at about 5.9 and generally decrease to about 4.5 by 2007. It generally increases to about 10 by 2009 and then generally decreases to about 7.9 by September 2012.

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

Figure: Manufacturing IP excluding Motor Vehicles and Parts

Line chart, by 3-month percent change, annual rate, 2003 to 2012. There is a horizontal line at zero. The series begins in 2003 at about 0 and generally increases to about 14 by 2005. It generally decreases to about -25 by 2009 and then generally increases to about 14 by 2010. It then generally decreases to about -1 by September 2012.

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

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 12.6 and generally decreases to about 3 by 2009. It then generally increases to about 9.5 by September 2012.

Source: Ward's Auto Infobank.

Figure: Sales of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2003 to 2012. The series begins in 2003 at about 16 and generally increases to about 20 by 2005. It generally decreases to about 9 by 2009 and then generally increases to about 15 by September 2012.

Source: Ward's Auto Infobank.

Figure: Real PCE Goods excluding Motor Vehicles

Line chart, by billions of chained (2005) dollars, 2003 to 2012. The series begins in 2003 at about 2400 and generally increases to about 2950 by 2007. It generally decreases to about 2800 by 2009 and then increases to about 3150 by September 2012.

Note: Figures for July, August, and September 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, by thousands of units, annual rate, 2003 to 2012. There are two series, Starts and Adjusted permits. Starts begins in 2003 at about 1500 and generally increases to about 1800 by 2006. It generally decreases to about 350 by 2008 and then generally increases to about 575 by September 2012. Adjusted permits generally follows the same path as Starts.

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

Source: U.S. Census Bureau.

Figure: Single-Family Home Sales

Line chart, by thousands of units, annual rate, 2003 to 2012. There are two series, New and Existing. New begins in 2003 at about 1050 and generally increases to about 1350 by 2005. It then generally decreases to about 400 by August 2012. Existing begins in 2003 at about 5400 and generally increases to about 6250 by 2005. It generally decreases to about 3475 by 2008 and then increases to about 5000 by 2009. It then generally decrease to about 4500 by August 2012.

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

Figure: Nondefense Capital Goods excluding Aircraft

Line chart, by billions of dollars, 2003 to 2012. There are two series, Orders and Shipments. Orders begins in 2003 at about 49 and generally increases to about 70 by 2008. It generally decreases to about 46 by 2009 and then generally increases to about 61 by August 2012. Shipments begins in 2003 at about 49 and generally increases to about 66 by 2008. It generally decreases to about 52 by 2009 and then generally increases to about 64 by August 2012.

Source: U.S. Census Bureau.

Recent Nonfinancial Developments (3)

Figure: Nonresidential Construction Put in Place

Line chart, by billions of chained (2005) dollars, 2003 to 2012. The series begins in 2003 at about 255 and generally increases to about 350 by 2008. It generally decreases to about 190 by 2011 and then generally increases to about 235 by August 2012.

Note: Nominal CPIP deflated by BEA prices through 2012:Q2 and by staff's estimated deflator thereafter.

Source: U.S. Census Bureau.

Figure: Inventory Ratios excluding Motor Vehicles

Line chart, by months, 2003 to 2012. There are two series, Staff flow-of-goods system and Census book-value data. Staff flow-of-goods system begins in 2003 at about 1.599 and generally decreases to about 1.48 by 2007. It generally increases to about 1.62 by 2009 and then generally decreases to about 1.51 by August 2012. Census book-value data begins in 2003 at about 1.3 and generally decreases to about 1.18 by 2008. It generally increases to about 1.41 by 2009 and then decreases to about 1.23 by August 2012.

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

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

Figure: Defense Spending

Line chart, by billions of chained (2005) dollars, 2003 to 2012. There are two series, Unified (monthly) and NIPA (quarterly). Unified (monthly) begins in 2003 at about 451 and generally increases to about 690 by 2010. It then decreases to about 530 by September 2012. NIPA (quarterly) begins in 2003 at about 450 and generally increases to about 650 by 2010. It then decreases to about 590 by September 2012.

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

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

Figure: Exports and Non-Oil Imports

Line chart, by billions of dollars, 2003 to 2012. There are two series, Non-oil imports and Exports. Non-oil imports begins in 2003 at about 110 and generally increases to about 180 by 2008. It decreases to about 130 by 2009 and then generally increases to about 190 by August 2012. Exports begins in 2003 at about 81 and generally increases to about 165 by 2008. It decreases to about 120 by 2009 and then generally increases to about 180 by August 2012.

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

Figure: Total PCE Prices

Line chart, by percent, 2003 to 2012. There is a horizontal line at zero. There are two series, 12-month change and 3-month change. 12-month change begins in 2003 at about 2 and generally increases to about 4 by 2008. It generally decreases to about -1 by 2009 and then generally increases to about 1.9 by September 2012. 3-month change begins in 2003 at about 2 and generally increases to about 8.5 by 2005. It generally decreases to about -9 by 2008 and then generally increases to about 3.8 by September 2012.

Note: 3-month changes are at an annual rate. July, August, and September 2012 are staff estimates.

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

Figure: PCE Prices excluding Food and Energy

Line chart, by percent, 2003 to 2012. There are two series, 12-month change and 3-month change. 12-month change begins in 2003 at about 1.8 and generally increases to about 2.5 by 2007. It generally decreases to about 1.15 by 2011 and then generally increases to about 1.7 by September 2012. 3-month change begins in 2003 at about 0.9 and generally increases to about 3.25 by 2007. It generally decreases to about 0.4 by 2009 and then generally increases to about 2.5 by 2011. It then generally decreases to about 1 by September 2012.

Note: 3-month changes are at an annual rate. July, August, and September 2012 are staff estimates.

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

Projections of Real GDP and Related Components

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

Measure	2011	2012 H1	2012 H2	2013	2014
Real GDP	**2.0**	**1.6**	**2.0**	**2.6**	**3.5**
Previous Tealbook	2.0	1.8	1.5	2.4	3.2
Final sales	1.7	2.1	2.0	2.5	3.5
Previous Tealbook	1.7	2.1	1.4	2.1	3.1
Personal consumption expenditures	1.9	2.0	2.7	2.8	3.7
Previous Tealbook	1.9	2.1	2.3	2.4	3.4
Residential investment	3.9	14.3	14.1	14.8	13.2
Previous Tealbook	3.9	14.3	7.6	11.9	12.4
Nonresidential structures	6.9	6.6	-4.2	2.7	2.3
Previous Tealbook	6.9	6.5	-2.3	2.2	2.2
Equipment and software	11.4	5.1	.5	4.2	7.5
Previous Tealbook	11.4	4.8	1.3	5.1	7.2

Federal purchases	-4.2	-2.3	-1.4	-4.2	-4.2
Previous Tealbook	-4.2	-2.2	-2.8	-4.2	-4.3
State and local purchases	-2.7	-1.6	.0	.3	.9
Previous Tealbook	-2.7	-1.6	-.5	.3	.9
Exports	4.3	4.8	1.1	5.1	6.2
Previous Tealbook	4.3	5.2	3.3	4.5	5.7
Imports	3.5	2.9	1.4	3.9	5.0
Previous Tealbook	3.5	3.0	3.3	4.2	4.8
	Contributions to change in real GDP (percentage points)				
Inventory change	.3	-.4	.1	.2	.0
Previous Tealbook	.3	-.3	.0	.3	.1
Net exports	.0	.1	-.1	.0	.0
Previous Tealbook	.0	.2	-.1	-.1	.0

Figure: Real GDP

Line chart, by 4-quarter percent change, 1983 to 2014. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1984 at about 8.4 and generally decreases to about -1 by 1991. It generally increases to about 6 by 2000 and then generally decreases to about -4.25 by 2009. It then generally increases to about 3.9 by 2014. Previous Tealbook generally follows the same path as Current Tealbook and ends in 2014 at about 3.8.

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:Q3.

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, 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 1 and generally decreases to about -3 by 2009. It increases to about 3 by 2010 and then generally decreases to about 1.8 by 2012. It then generally increases to about 3.9 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 1012 when it begins increasing at a slower rate. It ends in 2014 at about 3.4.

Figure: Residential Investment

Line chart, by 4-quarter percent change, 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 -24 and generally decreases to about -28 by 2009. It generally increases to about 6 by 2010 and then decreases to about -7 by 2011. It then generally increases to about 13 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2012 when it begins increasing at a slower rate. It ends in 2014 at about 12.

Figure: Equipment and Software

Line chart, by 4-quarter percent change, 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 2.5 and generally decreases to about -20 by 2009. It generally increases to about 11 by 2010 and then decreases to about 1 by 2013. It then generally increases to about 7.5 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

Figure: Nonresidential Structures

Line chart, by 4-quarter percent change, 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 15 and generally decreases to about -30 by 2009. It generally increases to about 20 by 2011 and then decreases to about -1 by 2013. It then generally increases to about 2.5 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

Figure: Government Consumption & Investment

Line chart, by 4-quarter percent change, 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 2.9 and generally increases to about 4.25 by 2009. It decreases to about -3.9 by 2011 and then generally increases to about -1 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

Figure: Exports and Imports

Line chart, by 4-quarter percent change, 2008 to 2014. There is a horizontal line at zero. There are four series, Current Exports, Previous Exports, Current Imports, and Previous Imports. Current Exports begins in 2008 at about 10 and generally decreases to about -14 by 2009. It increases to about 12.5 by 2010 and then generally decreases to about 6 by 2014. Previous Exports generally follows the same path as Current Exports. Current Imports begins in 2008 at about 0 and generally decreases to about -18 by 2009. It increases to about 16 by 2010 and then generally decreases to about 5 by 2014. Previous Imports generally follows the same path as Current Imports.

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

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

Aspects of the Medium-Term Projection

Figure: Personal Saving Rate

Line chart, by percent, 1995 to 2015. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 6 and generally decreases to about 1.25 by 2005. It generally increases to about 6 by 2008 and then generally decreases to about 3.6 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until about 2012 when it begins decreasing at a slower rate. It ends in 2014 at 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 Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 4.81 and generally increases to about 6.2 by 2000. It generally decreases to about 5.18 by 2003 and then generally increases to about 6.5 by 2006. It decreases to about 4.7 by 2009 and then generally increase to about 5.5 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2012 when it begins increasing at a slower rate. It ends in 2014 at 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 Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 1 and generally increases to about 1.75 by 2005. It decreases to about 0.30 by 2008 and then generally increases to about 0.8 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2012 when it begins increasing at a slower rate. It ends in 2014 at about 0.75.

Source: U.S. Census Bureau.

Figure: Equipment and Software Spending

Line chart, by share of nominal GDP, 1995 to 2015. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 8.1 and generally increases to about 9.6 by 2000. It generally decreases to about 6.35 by 2009 and then generally increases to about 7.5 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2012 when it begins increasing at a faster rate. It ends in 2014 at about 7.6.

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

Figure: Federal Surplus/Deficit

Line chart, by share of nominal GDP, 1995 to 2015. Data are 4-quarter moving averages. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about -2.8 and generally increases to about 2.1 by 2000. It generally decreases to about -10.5 by 2009 and then generally increases to about -3.9 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

Source: *Monthly Treasury Statement*.

Figure: Current Account Surplus/Deficit

Line chart, by share of nominal GDP, 1995 to 2015. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about -1.9 and generally decreases to about -6.5 by 2005. It generally increase to about -2.5 by 2009 and then decreases to about -3 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2012 when it begins decreasing at a faster rate. It ends in 2014 at about -3.4.

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

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: March 2001-November 2001, and December 2007-June 2009. Blue shading represents the projection period, which begins in 2012:Q3.

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**	**1.5**	**1.8**	**2.0**	**2.1**
Previous Tealbook	3.0	3.4	2.2	1.7	1.8	2.0	2.1
Selected contributions[1]							
Structural labor productivity	1.4	2.6	2.1	1.3	1.4	1.6	1.7
Previous Tealbook	1.4	2.6	2.2	1.5	1.4	1.6	1.7
Capital deepening	.7	1.5	.7	.4	.5	.6	.6
Previous Tealbook	.7	1.5	.7	.4	.5	.6	.7
Multifactor productivity	.5	.8	1.2	.8	.9	.9	1.0
Previous Tealbook	.5	.8	1.2	.9	.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, Current Tealbook and Structural. Current Tealbook begins in 2001 at about 43.75 and generally increases to about 51 by 2009. It then increases to about 58 by 2014. Structural begins in 2001 at about 44 and generally increases to about 57.9 by 2014.

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

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

Figure: Structural and Actual Labor Force Participation Rate

Line chart, by percent, 2001 to 2014. There are two series, Current Tealbook and Structural. Current Tealbook begins in 2001 at about 67.1 and generally decreases to about 66 by 2007. It then generally decreases to about 63.5 by 2014. Structural begins in 2001 at about 66.8 and generally decreases to about 64.9 by 2014.

Note: Blue shading represents the projection period, which begins in 2012:Q4.

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

The Outlook for the Labor Market and Resource Utilization

(Percent change from final quarter of preceding period)

Measure	2011	2012 H1	2012 H2	2013	2014
Output per hour, nonfarm business	.6	.7	1.1	1.3	1.6
Previous Tealbook	.6	.8	.9	1.3	1.6
Nonfarm private employment[1]	175	157	137	170	249
Previous Tealbook	175	159	145	153	218
Labor force participation rate[2]	64.0	63.7	63.6	63.6	63.6
Previous Tealbook	64.0	63.7	63.7	63.7	63.7
Civilian unemployment rate[2]	8.7	8.2	8.0	7.8	7.2
Previous Tealbook	8.7	8.2	8.3	8.0	7.6
Memo:					
GDP gap[3]	-4.0	-4.1	-4.0	-3.4	-2.0
Previous Tealbook	-4.4	-4.4	-4.6	-4.1	-3.1

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 Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 210 and generally decreases to about -300 by 2001. It generally increases to about 300 by 2005 and then decreases to about -800 by 2009. It then generally increases to about 300 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2012 when it begins increasing at a slower rate. It ends in 2014 at about 250.

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

Figure: Unemployment Rate

Line chart, by percent, 1995 to 2015. There are four series, Current Tealbook, Previous Tealbook, Natural rate, and Natural rate with EEB adjustment. Current Tealbook begins in 1995 at about 5.6 and generally decreases to about 4 by 2000. It generally increases to about 10 by 2009 and then decreases to about 7.1 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2012 when it begins decreasing at a slower rate. It ends in 2014 at about 7.8. Natural rate begins in 1995 at about 5 where it remains relatively constant until 2008. It increases to about 6 by 2010 where it remains relatively constant until 2014. Natural rate with EEB adjustment begins in 1995 at about 5 where it remains relatively constant until 2008. It increases to about 6.6 by 2010 and then generally decreases to about 6 by 2014.

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

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

Figure: GDP Gap

Line chart, by percent, 1995 to 2015. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about -2 and generally increases to about 3 by 2000. It generally decreases to about -6.2 by 2009 and then generally increases to about -2 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2012 when it begins increasing at a slower rate. It ends in 2014 at about -3.

Note: The GDP gap is the percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Blue shading represents the projection period, which begins in 2012:Q3.

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

Figure: Manufacturing Capacity Utilization Rate

Line chart, by percent, 1995 to 2015. There is a horizontal line at 79 representing the average rate from 1972 to 2011. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 84.5 and generally decreases to about 71 by 2001. It generally increases to about 79 by 2006 and then decreases to about 64 by 2009. It then generally increases to about 80 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

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:Q4, except as noted.

Inflation Projections

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

Measure	2011	2012 H1	2012 H2	2013	2014
PCE chain-weighted price index	2.5	1.6	1.9	1.3	1.4
Previous Tealbook	2.5	1.6	1.8	1.4	1.4
Food and beverages	5.1	1.0	1.6	2.4	1.0
Previous Tealbook	5.1	1.0	2.4	2.6	.9
Energy	11.9	-3.3	11.0	-4.7	-2.3
Previous Tealbook	11.9	-3.3	6.3	-3.4	-2.2
Excluding food and energy	1.7	2.0	1.3	1.6	1.7
Previous Tealbook	1.7	2.0	1.4	1.6	1.6
Prices of core goods imports[1]	4.3	.5	-.9	1.4	1.5
Previous Tealbook	4.3	.5	-1.1	1.1	1.4

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

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

Figure: Total PCE Prices

Line chart, by 4-quarter percent change, 1995 to 2015. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 2.4 and generally decreases to about 0.6 by 2002. It generally increases to about 4.15 by 2008 and then generally decreases to about -1 by 2009. It then generally increases to about 1.4 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

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

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

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 1995 to 2015. There are four series, Current Tealbook, Previous Tealbook, Current Market-based, and Previous Market-based. Current Tealbook begins in 1995 at about 2.4 and generally decreases to about 1.3 by 1998. It generally increases to about 3.5 by 2006 and then generally decreases to about 1.1 by 2010. It then generally increases to about 1.7 by 2014. Previous Tealbook generally follows the same path as Current Tealbook. Current Market-based begins in 1995 at about 2.1 and generally decreases to about 1 by 1997. It generally increases to about 2.5 by 2008 and then decreases to about 0.75 by 2010. It increases to about 2 by 2011 and then generally decreases to about 1.5 by 2014. Previous Market-based generally follows the same path as Current Market-based.

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

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 1995 at about 1.25 and generally increases to about 8.8 by 2000. It generally decreases to about 0 by 2009 and then generally increases to about 3.2 by 2014.

Previous Productivity and Costs generally follows the same path as Current Productivity and Costs. Current Employment Cost Index begins in 1995 at about 2.8 and generally increases to about 4.6 by 2000. It generally decreases to about 1 by 2009 and then increases to about 3 by 2014. Previous Employment Cost Index generally follows the same path as Current Employment Cost Index.

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

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

Figure: Long-Term Inflation Expectations

Line chart, by percent, 1995 to 2015. There are two series, Thomson Reuters/Michigan, next 5 to 10 years and SPF, next 10 years. Thomson Reuters/Michigan, next 5 to 10 years begins in 1995 at about 3.2 and generally decreases to about 2.6 by 2002. It generally increases to about 3.4 by 2008 and then generally decreases to about 2.6 by October 2012. SPF, next 10 years begins in 2006 at about 2 and generally increases to about 2.25 by 2012:Q3.

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

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

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

The Long-Term Outlook

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

Measure	2012	2013	2014	2015	2016	2017
Real GDP	1.8	2.6	3.5	3.7	3.1	2.4
Previous Tealbook	1.6	2.4	3.2	3.6	3.0	2.9
Civilian unemployment rate[1]	8.0	7.8	7.2	6.2	5.5	5.1
Previous Tealbook	8.3	8.0	7.6	6.7	6.2	5.7
PCE prices, total	1.7	1.3	1.4	1.5	1.8	2.0
Previous Tealbook	1.7	1.4	1.4	1.5	1.8	1.9
Core PCE prices	1.6	1.6	1.7	1.7	1.9	2.0
Previous Tealbook	1.7	1.6	1.6	1.7	1.8	1.9
Federal funds rate[1]	.1	.1	.1	.7	2.6	3.9
Previous Tealbook	.1	.1	.6	2.1	2.9	3.5
10-year Treasury yield[1]	1.8	2.7	3.5	4.1	4.4	4.6
Previous Tealbook	1.9	3.0	3.7	4.2	4.3	4.4

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

Figure: Real GDP

Line chart, by 4-quarter percent change, 2004 to 2020. There is a horizontal line at zero. There are four series, Current Real GDP, Previous Real GDP, Current Potential GDP, and Previous Potential GDP. Current Real GDP begins in 2004 at about 4 and generally decreases to about -4.6 by 2009. It generally increases to about 3.8 by 2015 and then generally decreases to about 2.2 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 2010.

It then generally increases to about 2.1 by 2020. Previous Potential GDP generally follows the same path as Current Potential GDP.

Figure: Unemployment Rate

Line chart, by percent, 2004 to 2020. There are four series, Current Unemployment rate, Previous Unemployment rate, Natural rate, and Natural rate with EEB adjustment. Current Unemployment rate begins in 2004 at about 5.8 and decreases to about 4.4 by 2007. It increases to about 10 by 2009 and then generally decreases to about 5.1 by 2020. Previous Unemployment rate generally follows the same path as Current Unemployment rate. Natural rate begins in 2004 at 5 where it remains relatively constant until 2008. It increases to about 6 by 2009 where it remains relatively constant until 2015. It decreases to about 5.1 by 2017 where it remains relatively constant until 2020. Natural rate with EEB adjustment begins in 2004 at about 5 where it remains relatively constant until 2008. It increases to about 6.4 by 2009 and then decreases to about 6 by 2013. It remains relatively constant here until 2015. It decreases to about 5.1 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 Total PCE prices, Current PCE prices excluding food and energy, and Previous PCE prices excluding food and energy. Current Total PCE prices begins in 2004 at about 2 and generally increases to about 4.2 by 2008. It decreases to about -0.9 by 2009 and then generally increases to about 2.8 by 2011. It then generally decreases to about 2 by 2020. Previous Total PCE prices generally follows the same path as Current Total PCE prices. Current PCE prices excluding food and energy begins in 2004 at about 1.9 and generally decreases to about 1.1 by 2011. 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 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 and generally decreases to about 1.8 by 2012. It then generally increases to about 4.8 by 2020. Previous 10-year Treasury generally follows the same path as Current 10-year Treasury. Current Federal funds rate begins in 2004 at about 1 and generally increases to about 5.1 by 2006. It generally decreases to about 0.1 by 2009 where it remains relatively constant until 2016. It then increases to about 4.2 by 2020. Previous Federal funds rate generally follows the same path as Current Federal funds rate.

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

Evolution of the Staff Forecast

Figure: Change in Real GDP

Line chart, by percent, Q4 over Q4, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins in January 20, 2010 at about 4.8 and generally decreases to about 1.5 by September 14, 2011. It then generally increases to about 2 by October 17, 2012. 2012 begins in September 15, 2010 at about 4.5 and generally decreases to about 2 by January 18, 2012. It increases to about 2.5 by April 18, 2012 and then generally decreases to about 1.8 by October 17, 2012. 2013 begins in September 14, 2011 at about 3.25 and generally decreases to about 2.8 by April 18, 2012. It then decreases to about 2.5 by October 17, 2012. 204 begins on April 18, 2012 at about 3.2 and generally increases to about 3.5 by October 17, 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 8.15 and generally increases to about 9.1 by September 15, 2010. It decreases to about 8.76 by March 9, 2011 and then increases to about 9 by September 14, 2011. It then decrease to about 8.75 by October 17, 2012. 2012 begins on September 15, 2010 at about 8 and generally decreases to about 7.4 by March 9, 2011. It generally increases to about 8.6 by September 14, 2011 and then generally decrease to about 8 by October 17, 2012. 2013 begins on September 14, 2011 at about 8 and generally decreases to about 7.7 by April 18, 2012. It increases to about 8.1 by July 25, 2012 and then decreases to about 7.75 by October 17, 2012. 2014 begins on April 18, 2012 at about 7.4 and generally increases to about 7.75 by July 25, 2012. It then generally decreases to about 7.2 by October 17, 2012.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, by percent Q4 over Q4, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 1.1 and generally decreases to about 0.8 by June 16, 2010. It Increases to about 2 by September 14, 2011 and then decreases to about 1.7 by October 17, 2012. 2012 begins on September 15, 2010 at about 0.8 and generally increases to about 1.8 by June 13, 2012. It then decreases to about 1.6 by October 17, 2012. 2013 begins on September 14, 2011 at about 1.3 and generally increases to about 1.7 by April 18, 2012. It then decreases to about 1.6 by October 17, 2012. 2014 begins on April 18, 2012 at about 1.7 and generally decreases to about 1.6 by July 25, 2012. It then increases to about 1.7 by October 17, 2012.

International Economic Developments and Outlook

Recent Foreign Indicators

Figure: Nominal Exports

Line chart, by ratio 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 generally increases to about 115 by 2011 and then decreases to about 111 by 2012. AFE begins in 2008 at about 100 and generally decreases to about 68 by 2009. It increases to about 109 by 2011 and then decreases to about 102 by 2012. EME begins in 2008 at about 100 and generally decreases to about 70 by 2009. It generally increases to about 131 by 2011 and then decreases to about 121 by 2012.

Note: EME excludes Venezuela.

Figure: Industrial Production

Line chart, by ratio 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 100 and decreases to about 86 by 2009. It then generally increases to about 102.5 by 2012. AFE begins in 2008 at 100 and generally decreases to about 85 by 2009. It then generally increases to about 94.5 by 2012. EME begins in 2008 at 100 and 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 -2 by 2009. It generally increases to about 7.5 by 2010 and then decreases to about 2.5 by 2012. AFE begins in 2008 at about

4.5 and generally decrease to about -4.8 by 2009. It generally increases to about 4 by 2010 and then generally decreases to about 1 by 2012. EME begins in 2008 at about 8 and generally decreases to about 2 by 2009. It generally increases to about 15 by 2010 and then generally decreases to about 7 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 decreases to about 1.1 by 2009. It then generally increases to about 1 by 2012. AFE begins in 2008 at about 0.8 and generally decreases to about -1.8 by 2009. It increases to about 1 by 2011 and then decreases to about 0.5 by 2012. EME begins in 2008 at about 3 and decrease to about 0.4 by 2009. It increases to about 3 by 2011 and then decreases to about 2.6 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 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 2.75 by 2011. It then generally decreases to about 1.55 by 2012. Core begins in 2008 at about 1.05 and generally decreases to about 0.75 by 2010. It then generally increases to about 1.075 by 2012.

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

Source: Haver Analytics and CEIC.

Figure: Consumer Prices: Emerging Market Economies

Line chart, by 12-month percent change, 2008 to 2012. There is a horizontal line at zero. There are three series, Headline, Excluding food - East Asia, and Excluding food - Latin America. Headline begins in 2008 at about 5.6 and generally decreases to about 0.75 by 2009. It generally increases to about 5 by 2011 and then decreases to about 3.2 by 2012. Excluding food - East Asia begins in 2008 at about 3 and generally decreases to about -2 by 2009. It generally increases to about 2.6 by 2011 and then decreases to about 1.8 by 2012. Excluding food - Latin America begins in 2008 at about 3.8 and generally increases to about 5.9 by 2009. It then generally decreases to about 3.35 by 2012.

The Foreign Outlook

(Percent change, annual rate)

		2012				2013			
	2011	Q1	Q2	Q3	Q4	Q1	Q2	H2	2014
Real GDP									
Total foreign	2.8	3.2	2.2	2.0	2.1	2.4	2.7	3.1	3.4
Previous Tealbook	2.8	3.2	2.3	2.3	2.3	2.5	2.7	3.0	3.3
Advanced foreign economies	1.3	1.5	.6	.7	.6	.9	1.1	1.6	2.0
Previous Tealbook	1.3	1.6	.7	.7	.6	.8	1.1	1.5	1.9
Emerging market economies	4.5	5.0	3.9	3.4	3.6	4.1	4.5	4.7	4.8
Previous Tealbook	4.5	5.0	3.9	4.0	4.1	4.4	4.5	4.6	4.8
Consumer Prices									

Total foreign	3.4	2.6	1.9	2.2	2.7	2.3	2.2	2.2	2.5
Previous Tealbook	3.4	2.6	1.9	1.8	2.6	2.3	2.3	2.2	2.5
Advanced foreign economies	2.2	2.1	.6	.7	1.8	1.3	1.2	1.2	1.7
Previous Tealbook	2.2	2.2	.6	.7	1.9	1.4	1.3	1.2	1.7
Emerging market economies	4.3	2.9	3.0	3.3	3.3	3.1	3.1	3.1	3.2
Previous Tealbook	4.3	2.9	3.0	2.7	3.2	3.1	3.1	3.0	3.2

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

Figure: Real GDP

Line chart, by percent change, annual rate, 2009 to 2014. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2009 at about -9 and increases to about 6 by late 2009. It generally decreases to about 1.5 by 2011 and then generally increases to about 4 by 2014. Previous Tealbook generally follows the same path as Current Tealbook.

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

Figure: Consumer Prices

Line chart, by percent change, annual rate, 2009 to 2014. There is a horizontal line at zero. There are two series, Current Total foreign and Previous Total foreign. Current Total foreign begins in 2009 at about -1 and generally increases to about 4.6 by 2010. It then generally decreases to about 2.3 by 2014. Previous Total foreign generally follows the same path as Current Total foreign.

There is a second line chart, by percent change, annual rate, 2009 to 2014. There is a horizontal line at zero. . There are four series, Current Emerging market economies, Previous Emerging market economies, Current Advanced foreign economies, and Previous Advanced foreign economies. Current Emerging market economies begins in 2009 at about -0.4 and generally increases to about 6.25 by 2010. It then generally decreases to about 3.2 by 2011 where it remains relatively constant until 2014. Previous Emerging market economies generally follows the same path as Current Emerging market economies. Current Advanced foreign economies begins in 2009 at about -1.8 and generally increases to about 2.9 by 2010. It generally decreases to about 0.6 by 2012 and then generally increases to about 1.25 by 2014. Previous Advanced foreign economies generally follows the same path as Current Advanced foreign economies.

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

[Box:] Recent Policy Developments in the Euro Area

Figure: 10-Year Sovereign Bond Spreads

Line chart, by basis points, 2011 to 2012. There is a vertical line representing the September Tealbook. There are four series, Spain, Italy, Belgium, and France. Spain begins in 2011:Q1 at about 250 and generally increases to about 475 by 2011:Q4. It generally decreases to about 300 by 2012:Q1 and then increases to about 650 by

2012:Q2. It ends in 2012:Q3 at about 425. Italy begins in 2011:Q1 at about 200 and generally increase to about 650 by 2011:Q3. It decreases to about 280 by 2012:Q1 and then increases to about 550 by 2012:Q2. It ends in 2012:Q3 at about 350. Belgium begins in 2011:Q1 at about 100 and generally increases to about 390 by 2011:Q4. It then generally decreases to about 90 by 2012:Q3. France begins in 2011:Q1 at about 40 and generally increases to about 200 by 2011:Q4. It then generally decreases to about 80 by 2012:Q3.

Note: Spreads relative to Germany.

Source: Bloomberg.

Figure: Euro-Area Stock Prices

Line chart, by ratio where January 3, 2011 = 100, 2011 to 2012. There is a vertical line representing the September Tealbook. There are two series, DJ Euro Stoxx and DJ Euro Stoxx - banks. DJ Euro Stoxx begins in 2011:Q1 at about 100 and generally decreases to about 70 by 2011:Q3. It increases to about 90 by 2012:Q1 and then decreases to about 75 by 2012:Q2. It ends in 2012:Q3 at about 90. DJ Euro Stoxx - banks begins in 2011:Q1 at about 100 and generally decreases to about 55 by 2011:Q3. It increase to about 80 by 2012:Q1 and then decreases to about 45 by 2012:Q2. It ends in 2012:Q3 at about 69.

Source: Bloomberg.

[Box:] Prospects for China's Economy

Figure: Real GDP

Line chart, by percent change at annual rate, 2005 to 2012. Data are quarterly. There is a horizontal line at zero. There are three series, Actual, Fitted model, and Electricity production (quarterly rate). There is a dot at the end of each series denoting the Q3 Tealbook. Actual begins in 2005 at about 9 and generally increases to about 21 by 2007. It generally decreases to about 4 by 2008 and then increases to about 16 by 2009. It then generally decreases to about 7 by 2012. Fitted model begins in 2005 at about 12 and generally increases to about 17.5 by 2007. It decreases to about 4 by 2008 and then increases to about 16 by 2009. It then generally decreases to about 7 by 2012. Electricity production (quarterly rate) begins in 2005 at about 4 and generally decreases to about -7 by 2008. It increases to about 7.5 by 2009 and then generally decreases to about 1 by 2012.

Note: Q3 are estimates based on July and August data.

Source: CEIC and staff estimates.

Figure: Investment and Exports

Line chart, by 4-quarter percent change, 2005 to 2012. There is a horizontal line at zero. There are two series, Investment and Exports. Investment begins in 2005 at about 21 and generally increases to about 34 by 2009. It then generally decreases to about 15 by 2012. Exports begins in 2005 at about 35 and generally decreases to about -22 by 2009. It increases to about 41 by 2010 and then generally decreases to about 4 by 2012.

Note: Fixed-asset investment in nominal terms and nominal exports deflated by the U.S. price index for imports from China.

Source: CEIC, U.S. Bureau of Labor Statistics, and staff estimates.

Evolution of Staff's International Forecast

Figure: Total Foreign GDP

Line chart, by percent change, Q4 over Q4, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 4 and generally decreases to about 3.5 by June 15, 2011. It then decreases to about 2.9 by October 17, 2012. 2012 begins on September 15, 2010 at about 3.5 and generally decreases to about 2.5 by December 7, 2011. It increases to about 3 by April 18, 2012 and then generally decreases to about 2.4 by October 17, 2012. 2013 begins on September 14, 2011 at about 3.2 and generally decreases to about 2.9 by October 17, 2012. 2014 begins on April 18, 2012 at about 3.6 and generally decreases to about 3.4 by October 17, 2012.

Figure: Total Foreign CPI

Line chart, by percent change, Q4 over Q4, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 2 and generally increases to about 3.1 by April 20, 2011. It then increases to about 3.45 by October 17, 2012. 2012 begins on September 15, 2010 at about 2.15 where it remains relatively constant until it increases to about 2.6 by March 7, 2012. It then decreases to about 2.4 by October 17, 2012. 2013 begins on September 14, 2011 at about 2.4 and generally decreases to about 2.25 by October 17, 2012. 2014 begins on April 18, 2012 at about 2.4 and generally increases to about 2.55 by October 17, 2012.

Figure: U.S. Current Account Balance

Line chart, by percent of GDP, January 2010 to December 2012. The x-axis represents Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about -3.1 and generally increases to about -2.6 by June 15, 2011. It then decreases to about -3.1 by October 17, 2012. 2012 begins on September 15, 2010 at about -3 and generally increases to about -2 by June 15, 2011. It then decreases to about -2.8 by October 17, 2012. 2013 begins on September 14, 2011 at about -2.25 and generally decreases to about -3.75 by July 25, 2012. It then increases to about -3 by October 17, 2012. 2014 begins on April 18, 2012 at about -3.2 and generally decreases to about -4 by July 25, 2012. It then increases to about -3 by October 17, 2012.

Financial Developments

Policy Expectations and Treasury Yields

Figure: Selected Interest Rates

Line chart, by percent, September 2012 to October 2012. There are vertical lines representing the September FOMC, Michigan consumer sentiment, September FOMC minutes, and September employment report. There are two series, 10-year Treasury yield and June 2015 Eurodollar. 10-year Treasury yield begins on September 12, 2012 at about 1.725 and generally increases to about 1.89 by September 15, 2012. It generally decreases to about 1.6 by September 28, 2012 and then generally increases to about 1.7 by October 16, 2012. June 2015 Eurodollar begins on September 12, 2012 at about 0.74 and generally decreases to about 0.62 by October 3, 2012. It then increases to about 0.71 by October 16, 2012.

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

Source: Bloomberg.

Figure: Inflation Compensation

Line chart, by percent, 2010 to 2012. Data are daily. There is a vertical line representing the September FOMC. There are two series, 5 to 10 years ahead and Next 5 years. 5 to 10 years ahead begins in 2010 at about 3.25 and generally decreases to about 2.1 by 2011. It then increases to about 2.8 by October 16, 2012. Next 5 years begins in early 2010 at about 2 and generally decreases to about 1.1 by late 2010. It generally increases to about 2.3 by early 2011 and then decreases to about 1.6 by late 2011. It then increases to about 2.25 by October 16, 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.

Figure: Implied Federal Funds Rate

Line chart, by percent, 2013 to 2016. There are four series, Mean: October 16, 2012, Mean: September 12, 2016, Mode: October 16, 2012, and Mode: September 12, 2016. Mean: October 16, 2012 begins in 2013 at about 0.18 and generally increases to about .825 by 2016. Mean: September 12, 2012 begins in 2013 at about 0.175 and generally increases to about 0.9 by 2016. Mode: October 16, 2012 begins in 2013 at about 0.1 and generally increases to about 0.31 by 2016. Mode: September 12, 2016 begins in 2013 at about 0.099 and generally increases to about 0.24 by 2016.

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

Source: Bloomberg and CME Group.

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

Bar chart, by percent, 2013 to 2016. There is a horizontal line at zero. There are two series, Recent: 21 Respondents and September FOMC: 21 Respondents. Recent 21 Respondents begins in 2015:Q1 at about 10 and increases to about 33 by 2015:Q2. It decreases to about 29 by 2015:Q3 and then decreases to about 10 by 2015:Q1. It stays at 10 for 2016:Q1 and then decreases to about 5 by 2016:Q2. It remains at 5 when it ends in 2016:Q3. September FOMC: 21 Respondents begins in 2013:Q1 at 0 where it remains until it increases to 5 by 2014:Q2. It increases to about 10 by 2014:Q3 and then decreases to 5 for 2014:Q3 and 2014:Q4. It increases to about 20 by 2015:Q2 and then increases to about 34 by 2015:Q3. It decreases to about 15 by 2015:Q4 and then decreases to about 5 for 2016:Q1 and 2016:Q2. It decreases to 0 by 2016:Q3 where it remains until it ends in 2016:Q4.

Source: Desk's dealer survey from October 15, 2012.

Figure: Treasury Yield Curve

Line chart, by percent, 1 to 20 years head. There are two series, Most recent: October 16, 2012 and Last FOMC: September 12, 2012. Most recent: October 16, 2012 begins in 1 year ahead at about 0.25 and generally increases to about 2.7 by 20 years ahead. Last FOMC: September 12, 2012 generally follows the same path as Most recent: October 16, 2012.

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.

[Box:] Market Reaction to the September 2012 FOMC Communications

Yield and Price Changes around the September 2012 FOMC

	One-day	One-week
5-year nominal	0	4
10-year nominal	2	5
5-year TIPS	-10	-4
10-year TIPS	-5	-5
5-year inflation compensation	10	8
5-year, 5-year forward inflation compensation	4	13
1-year OIS 3-years forward	-3	-1
3-5 percent coupon MBS yield+	-50	-68
3-5 percent coupon MBS OAS+	-30	-43

BBB nonfinancial corporate bond spread#	0	-11
HY nonfinancial corporate bond spread#	-1	-10
S&P500 (percent)	1.6	1.6
Broad nominal dollar index (percent)	-0.5	-0.5
Front month crude oil (percent)	0.9	-5.4

Note: One day changes are from 12:15 p.m. to 4:00 p.m. on September 13. One-week changes are from 12:15 p.m. on September 13 to 4:00 p.m. on September 20. Changes are in basis points. Nominal Treasury and TIPS yields are for on the run securities.

+ Fannie Mae 30 year; option adjusted spread (OAS) to Treasury securities. Changes are from end of day September 12 to end of day September 13. Return to table

Derived from smoothed yield curves using Merrill Lynch bond data; spread to the 10 year Treasury yield. Changes are from end of day September 12 to end-of-day September 13. Return to table

Source: For 3.5 percent coupon MBS yield and OAS, Barclays; for BBB and HY nonfinancial corporate bond spreads, Merrill Lynch; for all others, Bloomberg.

Foreign Developments

Figure: Dollar Exchange Rates

Line chart, by ratio where January 3, 2011 = 100, 2011 to 2012. There is a vertical line marking the September FOMC. There are three series, Broad, Major, and EME. Broad begins in early 2011 at about 100 and generally decreases to about 97.5 by mid-2011. It generally increases to about 104.8 by mid-2012 and then decreases to about 100 by October 17, 2012. Major begins in early 2011 at about 100 and generally decreases to about 93.5 by mid-2011. It generally increases to about 104 by mid-2012 and then decreases to about 99 by October 17, 2012. EME begins in early 2011 at about 100 and generally decreases to about 96 by mid-2011. It generally increases to about 105 by mid-2012 and then decreases to about 101 by October 17, 2012.

Source: Federal Reserve Board; Bloomberg.

Figure: Euro-Area 2-Year Government Bond Spreads

Line chart, by percentage points, 2011 to 2012. Data are daily. There is a vertical line marking the September FOMC. There are two series, Spain and Italy. Spain begins in 2011:Q1 at about 2.5 and generally decreases to about 0.8 by 2011:Q2. It generally increases to about 5.8 by 2011:Q4 and then decreases to about 2 by 2012:Q1. It increases to about 7 by 2012:Q3 and then decreases to about 2.8 by October 17, 2012. Italy begins in 2011:Q1 at about 1.99 and generally decreases to about 0.8 by 2011:Q2. It generally increases to about 7.2 by 2011:Q4 and then decreases to about 1.8 by 2012:Q1. It increases to about 5.2 by 2012:Q3 and then decreases to about 2 by October 17, 2012.

Note: Spread over German bunds.

Source: Bloomberg.

Figure: Euro-Area 10-Year Government Bond Spreads

Line chart, by percentage points, 2011 to 2012. Data are daily. There is a vertical line marking the September FOMC. There are two series, Spain and Italy. Spain begins in 2011:Q1 at about 2.15 and generally increases to about 4.6 by 2011:Q4. It decreases to about 3 by 2012:Q1 and then increases to about 6.6 by 2012:Q3. It ends on October 17, 2012 at about 3.9. Italy begins in 2011:Q1 at about 1.9 and generally increases to about 5.75 by 2011:Q4. It decreases to about 2.8 by 2012:Q1 and then increases to about 5.1 by 2012:Q3. It ends on October 17, 2012 at about 3.4.

Note: Spread over German bunds.

Source: Bloomberg.

Figure: Stock Price Indexes

Line chart, by ratio where January 3, 2011 = 100, 2011 to 2012. Data are daily. There is a vertical line marking the September FOMC. There are three series, DJ Euro, MSCI Emerging Markets, and DJ Euro Banks. DJ Euro begins in 2011:Q1 at about 100 and generally decreases to about 75 by 2011:Q3. It generally increases to about 90 by October 17, 2012. MSCI Emerging Markets begins in 2011:Q1 at about 100 and generally decreases to about 75 by 2011:Q3. It increases to about 96 by 2012:Q1 and then decreases to about 78 by 2012:Q2. It ends on October 17, 2012 at about 88. DJ Euro Banks begins in 2011:Q1 at about 100 and generally decreases to about 54 by 2011:Q4. It increases to about 73 by 2012:Q1 and then decreases to about 44 by 2012:Q3. It ends on October 17, 2012 at about 66.

Source: Bloomberg.

Figure: 10-Year Nominal Benchmark Yields

Line chart, by percent, 2011 to 2012. Data are daily. There is a vertical line marking the September FOMC. There are four series, Germany, United Kingdom, Japan, and Canada. Germany begins in 2011:Q1 at about 2.99 and generally increases to about 3.4 by 2011:Q2. It then generally decreases to about 1.6 by October 17, 2012. United Kingdom begins in 2011:Q1 at about 3.4 and generally decreases to about 2 by 2012:Q1. It then generally decreases to about 1.9 by October 17, 2012. Japan begins in 2011:Q1 at about 1.1 and generally decreases to about 0.75 by October 17, 2012. Canada begins in 2011:Q1 at about 3.1 and generally decreases to about 2 by 2012:Q1. It then generally decreases to about 1.9 by October 17, 2012.

Source: Bloomberg.

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

Bar chart, by billions of dollars, annual rate, 2010 to 2012. There are two series, Official and Private. Approximate values are: 2010: Official 450, Private 300; 2011:H1: Official 300, Private 90; 2011:H2: Official 20, Private 400; 2012:Q1: Official 325, Private 175; 2012:Q2: Official 325, Private 30; July 2012: Official 270, Private 200; August 2012: Official 600, Private 400.

Source: Treasury International Capital data adjusted for staff estimates. August data are embargoed until October 16, 2012.

[Box:] Balance Sheet Developments over the Intermeeting Period

Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (10/15/12)
Total assets	**4**	**2,829**
Selected assets:		
Liquidity programs for financial firms	-7	13
Primary, secondary, and seasonal credit	-0	+0
Foreign central bank liquidity swaps	-7	13
Term Asset-Backed Securities Loan Facility (TALF)	-0	1
Net portfolio holdings of Maiden Lane LLCs	-2	2
Maiden Lane	-0	2

Maiden Lane II	-0	+0
Maiden Lane III	-2	+0
Securities held outright*	4	2,586
U.S. Treasury securities	-2	1,649
Agency debt securities	-4	83
Agency mortgage-backed securities	10	854
Total liabilities	**4**	**2,774**
Selected liabilities:		
Federal Reserve notes in circulation	9	1,093
Reverse repurchase agreements	6	99
Foreign official and international accounts	9	99
Others	-3	0
Reserve balances of depository institutions**	-24	1,478
Term deposits held by depository institutions	0	0
U.S. Treasury, General Account	38	77
U.S. Treasury, Supplementary Financing Account	0	0
Other deposits	-27	7
Total capital	**+0**	**55**

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

* Par value. Return to table

** Includes overdrafts. Return to table

Financial Institutions and Short-Term Dollar Funding Markets

Figure: Stock Prices

Line chart, by ratio where September 12, 2012 = 100, 2010 to 2012. Data are daily. There is a vertical line marking the September FOMC. There are two series, S&P 500 and Dow Jones Bank Index. S&P 500 begins in January 2010 at about 80 and generally increases to about 96 by May 2011. It decreases to about 80 by September 2011 and then generally increases to about 100 by October 16, 2012. Dow Jones Bank Index begins in January 2011 at about 100 and generally increases to about 122 by May 2010. It generally decreases to about 69 by September 2011 and then increases to about 101 by October 16, 2012.

Source: Bloomberg.

Figure: CDS Spreads of Large Bank Holding Companies

Line chart, by basis points, 2010 to 2012. Data are daily. There is a vertical line marking the September FOMC. There are six series, Citigroup, JPMorgan Chase, Wells Fargo, Goldman Sachs, Bank of America, and Morgan Stanley. Citigroup begins in January 2010 at about 150 and generally decreases to about 115 by May 2011. It generally increases to about 375 by September 2011 and then decreases to about 200 by October 16, 2012. JPMorgan Chase begins in January 2010 at about 50 and generally increases to about 200 by September 2011. It then generally decreases to about 100 October 16, 2012. Wells Fargo begins in January 2010 at about 90 and generally increases to about 200 by September 2011. It then generally decreases to about 80 by October 16, 2012.

Goldman Sachs begins in January 2010 at about 100 and generally increases to about 400 by September 2011. It then generally decreases to about 175 by October 16, 2012. Bank of America begins in January 2010 at about 100 and generally increases to about 480 by November 2011. It then generally decreases to about 150 by October 16, 2012. Morgan Stanley begins in January 2010 at about 100 and generally increases to about 600 by September 2011. It then generally decreases to about 205 by October 16, 2012.

Source: Markit.

Figure: Selected Spreads

Line chart, by basis points, 2010 to 2012. Data are daily. There is a vertical line marking the September 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 increases to about 32 by July 2010. It decreases to about 15 by May 2011 and then increases to about 50 by January 2012. It then decreases to about 19 by October 17, 2012. USD 3x6 FRA-OIS begins in January 2010 at about 11 and generally increases to about 30 by May 2010. It generally decreases to about 15 by May 2011 and then increases to about 69 by December 2011. It then generally decreases to about 14 by October 17, 2012.

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

Source: Bloomberg.

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

Line chart, by days, 2010 to 2012. Data are weekly. There is a vertical line marking the September FOMC. There are two series, U.S. parent and European parent. U.S. parent begins in January 2010 at about 41 and generally creases to about 36 by June 2010. It then generally fluctuates between 45 and 50 until about January 2011. It then generally increases to about 63 by October 10, 2012. European parent begins in January 2010 at about 41 and generally decreases to about 36 by June 2010. It increases to about 56 by November 2010 and then generally decreases to about 31 by January 2012. It then generally increases to about 63.5 by October 10, 2012.

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

Figure: Overnight Funding Rates

Line chart, by basis points, 2011 to 2012. Data are 5-day moving averages. There is a vertical line marking the September FOMC. There are two series, Treasury repo rate and Fed funds rate. Treasury repo rate begins in February 2011 at about 16 and generally decreases to about 1 by July 2011. It generally increases to about 27 by June 2012 and then decreases to about 15 by August 2012. It then increases to about 27 by October 15, 2012. Fed funds rate begins in February 2011 at about 17.5 and generally decreases to about 6 by August 2011. It generally increases to about 17.5 by June 2012 and then generally decreases to about 16 by October 15, 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 marking the September FOMC. There are two series, U.S. sponsor and European sponsor. U.S. sponsor begins in January 2011 at about 5 and generally increases to about 25 by January 2012. It then generally decreases to about 6 by October 16, 2012. European sponsor begins in January 2011 at about 5 and generally increases to about 66 by January 2012 and then generally decreases to about 12 by October 16, 2012.

Note: Spreads computed over the AA nonfinancial unsecured rate.

Source: Depository Trust & Clearing Corporation.

Other Domestic Asset Market Developments

Figure: S&P 500 Stock Price Index

Line chart, by log scale where September 12, 2012 = 100, 2010 to 2012. Data are daily. There is a vertical line marking the September FOMC. The series begins in January 2010 at about 79 and generally decreases to about 72 by June 2010. It generally increases to about 93 by May 2011 and then decreases to about 77 by September 2011. It then generally increases to about 101 by October 17, 2012.

Source: Bloomberg.

Figure: Equity Risk Premium

Line chart, by percent, 1991 to 2012. Data are monthly. There is a vertical line marking the September 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 1991 at about 7.8 and generally decrease to about 2.1 by 2000. It then generally increases to about 8.1 by October 17, 2012. Expected real yield on 10-year Treasury begins in 1991 at about 4.4 and generally decreases to about 1 by 2003. It then generally decreases to about -0.5 by October 17, 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 are plus signs at the end of each series denoting the latest observation using daily interest rates and stock prices and latest earnings data.

Source: Thomson Financial.

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

Line chart, by percent, log scale, 2007 to 2012. Data are daily. There is a vertical line marking the September FOMC. The series begins in 2007 at about 7 and generally increases to about 80 by 2008. It then generally decreases to about 16 by October 16, 2012.

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 generally increases to about 2 by 2004 and then decreases to about -12 by 2009. It generally increases to about 3.8 by 2009 and then generally decreases to about 0 by mid-October estimate.

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

Source: Thomson Financial.

Figure: Corporate Bond Spreads

Line chart, by basis points, 2007 to 2012. Data are daily. There is a vertical line marking the September FOMC. There are two series, 10-year high-yield and 10-year BBB. 10-year high-yield begins in 2007 at about 250 and generally increases to about 1650 by 2008. It generally decreases to about 400 by 2011 and then increases to about 500 by October 17, 2012. 10-year BBB scale begins in 2007 at about 150 and generally increases to about 675 by 2009. It generally decreases to about 150 by 2010 and then increases to about 225 by October 17, 2012.

Note: Spreads are 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 marking the September FOMC. The series begins in April 2009 at about 90 and generally decreases to about 15 by January 2010. It then generally increases to about 35 by October 16, 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, 1991 to 2012. There are two series, Debt over total assets and Liquid assets over total assets. Debt over total assets begins in 1991 at about 0.331 and generally decreases to about 0.275 by 1996. It increases to about 0.31 by 2001 and then decreases to about 0.247 by 2005. It increases to about 0.29 by 2008 and then decreases to about 0.26 by 2012:Q2. Liquid assets over total assets begins in 1991 at about 0.06 and generally increases to about 0.104 by 2004. It decreases to about 0.089 by 2008 and then generally increases to about 0.105 by 2012:Q2.

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 1995. It decreases to about 5 by 2002 and then generally increases to about 10 by 2006. It generally increases to about 15 by 2009 and then decreases to about 5 by 2012:Q3. Downgrades begins in 1991 at about 32 and generally decreases to about 42 by 1992. It generally increases to about 10 by 1998 and then decreases to about 38 by 2003. It increases to about 10 by 2006 and then decreases to about 21 by 2009. It then generally increases to about 10 by 2012:Q3.

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

Figure: Selected Components of Net Debt Financing, Nonfinancial Firms

Bar chart, by billions of dollars, 2008 to 2012. Data are monthly rate. There is a horizontal line at zero. There are three series, Bonds, C&I loans, and Commercial paper. There is another series, Total, represented by line chart. Approximate values are: 2008: Bonds 18, C&I loans 25, Commercial paper 27, Total 27; 2009: Bonds 30, C&I loans -25, Commercial paper -32, Total 0; 2010: Bonds 31, C&I loans -5, Commercial paper 33, Total 30; 2011:H1: Bonds 31, C&I loans 42, Commercial paper 46, Total 46; 2012:H2: Bonds 2, C&I loans 40, Commercial paper 42, Total 42; 2012:Q1 Bonds 39, C&I Loans 49, Commercial paper: 50, Total 50; 2012:Q2: Bonds 30, C&I loans 46, Commercial paper 49, Total 49; July 2012: Bonds 37, C&I loans 51, Commercial paper -3, Total 48; August 2012: Bonds 47, C&I loans 50, Commercial paper -1, Total 50; September 2012: Bonds 47, C&I loans 58, Commercial paper -4, Total 50.

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

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

Figure: U.S. CLO Issuance

Bar chart, by billions of dollars, 2008 to 2012. Data are annual rate. There are two series, Issuance and Pipeline. Approximate values are: 2008: Issuance 20, Pipeline 0; 2009: Issuance 1, Pipeline 0; 2010: Issuance 5, Pipeline 0; 2011: Issuance 15, Pipeline 0; 2012:H1: Issuance 35, Pipeline 40.

Note: CLO is collateralized loan obligation.

Source: Thomson Reuters LPC LoanConnector.

Figure: Selected Components of Net Equity Issuance, Nonfinancial firms

Bar chart, by billions of dollars, 2008 to 2012. Data are monthly rate. There is a horizontal line at zero. There are four series, Public issuance, Private issuance, Repurchases, and Cash mergers. There is another series, Total, represented by line chart. Approximate values are: 2008: Public issuance 25, Private issuance 24, Repurchases -30, Cash mergers -48, Total -20; 2009: Public issuance 20, Private issuance 15, Repurchases -15, Cash mergers -19, Total -1; 2010: Public issuance 15, Private issuance 10, Repurchases -25, Cash mergers -33, Total -25; 2011:H1: 17, Private issuance 10, Repurchases -35, Cash mergers -42, Total -35; 2011:H2: Public issuance 12, Private issuance 10, Repurchases -38, Cash mergers -50, Total -40; 2012:Q1: Public issuance 15, Private issuance 10, Repurchases -27, Cash mergers -35, Total -25; 2012:Q2: Public issuance 17, private issuance 11, Repurchases -30, Cash mergers -60, Total -40.

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

Figure: CMBS Issuance

Bar chart, by billions of dollars, 2008 to 2012. Data are annual rate. There is a horizontal line at zero. The series begins in 2008 at 12 and decreases to 1 by 2009. It increases to about 10 by 2010 and then increases to about 30 by 2011. It decreases to 29 by 2012:H1 and then increases to about 45 by 2012:Q3.

Note: CMBS is commercial mortgage-backed securities.

Source: Commercial Mortgage Alert.

Household Finance

Figure: Mortgage Rate and MBS Yield

Line chart, by percent, 2010 to 2012. Data are daily. There is a vertical line marking the September FOMC. There are two series, 30-year conforming fixed mortgage rate and MBS yield. 30-year conforming fixed mortgage rate begins in early 2010 at about 5.3 and generally decreases to about 4.4 by late 2010. It increases to about 5 by early 2011 and then decreases to about 3.35 by October 16, 2012. MBS yield begins in early 2010 at about 4.5 and decreases to about 3.3 by late 2010. It increase to about 4.5 by early 2011 and then decrease to about 1 by October 16, 2012.

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

Source: For MBS yield, Barclays; for mortgage rate, Loansifter.

Figure: Refinance Loan Originations

Line chart, by billions of dollars, 2002 to 2012. Data are monthly. The series begins in 2002 at about 105 and generally increases to about 350 by 2003. It generally decreases to about 40 by 2008 and then generally increases to about 145 by October 2012.

Note: Seasonally adjusted by FRB staff.

Source: Staff estimates.

Figure: Prices of Existing Homes

Line chart, by index peak normalized to 100, 2005 to 2012. Data are monthly. The series begins in 2005 at about 86 and increases to about 100 by 2006. It decreases to about 68 by 2011 and then increases to about 71 by August 2012.

Source: CoreLogic.

Figure: Delinquencies on Prime Mortgages, Transition Rate

Line chart, by percent of loans, 2003 to 2012. There are two series, 3-month moving average and Monthly rate. 3-month moving average begins in 2003 at about 1.09 and generally decreases to about 0.81 by 2006. It generally increases to about 1.043 by 2008 and then generally decreases to about 0.97 by July 2012. Monthly rate begins in

2003 at about 1.03 and generally decreases to about 0.8 by 2006. It generally increases to about 1.78 by 2008 and then generally decreases to about 0.96 by July 2012.

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

Source: LPS Applied Analytics.

Figure: Consumer Credit

Line chart, by percent change, annual rate, 2004 to 2012. Data are 3-month moving averages. There is a horizontal line at zero. There are two series, Revolving and Nonrevolving. Revolving begins in 2004 at about 3 and generally increases to about 10 by 2008. It generally decrease to about -14 by 2010 and then generally increases to about -1 by August 2012. Nonrevolving begins in 2004 at about 5.4 and generally decreases to about -4 by 2008. It then generally increases to about 7.5 by August 2012.

Source: Federal Reserve Board.

Figure: Gross Consumer ABS Issuance

Bar chart, by billions of dollars, 2007 to 2012. Data are monthly rate. There are three series, Student loan, Credit card, and Auto. Approximate values are: 2007: Student loan 19, Credit card 14, Auto 6; 2008: Student loan 11, Credit card 8, Auto 3; 2009: Student loan 11, Credit card 8.5, Auto 4.5; 2010: Student loan 6, Credit card 5, Auto 4; 2011: Student loan 6.5, Credit card 5.5, Auto 4.5; 2012:Q1: Student loan 9, Credit card 8, Auto 7; 2012:Q2: Student loan 13, Credit card 10, Auto 7; 2012:Q3: Student loan 12, Credit card 10, Auto 7; October 2012 (month to date): Student loan 8, Credit card 7.5, Auto 5.

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, s.a.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 -12 by 2009. It then generally increases to about 4 by September 2012. C&I loans begins in 2005 at about 12 and generally increases to about 30 by 2007. It generally decreases to about -28 by 2009 and then generally increases to about 9 by September 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: Changes in Standards and Demand across All Loan Categories

Line chart, by net percent, 1990 to 2010. Data are quarterly. There is a horizontal line at zero. There is a vertical line marking the July 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, with results weighted by survey respondents' holdings of loans in each category.

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

Figure: Changes in Standards and Demand for C&I Loans

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 July survey. There are two series, Standards and Demands. Standards begins in 1991 at about 20 and generally increases to about 76 by 2000. It generally decreases to about -45 by 2004 and then increases to about 85 by 2008. It then generally decreases to about -2 by 2012. Demand begins in 1991 at about -38 and generally increases to about 43 b 1995. It generally decreases to about -65 by 2000. It increases to about 58 by 2004 and then generally decreases to about -57 by 2009. It then generally increases to about 17 by 2012.

Note: Results are weighted by survey respondents' holdings of commercial and industrial (C&I) loans.

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

Figure: Likelihood of Approving an Application for an FHA Home-Purchase Mortgage Loan Relative to 2006

Bar chart, by percent of respondents, FICO score of 660 to FICO score of 580. There are five series, Somewhat less likely, Much less likely, About the same, Much more likely, and Somewhat likely. Approximate values are: FICO score of 660: Somewhat less likely 10, Much less likely 0, About the same 95, Much more likely 100, Somewhat more likely 97; FICO score of 620: Somewhat less likely 80, Much less likely 5, About the same 95, Much more likely 0, Somewhat more likely 100; FICO score of 580: Somewhat less likely, 85, Much less likely 70, About the same 95, Much more likely 0, Somewhat more likely 100.

Note: Results are weighted by survey respondents' holdings of residential real estate loans (excluding multifamily loans and home equity lines of credit).

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	-18.4	-2.1	8.8
2012:H1	6.7	10.3	-16.8	-9.1	9.3
2012:Q3(p)	6.8	10.1	-17.8	-6.9	7.5
July	9.0	13.4	-18.9	-8.6	7.1
Aug.	4.5	6.9	-17.3	-5.8	8.1
Sept.(p)	10.2	13.4	-17.2	-1.0	11.6

Note: Retail MMFs are retail money market funds.

p Preliminary. Return to table

Source: Federal Reserve Board.

Figure: Level of Liquid Deposits

Line chart, by trillions of dollars, 2008 to 2012. There is a vertical line marking the September FOMC. The series begins in 2008 at about 4.5 and generally increases to about 7.9 by October 8, 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.

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, by percent, 1990 to 2012. There is a horizontal line at zero. There is a vertical line marking the July survey. There are two series, Loans to large and middle-market firms and Loans to small firms. Loans to large and middle-market firms begins in 1990 at about 59 and generally decreases to about -18 by 1994. It generally increases to about 60 by 2001 and then decreases to about -20 by 2005. It generally increases to about 85 by 2008 and then decreases to about -6 by 2012. Loans to small firms begins in 1990 at about 55 and generally decreases to about -10 by 1994. It increases to about 43 by 2000 and then generally decreases to about -22 by 2005. It increases to about 80 by 2009 and then generally decreases to about -6 by 2012.

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

Line chart, by percent, 1990 to 2012. There is a horizontal line at zero. There is a vertical line marking the July survey. There are two series, Loans to large and middle-market firms and Loans to small firms. Loans to large and middle-market firms begins in 1990 at about 10 and generally decreases to about -60 by 1994. It generally increases to about 60 by 2001 and then decreases to about -70 by 2005. It increase to about 100 by 2008 and then decreases to about -55 by 2012. Loans to small firms begins in 1990 at about 5 and generally decreases to about -30 by 1994. It generally increases to about 40 by 2001 and then decrease to about -50 by 2005. It increases to about 95 by 2009 and then decreases to about -50 by 2012.

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

Line chart, by percent, 1990 to 2012. There is a horizontal line at zero. There is a vertical line marking the July survey. There are two series, Loans to large and middle-market firms and Loans to small firms. Loans to large and middle-market firms begins in 1991 at about -30 and generally increases to about 40 by 1994. It generally decreases to about -70 by 2001 and then increases to about 45 by 2005. It generally decreases to about -60 by 2009 and then generally increases to about -5 by 2012. Loans to small firms begins in 1991 at about -25 and generally increases to about 40 by 1994. It generally decreases to about -40 by 2001 and then increases to about 40 by 2003. It generally decreases to about -60 by 2009 and then generally increases to about 5 by 2012.

Special Questions on C&I Lending

Figure: Share of the Increase in C&I Holdings Attributable to the Replacement of Debt from Nonbank Sources

Bar chart, by percent of respondents. There is a horizontal line at zero. There are five series, Between 75% and 100%, Between 45% and 75%, Between 25% and 45%, Up to 25%, and Not a factor in C&I loan growth. Approximate values are: Between 75% and 100% 0, Between 45% and 75% 0, Between 25% and 45% 100, Up to 25% 90, Not a factor in C&I loan growth 65.

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

Figure: Importance of Replacement of Debt from Nonbank Sources in C&I Loan Growth

Bar chart, by percent of respondents. There are three series, Somewhat important, Not important, and Very important. Approximate values are: Investment-grade bonds: Somewhat important 97, Not important, 90, Very important 100; Non-investment-grade or unrated bonds: Somewhat important 98, Not important 55, Very important

100; Short-term funding sources: Somewhat important 100, Not important 98, Very important 0; Syndicated loans held by nonbanks: Somewhat important 80, Not important 45, Very important 100; Loans from finance companies: Somewhat important 100, Not important 75, Very important 0.

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

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, easing and tightening. There are five series, 2011:Q4, 2012:Q1, 2012:Q2, 2012:Q3, and 2012:Q4. Approximate values are: Domestic respondents: 2011:Q4 62, 2012:Q1 70, 2012:Q2 21, 2012:Q3 62, 2012:Q4 49; Foreign respondents: 2011:Q4 56, 2012:Q1 72, 2012:Q2 18, 2012:Q3 43, 2012:Q4 14.

Note: European banks includes affiliates and subsidiaries. Domestic responses are weighted by survey respondents' holdings of C&I loans; because the C&I loans originated by a branch or agency of a foreign bank may not be sufficiently correlated with the loans the foreign bank chooses to hold on the balance sheet of that subsidiary, foreign responses are unweighted.

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

Bar chart, by percent of respondents, 2012:Q1 to 2012:Q4. There are five series, Increased a considerable amount, Increased to some extent, No appreciable increase, No decrease in competition, and Increase in competition. Approximate values are: 2012:Q1: Increased a considerable amount 100, Increased to some extent 99, No appreciable increase 50, No decrease in competition 10, Increase in competition 0; 2012:Q2: Increased a considerable amount 0, Increased to some extent 100, No appreciable increase 30, No decrease in competition 15, Increase in competition 0; 2012:Q3: Increased a considerable amount 0, Increased to some extent 100, No appreciable increase 45, No decrease in competition 2, Increase in competition 0; 2012:Q4: Increased a considerable amount 0, Increased to some extent 100, No appreciable increase 55, No decrease in competition 0, Increase in competition 0.

Note: 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, by percent, 1990 to 2012. There is a horizontal line at zero. There is a vertical line marking the July survey. The series begins in 1990 at about 70 and generally decrease to about -8 by 1997. It generally increases to about 45 by 2002 and then decreases to about -22 by 2005. It increases to about 88 by 2008 and then generally decreases to about -7 by 2012.

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

Line chart, by percent, 1990 to 2012. There is a horizontal line at zero. There is a vertical line marking the July survey. The series begins in 1994 at about 12 and generally increases to about 48 by 1997. It generally decreases to about -50 by 2001 and then increases to about 23 by 2004. It generally decreases to about -65 by 2009 and then increases to about 44 by 2012.

Measures of Supply and Demand for Residential Mortgage Loans

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

Line chart, by percent, 1990 to 2011. There is a horizontal line at zero. There are four series, All residential, Prime, Nontraditional, and Subprime. All residential begins in 1990 at about 10 and increases to about 33 by 1991. It generally decreases to about -15 by 1993 and then generally increases to about 10 by 2003. It decreases to about -8 by 2004 and then generally increases to about 18 by 2006. Prime begins in 2007 at about 18 and increases to about 75 by 2008. It generally decreases to about -1 by 2011. Nontraditional begins in 2007 at about 44 and increases to about 88 by 2008. It then generally decreases to about 0 by 2012. Subprime begins in 2007 at about 58 and generally increases to about 100 by 2008. It then generally decreases to about 0 by 2012.

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, by percent, 1990 to 2006. There is a horizontal line at zero. There are four series, All residential, Prime, Nontraditional, and Subprime. All residential begins in 1990 at about -50 and generally increases to about 60 by 1991. It decreases to about -78 by 1995 and then generally increases to about 62 by 1998. It decreases to about -65 by 2000 and then increases to about 43 by 2003. It then generally decreases to about -39 by 2006. Prime begins in 2007 at about -20 and decreases to about -60 by 2008. It increases to about 39 by 2009 and then decreases to about -36 by 2011. It increases to about 37 by 2012. Nontraditional begins in 2007 at about -18 and generally decreases to about -70 by 2008. It generally increases to about 39 by 2011 and then decreases to about 16 by 2012. Subprime begins in 2007 at about -20 and generally decreases to about -100 by 2008. It then generally increases to about 0 by 2012.

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.

Special Questions on FHA Mortgages

Figure: Likelihood of Approving an Application for an FHA Home-Purchase Mortgage Loan Relative to 2006

Bar chart, by percent of respondents. There are five series, Somewhat less likely, Much less likely, About the same, Much more likely, and Somewhat more likely. Approximate values are: FICO score of 660: Somewhat less likely 10, Much less likely 0, About the same 95, Somewhat more likely 99, Somewhat more likely 100; FICO score of 620: Somewhat less likely 80, About the same 95, Much less likely 2.5, Much more likely 0, Somewhat more like 100; FICO score of 580: Somewhat less likely 82, Much less likely 74, About the same 95, Much more likely 0, Somewhat more likely 100.

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

Figure: Reasons Much Less Likely or Somewhat Less Likely to Approve FHA Home-Purchase Mortgage Loans

Bar chart, by percent of respondents. There are four series, Somewhat important, Not important, The most important, Very important. Approximate values are: Somewhat important 30, Not important 5, The most important 0, Very important 100; Risk of FHA putback: Somewhat important 10, Not important 2, The most important 100, Very important 95; Concerns about bank's compare ratio: Somewhat important 30, Not important 15, The most important 100, Very important 31; Concerns about the solvency of the FHA insurance fund: Somewhat important 85, Not important 45, The most important 100, Very important 99.5; High RRE exposure: Somewhat important 60, Not important 35, The most important 100, Very important 99; Less favorable house price outlook: Somewhat important 98, Not important 25, The most important 100, Very important 99; Volume exceeds capacity: Somewhat important 80, Not important 70, The most important 100, Very important 99.

Note: Responses are weighted by survey respondents' holdings of residential real estate (RRE) loans (excluding multifamily loans and home equity lines of credit).

Special Questions on HARP 2.0

Figure: Proportion of Refinance Applications Attributable to HARP 2.0

Bar chart, by percent of respondents. There are five series, Between 50% and 70%, Between 30% and 50%, Between 10% and 30%, Less than 10%, and Little participation. Approximate values are: 2012:Q3: Between 50% and 70% 100, Between 30% and 50% 77, Between 10% and 30% 45, Less than 10% 15, Little participation 10; 2012:Q4: Between 50% and 70% 100, Between 30% and 50% 85, Between 10% and 30% 55, Less than 10% 24, Little participation 10.

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

Figure: Share of HARP 2.0 Applications Anticipated to Be Completed

Line 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: More than 80% 100, Between 60% and 80% 49, Between 40% and 60% 24, Between 20% and 40% 20, Less than 20% 20, and Little participation 20; 2012:Q3: More than 80% 100, Between 60% and 80% 90, Between 40% and 60% 37, Between 20% and 40% 10, Less than 20% 9, and Little participation 9; 2012:Q4: More than 80% 100, Between 60% and 80% 74, Between 40% and 60% 37, Between 20% and 40% 7, Less than 20% 6.8, and Little participation 6.5.

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

Measures of Supply and Demand for Consumer Loans

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

Line chart, by percent, 1990 to 2012. There are three series, Credit card loans, Other consumer loans, and Auto loans. Credit card loans begins in 1995 at about 23 and generally decreases to about -10 by 2007. It generally increases to about 66 by 2008 and then decreases to about -10 by 2012. Other consumer loans begins in 1995 at about 20 and generally decreases to about -10 by 2007. It generally increases to about 66 by 2008 and then decrease to about -3 by 2012. Other consumer loans begins in 2011:Q2 at about -16 and generally decreases to about -22 by 2012:Q3. It then increases to about -10 by 2012:Q4.

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, by percent, 1990 to 2012. There is a horizontal line at zero. There is a vertical line marking the July survey. The series begins in 1990 at about 8 and generally decreases to about -5 by 1996. It increases to about 20 by 2006 and then decreases to about -50 by 2008. It then generally increases to about 12 by 2012.

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

Line chart, by percent, 1990 to 2012. There are four series, All consumer loans, Credit card loans, Auto loans, and Other consumer loans. All consumer loans begins in 1990 at about -30 and generally increases to about 40 by 1994. It generally decreases to about -50 by 2008 and then generally increases to about 5 by 2012. Credit card loans begins in 2011:Q2 at about -1 and generally increases to about 10 by 2012:Q4. Auto loans begins in 2011:Q2 at about 25 and generally decrease to about 17 by 2012:Q1. It increases to about 40 by 2012:Q2 and then decreases to about 19 by 2012:Q4. Other consumer loans begins in 2011:Q2 at about 0 and generally decreases to about -8 by 2011:Q4. It increases to about 20 by 2012:Q2 and then decreases to about 5 by 2012:Q4.

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.

Risks and Uncertainty

Alternative Scenarios

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

Measure and scenario	2012 H1	2013	2014	2015	2016-17
Real GDP					
Extended Tealbook baseline	2.0	2.6	3.5	3.7	2.7
Fiscal cliff	2.0	1.3	2.6	3.5	3.7
Greater expectations	2.9	4.5	3.8	2.5	2.0
More momentum	2.6	3.5	3.5	2.9	2.4
Headwinds and attenuation	2.0	1.9	2.1	2.3	2.6
Damaged labor market	1.8	2.4	3.1	2.7	1.5
European crisis with severe spillovers	1.1	-3.1	1.2	4.2	3.3
Hard landing in China	1.8	1.7	2.9	3.9	3.2
Unemployment rate[1]					
Extended Tealbook baseline	8.0	7.8	7.2	6.2	5.1
Fiscal cliff	8.0	8.3	8.2	7.4	5.5
Greater expectations	7.9	6.9	5.9	5.3	5.2
More momentum	7.8	7.3	6.6	5.8	5.3
Headwinds and attenuation	8.0	8.0	8.0	7.8	7.0
Damaged labor market	8.0	7.9	7.4	6.8	6.8
European crisis with severe spillovers	8.1	9.8	10.4	9.3	7.5
Hard landing in China	8.0	8.1	7.9	6.9	5.5
Total PCE prices					
Extended Tealbook baseline	1.9	1.3	1.4	1.5	1.9
Fiscal cliff	1.9	1.3	1.2	1.1	1.5
Greater expectations	1.9	1.4	1.7	1.9	2.2
More momentum	1.9	1.4	1.6	1.7	2.0
Headwinds and attenuation	1.9	1.3	1.3	1.1	1.2
Damaged labor market	2.0	1.5	1.9	2.2	2.5
European crisis with severe spillovers	1.2	-1.1	.4	1.6	2.2
Hard landing in China	1.6	.4	.7	1.3	2.0
Core PCE prices					

Extended Tealbook baseline	1.3	1.6	1.7	1.7	1.9
Fiscal cliff	1.3	1.6	1.5	1.3	1.5
Greater expectations	1.3	1.7	2.0	2.1	2.2
More momentum	1.3	1.7	1.9	1.9	2.0
Headwinds and attenuation	1.3	1.6	1.6	1.3	1.2
Damaged labor market	1.4	1.8	2.2	2.4	2.5
European crisis with severe spillovers	1.1	.3	.8	1.5	2.0
Hard landing in China	1.2	1.2	1.3	1.5	1.9
Federal funds rate[1]					
Extended Tealbook baseline	.1	.1	.1	.7	3.9
Fiscal cliff	.1	.1	.1	.1	3.4
Greater expectations	.1	.6	1.8	2.2	4.0
More momentum	.1	.1	.6	1.4	3.7
Headwinds and attenuation	.1	.1	.1	.1	.5
Damaged labor market	.1	.1	1.0	2.6	4.9
European crisis with severe spillovers	.1	.1	.1	.1	1.5
Hard landing in China	.1	.1	.1	.2	3.1

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

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

Figure: Real GDP

Line chart, by 4-quarter percent change, 2008 to 2017. There is a horizontal line at zero. There are ten series, Extended Tealbook baseline, Fiscal cliff, Greater expectations, More momentum, Headwinds and attenuation, Damaged labor market, 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 -4.5 by 2009. It increases to about 3 by 2010 and then generally increases to about 3.8 by 2015. It then decreases to about 2.5 by 2017. Fiscal cliff begins in 2012 at about 2.5 and generally decreases to about 1.5 by 2013. It then generally increases to about 3.8 by 2017. Greater expectations begins in 2012 at about 2.5 and generally increases to about 4.8 by 2013. It then generally decreases to about 2.1 by 2017. More momentum begins in 2012 at about 2.5 and generally increases to about 4 by 2014. It then generally decreases to about 2.4 by 2017. Headwinds and attenuation begins in 2012 at about 2.5 and generally decreases to about 1.75 by 2013. It then generally increases to about 2.8 by 2017. Damaged labor market begins in 2012 at about 2.5 and generally increases to about 3 by 2014. It then generally decreases to about 1.4 by 2017. European crisis with severe spillovers begins in 2012 at about 2.5 and generally decreases to about -3 by 2013. It increases to about 4.5 by 2015 and then decreases to about 3 by 2017. Hard landing in China begins in 2012 at about 2.5 and generally decreases to about 1.4 by 2013. It generally increases to about 4.1 by 2015 and then decreases to about 3 by 2017. The other two series, 90 percent interval and 70 percent interval, closely track each other throughout the series with 90 percent interval being about 1.2 percent greater and less than 70 percent. 70 percent begins in 2012 at about 0.9 and 2.5 and increases to about 1 and 5 by 2015. It ends in 2017 at about 0.9 and 4.9.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2017. There are ten series, Extended Tealbook baseline, Fiscal cliff, Greater expectations, More momentum, Headwinds and attenuation, Damaged labor market, 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 2010. It then generally decreases to about 5.2 by 2017. Fiscal cliff begins in 2012 at about 8 and generally increases to about 8.2 by 2014. It then decreases to about 5.5 by 2017. Greater expectations begins in 2012 at about 8 and generally decreases to about 5.2 by 2017. More momentum begins in 2012 at about 8 and generally decreases to about 5.3 by 2017. Headwinds and attenuation begins in 2012 at about 8 and decreases to about 7.1 by 2017. Damaged labor market begins in 2012 at about 8 and decreases to about 6.6 by 2016. It increases to about 6.8 by 2017. European crisis with severe spillovers begins in 2012 at about 8 and increases to about 10.5 by 2014. It then decreases to about 7.6 by 2017. Hard landing in China begins in 2012 at about 8 and decreases to about 5.5 by 2017. The other two series, 90 percent interval and 70 percent interval, closely track each other throughout the series with 90 percent interval being about 0.75 greater and less than 70 percent interval. 70 percent interval begins in 2012 at about 8 and 7.6 and increases to about 5.5 and 8.2 by 2014. It ends in 2017 at about 4.25 and 6.5.

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 ten series, Extended Tealbook baseline, Fiscal cliff, Greater expectations, More momentum, Headwinds and attenuation, Damaged labor market, European crisis with severe spillovers, Hard landing in China, 90 percent interval and 70 percent interval. Extended Tealbook baseline begins in 2008 at 2.3 and generally decreases to about 1.1 by 2010. It increases to about 2 by 2011 and then decreases to about 1.5 by 2013. It then increases to about 2 by 2017. Fiscal cliff begins in 2012 at about 1.6 and generally decreases to about 1.35 by 2015. It then increases to about 1.6 by 2017. Greater expectations begins in 2012 at about 1.6 and generally increases to about 2.25 by 2017. More momentum begins in 2012 at about 1.6 and generally increases to about 2.1 by 2017. Headwinds and attenuation begins in 2012 at about 1.6 and generally decreases to about 1.25 by 2017. Damaged labor market begins in 2012 at about 1.6 and generally increases to about 2.6 by 2017. European crisis with severe spillovers begins in 2012 at about 1.6 and decreases to about 0.25 by 2013. It then generally increases to about 2.1 by 2017. Hard landing in China begins in 2012 at about 1.6 and decreases to about 1.25 by 2014. It then generally increases to about 2.1 by 2017. The other two series, 90 percent interval and 70 percent interval, closely track each other with 90 percent interval being about 0.6 percent greater and less than 70 percent interval. 70 percent begins in 2012 at about 1.8 and 0.8 and increases to about 0.75 and 2.6 by 2015. It ends in 2017 at about 1 and 2.9.

Figure: Federal Funds Rate

Line chart, by percent, 2008 to 2017. There is a horizontal line at zero. There are ten series, Extended Tealbook baseline, Fiscal cliff, Greater expectations, More momentum, Headwinds and attenuation, Damaged labor market, 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 where it remains relatively constant until 2015. It then increases to about 3.9 by 2017. Fiscal cliff begins in 2012 at about 0.1 where it remains relatively constant until 2015. It then increases to about 3.2 by 2017. Greater expectations begins in 2012 at about 0.1 and generally increases to about 4 by 2017. More momentum begins in 2012 at about 0.1 where it remains relatively constant until 2014. It then increases to about 3.8 by 2017. Headwinds and attenuation begins in 2008 at about 0.1 where it remains relatively constant until 2016. It then increases to about 0.5 by 2017. Damaged labor market begins in 2008 at about 0.1 where it remains relatively constant until 2014. It then increases to about 4.9 by 2017. European crisis with severe spillovers begins in 2012 at about 0.1 where it remains relatively constant until 2016. It then increases to about 1.5 by 2017. Hard landing in China begins in 2012 at about 0.1 where it remains relatively constant until 2015. It then increases to about 3 by 2017. The other two series, 90 percent interval and 70 percent interval, closely track each other with 90 percent interval being about 1.2 percent greater and less than 70 percent interval. 70 percent interval beings in 2012 at about 0.1 and 0.25 and increases to about 0.1 3 by 2015. It ends in 2017 at about 1.9 and 5.8.

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

Measure	2012	2013	2014	2015	2016	2017
Real GDP (percent change, Q4 to Q4)						
Projection	1.8	2.6	3.5	3.7	3.1	2.4
Confidence interval						
Tealbook forecast errors	1.3-2.3	.9-4.3	1.6-5.4	…	…	…
FRB/US stochastic simulations	1.2-2.4	1.3-4.5	1.6-5.2	1.2-5.0	1.1-5.1	.7-4.8
Civilian unemployment rate (percent, Q4)						
Projection	8.0	7.8	7.2	6.2	5.5	5.1
Confidence interval						
Tealbook forecast errors	7.9-8.1	7.1-8.5	6.0-8.4	…	…	…
FRB/US stochastic simulations	7.9-8.2	7.0-8.4	6.0-8.2	5.2-7.6	4.6-6.9	4.2-6.4
PCE prices, total (percent change, Q4 to Q4)						
Projection	1.7	1.3	1.4	1.5	1.8	2.0
Confidence interval						
Tealbook forecast errors	1.5-2.0	.0-2.5	.1-2.7	…	…	…
FRB/US stochastic simulations	1.4-2.2	.3-2.3	.2-2.6	.2-2.7	.5-2.9	.7-3.1
PCE prices excluding food and energy (percent change, Q4 to Q4)						
Projection	1.6	1.6	1.7	1.7	1.9	2.0
Confidence interval						
Tealbook forecast errors	1.4-1.8	.9-2.3	.9-2.5	…	…	…
FRB/US stochastic simulations	1.4-1.9	.9-2.3	.8-2.6	.7-2.6	.9-2.8	1.0-2.9
Federal funds rate (percent, Q4)						
Projection	.1	.1	.1	.7	2.6	3.9
Confidence interval						
FRB/US stochastic simulations	.1-.1	.1-1.0	.1-2.5	.1-3.1	.6-4.4	1.9-5.8

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
Real GDP						
Staff	1.6	1.8	2.4	2.6	3.2	3.5
FRB/US	1.5	1.4	1.7	1.9	2.9	3.1
EDO	1.9	2.0	3.1	3.2	3.1	3.2
Blue Chip	1.8	1.7	2.4	2.3	…	…
Unemployment rate[1]						
Staff	8.3	8.0	8.0	7.8	7.6	7.2
FRB/US	8.4	8.1	8.8	8.5	8.5	8.1
EDO	8.2	8.1	7.8	7.7	7.4	7.4
Blue Chip	8.1	8.1	7.7	7.8	…	…
Total PCE prices						
Staff	1.7	1.7	1.4	1.3	1.4	1.4
FRB/US	1.7	1.8	1.2	1.2	1.0	1.0
EDO	1.6	1.6	1.6	1.5	1.6	1.6
Blue Chip[2]	1.9	1.9	2.2	2.1	…	…
Core PCE prices						
Staff	1.7	1.6	1.6	1.6	1.6	1.7
FRB/US	1.7	1.7	1.5	1.5	1.2	1.3
EDO	1.7	1.6	1.6	1.5	1.6	1.6
Blue Chip	…	…	…	…	…	…
Federal funds rate[1]						
Staff	.1	.1	.1	.1	.6	.1
FRB/US	.2	.3	.2	.5	.9	1.6
EDO	.4	.3	1.2	1.2	1.9	1.9
Blue Chip[3]	.1	.1	.2	.2	…	…

Note: Blue Chip forecast completed on October 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 October 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 at about -1.9 and generally decreases to about -9 by late 2008. It increases to about 4 by 2009 and then generally decreases to about 0 by 2011. It increases to about 4 by 2012 and then decreases to about 2.8 by 2013. Staff forecast generally follows the same path as Blue chip consensus until 2012 when it begins increasing at a faster rate. It ends in 2013 at about 3.2. Blue chip top 10 and bottom 10 averages begins in 2012 at about 1 and 2.25 and increases to about 0.5 and 2.4 by early 2013. It ends in late 2013 at about 1.9 and 3.9.

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 at about -1 and decreases to about -5 by late 2008. It generally increases to about 4 by 2010 and then decreases to about 1 by 2011. It then generally increases to about 2.5 by 2013. Staff forecast generally follows the same path as Blue chip consensus until 2012 when it begins increasing at a faster rate. It ends in 2013 at about 3.6. Blue chip top 10 and bottom 10 averages begins in 2012 at about 1.4 and 2.6 and increases to about 0 and 2.9 by early 2013. It ends in late 2013 at about 1.8 and 3.4.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2013. 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 increases to about 10 by 2009. It then decreases to about 7.9 by 2013. Staff forecast generally follows the same path as Blue chip consensus. Blue chip top 10 and bottom 10 averages begins in 2012 at about 7.9 and 8.2 and increases to about 7.4 and 8.1 by late 2013.

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 early 2008 at about 4.2 and decreases to about -9 by late 2008. It generally increases to about 4.5 by 2011 and then decreases to about 2.1 by 2013. Staff forecast generally follows the same path as Blue chip consensus until 2012 when it begins decreasing at a faster rate. It ends in 2013 at about 1.75. Blue chip top 10 and bottom 10 averages begins in 2012 at about 1.7 and 3.8 and increases to about 0.1 and 3 by early 2013. It ends in late 2013 at about 1.8 and 3.

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 and generally decreases to about 0.1 by 2009. It remains relatively constant here until 2013. Staff forecast generally follows the same path as Blue chip consensus. Blue chip top 10 and bottom 10 averages begins in 2012 at about 0.1 and 0.2 and increases to about 0.1 and 0.3 by 2013.

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 2.7 by 2009. It increases to about 3.6 by 2010 and then decreases to about 1.6 by 2012. It then increases to about 2.4 by 2013. Staff forecast generally follows the same path as Blue chip consensus until 2012 when it begins increasing at a faster rate. It ends in 2013 at about 2.5. Blue chip top 10 and bottom 10 begins in 2012 at about 1.5 and 2 and generally increases to about 1.8 and 2.9 by 2013.

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

Assessment of Key Macroeconomic Risks (1)

Probability of Inflation Events

(4 quarters ahead--2013:Q3)

Probability that the 4-quarter change in total PCE prices will be ...	Staff	FRB/US	EDO	BVAR
Greater than 3 percent				
Current Tealbook	.06	.07	.11	.14
Previous Tealbook	.07	.06	.11	.14
Less than 1 percent				
Current Tealbook	.29	.26	.32	.09
Previous Tealbook	.27	.31	.32	.10

Probability of Unemployment Events

(4 quarters ahead--2013:Q3)

Probability that the unemployment rate will ...	Staff	FRB/US	EDO	BVAR
Increase by 1 percentage point				
Current Tealbook	.02	.15	.17	.01
Previous Tealbook	.02	.16	.16	.02
Decrease by 1 percentage point				
Current Tealbook	.04	.00	.29	.30
Previous Tealbook	.06	.00	.32	.14

Probability of Near-Term Recession

Probability that real GDP declines in each of 2012:Q4 and 2013:Q1	Staff	FRB/US	EDO	BVAR	Factor Model
Current Tealbook	.03	.06	.06	.03	.24
Previous Tealbook	.03	.07	.05	.03	.21

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

Assessment of Key Macroeconomic Risks (2)

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

Line chart, by probability, 1998 to 2012. There are two series, FRB/US and BVAR. FRB/US begins in 1998 at about 0 and generally increases to about .25 by 2000. It generally decreases to about 0 by 2004 and then increases to about 0.82 by 2008. It then generally decreases to about 0.075 by 2012. BVAR begins in 1998 at about 0.05 and generally increases to about 0.33 by 2001. It decreases to about 0.01 by 2002 and then generally increases to about 0.7 by 2008. It then generally decreases to about 0.17 by 2012.

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 0.84 by 2004. It generally decreases to about 0.2 by 2006 and then increases to about 1 by 2009. It then generally decreases to about 0.25 by 2012. BVAR begins in 1998 at about 0.2 and decreases to about 0 by 2001. It generally increases to about 0.99 by 2002 and then decrease to about 0.05 by 2005. It generally increases to about 1 by 2009 and then generally decreases to about 0.1 by 2012.

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

Line chart, by probability, 1998 to 2012. There are two series, FRB/US and BVAR. FRB/US begins in 1998 at 0 and generally increases to about 0.7 by 2001. It decreases to about 0 by 2004 and then increases to about 0.8 by 2009. It then generally decreases to about 0.18 by 2012. BVAR begins in 1998 at about 0 and generally increases to about 0.6 by 2001. It decreases to about 0 by 2004 and then increases to about 1 by 2009. It then generally decreases to about 0 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 0 and generally increases to about 0.85 by 2003. It decreases to about 0 by 2007 and then increases to about 0.8 by 2010. It then generally decreases to about 0 by 2012. BVAR begins in 1998 at about 0.12 and generally decreases to about 0 by 2001. It increases to about 0.21 by 2004 and then decreases to about 0 by 2007. It generally increases to about 0.59 by 2011 and then decreases to about 0.3 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 0 where it remains relatively stable until 2008. It increases to about 0.78 by 2009 and then generally decreases to about 0.075 by 2012. BVAR begins in 1998 at about 0 and increases to about 0.4 by 2001. It decreases to about 0 where it remains relatively stable until 2007. It generally increases to about 0.99 by 2009 and then decreases to about 0.05 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]	
		09/05/12	10/17/12	09/05/12	10/17/12	09/05/12	10/17/12	09/05/12	10/17/12	09/05/12	10/17/12
Quarterly											
2011:	Q1	2.2	2.2	.1	.1	3.2	3.2	1.3	1.3	9.0	9.0

	Q2	5.2	5.2	2.5	2.5	3.6	3.6	2.3	2.3	9.1	9.1
	Q3	4.3	4.3	1.3	1.3	2.3	2.3	1.9	1.9	9.1	9.1
	Q4	4.2	4.2	4.1	4.1	1.1	1.1	1.3	1.3	8.7	8.7
2012:	Q1	4.2	4.2	2.0	2.0	2.5	2.5	2.2	2.2	8.2	8.2
	Q2	3.3	2.8	1.7	1.3	.7	.7	1.8	1.7	8.2	8.2
	Q3	4.3	5.2	1.3	2.0	1.9	1.7	1.3	1.2	8.3	8.1
	Q4	3.1	4.3	1.7	2.0	1.7	2.1	1.5	1.4	8.3	8.0
2013:	Q1	3.4	2.8	2.0	1.8	1.2	.9	1.6	1.6	8.2	8.0
	Q2	3.8	4.0	2.3	2.5	1.5	1.4	1.6	1.6	8.2	8.0
	Q3	4.1	4.4	2.6	3.0	1.4	1.4	1.6	1.6	8.1	7.9
	Q4	4.3	4.5	2.8	3.1	1.3	1.3	1.6	1.6	8.0	7.8
Two-quarter[2]											
2011:	Q2	3.7	3.7	1.3	1.3	3.4	3.4	1.8	1.8	-.5	-.5
	Q4	4.3	4.3	2.7	2.7	1.7	1.7	1.6	1.6	-.4	-.4
2012:	Q2	3.7	3.5	1.8	1.6	1.6	1.6	2.0	2.0	-.5	-.5
	Q4	3.7	4.7	1.5	2.0	1.8	1.9	1.4	1.3	.1	-.2
2013:	Q2	3.6	3.4	2.1	2.2	1.4	1.2	1.6	1.6	-.1	.0
	Q4	4.2	4.5	2.7	3.1	1.4	1.4	1.6	1.6	-.2	-.2
Four-quarter[3]											
2010:Q4		4.3	4.3	2.4	2.4	1.5	1.5	1.2	1.2	-.3	-.3
2011:Q4		4.0	4.0	2.0	2.0	2.5	2.5	1.7	1.7	-.9	-.9
2012:Q4		3.7	4.1	1.6	1.8	1.7	1.7	1.7	1.6	-.4	-.7
2013:Q4		3.9	3.9	2.4	2.6	1.4	1.3	1.6	1.6	-.3	-.2
2014:Q4		4.7	5.0	3.2	3.5	1.4	1.4	1.6	1.7	-.4	-.6
Annual											
2010		3.8	3.8	2.4	2.4	1.9	1.9	1.5	1.5	9.6	9.6
2011		4.0	4.0	1.8	1.8	2.4	2.4	1.4	1.4	8.9	8.9
2012		4.0	4.1	2.1	2.2	1.8	1.8	1.8	1.7	8.2	8.1
2013		3.7	3.9	2.0	2.2	1.5	1.4	1.6	1.5	8.1	7.9
2014		4.5	4.8	3.0	3.3	1.4	1.4	1.6	1.6	7.8	7.4

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 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3
Real GDP	2.5	1.3	4.1	2.0	1.3	2.0	2.0	1.8	2.5	3.0
Previous Tealbook	2.5	1.3	4.1	2.0	1.7	1.3	1.7	2.0	2.3	2.6
Final sales	2.4	2.3	1.5	2.4	1.7	1.9	2.1	1.0	2.7	3.2
Previous Tealbook	2.4	2.3	1.5	2.4	1.9	1.4	1.4	.8	2.4	2.7
Priv. dom. final purch.	2.5	3.6	3.2	3.5	1.9	2.1	3.1	1.4	3.5	4.0
Previous Tealbook	2.5	3.6	3.2	3.5	2.0	2.1	2.2	1.3	3.3	3.5
Personal cons. expend.	1.0	1.7	2.0	2.4	1.5	2.3	3.1	1.1	3.0	3.4
Previous Tealbook	1.0	1.7	2.0	2.4	1.7	2.3	2.2	1.1	2.8	2.8
Durables	-2.3	5.4	13.9	11.5	-.2	8.0	12.4	2.3	10.4	10.1
Nondurables	-.3	-.4	1.8	1.6	.6	2.9	2.7	.9	1.8	2.3
Services	1.9	1.8	.3	1.3	2.1	1.3	1.7	1.0	2.3	2.7
Residential investment	4.1	1.4	12.1	20.5	8.5	14.3	13.9	13.4	14.9	15.6
Previous Tealbook	4.1	1.4	12.1	20.5	8.4	9.7	5.5	10.5	12.0	12.4
Business fixed invest.	14.5	19.0	9.5	7.5	3.6	-2.5	.8	1.0	3.7	5.2
Previous Tealbook	14.5	19.0	9.5	7.5	3.1	-1.0	1.5	.6	4.5	6.1
Equipment & software	7.8	18.3	8.8	5.4	4.8	-1.0	2.0	1.0	4.2	5.5
Previous Tealbook	7.8	18.3	8.8	5.4	4.1	.7	2.0	.2	5.4	7.5
Nonres. structures	35.2	20.7	11.5	12.9	.6	-6.1	-2.2	.9	2.7	4.4
Previous Tealbook	35.2	20.7	11.5	12.9	.5	-5.0	.5	1.4	2.3	2.6
Net exports[2]	-400	-398	-418	-416	-407	-406	-413	-409	-406	-402
Previous Tealbook[2]	-400	-398	-418	-416	-405	-405	-411	-412	-414	-414
Exports	4.1	6.1	1.4	4.4	5.3	-1.3	3.5	4.8	5.3	5.0
Imports	.1	4.7	4.9	3.1	2.8	-1.2	4.1	3.1	3.8	3.4
Gov't. cons. &										

invest.	-.8	-2.9	-2.2	-3.0	-.7	.6	-1.6	-1.5	-1.5	-1.4
Previous Tealbook	-.8	-2.9	-2.2	-3.0	-.7	-1.7	-1.1	-1.5	-1.5	-1.4
Federal	2.8	-4.3	-4.4	-4.2	-.2	1.4	-4.2	-4.0	-4.3	-4.1
Defense	8.3	2.6	-10.6	-7.1	-.2	3.4	-4.9	-4.7	-5.1	-4.8
Nondefense	-7.5	-17.4	10.2	1.8	-.4	-2.4	-2.7	-2.7	-2.7	-2.8
State & local	-3.2	-2.0	-.7	-2.2	-1.0	.0	.1	.2	.3	.3
Change in bus. inventories[2]	28	-4	71	57	41	48	48	74	69	64
Previous Tealbook[2]	28	-4	71	57	53	47	54	94	90	87
Nonfarm[2]	36	-1	74	62	53	67	67	68	61	57
Farm[2]	-6	-3	-2	-3	-8	-19	-19	7	7	7

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

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

Changes in Real Gross Domestic Product and Related Items

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Real GDP	2.8	2.4	2.2	-3.3	-.1	2.4	2.0	1.8	2.6	3.5
Previous Tealbook	2.8	2.4	2.2	-3.3	-.1	2.4	2.0	1.6	2.4	3.2
Final sales	2.7	2.8	2.4	-2.6	-.5	1.7	1.7	2.0	2.5	3.5
Previous Tealbook	2.7	2.8	2.4	-2.6	-.5	1.7	1.7	1.8	2.1	3.1
Priv. dom. final purch.	3.2	2.4	1.2	-4.5	-2.8	3.2	2.9	2.7	3.2	4.3
Previous Tealbook	3.2	2.4	1.2	-4.5	-2.8	3.2	2.9	2.5	2.9	4.0
Personal cons. expend.	2.8	3.2	1.7	-2.5	-.3	2.9	1.9	2.3	2.8	3.7
Previous Tealbook	2.8	3.2	1.7	-2.5	-.3	2.9	1.9	2.2	2.4	3.4
Durables	2.8	7.0	4.6	-13.0	3.0	9.5	5.9	7.8	8.1	9.6
Nondurables	3.1	2.9	.8	-3.1	.4	3.0	1.4	2.0	1.9	2.9
Services	2.7	2.6	1.4	-.5	-1.1	1.9	1.5	1.6	2.2	3.0
Residential investment	5.3	-15.7	-20.7	-24.4	-13.3	-5.7	3.9	14.2	14.8	13.2

Previous Tealbook	5.3	-15.7	-20.7	-24.4	-13.3	-5.7	3.9	10.9	11.9	12.4
Business fixed invest.	4.5	7.8	7.9	-9.4	-15.7	7.7	10.2	2.3	3.8	6.0
Previous Tealbook	4.5	7.8	7.9	-9.4	-15.7	7.7	10.2	2.7	4.2	5.7
Equipment & software	6.2	6.0	3.9	-13.6	-7.8	11.9	11.4	2.8	4.2	7.5
Previous Tealbook	6.2	6.0	3.9	-13.6	-7.8	11.9	11.4	3.0	5.1	7.2
Nonres. structures	-.1	13.0	17.3	-1.2	-29.4	-1.8	6.9	1.0	2.7	2.3
Previous Tealbook	-.1	13.0	17.3	-1.2	-29.4	-1.8	6.9	2.0	2.2	2.2
Net exports[1]	-723	-729	-649	-495	-355	-420	-408	-411	-406	-411
Previous Tealbook[1]	-723	-729	-649	-495	-355	-420	-408	-409	-416	-430
Exports	6.7	10.2	10.1	-2.5	.3	8.8	4.3	2.9	5.1	6.2
Imports	5.2	4.1	.8	-5.9	-6.1	10.9	3.5	2.2	3.9	5.0
Gov't. cons. & invest.	.7	1.5	1.9	2.7	4.0	-1.3	-3.3	-1.2	-1.5	-1.1
Previous Tealbook	.7	1.5	1.9	2.7	4.0	-1.3	-3.3	-1.6	-1.5	-1.1
Federal	1.2	2.2	3.1	8.8	5.1	2.3	-4.2	-1.8	-4.2	-4.2
Defense	.4	4.4	2.6	9.8	4.1	1.0	-4.0	-2.3	-4.9	-4.9
Nondefense	2.6	-2.3	4.2	6.8	7.2	5.2	-4.6	-.9	-2.7	-2.9
State & local	.4	1.2	1.2	-.9	3.3	-3.6	-2.7	-.8	.3	.9
Change in bus. inventories[1]	50	59	28	-36	-139	51	31	49	69	78
Previous Tealbook[1]	50	59	28	-36	-139	51	31	53	92	107
Nonfarm[1]	50	63	29	-38	-138	58	36	63	62	73
Farm[1]	0	-4	-1	1	-1	-6	-4	-12	7	5

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

Contributions to Changes in Real Gross Domestic Product

(Percentage points, annual rate except as noted)

Item	2011			2012				2013		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3

Real GDP	2.5	1.3	4.1	2.0	1.3	2.0	2.0	1.8	2.5	3.0
Previous Tealbook	2.5	1.3	4.1	2.0	1.7	1.3	1.7	2.0	2.3	2.6
Final sales	2.5	2.3	1.6	2.4	1.7	1.9	2.1	1.0	2.7	3.1
Previous Tealbook	2.5	2.3	1.6	2.4	1.9	1.4	1.4	.8	2.4	2.7
Priv. dom. final purch.	2.1	2.9	2.7	2.9	1.6	1.7	2.6	1.2	2.9	3.3
Previous Tealbook	2.1	2.9	2.7	2.9	1.7	1.8	1.9	1.1	2.7	2.9
Personal cons. expend.	.7	1.2	1.5	1.7	1.1	1.7	2.2	.8	2.2	2.4
Previous Tealbook	.7	1.2	1.5	1.7	1.2	1.7	1.6	.8	2.0	2.0
Durables	-.2	.4	1.0	.9	.0	.6	.9	.2	.8	.8
Nondurables	-.1	-.1	.3	.3	.1	.5	.4	.1	.3	.4
Services	.9	.9	.2	.6	1.0	.6	.8	.5	1.1	1.3
Residential investment	.1	.0	.3	.4	.2	.3	.3	.3	.4	.4
Previous Tealbook	.1	.0	.3	.4	.2	.2	.1	.2	.3	.3
Business fixed invest.	1.3	1.7	.9	.7	.4	-.3	.1	.1	.4	.5
Previous Tealbook	1.3	1.7	.9	.7	.3	-.1	.2	.1	.5	.6
Equipment & software	.5	1.2	.6	.4	.4	-.1	.1	.1	.3	.4
Previous Tealbook	.5	1.2	.6	.4	.3	.0	.1	.0	.4	.5
Nonres. structures	.8	.5	.3	.4	.0	-.2	-.1	.0	.1	.1
Previous Tealbook	.8	.5	.3	.4	.0	-.1	.0	.0	.1	.1
Net exports	.5	.0	-.6	.1	.2	.0	-.2	.1	.1	.1
Previous Tealbook	.5	.0	-.6	.1	.3	.0	-.2	.0	-.1	.0
Exports	.6	.8	.2	.6	.7	-.2	.5	.7	.7	.7
Imports	.0	-.8	-.9	-.5	-.5	.2	-.7	-.5	-.7	-.6
Gov't. cons. & invest.	-.2	-.6	-.4	-.6	-.1	.1	-.3	-.3	-.3	-.3
Previous										

Tealbook	-.2	-.6	-.4	-.6	-.1	-.3	-.2	-.3	-.3	-.3
Federal	.2	-.4	-.4	-.3	.0	.1	-.3	-.3	-.3	-.3
Defense	.5	.2	-.6	-.4	.0	.2	-.3	-.2	-.3	-.2
Nondefense	-.2	-.5	.3	.1	.0	-.1	-.1	-.1	-.1	-.1
State & local	-.4	-.2	-.1	-.3	-.1	.0	.0	.0	.0	.0
Change in bus. inventories	.0	-1.1	2.5	-.4	-.5	.1	.0	.8	-.2	-.1
Previous Tealbook	.0	-1.1	2.5	-.4	-.2	-.1	.2	1.2	-.1	-.1
Nonfarm	.0	-1.2	2.5	-.4	-.3	.5	.0	.0	-.2	-.1
Farm	.0	.1	.1	.0	-.2	-.3	.0	.7	.0	.0

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

Changes in Prices and Costs

(Percent, annual rate except as noted)

Item	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3
GDP chain-wt. price index	2.6	3.0	.4	2.0	1.6	3.0	2.1	1.0	1.4	1.3
Previous Tealbook	2.6	3.0	.4	2.0	1.6	2.9	1.4	1.4	1.5	1.5
PCE chain-wt. price index	3.6	2.3	1.1	2.5	.7	1.7	2.1	.9	1.4	1.4
Previous Tealbook	3.6	2.3	1.1	2.5	.7	1.9	1.7	1.2	1.5	1.4
Energy	20.5	4.7	-5.0	8.1	-13.6	10.5	11.6	-10.7	-3.0	-2.6
Previous Tealbook	20.5	4.7	-5.0	8.1	-13.5	10.3	2.5	-6.5	-2.4	-2.5
Food	6.0	5.1	3.3	1.3	.7	.6	2.6	3.5	2.9	2.2
Previous Tealbook	6.0	5.1	3.3	1.3	.7	1.4	3.4	3.6	3.4	2.5
Ex. food & energy	2.3	1.9	1.3	2.2	1.7	1.2	1.4	1.6	1.6	1.6
Previous Tealbook	2.3	1.9	1.3	2.2	1.8	1.3	1.5	1.6	1.6	1.6
Ex. food & energy, market based	2.3	2.1	1.5	2.2	1.8	1.3	1.2	1.5	1.5	1.5
Previous Tealbook	2.3	2.1	1.5	2.2	1.7	1.4	1.4	1.5	1.5	1.5

CPI	4.4	3.1	1.3	2.5	.8	2.3	2.9	.8	1.5	1.4
Previous Tealbook	4.4	3.1	1.3	2.5	.8	2.5	2.1	1.2	1.6	1.4
Ex. food & energy	2.4	2.5	1.9	2.1	2.6	1.5	1.7	1.7	1.7	1.7
Previous Tealbook	2.4	2.5	1.9	2.1	2.6	1.8	1.8	1.7	1.7	1.7
ECI, hourly compensation[2]	3.2	1.4	2.1	1.7	2.1	2.3	2.4	2.5	2.6	2.7
Previous Tealbook[2]	3.2	1.4	2.1	1.7	2.1	2.3	2.4	2.5	2.6	2.6
Nonfarm business sector										
Output per hour	1.2	.6	2.8	-.5	1.9	1.6	.7	.4	1.7	1.7
Previous Tealbook	1.2	.6	2.8	-.5	2.2	1.0	.8	.9	1.8	1.3
Compensation per hour	-.2	.0	-.7	5.8	3.5	2.2	2.4	2.6	2.7	2.8
Previous Tealbook	-.2	.0	-.7	5.8	3.7	2.3	2.3	2.5	2.6	2.7
Unit labor costs	-1.3	-.6	-3.3	6.4	1.6	.6	1.7	2.2	1.0	1.1
Previous Tealbook	-1.3	-.6	-3.3	6.4	1.5	1.3	1.5	1.6	.8	1.5
Core goods imports chain-wt. price index[3]	7.2	2.3	-.6	-.2	1.2	-3.4	1.6	1.8	1.1	1.4
Previous Tealbook[3]	7.2	2.3	-.6	-.2	1.2	-2.6	.4	.9	1.0	1.2

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

2. Private-industry workers. Return to table

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

Changes in Prices and Costs

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
GDP chain-wt. price index	3.5	2.9	2.6	2.1	.5	1.8	2.0	2.2	1.3	1.4
Previous Tealbook	3.5	2.9	2.6	2.1	.5	1.8	2.0	2.0	1.5	1.5
PCE chain-wt. price index	3.2	1.9	3.5	1.7	1.4	1.5	2.5	1.7	1.3	1.4
Previous Tealbook	3.2	1.9	3.5	1.7	1.4	1.5	2.5	1.7	1.4	1.4

Energy	21.5	-3.7	19.3	-8.8	2.7	6.5	11.9	3.6	-4.7	-2.3
Previous Tealbook	21.5	-3.7	19.3	-8.8	2.7	6.5	11.9	1.4	-3.4	-2.2
Food	1.5	1.7	4.7	7.0	-1.7	1.3	5.1	1.3	2.4	1.0
Previous Tealbook	1.5	1.7	4.7	7.0	-1.7	1.3	5.1	1.7	2.6	.9
Ex. food & energy	2.3	2.3	2.4	2.0	1.6	1.2	1.7	1.6	1.6	1.7
Previous Tealbook	2.3	2.3	2.4	2.0	1.6	1.2	1.7	1.7	1.6	1.6
Ex. food & energy, market based	2.0	2.2	2.1	2.2	1.7	.7	1.9	1.6	1.5	1.6
Previous Tealbook	2.0	2.2	2.1	2.2	1.7	.7	1.9	1.7	1.5	1.5
CPI	3.7	2.0	4.0	1.6	1.5	1.2	3.3	2.1	1.2	1.4
Previous Tealbook	3.7	2.0	4.0	1.6	1.5	1.2	3.3	2.0	1.4	1.3
Ex. food & energy	2.1	2.7	2.3	2.0	1.7	.6	2.2	2.0	1.7	1.8
Previous Tealbook	2.1	2.7	2.3	2.0	1.7	.6	2.2	2.1	1.7	1.7
ECI, hourly compensation[1]	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.1	2.6	2.9
Previous Tealbook[1]	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.1	2.6	2.9
Nonfarm business sector										
Output per hour	1.6	.8	2.5	-1.1	5.6	1.8	.6	.9	1.3	1.6
Previous Tealbook	1.6	.8	2.5	-1.1	5.6	1.8	.6	.8	1.3	1.6
Compensation per hour	3.5	4.5	3.6	2.5	1.5	1.6	2.0	3.5	2.8	3.1
Previous Tealbook	3.5	4.5	3.6	2.5	1.5	1.6	2.0	3.5	2.7	3.0
Unit labor costs	1.9	3.6	1.1	3.7	-3.9	-.2	1.4	2.6	1.5	1.5
Previous Tealbook	1.9	3.6	1.1	3.7	-3.9	-.2	1.4	2.6	1.4	1.4
Core goods imports chain-wt. price index[2]	2.2	2.5	2.9	3.7	-1.7	2.7	4.3	-.2	1.4	1.5
Previous Tealbook[2]	2.2	2.5	2.9	3.7	-1.7	2.7	4.3	-.3	1.1	1.4

1. Private-industry workers. Return to table

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

Other Macroeconomic Indicators

Item	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	Q
Employment and production											
Nonfarm payroll employment[2]	.6	.3	.5	.7	.3	.4	.4	.4	.4	.5	
Unemployment rate[3]	9.1	9.1	8.7	8.2	8.2	8.1	8.0	8.0	8.0	7.9	
Previous Tealbook[3]	9.1	9.1	8.7	8.2	8.2	8.3	8.3	8.2	8.2	8.1	
Natural rate of unemployment[3]	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Previous Tealbook[3]	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
GDP gap[4]	-4.6	-4.6	-4.0	-4.0	-4.1	-4.1	-4.0	-4.1	-3.9	-3.7	
Previous Tealbook[4]	-4.9	-5.0	-4.4	-4.4	-4.4	-4.5	-4.6	-4.6	-4.5	-4.3	
Industrial production[5]	1.2	5.6	5.1	5.9	2.6	-.4	2.8	5.0	3.7	3.4	
Previous Tealbook[5]	1.2	5.6	5.1	5.8	2.5	1.2	4.8	4.1	2.9	3.0	
Manufacturing industr. prod.[5]	.2	5.1	5.6	9.8	1.0	-.9	1.6	4.0	3.7	3.6	
Previous Tealbook[5]	.2	5.1	5.6	9.7	1.0	1.9	2.8	2.6	2.7	3.1	
Capacity utilization rate - mfg.[3]	74.4	75.2	76.1	77.6	77.5	77.1	77.1	77.5	77.9	78.2	
Previous Tealbook[3]	74.4	75.2	76.1	77.6	77.5	77.6	77.8	78.0	78.2	78.4	
Housing starts[6]	.6	.6	.7	.7	.7	.8	.9	.9	1.0	1.0	
Light motor vehicle sales[6]	12.2	12.6	13.4	14.2	14.1	14.5	14.7	14.9	15.1	15.3	
Income and saving											
Nominal GDP[5]	5.2	4.3	4.2	4.2	2.8	5.2	4.3	2.8	4.0	4.4	
Real disposable pers. income[5]	-1.5	-1.3	-.2	3.7	3.1	2.0	2.1	-1.6	3.0	3.6	
Previous Tealbook[5]	-1.5	-1.3	-.2	3.7	3.1	1.9	2.8	-1.3	2.9	3.6	
Personal saving rate[3]	4.6	3.9	3.4	3.6	4.0	4.0	3.8	3.1	3.1	3.1	

Previous Tealbook[3]	4.6	3.9	3.4	3.6	4.0	3.9	4.1	3.5	3.5	3.6
Corporate profits[7]	19.3	6.7	29.6	-10.4	4.7	4.2	-.7	-5.1	-3.6	-.8
Profit share of GNP[3]	11.8	11.9	12.5	12.1	12.1	12.1	12.0	11.7	11.5	11.4
Net federal saving[8]	-1,308	-1,232	-1,183	-1,059	-1,106	-1,053	-1,084	-826	-795	-772
Net state & local saving[8]	-75	-118	-117	-128	-124	-117	-110	-100	-80	-72
Gross national saving rate[3]	11.8	11.8	12.4	12.4	12.5	12.8	12.2	12.6	12.7	12.7
Net national saving rate[3]	-1.0	-1.0	-.3	-.3	-.1	.4	-.2	.3	.3	.4

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

2. Change, millions. Return to table

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

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

5. Percent change, annual rate. Return to table

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

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

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

Other Macroeconomic Indicators

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013
Employment and production									
Nonfarm payroll employment[1]	2.4	2.1	1.2	-2.8	-5.6	.8	1.8	1.8	2.0
Unemployment rate[2]	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.0	7.8
Previous Tealbook[2]	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.3	8.0
Natural rate of unemployment[2]	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0
Previous Tealbook[2]	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0
GDP gap[3]	.6	.8	.8	-4.4	-5.5	-4.4	-4.0	-4.0	-3.4
Previous Tealbook[3]	.6	.8	.8	-4.5	-5.7	-4.7	-4.4	-4.6	-4.1
Industrial production[4]	2.3	2.1	2.5	-9.0	-5.7	6.3	4.1	2.7	4.0
Previous Tealbook[4]	2.3	2.1	2.5	-9.0	-5.7	6.3	4.1	3.5	3.3

Manufacturing industr. prod.[4]	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	2.8	3.8
Previous Tealbook[4]	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	3.8	3.0
Capacity utilization rate - mfg.[2]	78.4	78.2	78.2	69.7	67.0	73.1	76.1	77.1	78.7
Previous Tealbook[2]	78.4	78.2	78.2	69.7	67.0	73.1	76.1	77.8	78.7
Housing starts[5]	2.1	1.8	1.4	.9	.6	.6	.6	.8	1.0
Light motor vehicle sales[5]	16.9	16.5	16.1	13.1	10.4	11.5	12.7	14.4	15.2
Income and saving									
Nominal GDP[4]	6.4	5.3	4.9	-1.2	.4	4.3	4.0	4.1	3.9
Real disposable pers. income[4]	.6	4.6	1.6	1.0	-3.0	3.5	.3	2.7	2.2
Previous Tealbook[4]	.6	4.6	1.6	1.0	-3.0	3.5	.3	2.9	2.2
Personal saving rate[2]	1.6	2.8	2.5	6.2	3.8	4.8	3.4	3.8	3.1
Previous Tealbook[2]	1.6	2.8	2.5	6.2	3.8	4.8	3.4	4.1	3.7
Corporate profits[6]	19.6	3.7	-8.1	-33.5	57.0	17.3	9.2	-.8	-2.5
Profit share of GNP[2]	11.8	11.6	10.1	6.8	10.7	12.0	12.5	12.0	11.3
Net federal saving[7]	-283	-204	-245	-613	-1229	-1308	-1237	-1075	-786
Net state & local saving[7]	26	51	12	-72	-113	-90	-102	-120	-79
Gross national saving rate[2]	15.6	16.5	13.9	12.6	11.0	12.1	12.4	12.2	12.8
Net national saving rate[2]	3.6	4.4	1.7	-.6	-2.3	-.6	-.3	-.2	.4

1. Change, millions. Return to table

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

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

4. Percent change. Return to table

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

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

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

Staff Projections of Federal Sector Accounts and Related Items

(Billions of dollars except as noted)

Item	Fiscal year				2012				2013		
	2012[a]	2013	2014	2015	Q1[a]	Q2[a]	Q3	Q4	Q1	Q2	Q
Unified budget					Not seasonally ac						
Receipts[1]	2,449	2,705	2,981	3,230	509	760	625	587	570	837	
Outlays[1]	3,538	3,501	3,598	3,784	966	885	810	912	886	863	

Surplus/deficit[1]	-1,089	-795	-617	-554	-457	-125	-185	-324	-317	-26	
Previous Tealbook	*-1,106*	*-837*	*-638*	*-597*	*-457*	*-125*	*-202*	*-331*	*-328*	*-34*	
On-budget	-1,151	-798	-627	-556	-458	-187	-160	-330	-298	-73	
Off-budget	62	3	10	2	1	62	-25	6	-19	47	
Means of financing											
Borrowing	1,152	832	697	634	398	198	230	275	307	101	
Cash decrease	-27	15	0	0	42	-48	6	40	30	-55	
Other[2]	-36	-52	-80	-80	17	-25	-51	9	-21	-20	
Cash operating balance, end of period	85	70	70	70	43	91	85	45	15	70	
NIPA federal sector					Seasonally adjusted a						
Receipts	2,637	2,911	3,164	3,400	2,665	2,669	2,681	2,713	2,943	2,976	3
Expenditures	3,737	3,780	3,852	3,993	3,724	3,775	3,734	3,797	3,768	3,770	3
Consumption expenditures	1,056	1,047	1,021	1,001	1,056	1,055	1,060	1,054	1,052	1,045	1
Defense	704	697	675	660	703	701	707	702	700	694	
Nondefense	352	351	346	340	352	354	353	352	352	351	
Other spending	2,682	2,733	2,831	2,992	2,668	2,720	2,674	2,743	2,716	2,725	2
Current account surplus	-1,100	-869	-688	-593	-1,059	-1,106	-1,053	-1,084	-826	-795	
Gross investment	156	153	144	137	152	156	158	156	154	151	
Gross saving less gross investment[3]	-1,116	-876	-681	-575	-1,071	-1,121	-1,068	-1,096	-835	-800	
Fiscal indicators[4]											
High-employment (HEB) surplus/deficit	-892.5	-647.0	-508.7	-482.3	-851.2	-899.2	-853.1	-877.9	-596.1	-565.2	-5
Change in HEB, percent of potential GDP	-1.1	-1.7	-.9	-.2	-.8	.3	-.3	.1	-1.7	-.2	
Fiscal impetus (FI), percent of GDP	-.6	-1.2	-.5	-.3	-.7	-.7	-.3	-.6	-2.0	-1.1	

Previous Tealbook	*-.6*	*-1.2*	*-.5*	*-.2*	*-.7*	*-.7*	*-.6*	*-.5*	*-2.0*	*-1.1*

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

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

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

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

a Actual. Return to table

Change in Debt of the Domestic Nonfinancial Sectors

(Percent)

Period[1]		Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
			Total	Home mortgages	Consumer credit				
Year									
2008		5.9	-.2	-.5	.8	6.1	.7	24.2	-1.2
2009		3.1	-1.7	-1.4	-4.5	-2.3	3.9	22.7	.4
2010		4.1	-2.2	-2.9	-1.2	.8	2.2	20.2	4.3
2011		3.6	-1.6	-2.3	3.4	4.7	-1.9	11.4	4.0
2012		4.4	.6	-1.6	5.8	4.3	-.2	10.7	4.1
2013		4.0	2.3	.9	6.7	3.9	.6	7.0	3.9
2014		3.8	2.5	.9	7.5	4.0	.9	5.7	5.0
2015		3.7	2.8	1.2	7.5	4.0	1.0	4.8	5.3
Quarter									
2011:	1	2.5	-2.0	-2.6	2.6	3.7	-2.8	9.1	2.2
	2	2.6	-2.7	-2.4	3.1	5.2	-2.6	8.2	5.2
	3	4.3	-1.7	-1.8	1.9	4.2	-.2	13.7	4.3
	4	4.9	.1	-2.5	5.9	5.3	-2.1	12.7	4.2
2012:	1	4.5	-.9	-3.3	5.7	3.8	-1.2	13.7	4.2
	2	4.8	1.3	-2.1	6.5	3.9	.8	10.9	2.8
	3	3.6	.5	-.9	4.5	5.1	-.9	6.7	5.2
	4	4.7	1.5	.0	6.0	4.3	.3	9.9	4.3
2013:	1	4.3	2.0	.9	5.4	4.1	.6	8.0	2.8

	2	4.1	2.4	1.0	6.6	3.8	.6	7.3	4.0
	3	3.0	2.4	.9	7.0	3.7	.6	3.5	4.4
	4	4.5	2.4	.8	7.2	3.8	.6	8.5	4.5
2014:	1	4.3	2.4	.7	7.3	3.9	.9	7.7	4.9
	2	3.1	2.4	.8	7.3	3.9	.9	3.3	5.0
	3	3.0	2.5	.9	7.3	4.0	.9	3.0	5.0
	4	4.6	2.6	1.0	7.3	4.1	.9	8.1	5.1

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)

					2012		2013				
Category	**2012**	**2013**	**2014**	**2015**	**Q3**	**Q4**	**Q1**	**Q2**	**Q3**	**Q4**	**Q**
Domestic nonfinancial sectors											
Net funds raised											
Total	1296.4	1266.4	1216.3	1221.0	958.5	1481.3	1376.3	1312.5	875.0	1501.8	1
Net equity issuance	-398.1	-340.0	-360.0	-360.0	-431.4	-360.0	-340.0	-340.0	-340.0	-340.0	-
Net debt issuance	1694.5	1606.4	1576.3	1581.0	1389.8	1841.3	1716.3	1652.5	1215.0	1841.8	1
Borrowing indicators											
Debt (percent of GDP)[1]	248.5	249.3	247.3	243.8	248.5	248.4	249.5	249.7	249.2	248.8	
Borrowing (percent of GDP)	10.8	9.8	9.2	8.8	8.8	11.5	10.7	10.2	7.4	11.1	
Households											
Net borrowing[2]	74.2	300.4	334.8	387.5	62.1	192.2	264.7	308.0	314.1	314.9	
Home mortgages	-153.7	86.4	82.3	117.4	-86.3	0.0	86.1	95.9	86.5	77.1	
Consumer credit	152.5	186.1	221.6	238.1	122.6	165.7	151.2	184.8	199.5	208.9	
Debt/DPI (percent)[3]	108.6	106.9	103.7	101.6	108.0	107.1	107.8	107.2	106.5	105.8	
Business											
Financing											

gap[4]	-106.1	49.1	223.1	263.0	-146.8	-119.4	2.3	32.7	61.4	99.9
Net equity issuance	-398.1	-340.0	-360.0	-360.0	-431.4	-360.0	-340.0	-340.0	-340.0	-340.0
Credit market borrowing	508.8	479.1	514.9	533.0	607.9	520.6	503.2	468.5	464.2	480.6
State and local governments										
Net borrowing	-7.3	17.9	25.9	29.9	-25.6	9.9	17.9	17.9	17.9	17.9
Current surplus[5]	146.3	168.8	211.7	262.1	123.6	133.0	144.3	166.4	176.1	188.3
Federal government										
Net borrowing	1101.6	809.0	700.7	630.6	745.5	1118.7	930.6	858.1	418.8	1028.5
Net borrowing (n.s.a.)	1101.6	809.0	700.7	630.6	229.8	275.3	307.5	100.6	148.1	252.8
Unified deficit (n.s.a.)	1091.9	703.6	620.7	550.6	185.1	324.3	316.9	25.8	128.1	232.8
Depository institutions										
Funds supplied	426.2	562.7	642.7	699.0	547.1	527.0	552.8	547.4	565.0	585.7

Note: Data after 2012:Q1 are staff projections.

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

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

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

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

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

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

Foreign Real GDP and Consumer Prices: Selected Countries

(Quarterly percent changes at an annual rate)

Measure and country									Projected	
	2011				2012				2013	
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Real GDP[1]										
Total foreign	3.5	2.4	3.8	1.6	3.2	2.2	2.0	2.1	2.4	2.7
Previous										

Tealbook	*3.5*	*2.3*	*3.9*	*1.6*	*3.2*	*2.3*	*2.3*	*2.3*	*2.5*	*2.7*
Advanced foreign economies	1.6	.0	3.1	.4	1.5	.6	.7	.6	.9	1.1
Canada	3.6	-1.0	4.5	1.9	1.8	1.8	1.9	1.8	1.7	1.8
Japan	-7.9	-1.3	6.9	.3	5.3	.7	-1.0	.4	.9	1.2
United Kingdom	2.0	.3	2.1	-1.4	-1.2	-1.5	2.4	.3	1.1	1.5
Euro area	2.6	.9	.3	-1.3	.0	-.7	-.8	-1.0	-.5	.0
Germany	5.0	1.8	1.5	-.6	2.0	1.1	.0	-.3	.0	.5
Emerging market economies	5.6	4.9	4.6	2.8	5.0	3.9	3.4	3.6	4.1	4.5
Asia	7.6	5.1	5.0	2.5	5.7	4.5	4.2	4.2	4.7	5.3
Korea	5.3	3.4	3.4	1.3	3.5	1.1	2.2	2.3	2.8	3.6
China	9.1	10.0	9.5	7.8	6.6	7.4	7.0	7.1	7.4	7.6
Latin America	3.3	4.8	4.0	3.0	4.2	3.2	2.6	3.0	3.5	3.6
Mexico	2.1	5.5	4.9	3.0	4.9	3.5	2.4	2.9	3.6	3.7
Brazil	3.3	2.3	-.6	.5	.5	1.6	2.8	3.3	3.4	3.5
Consumer prices[2]										
Total foreign	4.1	3.5	3.1	2.7	2.6	1.9	2.2	2.7	2.3	2.2
Previous Tealbook	*4.1*	*3.5*	*3.1*	*2.7*	*2.6*	*1.9*	*1.8*	*2.6*	*2.3*	*2.3*
Advanced foreign economies	3.0	2.3	1.3	2.4	2.1	.6	.7	1.8	1.3	1.2
Canada	3.3	3.4	1.0	2.9	2.1	.1	.1	2.1	1.6	1.5
Japan	.0	-.7	.1	-.7	2.3	-.9	-2.0	.5	.0	-.2
United Kingdom	6.7	4.0	3.9	4.0	1.9	1.2	2.6	3.8	2.0	1.5
Euro Area	3.4	2.9	1.9	3.6	2.4	2.0	2.3	2.1	1.6	1.6
Germany	3.3	2.5	1.9	2.8	2.4	1.4	1.8	2.2	2.2	2.1
Emerging market economies	5.1	4.5	4.5	3.0	2.9	3.0	3.3	3.3	3.1	3.1
Asia	5.5	5.2	4.9	2.1	2.3	3.2	2.1	3.0	2.9	2.9
Korea	5.5	3.4	4.4	2.6	1.6	1.2	1.0	2.3	2.8	2.8
China	5.1	6.1	5.7	1.4	2.0	2.5	1.7	2.5	2.7	2.8
Latin America	3.7	2.9	3.9	5.2	4.6	2.6	6.3	3.9	3.6	3.6
Mexico	3.2	2.4	3.5	4.9	4.5	2.5	6.5	3.6	3.4	3.3

Brazil	7.8	6.8	6.2	6.0	4.0	3.8	7.3	6.1	5.2	5.4

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

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

Foreign Real GDP and Consumer Prices: Selected Countries

(Percent change, Q4 to Q4)

Measure and country	2006	2007	2008	2009	2010	2011	Projected 2012	2013	2014
Real GDP[1]									
Total foreign	4.2	4.3	-.9	.9	4.5	2.8	2.4	2.8	3.4
Previous Tealbook	*4.2*	*4.3*	*-.9*	*.9*	*4.5*	*2.8*	*2.5*	*2.8*	*3.3*
Advanced foreign economies	2.6	2.6	-1.9	-1.4	2.9	1.3	.9	1.3	2.0
Canada	1.9	2.5	-.7	-1.4	3.3	2.2	1.8	2.0	2.7
Japan	2.1	1.6	-4.8	-.6	3.4	-.6	1.3	1.2	.8
United Kingdom	2.0	3.8	-4.6	-.9	1.5	.7	.0	1.7	2.3
Euro area	3.8	2.3	-2.1	-2.3	2.2	.6	-.6	.2	1.3
Germany	4.9	2.4	-1.9	-2.2	4.2	1.9	.7	.7	1.8
Emerging market economies	6.3	6.7	.4	3.6	6.2	4.5	4.0	4.5	4.8
Asia	7.8	8.8	.8	8.0	7.7	5.0	4.7	5.3	5.8
Korea	4.6	5.8	-3.2	6.3	5.0	3.4	2.3	3.5	4.2
China	12.8	13.7	7.7	11.3	9.7	9.1	7.0	7.7	8.1
Latin America	4.8	4.4	-.2	-.7	4.6	3.8	3.3	3.6	3.7
Mexico	4.1	3.5	-1.1	-2.1	4.3	3.9	3.4	3.7	3.7
Brazil	4.9	6.6	.9	5.3	5.3	1.4	2.1	3.6	4.0
Consumer prices[2]									
Total foreign	2.2	3.7	3.3	1.3	3.2	3.4	2.3	2.3	2.5
Previous Tealbook	*2.2*	*3.7*	*3.3*	*1.3*	*3.2*	*3.4*	*2.2*	*2.3*	*2.5*
Advanced foreign economies	1.4	2.2	2.0	.2	1.7	2.2	1.3	1.2	1.7
Canada	1.4	2.5	1.8	.8	2.2	2.7	1.1	1.6	1.9
Japan	.3	.5	1.1	-2.0	-.3	-.3	.0	-.1	1.7
United Kingdom	2.7	2.1	3.9	2.2	3.4	4.7	2.4	1.7	1.6
Euro Area	1.8	2.9	2.3	.4	2.0	2.9	2.2	1.5	1.5
Germany	1.3	3.1	1.7	.3	1.6	2.6	1.9	1.9	1.8
Emerging market economies	2.9	5.1	4.6	2.1	4.3	4.3	3.1	3.1	3.2
Asia	2.4	5.5	3.6	1.3	4.3	4.4	2.6	2.9	3.1

Korea	2.1	3.4	4.5	2.4	3.2	4.0	1.5	2.8	3.0
China	2.1	6.7	2.5	.6	4.6	4.6	2.2	2.8	3.0
Latin America	4.1	4.2	6.7	3.9	4.4	3.9	4.3	3.5	3.6
Mexico	4.1	3.8	6.2	4.0	4.3	3.5	4.3	3.3	3.3
Brazil	3.1	4.3	6.3	4.3	5.6	6.7	5.3	5.4	5.6

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

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

U.S. Current Account

Quarterly Data

					Projected						
	2011				2012				2013		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
	Billions of dollars, s.a.a.r.										
U.S. current account balance	**-480.0**	**-476.5**	**-432.6**	**-474.6**	**-534.5**	**-469.6**	**-436.6**	**-449.4**	**-465.7**	**-442.9**	**-45**
Previous Tealbook	*-480.0*	*-476.5*	*-432.6*	*-474.6*	*-549.3*	*-493.3*	*-455.5*	*-491.7*	*-514.4*	*-496.7*	*-50*
Current account as percent of GDP	-3.2	-3.2	-2.9	-3.1	-3.5	-3.0	-2.8	-2.8	-2.9	-2.7	
Previous Tealbook	*-3.2*	*-3.2*	*-2.9*	*-3.1*	*-3.5*	*-3.2*	*-2.9*	*-3.1*	*-3.2*	*-3.1*	
Net goods & services	-548.9	-566.2	-539.3	-585.1	-593.5	-557.3	-515.9	-528.7	-546.0	-517.4	-51
Investment income, net	217.9	232.8	241.9	247.4	197.4	229.7	220.1	222.1	221.7	211.9	20
Direct, net	314.9	318.2	323.4	330.2	282.9	305.5	281.7	276.6	275.2	267.7	26
Portfolio, net	-97.1	-85.4	-81.4	-82.8	-85.6	-75.8	-61.7	-54.5	-53.5	-55.7	-6
Other income and transfers, net	-148.9	-143.1	-135.3	-136.9	-138.4	-142.0	-140.8	-142.9	-141.4	-137.5	-14

Annual Data

							Projected		
	2006	2007	2008	2009	2010	2011	2012	2013	2014

	Billions of dollars								
U.S. current account balance	**-800.6**	**-710.3**	**-677.1**	**-381.9**	**-442.0**	**-465.9**	**-472.5**	**-463.5**	**-506.9**
Previous Tealbook	*-800.6*	*-710.3*	*-677.1*	*-381.9*	*-442.0*	*-465.9*	*-497.4*	*-516.9*	*-572.1*
Current account as percent of GDP	-6.0	-5.1	-4.7	-2.7	-3.0	-3.1	-3.0	-2.8	-3.0
Previous Tealbook	*-6.0*	*-5.1*	*-4.7*	*-2.7*	*-3.0*	*-3.1*	*-3.2*	*-3.2*	*-3.4*
Net goods & services	-753.3	-696.7	-698.3	-379.2	-494.7	-559.9	-548.8	-529.6	-542.1
Investment income, net	54.7	111.1	157.8	127.6	191.0	235.0	217.3	206.8	175.8
Direct, net	174.0	244.6	284.3	253.0	297.9	321.7	286.7	268.8	276.9
Portfolio, net	-119.4	-133.5	-126.5	-125.4	-106.9	-86.7	-69.4	-62.1	-101.1
Other income and transfers, net	-102.0	-124.7	-136.6	-130.3	-138.2	-141.1	-141.0	-140.6	-140.6

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

Last update: January 5, 2018

Accessible Material

October 2012 Tealbook B Tables and Charts†

Monetary Policy Strategies

Policy Rules and the Staff Projection

Near-Term Prescriptions of Selected Policy Rules

	Constrained Policy		Unconstrained Policy	
	2012Q4	2013Q1	2012Q4	2013Q1
Taylor (1993) rule	**1.65**	**1.40**	**1.65**	**1.40**
Previous Tealbook	*1.53*	*1.30*	*1.53*	*1.30*
Taylor (1999) rule	**0.13**	**0.13**	**-0.36**	**-0.63**
Previous Tealbook	*0.13*	*0.13*	*-0.76*	*-0.98*
Inertial Taylor (1999) rule	**0.13**	**0.13**	**0.07**	**-0.04**
Previous Tealbook	*0.13*	*0.13*	*0.01*	*-0.14*
Outcome-based rule	**0.13**	**0.13**	**0.10**	**-0.05**
Previous Tealbook	*0.13*	*0.13*	*-0.02*	*-0.23*
First-difference rule	**0.13**	**0.23**	**0.11**	**0.23**
Previous Tealbook	*0.13*	*0.13*	*0.03*	*0.04*
Nominal income targeting rule	**0.13**	**0.13**	**-0.21**	**-0.55**
Previous Tealbook	*0.13*	*0.13*	*-0.41*	*-0.86*

...ual Real Federal Funds Rate

	Current Tealbook	*Current Quarter Estimate as of Previous Tealbook*	*Previous Tealbook*
Tealbook-consistent FRB/US r estimate	-1.90	-2.11	*-2.39*
Actual real federal funds rate	-1.47		*-1.67*

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

Figure: Real Federal Funds Rate

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

Figure: Unemployment Rate

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

Figure: PCE Inflation

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

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

Constrained vs. Unconstrained Optimal Control Policy

Figure: Nominal Federal Funds Rate

Line chart, by percent 2012 to 2020. There are four series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Tealbook baseline." Current Tealbook: Constrained begins in 2012 at about 0.1 and remains relatively constant here until 2015. It generally increases to end at about 4.5 in 2020. Previous Tealbook: Constrained generally follows the same exact path as Current Tealbook: Constrained, except it ends at about 4.6 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 4.25 by 2020. Tealbook baseline begins in 2012 at about 0.1 where it remains relatively constant until about 2015. 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 H1	2012 H2	2013	2014	2015	2016
Real GDP						
Extended Tealbook baseline	1.6	2.0	2.6	3.5	3.7	3.1
Taylor (1993)	1.6	2.0	1.6	2.8	3.5	3.5
Taylor (1999)	1.6	2.0	2.2	3.1	3.4	3.2
Inertial Taylor (1999)	1.6	2.0	2.5	3.3	3.6	3.2
First-difference	1.6	2.0	2.0	2.9	3.3	3.2
Nominal income targeting	1.6	2.0	2.8	3.7	3.8	3.3
Constrained optimal control	1.6	2.2	3.0	3.8	4.0	3.2
Unemployment rate[1]						
Extended Tealbook baseline	8.2	8.0	7.8	7.2	6.2	5.5
Taylor (1993)	8.2	8.0	8.1	7.9	7.2	6.3
Taylor (1999)	8.2	8.0	7.9	7.5	6.8	6.0
Inertial Taylor (1999)	8.2	8.0	7.8	7.3	6.4	5.7
First-difference	8.2	8.0	8.0	7.7	7.0	6.3
Nominal income targeting	8.2	8.0	7.7	7.0	6.0	5.2
Constrained optimal control	8.2	8.0	7.6	6.8	5.7	5.0
Total PCE prices						
Extended Tealbook baseline	1.6	1.9	1.3	1.4	1.5	1.8
Taylor (1993)	1.6	1.7	0.9	1.0	1.0	1.3
Taylor (1999)	1.6	1.8	1.0	1.1	1.2	1.4
Inertial Taylor (1999)	1.6	1.9	1.3	1.4	1.5	1.8
First-difference	1.6	1.8	1.0	1.1	1.2	1.5
Nominal income targeting	1.6	2.1	1.6	1.7	1.8	2.1
Constrained optimal control	1.6	2.2	1.6	1.7	1.8	2.1
Core PCE prices						
Extended Tealbook baseline	2.0	1.3	1.6	1.7	1.7	1.9
Taylor (1993)	2.0	1.1	1.3	1.2	1.2	1.4
Taylor (1999)	2.0	1.1	1.3	1.4	1.4	1.5
Inertial Taylor (1999)	2.0	1.3	1.6	1.7	1.8	1.9

First-difference	2.0	1.1	1.3	1.4	1.4	1.6
Nominal income targeting	2.0	1.4	1.9	2.0	2.1	2.2
Constrained optimal control	2.0	1.5	1.9	2.0	2.0	2.2
Federal funds rate[1]						
Extended Tealbook baseline	0.2	0.1	0.1	0.1	0.7	2.6
Taylor (1993)	0.2	1.6	1.1	1.4	2.1	2.9
Taylor (1999)	0.2	0.1	0.1	0.6	1.8	3.0
Inertial Taylor (1999)	0.2	0.1	0.1	0.6	1.5	2.6
First-difference	0.2	0.1	0.2	0.9	2.2	3.2
Nominal income targeting	0.2	0.1	0.1	0.3	1.3	2.4
Constrained optimal control	0.2	0.1	0.1	0.1	0.4	2.0

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

Monetary Policy Alternatives

Table 1: Overview of Policy Alternatives for the October 24 FOMC Statement

Selected Elements	September Statement	October Alternatives		
		A	B	C
Economic Outlook				
Outlook	…without further policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. …anticipates that inflation over the medium term likely would run at or below its 2 percent objective.	…remains concerned that, without further policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Unchanged	…remains concerned that, without sufficient policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Unchanged	…expects economic growth to be moderate over coming quarters and then to pick up gradually, supported in part by the highly accommodative stance of monetary policy, and consequently anticipates that the unemployment rate will continue to decline toward levels the Committee judges consistent with its dual mandate. …anticipates that inflation over the medium term will run near its 2 percent objective.
Balance Sheet				
MEP	Continue its program as announced in June	Ends in December	Continues to year-end	Continues to year-end
Additional Asset Purchases	$40 billion per month additional MBS	Continue MBS purchases at $40 billion per month after the end of the year; purchase longer-term Treasury securities at $45	Unchanged	Continue MBS purchases at $40 billion per month through the end of the year.

		billion per month after MEP ends.		
Reinvestment Policies	Reinvest principal payments from agency debt and MBS into agency MBS.	Unchanged	Unchanged	Unchanged
Guidance	If the outlook for the labor market does not improve substantially, the Committee will continue its purchases of agency mortgage-backed securities, undertake additional asset purchases, and employ its other policy tools as appropriate until such improvement is achieved in a context of price stability.	The Committee will continue purchases of agency MBS and Treasury securities until it judges that data on economic activity and labor market conditions are consistent with an outlook for sustained progress toward maximum employment and price stability.	Unchanged	The Committee is prepared to take further action as needed to promote sustained improvement in labor market conditions in a context of price stability.
Future Policy Action				
Guidance	Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the recovery strengthens; … currently anticipates that exceptionally low levels for the federal funds rate are likely warranted at least through mid-2015.	Unchanged	Unchanged	for [a considerable | some] time; … at least through [late 2014 | mid-2014 | late 2013] **OR** In determining the appropriate time to increase its target, the Committee will consider actual and projected labor market conditions, medium-term outlook for inflation, and risks to achievement of Committee's objectives.

[Note: In the October 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.]

October FOMC Statement--Alternative A

1. Information received since the Federal Open Market Committee met in ~~August~~ **September** suggests that economic activity has continued to expand at a moderate pace in recent months. Growth in employment has been slow, and the unemployment rate remains elevated. Household spending has continued to advance, but growth in business fixed investment ~~appears to have~~ **has** slowed. The housing sector has shown some further signs of improvement, albeit from a depressed level. Inflation ~~has been subdued, although the prices of some key commodities have increased~~ recently **picked up somewhat, reflecting higher energy prices**. 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 ~~is~~ **remains** concerned that, without further policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term likely would run at or below its 2 percent objective.
3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee agreed today to ~~increase policy accommodation by~~ **continue**

purchasing additional agency mortgage-backed securities at a pace of $40 billion per month **after the end of the year**. The Committee also ~~will continue through the end of the year~~ **agreed to purchase longer-term Treasury securities at a pace of $45 billion per month after** its program to extend the average maturity of its holdings of **Treasury** securities ~~as announced in June, and it~~ **ends in December. 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. These actions, which together will increase the Committee's holdings of longer-term securities by about $85 billion each month ~~through the end of the year~~, should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

4. The Committee will closely monitor incoming information on economic and financial developments ~~in coming months~~. ~~If the outlook for the labor market does not improve substantially,~~ The Committee will continue its purchases of agency mortgage-backed securities **and Treasury securities**, ~~undertake additional asset purchases,~~ and employ its other policy tools as appropriate, until ~~such improvement is achieved~~ **it judges that data on economic activity and labor market conditions are consistent with an outlook for sustained progress toward maximum employment** in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.

5. To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens. In particular, the Committee also decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that exceptionally low levels for the federal funds rate are likely to be warranted at least through mid-2015.

October FOMC Statement--Alternative B

1. Information received since the Federal Open Market Committee met in ~~August~~ **September** suggests that economic activity has continued to expand at a moderate pace in recent months. Growth in employment has been slow, and the unemployment rate remains elevated. Household spending has ~~continued to~~ advance**d a bit more quickly**, but growth in business fixed investment ~~appears to have~~ **has** slowed. The housing sector has shown some further signs of improvement, albeit from a depressed level. Inflation ~~has been subdued, although the prices of some key commodities have increased~~ recently **picked up somewhat, reflecting higher energy prices**. 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 ~~is~~ **remains** concerned that, without ~~further~~ **sufficient** policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions. Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term likely would run at or below its 2 percent objective.

3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~agreed today to increase policy accommodation by~~ **will continue** purchasing additional agency mortgage-backed securities at a pace of $40 billion per month. The Committee also will continue through the end of the year its program to extend the average maturity of its holdings of **Treasury** securities ~~as announced in June~~, and it is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. These actions, which together will increase the Committee's holdings of longer-term securities by about $85 billion each month through the end of the year, should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

4. The Committee will closely monitor incoming information on economic and financial developments in coming months. If the outlook for the labor market does not improve substantially, the Committee will continue

its purchases of agency mortgage-backed securities, undertake additional asset purchases, and employ its other policy tools as appropriate until such improvement is achieved in a context of price stability. In determining the size, pace, and composition of its asset purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.
5. To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the economic recovery strengthens. In particular, the Committee also decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that exceptionally low levels for the federal funds rate are likely to be warranted at least through mid-2015.

October FOMC Statement--Alternative C

1. Information received since the Federal Open Market Committee met in ~~August~~ **September** suggests that economic activity has continued to expand at a moderate pace in recent months **despite the adverse effects of the drought on agricultural production**. ~~Growth in~~ Employment has **increased further** ~~been slow~~, and the unemployment rate, ~~remains~~ **though still** elevated**, has declined**. ~~Household spending~~ **Private domestic demand** has continued to advance~~, but growth in business fixed investment appears to have slowed~~. The housing sector has shown some further signs of improvement~~, albeit from a depressed level~~. Inflation ~~has been subdued~~, ~~although the prices of some key commodities have increased~~ recently **picked up, mainly reflecting higher energy prices; however,** longer-term inflation expectations have remained stable.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee ~~is concerned that, without further policy accommodation, economic growth might not be strong enough to generate sustained improvement in labor market conditions~~ **expects economic growth to be moderate over coming quarters and then to pick up gradually, supported in part by the highly accommodative stance of monetary policy, and consequently anticipates that the unemployment rate will continue to decline toward levels that the Committee judges consistent with its dual mandate**. ~~Furthermore~~ **However**, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee also anticipates that inflation over the medium term ~~likely would~~ **will** run ~~at or below~~ **near** its 2 percent objective.
3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee agreed today to ~~increase policy accommodation by~~ **continue** purchasing additional agency mortgage-backed securities at a pace of $40 billion per month **through the end of the year**. The Committee also will continue through the end of the year its program to extend the average maturity of its holdings of **Treasury** securities ~~as announced in June~~, and it is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. These actions, which together will increase the Committee's holdings of longer-term securities by about $85 billion each month through the end of the year, should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.
4. The Committee will closely monitor incoming information on economic and financial developments ~~in coming months. If the outlook for the labor market does not improve substantially, the Committee will continue its purchases of agency mortgage-backed securities, undertake additional asset purchases, and employ its other policy tools as appropriate until such improvement is achieved~~ **and is prepared to take further action as needed to promote sustained improvement in labor market conditions** in a context of price stability. ~~In determining the size, pace, and composition of its asset purchases, the Committee will, as always, take appropriate account of the likely efficacy and costs of such purchases.~~
5. To support continued progress toward maximum employment and price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for **[** a considerable **| some]** time after the economic recovery strengthens. In particular, the Committee ~~also~~ decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that exceptionally low

levels for the federal funds rate are likely to be warranted at least through mid-2015 **[late 2014 | mid-2014 | late 2013]**.

OR

5′. To support continued progress toward maximum employment ~~and~~ **in a context of** price stability, the Committee expects that a highly accommodative stance of monetary policy will remain appropriate for **[** a considerable **| some]** time after the economic recovery strengthens. In particular, the Committee ~~also~~ decided today to keep the target range for the federal funds rate at 0 to 1/4 percent ~~and currently anticipates that exceptionally low levels for the federal funds rate are likely to be warranted at least through mid-2015~~. **As rates of resource utilization rise toward levels consistent with maximum employment, the Committee will need to make monetary policy less accommodative in order to foster sustained economic expansion with inflation at 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.**

Long-Run Projections of the Balance Sheet and Monetary Base

Figure: Total Assets

Line chart, by billions of dollars, 2006 to 2020. Data are monthly. There are five series, "Alt A," "Alt B," "Alt C," and "September Alt B′." All five series begin at about 900 in 2006. They all follow the same path to generally increase to about 2500 in 2012. The Alt A series generally increases to about 4000 in 2014. It then generally decreases to end at about 2000 in 2020. The Alt B series generally increases to about 3000 in 2013. It then generally decreases to end at about 2000 in 2020. The Alt C series generally decreases to about 1500 in 2018. It then generally increases to end at about 2000 in 2020. The September Alt B′ series generally decreases to about 1500 in 2017. It then generally increases to end at about 2000 in 2020.

Growth Rates for the Monetary Base

Date	Alternative B	Alternative A	Alternative C	Memo: September Alt B′
	Percent, annual rate			
Monthly				
Apr-12	-12.3	-12.3	-12.3	-12.2
May-12	-8.7	-8.7	-8.7	-8.7
Jun-12	-5.1	-5.1	-5.1	-5.1
Jul-12	7.7	7.7	7.7	7.7
Aug-12	7.7	7.7	7.7	18.7
Sep-12	-12.4	-12.4	-12.4	6.0
Oct-12	1.1	1.2	-0.1	-1.1
Nov-12	28.9	29.1	27.6	16.0
Dec-12	23.1	23.1	23.6	17.3
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	-3.9
2012 Q3	0.8	0.8	0.8	5.3
2012 Q4	7.5	7.6	6.9	8.6
2013 Q1	28.3	28.3	15.9	22.8
2013 Q2	30.1	30.3	-4.8	25.3
Annual - Q4 to Q4				
2010	0.9	0.9	0.9	0.9
2011	32.9	32.9	32.9	32.9
2012	2.5	2.5	2.3	3.9
2013	25.1	37.4	4.9	23.6
2014	-0.6	4.9	-2.2	-0.7
2015	-2.4	-2.5	-7.7	-3.2
2016	-14.3	-13.5	-17.2	-14.5
2017	-16.9	-15.7	-18.9	-16.7
2018	-23.9	-22.6	-6.7	-23.9

Note: Not seasonally adjusted.

Growth Rates for M2

(Percent, seasonally adjusted annual rate)

	Tealbook Forecast *
Monthly Growth Rates	
Jan-12	16.2
Feb-12	3.7
Mar-12	4.2
Apr-12	5.5
May-12	3.9
Jun-12	5.1
Jul-12	9.0
Aug-12	4.5
Sep-12	10.1
Oct-12	6.6
Nov-12	4.0
Dec-12	3.6
Quarterly Growth Rates	
2012 Q1	8.7

2012 Q2	4.6
2012 Q3	6.7
2012 Q4	6.3
2013 Q1	-0.4
2013 Q2	1.9
2013 Q3	2.2
2013 Q4	2.2
2014 Q1	2.6
2014 Q2	2.7
2014 Q3	2.7
2014 Q4	2.8
Annual Growth Rates	
2012	6.7
2013	1.5
2014	2.7

* This forecast is consistent with nominal GDP and interest rates in the Tealbook A forecast. Actual data through October 8, 2012; projections thereafter. Return to table

[Note: In the October 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.]

October 2012 Directive--Alternative A

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about $267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about $267 billion. For the duration of this program, the Committee directs the Desk to suspend its policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. The Desk is also directed to ~~begin~~ **continue** purchasing agency mortgage-backed securities at a pace of about $40 billion per month. 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.

October 2012 Directive--Alternative B

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about $267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about $267 billion. For the duration of this program, the Committee directs the Desk to suspend its policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. The Desk is also directed to ~~begin~~ **continue** purchasing agency mortgage-backed securities at a pace of about $40 billion per month. 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.

October 2012 Directive--Alternative C

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it announced in June to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about $267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about $267 billion. For the duration of this program, the Committee directs the Desk to suspend its policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. The Desk is also directed to ~~begin~~ **continue** purchasing agency mortgage-backed securities at a pace of about $40 billion per month **until the end of 2012**. 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.

Explanatory Notes

A. Policy Rules Used in "Monetary Policy Strategies"

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

Rule	Specification
Taylor (1993) rule	$R_t = 2.25 + \pi_t + 0.5(\pi_t - \pi\quad) + 0.5 gap_t$

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

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

10-Year Treasury Term Premium Effect

Date	Alternative B	Alternative A	Alternative C	Memo: September Alt B′
	Basis Points Quarterly Averages			
2012 Q4	-93	-114	-66	-93
2013 Q1	-90	-111	-62	-89
2013 Q2	-86	-107	-58	-86
2013 Q3	-81	-103	-54	-81
2013 Q4	-76	-98	-50	-76
2014 Q1	-72	-93	-46	-71
2014 Q2	-67	-87	-42	-66
2014 Q3	-62	-81	-38	-61
2014 Q4	-57	-75	-35	-57
2015 Q1	-53	-70	-32	-52
2015 Q2	-49	-64	-29	-48
2015 Q3	-44	-59	-26	-43
2015 Q4	-40	-54	-23	-39
2016 Q1	-37	-49	-20	-35
2016 Q2	-33	-44	-18	-32
2016 Q3	-30	-40	-16	-29
2016 Q4	-27	-36	-14	-25
2017 Q1	-24	-32	-13	-23
2017 Q2	-21	-29	-11	-20
2017 Q3	-19	-25	-10	-17
2017 Q4	-17	-23	-9	-15
2018 Q1	-15	-20	-8	-13
2018 Q2	-13	-17	-7	-12
2018 Q3	-12	-15	-7	-10

2018 Q4	-10	-13	-6	-9
2019 Q1	-9	-12	-6	-8
2019 Q2	-8	-10	-6	-7
2019 Q3	-8	-9	-6	-6
2019 Q4	-7	-8	-5	-6
2020 Q1	-6	-7	-5	-5
2020 Q2	-6	-6	-5	-5
2020 Q3	-6	-6	-4	-5
2020 Q4	-5	-5	-4	-4

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

Billions of dollars

	Sep 30, 2012	2012	2014	2016	2018	2020
Total assets	2,802	2,908	3,511	2,891	1,873	1,976
Selected assets						
Liquidity programs for financial firms	13	13	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	13	13	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	2	2	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	2	1	0	0	0	0
Securities held outright	2,564	2,650	3,258	2,685	1,710	1,848
U.S. Treasury securities	1,645	1,657	1,927	1,707	1,218	1,828
Agency debt securities	83	77	39	16	2	0
Agency mortgage-backed securities	835	916	1,292	961	490	20
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	221	241	252	206	162	128
Total liabilities	2,747	2,846	3,430	2,783	1,730	1,787
Selected liabilities						
Federal Reserve notes in circulation	1,086	1,108	1,249	1,402	1,530	1,671
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,578	1,658	2,099	1,300	127	36
Reserve balances held by depository institutions	1,464	1,607	2,048	1,290	116	25
U.S. Treasury, General Account	85	45	45	5	5	5
Other Deposits	29	6	6	6	6	6
Interest of Federal Reserve Notes due to U.S. Treasury	2	0	0	0	-8	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

	Sep 30, 2012	2012	2014	2016	2018	2020
Total assets	2,802	2,909	4,043	3,359	2,213	1,943
Selected assets						
Liquidity programs for financial firms	13	13	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	13	13	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	2	2	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	2	1	0	0	0	0
Securities held outright	2,564	2,649	3,765	3,134	2,038	1,808
U.S. Treasury securities	1,645	1,657	2,197	1,977	1,454	1,784
Agency debt securities	83	77	39	16	2	0
Agency mortgage-backed securities	835	915	1,530	1,141	582	23
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	221	243	276	224	175	135
Total liabilities	2,747	2,847	3,961	3,251	2,070	1,754
Selected liabilities						
Federal Reserve notes in circulation	1,086	1,108	1,249	1,402	1,530	1,671
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,578	1,658	2,626	1,764	483	36
Reserve balances held by depository institutions	1,464	1,608	2,575	1,754	473	25
U.S. Treasury, General Account	85	45	45	5	5	5
Other Deposits	29	6	6	6	6	6
Interest of Federal Reserve Notes due to U.S. Treasury	2	0	0	0	-31	-34
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

	Sep 30, 2012	2012	2014	2016	2018	2020
Total assets	2,802	2,907	2,862	2,206	1,790	1,976
Selected assets						
Liquidity programs for financial firms	13	13	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	13	13	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	2	2	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	2	1	0	0	0	0
Securities held outright	2,564	2,661	2,655	2,040	1,656	1,863
U.S. Treasury securities	1,645	1,657	1,657	1,437	1,448	1,863
Agency debt securities	83	77	39	16	2	0
Agency mortgage-backed securities	835	927	959	586	206	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	221	230	206	166	134	112
Total liabilities	2,747	2,845	2,780	2,098	1,647	1,786
Selected liabilities						
Federal Reserve notes in circulation	1,086	1,108	1,249	1,402	1,530	1,671
Reverse repurchase agreements	70	70	70	70	70	70
Deposits with Federal Reserve Banks	1,578	1,655	1,449	615	36	36
Reserve balances held by depository institutions	1,464	1,604	1,438	605	25	25
U.S. Treasury, General Account	85	45	5	5	5	5
Other Deposits	29	6	6	6	6	6
Interest of Federal Reserve Notes due to U.S. Treasury	2	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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