

Board of Governors of the Federal Reserve System

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

Accessible Material

April 2012 Tealbook Tables and Charts

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April 2012 Tealbook A Tables and Charts[†]

Domestic Economic Developments and Outlook

[Box:] Revisions to the Staff Projection since the Previous SEP

Staff Economic Projections Compared with the January Tealbook

Variable	2012		2012	2013	2014 ³	Longer run
	H1	H2				
Real GDP ¹	2.3	2.7	2.5	2.8	3.3	2.5
January Tealbook	1.7	2.5	2.1	2.4	3.6	2.5
Unemployment rate ²	8.2	8.0	8.0	7.7	7.4	5.2
January Tealbook	8.7	8.6	8.6	8.2	7.8	5.2
PCE inflation ¹	2.0	1.7	1.9	1.5	1.5	2.0
January Tealbook	1.5	1.3	1.4	1.3	1.5	2.0
Core PCE inflation ¹	2.0	1.7	1.8	1.7	1.7	n.a.
January Tealbook	1.5	1.4	1.5	1.4	1.4	n.a.
Federal funds rate ²	.12	.13	.13	.13	1.20	4.25
January Tealbook	.10	.13	.13	.13	.32	4.25
Memo:						
Federal funds rate, end of period	.13	.13	.13	.13	1.25	4.25
January Tealbook	.13	.13	.13	.13	.50	4.25

1. Percent change from final quarter of preceding period to final quarter of period indicated. [Return to table](#)

2. Percent, final quarter of period indicated. [Return to table](#)

3. Figures for 2014 in the January Tealbook refer to projections in the long-run outlook. [Return to table](#)

n.a. Not available. [Return to table](#)

Key Background Factors underlying the Baseline Staff Projection

Figure: Federal Funds Rate

Line chart, by percent, 2007 to 2014. Data are quarterly average. There are three series, Current Tealbook, Previous Tealbook, and Market, expected rate. Current Tealbook begins in 2007:Q1 at about 5.25 and generally decreases to about 0.1 by 2009:Q1. It remains relatively constant here until 2013:Q4. It then increases to about 1.15 by 2014:Q4. Previous Tealbook begins in 2007:Q1 at about 5.25 and generally decreases to about 0.1 by 2009:Q1. It remains relatively constant here until about 2014:Q1. It then increases to about 0.99 by 2014:Q4. Market, expected rate begins in 2007:Q1 at about 5.25 and generally decreases to about 0.1 by 2009:Q1. It remains relatively constant here until about 2013:Q1 and generally increases to about 0.6 by 2014:Q4.

Figure: Long-Term Interest Rates

Line chart, by percent, 2007 to 2014. Data are quarterly average. There are six series, Current BBB corporate yield, Previous BBB corporate yield, Current Conforming mortgage rate, Previous Conforming Mortgage rate, Current 10-year Treasury yield, and Previous 10-year Treasury yield. Current BBB corporate yield begins in 2007:Q1 at about 6.05 and generally increases to about 9.4 by 2008:Q3. It then generally decreases to about 5 by 2012:Q1 and then generally increases to about 5.75 by 2014:Q4. Previous BBB corporate yield generally follows the same exact path as Current BBB corporate yield. Current Conforming mortgage rate begins in 2007:Q1 at about 6.1 and generally decreases to about 4.1 by 2012:Q1. It then generally increases to about 5.3 by 2014:Q4. Previous Conforming mortgage rate generally follows the exact same path as Current Conforming mortgage rate. Current 10-year Treasury yield begins in 2007:Q1 at about 2.9 and generally decreases to about 2 by 2012:Q1. It then generally increases to about 3.95 by 2014:Q4.

Figure: Equity Prices

Line chart, by ratio scale where 2007:Q1 = 100, 2007 to 2014. Data are quarter-end. There are two series, Current Dow Jones U.S. Total Stock Market Index and Previous Dow Jones U.S. Total Stock Market Index. Current Dow Jones U.S. Total Stock Market Index begins in 2007:Q1 at about 100 and generally decreases to about 57 by 2009:Q1. It then generally increases to about 121 by 2014:Q4. Previous Dow Jones U.S. Total Stock Market Index generally follows the same path as Current Dow Jones U.S. Total Stock Market Index until about 2011:Q3 when it begins increasing at a slower rate. It then generally increases to end at about 111 by 2013:Q3.

Figure: House Prices

Line chart, by ratio scale where 2007:Q1 = 100, 2007 to 2014. Data are quarterly. There are two series, Current CoreLogic index and Previous CoreLogic index. Current CoreLogic Index begins in 2007:Q1 at about 100 and generally decreases to about 78 by 2011:Q4. It then generally increases to about 72.5 by 2014:Q4. Previous CoreLogic index generally follows the same path as Current CoreLogic Index until about 2011:Q4 when it continues to decrease. It generally decreases to about 67 by 2013:Q4.

Figure: Crude Oil Prices

Line chart, by dollars per barrel, 2007 to 2014. Data are quarterly average. There are four series, Current West Texas Intermediate, Previous West Texas Intermediate, Current Imported Oil, and Previous Imported Oil. Current West Texas Intermediate begins in 2007:Q1 at about 59.5 and generally increases to about 125 by 2008:Q2. It then generally decrease to about 41 by 2009:Q1 and then generally increases to about 102 by 2012:Q1. It then generally

decreases to about 99 by 2014:Q4. Previous West Texas Intermediate generally follows the same path as Current West Texas Intermediate until 2012:Q2 when it continues to increase. It ends at about 104 by 2013:Q4. Current imported oil begins in 2007:Q1 at about 58 and generally increases to about 118 by 2008:Q4. It then generally decreases to about 41 by 2009:Q1. It then generally increases to about 100 by 2014:Q4. Previous Imported oil generally follows the same path as Current Imported oil until about 2011:Q3 when it begins increasing at a faster rate. It ends at about 108 by 2013:Q4.

Figure: Broad Real Dollar

Line chart, by ratio scale where 2007:Q1 = 100, 2007 to 2014. Data are quarterly average. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2007:Q1 at 100 and generally decreases to about 88 by 2008:Q1. It generally increases to about 102 by 2009:Q1 and then generally decreases to about 84 by 2014:Q4. Previous Tealbook generally follows the same path as Current Tealbook until about 2012:Q2 when it begins decreasing at a slightly faster rate. It ends at about 85 by 2013:Q4.

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

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2012:Q1		2012:Q2		2012:Q3	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	1.8	2.5	2.2	2.1	2.6	2.5
Private domestic final purchases	1.9	2.4	2.9	3.2	3.0	3.3
Personal consumption expenditures	1.2	2.2	2.6	2.5	2.8	2.9
Residential investment	13.9	17.8	7.7	11.6	8.7	9.7
Business fixed investment	4.5	.6	3.9	6.1	3.6	4.5
Government purchases	-1.4	.1	-.3	-.9	-.9	-1.0
<i>Contributions to change in real GDP</i>						
Inventory investment ¹	.0	.2	-.4	-.4	.2	.2
Net exports ¹	.5	.3	.2	.0	.0	-.3
Unemployment Rate²	8.4	8.2	8.4	8.2	8.3	8.1
PCE Chain Price Index	2.1	2.5	2.2	1.6	1.5	1.8
Ex. food and energy	1.8	2.2	1.7	1.8	1.6	1.7

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 percentage change, 2003 to 2011. 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 -5 by 2009 and then generally increases

to about 3.3 by 2010. It then generally decreases to about 1.7 by 2011:Q4. Gross domestic income begins in 2003 at about 1.3 and generally increases to about 4.2 by 2006. It then generally decreases to about -5.2 by 2009 and then increases to about 4.3 by 2010. It then generally decreases to about 2.1 by 2011:Q4.

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

Figure: Change in Private Payroll Employment

Line chart, by thousands of employees, 2003 to 2014. There is a horizontal line at zero. There are two series, Gross domestic product and 3-month moving average. Gross domestic product begins in 2003 at about 50 and generally increases to about 370 by 2005. It generally decreases to about -875 by 2009 and then generally increases to about 100 by March 2011. 3-month moving average begins in 2003 at about -50 and generally increases to about 225 by 2006. It generally decreases to about -800 by 2009 and then generally increases to about 200 by March 2011.

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

Figure: Unemployment Rate

Line chart, by percent, 2003 to 2012. The series begins in 2003 at about 5.9 and generally decreases to about 4.5 by 2007. It generally increases to about 10 by 2009 and then generally decreases to about 8.2 by March 2011.

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 2011. There is a horizontal line at zero. The series begins in 2003 at about 0 and generally increases to about 13 by 2005. It generally decreases to about -26 by 2009 and then generally increases to about 5 by March 2011.

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

Recent Nonfinancial Developments (2)

Figure: Product of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2003 to 2011. The series begins in 2003 at about 12.5 and generally decreases to about 3.8 by 2009. It then generally increases to about 9.9 by March 2011.

Source: Ward's Auto Infobank.

Figure: Sales of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2003 to 2011. The series begins in 2003 at about 16 and generally increases to about 20 by 2005. It generally decreases to about 9.3 by 2009 and then generally increases to about 14 by March 2011.

Source: Ward's Auto Infobank.

Figure: Real PCE Goods excluding Motor Vehicles.

Line chart, by billions of chained (2005) dollars, 2003 to 2011. The series begins in 2003 at about 2400 and generally increases to about 2940 by 2007. It generally decreases to about 2775 by 2009 and then generally increases to about 3080 by March 2011.

Note: Figures for January, February, and March 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 2011. There are two series, Starts and Adjusted permits.

Starts begins in 2003 at about 1550 and generally increases to about 1800 by 2005. It generally decreases to about 320 by 2009 and then generally increases to about 500 by March 2011. Adjusted permits begins in 2003 at about 1420 and generally increases to about 1800 by 2005. It generally decreases to about 320 by 2009 and then generally increases to about 500 by March 2011.

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 2011. There are two series, New and Existing. New begins in 2003 at about 1,000 and generally increases to about 1,300 by 2005. It generally decreases to about 300 by February 2011. Existing begins in 2003 at about 5,400 and generally increases to about 6,150 by 2005. It generally decreases to about 3,000 by 2010 and then generally increases to about 3,800 by February 2011.

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

Figure: Nondefense Capital Goods excluding Aircraft

Line chart, by billions of dollars, 2003 to 2011. There are two series, Orders and Shipments. Orders begins in 2003 at about 59 and generally increases to about 69 by 2008. It generally decreases to about 46 by 2009 and then generally increases to about 67 by February 2011. Shipments begins in 2003 at about 59 and generally increases to about 65 by 2008. It generally decreases to about 57 by 2009 and then generally increases to about 66 by February 2011.

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 2011. The series begins in 2003 at about 230 and generally increases to about 410 by 2008. It then generally decreases to about 280 by February 2011.

Source: U.S. Census Bureau.

Figure: Inventory Ratios excluding Motor Vehicles

Line chart, by months, 2003 to 2011. There are two series, Staff flow-of-goods system and Census book-value data. Staff flow-of-goods system begins in 2003 at about 1.6 and generally decreases to about 1.5 by 2007. It generally increases to about 1.66 by 2009 and then generally decreases to about 1.51 by March 2011. Census book-value data begins in 2003 at about 1.3 and generally decreases to about 1.2 by 2008. It generally increases to about 1.4 by 2009 and then generally decreases to about 1.23 by February 2011.

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 2011. There are two series, Unified (monthly) and NIPA (quarterly). Unified (monthly) begins in 2003 at about 450 and generally increases to about 690 by 2011. It then generally decreases to about 620 by March 2011. NIPA (quarterly) begins in 2003 at 450 and generally increases to about 645 by 2010. It then generally decreases to about 605 by 2011:Q4.

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 2011. There are two series, Non-oil imports and Exports. Non-oil imports begins in 2003 at about 112 and generally increases to about 180 by 2008. It generally decreases to about 135 by 2009 and then generally increases to about 192 by February 2011. Exports begins in 2003 at about 81 and generally increases to about 165 by 2008. It generally decreases to about 124 by 2009 and then generally increases to about 180 by February 2011.

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

Figure: Total PCE Prices

Line chart, by percent, 2003 to 2011. There is a horizontal line at zero. There are two series, 12-month change and 3-month change. 12-month change begins in 2003 at about 2 and generally increases to about 4.3 by 2008. It generally decreases to about -0.6 by 2009 and then generally increases to about 2 by March 2011. 3-month change begins in 2003 at about 2 and generally increases to about 8.3 by 2005. It generally decreases to about -9 by 2008 and then generally increases to about 3.2 by March 2011.

Note: 3-month changes are at an annual rate. January, February, and March 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 2011. There are two series, 12-month change and 3-month change. 12-month change begins in 2003 at about 1.85 and generally increases to about 2.5 by 2008. It generally decreases to about 1 by 2010 and then generally increases to about 2 by March 2011. 3-month change begins in 2003 at 0.9 and generally increases to about 3.3 by 2007. It generally decreases to about 0.3 by 2009 and then generally increases to about 2.25 by March 2011.

Note: 3-month changes are at an annual rate. January, February, and March 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		2013	2014
		H1	H2		
Real GDP	1.6	2.3	2.7	2.8	3.3
Previous Tealbook	1.6	2.0	2.7	2.7	
Final sales	1.5	2.4	2.4	2.5	3.2
Previous Tealbook	1.5	2.2	2.4	2.4	
Personal consumption expenditures	1.6	2.4	3.0	2.7	3.2
Previous Tealbook	1.7	1.9	2.8	2.6	
Residential investment	3.5	14.6	8.2	9.3	13.0
Previous Tealbook	3.5	10.8	8.4	8.2	
Nonresidential structures	4.4	-1.6	.4	2.7	3.5
Previous Tealbook	4.4	.4	.8	2.0	
Equipment and software	9.6	5.2	5.9	6.2	6.5
Previous Tealbook	8.9	5.7	4.9	5.6	

Federal purchases	-3.2	-7	-2.6	-4.1	-4.4
Previous Tealbook	-3.2	-1.2	-2.0	-4.1	
State and local purchases	-2.5	-2	.0	.7	2.1
Previous Tealbook	-2.5	-6	-2	.7	
Exports	4.7	5.9	5.3	5.6	6.4
Previous Tealbook	5.1	6.3	5.5	5.7	
Imports	3.6	3.7	5.2	4.2	4.9
Previous Tealbook	3.6	2.9	4.5	3.9	
	Contributions to change in real GDP (percentage points)				
Inventory change	.1	-.1	.3	.3	.1
Previous Tealbook	.1	-.2	.3	.3	
Net exports	.0	.1	-.2	.0	.0
Previous Tealbook	.1	.4	.0	.1	

Figure: Real GDP

Line chart, by 4-quarter percent change, 1983 to 2014. There is a horizontal line at zero. The shaded area from 2012 to 2014 represents the forecasted period. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1983 at about 1.9 and generally increases to about 8.4 by 1984. It generally fluctuates between 0 and 4 from 1986 to 2007. It generally decreases to about -5 by 2009 and then generally increases to about 3.6 by 2014. Previous Tealbook generally follows the same exact path as Current Tealbook.

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.

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 0.95 and generally decreases to about -3.2 by 2009. It generally increases to about 3 by 2010 and then decreases to about 1.9 by 2012. It then generally increases to about 3.2 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until about 2012 when it decreases to about 1.75. It then generally increases to about 2.6 by 2013.

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 -24.3 and generally decreases to about -28 by 2009. It increases to about 5 by 2010 and then generally decreases to about -7.5 by 2011. It then generally increases to about 14 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until about 2012 when it begins increasing at a slower rate. It ends at about 7 in 2013.

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 -21 by 2009. It generally increases to about 17 and then generally decreases to about 6 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until about 2011 when it begins decreasing at a slightly faster rate. It ends in 2013 at about 5.1.

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 14.9 and generally decreases to about -29 by 2009. It generally increases to about 8.7 by 2012 and then generally decreases to about 4.8 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until 2013 when it ends at about 2.5.

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 decreases to about -2.9 by 2011. It then generally increases to about -0.4 by 2014. Previous Tealbook generally follows the same path as Current Tealbook until about 2012 when it begins increasing at a slower rate. It increases to end at about -1.2 by 2013.

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 generally 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 and ends at about 6 by 2013. Current Imports begins in 2008 at about -0.05 and generally decreases to about -18 by 2009. It generally increases to about 16.5 by 2010 and then generally decreases to about 5 by 2014. Previous Imports generally follows the same path as Current Imports and ends in 2013 at about 5.

Note: Blue shading represents the projection period, which begins in 2012:Q1.

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 6.1 and generally decreases to about 1.2 by 2005. It generally increases to about 6.15 by 2009 and then generally decreases to about 4 by 2015. Previous Tealbook generally follows the same path as Current Tealbook until about 2011. It ends by decreasing to about 4.25 by 2014.

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 4.8 and generally increases to about 6.15 by 2000. It generally decreases to about 5 by 2002 and then generally increases to about 6.45 by 2006. It then generally decreases to end at about 5.2 by 2015. Previous Tealbook generally follows the same path as Current Tealbook until about 2012. It ends in 2014 at about 5.1.

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 1.05 and generally increases to about 1.75 by 2005. It generally decreases to about 0.3 by 2009 and then generally increases to about 0.75 by 2015. Previous Tealbook follows the same path as Current Tealbook and ends in 2014 at about 0.6.

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 6.45 by 2009 and then generally increases to about 8.05 by 2015. Previous Tealbook generally follows the same path as Current Tealbook and ends in 2014 at about 7.8.

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 average. 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 2.25 by 2000. It generally decreases to about -11 by 2009 and then generally increases to about -4 by 2015. Previous Tealbook generally follows the same path as Current Tealbook and ends in 2014 at about 4.5.

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 -6.6 by 2005. It generally increases to about -2.1 by 2009 and then generally decreases to about -3.25 by 2015. Previous Tealbook generally follows the same path as Current Tealbook until it begins decreasing at a slower rate in 2012. It ends in 2014 at about -2.8.

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:Q1.

[Box:] Equipment and Software Spending during the Recovery

Figure: Real Spending on Equipment and Software

Line chart, by ratio scale where 100 = NBER recession peak, 2007 to 2011. There are two series, Recent data and Average of previous postwar recessions, indexed to NBER recession peak. Recent data begins in 2007 at about 97 and generally decreases to about 78 by 2009. It then generally increases to about 104.5 by 2011. Average of previous postwar recessions, indexed to NBER recession peak begins in 2007 at about 96 and generally decreases to about 93.5 by 2008. It then generally increases to about 116 by 2011.

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

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

Figure: Equipment and Software Spending Growth: Data and Model Simulation

Line chart, by percent change, annual rate, from 2007 to 2014. There is a horizontal line at zero. There is a vertical line at 2009:Q1. There are two series, Data and staff forecast and Model simulation. Data and staff forecast begins in 2007 at about 5.1 and generally decreases to about -23.5 by 2009. It generally increases to about 17 by 2010 and then generally decreases to about 6.5 by 2014. Model simulation begins in 2009 at about -23.5 and increases

to about 7 by 2010. It then decreases to about 5.8 by 2014.

Note: Excludes transportation equipment spending. The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: December 2007-June 2009. Blue shading represents the projection period, which begins in 2012:Q1.

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

Decomposition of Potential GDP

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

Measure	1974-1995	1996-2000	2001-2010	2011	2012	2013	2014
Potential real GDP	3.0	3.4	2.2	1.7	2.0	2.1	2.3
Previous Tealbook	3.0	3.4	2.3	1.7	2.0	2.1	
<i>Selected contributions¹</i>							
Structural labor productivity	1.4	2.6	2.2	1.5	1.6	1.7	1.9
Previous Tealbook	1.4	2.6	2.3	1.5	1.6	1.7	
Capital deepening	.7	1.5	.7	.6	.6	.8	.9
Previous Tealbook	.7	1.5	.8	.6	.6	.7	
Multifactor productivity	.5	.8	1.2	.8	.9	.9	.9
Previous Tealbook	.5	.8	1.3	.8	.9	.9	
Structural hours	1.5	1.0	.6	.5	.6	.6	.6
Previous Tealbook	1.5	1.0	.6	.5	.6	.6	
Labor force participation	.4	.0	-.3	-.4	-.3	-.3	-.3
Previous Tealbook	.4	.0	-.3	-.4	-.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 2013. There are two series, Current Tealbook and Structural. Current Tealbook starts in 2001 at about 43.6 and generally increases to about 57.4 by 2013. Structural begins in 2001 at 44 and increases to about 57.4 by 2013.

Note: Blue shading represents the projection period, which begins in 2012:Q1.

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 2013. There are two series, Current Tealbook and Structural. Current Tealbook begins in 2001 at about 67.1 and generally decreases to about 63.8 by 2013. Structural begins in 2001 at about 66.9 and generally decreases to about 64 by 2013.

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

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

[Box:] Revisions to Measures of Economic Capacity

Figure: Unemployment Rate

Line chart, by percent, 2000 to 2020. There are three series, History and forecast, NAIRU (April 2012) and NAIRU (January 2008). History and forecast begins in 2000 at about 4 and generally increases to about 6.2 by 2002. It generally decreases to about 4.6 by 2007 and then generally increases to about 10 by 2010. It then generally decreases to about 5.1 by 2020. NAIRU (April 2012) begins in 2000 at about 5 where it remains relatively constant until it increases to 6 in 2008. It then remains relatively constant here until it decreases to about 5.1 by 2020. NAIRU (January 2008) begins in 2000 at about 5.05 and generally decreases to about 4.9. It remains constant here until 2020.

Note: The shaded gray 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.

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

Figure: Real GDP

Line chart, by thousands of dollars, ratio scale, from 2000 to 2020. There are three series, History and forecast, Potential (April 2012), and Potential (January 2008). History and forecast begins in 2000 at about 11,200 and generally increases to about 13,100 by 2009. It then generally decreases to about 12,550 by 2010 and then generally increases to about 17,520 by 2020. Potential (April 2012) begins in 2000 at about 10,900 and generally increases to about 17,520 by 2020. Potential (January 2008) begins in 2000 at about 10,900 and generally increases to about 18,400 by 2020.

Note: The shaded gray 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.

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

Figure: Structural Labor Productivity

Bar chart, by Q4 over Q4 percent change, 2008 to 2020. There are two series, January 2008 and April 2012. January 2008 begins in 2008 at about 2.05 and generally increases to about 2.3 by 2011. It then generally decreases to about 2.25 by 2020. April 2012 begins in 2008 at about 1.75 and generally decreases to about 1.4 by 2010. It then generally increases to about 2.4 by 2020.

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

The Outlook for the Labor Market and Resource Utilization

(Percent change from final quarter of preceding period)

Measure	2011	2012		2013	2014
		H1	H2		
Output per hour, nonfarm business	.3	.6	1.7	1.7	1.9
Previous Tealbook	.4	.1	2.1	1.6	
Nonfarm private employment ¹	175	193	193	186	191
Previous Tealbook	174	201	185	195	
Labor force participation rate ²	64.0	63.8	63.8	63.7	63.7
Previous Tealbook	64.0	63.7	63.7	63.7	
Civilian unemployment rate ²	8.7	8.2	8.0	7.7	7.4
Previous Tealbook	8.7	8.4	8.2	7.8	

Memo:					
GDP gap ³	-4.8	-4.7	-4.3	-3.7	-2.7
Previous Tealbook	-5.0	-5.0	-4.6	-4.0	

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 220 and generally decreases to about -370 by 2001. It generally increases to about 240 by 2005 and then generally decreases to about -800 by 2009. It then generally increases to about 195 by 2015. Previous Tealbook generally follows the same path as Current Tealbook and ends in 2014 at about 200.

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, NAIRU, and NAIRU with EEB adjustment. Current Tealbook begins in 1995 at about 5.6 and generally decreases to about 3.9 by 2000. It generally increases to about 6.1 about 2003 and then generally decreases to about 4.6 by 2008. It then generally increases to about 10 by 2009 and then generally decreases to about 7.4 by 2015. Previous Tealbook generally follows the same path as Current Tealbook and ends in 2014 at about 7.9. NAIRU begins in 1995 at about 5 and remains relatively constant here until about 2009. It then increases to about 6.5 by 2010 and remains relatively constant here until 2015. NAIRU with EEB adjustment follows the same path as NAIRU until 2009 when it begins increasing at a faster rate. It increases to about 6.5 by 2010 and then decreases to about 6 by 2015.

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

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

Figure: GDP Gap

Line chart, by percent, 1995 to 2000. 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 1999. It generally decreases to about -1.8 by 2002 and then generally increases to about 1 by 2006. It generally decreases to about -6.4 by 2009 and then generally increases to about -2.4 by 2015. Previous Tealbook generally follows the same path as Current Tealbook and ends at about -4 in 2014.

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:Q1.

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 and generally decreases to about 72 by 2001. It generally increases to about 79 by 2006 and then generally decreases to about 64 by 2009. It then generally increases to about 81 by 2015. Previous Tealbook generally follows the same path as Current Tealbook and ends in 2015 at about 80.

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

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

Inflation Projections

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

Measure	2011	2012		2013	2014
		H1	H2		
PCE chain-weighted price index	2.7	2.0	1.7	1.5	1.5
Previous Tealbook	2.7	2.1	1.5	1.4	
Food and beverages	5.2	1.4	1.7	1.6	1.5
Previous Tealbook	5.2	1.7	1.4	1.2	
Energy	12.8	3.2	2.8	-1.1	-1.7
Previous Tealbook	12.8	7.9	-2	-1.6	
Excluding food and energy	1.8	2.0	1.7	1.7	1.7
Previous Tealbook	1.8	1.8	1.6	1.6	
Prices of core goods imports ¹	4.3	.7	1.1	1.5	1.5
Previous Tealbook	4.3	.5	1.4	1.5	

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

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

Figure: Total PCE Prices

Line chart, by 4-quarter percent change, 1995 to 2015. There is a horizontal line at zero. The shaded area from 2012:Q1 to 2014:Q4 represents the forecast period. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 1995 at about 2.45 and generally fluctuates between 1 and 2.5 from 1995 to 2004. It then generally increases to about 4.5 by 2009 and then generally decreases to about -0.8 by 2010. It then generally increases to about 1.6 by 2015. Previous Tealbook generally follows the same path as Current Tealbook and ends in 2014 at about 1.5.

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

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 1995 to 2015. The shaded area from 2012:Q1 to 2014:Q4 represents the forecast period. There are four series, Current Tealbook, Previous Tealbook, Current Market-based prices, and Previous Market-based prices. Current Tealbook begins in 1995 at about 2.4 and generally decreases to about 1.5 by 2004. It generally increases to about 2.5 by 2006 and then generally decreases to about 0.95 by 2010. It then generally increases to about 1.85 by 2015. Previous Tealbook generally follows the same path as Current Tealbook and ends in 2014 at about 1.75. Current Market-based prices begins in 1995 at about 2.15 and generally decreases to about 1 by 1997. It generally increases to about 2.25 by 2006 and then generally decreases to about 0.8 by 2010. It then generally increases to about 1.6 by 2015. Previous Market-based prices generally follows the same path as Current Market-based prices and ends in 2014 at about 1.5.

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. The shaded area from 2012:Q1 to 2014:Q4 represents the forecast period. 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 1.6 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 2015. Previous Productivity and costs generally follows the same path as Current Productivity and costs and ends in 2014 at about 2.7. Current Employment cost index begins in 1995 at about 2.7 and generally decreases to about 1 by 2009. It then generally increases to about 2.8 by 2015. Previous Employment cost index generally follows the same path as Current Employment cost index and ends in 2014 at about 2.5

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 3.1 and generally fluctuates between 2.5 and 3.1 until 2012. It ends in April 2012 at about 3. SPF, next 10 years begins in 2006 at about 2 and generally increases to about 2.25 by 2012:Q1.

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	2.5	2.8	3.3	3.6	3.5	3.4
Previous Tealbook	2.4	2.7	3.3	3.7	3.4	3.2
Civilian unemployment rate ¹	8.0	7.7	7.4	6.8	6.2	5.6
Previous Tealbook	8.2	7.8	7.5	6.9	6.2	5.6
PCE prices, total	1.9	1.5	1.5	1.7	1.7	1.9
Previous Tealbook	1.8	1.4	1.4	1.5	1.6	1.8
Core PCE prices	1.8	1.7	1.7	1.8	1.8	1.9
Previous Tealbook	1.7	1.6	1.6	1.6	1.7	1.8
Federal funds rate ¹	.1	.1	1.2	2.3	3.1	3.8
Previous Tealbook	.1	.1	.8	2.1	3.0	3.7
10-year Treasury yield ¹	2.8	3.7	3.9	4.1	4.2	4.4
Previous Tealbook	2.8	3.6	3.7	4.0	4.1	4.3

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

Figure: Real GDP

Line chart, by 4-quarter percent change, 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 Real GDP. Current Real GDP begins in 2004 at about 4.1 and generally decreases to about -5 by 2009. It generally increases to about 3.8 by 2010 and then generally decreases to about 1.8 by 2011. It then generally increases to about 2.5 by 2020. Previous Real GDP generally follows the same path as Current Real GDP. Current Potential GDP begins in 2004 at about 2.55 and generally decreases to about 1.3 by 2009. It then generally increases to about 2.5 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 Tealbook, Previous Tealbook, NAIRU, and NAIRU with EEB adjustment. Current Tealbook begins in 2004 at about 5.85 and generally decreases to about 4.4 by 2007. It generally increases to about 10 by 2010 and then generally decreases to about 5.15 by 2020. Previous Tealbook generally follows the same path as Current Tealbook. NAIRU begins in 2004 at about 5 where it remains relatively constant until 2008. It then increases to about 6 by 2009 and remains relatively constant here until about 2015. It then decreases to about 5.15 by 2020. NAIRU with EEB adjustment begins in 2004 at about 5 where it remains relatively constant until 2008. It then increases to about 6.3 by 2009 and then decreases to about 5.15 by 2017. It remains relatively constant here 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 4.25 by 2008. It generally decrease to about -0.75 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 until 2012 when it begins decreasing at a faster rate. It ends in 2020 at about 2. Current PCE Prices excluding food and energy begins in 2004 at about 1.9 and generally decreases to about 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 2009. It then generally decreases to about 6.1 by 2020. Previous BBB corporate generally follows the same path as Current BBB corporate. Current 10-year Treasury begins in 2004 at about 4.1 and generally decreases to about 2.3 by 2012. It then generally increases to about 4.9 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 2007. It generally decreases to about 0.05 by 2008 and then generally increases to about 4.1 by 2020. Previous Federal funds rate generally follows the same path as Current Federal funds rate.

Note: In each panel, shading represents the projection period, which begins in 2012:Q1; dashed lines are the previous Tealbook.

Evolution of the Staff Forecast

Figure: Change in Real GDP

Line chart, by percent, Quarter 4 over Quarter 4, January 2010 to December 2012. The x-axis is Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 4.8 and generally decreases to about 3.3 by September 15, 2010. It decreases to about 1.5 by September 14, 2011 and remains relatively constant here until April 18, 2012. 2012 begins on September 15, 2010 at about 4.25 and generally declines to about 2.15 by January 18, 2012. It then generally increase to about 2.5 by April 18, 2012.

2013 begins on September 14, 2011 at about 3.3 and generally decreases to about 2.5 by January 18, 2012. It then generally increases to about 2.75 by April 18, 2012. 2014 begins on April 18, 2012 at about 3.45.

Figure: Unemployment Rate

Line chart, by percent, fourth quarter, January 2010 to December 2012. The x-axis is Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 8.2 and generally increases to about 9.2 by September 15, 2010. It generally fluctuates between 8.7 and 9.2 from September 15, 2010 to August 3, 2011. It then decreases to about 8.6 by April 18, 2012. 2012 begins on September 15, 2010 at about 8 and generally decreases to about 7.6 by March 9, 2011. It generally increases to about 8.6 by September 14, 2011 and then generally decreases to about 8 by April 18, 2012. 2013 begins on September 14, 2011 at about 8 and generally decreases to about 7.7 by April 18, 2012. 2014 begins on April 18, 2012 at about 7.5

Figure: Change in PCE Prices excluding Food and Energy

Line chart, by percent, Quarter 4 over Quarter 4, January 20, 2010 to December 5, 2012. The x-axis is Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 1.1 and generally increases to about 1.9 by September 14, 2011. It then generally decreases to about 1.75 by April 18, 2012. 2012 begins on September 15, 2010 at about 0.9 and generally increase to about 1.75 by April 18, 2012. 2013 begins on September 14, 2011 at about 1.4 and generally increases to about 1.6 by April 18, 2012. 2014 begins on April 18, 2014 at about 1.65.

International Economic Developments and Outlook

Recent Foreign Indicators

Figure: Nominal Exports

Line chart, by ratio scale where January 2008 = 100, 2008 to 2012. There is a horizontal line at 100. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 at about 100 and generally decreases to about 70 by 2009. It then generally increases to about 113 by 2011. AFE begins in 2008 at about 100 and generally decreases to about 71.5. It then generally increases to about 103 by 2011. EME begins in 2008 at about 100 and generally declines to about 69. It then generally increases to about 125 by 2011.

Note: EME excludes Venezuela.

Figure: Industrial Production

Line chart, by ratio scale where January 2008 = 100, 2008 to 2012. There is a horizontal line at 100. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 at about 100 and generally decreases to about 86 by 2009. It then generally increases to about 102 by 2011. AFE begins in 2008 at about 100 and generally decreases to about 85 by 2009. It then generally increases to about 94.5 by 2011. EME begins in 2008 at about 100 and generally decreases to about 87.5 by 2009. It then generally increases to about 114 by 2011.

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

Figure: Retail Sales

Line chart, by 12-month percent change, 2008 to 2012. There is a horizontal line at zero. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 and about 5 and generally decreases to about -1.5 by 2009. It increases to about 6 by 2010 and then decreases to about 2 by 2011. AFE begins in 2008 at about 4.4 and generally decreases to about 4 by 2009. It generally increases to about 5 by 2010 and then generally decreases to about 1 by 2011. EME begins in 2008 at about 8 and generally decreases to about 3 by 2009. It generally increase to about 11 by 2010 and then generally decreases to about 5.8 by 2011.

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

Figure: Employment

Line chart, by 4-quarter percentage change, 2008 to 2012. There is a horizontal line at zero. There are three series, Foreign, AFE, and EME. Foreign begins in 2008 at about 2 and generally decreases to about -1.1 by 2009. It then generally increases to about 1.25 by 2011. AFE begins in 2008 at about 1.75 and generally decreases to about -1.9 by 2009. It generally increases to about 1 by 2010 and then generally decrease to about 0.6 by 2011. EME begins in 2008 at about 3 and generally decreases to about 1.5 by 2009. It then generally increases to about 3 by 2011.

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 generally increases to about 3.6 by mid-2008. It generally decreases to about -0.9 by 2009 and then generally increases to about 2.1 by 2011. Core begins in 2008 at about 1.05 and generally decreases to about 0.75 by 2010. It then generally increases to about 1.25 by 2011.

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

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 5.75 and generally decreases to about 0.8 by 2009. It then generally increases to about 3.75 by 2011. Excluding food--East Asia begins in 2008 at about 3 and generally decreases to about -1.9 by 2009. It then generally increases to about 2 by 2011. Excluding food--Latin America begins in 2008 at about 4.8 and generally increases to about 5.75 by 2009. It then generally decreases to about 3.7 by 2011.

The Foreign Outlook

(Percent change, annual rate)

	2011			2012				2013	2014
	H1	Q3	Q4	Q1	Q2	Q3	Q4		
Real GDP									
Total foreign	3.0	3.9	1.4	3.2	2.9	2.8	2.9	3.2	3.6
Previous Tealbook	3.0	3.8	1.2	3.1	2.8	2.8	3.0	3.2	n.a.
Advanced foreign economies	1.0	3.1	.2	1.2	1.1	1.1	1.3	1.8	2.4
Previous Tealbook	.9	3.1	.1	1.1	1.1	1.2	1.5	1.8	n.a.
Emerging market economies	5.2	4.8	2.6	5.3	4.8	4.6	4.6	4.6	4.9
Previous Tealbook	5.2	4.6	2.4	5.2	4.7	4.6	4.6	4.6	n.a.
Consumer Prices									
Total foreign	3.7	3.1	2.9	2.5	2.1	2.4	2.4	2.4	2.5
Previous Tealbook	3.7	3.1	2.9	3.1	2.4	2.4	2.4	2.4	n.a.
Advanced foreign economies	2.7	1.1	2.5	2.1	1.5	1.4	1.4	1.3	1.4

Previous Tealbook	2.7	1.1	2.5	2.1	1.4	1.4	1.4	1.3	n.a.
Emerging market economies	4.6	4.7	3.2	2.7	2.7	3.2	3.2	3.2	3.3
Previous Tealbook	4.6	4.6	3.2	3.8	3.2	3.2	3.2	3.2	n.a.

n.a. Not available.

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

Figure: Real GDP

Line chart of Total Foreign Real GDP, by percent change, annual rate, 2008 to 2014. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2008 at about 3 and generally decreases to about -9.5 by 2009. It generally increases to about 6 by mid-2009 and then generally decreases 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, 2008 to 2012. There is a horizontal line at zero. There are four series, Current Emerging market economies, Previous Emerging market economies, Current Advanced foreign economies, and Previous Advanced foreign economies. Current Emerging market economies begins in 2008 at about 5.1 and generally decreases to about -9.8 by 2009. It generally increases to 10 by mid-2009 and then generally decreases to about 5 by 2014. Previous Emerging market economies generally follows the same path as Current Emerging market economies. Current Advance foreign economies begins in 2008 at about 0.75 and generally decreases to about -9.8 by 2009. It increases to about 4 by 2010 and then generally decreases to about 2.5 by 2014. Previous Advanced foreign economies generally follows the same path as Current Advanced foreign economies

Figure: Consumer Prices

Line chart of Total Foreign Consumer Prices, by percent change, annual rate, 2008 to 2014. There is a horizontal line at zero. There are two series, Current Total foreign and Previous Total foreign. Current Total foreign begins in 2008 at about 5 and generally decreases to about -1 by 2009. It generally increases to about 5 by 2010 and then generally decreases to about 2.5 by 2014. Previous Total foreign generally follows the same path as Current Total foreign.

There is a second line chart, by percent change, annual rate, 2008 to 2014. There is a horizontal line at zero. There are four series, Current Emerging market economies, Previous Emerging market economies, Current Advanced foreign economies, and Previous Advanced foreign economies. Current Emerging market economies begins in 2008 at about 7 and generally decreases to about -0.5 by 2009. It generally increases to about 6.5 by 2010 and then generally decreases to about 3.2 by 2014. Previous Emerging market economies generally follows the same path as Current Emerging market economies. Current Advanced foreign economies begins in 2008 at about 2.6 and generally decreases to about -2.1 by late 2008. It generally increases to about 3 by 2010 and then generally decreases to about 1.9 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:Q1.

[Box:] Continuing Vulnerabilities in the Euro Area

Figure: 10-Year Sovereign Bond Spreads

Line chart, by basis points, 2011 to 2012. There are four series, Spain, Italy, Belgium, and France. Spain begins in January 2011 at about 250 and generally increases to about 475 by November 2011. It generally decreases to about 310 by January 2012 and then generally increases to about 410 by April 2012. Italy begins in January 2011 at about 190 and generally increases to about 530 by October 2011. It generally decreases to about 280 by February 2012 and then generally increases to about 375 by April 2012. Belgium begins in January 2011 at about

100 and generally increases to about 360 by October 2011. It then generally creases to about 170 by April 2012. France begins in January 2011 at about 40 and generally increases to about 190 by November 2011. It then generally decreases to about 125 by April 2012.

Note: Relative to Germany.

Source: Bloomberg.

Figure: Projected Debt-to-GDP Ratio

Line chart, by percent of GDP, from 2010 to 2020. The shaded area from 2012 to 2020 represents the forecast period. There are four series, Spain, Ireland, Italy, and Portugal. Spain begins in 2012 at about 53 and generally increases to about 85 by 2013. It then generally decreases to about 81 by 2020. Ireland begins in 2010 at about 65 and generally increases to about 122 by 2013. It then generally decreases to about 112 to 2020. Italy begins in 20120 at about 115 and generally increases to about 119 by 2012. It then generally decreases to about 109.5 by 2020. Portugal begins in 2010 at about 82 and generally increases to about 120 by 2012. It then generally decreases to about 119 by 2020.

Note: Assumes Greece, Ireland, and Portugal are able to access market financing on the timeline set out in their respective IMF programs.

Source: Staff estimate.

[Box:] Euro-Area TARGET2 Balances

Eurosystem Lending and TARGET2 Balances

Figure: Greece

Line chart, by billions of euro, 2006 to 2012. There is a horizontal line at zero. There are two series, NCB lending and TARGET2. NCB lending begins in 2006 at about 1 and generally increases to about 120 by 2012. TARGET2 begins in 2006 at about -8 and generally decreases to about -105 by 2012.

Figure: Spain

Line chart, by billions of euro, 2006 to 2012. There is a horizontal line at zero. There are two series, NCB lending and TARGET2. NCB lending begins in 2006 at about 20 and generally increases to about 120 by 2012. It generally decreases to about 40 by 2011 and then generally increases to about 225 by 2012. TARGET2 begins in 2006 at about 10 and generally decreases to about -200 by 2012.

Figure: Italy

Line chart, by billions of euro, 2006 to 2012. There is a horizontal line at zero. There are two series, NCB lending and TARGET2. NCB lending begins in 2006 at about 15 and generally increases to about 290 by 2012. TARGET2 begins in 2006 at about 225 and generally increases to about 80 by 2009. It then generally decreases to about -280 by 2012.

Figure: Germany

Line chart, by billions of euro, 2006 to 2012. There is a horizontal line at zero. There are two series, NCB lending and TARGET2. NCB lending begins in 2006 at about 210 and generally decreases to about -100 by 2012. TARGET2 begins in 2006 at about 0 and generally increases to about 610 by 2012.

Source: NCB lending data are from the ECB refinancing operations, emergency liquidity assistance operations, and deposits. TARGET2 data are from the Institute of Empirical Economic Research, Universitat Osnabruck.

Evolution of Staff's International Forecast

Figure: Total Foreign GDP

Line chart, by percent change, Quarter 4 over Quarter 4, January 20, 2010 to December 5, 2012. The x-axis is Tealbook publication date. There are four series, 2011, 2012, 2013, and 2014. 2011 begins on January 20, 2010 at about 4.05 and generally decreases to about 3.1 by January 19, 2011. It generally increases to about 3.4 by June 15, 2011 and then generally decreases to about 2.75 by April 18, 2012. 2012 begins on September 15, 2010 at about 3.5 and generally decreases to about 2.5 by December 7, 2011. It then generally increases to about 3 by April 18, 2012. 2013 begins on September 14, 2011 at about 3.4 and generally decreases to about 3.1 by April 18, 2012. 2014 begins on April 18, 2012 at about 3.6.

Figure: Total Foreign CPI

Line chart, by percent change, Quarter 4 over Quarter 4, January 20, 2010 to December 5, 2012. The x-axis is 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 3.4 by April 18, 2012. 2012 begins on September 15, 2010 at about 2.25 and remains relatively constant here until April 18, 2012. 2013 begins on September 14, 2011 at about 2.25 and generally decreases to about 2.15 by January 18, 2011. It then generally increases to about 2.25 by April 18, 2012. 2014 begins on April 18, 2012 at about 2.3.

Figure: U.S. Current Account Balance

Line chart, by percent of GDP, January 20, 2010 to December 5, 2012. The x-axis is 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 -2.9 by March 7, 2012. It then generally decreases to about -3.3 by April 18, 2012. 2012 begins on September 15, 2010 at about -3 and generally increases to about -2 by June 15, 2011. It then generally decreases to about -3.4 by April 18, 2012. 2013 begins on September 14, 2011 at about -2.2 and generally decreases to about -3.4 by April 18, 2012. 2014 begins on April 18, 2014 at about -3.4.

Financial Developments

Policy Expectations and Treasury Yields

Figure: Selected Interest Rates

Line chart, by percent, March 12, 2012 to April 15, 2012. There is a vertical line on March 12 marking the March FOMC, on March 23 marking the Chairman's speech, on April 2 marking the March FOMC minutes, and April 5 marking the March employment report. There are two series, 2-year Treasury yield and 10-year Treasury yield. 2-year Treasury yield begins on March 12 at about 0.28 and generally increases to about 0.35 by March 20. It then generally decreases to about 0.275 by April 15. 10-year Treasury yield begins on March 12 at about 2 and generally increases to about 2.38 by March 20. It then generally decreases to about 1.93 by April 15.

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

Source: Bloomberg.

Figure: Long-Term Interest Rate Implied Volatility

Line chart, by percent, January 2010 to June 2012. Data are daily. There is a vertical line on March 2012 marking the March FOMC. The series begins in January 2010 at about 7 and generally increases to about 9 by January 2011. It then generally decreases to about 5.25 by April 17, 2012.

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

Source: Bloomberg.

Figure: Implied Federal Funds Rate

Line chart, by percent, 2012 to 2015. There are four series, Mean: April 17, 2012, Mean: March 12, 2012, Mode:

April 17, 2012, and Mode: March 12, 2012. Mean: April 17, 2012 begins in April 2012 at about 0.15 and generally increases to about 1.08 by 2015. Mean: March 12, 2012 begins in 2012 at about 0.15 and generally increases to about 1.1 by 2015. Mode: April 17, 2012 begins in 2012 at about 0.15 and generally increases to about 0.4 by 2015. Mode: March 12, 2012 begins in 2012 at about 0.15 and generally increases to about 0.4 by 2015.

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:Q1 to 2016:Q4. There are two series, Recent: 21 respondents and March FOMC: 21 respondents. Recent: 21 respondents begins in 2013:Q2 at about 5 and decreases to 0 in 2013:Q4. It then increases to about 35 by 2014:Q3 and then decreases to 0 by 2015:Q2. It increases to 5 in 2015:Q3 and then decreases back to 0 by 2015:Q4. It increases to 5 by 2016:Q1. March FOMC: 21 respondents begins at 10 in 2013:Q3 and then decreases to 0 by 2013:Q4. It then generally increases to about 35 by 2014:Q3 before decreasing to 0 by 2015:Q2. It increases again to 5 by 2015:Q3 before decreasing to 0 in 2015:Q4. It increases once more to 5 in 2016:Q2.

Source: Desk's Dealer Survey from April 16, 2012.

Figure: Inflation Compensation

Line chart, by percent, 2010 to 2012. Data are daily. There is a vertical line on March 2012 marking the March FOMC. There are two series, 5 to 10 years ahead and Next 5 years. 5 to 10 years ahead begins in 2010 at about 3.2 and generally decreases to about 2.3 by mid-2010. It then increases to about 3.1 by 2011 and then decreases to about 2.7 by April 17, 2012. Next 5 years begins in 2010 at about 2 and generally decreases to about 1.15 by mid-2012. It then increases to about 2.2 by 2011 and then decreases to about 1.95 by April 17, 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.

Short-Term Dollar Funding Markets and Financial Institutions

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

Line chart, by days, January 2010 to April 2012. Data are weekly. There is a vertical line on March 2012 representing the March FOMC. There are two series, U.S. parent and European parent. U.S. parent begins in January 2010 at about 40.5 and generally increases to about 49 by April 2010. It then generally decreases to about 35 by May 2010 and generally fluctuates between 41 and 51 from September 2010 to September 2011. It then generally increases to about 62 by April 11, 2012. European parent begins in January 2010 at about 41 and generally increases to about 48 by April 2010. It then generally decreases to about 35 by May 2010 and generally increases to about 58 by October 2010. It generally decreases to about 31 by January 2012 and then generally increases to about 50 by April 11, 2012.

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

Figure: Asset-Backed Commercial Paper Overnight Spreads

Line chart, by basis points, January 2011 to April 2012. Data are 5-day moving average. There is a vertical line on March 2012 representing the March FOMC. There are three series, United States, Europe, and Other. United States begins in January 2011 at about 5 and generally increases to about 24 by January 2012. It then generally decreases to about 7 by April 17, 2012. Europe begins in January 2011 at about 5 and generally increases to about 65 by December 2012. It then generally decreases to about 12 by April 17, 2012. Other begins in January 2011 at

about 3 and generally increases to about 7 by April 17, 2012.

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

Figure: Selected Interest Rate Spreads

Line chart, by basis points, January 2010 to April 2012. Data are daily. There is a vertical line on March 2012 representing the March FOMC. There are two series, 3-month LIBOR over OIS and 1-week LIBOR over OIS. 3-month LIBOR over OIS begins in January 2010 at about 9.8 and generally increases to about 33 by June 2010. It generally decreases to about 10 by September 2010 and generally increases to about 50 by December 2011. It then generally decreases to about 32 by April 18, 2012. 1-week LIBOR over OIS begins in January 2010 at about 9 and generally increases to about 17 by June 2010. It then generally decreases to about 4 by April 17, 2012.

Source: Bloomberg.

Figure: Dollar Funding Spreads

Line chart, by basis points, January 2010 to April 2012. Data are daily. There is a vertical line on March 2012 representing the March FOMC. There are two series, USD 3x6 FRA-OIS and 3-month euro-dollar implied basis swap. USD 3x6 FRA-OIS begins in January 2010 at about 17 and generally increases to about 51 by January 2011. It generally decreases to about 20 by May 2011 and then generally increases to about 70 by December 2011. It then generally decreases to about 35 by April 17, 2012. 3-month euro-dollar implied basis swap begins in April 2010 at about 30 and generally decreases to about 0 by May 2011 and generally increases to about 150 by December 2011. It then generally decreases to about 37 by April 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; Federal Reserve Bank of New York.

Figure: Stock Prices

Line chart, by ratio scale where December 31, 1991 = 100, January 2010 to April 2012. Data are daily. There is a vertical line on March 2012 representing the March FOMC. There are two series, S&P 500 and Dow Jones Bank Index. S&P 500 begins in January 2010 at about 1140 and generally decreases to about 1030 by June 2010. It generally increases to about 1350 by May 2011 and then generally decreases to about 1100 by September 2011. It generally increases to about 1380 by April 17, 2012. Dow Jones Bank Index begins in January 2010 at about 220 and generally increases to about 270 by May 2010. It generally decreases to about 145 by September 2011 and then generally increases to about 210 by April 17, 2012.

Source: Bloomberg.

Figure: CDS Spreads

Line chart, by basis points, January 2009 to April 2012. Data are daily. There is a vertical line on March 2012 representing the March FOMC. The series begins in January 2009 at about 115 and generally increases to about 375 by March 2009. It then generally decreases to about 100 by May 2010 and then generally increases to about 390 by August 2011. It then generally decreases to about 260 by April 17, 2012.

Source: Markit.

[Box:] What Explains the Current Low Level of the 10-Year Treasury Term Premium?

Parameter Estimates and Decomposition of Changes in the 10-Year Term Premium

Parameter estimates

Total change of the 10-Year term premium
(basis points)

June 2011 To March 2012

		-76
		Explained by
Constant	4.04 (5.18)	
Interest rate uncertainty	.12 (6.48)	□22
Capacity utilization	□.05 (□5.22)	□7
Foreign official purchases	□.11 (□9.18)	4
Equity implied volatility	□.01 (□2.09)	0
Corr. between equity and 10□y rate	□.34 (□4.76)	10
SOMA holdings	□.13 (□3.29)	□22
Euro□zone worries	□.45 (□4.94)	□21
Treasury securities outstanding	.06 (5.38)	25
	Adjusted R^2	Total change explained by the model
	.70	-34

Note: The models are estimated on monthly data from January 1998 to March 2012. T□ statistics are shown in parentheses.

[Box:] Inflation Probability Distributions Implied by Inflation Caps

Figure: Probably Distribution of Annualized Cumulative Headline CPI Inflation over the Next 5 Years

Bar chart, by percent, -2 to 5. There are two series, April 17, 2012 and March 13, 2012. April 17, 2012 begins on -2 at about 1.5 and increases to about 2 by -1. It increases to 6 by 0 and then to about 16 by 1. By 1, it increases to about 30 and then decreases to about 25 by 3. It decreases to about 10 by 4 and then to about 4 by 5. It ends on 6 at about 3. March 13, 2012 begins on -2 about 1.4 and increases to about 1.9 by -1. It increases to about 5 by 0 and then increases to about 14 by 1. It increases to about 29 by 2 and then decreases to about 27 by 3. It continues to decrease to about 13 by 4 and decreases again to about 5 by 5. It ends on 6 at about 4.

Source: Federal Reserve Board's staff estimates.

Figure: Probably Distribution of Annualized Cumulative Headline CPI Inflation over the Next 10 Years

Bar chart, by percent, -2 to 5. There are two series, April 17, 2012 and March 13, 2012. April 17, 2012 begins on -2 at about 1.5 and increases to about 2 by -1. It increases to 6 by 0 and then to about 16 by 1. By 1, it increases to about 30 and then decreases to about 26.9 by 3. It decreases to about 12 by 4 and then to about 5 by 5. It ends on 6 at about 3. March 13, 2012 begins on -2 about 1.4 and increases to about 2 by -1. It increases to about 6 by 0 and then increases to about 15.6 by 1. It increases to about 29.5 by 2 and then decreases to about 27 by 3. It continues to decrease to about 13 by 4 and decreases again to about 6 by 5. It ends on 6 at about 4.

Source: Federal Reserve Board's staff estimates.

Figure: Probability of Annualized Cumulative Headline CPI Inflation over the Next 5 Years

Bar chart, by percent, -2 to 6. There are two series, April 17, 2012 and October 18, 2011. April 17, 2012 begins on -2 about 2 and generally increases to about 2.5 by -1. It increases to about 6 by 0 and then increases to about 17 by 1. It increases to about 30 by 2 and then decreases to about 25 by 3. It decreases to about 10 by 4 and then decreases to about 4 by 5. It ends on 6 at about 3. October 18, 2011 begins on -2 at about 2.5 and generally increases to about 3.5 by -1. It increases to about 10 by 0 and then increases to about 22 by 1. It increases to about 22.5 by 2 and then increases to about 28 by 3. It decreases to 0 by 4 and then increases to about 3.8 by 5. It

then ends on 6 by decreasing to about 3.

Source: Federal Reserve Board's staff estimates.

Figure: Probability Distribution of Annualized Cumulative Headline CPI Inflation over the Next 10 Years

Bar chart, by percent, -2 to 6. There are two series, April 17, 2012 and October 18, 2011. April 17, 2012 begins on -2 at about 1.5 and generally increases to about 2 by -1. It generally increases to about 5 by 0 and then increases to about 15 by 1. It increases to about 27 by 2 and decreases to about 25 by 3. It decreases to about 17.5 by 4 and decreases to about 5 by 5. It then ends on 6 by decreasing to about 4.7. October 18, 2011 begins on -2 at about 3 and generally increases to about 3.5 by -1. It generally increase to about 8 by 0 and then increases to about 18 by 1. It increases to about 25 by 2 and decreases to about 20 by 3. It decreases to about 17.5 by 4 and decreases to about 4 by 5. It ends at about 3.9 by 6.

Source: Federal Reserve Board's staff estimates.

Foreign Developments

Figure: 10-Year Nominal Benchmark Yields

Line chart, by percent, 2011 to 2012. Data are daily. There is a vertical line on March 2012 marking the March 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 1.8 by 2012:Q2. United Kingdom begins in 2011:Q1 at about 3.5 and generally decreases to about 2.1 by 2012:Q2. Japan begins in 2011:Q1 at about 1.1 and generally decreases to about 0.95 by 2012:Q2. Canada begins in 2011:Q1 at about 3.1 and generally decreases to about 2.1 by 2012:Q2.

Source: Bloomberg.

Figure: Stock Price Indexes

Line chart, by ratio scale where January 3, 2011 = 100, 2011 to 2012. Data are daily. There is a vertical line on March 2012 marking the March FOMC. There are four series, DJ Euro, Topix, DJ Euro Banks, and MSCI Emerging Markets. DJ Euro begins in 2011:Q1 at about 100 and generally decreases to about 73 by 2011:Q4. It generally increases to about 92 by 2012:Q1 and then decrease to about 85 by 2012:Q2. Topix begins in 2011:Q1 at about 100 and generally decreases to about 86 by 2011:Q4. It generally increases to about 95 by 2012:Q1 and then decrease to about 90 by 2012:Q2. DJ Euro Banks begins in 2011:Q1 at about 100 and generally increases to about 118 by 2011:Q2. It generally decreases to about 52 by 2011:Q3 and generally increases to about 73 by 2012:Q1. It then generally decreases to about 56 by 2012:Q2. MSCI Emerging Markets begins in 2011:Q1 at about 100 and generally decreases to about 72 by 2011:Q4. It generally increases to about 89 by 2012:Q2.

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 on March 2012 marking the March FOMC. There are four series, Portugal, Spain, Ireland, and Italy. Portugal begins in 2011:Q1 at about 3.9 and generally increases to about 15.8 by 2012:Q1. It then generally decreases to about 10.8 by 2012:Q2. Spain begins in 2011:Q1 at about 2.2 and generally increases to about 4.1 by 2012:Q2. Ireland begins in 2011:Q1 at about 6 and generally increases to about 11.5 by 2011:Q3. It then generally decreases to about 5.3 by 2012:Q2. Italy begins in 2011:Q1 at about 1.99 and generally increases to about 5.9 by 2012:Q4. It then generally decreases to about 3.9 by 2012:Q2.

Note: Spread over German bunds.

Source: Bloomberg.

Figure: Median Bank CDS Premiums

Line chart, by basis points, 2011 to 2012. Data are daily. There is a vertical line on March 2012 marking the March FOMC. There are four series, Portugal, Spain, Ireland, and Italy. Portugal begins in 2011:Q1 at about 750 and generally increases to about 1150 by 2011:Q4. It then generally decreases to about 900 by 2012:Q2. Spain begins in 2011:Q1 at about 490 and generally decreases to about 475 by 2012:Q1. It then generally increases to about 600 by 2012:Q2. Ireland begins in 2011:Q1 at about 1100 and generally increase to about 2000 by 2011:Q3. It then generally decreases to about 800 by 2012:Q2. Italy begins in 2011:Q1 at about 200 and generally increases to about 650 by 2011:Q4. It then generally decreases to about 400 by 2012:Q2.

Source: Markit.

Figure: Dollar Exchange Rates

Line chart, by ratio scale where January 3, 2011 = 100, 2011 to 2012. There is a vertical line on March 2012 representing the March FOMC. There are two series, Broad and Yen. Broad begins in 2011:Q1 at about 100 and generally decreases to about 96 by 2011:Q2. It generally increases to about 103 by 2011:Q3 and then generally decreases to about 101 by 2012:Q2. Yen begins in 2011:Q1 at about 102 and generally decreases to about 93 by 2011:Q3. It then generally increases to about 99 by 2012:Q2.

There is another series, Euro, by euros per dollar, 2011 to 2012. The series begins in 2011:Q1 at about 0.75 and generally decreases to about 0.68 by 2011:Q2. It generally increases to about 0.8 by 2012:Q1 and then decreases to about 0.76 by 2012:Q1.

Source: Federal Reserve Board; Bloomberg.

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

Bar chart, by billions of dollar, annual rate, 2010 to 2012. There are two series, Official and Private. Official begins in 2010 at about 400 and decreases to about 200 by 2011:Q1. It decreases again to about 100 by 2011:Q3. By 2011:Q4 it decreases to about -50 and then increases to about 800 by January 2012. It then decreases to about 200 by February 2012. Private begins at about 200 in 2010 and decreases to about -25 by 2011:H1. It increases to about 450 by 2011:Q3 and then decreases to about 320 by 2011:Q4. It decreases to about -200 by January 2012 and then increases to about 300 by February 2012.

Source: Treasury International Capital data adjusted for staff estimates.

Other Domestic Asset Market Developments

Figure: S&P 500 Stock Price Index

Line chart, by log scale where November 1, 2011 = 100, January 2010 to April 2012. Data are daily. There is a vertical line on March 2012 representing the March FOMC. The series begins in January 2010 at about 96 and generally decreases to about 84 by June 2010. It generally increases to about 110 by May 2011 and then generally decreases to about 92 by October 2011. It then generally increases to about 113 by April 17, 2012.

Source: Bloomberg.

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 on March 2012 representing the March FOMC. The series begins in 2007 at about 6 and generally increases to about 80 by late 2008. It generally decreases to about 17 by 2010 and then generally increases to about 50 by 2011. It then generally decreases to about 20 by April 17, 2012.

Source: Chicago Board Options Exchange.

Figure: Equity Risk Premium

Line chart, by percent, 1992 to 2012. Data are daily. There is a vertical line on March 2012 representing the March FOMC. There are two series, Expected 10-year real equity return and Expected real yield on 10-year Treasury. Expected 10-year real equity return begins in 1992 at about 7.75 and generally decreases to about 2.5 by 2000. It then generally increases to about 8.4 by April 17, 2012. Expected real yield on 10-year Treasury begins in 1992 at about 4.6 and generally decreases to about 0 by April 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 is a plus-sign at the end of the Expected real yield on 10-year Treasury series that denotes the latest observation using daily interest rates and stock prices and latest earnings data.

Source: Thomson Financial.

Figure: S&P 500 Earnings per Share

Line series, by dollars per share, 2000 to 2011. Data are quarterly. The series begins in 2000 at about 14 and generally decreases to about 11 by 2011. It generally increases to about 24 by 2007 and then generally decreases to about 5.2 by 2009. It then generally increase to about 24 by 2011:Q4 preliminary.

Note: Data are seasonally adjusted by staff.

Source: Thomson Financial.

Figure: Corporate Bond Spreads

Line chart, by basis points, 2007 to 2012. Data are daily. There is a vertical line on March 2012 representing the March FOMC. There are two series, 10-year high-yield and 10-year BBB. 10-year high-yield begins in 2007 at about 260 and generally increases to about 1700 by 2008. It then generally decreases to about 500 by April 17, 2012. 10-year BBB begins in 2007 at about 110 and generally increases to about 650 by 2008. It then generally decreases to about 275 by April 17, 2012.

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

Source: Merrill Lynch and staff estimates.

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

Line chart, by basis points, March 2009 to April 2012. Data are 5-day moving average. There is a vertical line on March 2012 representing the March FOMC. The series begins in March 2012 at about 80 and general decreases to about 20 by March 2010. It then generally increases to about 30 by April 17, 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 that denotes the latest available single-day observation.

Source: Depository Trust & Clearing Corporation.

Business Finance

Figure: Selected Components of Net Debt Financing, Nonfinancial Firms

Bar chart, by billions of dollars, 2008 to 2012. Data are monthly rate. There are three series, C&I loans, Commercial paper, and Bonds. There is also a Total series presented as a line chart. Approximate values are: 2008: Bonds 18, C&I loans 28, Commercial paper 30, Total 30; 2009: Bonds 32, C&I loans -25, Commercial paper -30, Total 0; 2010: Bonds 38, C&I loans -5, Commercial paper 40, Total 36; 2011:H1: Bonds 38, C&I loans 43, Commercial paper 50, Total 50; 2011:Q3: Bonds 23, C&I loans 38, Commercial paper 40, Total 40; 2011:Q4: Bonds 30, C&I loans 43, Commercial paper 46, Total 46; 2012:Q1 Bonds 39, C&I loans 50, Total 50.

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

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

Figure: Gross Issuance of Institutional Leveraged Loans

Bar chart, by billions of dollars, 2008 to 2012. Data are monthly rate. The series begins in 2008 at about 5 and decreases to about 4 in 2009. It increases to about 18 by 2010 and increases to about 35 by 2011:H1. It decreases to about 10 in 2011:H2 and increases to about 20 in 2012:Q1.

Source: Reuters Loan Pricing Corporation.

Figure: Selected Components of Net Equity Issuance, Nonfinancial Firms

Bar chart, by billions of dollars, 2008 to 2011. 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 also a Total series presented as a line chart. Approximate values are: 2008: Public issuance 25, Private issuance 23, Repurchases -30, Cash mergers -48, Total -23; 2009: Public issuance 19, Private issuance 15, Repurchases -15, Cash mergers -24, Total -4; 2010: Public issuance 17, Private issuance 12, Repurchases -25, Cash mergers -33, Total -24; 2011:H1: Public issuance 19, Private issuance 12, Repurchases -33, Cash mergers -44, Total -33; 2011:Q3: Public issuance 15, Private issuance 11, Repurchases -40, Cash mergers -54, Total -50; 2011:Q4 estimate: Public issuance 17, Private issuance 12, Repurchases -30, Cash mergers -50, Total -31.

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

Figure: Financial Ratios for Nonfinancial Corporations

Line chart, by ratio, 1991 to 2011. There are two series, Debt over total assets and Liquid assets over total assets. Debt over total assets begins in 1991 at about .335 and generally decreases to about 0.28 by 1995. It generally decreases to about 0.245 by 2006 and then increases to about 0.29 by 2009. It then generally decreases to about 0.25 by 2011:Q4 preliminary. Liquid assets over total assets begins in 1991 at about 0.054 and generally increases to about 0.95 by 2004. It then generally decreases to about 0.088 by 2008 and then increase to about 0.105 by 2011:Q4 preliminary.

Note: Data are annual through 1999 and quarterly thereafter.

Source: Compustat.

Figure: Bond Ratings Changes of Nonfinancial Firms

Bar chart, by percent of outstandings, 1991 to 2012. Data are annual rate. There is a horizontal line at zero. There are two series, Upgrades and Downgrades. Upgrades begins in 1991 at about 10 and generally increases to about 20 by 1994. It generally decreases to about 3 by 2002 and then generally increases to about 17 by 2012:Q1. Downgrades begins in 1991 at about -30 and decreases to about -43 by 1992. It generally increases to about -10 by 1996 and then generally decreases to about 0.38 by 2002. It then generally increases to about 7 by 2012:Q1.

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

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 about 12 and decreases to 1 by 2009. It increases to about 10 in 2010 and then increases to about 32 by 2011:H1. It decreases to about 29 by 2011:H2 and then decreases to about 17 by 2012:Q1.

Source: Commercial Mortgage Alert.

Household Finance

Figure: Mortgage Rate and MBS Yield

Line chart, by percent, 2007 to 2012. There is a vertical line on March 2012 representing the March FOMC. There are two series, 30-year conforming fixed mortgage rate and MBS yield. 30-year conforming fixed mortgage rate begins in 2007 at about 6.3 and generally decreases to about 4.9 by 2009. It then generally decreases to about 3.8 by April 17, 2012. MBS yield begins in 2007 at about 5.7 and generally decreases to about 3.65 by 2009. It then

generally decreases to about 2.9 by April 17, 2012.

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

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

Figure: Refinance Activity

Line chart, by ratio scale where March 16, 1990 = 100, 2002 to 2012. There is a vertical line on March 2012 representing the March FOMC. The series begins in 2002 at about 2000 and generally increases to about 10000 by 2003. It generally decreases to about 1900 by 2004 and then generally increases to about 6100 by 2009. It then generally decreases to about 4000 by April 13, 2012.

Note: Seasonally adjusted by FRB staff.

Source: Mortgage Bankers Association.

Figure: Prices of Existing Homes

Line chart, by index peak normalized to 100, 2005 to 2012. Data are monthly. The series begins in 2005 at about 86 and generally increases to about 100 by 2006. It generally decreases to about 72 by 2009 and then generally decreases to about 67 by February 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 1.08 and generally decreases to about 0.82 by 2006. It generally increases to about 1.43 by 2009 and then generally decreases to about 0.97 by February 2012. Monthly rate begins in 2003 at about 1.05 and generally decreases to about 0.8 by 2006. It generally increases to about 1.75 by 2009 and then generally decreases to about 0.93 by February 2012.

Note: Percent of previously current mortgages that transition to being at least 30 days of 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 average. There is a horizontal line at zero. There are two series, Nonrevolving and Revolving. Nonrevolving begins in 2004 at about 5.75 and generally decreases to about -2 by 2009. It then generally increases to about 11.6 by February 2012. Revolving begins in 2004 at about 3 and generally increases to about 10 by 2007. It generally decreases to about -12 by 2010 and then generally increases to about -0.6 by February 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, 15, Auto 6; 2008: Student loan 11, Credit card 8, Auto 3; 2009: Student loan 11, Credit card 9, Auto 5; 2010: Student loan 7, Credit Card 6.5, Auto 5; 2011: Student loan 7.3, Credit Card 7, Auto 5.2; 2012:Q2: Student loan 9, Credit Card 8, Auto 7.2.

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. There is a horizontal line at zero. Data are 3-month change, a.r. There are

two series, Total bank credit and C&I loans. Total bank credit begins in 2005 at about 10 and generally decreases to about -10 by 2009. It then generally increases to about 4.5 by March 2012. C&I loans begins in 2005 at about 12 and generally increases to about 29 by 2007. It generally decreases to about -28 by 2009 and then generally increases to about 10 by March 2012.

Source: Federal Reserve Board.

Figure: Changes in Standards and Demand for Bank Loans

Line chart, by index, 1991 to 2012. Data are quarterly. There is a horizontal line at zero. There is a vertical line on January 2012 marking the January survey. There are two series, Standards and Demands. Standards begins in 1991 at about 0.39 and generally decreases to about -0.13 by 1993. It generally increases to about 0.4 by 2002 and then generally decreases to about -0.2 by 2004. It generally increases to about 0.85 by 2007 and then generally decreases to about 0.08 by April 2012. Demand begins in 1992 at about -0.25 and generally increases to about 0.4 by 1999. It generally decreases to about -0.4 by 2001 and then generally increases to about 0.3 by 2006. It generally decreases to about -0.53 by 2008 and then generally increases to about 0.6 by April 2012.

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

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

Figure: Changes in Spreads on C&I Loans

Line chart, by net percent, 1991 to 2012. Data are quarterly. There is a horizontal line at zero. There is a vertical line on January 2012 representing the January survey. There are two series, Domestic respondents and Foreign respondents. Domestic respondents begins in 1991 at about 20 and generally decreases to about -45 by 1996. It generally increases to about 50 by 2001 and then decreases to about -65 by 2004. It generally increases to about 98 by 2008 and then generally decreases to -58 by April 2012. Foreign respondents begins in 1992 at about 86 and generally decreases to about -60 by 1995. It generally increases to about 100 by 1999 and then generally decreases to about -62 by 2004. It generally increases to about 80 by 2008 and then generally decreases to about -3 by April 2012.

Note: Net percent of respondents that increased spreads of loan rates over cost of funds over the past 3 months.

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

Figure: Demand for C&I Loans

Line chart, by net percent, 1992 to 2012. Data are quarterly. There is a horizontal line at zero. There is a vertical line on January 2012 representing the January survey. There are two series, Domestic respondents and Foreign respondents. Domestic respondents begins in 1992 at about -30 and generally increases to about 40 by 1995. It generally decreases to about -60 by 2002 and generally increases to about 40 by 2005. It generally decreases to about -60 by 2008 and then generally increases to about 22 by April 2012. Foreign respondents begins in 1992 at about 17 and generally increases to about 55 by 1995. It generally decreases to about -40 by 2002 and then generally increases to about 23 by 2004. It generally decreases to about -40 by 2007 and then generally increases to about -9 by April 2012.

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.
2010	3.3	10.9	-21.4	-15.2	5.9
2011:H1	6.8	11.9	-19.3	-6.0	9.3
2011:H2	12.1	17.9	-19.7	1.8	7.8

Jan.	15.9	21.9	-13.6	-7.1	11.3
Feb.	3.2	6.6	-18.1	-23.0	12.2
Mar.(p)	3.9	6.8	-23.2	-9.1	10.7

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 on March 2012 representing the March FOMC. The series begins in 2008 at about 4.5 and generally increases to about 7.5 by April 9, 2012.

Note: Seasonally adjusted.

Source: Federal Reserve Board.

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

[Box:] Balance Sheet Developments over the Intermeeting Period

Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (04/16/12)
Total assets	-12	2,881
Selected assets:		
Liquidity programs for financial firms	-32	32
Primary, secondary, and seasonal credit	+0	+0
Foreign central bank liquidity swaps	-33	32
Term Asset-Backed Securities Loan Facility (TALF)	-0	7
Net portfolio holdings of Maiden Lane LLCs	-6	21
Maiden Lane	-2	4
Maiden Lane II	-4	+0
Maiden Lane III	-0	17
Securities held outright*	17	2,627
U.S. Treasury securities	21	1,679
Agency debt securities	-5	95
Agency mortgage-backed securities	1	853
Total liabilities	-12	2,827
Selected liabilities:		

Federal Reserve notes in circulation	5	1,058
Reverse repurchase agreements	4	91
Foreign official and international accounts	5	91
Others	-2	0
Reserve balances of depository institutions**	-1	1,576
Term deposits held by depository institutions	3	3
U.S. Treasury, General Account	15	65
U.S. Treasury, Supplementary Financing Account	0	0
Other deposits	-35	12
Total capital	-0	54

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

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

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

Appendix

Senior Loan Officer Opinion Survey on Bank Lending Practices

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

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

Line chart, by percent, 1990 to 2012. There is a horizontal line at zero. There is a vertical line on January 2012 marking the January 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 1993. It generally increases to about 60 by 2001 and then decreases to about -20 by 2005. It generally increases to about 82 by 2008 and then decreases to about -5 by 2012. Loans to small firms begins in 1990 at about 55 and generally decreases to about -15 by 1994. It generally increases to about 45 by 2001 and then decreases to about -20 by 2005. It generally increases to about 77 by 2008 and then decreases to about -1 by 2012.

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

Line chart, by percent, 1990 to 2012. There is a horizontal line at zero. There is a vertical line on January 2012 marking the January 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 -58 by 1994. It generally increases to about 56 by 2003 and then generally decreases to about -74 by 2005. It generally increases to about 98 by 2008 and then generally decreases to about -60 by 2012. Loans to small firms begins in 1991 at about 5 and generally decreases to about -25 by 1997. It generally increases to about 43 by 2001 and then decreases to about -55 by 2005. It increases to about 94 by 2008 and then decreases to about -52 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 on January 2012 marking the January 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 38 by 1993. It decreases to about -72 by 2001 and then increases to about 42 by 2005. It decreases to about -60 by 2009

and then increases to about 30 by 2012. Loans to small firms begins in 1991 at about -28 and generally increases to about 38 by 1993. It generally decreases to about -40 by 2001 and then increases to about 36 by 2003. It generally decreases to about -60 by 2009 and then increases to about 20 by 2012.

Special Questions on Lending to Firms with Exposures to European Economies

Figure: Changes in Standards and Terms for Lending to Firms with Significant Exposure to European Economies

Bar chart, For banks headquartered in Europe (includes affiliates and subsidiaries), by Net percent, Domestic respondents and Foreign respondents. Data are Tightening and Easing. There is a horizontal line at zero. There are three series, 2011:Q4, 2012:Q1, and 2012:Q2. Approximate values are: Domestic respondents, 2011:Q4: 68, 2012:Q1: 58, 2012:Q2: 30. Foreign respondents, 2011:Q4: 56, 2012:Q1: 71, 2012:Q2: 18.

There is a second bar chart, For nonfinancial companies. Approximate values are: Domestic respondents, 2011:Q4: 17, 2012:Q1: 37, 2012:Q2: 12. Foreign respondents, 2011:Q4: 23, 2012:Q1: 32, 2012:Q2: 18.

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

Bar chart, by percent of respondents, 2012:Q1 to 2012:Q2. There is a horizontal line at zero. There are four series, Increased a considerable amount, Increased to some extent, No appreciable increase, and No decrease in competition. Increased a considerable amount begins in 2012:Q1 at about 100 and remains at 100 in 2012:Q2. Increased to some extent begins in 2012:Q1 at about 98 and increases to about 100 by 2012:Q2. No appreciable increase begins in 2012:Q1 at about 49 and decreases to about 37 by 2012:Q2. No decrease in competition begins in 2012:Q1 at about 15 and decreases to about 13 by 2012:Q2.

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 at January 2012 marking the January survey. The series begins in 1990 at about 70 and generally decreases to about -10 by 1997. It generally increases to about 45 by 2002 and generally decreases to about -22 by 2005. It generally increases to about 85 by 2008 and then decreases to about -15 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 at January 2012 marking the January survey. The series begins in 1994 at about 16 and generally increases to about 42 by 1998. It generally decreases to about -55 by 2001 and then generally increases to about 23 by 2004. It generally decreases to about -65 by 2009 and then generally increases to about 29 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 2012. There is a horizontal line at zero. There are four series, All residential, Prime, Nontraditional, and Subprime. All residential begins in 1990 at about 8 and generally decreases to about -17 by 1993. It then generally fluctuates between -5 and 7 until 2005. It then increases to about 19 by 2006. Prime begins in 2007 at about 17 and generally increases to about 75 by 2008. It decreases to about -5 by 2010 and then increases to about 2 by 2012. Nontraditional begins in 2007 at about 44 and generally increases to about 88 by

2008. It then generally decreases to about 15 by 2012. Subprime begins in 2007 at about 58 and generally increases to about 100 by 2008. It then generally decreases to about 44 by 2009.

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 2012. There is a horizontal line at zero. There are four series, All residential, Prime, Nontraditional, and Subprime. All residential begins in 1990 at about -47 and generally increases to about 62 by 1998. It generally decreases to about -60 by 2000 and then generally increases to about 45 by 2003. It then generally decreases to about -38 by 2006. Prime begins in 2007 at about -21 and generally increases to about 38 by 2009. It generally decreases to about -36 by 2011 and then generally increases to about 33 by 2012. Nontraditional begins in 2007 at about -18 and generally decreases to about -72 by 2008. It generally increases to about 21 by 2012. Subprime begins in 2007 at about -20 and generally decreases to about -100 by 2008. It then generally increases to about -50 by 2009.

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.

Special Questions on Residential Real Estate Lending

Figure: Factors Affecting Banks' Ability to Originate or Purchase Additional RRE Loans

Bar chart, by percent of respondents. There is a horizontal line at zero. There are four series, Somewhat a factor, Not at all a factor, The most important factor, and Very much a factor. Approximate values are: When periods of high application exceed capacity: Somewhat a factor 55, Not at all a factor 5, The most important factor 100, Very much a factor 98; Difficulty in completing appraisals: Somewhat a factor 80, Not at all a factor 55, The most important factor 0, Very much a factor 100; Difficulty in completing appraisals: Somewhat a factor 90, Not at all a factor 30, The most important factor 100; Very much a factor 100; Difficulty in securing servicing help: Somewhat a factor 99, Not at all a factor 88, The most important factor 0, Very much a factor 100; Difficulty in hiring: Somewhat a factor 98, Not at all a factor 70, The most important factor 0, Very much a factor 100; Limited balance sheet capacity: Somewhat a factor 98, Not a factor at all 97, The most important factor 0, Very much a factor 100.

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

Figure: Likelihood of Originating a GSE-Eligible Mortgage Loan Relative to 2006

Bar chart, by percent of respondents. There is a horizontal line at zero. There are five series, Somewhat less likely, Much less likely, About the same, Much more likely, and Somewhat more likely. The approximate values are: FICO score 620 Down payment 10%: Somewhat less likely 67, Much less likely 33, About the same 100, Much more likely 0, Somewhat more likely 0; FICO score 620 Down payment 10%: Somewhat less likely 23, Much less like 15, About the same 100, Much more likely 0, Somewhat more likely 0; FICO score 720 Down payment 10%: Somewhat less likely 16, Much less likely 4, About the same 99, Much more likely 0, Somewhat more likely 100; FICO score 620 Down payment 20%: Somewhat less likely 40, Much less likely 30, About the same 100, Much more likely 0, Somewhat more likely 0; FICO score 680 Down payment 20%: Somewhat less likely 15, Much less likely 10, About the same 99, Much more likely 0, Somewhat more likely 100; FICO score 720 Down payment 20%: Somewhat less likely 3, Much less likely 0, About the same 98, Much more likely 100, Somewhat more likely 99.

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

Figure: Reasons Much Less Likely or Somewhat Less Likely to Originate GSE-Eligible Mortgage Loans

Bar chart, by percent of respondents. There is a horizontal line at zero. There are four series, Somewhat important, Not important, The most important, and Very important. The approximate values are: Higher servicing costs: Somewhat important 80, Not important 40, The most important 0, Very important 100; Borrower difficulty with PMI:

Somewhat important 45, Not important 5, The most important 100, Very important 96; Borrower difficulty with secondary liens: Somewhat important 97, Not important 78, The most important 100, Very important 99; Risk of GSE putback: Somewhat important 45, Not important 35, The most important 100, Very important 80; Basel III treatment: Somewhat important 98, Not important 67, The most important 100, Very important 98.5.

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

Figure: Reasons Much Less Likely or Somewhat Less Likely to Originate GSE-Eligible Mortgage Loans

Bar chart, by percent of respondents. There is a horizontal line at zero. There are four series, Somewhat important, Not important, The most important, and Very important. The approximate values are: Legislative changes: Somewhat important 68, Not important 55, The most important 100, Very important 99; High RRE exposure: Somewhat important 69, Not important 53, The most important 100, Very important 98; Less favorable house price outlook: Somewhat important 69, Not important 35, The most important 100, Very important 98; Less favorable economic outlook: Somewhat important 75, Not important 35, The most important 100, Very important 100; Low rate speed: Somewhat important 96, Not important 60, The most important 10, Very important 99.

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

Figure: Participation in HARP 2.0

Bar chart, by percent of respondents. There is a horizontal line at zero. There are three series, Actively soliciting, Not actively soliciting, and Little participation. The approximate values are: Actively soliciting 100, Not actively soliciting 26, Little participation 20.

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

Figure: Share of HARP 2.0 Applicants Anticipate Completing

Bar chart, by percent of respondents. There is a horizontal line at zero. There are six series, More than 80%, Between 60 and 80%, Between 40 to 60%, Between 20 and 40%, Less than 20%, and Little participation. The approximate values are: More than 80% 100, Between 60 and 80% 48, Between 50 and 60% 24, Less than 20% 20, Little participation 20.

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

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

Bar chart, by percent of respondents. There is a horizontal line at zero. There are four series, Somewhat important, Not important, The most important, and Very important. The approximate values are: Identify junior lien holders: Somewhat important 99, Not important 50, The most important 0, Very important 100; Resubordination of second liens: Somewhat important 98, Not important 48, The most important 0, Very important 100; PMI transfer: Somewhat important 75, Not important 20, The most important 100, Very important 99; Risk of GSE putback: Somewhat important 75, Not important 70, The most important 100, Very important 98.

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

Figure: Willingness to Refinance Underwater Loans Outside of HARP 2.0

Bar chart, by percent of respondents. There is a horizontal line at zero. There are three series, Actively soliciting, Not actively soliciting, and Very little refinancing. The approximate values are: Currently held in portfolio: Actively soliciting 100, Not actively soliciting 74, Very little refinancing 35; Not currently held in portfolio: Actively soliciting 100, Not actively soliciting 76, Very little refinancing 40.

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

Figure: Anticipated Change in RRE Exposure Over Next Year

Bar chart, by percent of respondents. There is a horizontal line at zero. There are five series, Increase substantially, Increase somewhat, Keep the same, Reduce somewhat, and Reduce substantially. The approximate values are: Unweighted: Increase substantially 100, Increase somewhat 98, Keep the same 51, Reduce somewhat 15, Reduce

substantially 5; Weighted: Increase substantially 100, Increase somewhat 99, Keep the same 75, Reduce somewhat 50, Reduce substantially 5.

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

Measures of Supply and Demand for Consumer Loans

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

Line chart, by percent, 1991 to 2012. There is a horizontal line at zero. There are three series, Credit card loans, Other consumer loans, and Auto loans. Credit card loans begins in 1996 at about 23 and generally decreases to about -10 by 2007. It generally increases to about 65 by 2008 and then generally decreases to about -5 by 2011:Q4. It decreases to about -10 by 2012:Q2. Other consumer loans begins in 1996 at about 10 and generally increases to about 65 by 2008. It then generally decreases to about -5 by 2012:Q2. Auto loans begins in 2011:Q2 at about -17 and generally decreases to about -19 by 2012:Q2.

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 on January 2012 marking the January survey. The series begins in 1990 at about 7 and generally increases to about 27 by 1994. It generally decreases to about -5 by 1996 and then increases to about 15 by 1998. It generally decreases to about -48 by 2008 and then increases to about 24 by 2012.

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

Line chart, by percent, 1991 to 2012. There is a horizontal line at zero. There are four series, All consumer loans, Credit card loans, Auto loans, and Other consumer loans. All consumer loans begins in 1991 at about -30 and generally increases to about 38 by 1994. It generally decreases to about -40 by 2001 and then increases to about 35 by 2003. It generally decreases to about -50 by 2009 and then increases to about 5 by 2011. Credit card loans begins in 2011:Q2 at about -1 and generally increases to about 20 by 2012:Q2. Auto loans begins in 2011:Q2 at about 21 and generally decreases to about 13 by 2011:Q4. It then increases to about 39 by 2012:Q2. Other consumer loans begins in 2011:Q2 at about 0 and generally decreases to about -5 by 2011:Q4. It then increases to about 20 by 2012:Q2.

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		2013	2014	2015	2016-17
	H1	H2				
<i>Real GDP</i>						
Extended Tealbook baseline	2.3	2.7	2.8	3.3	3.6	3.4

Virtuous circle	2.5	3.6	4.4	3.4	3.2	3.1
Virtuous circle with higher inflation	2.5	3.6	4.3	3.2	2.9	3.0
Fiscal cliff	2.3	2.7	1.6	2.7	4.2	4.0
Corrosion	2.3	2.4	2.0	2.2	2.6	2.8
Disinflation	2.3	2.6	2.4	2.8	3.7	3.9
European crisis with severe spillovers	.9	-2.7	-1.5	2.8	4.5	4.4
Higher oil prices	1.9	1.8	2.3	3.2	3.7	3.8
<i>Unemployment rate¹</i>						
Extended Tealbook baseline	8.2	8.0	7.7	7.4	6.8	5.6
Virtuous circle	8.2	7.8	6.9	6.3	5.9	5.3
Virtuous circle with higher inflation	8.2	7.8	6.9	6.4	6.2	5.7
Fiscal cliff	8.2	8.0	8.2	8.3	7.6	5.6
Corrosion	8.3	8.2	8.3	8.6	8.4	7.7
Disinflation	8.2	8.0	7.9	7.8	7.2	5.5
European crisis with severe spillovers	8.3	9.0	10.5	10.6	9.5	7.4
Higher oil prices	8.2	8.2	8.1	7.9	7.3	5.8
<i>Total PCE prices</i>						
Extended Tealbook baseline	2.0	1.7	1.5	1.5	1.7	1.8
Virtuous circle	2.0	1.7	1.5	1.6	2.0	2.2
Virtuous circle with higher inflation	2.1	1.9	2.1	2.6	3.0	2.9
Fiscal cliff	2.0	1.7	1.5	1.3	1.4	1.5
Corrosion	2.0	1.7	1.5	1.5	1.8	1.9
Disinflation	1.6	1.1	.6	.3	.4	.4
European crisis with severe spillovers	1.4	-.5	-.2	1.1	1.9	2.1
Higher oil prices	5.7	1.2	1.4	1.4	1.8	1.9
<i>Core PCE prices</i>						
Extended Tealbook baseline	2.0	1.7	1.7	1.7	1.8	1.9
Virtuous circle	2.0	1.7	1.7	1.8	2.1	2.3
Virtuous circle with higher inflation	2.0	1.9	2.3	2.8	3.1	3.0
Fiscal cliff	2.0	1.7	1.7	1.5	1.5	1.6
Corrosion	2.0	1.7	1.7	1.7	1.9	2.0
Disinflation	1.6	1.1	.8	.5	.5	.5
European crisis with severe spillovers	1.8	.7	.5	1.1	1.7	2.0
Higher oil prices	2.0	1.9	2.0	1.9	1.9	2.0
<i>Federal funds rate¹</i>						
Extended Tealbook baseline	.1	.1	.1	1.2	2.3	3.8

Virtuous circle	.1	.5	2.2	3.1	3.7	4.6
Virtuous circle with higher inflation	.1	.5	2.7	4.1	4.7	5.2
Fiscal cliff	.1	.1	.1	.1	1.1	3.6
Corrosion	.1	.2	.1	.8	1.7	3.4
Disinflation	.1	.1	.1	.1	.1	1.8
European crisis with severe spillovers	.1	.1	.1	.1	.1	1.2
Higher oil prices	.1	.1	.1	.8	1.6	2.8

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, Virtuous circle, Virtuous circle with higher inflation, Fiscal cliff, Corrosion, Disinflation, European crisis with severe spillovers, Higher oil prices, 90 percent interval, and 70 percent interval. Extended Tealbook with baseline begins in 2008 at about 2 and decreases to about -5 by 2009. It generally increases to about 3.5 by 2010 and then decreases to about 1.75 by 2011. It then generally increases to about 3.4 by 2017. Virtuous circle begins in 2012 at about 2.5 and generally increases to about 4.6 by 2013. It then generally decreases to about 3.1 by 2017. Virtuous circle with higher inflation begins in 2012 at about 2.5 and generally increases to about 4.5 by 2013. It then generally decreases to about 3.1 by 2017. Fiscal cliff begins in 2012 at about 2.5 and generally decreases to about 1.8 by 2013. It generally increases to about 4.4 by 2015 and then generally decreases to about 3.9 by 2017. Corrosion begins in 2012 at about 2.5 and generally decreases to about 2 by 2013. It then generally increases to about 2.9 by 2017. Disinflation begins in 2012 at about 2.5 and generally decreases to about 2.3 by 2013. It then generally increases to about 3.9 by 2017. European crisis with severe spillovers begins in 2012 at about 2.5 and generally decreases to about -2.75 by 2013. It then generally increases to about 4.6 by 2017. Higher oil prices begins in 2012 at about 2.5 and generally decreases to about 1.8 by 2013. It then generally increases to about 3.8 by 2017. The other two series closely track each other throughout the chart, with the 90 percent interval being about 1.2 percent both lesser and greater than the 70 percent interval. The 70 percent interval starts at about 1.8 and 3 and increases to between 1.6 and 5.8 by 2015. It ends in 2017 at about 1.2 and 5.9.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2017. There is a horizontal line at zero. There are ten series, Extended Tealbook baseline, Virtuous circle, Virtuous circle with higher inflation, Fiscal cliff, Corrosion, Disinflation, European crisis with severe spillovers, Higher oil prices, 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 5.6 by 2017. Virtuous circle begins in 2012 at about 8.25 and generally decreases to about 5.4 by 2017. Virtuous circle with higher inflation begins in 2012 at about 8.25 and generally decreases to about 5.75 by 2017. Fiscal cliff begins in 2012 at about 8.25 and increases to about 8.4 by 2014. It then decreases to about 5.75 by 2017. Corrosion begins in 2012 at about 8.25 and generally increases to about 8.5. It then generally decreases to about 7.75. Disinflation begins in 2012 at about 8.25 and generally decreases to about 5.6 by 2017. European crisis with severe spillovers begins in 2012 at about 8.25 and generally increases to about 10.7 by 2014. It then generally decreases to about 7.5 by 2017. Higher oil prices begins in 2012 at about 8.25 and generally decreases to about 5.8 by 2017. The other two series closely track each other throughout the chart, with the 90 percent interval being about 1.2 less than and 1.5 greater than the 70 percent interval. The 70 percent interval starts at about 7.5 and 8.35 and increases to

between 6.5 and 8.5 by 2015. It ends in 2017 at about 4.5 and 6.9.

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, Virtuous circle, Virtuous circle with higher inflation, Fiscal cliff, Corrosion, Disinflation, European crisis with severe spillovers, Higher oil prices, 90 percent interval, and 70 percent interval. Extended Tealbook with baseline begins in 2008 at about 2.3 and generally decreases to about 0.9 by 2010. It increases to about 2 by 2012 and then decreases to about 1.8 by 2017. Virtuous circle begins in 2012 at about 2 and generally decreases to about 1.7 by 2013. It then increases to about 2.25 by 2017. Virtuous circle with higher inflation begins in 2012 at about 2 and generally increases to about 3.1 by 2014. It then decreases to about 2.9 by 2017. Fiscal cliff begins in 2012 at about 2 and generally decreases to about 1.6 by 2017. Corrosion begins in 2012 at about 2 and generally decreases to about 1.75 by 2013. It then generally increases to about 1.9 by 2017. Disinflation begins in 2012 at about 2 and generally decreases to about 0.4 by 2017. European crisis with severe spillover begins in 2012 at about 2 and generally decreases to about 0.5 by 2013. It then generally increases to about 2.1 by 2017. Higher oil prices begins in 2012 at about 2 and generally decreases to about 1.9 by 2017. The other two series closely track each other throughout the chart, with the 90 percent interval being about 1 percent both greater and less than the 70 percent interval. The 70 percent interval starts in 2012 at about 1.8 and 2.1 and increases to about 0.8 and 2.5 by 2014. It ends in 2017 at about 0.9 and 3.8.

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, Virtuous circle, Virtuous circle with higher inflation, Fiscal cliff, Corrosion, Disinflation, European crisis with severe spillovers, Higher oil prices, 90 percent interval, and 70 percent interval. Extended Tealbook with baseline begins in 2008 at about 3.2 and generally decrease to about 0.2. It then generally increases to about 3.8 by 2017. Virtuous circle begins in 2012 at about 0.1 and generally increases to about 4.6 by 2017. Virtuous circle with sever spillovers begins in 2012 at about 0.1 and generally increases to about 5.25 by 2017. Fiscal cliff begins in 2012 at about 0.1 and generally increases to about 3.6 by 2017. Corrosion begins in 2012 at about 0.1 and generally increases to about 3.4 by 2017. Disinflation begins in 2012 at about 0.1 and generally increases to about 1.9 by 2017. European crisis begins in 2012 at about 0.1 and generally increases to about 1.1 by 2017. Higher oil prices begins in 2012 at about 0.1 and generally increases to about 2.75 by 2017. The other two series closely track each other throughout the chart, with the 90 percent interval being about 1 percent both greater and less than the 70 percent interval. The 70 percent interval begins in 2012 at about 0.5 and 0 and generally increases to about 0.75 and 3 by 2014. It ends in 2017 at about 1.8 and 5.9.

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

Measure	2012	2013	2014	2015	2016	2017
<i>Real GDP (percent change, Q4 to Q4)</i>						
Projection	2.5	2.8	3.3	3.6	3.5	3.4
Confidence interval						
Tealbook forecast errors	1.2-3.8	1.0-4.5	...	...	...	...
FRB/US stochastic simulations	1.2-3.9	.8-4.5	1.1-5.1	1.5-5.8	1.4-5.9	1.3-5.8
<i>Civilian unemployment rate (percent, Q4)</i>						
Projection	8.0	7.7	7.4	6.8	6.2	5.6
Confidence interval						
Tealbook forecast errors	7.5-8.5	6.9-8.5	...	...	...	...

FRB/US stochastic simulations	7.5-8.5	6.8-8.7	6.4-8.6	5.8-8.1	5.2-7.4	4.5-6.8
<i>PCE prices, total (percent change, Q4 to Q4)</i>						
Projection	1.9	1.5	1.5	1.7	1.7	1.9
Confidence interval						
Tealbook forecast errors	1.2-2.6	.3-2.7	...	...	...	...
FRB/US stochastic simulations	1.0-2.8	.4-2.7	.2-2.7	.3-2.9	.4-2.9	.6-3.1
<i>PCE prices excluding food and energy (percent change, Q4 to Q4)</i>						
Projection	1.8	1.7	1.7	1.8	1.8	1.9
Confidence interval						
Tealbook forecast errors	1.4-2.3	1.0-2.4	...	...	...	...
FRB/US stochastic simulations	1.3-2.3	.9-2.5	.8-2.6	.7-2.7	.8-2.7	.9-2.8
<i>Federal funds rate (percent, Q4)</i>						
Projection	.1	.1	1.2	2.3	3.1	3.8
Confidence interval						
FRB/US stochastic simulations	.1-1.2	.1-2.2	.1-3.3	.4-4.3	1.1-5.2	1.9-5.9

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

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

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

Tealbook Forecast Compared with Blue Chip

(Blue Chip survey released April 10, 2012)

Figure: Real GDP

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

Figure: Real PCE

Line chart, by percent change, annual rate, 2008 to 2013. There is a horizontal line at zero. There are three series, Blue chip consensus, Staff forecast, and Blue Chip top 10 and bottom 10 averages. Blue chip consensus begins in 2008:Q1 at about -1 and generally decreases to about -5.2 by 2008:Q4. It generally increases to about 3.8 by 2010:Q4 and then decreases to about 1 by 2011:Q1. It then generally increases to about 2.75 by 2013:Q4. Staff forecast generally follows the same exact path as Blue chip consensus until it begins increasing at a faster rate in 2012:Q1. It ends in 2013:Q4 at about 3. Blue Chip top 10 and bottom 10 averages begins in 2011:Q4 at about 1.75 and 3 and increases to about 1.8 and 3.2 by 2012:Q3. It ends in 2013:Q4 at about 1.9 and 3.4.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2013. There is a horizontal line at zero. There are three series, Blue chip consensus, Staff forecast, and Blue Chip top 10 and bottom 10 averages. Blue chip consensus begins in 2008 at about 5 and generally increases to about 9.85 by 2009. It then generally decreases to about 7.5 by 2013. Staff forecast follows the same path as Blue chip consensus until about 2012 when it starts decreases at a slower rate. It ends in 2013 at about 7.75. Blue chip top 10 and bottom 10 averages begins in 2012:Q1 at about 7.9 and 8.25 and increases to about 7.6 and 8.2 by 2012:Q4. It ends in 2013 at about 7 and 8.1.

Figure: Consumer Price Index

Line chart, by percent change, annual rate, 2008 to 2013. There is a horizontal line at zero. There are three series, Blue chip consensus, Staff forecast, and Blue Chip top 10 and bottom 10 averages. Blue chip consensus begins in 2008:Q1 at about 4.25 and generally decreases to about -9.5 by 2008:Q4. It then generally fluctuates between -0.2 and 3.8 from 2009:Q1 to 2011:Q3. It then decreases to about 2.1 by 2013:Q4. Staff forecast generally follows the same path as Blue chip consensus until 2012 when it begins decreases at a faster rate. It ends in 2013:Q4 at about 1.8. Blue Chip top 10 and bottom 10 averages begins in 2012 at about 1.8 and 3.2 and ends in 2013:Q4 at generally the same spots.

Figure: Treasury Bill Rate

Line chart, by percent, 2008 to 2013. There is a horizontal line at zero. There are three series, Blue chip consensus, Staff forecast, and Blue Chip top 10 and bottom 10 averages. Blue chip consensus begins in 2008 at about 2.1 and generally decreases to about 0.1 by 2009. It then generally increases to about 0.4 by 2013. Staff forecast generally follows the same exact path as Blue chip consensus until it begins increasing at a slower rate in 2012. It ends in 2013 at about 0.3. Blue chip top 10 and bottom 10 averages begins in 2012:Q1 at about 0 and 0.2 and increases to about 0.1 and 0.5 by 2012:Q4. It then increases to about 0.1 and 1 by 2013:Q4.

Figure: 10-Year Treasury Yield

Line chart, by percent, 2008 to 2013. There is a horizontal line at zero. There are three series, Blue chip consensus, Staff forecast, and Blue Chip top 10 and bottom 10 averages. Blue chip consensus begins in 2008 at about 3.6 and generally decreases to about 2.1 by 2011. It then generally increases to about 3.1 by 2013. Staff forecast generally follows the same exact path as Blue chip consensus until 2012 when it begins increasing at a faster rate. It ends in 2013 at about 3.55. Blue chip top 10 and bottom 10 averages begins in 2012:Q1 at about 2 and 2.5 and increases to about 2.1 and 3 by 2012:Q3. It then increases to about 2.45 and 3.9 by 2013:Q4.

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

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		
	03/07/12	04/18/12	03/07/12	04/18/12	03/07/12	04/18/12	03/07/12	04/18/12	03/07/12	04/18/12	
<i>Quarterly</i>											
2011:	Q1	3.1	3.1	.4	.4	3.9	3.9	1.6	1.6	9.0	9.0
	Q2	4.0	4.0	1.3	1.3	3.3	3.3	2.3	2.3	9.1	9.1
	Q3	4.4	4.4	1.8	1.8	2.3	2.3	2.1	2.1	9.1	9.1

<i>Tealbook</i>	-9	-1	-4.2	-1.4	-3	-9	-1.0	-1.2	-1.1	-1.3
Federal	1.9	2.1	-6.9	.8	-2.1	-2.4	-2.8	-3.4	-3.6	-4.5
Defense	7.0	5.0	-12.1	1.6	-2.1	-2.4	-3.0	-3.8	-4.2	-5.5
Nondefense	-7.6	-3.8	4.5	-1.0	-2.2	-2.5	-2.5	-2.5	-2.6	-2.6
State & local	-2.8	-1.6	-2.2	-.4	-.1	.0	.0	.4	.6	.8
Change in bus. inventories ²	39	-2	52	62	50	55	68	70	73	82
<i>Previous Tealbook</i> ²	39	-2	57	57	45	53	66	68	71	79
Nonfarm ²	51	6	61	63	50	54	67	69	72	81
Farm ²	-9	-6	-6	-1	0	1	1	1	1	1

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

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

Changes in Real Gross Domestic Product and Related Items

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Real GDP	2.8	2.4	2.2	-3.3	-5	3.1	1.6	2.5	2.8	3.3
<i>Previous Tealbook</i>	2.8	2.4	2.2	-3.3	-5	3.1	1.6	2.4	2.7	
Final sales	2.7	2.8	2.4	-2.6	-8	2.4	1.5	2.4	2.5	3.2
<i>Previous Tealbook</i>	2.7	2.8	2.4	-2.6	-8	2.4	1.5	2.3	2.4	
Priv. dom. final purch.	3.2	2.4	1.2	-4.5	-2.5	3.6	2.5	3.1	3.2	3.9
<i>Previous Tealbook</i>	3.2	2.4	1.2	-4.5	-2.5	3.6	2.4	2.8	3.0	
Personal cons. expend.	2.8	3.2	1.7	-2.5	-2	3.0	1.6	2.7	2.7	3.2
<i>Previous Tealbook</i>	2.8	3.2	1.7	-2.5	-2	3.0	1.7	2.4	2.6	
Durables	2.8	7.0	4.6	-13.0	3.0	10.9	6.8	7.8	6.4	7.4
Nondurables	3.1	2.9	.8	-3.1	.6	3.5	.5	1.9	2.1	2.6
Services	2.7	2.6	1.4	-.5	-9	1.6	1.2	2.1	2.3	2.7
Residential investment	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	3.5	11.3	9.3	13.0
<i>Previous Tealbook</i>	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	3.5	9.6	8.2	

<i>Tealbook</i>	1.3	1.8	3.1	1.8	2.2	2.6	2.9	2.3	2.6	2.8
Final sales	1.6	3.2	1.2	2.3	2.5	2.3	2.5	2.3	2.6	2.6
<i>Previous Tealbook</i>	1.6	3.2	1.2	1.9	2.6	2.4	2.5	2.2	2.4	2.5
Priv. dom. final purch.	1.6	2.8	2.3	2.0	2.7	2.8	2.8	2.4	2.7	2.7
<i>Previous Tealbook</i>	1.6	2.8	2.1	1.6	2.4	2.5	2.7	2.3	2.5	2.6
Personal cons. expend.	.5	1.2	1.5	1.6	1.8	2.1	2.2	1.7	1.9	2.0
<i>Previous Tealbook</i>	.5	1.2	1.5	.9	1.9	2.0	2.1	1.6	1.8	1.9
Durables	-.4	.4	1.2	1.0	.4	.5	.5	.5	.6	.4
Nondurables	.0	-.1	.1	.1	.2	.5	.5	.3	.3	.4
Services	.9	.9	.2	.5	1.2	1.1	1.2	.9	1.0	1.2
Residential investment	.1	.0	.3	.4	.3	.2	.2	.2	.2	.2
<i>Previous Tealbook</i>	.1	.0	.2	.3	.2	.2	.2	.2	.2	.2
Business fixed invest.	1.0	1.5	.5	.1	.6	.5	.5	.5	.6	.5
<i>Previous Tealbook</i>	1.0	1.5	.3	.5	.4	.4	.4	.5	.5	.5
Equipment & software	.4	1.1	.6	.1	.6	.5	.4	.5	.6	.4
<i>Previous Tealbook</i>	.4	1.1	.4	.5	.4	.4	.4	.4	.5	.4
Nonres. structures	.5	.4	.0	-.1	.0	.0	.0	.1	.1	.1
<i>Previous Tealbook</i>	.5	.4	.0	.0	.0	.0	.0	.0	.1	.1
Net exports	.2	.4	-.3	.3	.0	-.3	-.1	.1	.1	.1
<i>Previous Tealbook</i>	.2	.4	-.1	.5	.2	.0	.0	.1	.2	.2
Exports	.5	.6	.4	.9	.7	.7	.7	.8	.8	.8
Imports	-.2	-.2	-.6	-.6	-.7	-1.0	-.8	-.7	-.7	-.7
Gov't. cons. & invest.	-.2	.0	-.8	.0	-.2	-.2	-.2	-.2	-.2	-.2
<i>Previous Tealbook</i>	-.2	.0	-.8	-.3	.0	-.2	-.2	-.2	-.2	-.2
Federal	.2	.2	-.6	.1	-.2	-.2	-.2	-.3	-.3	-.3

Defense	.4	.3	-.7	.1	-.1	-.1	-.2	-.2	-.2	-.3
Nondefense	-.2	-.1	.1	.0	-.1	-.1	-.1	-.1	-.1	-.1
State & local	-.3	-.2	-.3	.0	.0	.0	.0	.0	.1	.1
Change in bus. inventories	-.3	-1.4	1.8	.2	-.4	.2	.4	.0	.1	.3
<i>Previous Tealbook</i>	-.3	-1.4	1.9	.0	-.4	.2	.4	.1	.1	.2
Nonfarm	-.3	-1.5	1.8	.1	-.4	.1	.4	.0	.1	.3
Farm	.0	.1	.0	.2	.0	.0	.0	.0	.0	.0

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

Changes in Prices and Costs

(Percent, annual rate except as noted)

Item	2011				2012				2013		
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
GDP chain-wt. price index	2.5	2.6	.9	2.0	1.4	1.8	1.5	1.6	1.6	1.6	
<i>Previous Tealbook</i>	2.5	2.6	.9	1.5	2.0	1.5	1.4	1.5	1.5	1.5	
PCE chain-wt. price index	3.3	2.3	1.2	2.5	1.6	1.8	1.7	1.6	1.5	1.5	
<i>Previous Tealbook</i>	3.3	2.3	1.2	2.1	2.2	1.5	1.4	1.4	1.4	1.4	
Energy	15.0	3.3	-3.2	7.8	-1.3	3.9	1.7	-.2	-.8	-1.7	
<i>Previous Tealbook</i>	15.0	3.3	-3.2	6.3	9.5	.7	-1.0	-.9	-1.5	-1.9	
Food	6.4	4.7	3.3	1.3	1.5	1.7	1.7	1.6	1.6	1.5	
<i>Previous Tealbook</i>	6.4	4.7	3.3	1.7	1.6	1.5	1.3	1.2	1.2	1.2	
Ex. food & energy	2.3	2.1	1.3	2.2	1.8	1.7	1.7	1.7	1.7	1.7	
<i>Previous Tealbook</i>	2.3	2.1	1.3	1.8	1.7	1.6	1.6	1.6	1.6	1.6	
Ex. food & energy, market based	2.4	2.3	1.4	2.0	1.7	1.6	1.6	1.6	1.6	1.6	
<i>Previous Tealbook</i>	2.4	2.3	1.4	1.8	1.6	1.5	1.5	1.4	1.4	1.5	
CPI	4.4	3.1	1.3	2.5	1.8	2.0	1.7	1.6	1.6	1.5	
<i>Previous Tealbook</i>	4.4	3.1	1.3	2.4	2.6	1.5	1.3	1.4	1.3	1.3	

<i>Tealbook</i>	21.5	-3.7	19.3	-8.8	2.6	6.2	12.8	3.8	-1.6	
Food	1.5	1.7	4.7	7.0	-1.7	1.3	5.2	1.5	1.6	1.5
<i>Previous Tealbook</i>	1.5	1.7	4.7	7.0	-1.7	1.3	5.2	1.6	1.2	
Ex. food & energy	2.3	2.3	2.4	2.0	1.7	1.0	1.8	1.8	1.7	1.7
<i>Previous Tealbook</i>	2.3	2.3	2.4	2.0	1.7	1.0	1.8	1.7	1.6	
Ex. food & energy, market based	2.0	2.2	2.1	2.2	1.7	.7	1.8	1.7	1.6	1.6
<i>Previous Tealbook</i>	2.0	2.2	2.1	2.2	1.7	.7	1.8	1.6	1.5	
CPI	3.7	2.0	4.0	1.6	1.5	1.2	3.3	2.0	1.5	1.5
<i>Previous Tealbook</i>	3.7	2.0	4.0	1.6	1.5	1.2	3.3	2.0	1.3	
Ex. food & energy	2.1	2.7	2.3	2.0	1.7	.6	2.2	1.9	1.8	1.8
<i>Previous Tealbook</i>	2.1	2.7	2.3	2.0	1.7	.6	2.2	1.8	1.7	
ECI, hourly compensation ¹	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.6	2.8	3.0
<i>Previous Tealbook</i> ¹	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.5	2.6	
Nonfarm business sector										
Output per hour	1.6	.8	2.5	-1.1	5.3	2.3	.3	1.1	1.7	1.9
<i>Previous Tealbook</i>	1.6	.8	2.5	-1.1	5.3	2.3	.4	1.1	1.6	
Compensation per hour	3.5	4.5	3.6	2.5	1.8	1.4	3.5	2.5	2.9	3.2
<i>Previous Tealbook</i>	3.5	4.5	3.6	2.5	1.8	1.4	3.5	2.5	2.7	
Unit labor costs	1.9	3.6	1.1	3.7	-3.3	-9	3.1	1.3	1.2	1.3
<i>Previous Tealbook</i>	1.9	3.6	1.1	3.7	-3.3	-9	3.1	1.4	1.1	
Core goods imports chain-wt. price index ²	2.2	2.5	2.9	3.7	-1.7	2.6	4.3	.9	1.5	1.5
<i>Previous Tealbook</i> ²	2.2	2.5	2.9	3.7	-1.7	2.6	4.3	.9	1.5	

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

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

Other Macroeconomic Indicators

Item	2011			2012				2013			C
	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
<i>Employment and production</i>											
Nonfarm payroll employment ²	.6	.3	.5	.7	.5	.5	.6	.5	.6	.6	
Unemployment rate ³	9.1	9.1	8.7	8.2	8.2	8.1	8.0	7.9	7.9	7.8	
<i>Previous Tealbook</i> ³	9.1	9.1	8.7	8.4	8.4	8.3	8.2	8.1	8.0	7.9	
NAIRU ³	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
<i>Previous Tealbook</i> ³	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
GDP gap ⁴	-5.1	-5.1	-4.8	-4.7	-4.7	-4.5	-4.3	-4.3	-4.1	-3.9	
<i>Previous Tealbook</i> ⁴	-5.3	-5.3	-5.0	-5.0	-5.0	-4.8	-4.6	-4.6	-4.4	-4.3	
<i>Industrial production</i>											
Industrial production ⁵	1.2	5.6	5.0	5.4	5.8	4.3	3.0	2.7	2.3	2.7	
<i>Previous Tealbook</i> ⁵	.7	6.2	3.9	3.5	5.5	3.9	3.7	2.5	2.4	2.7	
Manufacturing industr. prod. ⁵	.2	5.1	5.6	10.4	4.0	3.2	2.9	2.6	2.4	3.0	
<i>Previous Tealbook</i> ⁵	.1	4.9	5.1	8.0	3.8	2.8	3.6	2.3	2.6	3.1	
Capacity utilization rate - mfg. ³	74.4	75.2	76.1	77.8	78.3	78.8	79.2	79.3	79.4	79.7	
<i>Previous Tealbook</i> ³	74.4	75.1	75.8	77.1	77.6	78.0	78.5	78.7	78.8	79.1	
<i>Housing and vehicle sales</i>											
Housing starts ⁶	.6	.6	.7	.7	.7	.7	.8	.8	.9	.9	
Light motor vehicle sales ⁶	12.1	12.4	13.4	14.5	14.3	14.5	14.5	14.8	15.2	15.2	
<i>Income and saving</i>											
Nominal GDP ⁵	4.0	4.4	3.8	4.6	3.5	4.3	4.5	4.0	4.3	4.5	
Real disposable pers. income ⁵	-5	.7	1.7	.3	2.3	3.2	3.6	-.4	3.1	3.2	
<i>Previous Tealbook</i> ⁵	-5	.7	1.4	1.6	2.8	3.1	3.5	-.8	2.7	2.9	
Personal saving rate ³	4.8	4.6	4.5	4.1	4.0	4.1	4.2	3.5	3.6	3.7	
<i>Previous Tealbook</i> ³	4.8	4.6	4.5	4.6	4.6	4.7	4.8	4.1	4.1	4.2	

Corporate profits ⁷	13.7	6.9	3.5	4.1	4.5	.1	-7	-2.6	-1.1	.8
Profit share of GNP ³	12.7	12.8	12.8	12.8	12.8	12.7	12.5	12.3	12.2	12.1
Net federal saving ⁸	-1,275	-1,161	-1,095	-1,020	-1,019	-1,000	-981	-809	-787	-761
Net state & local saving ⁸	-40	-83	-81	-63	-42	-35	-24	-15	0	1
Gross national saving rate ³	12.4	12.9	13.4	13.3	13.3	13.4	13.4	13.5	13.6	13.8
Net national saving rate ³	-.4	.2	.7	.8	.9	.9	1.0	1.1	1.2	1.4

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
<i>Employment and production</i>									
Nonfarm payroll employment ¹	2.4	2.1	1.2	-2.8	-5.6	.8	1.8	2.2	2.3
Unemployment rate ²	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.0	7.7
<i>Previous Tealbook²</i>	5.0	4.5	4.8	6.9	9.9	9.6	8.7	8.2	7.8
NAIRU ²	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0
<i>Previous Tealbook²</i>	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0
GDP gap ³	.6	.8	.8	-4.5	-6.2	-4.7	-4.8	-4.3	-3.7
<i>Previous Tealbook³</i>	.6	.8	.8	-4.5	-6.4	-4.9	-5.0	-4.6	-4.0
Industrial production ⁴	2.3	2.1	2.5	-9.0	-5.7	6.3	4.0	4.6	2.6
<i>Previous Tealbook⁴</i>	2.3	2.3	2.5	-9.1	-5.5	6.2	3.9	4.1	2.6
Manufacturing industr. prod. ⁴	3.4	1.8	2.8	-11.8	-6.5	6.5	4.2	5.1	2.8
<i>Previous Tealbook⁴</i>	3.4	2.0	2.8	-11.8	-6.1	6.1	4.3	4.5	2.9

Capacity utilization rate - mfg. ²	78.4	78.2	78.2	69.7	67.0	73.1	76.1	79.2	79.9
<i>Previous Tealbook</i> ²	78.5	78.4	79.0	70.1	67.7	73.3	75.8	78.5	79.5
Housing starts ⁵	2.1	1.8	1.4	.9	.6	.6	.6	.7	.9
Light motor vehicle sales ⁵	16.9	16.5	16.1	13.1	10.3	11.5	12.7	14.5	15.1
<i>Income and saving</i>									
Nominal GDP ⁴	6.4	5.3	4.9	-1.2	.0	4.7	3.8	4.2	4.4
Real disposable pers. income ⁴	.6	4.6	1.6	1.0	-2.4	3.5	.8	2.4	2.3
<i>Previous Tealbook</i> ⁴	.6	4.6	1.6	1.0	-2.4	3.5	.7	2.8	2.0
Personal saving rate ²	1.6	2.8	2.5	6.2	4.3	5.2	4.5	4.2	3.8
<i>Previous Tealbook</i> ²	1.6	2.8	2.5	6.2	4.3	5.2	4.5	4.8	4.3
Corporate profits ⁶	19.6	3.7	-8.1	-33.5	61.8	18.2	7.0	2.0	-4
Profit share of GNP ²	11.8	11.6	10.1	6.8	11.0	12.4	12.8	12.5	12.0
Net federal saving ⁷	-283	-204	-245	-613	-1218	-1274	-1183	-1005	-775
Net state & local saving ⁷	26	51	12	-72	-78	-25	-66	-41	-2
Gross national saving rate ²	15.6	16.5	13.9	12.6	11.3	12.3	13.4	13.4	13.9
Net national saving rate ²	3.6	4.4	1.7	-6	-1.9	-.4	.7	1.0	1.5

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				2011				2012		
	2011 ^a	2012	2013	2014	Q1 ^a	Q2 ^a	Q3 ^a	Q4 ^a	Q1	Q2	Q3
Unified budget					Not seasonally adjusted						
Receipts ¹	2302	2478	2757	2959	488	714	568	555	509	782	
Outlays ¹	3599	3590	3574	3663	949	855	895	877	966	897	
Surplus/deficit ¹	-1297	-1112	-817	-704	-460	-141	-326	-322	-457	-116	
<i>Previous Tealbook</i>	-1300	-1127	-834	-729	-460	-141	-326	-322	-432	-140	

On-budget	-1364	-1113	-807	-699	-451	-202	-311	-346	-458	-142	
Off-budget	67	1	-11	-5	-10	61	-15	24	1	26	
Means of financing											
Borrowing	1110	1138	877	784	260	93	389	326	398	162	
Cash decrease	252	-12	20	0	225	-19	79	-28	42	-37	
Other ²	-65	-14	-80	-80	-24	67	-142	23	17	-10	
Cash operating balance, end of period	58	70	50	50	118	137	58	86	43	80	
NIPA federal sector											Seasonally adjusted a
Receipts	2534	2713	2978	3205	2528	2554	2583	2613	2713	2747	
Expenditures	3765	3746	3813	3924	3729	3829	3744	3708	3732	3766	
Consumption expenditures	1070	1075	1068	1041	1059	1078	1085	1067	1078	1078	
Defense	715	717	713	692	701	723	733	710	720	719	
Nondefense	355	358	355	350	358	354	352	357	359	358	
Other spending	2695	2672	2745	2883	2670	2752	2659	2641	2654	2689	
Current account surplus	-1231	-1033	-834	-719	-1201	-1275	-1161	-1095	-1020	-1019	-
Gross investment	165	159	154	143	161	160	164	159	160	159	
Gross saving less gross investment ³	-1260	-1048	-834	-699	-1227	-1298	-1185	-1113	-1036	-1033	-
Fiscal indicators⁴											
High-employment (HEB) surplus/deficit	-979	-782	-585	-502	-951	-1014	-899	-832	-768	-772	
Change in HEB, percent of potential GDP	-.3	-1.4	-1.3	-.6	-.7	.3	-.8	-.5	-.4	.0	
Fiscal impetus (FI), percent of GDP	-0.3	-0.6	-1.2	-0.6	-0.6	0.4	-0.1	-1.0	-0.4	-0.7	
<i>Previous Tealbook</i>	<i>-0.3</i>	<i>-0.5</i>	<i>-1.1</i>	<i>-0.6</i>	<i>-0.6</i>	<i>0.4</i>	<i>-0.1</i>	<i>-1.0</i>	<i>-0.7</i>	<i>-0.5</i>	

1. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service

surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law. [Return to table](#)

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

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

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

a Actual. [Return to table](#)

Change in Debt of the Domestic Nonfinancial Sectors

(Percent)

Period ¹	Households					Business	State and local governments	Federal government	Memo: Nominal GDP
	Total	Total	Home mortgages	Consumer credit					
<i>Year</i>									
2007	8.5	6.7	6.9	5.8	13.6	5.4	4.9	4.9	
2008	6.0	.1	-5	1.5	6.2	.7	24.2	-1.2	
2009	3.1	-1.7	-1.4	-4.4	-2.4	3.9	22.7	.0	
2010	4.1	-2.1	-2.9	-1.8	.7	2.2	20.2	4.7	
2011	3.7	-.9	-2.1	3.5	4.2	-1.9	11.4	3.8	
2012	4.5	1.0	-.8	6.9	4.3	-.5	10.7	4.3	
2013	4.1	2.2	.4	7.5	4.0	.6	7.3	4.4	
2014	4.1	2.6	.8	7.7	4.2	1.0	6.3	5.0	
<i>Quarter</i>									
2010:	1	3.5	-3.1	-4.8	-3.9	-.1	2.4	20.6	5.5
	2	3.9	-2.2	-2.5	-3.3	-1.3	-.5	22.5	5.4
	3	3.7	-2.2	-2.5	-2.2	1.8	2.1	16.0	3.9
	4	4.9	-.7	-1.8	2.3	2.5	4.8	16.4	4.2
2011:	1	2.3	-1.9	-2.7	2.2	4.1	-3.3	7.9	3.1
	2	3.0	-.6	-2.4	3.6	4.4	-3.5	8.6	4.0
	3	4.4	-1.2	-1.9	1.4	3.6	.0	14.1	4.4
	4	4.9	.3	-1.5	6.9	4.6	-1.0	13.1	3.8
2012:	1	5.0	.4	-1.6	6.5	5.4	-1.8	12.4	4.6
	2	4.3	.9	-.9	6.4	3.9	-.3	10.3	3.5
	3	3.7	1.3	-.5	7.0	3.8	-.1	7.5	4.4

	4	4.8	1.6	-2	7.1	3.7	.3	11.1	4.6
2013:	1	4.8	1.9	.2	7.2	3.8	.6	10.1	4.0
	2	3.5	2.0	.3	7.3	3.8	.6	5.5	4.3
	3	3.0	2.2	.5	7.4	3.9	.6	3.7	4.5
	4	4.8	2.3	.6	7.4	4.0	.6	9.4	4.8

Note: Quarterly data are at seasonally adjusted annual rates.

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

Flow of Funds Projections: Highlights

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

Category	2011	2012	2013	2014	2011		2012				
					Q3	Q4	Q1	Q2	Q3	Q4	
<i>Domestic nonfinancial sectors</i>											
Net funds raised											
Total	893.6	1355.0	1295.0	1345.1	1030.8	1408.4	1557.0	1287.8	1055.9	1519.2	1
Net equity issuance	-474.8	-385.2	-340.0	-360.0	-605.3	-458.7	-360.8	-380.0	-400.0	-400.0	-
Net debt issuance	1368.4	1740.2	1635.0	1705.1	1636.1	1867.1	1917.9	1667.8	1455.9	1919.2	1
Borrowing indicators											
Debt (percent of GDP) ¹	249.3	249.2	249.3	247.6	248.0	248.6	248.8	249.6	249.4	249.3	
Borrowing (percent of GDP)	9.1	11.1	10.0	9.9	10.8	12.2	12.4	10.7	9.2	12.0	
Households											
Net borrowing ²	-113.9	138.7	287.9	353.7	-159.3	43.1	49.3	116.9	176.2	212.2	
Home mortgages	-213.2	-78.5	39.1	81.2	-184.8	-150.3	-157.3	-88.3	-48.9	-19.5	
Consumer credit	86.3	174.4	202.8	223.7	34.6	170.4	165.0	162.8	181.9	187.8	
Debt/DPI (percent) ³	114.4	110.6	108.2	105.4	113.6	112.7	112.0	111.1	110.0	109.0	
Business											
Financing gap ⁴	-192.3	-128.2	44.1	109.1	-252.9	-173.1	-167.7	-154.8	-121.2	-69.1	
Net equity issuance	-474.8	-385.2	-340.0	-360.0	-605.3	-458.7	-360.8	-380.0	-400.0	-400.0	-

economies	1.8	.1	3.1	.2	1.2	1.1	1.1	1.3	1.5	1.7
Canada	3.7	-.6	4.2	1.8	2.2	2.0	2.2	2.3	2.2	2.3
Japan	-6.9	-1.2	7.1	-.7	2.7	2.1	1.6	1.5	1.3	1.4
United Kingdom	1.0	-.2	2.3	-1.2	.9	1.6	1.2	1.3	1.7	1.9
Euro area	3.1	.6	.5	-1.3	-.8	-.9	-.7	-.3	.5	.8
Germany	5.5	1.1	2.3	-.7	.3	.5	.7	1.0	1.3	1.5
Emerging market economies	5.5	4.9	4.8	2.6	5.3	4.8	4.6	4.6	4.6	4.6
Asia	7.7	4.8	5.3	2.6	6.8	6.0	5.7	5.5	5.8	5.8
Korea	5.3	3.4	3.4	1.3	3.4	3.5	3.5	3.5	3.7	3.8
China	9.1	9.5	10.0	7.8	7.4	8.4	8.0	8.0	8.2	8.2
Latin America	3.1	5.2	4.2	2.3	3.9	3.6	3.5	3.5	3.2	3.2
Mexico	2.1	6.0	5.1	1.7	4.0	3.5	3.4	3.4	3.0	3.0
Brazil	2.5	2.0	-.2	1.3	3.2	3.5	3.8	3.8	3.7	3.8
Consumer prices²										
Total foreign	4.1	3.4	3.1	2.9	2.5	2.1	2.4	2.4	2.4	2.4
<i>Previous Tealbook</i>	4.1	3.3	3.1	2.9	3.1	2.4	2.4	2.4	2.4	2.4
Advanced foreign economies	3.0	2.4	1.1	2.5	2.1	1.5	1.4	1.4	1.3	1.3
Canada	3.3	3.4	1.0	2.9	2.6	2.1	2.0	1.8	1.8	1.8
Japan	.0	-.7	.1	-.7	1.0	-.1	-.2	-.2	-.1	-.1
United Kingdom	6.7	4.0	3.7	4.2	1.9	1.9	2.2	3.4	1.7	1.6
Euro Area	3.5	3.0	1.5	3.8	2.5	1.8	1.5	1.5	1.5	1.5
Germany	3.4	2.4	1.9	2.8	2.4	2.2	1.9	1.9	1.9	1.9
Emerging market economies	4.9	4.3	4.7	3.2	2.7	2.7	3.2	3.2	3.2	3.2
Asia	5.2	4.9	5.3	2.4	2.0	2.7	3.0	3.0	3.0	3.0
Korea	6.0	2.8	4.8	2.3	2.3	2.5	2.7	2.8	2.9	3.0
China	4.6	5.8	6.2	1.8	1.4	2.1	2.8	2.9	2.9	2.9
Latin America	3.8	2.9	3.7	5.2	4.7	2.5	3.7	3.8	3.8	3.8
Mexico	3.2	2.4	3.5	4.9	4.5	2.2	3.4	3.5	3.5	3.5
Brazil	8.1	7.1	5.3	6.4	4.3	4.1	5.5	6.3	6.0	5.4

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

Foreign Real GDP and Consumer Prices: Selected Countries

(Percent change, Q4 to Q4)

Measure and country	2006	2007	2008	2009	2010	2011	Projected		
							2012	2013	2014
Real GDP¹									
Total foreign	4.2	4.4	-9	.9	4.4	2.8	2.9	3.2	3.6
<i>Previous Tealbook</i>	4.2	4.4	-9	.9	4.4	2.8	2.9	3.2	...
Advanced foreign economies	2.6	2.6	-2.0	-1.3	2.8	1.3	1.2	1.8	2.4
Canada	1.9	2.5	-7	-1.4	3.3	2.2	2.2	2.3	2.8
Japan	2.1	1.6	-4.8	-6	3.2	-6	2.0	1.4	1.6
United Kingdom	2.1	4.1	-5.4	-.8	1.7	.5	1.2	2.1	2.8
Euro area	3.8	2.3	-2.1	-2.1	2.0	.7	-.7	1.0	1.9
Germany	4.9	2.4	-1.9	-2.2	3.8	2.0	.6	1.6	2.2
Emerging market economies	6.3	6.7	.4	3.5	6.2	4.4	4.8	4.6	4.9
Asia	7.8	8.9	.8	8.0	7.7	5.1	6.0	5.8	6.0
Korea	4.6	5.8	-3.2	6.3	5.0	3.4	3.5	3.9	4.5
China	12.8	13.7	7.7	11.4	9.6	9.1	7.9	8.2	8.3
Latin America	4.8	4.5	-3	-9	4.6	3.7	3.6	3.3	3.5
Mexico	4.1	3.5	-1.2	-2.4	4.3	3.7	3.6	3.1	3.4
Brazil	4.9	6.6	.9	5.3	5.4	1.4	3.6	3.9	4.1
Consumer prices²									
Total foreign	2.2	3.7	3.3	1.3	3.2	3.4	2.4	2.4	2.5
<i>Previous Tealbook</i>	2.2	3.7	3.3	1.3	3.2	3.4	2.6	2.4	...
Advanced foreign economies	1.4	2.2	2.0	.2	1.7	2.2	1.6	1.3	1.4
Canada	1.4	2.5	1.8	.8	2.2	2.7	2.1	1.8	2.0
Japan	.3	.5	1.1	-2.0	-3	-3	.1	-.1	.0
United Kingdom	2.7	2.1	3.9	2.2	3.4	4.7	2.3	1.7	1.7
Euro Area	1.8	2.9	2.3	.4	2.0	2.9	1.8	1.5	1.6
Germany	1.3	3.1	1.7	.3	1.6	2.6	2.1	1.8	1.7
Emerging market economies	2.9	5.1	4.6	2.1	4.3	4.3	2.9	3.2	3.3
Asia	2.4	5.5	3.6	1.3	4.3	4.4	2.7	3.0	3.1
Korea	2.1	3.4	4.5	2.4	3.2	4.0	2.6	3.0	3.0
China	2.1	6.7	2.5	.6	4.7	4.6	2.3	2.9	3.0
Latin America	4.1	4.2	6.7	3.9	4.4	3.9	3.7	3.8	3.7

Mexico	4.1	3.8	6.2	4.0	4.3	3.5	3.4	3.5	3.4
Brazil	3.1	4.3	6.3	4.3	5.6	6.7	5.0	5.4	4.9

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	
	<i>Billions of dollars, s.a.a.r.</i>											
U.S. current account balance	-473.1	-493.7	-430.5	-496.4	-520.4	-478.3	-493.9	-522.0	-553.9	-521.0	-500.0	
<i>Previous Tealbook</i>	-474.9	-495.4	-437.7	-458.5	-467.4	-422.7	-426.3	-450.7	-480.4	-438.4	-440.0	
Current account as percent of GDP	-3.2	-3.3	-2.8	-3.2	-3.4	-3.1	-3.1	-3.3	-3.4	-3.2	-3.2	
<i>Previous Tealbook</i>	-3.2	-3.3	-2.9	-3.0	-3.0	-2.7	-2.7	-2.8	-3.0	-2.7	-2.7	
Net goods & services	-555.8	-580.9	-538.9	-564.3	-589.7	-556.2	-566.4	-583.3	-607.8	-565.0	-560.0	
Investment income, net	220.7	238.0	251.2	210.1	216.8	221.5	219.4	210.2	201.4	187.5	170.0	
Direct, net	317.1	323.6	331.8	294.3	291.0	288.0	283.9	280.6	279.8	274.5	270.0	
Portfolio, net	-96.4	-85.6	-80.6	-84.3	-74.2	-66.5	-64.5	-70.4	-78.4	-87.0	-90.0	
Other income and transfers, net	-138.0	-150.9	-142.9	-142.2	-147.4	-143.5	-146.8	-148.9	-147.4	-143.5	-140.0	

Annual Data

	Projected									
	2006	2007	2008	2009	2010	2011	2012	2013	2014	
	<i>Billions of dollars</i>									
U.S. current account balance	-800.6	-710.3	-677.1	-376.6	-470.9	-473.4	-503.6	-540.0	-574.7	

<i>Previous Tealbook</i>	-800.6	-710.3	-677.1	-376.6	-470.9	-466.6	-441.8	-455.9	...
Current account as percent of GDP	-6.0	-5.1	-4.7	-2.7	-3.2	-3.1	-3.2	-3.3	-3.3
<i>Previous Tealbook</i>	-6.0	-5.1	-4.7	-2.7	-3.2	-3.1	-2.8	-2.8	...
Net goods & services	-753.3	-696.7	-698.3	-381.3	-500.0	-560.0	-573.9	-576.6	-566.9
Investment income, net	54.7	111.1	157.8	137.1	174.5	230.0	217.0	183.4	139.0
Direct, net	174.0	244.6	284.3	262.2	280.6	316.7	285.9	275.3	273.2
Portfolio, net	-119.4	-133.5	-126.5	-125.1	-106.2	-86.7	-68.9	-91.9	-134.2
Other income and transfers, net	-102.0	-124.7	-136.6	-132.3	-145.3	-143.5	-146.7	-146.7	-146.7

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

Last update: January 5, 2018



BOARD OF GOVERNORS *of the* FEDERAL RESERVE SYSTEM
20th Street and Constitution Avenue N.W., Washington, DC 20551

Board of Governors of the Federal Reserve System

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

Accessible Material

April 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	
	2012Q2	2012Q3	2012Q2	2012Q3
Taylor (1993) rule	1.70	1.60	1.70	1.60
<i>Previous Tealbook</i>	1.38	1.27	1.38	1.27
Taylor (1999) rule	0.13	0.13	-0.63	-0.67
<i>Previous Tealbook</i>	0.13	0.13	-1.10	-1.14
Outcome-based rule	0.13	0.13	0.04	-0.01
<i>Previous Tealbook</i>	0.13	0.13	-0.05	-0.20
First-difference rule	0.18	0.28	0.18	0.28
<i>Previous Tealbook</i>	0.14	0.20	0.14	0.20
Nominal income targeting rule	0.13	0.13	-0.48	-0.91
<i>Previous Tealbook</i>	0.13	0.13	-0.55	-1.04

Memo: Equilibrium and Actual Real Federal Funds Rate

Current Tealbook

Previous Tealbook

Tealbook-consistent FRB/US r estimate	-2.5	-2.9
Actual real federal funds rate	-1.8	-1.7

Key Elements of the Staff Projection

Figure: GDP Gap

Line chart, by percent, 2011 to 2020. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2011 at about -5.1 and generally increases to about 0 by 2020. Previous Tealbook begins in 2011 at about -5.3 and generally increases to about 0 by 2020.

Figure: PCE Prices excluding Food and Energy

Line chart, by four-quarter percent change, 2011 to 2020. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2011 at about 1.1 and generally increases to about 1.9 by 2012. It generally decreases to about 1.75 by 2013 and then generally increases to about 2.05 by 2020. Previous Tealbook begins in 2011 at about 1.1 and generally increases to about 1.8 by 2012. It generally decreases to about 1.6 by 2013 and then generally increases to about 2 by 2020.

Policy Rule Simulations

Figure: Nominal Federal Funds Rate

Line chart, by percent, 2011 to 2020. There are five series, Taylor (1993) rule, Taylor (1999) rule, Nominal income targeting rule, First-difference rule, and Tealbook baseline. Taylor (1993) rule begins in 2011 at about 0.1 and generally increases to about 1.65 by 2012. It generally decreases to about 1.4 by 2013 and then generally increases to about 4.25 by 2020. Taylor (1999) rule begins in 2011 at about 0.1 where it remains relatively constant until about 2013. It generally increases to about 4.4 by 2020. Nominal income target rule begins in 2011 at about 0.1 where it remains relatively constant until about 2014. It then generally increases to about 4.75 by 2020. First-difference rule begins in 2011 at about 0.1 where it remains relatively constant until about 2012. It then increases to about 4.4 by 2018 and then generally decreases to about 4.05 by 2020. Tealbook baseline begins in 2011 at about 0.1 where it remains relatively constant until about 2014. It then generally increases to about 4.25 by 2020.

Figure: Real Federal Funds Rate

Line chart, by percent, 2011 to 2020. There are five series, Taylor (1993) rule, Taylor (1999) rule, Nominal income targeting rule, First-difference rule, and Tealbook baseline. Taylor (1993) rule begins in 2011 at about -0.95 and generally decreases to about -1.9 by 2012. It increases to about -0.25 by 2013 and then increases to about 2.2 by 2020. Taylor (1999) rule begins in 2011 at about -0.95 and generally decreases to about -1.9 by 2012. It then generally increases to about 2.2 by 2020. Nominal income targeting rule begins in 2011 at about -0.95 and generally decreases to about -1.9 by 2012. It remains relatively constant here until 2014. It then increases to about 2.6 by 2020. First-difference rule begins in 2011 at about -0.95 and generally decreases to about -1.9 by 2012. It then increases to about 3.5 by 2018 and then decreases to about 2.1 by 2020. Tealbook baseline begins in 2011 at about -0.95 and generally decreases to about -1.9. It then generally increases to about 2.45 by 2020.

Figure: Unemployment Rate

Line chart, by percent, 2011 to 2020. There are five series, Taylor (1993) rule, Taylor (1999) rule, Nominal income targeting rule, First-difference rule, and Tealbook baseline. Taylor (1993) rule begins in 2012 at about 8.2 and generally decreases to about 5.1 by 2020. Taylor (1999) rule begins in 2012 at about 8.2 and generally decreases to about 5.25 by 2020. Nominal income targeting rule begins in 2012 at about 8.2 and generally decreases to about 4.95 by 2018. It then increases to about 5.2 by 2020. First-difference rule begins in 2012 at about 8.2 and generally decreases to about 5.3 by 2020. Tealbook baseline begins in 2011 at about 9 and generally decreases to about 5.2

by 2020.

Figure: PCE Inflation

Line chart, by percent, 2011 to 2020. Data are four-quarter average. There is a horizontal line at 2. There are five series, Taylor (1993) rule, Taylor (1999) rule, Nominal income targeting rule, First-difference rule, and Tealbook baseline. Taylor (1993) rule begins in 2012 at about 2.9 and generally decrease to about 1.3 by 2014. It then generally increases to about 1.99 by 2020. Taylor (1999) rule begins in 2012 at about 2.9 and generally decreases to about 1.55 by 2014. It then generally increases to about 2.1 by 2020. Nominal income targeting rule begins in 2012 at about 2.9 and generally decreases to about 1.8 by 2014. It then generally increases to about 2 by 2020. First-difference rule begins in 2012 at about 2.9 and generally decreases to about 1.25 by 2014. It then generally increases to about 1.9 by 2020. Tealbook baseline begins in 2011 at about 1.8 and generally increases to about 2.9 by 2012. It generally decreases to about 1.5 by 2014 and then generally increases to about 2.05 by 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 Monetary Policy

Figure: Nominal Federal Funds Rate

Line chart, by percent 2011 to 2020. There are four series, Current Tealbook: Constrained, Previous Tealbook: Constrained, Current Tealbook: Unconstrained, and Tealbook baseline. Current Tealbook: Constrained begins in 2011 at about 0.1 and remains relatively constant here until 2014. It generally increases to about 5 by 2018 and then generally decreases to about 4.7 by 2020. Previous Tealbook: Constrained generally follows the same exact path as Current Tealbook: Constrained. Current Tealbook: Unconstrained begins in 2011 at about 0.1 and generally decreases to about -2 by 2013. It then generally increases to about 4.3 by 2020. Tealbook baseline begins in 2011 at about 0.1 where it remains relatively constant until about 2013. It then generally increases to about 4.25 by 2020.

Figure: Real Federal Funds Rate

Line chart, by percent, 2011 to 2020. There are four series, Current Tealbook: Constrained, Previous Tealbook: Constrained, Current Tealbook: Unconstrained, and Tealbook baseline. Current Tealbook: Constrained begins in 2011 at about -0.95 and generally decreases to about -2 by 2013 where it remains relatively constant until about 2015. It then generally increases to about 2.6 by 2020. Previous Tealbook: Constrained generally follows the same path as Current Tealbook: Constrained. Current Tealbook: Unconstrained begins in 2011 at about -0.95 and generally decreases to about -4 by 2013. It then generally increases to about 2.5 by 2020. Tealbook baseline begins in 2011 at about -0.95 and generally decreases to about -2 by 2012. It then generally increases to about 2.5 by 2020.

Figure: Unemployment Rate

Line chart, by percent, 2011 to 2020. There are four series, Current Tealbook: Constrained, Previous Tealbook: Constrained, Current Tealbook: Unconstrained, and Tealbook baseline. Current Tealbook: Constrained begins in 2011 at about 9 and generally decreases to about 5 by 2017. It then generally increases to about 5.3 by 2020. Previous Tealbook: Constrained begins in 2011 at about 9 and generally decreases to about 4.9 by 2017. It then generally increases to about 5.3 by 2020. Current Tealbook: Unconstrained begins in 2011 at about 9 and generally decreases to about 5.2 by 2017. It then increases to about 5.3 by 2020. Tealbook baseline begins in 2011 at about 9 and generally decreases to about 5.1 by 2020.

Figure: PCE Inflation

Line chart, by percent, 2011 to 2020. Data are four-quarter average. There is a horizontal line at 2. There are four series, Current Tealbook: Constrained, Previous Tealbook: Constrained, Current Tealbook: Unconstrained, and

Tealbook baseline. Current Tealbook: Constrained begins in 2011 at about 1.7 and generally increases to about 2.9 by 2012. It generally decreases to about 1.8 by 2013 and then increases to about 2.25 by 2017. It then decreases to about 2 by 2020. Previous Tealbook: Constrained begins in 2011 at about 1.7 and generally increases to about 2.9 by 2012. It generally decreases to about 1.75 by 2013 and then increase to about 2.3 by 2017. It then decreases to about 2.1 by 2020. Current Tealbook: Unconstrained begins in 2011 at about 1.7 and generally increases to about 2.9 by 2012. It generally decreases to about 1.75 by 2014 and then increases to about 2.2 by 2017. It then decreases to about 1.95 by 2020. Tealbook baseline begins in 2011 at about 1.7 and generally increase to about 2.9 by 2012. It generally decreases to about 1.5 by 2014 and then generally increases to about 2.1 by 2020.

Outcomes under Alternative Policies

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

Measure and scenario	2011					
	H2	2012	2013	2014	2015	2016
<i>Real GDP</i>						
Extended Tealbook baseline	2.4	2.5	2.8	3.3	3.6	3.5
Taylor (1993)	2.4	2.1	2.2	3.2	3.8	3.9
Taylor (1999)	2.4	2.5	2.8	3.3	3.6	3.5
First-difference	2.4	2.4	2.6	3.1	3.5	3.5
Nominal income targeting	2.4	2.8	3.4	3.8	3.8	3.4
Constrained optimal control	2.4	2.8	3.6	4.0	4.0	3.2
<i>Unemployment rate¹</i>						
Extended Tealbook baseline	8.7	8.0	7.7	7.4	6.8	6.2
Taylor (1993)	8.7	8.1	8.1	7.9	7.2	6.4
Taylor (1999)	8.7	8.0	7.7	7.4	6.8	6.2
First-difference	8.7	8.0	7.8	7.6	7.1	6.5
Nominal income targeting	8.7	7.9	7.4	6.8	6.0	5.5
Constrained optimal control	8.7	7.9	7.2	6.6	5.8	5.2
<i>Total PCE prices</i>						
Extended Tealbook baseline	1.7	1.9	1.5	1.5	1.7	1.7
Taylor (1993)	1.7	1.8	1.4	1.3	1.5	1.5
Taylor (1999)	1.7	1.9	1.5	1.5	1.7	1.7
First-difference	1.7	1.8	1.3	1.3	1.5	1.5
Nominal income targeting	1.7	2.1	1.9	1.9	2.1	2.0
Constrained optimal control	1.7	2.2	1.9	1.9	2.1	2.1
<i>Core PCE prices</i>						
Extended Tealbook baseline	1.7	1.8	1.7	1.7	1.8	1.8
Taylor (1993)	1.7	1.7	1.6	1.5	1.6	1.6

Taylor (1999)	1.7	1.8	1.7	1.7	1.8	1.8
First-difference	1.7	1.7	1.5	1.5	1.6	1.6
Nominal income targeting	1.7	2.0	2.1	2.1	2.2	2.1
Constrained optimal control	1.7	2.1	2.1	2.1	2.2	2.2
<i>Federal funds rate¹</i>						
Extended Tealbook baseline	0.1	0.1	0.1	1.2	2.3	3.1
Taylor (1993)	0.1	1.6	1.4	1.8	2.5	3.2
Taylor (1999)	0.1	0.1	0.2	1.2	2.3	3.2
First-difference	0.1	0.1	0.4	1.4	2.4	3.4
Nominal income targeting	0.1	0.1	0.1	0.5	1.6	2.6
Constrained optimal control	0.1	0.1	0.1	0.1	0.6	2.4

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

Monetary Policy Alternatives

Table 1: Overview of Policy Alternatives for the April 25 FOMC Statement

Selected Elements	March Statement	April Alternatives		
		A	B	C
<i>Forward Rate Guidance</i>				
<i>Guidance</i>	at least through late 2014	unchanged	unchanged	In judging when to first increase its target for the federal funds rate, the Committee will consider a range of factors, including rates of resource utilization, the projected pace of improvement in labor market conditions, the contours of the medium-term inflation outlook, the stability of longer-run inflation expectations, and the balance of risks that could impede the attainment of ... goals OR until mid-2013
<i>Balance Sheet</i>				
<i>MEP</i>	continue its program as announced in September (\$400 billion; complete by end of June 2012)	complete the MEP announced in September; then purchase, between July 2012 and March 2013, an additional \$400 billion of Treasury securities with remaining maturities of 6 to 30 years and sell an equal amount with remaining maturities of 4 years or less	unchanged	complete in June the program that it announced in September

<i>Additional Purchases</i>	none	OR (instead of expanding the MEP) purchase an additional \$500 billion of agency MBS by the end of April 2013	none	none
<i>Reinvestment Policies</i>	principal payments of agency debt and MBS into agency MBS; Treasuries into Treasuries	unchanged	unchanged	unchanged
Future Policy Action				
<i>Future Actions</i>	regularly review the size and composition of securities holdings; prepared to adjust holdings as appropriate to promote stronger recovery in context of price stability	As in March plus : In judging the appropriate stance of monetary policy, the Committee will consider a range of factors, including rates of resource utilization, the projected pace of improvement in labor market conditions, the contours of the medium-run inflation outlook, the stability of longer-run inflation expectations, and the balance of risks that could impede the attainment of ... goals.	unchanged	regularly review the size and composition of securities holdings; prepared to adjust holdings as appropriate to promote maximum employment and price stability

[Note: In the April 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.]

April FOMC Statement--Alternative A

1. Information received since the Federal Open Market Committee met in ~~January~~ **March** suggests that the economy has been expanding moderately. Labor market conditions have improved ~~further~~ **in recent months**; the unemployment rate has declined ~~notably in recent months~~ but remains elevated. Household spending and business fixed investment have continued to advance. The housing sector remains depressed. Inflation has ~~been subdued~~ **picked up somewhat** ~~in recent months~~, although **mainly reflecting higher** prices of crude oil and gasoline ~~have increased lately~~. **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 ~~expects moderate~~ **anticipates that, absent further policy stimulus**, economic growth ~~over coming quarters~~ **would be unacceptably slow** and ~~consequently anticipates~~ that the unemployment rate ~~will~~ **would** decline **only very** gradually toward levels that the Committee judges to be consistent with its dual mandate. Strains in global financial markets ~~have eased, though they~~ continue to pose significant downside risks to the economic outlook. The ~~recent~~ increase in oil and gasoline prices **earlier this year** ~~will push up~~ **is reducing consumers' purchasing power while boosting** inflation temporarily, but the Committee anticipates that subsequently inflation will run at or below the rate that it judges most consistent with its dual mandate.

3.1 To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~expects to maintain a highly accommodative stance for monetary policy~~. In particular, the Committee decided today to ~~continue~~ **expand** its program to extend the average maturity of its holdings of securities ~~as announced in September~~. **After completing the transactions that it announced last September, the Committee intends to purchase, between July 2012 and the end of March 2013, an additional \$400 billion of Treasury securities with remaining maturities of 6 years to 30 years, and to sell an equal amount of Treasury securities with remaining maturities of 4 years or less. These transactions should put downward pressure on longer-term**

interest rates and help to make broader financial conditions more accommodative. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability.

OR

3.2 To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee~~ decided today to **continue its purchase an additional \$500 billion of agency mortgage-backed securities by the end of April 2013. The Committee also will complete the** program to extend the average maturity of its holdings of securities **as that it** announced in September. **These transactions should put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.** The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability.

4. The Committee also decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions ~~—including low rates of resource utilization and a subdued outlook for inflation over the medium run—~~ are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

5. **In judging the appropriate stance of monetary policy, the Committee will consider a range of factors, including rates of resource utilization, the projected pace of improvement in labor market conditions, the contours of the medium-run inflation outlook, the stability of longer-run inflation expectations, and the balance of risks that could impede the attainment of the Committee's goals.**

April FOMC Statement--Alternative B

1. Information received since the Federal Open Market Committee met in ~~January~~ **March** suggests that the economy has been expanding moderately. Labor market conditions have improved ~~further~~ **in recent months**; the unemployment rate has declined ~~notably in recent months~~ but remains elevated. Household spending and business fixed investment have continued to advance. **Despite some tentative signs of improvement,** the housing sector remains depressed. Inflation has ~~been subdued~~ **picked up somewhat** in recent months, ~~although mainly reflecting higher prices of crude oil and gasoline have increased lately.~~ **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 expects ~~moderate~~ economic growth **to remain moderate** over coming quarters and **then to pick up gradually, supported by highly accommodative monetary policy.** Consequently, **the Committee** anticipates that the unemployment rate will decline gradually toward levels that ~~the Committee~~ it judges to be consistent with its dual mandate. Strains in global financial markets ~~have eased, though they~~ continue to pose significant downside risks to the economic outlook. The ~~recent~~ increase in oil and gasoline prices ~~earlier this year will push up~~ **is expected to affect** inflation **only** temporarily, ~~but~~ **and** the Committee anticipates that subsequently inflation will run at or below the rate that it judges most consistent with its dual mandate.

3. To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for

monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run-- are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

4. The Committee also decided to continue its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate to promote a stronger economic recovery in a context of price stability.

April FOMC Statement--Alternative C

1. Information received since the Federal Open Market Committee met in ~~January~~ **March** suggests that the ~~economy has been expanding moderately~~ **economic recovery has continued to strengthen**. Labor market conditions have improved further; the unemployment rate has declined ~~notably in recent months but remains elevated~~ **somewhat more, and private payrolls have expanded moderately on average in recent months**. Household spending and business fixed investment have continued to advance. The housing sector remains depressed **but has shown some signs of improvement. Sizable increases in the prices of crude oil and gasoline have pushed up** inflation ~~somewhat has been subdued in recent months, although prices of crude oil and gasoline have increased lately.~~ Longer-term inflation expectations have remained stable.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects ~~moderate economic growth over coming quarters~~ **to pick up over time** and consequently anticipates that the unemployment rate will ~~decline gradually~~ **move appreciably closer, over the next few years, to** ~~toward~~ levels that the Committee judges to be consistent with its dual mandate. Strains in global financial markets ~~have eased, though they~~ continue to pose significant downside risks to the economic outlook. The ~~recent~~ increase in oil and gasoline prices ~~earlier this year will push up~~ **is expected to affect inflation only temporarily, but; the Committee anticipates that subsequently, with appropriate monetary policy, inflation over the medium term will run at or below close to** the rate that it judges most consistent with its dual mandate.

3.1 To support a ~~stronger~~ **sustainable** economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee ~~expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee~~ decided today to keep the target range for the federal funds rate at 0 to 1/4 percent and ~~currently anticipates that economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.~~ **In judging when to first increase its target for the federal funds rate, the Committee will consider a range of factors, including rates of resource utilization, the projected pace of improvement in labor market conditions, the contours of the medium-run inflation outlook, the stability of longer-run inflation expectations, and the balance of risks that could impede the attainment of the Committee 's goals.**

OR

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

rate at least through late 2014 **until mid-2013**.

4. The Committee also decided to ~~continue its~~ **complete in June the** program to extend the average maturity of its holdings of securities ~~as that it~~ announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as ~~appropriate~~ **necessary** to promote ~~a stronger economic recovery in a context of~~ **maximum employment and** price stability.

Long-Run Projections of the Balance Sheet and Monetary Base

Figure: Total Assets

Line chart, by billions of dollars, 2006 to 2020. Data are monthly. There are five series, Alt A1, Alt A2, Alt B, Alt C, and March Alt B. Alt A1 begins in 2006 at about 850 where it remains relatively constant until 2008. It increases to about 2200 by 2009 and continues to increase to about 2900 by 2011. It then decreases to about 1800 by 2018 and then increases to about 2025 by 2020. Alt A2 follows the same path as Alt A1 until 2012 when it begins increasing. It increases to about 3400 by 2013 and then decreases to about 1700 by 2018. It then increases to about 2025 by 2020. Alt B follows the same path as Alt A1 until 2012. It decreases to about 1600 by 2017 and then increases to about 2025 by 2020. Alt C follows the same path as Alt A1 until 2012 when it begins decreasing at a faster rate. It decreases to about 1500 by 2017 and then increases to about 2025 by 2020. March Alt B follows the same path as Alt A1 until 2012. It decreases to about 1600 by 2017 and then increases to about 2025 by 2020.

Growth Rates for the Monetary Base

Date	Alternative B	Alternative A1	Alternative A2	Alternative C	<i>Memo: March Tealbook</i>
	Percent, annual rate				
	Monthly				
Jan-12	9.2	9.2	9.2	9.2	9.2
Feb-12	17.8	17.8	17.8	17.8	18.0
Mar-12	3.1	3.1	3.1	3.1	11.3
Apr-12	-23.8	-24.5	-24.4	-24.2	-31.7
May-12	2.5	1.8	1.9	1.7	-13.7
Jun-12	13.8	13.9	18.2	13.1	16.2
Jul-12	1.3	2.7	14.1	1.1	6.8
Aug-12	5.7	8.3	23.3	5.8	10.0
Sep-12	-6.2	-3.9	12.3	-6.3	-5.1
	Quarterly				
2011 Q1	36.8	36.8	36.8	36.8	36.8
2011 Q2	69.3	69.3	69.3	69.3	69.3
2011 Q3	21.0	21.0	21.0	21.0	21.0
2011 Q4	-5.9	-5.9	-5.9	-5.9	-5.9

2012 Q1	5.5	5.5	5.5	5.5	6.4
2012 Q2	-3.3	-3.6	-3.1	-3.6	-7.4
2012 Q3	4.4	5.6	15.7	4.0	6.0
2012 Q4	-5.3	-3.4	13.4	-5.4	-4.5
Annual - Q4 to Q4					
2010	0.9	0.9	0.9	0.9	0.9
2011	32.9	32.9	32.9	32.9	32.9
2012	0.3	1.0	8.0	0.1	0.1
2013	-0.2	0.5	10.9	-3.8	-0.3
2014	-2.4	-1.2	-2.7	-10.5	-2.0
2015	-10.8	-6.6	-11.6	-13.0	-10.7
2016	-19.6	-10.4	-20.2	-21.5	-19.8
2017	-15.9	-16.2	-22.2	-0.1	-17.7
2018	5.2	-12.0	-3.4	5.2	5.0

Note: Not seasonally adjusted.

Growth Rates for M2

(Percent, seasonally adjusted annual rate)

Tealbook Forecast *	
Monthly Growth Rates	
Jan-12	15.9
Feb-12	3.0
Mar-12	3.6
Apr-12	7.4
May-12	3.3
Jun-12	3.3
Jul-12	4.8
Aug-12	4.8
Sep-12	4.8
Oct-12	4.3
Nov-12	4.2
Dec-12	4.2
Quarterly Growth Rates	
2012 Q1	8.4
2012 Q2	4.7
2012 Q3	4.3

2012 Q4	4.5
2013 Q1	1.4
2013 Q2	3.0
2013 Q3	3.2
2013 Q4	1.9
Annual Growth Rates	
2012	5.6
2013	2.4
2014	-1.8

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

[Note: In the April 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.]

April 2012 Directive--Alternative A

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. **In addition, the Committee directs the Desk to purchase, between July 2012 and the end of March 2013, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 4 years or less with a total face value of \$400 billion.** The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities; ~~in order these actions are intended~~ to maintain the total face value of domestic securities at approximately \$2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

OR

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to 1/4 percent. The Committee directs the Desk to continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. **In addition, the Committee directs the Desk to execute purchases of agency mortgage-backed securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately \$3.1 trillion by the end of April 2013.** The Committee also directs the Desk to maintain its existing

policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities ~~in order to maintain the total face value of domestic securities at approximately \$2.6 trillion~~. The Committee directs the Desk to engage in dollar roll **and coupon swap** transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

April 2012 Directive--Alternative B

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

April 2012 Directive--Alternative C

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

Explanatory Notes

A. Policy Rules Used in "Monetary Policy Strategies"

The table below gives the expressions for the selected policy rules used in "Monetary Policy Strategies." In the table, R_t denotes the nominal federal funds rate for quarter t , while the right-hand-side variables include the staff's

projection of trailing four-quarter core PCE inflation for the current quarter and three quarters ahead (π_t and $\pi_{t+3|t}$), the output gap estimate for the current period as well as its one-quarter-ahead forecast (gap_t and $gap_{t+1|t}$) and the forecast of the three-quarter-ahead annual change in the output gap ($\Delta^4 gap_{t+3|t}$). The value of policymakers' long-run inflation objective, denoted π^* , is 2 percent. The nominal income targeting rule responds to the nominal income gap, which is defined as the difference between nominal income yn_t (100 times the log of the level of nominal GDP) and a target value yn^t (100 times the log of potential nominal GDP), where potential nominal GDP is defined as potential real GDP multiplied by a price target equal to the actual GDP deflator in the fourth quarter of 2007 and growing thereafter at a steady rate of 2 percent per year.¹

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

1. See Christopher Erceg, Michael T. Kiley, and J. David López-Salido (2011) for analysis of this rule. The nominal GDP targeting rule in "Monetary Policy Strategies" differs slightly from the rule studied in that memo in setting the target equal to potential nominal GDP (rather than applying a growth rate to actual nominal GDP for the final quarter of 2007) and in having an interest-rate smoothing coefficient of 0.75 (a more standard value than the 0.9 value employed in the memo). Background on the relationship between simple interest-rate rules and nominal income targeting is provided in Bennett T. McCallum and Edward Nelson (1999) and Athanasios Orphanides (2003). [Return to text](#)

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

Term Premium Effect

Date	Alternative B	Alternative A1	Alternative A2	Alternative C
	Basis Points Quarterly Averages			
2012 Q2	-61	-77	-77	-54
2012 Q3	-58	-74	-74	-51
2012 Q4	-55	-71	-71	-48
2013 Q1	-51	-67	-67	-44
2013 Q2	-48	-64	-63	-41
2013 Q3	-45	-60	-59	-37
2013 Q4	-41	-56	-55	-34
2014 Q1	-38	-52	-51	-31
2014 Q2	-35	-48	-47	-28
2014 Q3	-32	-45	-43	-26
2014 Q4	-29	-41	-39	-23
2015 Q1	-27	-38	-35	-21
2015 Q2	-24	-35	-32	-19
2015 Q3	-22	-32	-29	-17

2015 Q4	-20	-29	-26	-15
2016 Q1	-18	-27	-23	-14
2016 Q2	-16	-25	-21	-13
2016 Q3	-15	-22	-19	-11
2016 Q4	-13	-20	-17	-10
2017 Q1	-12	-19	-15	-10
2017 Q2	-11	-17	-13	-9
2017 Q3	-10	-15	-12	-8
2017 Q4	-10	-14	-11	-8
2018 Q1	-9	-13	-10	-8
2018 Q2	-8	-12	-9	-8
2018 Q3	-8	-11	-9	-7
2018 Q4	-8	-10	-8	-7
2019 Q1	-7	-10	-8	-7
2019 Q2	-7	-9	-7	-7
2019 Q3	-7	-9	-7	-6
2019 Q4	-6	-8	-6	-6
2020 Q1	-6	-8	-6	-6
2020 Q2	-5	-7	-5	-5
2020 Q3	-5	-7	-5	-5
2020 Q4	-5	-6	-5	-5

Federal Reserve Balance Sheet: End-of-Year Projections -- Alternative A1

Billions of dollars

	Mar 30, 2012	2012	2014	2016	2018	2020
Total assets	2,859	2,857	2,758	2,324	1,820	2,028
Selected assets						
Liquidity programs for financial firms	46	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	46	0	0	0	0	0
Lending through other credit facilities	7	3	1	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	7	3	1	0	0	0
Support for specific institutions	23	20	16	12	7	4
Credit extended to AIG	0	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	23	20	16	12	7	4

Securities held outright	2,594	2,589	2,515	2,121	1,653	1,882
U.S. Treasury securities	1,661	1,650	1,629	1,570	1,445	1,882
Agency debt securities	96	77	39	16	2	0
Agency mortgage-backed securities	837	862	847	535	206	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	187	244	225	190	160	142
Total liabilities	2,805	2,795	2,676	2,215	1,677	1,839
Selected liabilities						
Federal Reserve notes in circulation	1,057	1,115	1,257	1,403	1,561	1,723
Reverse repurchase agreements	97	70	70	70	70	70
Deposits with Federal Reserve Banks	1,631	1,593	1,333	726	30	30
Reserve balances held by depository institutions	1,550	1,507	1,328	721	25	25
U.S. Treasury, General Account	43	86	5	5	5	5
Other Deposits	37	0	0	0	0	0
Interest of Federal Reserve Notes due to U.S. Treasury	3	0	0	0	0	0
Total capital	54	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 A2

Billions of dollars

	Mar 30, 2012	2012	2014	2016	2018	2020
Total assets	2,859	3,094	3,171	2,251	1,821	2,028
Selected assets						
Liquidity programs for financial firms	46	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	46	0	0	0	0	0
Lending through other credit facilities	7	3	1	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	7	3	1	0	0	0
Support for specific institutions	23	20	16	12	7	4
Credit extended to AIG	0	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	23	20	16	12	7	4
Securities held outright	2,594	2,850	2,952	2,077	1,685	1,915
U.S. Treasury securities	1,661	1,650	1,596	1,228	1,362	1,915
Agency debt securities	96	77	39	16	2	0
Agency mortgage-backed securities	837	1,123	1,318	833	320	0

Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	187	220	201	161	129	110
Total liabilities	2,805	3,032	3,089	2,142	1,677	1,839
Selected liabilities						
Federal Reserve notes in circulation	1,057	1,115	1,257	1,403	1,561	1,723
Reverse repurchase agreements	97	70	70	70	70	70
Deposits with Federal Reserve Banks	1,631	1,830	1,745	654	30	30
Reserve balances held by depository institutions	1,550	1,744	1,740	648	25	25
U.S. Treasury, General Account	43	86	5	5	5	5
Other Deposits	37	0	0	0	0	0
Interest of Federal Reserve Notes due to U.S. Treasury	3	0	0	0	0	0
Total capital	54	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 B

Billions of dollars

	Mar 30, 2012	2012	2014	2016	2018	2020
Total assets	2,859	2,819	2,674	1,936	1,821	2,028
Selected assets						
Liquidity programs for financial firms	46	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	46	0	0	0	0	0
Lending through other credit facilities	7	3	1	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	7	3	1	0	0	0
Support for specific institutions	23	20	16	12	7	4
Credit extended to AIG	0	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	23	20	16	12	7	4
Securities held outright	2,594	2,589	2,482	1,779	1,692	1,915
U.S. Treasury securities	1,661	1,650	1,596	1,228	1,483	1,915
Agency debt securities	96	77	39	16	2	0
Agency mortgage-backed securities	837	862	847	535	206	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	187	207	175	145	122	109
Total liabilities	2,805	2,757	2,593	1,828	1,677	1,839
Selected liabilities						

Federal Reserve notes in circulation	1,057	1,115	1,257	1,403	1,561	1,723
Reverse repurchase agreements	97	70	70	70	70	70
Deposits with Federal Reserve Banks	1,631	1,555	1,249	339	30	30
Reserve balances held by depository institutions	1,550	1,469	1,244	334	25	25
U.S. Treasury, General Account	43	86	5	5	5	5
Other Deposits	37	0	0	0	0	0
Interest of Federal Reserve Notes due to U.S. Treasury	3	0	0	0	0	0
Total capital	54	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

	Mar 30, 2012	2012	2014	2016	2018	2020
Total assets	2,859	2,814	2,357	1,649	1,820	2,028
Selected assets						
Liquidity programs for financial firms	46	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	46	0	0	0	0	0
Lending through other credit facilities	7	3	1	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	7	3	1	0	0	0
Support for specific institutions	23	20	16	12	7	4
Credit extended to AIG	0	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	23	20	16	12	7	4
Securities held outright	2,594	2,589	2,171	1,499	1,698	1,918
U.S. Treasury securities	1,661	1,650	1,519	1,176	1,698	1,918
Agency debt securities	96	77	39	16	0	0
Agency mortgage-backed securities	837	862	613	306	0	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	187	202	169	138	115	106
Total liabilities	2,805	2,752	2,275	1,541	1,677	1,839
Selected liabilities						
Federal Reserve notes in circulation	1,057	1,115	1,257	1,403	1,561	1,723
Reverse repurchase agreements	97	70	70	70	70	70
Deposits with Federal Reserve Banks	1,631	1,550	932	52	30	30

Reserve balances held by depository institutions	1,550	1,464	926	47	25	25
U.S. Treasury, General Account	43	86	5	5	5	5
Other Deposits	37	0	0	0	0	0
Interest of Federal Reserve Notes due to U.S. Treasury	3	0	0	0	0	0
Total capital	54	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](#)

Last update: January 5, 2018



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