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April 2011 Tealbook A Tables and Charts[‡]

Domestic Economic Developments and Outlook

Key Background Factors underlying the Baseline Staff Projection

Figure: Federal Funds Rate

Line chart, 2007 to 2012. Unit is percent. Data are quarterly averages. There are four series, "Current," "Previous Tealbook," "Market, expected rate," and "Market, modal rate." All four series begin at about 5.25 and generally decrease to about 0 in 2009:Q1. They remain about constant until 2011:Q4. Current and previous Tealbook generally increase ending at about 0.5. Market, expected rate generally increases ending at about 1. Market, Modal rate generally increases ending at about 0.25.

Figure: Long-Term Interest Rates

Line chart, 2007 to 2012. Unit is percent. Data are quarterly averages. There are six series, "BBB Corporate Yield - Current," "BBB Corporate Yield - Previous Tealbook," "Conforming Mortgage Rate - Current," "Conforming Mortgage Rate - Previous Tealbook," "10-Year Treasury Yield - Current," and "10-Year Treasury Yield - Previous Tealbook." BBB Corporate Yield Current and Previous Tealbook begin at about 6 and generally increase together to about 9.5 in 2008:Q4. They generally decrease together to about 5 in 2010:Q3 then generally increase together ending at about 6. Conforming Mortgage Rate Current and Previous Tealbook begin at about 6 and generally increase together to about 6.5 in 2007:Q3. They generally decrease together to about 6 in 2008:Q1 then generally increase together to about 6.5 in 2008:Q3. They generally decrease together to about 4 in 2010:Q3 then generally increase together ending at about 6. 10-Year Treasury Yield Current and Previous Tealbook begin at about 5 and fluctuate but generally decrease together to about 3 in 2009:Q1. They generally increase together to about 4 in 2010:Q1 then generally decrease together to about 3 in 2010:Q3. They generally increase together ending at about 4.5.

Figure: Equity Prices

Line chart, 2007 to 2012. Unit is ratio scale, 2007:Q1 = 100. Data are quarterly. There are two series, "Dow Jones U.S. Total Stock Market Index - Current" and "Dow Jones U.S. Total Stock Market Index - Previous Tealbook." Both series begin at about 100 and generally increase together to about 108 in 2007:Q3. They generally decrease together to about 60 in 2009:Q1 then generally increase together to about 85 in 2010:Q1. They generally decrease together to about 75 in 2010:Q2 then generally increase together ending at about 110.

Figure: House Prices

Line chart, 2007 to 2012. Unit is ratio scale, 2007:Q1 = 100. Data are quarterly. There are two series, "CoreLogic Index - Current" and "CoreLogic Index - Previous Tealbook." Both series begin at about 100 and generally decrease together to about 70 in 2009:Q1. They generally increase together to about 75 in 2010:Q2 then generally decrease together ending at about 67.

Figure: Crude Oil Prices

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

Figure: Broad Real Dollar

Line chart, 2007 to 2012. Unit is an index, 2007:Q1 = 100. Data are quarterly averages. There are two series, "Current" and "Previous Tealbook." Both series begin at about 100 and generally decrease together to about 90 in 2008:Q2. They generally increase together to about 100 in 2009:Q1 then generally decrease together to about 93 in 2010:Q1. They generally increase together to about 95 in 2010:Q2 then generally decrease together ending at about 83.

Note: Shading represents the projection period, which begins in 2011:Q2. In the upper-left panel that reports the federal funds rate, the black dotted line is not apparent because the federal funds rate in the March and the current Tealbooks are the same.

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2011:Q1		2011:Q2		2011:Q3	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	3.2	1.7	3.8	3.1	3.9	4.1
Private domestic final purchases	3.0	2.3	4.2	3.6	4.4	3.8
Personal consumption expenditures	2.5	2.5	3.5	3.0	3.5	3.1
Residential investment	3.7	-1.8	7.3	.4	10.9	2.6
Nonres. structures	-10.4	-17.3	-.9	-1.4	-.9	-.7
Equipment and software	12.7	10.1	12.5	12.2	13.2	12.6
Federal purchases	-4.7	-11.5	4.6	8.0	2.0	3.9
State and local purchases	-2.1	-3.9	-.7	-1.2	-.2	-.4
	Contribution to change in real GDP (percentage points)					
Inventory investment	1.1	1.1	.1	-.3	.3	1.1
Net exports	.2	.1	-.1	-.1	-.1	-.4

Recent Nonfinancial Developments (1)

Figure: Change in Private Payroll Employment

Line chart, 2001 to March 2011. Unit is thousands of employees. The series begins at about 0 and generally decreases to about -400 in late 2001. It fluctuates but generally increases to about 350 in mid-2005 then fluctuates but generally decreases to about -800 in early 2009. It fluctuates but generally increases ending at about 200. There is a second series called 3-month moving average that generally runs concurrent to the first series.

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

Figure: Unemployment Rate

Line chart, 2001 to March 2011. Unit is percent. The series begins at about 4 and generally increases to about 6 in mid-2003. It generally decreases to about 4 in early 2007 then generally increases to about 10 in late 2009. It generally decreases ending at about 8.75.

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

Figure: Manufacturing IP ex. Motor Vehicles and Parts

Line chart, 2001 to March 2011. Unit is 3-month percent change, annual rate. The series begins at about -3 and generally decreases to about -9 in late 2001. It generally increases to about 7 in early 2002 then generally decreases to about -2 in late 2002. It generally increases to about 10 in late 2004 then generally decreases to about -5 in late 2005. It generally increases to about 12 in early 2006. It generally decreases to about - in late 2006 then generally increases to about 7 in early 2007. It generally decreases to about -25 in early 2009 then generally increases to about 10 in early 2010. It generally decreases to about 3 in late 2010 then generally increases to about 10 in early 2011. It generally decreases ending at about 5.

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

Figure: Production of Light Motor Vehicles

Line chart, 2001 to March 2011. Unit is millions of units, annual rate. The series begins at about 10.5 and fluctuates but generally increases to about 13 in early 2003. It fluctuates but generally decreases to about 4 in early 2009 then generally increases ending at about 9.

Source: Ward's Auto Infobank.

Recent Nonfinancial Developments (2)

Figure: Real PCE Goods Ex. Motor Vehicles

Line chart, 2001 to March 2011. Unit is billions of chained (2005) dollars. The series begins at about 2300 and generally increases to about 2850 in late 2007. It generally decreases to about 2800 in late 2008 then generally increases ending at about 3100.

Note: Figures for January, February, and March are staff estimates based on available source data.

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

Figure: Sales of Light Motor Vehicles

Line chart, 2001 to March 2011. Unit is millions of units, annual rate. The series begins at about 18 and fluctuates but generally increases to about 22 in early 2002. It fluctuates but generally decreases to about 16 in late 2004 then generally increases to about 21 in mid-2005. It generally decreases to about 9 in late 2009 then generally increases ending at about 13.

Source: Ward's Auto Infobank.

Figure: Single-Family Housing Starts

Line chart, 2001 to March 2011. Unit is thousands of units, annual rate. There are two series, "Starts" and "Adjusted Permits." Both series begin at about 1200 and generally increase together to about 1800 in mid-2005. They generally decrease together to about 300 in early 2009 then generally increase together to about 600 in early 2010. They generally decrease together ending at about 300.

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

Source: U.S. Census Bureau.

Figure: Single-Family Home Sales

Line chart, 2001 to 2011. Unit is thousands of units, annual rate. There are two series, "New" and "Existing." New begins at about 900 and generally increases to about 1300 in late 2005. It generally decreases ending at about 300 in February 2011. Existing begins at about 4500 and generally increases to about 6200 in late 2005. It generally decreases to about 4000 in late 2008 then generally increases to about 5700 in late 2009. It generally decreases to about 3500 in mid-2010 then generally increases to about 4700 in early 2011. It generally decreases ending at about 4500 in March 2011.

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

Figure: Nondefense Capital Goods ex. Aircraft

Line chart, 2001 to February 2011. Unit is billions of dollars. There are two series, "Orders" and "Shipments." Orders begins at about 63 and generally decreases to about 45 in early 2002. It generally increases to about 72 in late 2007 then generally decreases to about 46 in early 2009. It generally increases to about 67 in late 2010 then generally decreases ending at about 62. Shipments begins at about 63 and generally decreases to about 50 in early 2002. It generally increases to about 67 in mid-2008 then generally decreases to about 54 in early 2009. It generally increases ending at about 62.

Source: U.S. Census Bureau.

Figure: Nonresidential Construction Put in Place

Line chart, 2001 to February 2011. Unit is billions of chained (2005) dollars. The series begins at about 275 and generally decreases to about 225 in late 2002. It generally increases to about 400 in late 2008 then generally decreases to about 350 in late 2010. It generally increases to about 275 in early 2011 then generally decreases ending at about 225.

Source: U.S. Census Bureau.

Recent Nonfinancial Developments (3)

Figure: Inventory Ratios ex. Motor Vehicles

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

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

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

Figure: Defense Spending

Line chart, 2001 to 2011. Unit is billions of chained (2005) dollars. There are two series, "Unified (monthly)" and "NIPA (quarterly)." Unified begins at about 375 and fluctuates but generally increases to about 700 in late 2010. It generally decreases to about 600 in early 2011 then generally increases ending at about 650 in March 2011. NIPA begins at about 400 and generally increases to about 650 in early 2010. It generally decreases ending at about 600 in 2011:Q1.

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

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

Figure: Trade Balance

Line chart, 2001 to February 2011. Unit is billions of dollars. The series begins at about -40 and generally increases to about -30 in early 2002. It generally decreases to about -70 in early 2006 then fluctuates but generally increases to about -25 in late 2009. It fluctuates but generally decreases ending at about -50.

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

Figure: Exports and Non-Oil Imports

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

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

Figure: Total PCE Prices

Line chart, 2001 to March 2011 (staff estimate). Unit is percent. There are two series, "12-month change," and "3-month change." 12-month change begins at about 2 and generally decreases to about 1 in early 2002. It generally increases to about 4 in late 2005 then generally decreases to about 2 in late 200. It generally increases to about 5 in late 2008 and generally decreases to about -1 in mid-2009. It generally increases to about 2.5 in late 2009 then generally decreases ending at about 2. 3-month change begins at about 0 in late 2001 then fluctuates but generally increases to about 9 in late 2005. It generally decreases to about -1 in late 2005 then generally increases to about 4 in mid-2006. It generally decreases to about -2 in late 2006 then fluctuates but generally increases to about 8 in mid-2008. It generally decreases to about -10 in late 2008 then generally increases to about 4 in early 2009. It generally decreases to about -1 in mid-2010 then generally increases ending at about 4.

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

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

Figure: PCE Prices ex. Food and Energy

Line chart 2001 to March 2011 (staff estimate). Unit is percent. There are two series, "12-month change," and "3-month change." 12-month change begins at about 2 and generally decreases to about 1 in late 2001. It fluctuates but generally increases to about 2.5 in early 2003. It generally decreases to about 1.5 in mid-2003 then generally increases to about 2.5 in late 2008. It generally increases to about 2 in early 2010 then generally decreases ending at about 1. 3-month change begins at about 2.5 and generally decreases to about -1 in late 2001. It generally increases to about 4 in early 2002 then generally decreases to about 1 in early 2002. It generally increases to about 2.5 in mid-2002 then generally decreases to about 1 in late 2002. It fluctuates but generally increases to about 3.5 in early 2007 then generally decreases to about 1 in early 2007. It generally increases to about 3 in early 2008 then generally decreases to about 0 in early 2009. It generally increases to about 2.5 in mid-2009 then generally decreases to about 0.5 in late 2010. It generally increases ending at about 2.

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

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

Projections of Real GDP and Related Components

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

Measure	2010	2011		2012
		H1	H2	
Real GDP	2.8	2.4	4.0	4.2
Previous Tealbook	2.8	3.5	4.0	4.4
Final sales	2.4	1.9	3.9	3.9
Previous Tealbook	2.4	2.9	4.3	4.1
Personal consumption expenditures	2.6	2.8	3.1	3.7
Previous Tealbook	2.6	3.0	3.5	3.9
Residential investment	-4.6	-.7	4.0	8.7
Previous Tealbook	-4.7	5.5	11.5	13.4
Nonresidential structures	-4.0	-9.7	.0	-.4
Previous Tealbook	-4.2	-5.7	-.2	-.1
Equipment and software	16.9	11.1	13.0	9.1
Previous Tealbook	16.6	12.6	13.4	9.6

Federal purchases	4.8	-2.2	1.7	-8
Previous Tealbook	4.8	-.2	.8	-8
State and local purchases	-1.3	-2.6	-.3	.4
Previous Tealbook	-1.3	-1.4	-.1	.5
Exports	9.0	7.6	9.4	9.0
Previous Tealbook	9.2	10.9	9.1	9.0
Imports	11.0	6.0	3.9	5.1
Previous Tealbook	11.0	8.0	3.8	5.5
Contributions to change in real GDP (percentage points)				
Inventory change	.4	.4	.0	.3
Previous Tealbook	.4	.6	-.3	.3
Net exports	-.6	.0	.6	.4
Previous Tealbook	-.5	.1	.6	.3

Figure: Real GDP

Line chart, 1981 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." Both series begin at about 2 and generally increase together to about 4.5 in late 1981. They generally decrease together to about -2 in late 1982 then generally increase together to about 8 in early 1984. They generally decrease together to about -2 in early 1991 then fluctuate but generally increase together to about 6 in mid-2000. They generally decrease together to about 0.5 in 2001 then generally increase together to about 4 in mid-2004. They fluctuate but generally decrease together to about -4 in early 2009 then fluctuate but generally increase together ending at about 4.

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: July 1981-November 1982, July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009. A blue shaded bar indicates the projection period, beginning in 2011:Q1.

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

[Box:] Household Inflation Expectations and Food and Energy Prices

Figure: Michigan 12-Month Median Expectations

Line chart, 2002 to 2011. Unit is percent. There are two series, "Published" and "Simulated." Published begins at about 2.0 and generally increases to about 2.75 in 2002:Q1. It generally decreases to about 2.5 in 2002:Q4 then generally increases to about 3.0 in 2003:Q1. It generally decreases to about 1.5 in 2003:Q3 then fluctuates but generally increases to about 4.5 in 2005:Q4. It generally decreases to about 3.0 in 2006:Q1 then generally increases to about 4.0 in 2006:Q2. It fluctuates but generally decreases to about 3.0 in 2006:Q4 then fluctuates but generally increases to about 5.25 in 2008:Q2. It generally decreases to about 1.0 in 2008:Q4 then fluctuates but generally increases ending at about 4.5. Simulated begins at about 2.0 and fluctuates but generally increases to about 4.25 in 2005:Q3. It generally decreases to about 2.5 in 2006:Q4 then generally increases to about 4.0 in 2007:Q2. It generally decreases to about 3.0 then generally increases to about 4.5 in 2008:Q2. It generally decreases to about 2.0 in 2009:Q1 then fluctuates but generally increases ending at about 4.0.

Source: Thomson Reuters/University of Michigan Surveys of Consumers; FRB staff.

Figure: Michigan 5-to-10-Year Median Expectations

Line chart, 2002 to 2011. Unit is percent. There are two series, "Published" and "Simulated." Published begins at about 2.75 and fluctuates but remains about constant until 2008:Q2. It generally decreases to about 2.5 in 2008:Q4 then fluctuates but generally increases ending at about 3.0. Simulated begins at about 2.75 and fluctuates but generally increases to about 3.25 in 2008:Q3. It generally decreases to about 2.5 in 2010:Q3 then generally increases ending at about 3.0.

Source: Thomson Reuters/University of Michigan Surveys of Consumers; FRB staff.

Figure: Food and Energy Prices

Line chart, 2002 to 2011. Unit is percent (3-month changes, annual rate, not seasonally adjusted). There are two series, "CPI Energy" and "CPI Food." CPI energy begins at about -30 and generally increases to about 50 in 2002:Q3. It generally decreases to about -10 in 2003:Q1 then generally increases to about 80 in 2003:Q2. It fluctuates but generally decreases to about -30 in 2004:Q1 then fluctuates but generally increases to about 50 in 2004:Q2. It generally decreases to about -15 in 2005:Q1 then generally increases to about 110 in 2005:Q3. It general decreases to about -50 in 2005:Q4 then generally increases to about 60 in 2006:Q2. It generally decreases to about -60 in 2006:Q4 then generally increases to about 90 in 2007:Q2. It generally decreases to about -30 in 2007:Q3 then fluctuates but generally increases to about 100 in 2008:Q2. It generally decreases to about -90 in 2008:Q4 then generally increases to about 70 in 2009:Q2. It generally decreases to about -10 in 2009:Q3 then generally increases to about 15 in 2010:Q2. It generally decreases to about -5 in 2010:Q3 then generally increases ending at about 55. CPI Food begins at about 2 and generally decreases to about -3 in 2002:Q2. It fluctuates but generally increases to about 8 in 2004:Q1 then fluctuates but generally decreases to about -4 in 2006:Q2. It fluctuates but generally increases to about 10 in 2008:Q4 then generally decreases to about -8 in 2009:Q2. It generally increases to about 4 in 2010:Q1 then generally decreases to about -1 in 2010:Q2. It generally increases ending at about 12.

Note: The yellow bands represent months when the annualized three-month change multiplied by its expenditure weight was 2 standard deviations above its mean over the period from 1998 to the present: approximately September-October 2005, March 2007, May 2007, May-September 2008, and March 2011.

Components of Final Demand

Figure: Personal Consumption Expenditures

Line chart, 2007 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." The series begin at about 3 and generally decrease together to about -2 in 2009:Q2. They generally increase together ending at about 4.

Figure: Residential Investment

Line chart, 2007 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." The series begin at about -18 and generally decrease together to about -30 in 2009:Q2. They generally increase together to about 5 in 2010:Q2 then generally decrease together to about -5 in 2010:Q3. They generally increase together to about -2 in 2010:Q4 then generally decrease together to about -7 in 2011:Q2. Current generally increases ending at about 10 and Previous Tealbook generally increases ending at about 15.

Figure: Equipment and Software

Line chart, 2007 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." The series begin at about 4 and generally decrease together to about -20 in 2009:Q1. They generally increase together to about 20 in 2010:Q2 then generally decrease together ending at about 10.

Figure: Nonresidential Structures

Line chart, 2007 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." The series begin at about 10 and generally increase together to about 17 in 2007:Q4. They generally decrease together to about -25 in 2009:Q4 then generally increase together to about 0 in 2012:Q1. They remain about constant to the end of the timeline.

Figure: Government Consumption & Investment

Line chart, 2007 to 2012. Unit is 4-quarter percent change. There are two series, "Current" and "Previous Tealbook." The series begin at about 0.5 and generally increase together to about 3.0 in 2008:Q3. They generally decrease together to about 0.5 in 2010:Q2 then generally increase together to about 1.5 in 2010:Q4. Current generally decreases to about -1.5 in 2011:Q3 then generally increases to about 1.0 in 2012:Q1. It generally decreases ending at about 0. Previous Tealbook generally decreases to about -0.5 in 2011:Q3 then generally increases to about 0.5 in 2012:Q1. It generally decreases ending at about 0.

Figure: Exports and Imports

Line chart, 2007 to 2012. Unit is 4-quarter percent change. There are four series, "Exports - Current," "Exports - Previous Tealbook," "Imports - Current," and "Exports - Previous Tealbook." Exports - Current and Previous Tealbook begin at about 7 and generally increase together to about 12 in 2007:Q4. They generally decrease together to about -15 in 2009:Q4 then generally increase together to about 13 in 2010:Q1. Exports - Current generally decreases to about 8 in 2010:Q4 then remains about constant to the end of the timeline. Exports - Previous Tealbook decreases to about 11 in 2010:Q4 and generally decreases ending at about 10. Imports Current and Previous Tealbook begin at about 4 and generally decrease together to about -20 in 2009:Q2. They generally increase together to about 17 in 2010:Q1 then generally decrease together to about 3 in 2011:Q3. They generally increase together ending at about 5.

Note: Shading represents the projection period, which begins in 2011:Q1.

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

Aspects of the Medium-Term Projection

Figure: Personal Saving Rate

Line chart, 1990 to 2011. Unit is percent. There are two series, "Current" and "Previous Tealbook." The series begin at about 6.5 and generally increase together to about 7.5 in 1993. They fluctuate but generally decrease together to about 2 in 1999 then fluctuate but generally increase together to about 4 in 2001. They fluctuate but generally decrease together to about 1 in 2005 then fluctuate but generally increase together to about 7 in 2008. They fluctuate but generally decrease together ending at about 5.5.

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

Figure: Wealth-to-Income Ratio

Line chart, 1990 to 2011. Unit is ratio. There are two series, "Current" and "Previous Tealbook." The series begin at about 4.8 and generally increase together to about 6.2 in 1999. They generally decrease together to about 5.0 in 2003 then generally increase together to about 6.4 in 2005. They generally decrease together to about 4.4 then generally increase together ending at about 4.8.

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

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

Figure: Single-Family Housing Starts

Line chart, 1990 to 2011. Unit is millions of units. There are two series, "Current" and "Previous Tealbook." The series begin at about 1.00 and generally decrease together to about 0.75 in 1990. They generally increase together to about 1.75 in 2005 then generally decrease together to about 0.25 in 2008. They generally increase together ending at about 0.6.

Source: U.S. Census Bureau.

Figure: Equipment and Software Spending

Line chart, 1990 to 2011. Unit is share of nominal GDP. There are two series, "Current" and "Previous Tealbook." The series begin at about 7.5 and generally decrease together to about 6.0 in 1992. They generally increase together to about 9.5 in 1999 then generally decrease together to about 7.5 in 2002. They generally increase together to about 8.0 in 2005 then generally decrease together to about 6.5 in 2009. They generally increase together ending at about 8.0.

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

Figure: Federal Surplus/Deficit

Line chart, 1990 to 2011. Unit is share of nominal GDP. There are two series, "Current" and "Previous Tealbook." The series begin at about -3 and generally decrease together to about -5 in 1992. They generally increase together to about 2 in 2000 then generally decrease together to about -4 in 2003. They generally increase together to about -2 in 2007 then generally decrease together to about -10 in 2010. They generally increase together ending at about -6.

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

Source: Monthly Treasury Statement.

Figure: Current Account Surplus/Deficit

Line chart, 1990 to 2011. Unit is share of nominal GDP. There are two series, "Current" and "Previous Tealbook." The series begin at about -1.5 and generally increase together to about 1 in 1991. They generally decrease together to about -7 in 2005 then generally increase together to about -2 in 2008. They generally decrease together to about -3 in 2010 then generally increase together ending at about -2.

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009. Blue shading represents the projection period, which begins in 2011:Q1.

Decomposition of Potential GDP

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

Measure	1974-1995	1996-2000	2001-2008	2009	2010	2011	2012
Potential GDP	3.0	3.5	2.7	2.0	2.0	2.3	2.5
Previous Tealbook	3.0	3.5	2.7	2.0	2.1	2.4	2.6
Selected contributions ¹							
Structural labor productivity	1.5	2.7	2.5	2.3	1.9	1.9	2.0
Previous Tealbook	1.5	2.7	2.5	2.3	2.0	2.0	2.1
Capital deepening	.7	1.5	.7	.3	.4	.6	.8
Previous Tealbook	.7	1.5	.7	.4	.5	.7	.9
Multifactor productivity	.5	.9	1.6	1.9	1.3	1.2	1.2
Previous Tealbook	.5	.9	1.6	1.8	1.3	1.2	1.2
Trend hours	1.5	1.0	.8	-.1	.5	.6	.7
Previous Tealbook	1.5	1.1	.8	-.1	.5	.6	.7

Labor force participation	.4	.0	-.2	-.3	-.4	-.3	-.2
Previous Tealbook	.4	.0	-.2	-.3	-.4	-.3	-.2

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

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

Source: Staff assumptions.

Figure: Nonfarm Business Productivity

Line chart, 2001 to 2012. Unit is chained (2005) dollars per hour. Shading represents the projection period, which begins in 2011:Q1. The series begins at about 44 and fluctuates but generally increases ending at about 58. There is a second series labeled "Structural Productivity" which begins at 44 and steadily increases ending at about 58.

Figure: Labor Force Participation Rate

Line chart, 2001 to 2012. Unit is percent. Shading represents the projection period, which begins in 2011:Q2. The series begins at about 67 and generally decreases to about 65.5 in 2005:Q1. It generally increases to about 66 in 2007:Q1 then generally decreases to about 64 in 2011:Q1. It generally increases ending at about 64.5. There is a second series showing Trend which begins at about 66.8 and generally decreases ending at about 64.8.

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

The Outlook for the Labor Market

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

Measure	2009	2010	2011	2012
Output per hour, nonfarm business	6.5	2.0	1.1	1.8
Previous Tealbook	6.5	2.0	1.4	1.7
Nonfarm private employment	-5.0	.9	2.5	2.9
Previous Tealbook	-5.0	.9	2.4	3.2
Labor force participation rate ¹	64.9	64.5	64.3	64.4
Previous Tealbook	64.9	64.5	64.3	64.4
Civilian unemployment rate ¹	10.0	9.6	8.7	7.7
Previous Tealbook	10.0	9.6	8.6	7.5
Memo:				
GDP gap ²	-6.6	-5.9	-5.0	-3.5
Previous Tealbook	-6.6	-5.9	-4.7	-3.0

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

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

2. Percent difference between actual and potential GDP in the fourth quarter of the year indicated. [Return to table](#)

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

Figure: Private Payroll Employment, Average Monthly Changes

Line chart, 1990 to 2012. Unit is thousands. Shading represents the projection period, which begins in 2011:Q2. There are two series, "Current" and "Previous Tealbook." The series begin at about 200 and generally decrease together to about -200. They generally increase together to about 300 in 1994 then fluctuate but generally decrease together to about -400 in 2001. They generally increase together to about 300 in 2005 then generally decrease together to about -800 in 2009. They generally increase together ending at about 300.

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

Figure: Unemployment Rate

Line chart, 1990 to 2012. Unit is percent. Shading represents the projection period, which begins in 2011:Q2. There are four series, "Current," "Previous Tealbook," "NAIRU," and "NAIRU with EEB Adjustment." Current and Previous Tealbook begin at about 5 and generally increase together to about 7.5 in 1992. They generally decrease together to about 4 in 2000 then generally increase together to about 6 in 2003. They generally decrease together to about 4.5 in 2008 then generally increase together to about 10 in 2009. They generally decrease together ending at about 7.5. NAIRU begins at about 6 and generally decreases to about 5 in 1994. It

remains about constant until 2008 then generally increases to about 6 in 2010. It remains about constant to the end of the timeline. NAIRU with EEB adjustment begins at about 6 and generally decreases to about 5 in 1995. It remains about constant until 2008 then generally increases to about 7 in 2010. It generally decreases ending at about 6.

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

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

Figure: GDP Gap

Line chart, 1990 to 2012. Unit is percent. Shading represents the projection period, which begins in 2011:Q1. There are two series, "Current" and "Previous Tealbook." The series begin at about 1 and generally decrease together to about -3 in 1992. They generally increase together to about 4 in 1999 then generally decrease together to about -2 in 2002. They generally increase together to about 0 in 2005 then generally decrease together to about -7.5 in 2009. They generally increase together ending at about -3.

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

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

Figure: Manufacturing Capacity Utilization Rate

Line chart, 1990 to 2012. Unit is percent. Shading represents the projection period, which begins in 2011:Q2. Average rate from 1972 to 2010 is marked at about 79 on the scale. There are two series, "Current" and "Previous Tealbook." The series begin at about 83 and generally decrease together to about 78 in 1991. They generally increase together to about 85 in 1994 then fluctuate but generally decrease together to about 73 in 2001. They generally increase together to about 79 in 2005 then generally decrease together to about 65 in 2009. They generally increase together ending 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: July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009.

[Box:] Capacity Utilization in the Manufacturing Sector

Figure: Manufacturing Capacity Utilization

Line chart, 1970 to 2012. Unit is percent. The series begins at about 77 and generally increases to about 89 in 1974. It generally decreases to about 73 in 1975 then generally increases to about 86 in 1978. It generally decreases to about 70 in 1982 then fluctuates but generally increases to about 85 in 1988. It generally decreases to about 78 in 1991 then generally increases to about 85 in 1994. It fluctuates but generally decreases to about 72 in 2002 then generally increases to about 80 in 2007. It generally decreases to about 65 in 2009 then generally increases ending at about 80.

Note: Grey areas represent recessions defined by the National Bureau of Economic Research: December 1969-November 1970, November 1973-March 1975, January 1980-July 1980, July 1981-November 1982, July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009. The blue area represents the staff forecast (beginning in January 2011). The horizontal line is the 1972-2010 average of 79.0 percent.

Source: Federal Reserve Board.

Figure: Manufacturing Capacity

Bar chart, 1974 to 2012. Unit is percent change at an annual rate. Approximate values are: 1974-94: 2.5; 1995-2000: 6.5; 2001-07: 1; 2008-10: -2; 2011-12: 1.25.

Note: Average annual percent changes over the four quarters of the years indicated. The change for 2011-12 is a staff forecast.

Source: Federal Reserve Board.

Inflation Projections

(Percent change, Q4 to Q4)

Measure	2009	2010	2011	2012
PCE chain-weighted price index	1.5	1.1	2.2	1.2
Previous Tealbook	1.5	1.2	1.9	1.1
Food and beverages	-1.6	1.3	4.3	1.4
Previous Tealbook	-1.6	1.3	3.4	1.3
Energy	2.7	5.9	12.9	-1.1
Previous Tealbook	2.7	5.9	11.0	-1.3

Excluding food and energy	1.7	.8	1.4	1.4
Previous Tealbook	1.7	.8	1.2	1.2
Prices of core goods imports ¹	-1.9	2.7	4.9	1.4
Previous Tealbook	-1.9	2.7	4.6	1.4

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

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

Figure: Total PCE Prices

Line chart, 1990 to 2012. Unit is 4-quarter percent change. Shading represents the projection period, which begins in 2011:Q1. There are two series, "Current" and "Previous Tealbook." The series begin at about 4 and generally increase together to about 5.5 in 1991. They fluctuate but generally decrease together to about 1 in 1997. They fluctuate but generally increase together to about 45 in 2007 then generally decrease together to about -1 in 2009. They generally increase together to about 2.5 in 2011 then generally decrease together to about 1 in 2011. They generally increase together to about 2.5 in 2012 then generally decrease together ending at about 1.

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

Figure: PCE Prices ex. Food and Energy

Line chart, 1990 to 2012. Unit is 4-quarter percent change. Shading represents the projection period, which begins in 2011:Q1. There are four series, "Current," "Previous Tealbook," "Market Based - Current," and "Market Based - Previous Tealbook." Current and Previous Tealbook begin at about 4 and generally increase to about 4.5 in 1991. They fluctuate but generally decrease together to about 1 in 1998. They fluctuate but generally increase together to about 2.75 in 2006 then generally decrease together to about 1 in 2010. They generally increase together ending at about 1.5. Market based current and previous Tealbook begin at about 2.4 and generally increase together to about 5 in 1991. They generally decrease together to about 1 in 1997 then generally increase together to about 2 in 2001. They generally decrease together to about 1.25 in 2004 then generally increase together to about 2.5 in 2008. They generally decrease together ending at about 1.25.

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

Figure: Compensation per Hour

Line chart, 1990 to 2010. Unit is 4-quarter percent change. Shading represents the projection period, which begins in 2011:Q1. There are four series, "Productivity and Costs - Current," "Productivity and costs - Previous Tealbook," "Employment Cost Index - Current," and "Employment Cost Index - Previous Tealbook." Productivity and costs current and previous Tealbook begin at about 4 and generally increase together to about 7 in 1991. They generally decrease together to about 2 in 1994 then fluctuate but generally increase together to about 9 in 1999. They fluctuate but generally decrease together ending at about 3. Employment Cost Index current and previous Tealbook begin at about 5 and generally decrease together to about 2 in 1995. They generally increase together to about 5 in 1999 then generally decrease together to about 1 in 2009. They generally increase together ending at about 3.

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

Figure: Long-Term Inflation Expectations

Line chart, 1990 to 2011. Unit is percent. There are two series, "Thomson Reuters/Michigan, next 5 to 10 years," and "SPF, next 10 years." Thomson Reuters/Michigan, next 5 to 10 years begins at about 4 and generally increases to about 4.5 in 1991. It fluctuates but generally decreases to about 2.75 in 1995 then remains about constant until the end of the timeline in April 2011 (preliminary). SPF, next 10 years begins at about 4 and generally decreases to about 2.25 in 1998. It remains about constant until 2009 then generally decreases ending at about 2 in 2011:Q1.

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

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

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

The Long-Term Outlook

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

Item	2010	2011	2012	2013	2014	2015
Real GDP	2.8	3.2	4.2	4.3	4.0	3.1
Civilian unemployment rate ¹	9.6	8.7	7.7	7.0	6.2	5.6
PCE prices, total	1.1	2.2	1.2	1.5	1.6	1.7
Core PCE prices	.8	1.4	1.4	1.5	1.6	1.7
Federal funds rate ¹	.2	.1	.5	2.0	3.3	3.8

10-year Treasury yield ¹	3.0	3.9	4.5	4.8	5.0	5.0
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1. Percent, average for the final quarter of the period. [Return to table](#)

Figure: Real GDP

Line chart, 2002 to 2015. Unit is 4-quarter percent change. There are two series, "Real GDP" and "Potential GDP." Real GDP begins at about 1.5 and generally increases to about 4 in 2004. It generally decreases to about -4 in 2009 then generally increases to about 3.5 in 2010. It generally increases to about 4 in 2013 then generally decreases ending at about 3. Potential GDP begins at about 3.5 and generally decreases to about 2 in 2004. It generally increases to about 2.5 in 2007 then generally decreases to about 2 in 2010. It generally increases ending at about 2.75.

Figure: Unemployment Rate

Line chart, 2002 to 2015. Unit is percent. The series begins at about 6 and fluctuates but generally decreases to about 4.25 in 2007. It generally increases to about 10 in 2009 then generally decreases ending at about 5.75. There is a second series labeled NAIRU with EEB adjustment which begins at about 5 and remains about constant until 2008. It generally increases to about 6.5 in 2010 then generally decreases ending at about 5. A third series labeled NAIRU begins at about 5 and remains about constant until 2008. It generally increases to about 6 then remains about constant until 2013. It generally decreases ending at about 5.

Figure: PCE Prices

Line chart 2002 to 2015. Unit is 4-quarter percent change. There are two series, "Total PCE Prices" and "PCE Prices excluding Food and Energy." Total PCE Prices begins at about 2 and fluctuates but generally increases to about 3 in 2006. It generally decreases to about 2 in 2007 then generally increases to about 4 in 2008. It generally decreases to about -1 in 2009 then generally increases to about 2.25 in 2010. It generally decreases to about 1 in 2011 then generally increases to about 2.25 in 2012. It generally decreases to about 1 in 2012 then generally increases ending at about 1.75. PCE Prices excluding food and energy begins at about 1.5 and generally increases to about 2 in 2002. It generally decreases to about 1.5 in 2003 then fluctuates but generally increases to about 2.5 in 2008. It fluctuates but generally decreases to about 1 in 2010 then generally increases ending at about 1.75.

Figure: Interest Rates

Line chart, 2002 to 2015. Unit is percent. There are three series, "BBB corporate," "10-year Treasury," and "Federal funds rate." BBB corporate begins at about 7.5 and generally decreases to about 6 in 2003. It generally increases to about 9.5 in 2009 then generally decreases to about 5.5 in 2010. It generally increases ending at about 6.75. 10-year Treasury begins at about 5.5 and fluctuates but generally decreases to about 3 in 2010. It generally increases ending at about 5. Federal funds rate begins at about 1.9 and generally decreases to about 1 in 2005. It generally increases to about 5 in 2006 then generally decreases to about 0 in 2009. It remains about constant until 2012 then generally increases ending at about 4.

Note: In each panel, shading represents the projection period (beginning in 2011:Q1).

Evolution of the Staff Forecast

Figure: Change in Real GDP

Line chart, Tealbook publication dates 1/22/2009 to 4/20/2011. Unit is percent, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 2.5 and generally decreases to about 1.5 on 3/12/2009. It fluctuates but generally increases to about 3 on 4/21/2010 then generally decreases to about 2 on 10/27/2010. It generally increases ending at about 3 on 4/20/2011. 2011 begins at about 4.5 on 9/16/2009 then fluctuates but generally decreases to about 3 on 9/15/2010. It generally increases to about 3.5 on 3/9/2010 then generally decreases ending at about 3 on 4/20/2011. 2012 begins at about 2 on 9/15/2010 and generally increases to about 4.5 on 10/27/2010. It generally decreases ending at about 4 on 4/20/2011.

Figure: Unemployment Rate

Line chart, Tealbook publication dates 1/22/2009 to 4/20/2011. Unit is percent, fourth quarter. There are three series, "2010," "2011," and "2012." 2010 begins at about 8.0 and generally increases to about 9.5 on 3/12/2009. It generally decreases to about 9.0 on 4/22/2009 then fluctuates but generally increases to about 9.5 on 10/29/2010. It fluctuates but remains about constant ending on 4/20/2011. 2011 begins at about 7.75 on 9/16/2009 and generally increases to about 9.0 on 9/15/2010. It generally decreases ending at about 8.5 on 4/20/2011. 2012 begins at about 8.0 on 9/15/2011 and generally decreases to about 7.5 on 4/9/2011. It generally increases ending at about 7.75 on 4/20/2011.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, Tealbook publication dates 1/22/2009 to 4/20/2011. Unit is percent, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 0.75 and generally decreases to about 0.5 on 3/12/2009. It generally increases to about 1.25 on 1/20/2010 then generally decreases to about 0.5 on 6/16/2010. It generally increases to about 1.0 on 8/4/2010 then remains about constant until 10/27/2010. It generally decreases to about 0.75 on 1/19/2011 then remains about constant ending on 4/20/2011. 2011 begins at about 1.0 on 9/16/2009 then generally decreases to about 0.75 on 6/16/2010. It generally increases ending at about 1.5 on 4/20/2011. 2012 begins at about 1 on 9/15/2010 then generally increases ending at about 1.5 on 4/20/2011.

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

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

Last update: February 3, 2017

April 2011 Tealbook A Tables and Charts[‡]

International Economic Developments and Outlook

Recent Foreign Indicators

Figure: Nominal Exports

Line chart, 2007 to 2011. Unit is an index, January 2007 = 100. There are three series, "Foreign," "AFE," and "EME" (excludes Venezuela). All three series begin at about 0 and generally increase together to about 135 in late 2008. Foreign generally decreases to about 85 in early 2009 then generally increases ending at about 140. AFE generally decreases to about 80 in early 2009 then generally increases ending at about 120. EME generally decreases to about 90 in early 2009 then generally increases to about 155 in early 2011. It generally decreases ending at about 145.

Figure: Industrial Production

Line chart, 2007 to 2011. Unit is an index, January 2007 = 100. There are three series, "Foreign," "AFE" (excludes Australia and Switzerland), and "EME" (excludes Colombia, Hong Kong, Philippines, and Venezuela). Foreign begins at 100 and generally increases to about 105 in early 2008. It generally decreases to about 90 in early 2009 then generally increases ending at about 105. AFE begins at 100 and generally decreases to about 80 in early 2009. It generally increases ending at about 95. EME begins at 100 and generally increases to about 110 in early 2008. It generally decreases to about 95 in early 2009 then generally increases ending at about 120.

Figure: Retail Sales

Line chart, 2007 to 2011. Unit is 12-month percent change. There are three series, "Foreign," "AFE" (excludes Australia and Switzerland), and "EME" (includes Brazil, China, Israel, Korea, Singapore, and Taiwan). Foreign begins at about 5 and generally decreases to about -2 in early 2009. It generally increases to about 5 in early 2010 then generally decreases ending at about 4. AFE begins at about 4 and fluctuates but generally decreases to about -5 in early 2009. It generally increases to about 5 in early 2010 then generally decreases ending at about 2.5. EME begins at about 5 and generally increases to about 11 in mid-2007. It generally decreases to about 6 in mid-2007 then generally increases to about 8 in late 2007. It generally decreases to about 4 in early 2009 then generally increases to about 11 in early 2010. It generally decreases ending at about 7.

Figure: Employment

Line chart, 2007 to 2011. Unit is 4-quarter percent change. There are three series, "Foreign," "AFE," and "EME" (excludes Argentina and Mexico). Foreign begins at about 2 and generally decreases to about -1 in mid-2009. It generally increases ending at about 1. AFE begins at about 2 and generally decreases to about -2 in mid-2009. It generally increases ending at about 1. EME begins at about 3 and generally increases to about 3.25 in early 2008. It generally decreases to about 0.5 in mid-2009 then generally increases ending at about 2.5.

Figure: Consumer Prices: Advanced Foreign Economies

Line chart, 2007 to 2011. Unit is 12-month percent change. There are two series, "Headline" and "Core" (excludes all food and energy; staff calculation). Headline begins at about 5 and fluctuates but generally decreases to about -2.5 in early 2009. It generally increases to about 5 in early 2010 then generally decreases ending at about 4. Core begins at about 1 and fluctuates but remains about constant to the end of the timeline.

Note: Excludes Australia, Sweden, and Switzerland.

Source: Haver Analytics and CEIC.

Figure: Consumer Prices: Emerging Market Economies

Line chart, 2007 to 2011. Unit is 12-month percent change. There are three series, "Headline," "ex. Food - East Asia*," and "Ex. Food - Latin America." Headline begins at about 3 and generally increases to about 6.5 in mid-2008. It generally decreases to about 1 in mid-2009 then generally increases ending at about 4.5. Ex. Food - East Asia begins at about 2 and generally increases to about 4 in late 2008. It generally decreases to about -2 in mid-2009 then generally increases ending at about 2. Ex. Food - Latin America begins at about 4 and generally increases to about 6 in late 2008. It generally decreases to about 4 in late 2009 then generally increases to about 4.5 in early 2010. It remains about constant until late 2010 then generally decreases ending at about 4.

The Foreign Outlook

(Percent change, annual rate)

	2010			2011			2012
	H1	Q3	Q4	Q1	Q2	H2	
Real GDP							
Total foreign	5.5	2.3	3.4	4.0	2.8	3.4	3.5
Previous Tealbook	5.5	2.3	3.3	3.6	3.3	3.3	3.5
Advanced foreign economies	3.5	1.9	1.7	2.5	1.5	2.3	2.4
Previous Tealbook	3.5	1.9	1.7	2.3	2.0	2.0	2.3
Emerging market economies	8.1	2.8	5.5	5.9	4.4	4.8	4.9
Previous Tealbook	8.1	2.8	5.4	5.2	4.9	4.9	4.9
Consumer Prices							
Total foreign	2.4	2.3	5.3	4.4	3.2	2.5	2.3
Previous Tealbook	2.4	2.3	5.3	4.3	3.1	2.5	2.3
Advanced foreign economies	1.3	1.1	3.5	3.3	2.3	1.5	1.4
Previous Tealbook	1.3	1.1	3.6	2.8	2.0	1.5	1.4
Emerging market economies	3.5	3.5	6.9	5.5	4.1	3.4	3.2
Previous Tealbook	3.5	3.4	6.9	5.7	4.0	3.4	3.2

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

Figure: Real GDP [Total Foreign]

Line chart, 2007 to 2012. Unit is percent change, annual rate. There are two series, "Current" and "Previous Tealbook." Both series begin at about 5 and generally decrease together to about -10 in early 2009. They generally increase together to about 5 in early 2010 then generally decrease together to about 4 in early 2011. They remain about constant to the end of the timeline.

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

Line chart, 2007 to 2012. Unit is percent change, annual rate. There are four series, "Emerging Market Economies - Current," "Emerging Market Economies - Previous Tealbook," "Advanced Foreign Economies - Current," and "Advanced Foreign Economies - Previous Tealbook." Emerging Market Economies current and previous Tealbook begin at about 7 and generally decrease together to about -10 in early 2009. They generally increase together to about 10 in late 2009 then generally decrease together to about 3 in mid-2010. They generally increase together to about 5 in early 2011 and remain about constant to the end of the timeline. Advanced Foreign Economies current and previous Tealbook begin at about 4 and generally decrease together to about -10 in early 2009. They generally increase together to about 4 in early 2010 then fluctuate but remain about constant to the end of the timeline.

Figure: Consumer Prices [Total Foreign]

Line chart, 2007 to 2012. Unit is percent change, annual rate. There are two series, "Current" and "Previous Tealbook." Both series begin at about 3 and generally increase together to about 5 in early 2008. They generally decrease together to about -1 in late 2008 then fluctuate but generally increase together to about 5 in late 2010. They generally decrease together to about 2.5 in mid-2011 then remain about constant to the end of the timeline.

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

Line chart, 2007 to 2012. Unit is percent change, annual rate. There are four series, "Emerging Market Economies - Current," "Emerging Market Economies - Previous Tealbook," "Advanced Foreign Economies - Current," and "Advanced Foreign Economies - Previous Tealbook." Emerging Market Economies current and previous Tealbook begin at about 4 and generally increase together to about 8 in early 2008. They generally decrease together to about 0 in early 2009 then fluctuate but generally increase to about 7 in late 2010. They generally decrease together to about 3.5 in mid-2011 then remain about constant to the end of the timeline. Advanced Foreign Economies current and previous Tealbook begin at about 2.5 and generally decrease together to about 1 in late 2007. They generally increase together to about 4 in mid-2008 then generally decrease together to about -2 in late 2008. They generally increase together to about 3 in late 2010 then generally decrease together ending at about 2.

Note: Shading represents the projection period, which begins in 2011:Q1.

[Box:] Economic Effects of the Earthquake in Japan

Figure: Sendai Earthquake

Line chart, 2008 to 2011. Unit is 50+ = Expansion. 50 on the scale is marked by a horizontal line. March 11, 2011 is labeled by a vertical line. There are two series,

"PMI Composite" and "Consumer Confidence." PMI Composite begins at about 49 and generally decreases to about 30 in 2009:Q1. It generally increases to about 51 in 2009:Q3 then generally decreases to about 45 in 2009:Q4. It generally increases to about 53 in 2010:Q2 then generally decreases to about 47 in 2010:Q4. It generally increases to about 51 in 2011:Q1 then generally decreases ending at about 36 on March 11, 2011. Consumer confidence begins at about 37 and generally decreases to about 27 in 2008:Q4. It generally increases to about 44 in 2010:Q2 then generally decreases ending at about 38 on March 11, 2011.

Source: Haver Analytics.

Figure: Kobe Earthquake

Line chart, 1994 to 1996. Unit is an index, January 1994 = 100. January 16, 1995 is marked by a vertical line. There is one series, "Industrial Production" which begins at about 100 and generally increases to about 109 in 1994:Q4. It generally decreases to about 106 on January 16, 1995 then generally increases to about 111 in 1995:Q2. It generally decreases to about 106 in 1995:Q3 then generally increases to about 110 in 1995:Q4. It generally decreases to about 109 in 1996:Q1 then generally increases ending at about 113.

Source: Haver Analytics.

[Box:] Capital Controls in Emerging Market Economies

Figure: EME Net International Financial Flows

Stacked bar chart, 2008 to 2010. Unit is "Excluding changes in reserves, billions of dollars." Data are quarterly. There are four series, "Direct Investment," "Portfolio Investment," "Other Investment," and "Financial Derivatives." There is a fifth series presented as a line chart which shows the total of the other series. Approximate data values are: 2008:Q1 - Direct Investment 47, Portfolio Investment 2, Other Investment 50, Financial Derivatives 0, Total 99; 2008:Q2 - Direct Investment 30, Portfolio Investment 1, Other Investment 70, Financial Derivatives - 0, Total 101; 2008:Q3 - Direct Investment 20, Portfolio Investment 1, Other Investment 30, Financial Derivatives -49, Total 0; 2008:Q4 - Direct Investment 40, Portfolio Investment -75, Other Investment -155, Financial Derivatives 5, Total -255; 2009:Q1 - Direct Investment - 10, Portfolio Investment -25, Other Investment -20, Financial Derivatives 5, Total -30; 2009:Q2 - Direct Investment 20, Portfolio Investment 30, Other Investment -25, Financial Derivatives 0, Total 25; 2009:Q3 - Direct Investment 25, Portfolio Investment 50, Other Investment 5, Financial Derivatives 0, Total 80; 2009:Q4 - Direct Investment 15, Portfolio Investment 60, Other Investment 25, Financial Derivatives 0, Total 100; 2010:Q1 - Direct Investment 18, Portfolio Investment 50, Other Investment 2, Financial Derivatives 0, Total 70; 2010:Q2 - Direct Investment 19, Portfolio Investment 45, Other Investment 35, Financial Derivatives 0, Total 99; 2010:Q3 - Direct Investment 25, Portfolio Investment 73, Other Investment 2, Financial Derivatives 0, Total 100; 2010:Q4 - Direct Investment 20, Portfolio Investment 45, Other Investment 15, Financial Derivatives 0, Total 80.

Note: Countries included are Argentina, Brazil, Chile, Czech Republic, Hungary, Indonesia, India, South Korea, Malaysia, Mexico, Philippines, Poland, Russia, Singapore, Taiwan, Thailand, Turkey, and Ukraine.

Figure: Investment Flows to EME Dedicated Funds

Stacked bar chart, 2010 to 2011. Unit is billions of dollars. Data are weekly. There are two series, "Bond funds" and "Equity Funds." There is a third series presented as a line chart which shows total flows. Bond funds begins at about .5 and fluctuates but generally increases to about 2 in early 2010:Q2. It fluctuates but generally decreases to about -.5 in late 2010:Q2 then fluctuates but generally increases to about 1.25 in early 2010:Q3. It fluctuates but generally decreases to about .5 in late 2010:Q3. It fluctuates but generally increases to about 1.5 in early 2011:Q4 then fluctuates but generally decreases to about -.5 in mid-2010:Q4. It fluctuates but generally increases to about .75 in early 2011:Q1 then fluctuates but generally decreases to about -.75 in mid-2011:Q1. It fluctuates but generally increases to about 1 in late 2011:Q1. It generally decreases ending at about 0.5. Equity funds begins at about 1.5 and generally decreases to about -1 in mid-2010:Q1. It fluctuates but generally increases to about 2.5 in early 2010:Q2. It fluctuates but generally decreases to about -2.25 in late 2010:Q2. It fluctuates but generally increases to about 2.5 in early 2010:Q3 then fluctuates but generally decreases to about -.25 in late 2010:Q3. It fluctuates but generally increases to about 3.5 in early 2010:Q4 then generally decreases to about 1.5 in early 2010:Q4 then generally increases to about 3 in early 2010:Q4. It fluctuates but generally decreases to about 0 in late 2010:Q4 then generally increases to about 2 in late 2010:Q4. It fluctuates but generally decreases to about -3 in mid-2011:Q1 then generally increases to about .25 in late 2011:Q1. It generally decreases to about -2 in late 2011:Q1 then generally increases to about 2.5 in late 2011:Q1. It generally decreases ending at about .75. Total flows begins at about 1.5 and generally decreases to about -.5 in mid-2010:Q1. It fluctuates but generally increases to about 2.75 in early 2010:Q2 then fluctuates but generally decreases to about -2 in mid-2010:Q2. It generally increases to about 3 in late 2010:Q2 then fluctuates but generally decreases to about .5 in mid-2010:Q3. It generally increases to about 3 in early 2010:Q1 then fluctuates but generally decreases to about -1 in late 2010:Q4. It generally increases to about 2 in late 2010:Q4 then fluctuates but generally decreases to about -3 in mid-2011:Q1. It generally increases to about 0 in late 2011:Q1 then generally decreases to about -2 in late 2011:Q1. It generally increases to about 3 in late 2011:Q1 then then generally decreases ending at about .5.

Source: Emerging Portfolio Fund Research (EPFR).

Overview of Capital Controls Implemented in EMEs since 2009

Measures targeting the volume of flows		Measures targeting the composition of flows		
Tax on inflows	Required reserves on FX liabilities	Restrictions by asset type or maturity	Tax on short-term external borrowing	Quantitative limits on FX exposure
Brazil South Korea Thailand	Brazil Indonesia Taiwan	Indonesia Taiwan	Brazil South Korea	Indonesia South Korea Taiwan

Source: Government announcements.

Evolution of Staff's International Forecast

Figure: Total Foreign GDP

Line chart, Tealbook publication dates 1/22/2009 to 4/20/2011. Unit is percent change, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 3 and generally decreases to about 2.25 on 3/12/2009. It generally increases ending at about 4.25 on 4/20/2011. 2011 begins at about 4 on 9/16/2010 and generally decreases to about 4 on 12/8/2010. It generally increases ending at about 3.5 on 4/20/2011. 2012 begins at about 3.5 on 9/15/2010 and fluctuates but remains about constant ending on 4/20/2011.

Figure: Total Foreign CPI

Line chart, Tealbook publication dates 1/22/2009 to 4/20/2011. Unit is percent change, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 2.0 and generally decreases to about 1.5 on 3/12/2009. It generally increases to about 2.5 on 4/21/2010 then generally decreases to about 2.0 on 8/4/2010. It generally increases ending at about 3.25 on 4/20/2011. 2011 begins at about 1.75 on 9/16/2009 and generally increases ending at about 3.0 on 4/20/2011. 2012 begins at about 2.25 on 9/15/2010 and remains about constant ending on 4/20/2011.

Figure: U.S. Current Account Balance

Line chart, Tealbook publication dates 1/22/2009 to 4/20/2011. Unit is percent of GDP. There are three series, "2010," "2011," and "2012." 2010 begins at about -3.5 and generally decreases to about -4 on 3/12/2009. It generally increases to about -3 on 10/29/2009 then fluctuates but remains about constant until 9/15/2010. It generally decreases to about -3 on 10/27/2010 then generally increases ending at about -3 on 4/20/2011. 2011 begins at about -3 and fluctuates but remains about constant ending on 4/20/2011. 2012 begins at about -3 on 9/15/2010 then generally decreases to about -3.25 on 12/8/2010. It generally increases ending at about -2 on 4/20/2011.

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

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April 2011 Tealbook A Tables and Charts[‡]

Financial Developments

Policy Expectations and Treasury Yields

Figure: Selected Interest Rates

Line chart, March 14 through April 17. Unit is percent. There are two series, "10-year Treasury yield" and "June 2012 Eurodollar." 10-year Treasury Yield begins at about 3.4 and generally decreases to about 3.25 on March 14. It generally increases to about 3.3 on March 15 then generally decreases to about 3.15 on March 16. It fluctuates but generally increases to about 3.5 around March 29 then generally decreases to about 3.4 on March 30. It generally increases to about 3.5 around April 1 then generally decreases to about 3.4 on April 4. It generally increases to about 3.6 on April 7 then fluctuates but generally decreases ending at about 3.35. June 2012 Eurodollar begins at about 1.0 and generally decreases to about 0.9 on March 14. It fluctuates but generally increases to about 1.4 around April 1 then fluctuates but generally decreases ending at about 0.9.

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

Source: Bloomberg.

Figure: Implied Federal Funds Rate

Line chart, 2011 to 2013. Unit is percent. There are four series, "Mean: April 19, 2011," "Mean: March 14, 2011," "Mode: April 19, 2011," and "Mode: March 14, 2011." Mean: April 19 and March 14, 2011 begin at about 0.1 and generally increase together ending at about 1.5. Mode: April 19 and March 14, 2011 begin at about 0.1 and generally increase together ending at about 0.5.

Note: Mean is estimated from federal funds and Eurodollar futures. Mode is estimated from distribution of federal funds rate implied by interest rate caps. Both include an allowance for term premiums and other adjustments.

Source: Bloomberg and CME Group.

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

Bar chart, 2011:Q2 to 2013:Q2 and later. Unit is percent. There are two series, "Recent: 20 respondents," and "March FOMC: 20 respondents." Recent: 20 respondents begins at about 0 and generally increases to about 20 in 2012:Q1. It generally decreases ending at about 8 for 2013:Q2 and later. March FOMC: 20 respondents begins at about 0 and generally increases to about 18 in 2012:Q2. It generally decreases to about 17 in 2012:Q4 then remains constant through 2013:Q1 and later.

Note: For the March FOMC, the probability reported in the 2013:Q1 bin corresponds to the probability that the first policy rate hike will occur in 2013:Q1 or later.

Source: Desk's Dealer Survey from April 18, 2011.

Figure: Long-term Interest Rate Implied Volatility

Line chart January 2010 to April 19, 2011. Unit is percent. Data are daily. The series begins at about 7 and generally decreases to about 5 in mid-March 2010. It generally increases to about 8 in early May 2010 then generally decreases to about 6 in early August 2010. It generally increases to about 7.5 in late August 2010 then generally decreases to about 6 in early October 2010. It generally increases to about 9.25 in early December 2010 then fluctuates but generally decreases ending at about 7.

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

Source: Bloomberg.

Figure: Inflation Compensation

Line chart, 2007 to April 19, 2011. Unit is percent. Data are daily. There are two series, "5 to 10 years ahead" and "Next 5 years" (adjusted for the indexation-lag (carry) effect). 5 to 10 years begins at about 2.5 and generally increases to about 4 in 2008:Q4. It generally decreases to about 2 in 2009:Q1 then generally increases to about 3.5 in 2009:Q4. It generally decreases to about 2 in 2010:Q3 then generally increases ending at about 3. Next 5 years begins at about 2.25 and remains about constant until 2008:Q1. It generally increases to about 2.5 in 2008:Q2 then generally decreases to about -2 in 2008:Q4. It fluctuates but generally increases ending at about 2.25.

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

Source: Barclays PLC and staff estimates.

Asset Market Developments

Figure: S&P 500 Index

Line chart, 2008 to April 19, 2011. Unit is an index, March 14, 2011 = 100. Data are daily. The series begins at about 115 and generally decreases to about 100 in 2008:Q1. It generally increases to about 115 in 2008:Q3 then fluctuates but generally decreases to about 50 in 2009:Q1. It generally increases to about 95 in 2010:Q2 then generally decreases to about 80 in 2010:Q3. It generally increases ending at about 100.

Source: Bloomberg.

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

Line chart, 2007 to April 19, 2011. Unit is percent, log scale. Data are daily. The series begins at about 5 and fluctuates but generally increases to about 35 in 2008:Q1. It generally decreases to about 35 in 2008:Q2 then fluctuates but generally increases to about 80 in 2009:Q1. It generally decreases to about 15 in 2010:Q2 then generally increases to about 50 in 2010:Q3. It fluctuates but generally decreases ending at about 15.

Source: Chicago Board Options Exchange.

Figure: S&P 500 Earnings Per Share

Line chart, 2000 to 2011:Q1 (staff estimate). Unit is dollars per share. Data are quarterly. The series begins at about 14 and generally decreases to about 10 in 2002:Q1. It generally increases to about 24 in 2007:Q3 then fluctuates but generally decreases to about 5 in 3009:Q1. It generally increases ending at about 24.

Note: Data are seasonally adjusted by staff.

Source: Thomson Financial.

Figure: Corporate Bond Spreads

Line chart, 2007 to April 19, 2011. Unit is basis points. Data are daily. There are two series, "10-year high-yield" and "10-year BBB." 10-year high-yield begins at about 300 and fluctuates but generally increases to about 1700 in 2008:Q4. It fluctuates but generally decreases ending at about 375. 10-Year BBB begins at about 100 and generally increases to about 650 in 2008:Q4. It fluctuates but generally decreases ending at about 200.

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

Source: Merrill Lynch and staff estimates.

Figure: Spreads on 30-Day Commercial Paper

Line chart, March 2009 to April 19, 2011. Unit is basis points. Data are 5-day moving averages. There are two series, "A2/P2" and "ABCP." A2/P2 begins at about 100 and generally decreases to about 15 in February 2010. It generally increases to about 25 in June 2010 then fluctuates but remains about constant to the end of the timeline. ABCP begins at about 35 and fluctuates but generally decreases to about 10 in April 2010. It generally increases to about 25 in June 2010 then fluctuates but generally decreases ending at about 10.

Note: The ABCP spread is the AA ABCP rate minus the AA nonfinancial rate. The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate.

Source: Depository Trust & Clearing Corporation.

Figure: Libor over OIS Spreads

Line chart, 2009 to April 20, 2011. Unit is basis points. Data are daily. There are three series, "1-month," "3-month," and "6-month." 1-month begins at about 10 and remains about constant until early 2010:Q2. It generally increases to about 10 in early 2010:Q3 then generally decreases to about 5 in late 2010:Q3. It generally increases ending at about 10. 3-month begins at about 45 and generally decreases to about 10 in late 2010:Q1. It generally increases to about 30 in early 2010:Q3 then generally decreases to about 10 in late 2010:Q3. It generally increases ending at about 15. 6-month begins at about 100 and generally decreases to about 20 in late 2010:Q1. It generally increases to about 55 in early 2010:Q3 then generally decreases ending at about 30.

Source: British Bankers' Association and Prebon.

[Box:] Effects of the FDIC's New Deposit Insurance Assessment System on Short-Term Market Interest Rates

Short-term interest rates	Average March 2011 basis points	Average April 1-7, 2011, basis points
Effective federal funds	14	10
Treasury GC repo	13	5
Effective overnight Eurodollar	15	11

Four-week Treasury bill	6	3
Overnight AA commercial paper	14	10

Source: Federal Reserve Bank of New York, Depository Trust and Clearing Corporation, and ICAP.

Business Finance

Figure: Selected Components of Net Debt Financing, Nonfinancial Firms

Bar chart, 2007 to 2011:Q1. Unit is billions of dollars. Data are monthly rate. There are three series, "Bonds," "C&I loans" (period-end basis, seasonally adjusted), and "Commercial paper" (period-end basis, seasonally adjusted). There is a fourth series presented as a line chart summing the other series. Approximate data are: 2007: Bonds 25, C&I loans 20, Commercial paper 0, Total 45; 2008: Bonds 17, C&I loans 10, Commercial paper 2, total 29; 2009: Bonds 35, C&I loans -22, Commercial paper -13, total 0; 2010:H1: Bonds 30, C&I Loans -18, Commercial paper 8, total 20; 2010:H2: Bonds 40, C&I Loans 2, Commercial paper 0, total 42; 2011:Q1: Bonds 30, C&I Loans 8, Commercial Paper 2, total 40.

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

Figure: Institutional Leveraged Loan Issuance

Bar chart, 2005 to 2011:Q1. Unit is billions of dollars. Data are quarterly rate. The series begins at about 60 and generally increases to about 110 in 2007. It generally decreases to about 15 in 2008 then generally increases ending at about 110.

Source: Reuters Loan Pricing Corporation.

Figure: Selected Components of Net Equity Issuance, Nonfinancial Firms

Bar chart, 2007 to 2010:Q4 (preliminary). Unit is billions of dollars. Data are monthly rate. There are four series, "Public Issuance," "Private issuance," "Repurchases," and "Cash mergers." There is a fifth series presented as a line chart which sums the total of the other series. Approximate values are: 2007: Public Issuance 2, Private Issuance 23, Repurchases -45, Cash Mergers -35, Total -55; 2008: Public Issuance 2, Private Issuance 23, Repurchases -30, Cash Mergers -20, Total -25; 2009: Public Issuance 2, Private Issuance 15, Repurchases -12, Cash Mergers -12, Total -7; 2010:H1: Public Issuance 2, Private Issuance 13, Repurchases -25, Cash Mergers -3, Total -11; 2010:Q3: Public Issuance 2, Private Issuance 13, Repurchases -25, Cash Mergers -5, Total -13; 2010:Q4: Public Issuance 10, Private Issuance 10, Repurchases -30, Cash Mergers -20, Total -30.

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

Figure: Expected Nonfinancial Year-Ahead Defaults

Line chart, 1994 to April 2011. Unit is percent of liabilities. Data are monthly. The series begins at about 0 and remains about constant until late 1997. It generally increases to about 4.5 in late 2002 then generally decreases to about 0 in early 2007. It generally increases to about 5 in early 2009 then generally decreases ending at about 1.

Note: Firm-level estimates of default weighted by firm liabilities as a percent of total liabilities, excluding defaulted firms.

Source: Calculated using firm-level data from Moody's KMV.

Figure: Bond Ratings Changes of Nonfinancial Firms

Bar chart, 1990 to 2011:Q1. Unit is percent of outstandings. Data are annual rate. There are two series, "Upgrades" and "Downgrades." Upgrades begins at about 20 and generally increases to about 18 in 1991. It fluctuates but generally decreases to about 8 in 1994. It generally increases to about 20 in 1995 then generally decreases to about 10 in 1997. It generally increases to about 18 in 1998 then generally decreases to about 2 in 2002. It generally increases to about 10 in 2007 then generally decreases to about 4 in 2008. It generally increases to about 18 in 2010:H1 then generally decreases ending at about 17 in 2011:Q1. Downgrades begins at about 30 and generally increases to about 43 in 1992. It generally decreases to about 10 in 1995 then remains about constant until 1998. It generally increases to about 40 in 2002 then generally decreases to about 10 in 2003. It generally increases to about 15 in 2006 then generally decreases to about 10 in 2007. It generally increases to about 20 in 2009 then fluctuates but generally decreases ending at about 2 in 2011:Q1.

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

Figure: CMBS Issuance

Bar chart, 2000 to 2011:Q1. Unit is billions of dollars. Data are annual rate. The series begins at about 40 and generally increases to about 230 in 2007. It generally decreases to about 0 then generally increases ending at about 38 in 2011:Q1.

Source: Commercial Mortgage Alert.

Household Finance

Figure: Mortgage Rate and MBS Yield

Line chart, 2007 to 2011. Unit is percent. Data are weekly. There are two series, "30-year conforming fixed mortgage rate" and "MBS Yield." 30-year conforming fixed mortgage rate begins at about 6.4 and generally increase to about 6.6 in 2007:Q3. It generally decreases to about 5.5 in 2008:Q1 then generally increases to about 6.5 in 2008:Q3 then generally decreases to about 4.5 in 2009:Q1. It generally increases to about 5.5 in 2009:Q2 then fluctuates but generally decreases to about 4.5 in 2010:Q1. It generally increases ending at about 5.0 on April 13, 2011. MBS yield begins at about 5.6 and generally increases to about 6.5 in 2007:Q3. It generally decreases to about 4.6 in 2007:Q4 then fluctuates but generally increases to about 6.0 in 2008:Q4. It generally decreases to about 3.5 in 2009:Q1 then generally increases to about 5.0 in 2009:Q2. It fluctuates but generally decreases to about 3.5 in 2010:Q4. It generally increases ending at about 4.5 on April 19, 2011.

Note: For MBS yield, Fannie Mae 30-year current coupon rate.

Source: For mortgage rate, Freddie Mac; for MBS yield, Bloomberg.

Figure: Purchase and Refinance Activity

Line chart, 2002 to April 15, 2011. Unit is an index, March 16, 1990 = 100. Data are weekly. There are two series, "Purchase Index" and "Refi Index." Purchase index begins at about 300 and generally increases to about 500 in late 2005. It generally decreases to about 350 in late 2006 then generally increases to about 450 in early 2007. It fluctuates but generally decreases ending at about 200. Refi index begins at about 2000 then generally increases to about 10000 in mid-2003. It generally decreases to about 2000 in early 2006 then generally increases to about 4000 in early 2008. It generally increases to about 6000 in early 2009 then generally decreases to about 2000 in early 2010. It generally increases to about 5500 in late 2010 then generally decreases ending at about 2000.

Note: Seasonally adjusted by FRB staff.

Source: Mortgage Bankers Association.

Figure: Growth of Home Mortgage Debt

Line chart, 1992 to 2010:Q4. Unit is percent. Data are quarterly, s.a.a.r. The series begins at about 8 and generally decreases to about 4 in 1993. It generally increases to about 16 in 2003 then generally decreases to about -4 in 2010. It generally increases ending at about -1.

Source: Federal Reserve Board.

Figure: Prices of Existing Homes

Line chart, 2005 to 2011. Unit is an index, with peaks normalized to 100. Data are monthly. There are three series, "FHFA," "CoreLogic," and "20-city S&P/Case-Shiller." FHFA begins at about 90 and generally increases to about 100 in early 2007. It generally decreases ending at about 85 in January 2011. CoreLogic begins at about 90 and generally increases to about 100 in early 2006. It generally decreases to about 70 in early 2009 then generally increases to about 72 in mid-2010. It generally decreases ending at about 68 in February 2011. 20-city S&P/Case-Shiller begins at about 85 and generally increases to about 100 in early 2006. It generally decreases to about 69 in early 2009 then generally increases to about 72 in late 2010. It generally decreases ending at about 70 in January 2011.

Source: For FHFA, Federal Housing Finance Agency; for CoreLogic, CoreLogic; for S&P/Case-Shiller, Standard & Poor's.

Figure: Delinquency Rates

Line chart, 2003 to 2011. Unit is percent of loans. Data are monthly. There are three series, "Credit card loans in securitized pools," "Auto loans at captive finance companies," and "Prime mortgages." Credit card loans in securitized pools begins at about 5.5 and generally decreases to about 3.5 in late 2005. It generally increases to about 6 in early 2009 then generally decreases ending at about 4 in January 2011. Auto loans at captive finance companies begins at about 2 and generally increases to about 3.5 in late 2009. It generally decreases ending at about 2.5 in February 2011. Prime mortgages begins at about 1.5 and fluctuates but remains about constant until early 2007. It generally increases to about 7 in early 2010 then generally decreases ending at about 6 in February 2011.

Note: For mortgage delinquency rate, percent of loans 90 or more days past due or in foreclosure.

Source: For mortgage rate, LPS Applied Analytics; for credit card, Moody's; for auto loans, Federal Reserve Board.

Figure: Gross Consumer ABS Issuance

Stacked bar chart, 2006 to March 2011. Unit is billions of dollars. Data are monthly rate. There are three series, "Student Loan," "Credit Card," and "Auto." Approximate data are: 2006: Student Loan 7, Credit card 6, Auto 7; 2007: Student Loan 5, Credit card 9, Auto 6; 2008:H1: Student Loan 4, Credit card 9, Auto 5; 2008:H2: Student Loan 3, Credit card 10, Auto 5; 2009:H1: Student Loan 1, Credit card 2, Auto 1; 2009:H2: Student Loan 3, Credit card 8, Auto 7; 2010:H1: Student Loan 2, Credit card 1, Auto 4; 2010:Q3: Student Loan 3, Credit card 1, Auto 4; 2010:Q4: Student Loan 2, Credit Card 0, Auto 3; January 2011: Student Loan 0, Credit card 1, Auto 3; February 2011: Student Loan 1, Credit card 0, Auto 6; March 2011: Student Loan 3, Credit card 2, Auto 3.

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

[Box:] Balance Sheet Developments over the Intermeeting Period

Federal Reserve Balance Sheet

Billions of dollars



	Change since last FOMC	Current (04/18/11)	Maximum level	Date of maximum level
Total assets	92	2,680	2,680	04/18/11
Selected assets:				
Liquidity programs for financial firms	-0	+0	677	11/06/08
Primary, secondary, and seasonal credit	-0	+0	114	10/28/08
Foreign central bank liquidity swaps	0	0	586	12/04/08
Term Asset-Backed Securities Loan Facility (TALF)	-2	18	49	03/11/10
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	-1	63	75	12/30/08
Securities held outright*	91	2,456	2,456	04/18/11
U.S. Treasury securities	121	1,394	1,394	04/18/11
Agency debt securities	-15	128	169	03/11/10
Agency mortgage-backed securities	-16	933	1,129	06/14/10
Total liabilities	92	2,628	2,628	04/18/11
Selected liabilities:				
Federal Reserve notes in circulation	9	969	970	04/13/11
Reverse repurchase agreements	-1	56	110	10/14/08
Foreign official and international accounts	-1	56	92	12/22/08
Others	0	0	26	09/26/08
Reserve balances of depository institutions**	91	1,480	1,534	04/13/11
Term deposits held by depository institutions	5	5	5	11/03/10
U.S. Treasury, general account	65	89	187	12/31/09
U.S. Treasury, supplementary financing account	-45	5	559	10/22/08
Funds from AIG asset dispositions, held as agent	0	0	27	01/13/11
Other deposits	-32	+0	81	03/12/10
Total capital	+0	53	60	08/03/10

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](#)

Foreign Developments

Figure: Stock Price Indexes

Line chart, 2010 to April 19, 2011. Unit is an index, January 1, 2010 = 100. Data are daily. There are four series, "DJ Euro," "Topix," "FTSE," and "MSCI Emerging Markets." DJ Euro begins at about 100 and generally decreases to about 9 in late 2010:Q1. It generally increases to about 103 in early 2010:Q2 then generally decreases to about 93 in early 2010:Q3. It fluctuates but generally increases to about 198 in mid-2011:Q1. It generally decreases to about 100 in late 2011:Q1 then generally increases to about 108 in early 2011:Q2. It generally decreases ending at about 102. Topix begins at about 100 and generally increases to about 105 in early 2010:Q1. It generally decreases to about 98 in late 2010:Q1 then generally increases to about 110 in mid-2010:Q2. It generally decreases to about 90 in early 2010:Q3 then generally increases to about 110 in mid-2011:Q1. It generally decreases to about 85 in late 2011:Q1 then generally increases to about 99 in late 2011:Q1. It generally decreases ending at about 90. FTSE begins at about 100 and generally decreases to about 92 in mid-2010:Q1. It generally increases to about 109 in early 2010:Q2 then generally decreases to about 90 in late 2010:Q2. It fluctuates but generally increases to about 110 in mid-2011:Q1. It generally decreases to about 102 in late 2011:Q1 then generally increases to about 111 in early 2011:Q2. It generally decreases ending at about 110. MSCI Emerging Markets begins at about 100 and generally decreases to about 90 in mid-2010:Q1. It generally increases to about 105 in early 2010:Q2 then generally decreases to about 85 in mid-2010:Q2. It fluctuates but generally increases to about 120 in early 2011:Q1. It generally decreases to about 110 in late 2011:Q1 then generally increases ending at about 120.

Source: Bloomberg.

Figure: Nominal 10-Year Government Bond Yields

Line chart, 2010 to April 19, 2011. Unit is percent. Data are daily. There are three series, "Germany," "United Kingdom," and "Japan." Germany begins at about 3.5 and generally decreases to about 2 in late 2010:Q3. It generally increases ending at about 3.25. United Kingdom begins at about 4 and generally decreases to about 3 in late 2010:Q3. It generally increases to about 4 in mid-2011:Q1 then fluctuates but generally decreases ending at about 3.5. Japan begins at about 1.5 and generally decreases to about 1 in mid-2010:Q3. It generally increases to about 1.25 in late 2010:Q3 then generally decreases to about 1 in early 2010:Q1. It generally increases

ending at about 1.25.

Source: Bloomberg.

Figure: Nominal Trade-Weighted Dollar Indexes

Line chart, 2010 to April 19, 2011. Unit is an index, January 1, 2010 = 100. Data are daily. There are three series, "Broad," "Major," and "OITP" (Other Important Trading Partners). Broad begins at about 100 and fluctuates but generally increases to about 105 in late 2010:Q2. It fluctuates but generally decreases to about 95 in early 2010:Q4 then generally increases to about 100 in late 2010:Q4. It generally decreases ending at about 95. Major begins at about 200 and fluctuates but generally increases to about 110 in late 2010:Q2. It fluctuates but generally decreases to about 95 in early 2010:Q4. It generally increases to about 103 in late 2010:Q4 then generally decreases ending at about 95. OITP begins at about 100 and fluctuates but generally decreases to about 97 in early 2010:Q2. It generally increases to about 103 in late 2010:Q2 then fluctuates but generally decreases ending at about 95.

Source: Federal Reserve Board and Bloomberg.

Figure: Bilateral Exchange Rates

Line chart, 2010 to April 19, 2011. Unit is an index of foreign currency per dollar, January 1, 2010 = 100. Data are daily. There are four series, "Euro," "Chilean peso," "Yen," and "Korean won." Euro begins at about 100 and generally increases to about 120 in late 2010:Q2. It fluctuates but generally decreases ending at about 100. Chilean peso begins at about 100 and generally increases to about 209 in mid-2010:Q1. It fluctuates but generally decreases to about 90 in early 2011:Q1. It generally increases to about 100 in early 2011:Q1 then fluctuates but generally decreases ending at about 92. Yen begins at about 100 and generally decreases to about 94 in late 2010:Q1. It generally increases to about 100 in late 2010:Q2 then fluctuates but generally decreases ending at about 90. Korean won begins at about 100 and fluctuates but generally increases to about 110 in late 2010:Q2. It fluctuates but generally decreases ending at about 92.

Source: Federal Reserve Bank of New York.

Figure: Euro-Area 10-Year Government Bond Spreads

Line chart, 2010 to April 19, 2011. Unit is percentage points. Data are daily. There are four series, "Greece," "Portugal," "Spain," and "Ireland." Greece begins at about 2 and generally increases to about 10 in mid-2010:Q2. It generally decreases to about 4 in mid-2010:Q2 then generally increases to about 10 in late 2010:Q3. It generally decreases to about 6.5 in early 2010:Q4 then generally increases to about 10 in early 2011:Q1. It generally decreases to about 8 in mid-2011:Q1 then generally increases ending at about 12. Portugal begins at about 1 and fluctuates but generally increases ending at about 6. Spain begins at about 0.5 and fluctuates but generally increases ending at about 2. Ireland begins at about 1.5 and fluctuates but generally increases to about 7 in late 2011:Q1. It generally decreases to about 6 in early 2011:Q2 then generally increases ending at about 7.

Note: Spread over German bunds.

Source: Bloomberg.

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

Bar chart, 2009 to February 2011. Unit is billions of dollars, annual rate. There are two series, "Official" and "Private." Approximate values are: 2009: Official, 490, private 20; 2010:H1: Official 200, private 400; 2010:Q3: Official 700, private 250; 2010:Q4: Official 350, private 100; January 2011: Official 50, private 150; February 2011: Official 300, private -20.

Source: Treasury International Capital data adjusted for staff estimates.

Commercial Banking and Money

Figure: Bank Credit

Line chart, 2008 to April 6, 2011. Unit is an index, January 2008 = 100. Data are 4-week moving averages. There are two series, "Securities" and "Total loans." Securities begins at about 100 and fluctuates but generally increases ending at about 115. Total loans begins at about 100 and generally increases to about 105 in late 2008. It generally decreases ending at about 86.

Note: The data have been adjusted to remove the estimated effects of marking certain securities to market (FAS 115); the initial consolidations of assets under FIN 46, FAS 166, and FAS 167; and nonbank structure activity of \$5 billion or more.

Source: Federal Reserve Board.

Figure: Changes in Standards and Demand for Bank Loans

Line chart, 1991 to April 2011. Unit is net percent. Data are quarterly. There are two series, "Standards" and "Demands." Standards begins at about 25 and generally decreases to about -25 in 1994. It generally increases to about 45 in 2000 then generally decreases to about -25 in 2005. It generally increases to about 90 in 2008 then generally decreases ending at about -25. Demand begins at about -25 and generally increases to about 30 in 1994. It generally decreases to about -15 in 1994 then generally increases to about 30 in 1997. It generally decreases to about -50 in 2001 then generally increases to about 25 in 2005. It generally decreases to about -50 in 2009 then generally increases ending at about 0.

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

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

Figure: Changes in Spreads on C&I Loans

Line chart, 1990 to April 2011. Unit is net percent. Data are quarterly. There are two series, "Large and middle-market firms" and "Small firms." Large and middle-market firms begins at about 10 and generally increases to about 65 in 1991. It generally decreases to about -50 in 1994 then fluctuates but generally increases to about 60 in 2002. It generally decreases to about -75 in 2005 then generally increases to about 100 in 2008. It generally decreases ending at about -50. Small firms begins at about 10 and generally increases to about 30 in 1991. It generally decreases to about -40 in 1997 then generally increases to about 35 in 2002. It generally decreases to about -50 in 2005 then generally increases to about 100 in 2008. It generally decreases ending at about -50.

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

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

Figure: Changes in Willingness to Make Consumer Installment Loans

Line chart, 1990 to April 2011. Unit is net percent. Data are quarterly. The series begins at about 10 and generally decreases to about -15 in 1991. It generally increases to about 25 in 1994 then generally decreases to about -5 in 1996. It generally increases to about 15 in 1999 then generally decreases to about -5 in 2002. It generally increases to about 25 in 2005 then generally decreases to about -50 in 2008. It generally increases ending at about 26.

Note: Net percent of respondents that reported increased willingness to make consumer installment loans over the past three months.

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	RMMF	Curr.
2008	8.6	6.9	12.3	13.8	5.8
2009	5.0	17.1	-15.7	-22.1	6.9
2010					
H1	1.3	9.6	-22.4	-22.8	4.5
H2	5.1	11.9	-23.4	-9.4	7.0
2011					
Jan.	2.7	6.8	-24.1	-2.7	5.6
Feb.	7.4	12.8	-17.9	-13.6	11.3
Mar. (p)	3.0	6.4	-20.1	-11.5	12.5

Note: RMMF are retail money market mutual funds.

p Preliminary. [Return to table](#)

Source: Federal Reserve Board.

Figure: Interest Rates on Selected Components of M2

Line chart, 2008 to March 2011 (preliminary). Unit is percent. Data are monthly. There are three series, "Retail money market mutual funds," "Small time deposits," and "Liquid deposits." Retail money market mutual funds begins at about 3.5 and generally decreases to about 0 in mid-2009. It remains about constant to the end of the timeline. Small time deposits begins at about 3 and generally decreases to about 1.75 in early 2008. It generally increases to about 2 in late 2008 then generally decreases to about 0 in early 2010. It remains about constant to the end of the timeline. Liquid deposits begins at about 2.25 and generally decreases to about 1 in mid-2008. It generally increases to about 1.5 in mid-2008 then generally decreases to about .5 in early 2010. It remains about constant to the end of the timeline.

Note: Interest rates on small time deposits and liquid deposits reflect the deposit-weighted average interest rate paid at banks and thrifts for each component.

Source: Federal Reserve Board.

Appendix: Senior Loan Officer Opinion Survey on Bank Lending Practices

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

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

Line chart 1990 to 2011. Unit is percent. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Both series begin at about 60 and generally decrease together to about -20 in 1993:Q3. They generally increase together to about 60 in 2000:Q1 then generally decrease together to about -20 in mid-

2005. They generally increase together to about 80 in 2008:Q4 then generally decrease together ending at about -20.

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

Line chart 1990 to 2011. Unit is percent. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Loans to large and medium-sized firms begins at about 10 then generally increases to about 60 in 1991:Q2. It generally decreases to about -60 in 1993:Q4. It generally increases to about 40 in 1998:Q4 then generally decreases to about 10 in 1999:Q1. It generally increases to about 60 in 2002:Q2 then generally decreases to about -70 in 2005:Q2. It generally increases to about 100 in 2008:Q4 then generally decreases ending at about -60. Loans to small firms begins at about 5 and generally increases to about 40 in 1991:Q1. It generally decreases to about -30 in 1993:Q4 then fluctuates but generally increases to about 40 in 2001:Q4. It generally decreases to about -60 in 2005:Q2 then generally increases to about 90 in 2008:Q4. It generally decreases ending at about -55.

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

Line chart 1990 to 2011. Unit is percent. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Loans to large and medium-sized firms begins at about -30 and generally increases to about 40 then generally decreases to about 0 in 1996:Q1. It generally increases to about 30 in 1998:Q1. It generally decreases to about -75 in 2001:Q4 then generally increases to about 40 in 2005:Q1. It generally decreases to about -60 in 2009:Q1. It generally increases ending at about 30. Loans to small firms begins at about -30 and generally increases to about 40 in 1994:Q1. It generally decreases to about -60 in 2001:Q4 then generally increases to about 40 in 2004:Q1. It generally decreases to about -60 in 2009:Q2. It generally increases ending at about 15.

Measures of Supply and Demand for Commercial Real Estate Loans

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

Line chart, 1990 to 2011. Unit is percent. The series begins at about 70 and generally decreases to about -5 in 1994:Q1. It generally increases to about 45 in 1999:Q1 then generally decreases to about 5 in 1999:Q1. It generally increases to about 40 in 2002:Q1 then generally decreases to about -20 in 2005:Q1. It generally increases to about 90 in 2009:Q1 then generally decreases ending at about -5.

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

Line chart 1995 to 2011. Unit is percent. The series begins at about 10 in 1995:Q2 and generally decreases to about 0 in 1996:Q4. It generally increases to about 45 in 1998:Q3 then generally decreases to about 0 in 1991:Q1. It generally increases to about 30 in 1999:Q4 then generally decreases to about -50 in 2001:Q4. It generally increases to about 25 in 2006:Q1 then generally decreases to about -65 in 2009:Q2. It generally increases ending at about 35.

Measures of Supply and Demand for Residential Mortgage Loans

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

Line chart, 1990 to 2006. Unit is percent. There is one series, "All residential." The series begins at about 10 and generally increases to about 35 in 1991:Q2. It generally decreases to about -10 in 1994:Q1 then fluctuates but generally increases to about 15 in 2003:Q1. It generally fluctuates but generally decreases to about -10 in 2006:Q3. It generally increases ending at about 20.

There is a second panel showing a line chart from 2007 to 2011. Unit is percent. There are three series, "Prime," "Nontraditional," and "Subprime." Prime begins at about 18 and generally increases to about 75 in 2008:Q2. It generally decreases to about -5 in 2010:Q3 then generally increases to about 10 in 2010:Q4. It generally decreases ending at about 0. Nontraditional begins at about 40 and generally increases to about 90 in 2009:Q1. It generally decreases to about 5 in 2010:Q1 then generally increases to about 15 in 2011:Q1. It generally decreases ending at about 25. Subprime begins at about 55 and generally increases to about 100 in 2008:Q4. It generally decreases ending at about 45 in 2009:Q1.

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

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

Line chart, 1990 to 2006. There is one series, "All residential." The series begins at about -45 and generally decreases to about -60 in 1991:Q1. It generally increases to about 60 in 1992:Q1 then fluctuates but generally decreases to about 5 in 1993:Q1. It generally increases to about 40 in 1994:Q1 then generally decreases to about -80 in 1995:Q1. It generally increases to about 55 in 1996:Q1 then generally decreases to about -20 in 1996:Q2. It generally increases to about 60 in 1998:Q4 then generally decreases to about -70 in 2000:Q1. It generally increases to about 50 in 2001:Q1. It generally decreases to about 0 in 2001:Q4 then fluctuates but generally increases to about 50 in 2003:Q2. It generally decreases to about -40 in 2004:Q1 then generally increases to about 20 in 2005:Q4. It fluctuates but generally

decreases to about 060 in 2006:Q4 then generally increases ending at about -40.

There is a second panel showing a line chart from 2007 to 2011. Unit is percent. There are three series, "Prime," "Nontraditional," and "Subprime." Prime begins at about -20 then generally increases to about -10 in 2007:Q4. It generally decreases to about -60 in 2008:Q1 then generally increases to about -20 in 2008:Q2 then generally decreases to about -50 in 2009:Q1 then generally increases to about 40 in 2009:Q2. It fluctuates but generally decreases ending at about -35. Nontraditional begins at about -15 and generally decreases to about -70 in 2008:Q1. It generally increases to about -25 in 2008:Q1 then generally decreases to about -75 in 2008:Q4. It generally increases to about -5 in 2009:Q4 then generally decreases to about -35 in 2010:Q1. It generally increases to about 0 in 2010:Q2 then generally decreases ending at about -20. Subprime begins at about -20 then generally decreases to about -70 in 2008:Q1. It generally increases to about -25 in 2008:Q4 then generally decreases to about -100 in 2008:Q4. It generally increases ending at about -55 in 2009:Q1.

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

Measures of Supply and Demand for Consumer Loans

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

Line chart, 1996 to 2011. Unit is percent. There are four series, "Credit card loans," "Consumer loans excluding credit card loans," "New and used auto loans," and "Consumer loans excluding credit cards and auto loans." Credit card loans begins at about 20 in 1996:Q1 and generally increases to about 40 in 1996:Q4. It generally decreases to about -5 in 2000:Q3 then generally increases to about 20 in 2001:Q1. It generally decreases to about -10 in 2007:Q2 then generally increases to about 65 in 2008:Q3. It generally decreases ending at about -20. Consumer loans excluding credit card loans begins at about 20 in 1996:Q1 and generally decreases to about 10 in 1996:Q1. It generally increases to about 20 in 1996:Q4 then generally decreases to about 0 in 1999:Q4. It generally increases to about 20 in 2002:Q2 then generally decreases to about -10 in 2005:Q2. It generally increases to about 60 in 2008:Q3 then generally decreases to about -15 in 2010:Q3. It generally increases ending at about -5. New and used auto loans is presented as a single point at about -5 in 2011:Q2. Consumer loans excluding credit cards and auto loans is presented as a single point at about -15 in 2011:Q2.

Note: For data starting in 2011:Q2, changes in standards for new auto loans, used auto loans, and consumer loans excluding credit card and auto loans are reported separately. For the 2011:Q2 survey only, banks were asked about standards for new and used auto loans separately, but because responses were identical across both categories for all banks, the series are combined into a single point.

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

Line chart, 1990 to 2011. Unit is percent. The series begins at about 10 and generally decreases to about -20 in 1991:Q1. It generally increases to about 25 in 1994:Q3 then generally decreases to about -5 in 1996:Q3. It generally increases to about 15 in 1999:Q3 then generally decreases to about -5 in 2002:Q1. It generally increases to about 20 in 2005:Q4 then generally decreases to about -60 in 2008:Q4. It generally increases ending at about 30.

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

Line chart, 1991 to 2011. Unit is percent. There are four series, "All consumer loans," "Credit card loans," "Auto loans," and "Consumer loans excluding credit cards and auto loans." All consumer loans begins at about -25 in 1992:Q1 and generally increases to about 20 in 1992:Q2. It generally decreases to about 0 in 1993:Q1 then generally increases to about 40 in 1994:Q2. It generally decreases to about -15 in 1997:Q1 then fluctuates but generally increases to about 20 in 1999:Q2. It generally decreases to about -40 in 2001:Q1. It generally increases to about 10 in 2001:Q2 then generally decreases to about -20 in 2001:Q4. It generally increases to about 40 in 2003:Q4 then fluctuates but generally decreases to about -40 in 2006:Q4. It fluctuates but generally decreases ending at about 5. Credit card loans is presented as a single point at about -5 in 2011:Q2. Auto loans is presented as a single point at about 25 in 2011:Q2. Consumer loans excluding credit cards and auto loans is presented as a single point at about 0 in 2011: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.

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

Last update: February 3, 2017

Risks and Uncertainty

Alternative Scenarios

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

Measure and scenario	2011		2012	2013	2014-15
	H1	H2			
Real GDP					
Extended Greenbook baseline	2.4	4.0	4.2	4.3	3.6
Lower potential	1.8	2.8	2.8	3.7	3.4
Stronger recovery	2.6	4.6	5.2	4.6	2.8
Weaker recovery	2.2	3.3	2.8	3.4	4.6
With further disinflation	2.1	3.2	2.8	3.3	4.7
Higher oil prices	2.3	3.5	3.7	4.1	3.6
With weaker dollar	2.3	3.5	3.9	4.1	3.5
Unemployment rate ¹					
Extended Greenbook baseline	8.9	8.7	7.7	7.0	5.6
Lower potential	9.1	8.7	8.0	7.4	5.9
Stronger recovery	8.9	8.6	7.1	6.0	5.3
Weaker recovery	8.9	8.8	8.4	8.4	6.3
With further disinflation	8.9	8.9	8.5	8.5	6.4
Higher oil prices	8.9	8.8	8.0	7.4	5.9
With weaker dollar	8.9	8.8	7.9	7.2	5.8
Core PCE inflation					
Extended Greenbook baseline	1.4	1.3	1.4	1.5	1.6
Lower potential	1.5	2.2	2.5	2.6	2.4
Stronger recovery	1.4	1.3	1.4	1.6	2.0
Weaker recovery	1.4	1.3	1.3	1.3	1.1
With further disinflation	1.4	1.1	.8	.4	.4
Higher oil prices	1.5	1.7	1.6	1.5	1.6
With weaker dollar	1.5	1.9	1.8	1.6	1.6
Federal funds rate ¹					
Extended Greenbook baseline	.1	.1	.5	2.0	3.8
Lower potential	.1	.6	1.5	2.8	4.4
Stronger recovery	.2	.4	1.7	3.4	4.0
Weaker recovery	.1	.1	.1	.2	3.2
With further disinflation	.1	.1	.1	.1	2.1
Higher oil prices	.1	.1	.5	1.8	3.5
With weaker dollar	.1	.1	.7	1.9	3.7

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

Figure: Real GDP

Line chart, 2008 to 2015. Unit is 4-quarter percent change. There are seven series, "Extended Greenbook baseline," "Lower Potential," "Stronger recovery," "Weaker recovery," "Weaker recovery, further disinflation," "Higher oil prices," and "Higher oil prices, weaker dollar." Extended Greenbook baseline begins at about 2 and generally decreases to about -4 in 2009:Q3. It generally increases to about 3.5 in 2010:Q4 then generally decreases to about 2.5 in 2011:Q1. It generally increases to about 4.5 in 2014:Q1 then generally decreases ending at about 3. Lower potential begins at about 2.5 in 2010:Q4 and generally increases to about 4 in 2014:Q3. It generally decreases ending at about 3. Stronger recovery begins at about 2.5 in 2010:Q4 and generally increases to about 5.5 in 2013:Q1. It generally decreases ending at about 2. Weaker recovery begins at about 2.5 in 2010:Q4 and generally increases to about 3 in 2012:Q2. It generally decreases to about 2.75 in 2013:Q1 then generally increases ending at about 4.75. Weaker recovery, further disinflation begins at about 2.5 in 2010:Q4 then generally increases to about 3.25 in 2012:Q1. It generally decreases to about 3 in 2013:Q3 then generally increases ending at about 5. Higher oil prices begins at about 2.5 in 2010:Q4 and generally increases to about 4 in 2014:Q3. It generally decreases ending at about 3. Higher oil prices, weaker dollar begins at about 2.5 in 2010:Q4 and generally increases to about 4 in 2013:Q3. It generally decreases ending at about 3. 70-percent interval is presented as a dark gray range that begins at about 2.5 in 2010:Q4 and generally increases to about [2.25, 6.25] in 2014:Q3. It generally decreases ending at about [1.25, 5.5]. 90-percent interval is presented as a light gray range that begins at about 2.5 in 2010:Q4 and generally increases to about [1, 7.5] in 2014:Q3. It generally decreases ending at about [0, 6.5].

Figure: Unemployment Rate

Line chart, 2008 to 2015. Unit is percent. There are seven series, "Extended Greenbook baseline," "Lower Potential," "Stronger recovery," "Weaker recovery," "Weaker recovery, further disinflation," "Higher oil prices," and "Higher oil prices, weaker dollar." Extended Greenbook baseline begins at about 5.0 and generally increases to about 10.0 in 2010:Q1. It generally decreases ending at about 5.6. Lower potential begins at about 9.0 in 2010:Q4 then generally decreases ending at about 6.0. Stronger recovery begins at about 9.0 in 2010:Q4 then generally decreases ending at about 5.25. Weaker recovery and weaker recovery, further disinflation begin at about 9.0 in 2010:Q4 then generally decrease together ending at about 6.5. Higher oil prices and higher oil prices, weaker dollar begin at about 9.0 in 2010:Q4 then generally decrease together ending at about 6.0. 70 percent interval is presented as a dark gray range that begins at about 9.0 in 2010:Q4 then generally decreases ending at about [4.5, 6.75]. 90 percent interval is presented as a light gray range that begins at about 9.0 in 2010:Q4 and generally decreases ending at about [4.0, 7.5].

Figure: PCE Prices excluding Food and Energy

Line chart, 2008 to 2015. Unit is 4-quarter percent change. There are seven series, "Extended Greenbook baseline," "Lower Potential," "Stronger recovery," "Weaker recovery," "Weaker recovery, further disinflation," "Higher oil prices," and "Higher oil prices, weaker dollar." Extended Greenbook baseline begins at about 2.5 and generally decreases to about 1.25 in 2009:Q4. It generally increases to about 1.75 in 2010:Q2 then generally decreases to about 1.0 in 2010:Q3. It generally increases ending at about 1.75. Lower potential begins at about 1.0 in 2010:Q4 then generally increases to about 2.5 in 2012: Q4. It remains about constant to the end of the timeline. Stronger recovery begins at about 1.0 in 2010:Q4 and generally increases ending at about 2.25. Weaker recovery begins at about 1.0 in 2010:Q4 then generally increases to about 1.4 in 2011:Q3. It generally decreases ending at about 1.1. Weaker recovery, further disinflation begins at about 1.0 in 2010:Q4. It generally increases to about 1.25 in 2011:Q4. It generally decreases to about 0.25 in 2014:Q3. It generally increases ending at about 0.5. Higher oil prices begins at about 1.0 in 2010:Q4. It generally increases to about 1.75 in 2011:Q4 then generally decreases to about 1.5 in 2013:Q4. It generally increases ending at about 1.6. Higher oil prices, weaker dollar begins at about 1.0 in 2010:Q4. It generally increases to about 2.1 in 2012:Q2 then generally decreases to about 1.5 in 2014:Q1. It generally increases ending at about 1.75. 70 percent interval is presented as a dark gray range that begins at about 1.0 in 2010:Q4 and generally increases ending at about [0.75, 1.75]. 90 percent interval is presented as a light gray range that begins at about 1 in 2010:Q4 and generally increases ending at about [0.25, 3.25].

Figure: Federal Funds Rate

Line chart, 2008 to 2015. Unit is percent. There are seven series, "Extended Greenbook baseline," "Lower Potential," "Stronger recovery," "Weaker recovery," "Weaker recovery, further disinflation," "Higher oil prices," and "Higher oil prices, weaker dollar." Extended Greenbook baseline begins at about 3 and generally decreases to about 0 in 2009:Q1. It remains about constant until 2012:Q2 then generally increases ending at about 4. Lower potential begins at about 0 in 2010:Q4 and remains about constant until 2011:Q2. It generally increases ending at about 4.25. Stronger recovery begins at about 0 in 2010:Q4 and remains about constant until 2011:Q3. It generally increases to about 4.25 in 2014:Q4. It generally decreases ending at about 4. Weaker recovery begins at about 0 in 2010:Q4 and remains about constant until 2013:Q4. It generally increases ending at about 3.25. Weaker recovery, further disinflation begins at about 0 in 2010:Q4 and remains about constant until 2014:Q3. It generally increases ending at about 2. Higher oil prices begins at about 0 and remains about constant until 2012:Q3. It generally increases ending at about 3.5. Higher oil prices, weaker dollar begins at about 0 and remains about constant until 2011:Q4. It generally increases ending at about 3.75. 70 percent interval is presented as a dark gray range that begins at about 0 in 2010:Q4 and generally increases ending at about [2, 6]. 90 percent interval is presented as a light gray range that begins at about 0 in 2010:Q4 and generally increases ending at about [0.75, 7.25].

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

Measure	2011	2012	2013	2014	2015
Real GDP (percent change, Q4 to Q4)					
Projection	3.2	4.2	4.3	4.0	3.1

Confidence interval					
Tealbook forecast errors	1.9-4.5	2.4-5.9	...	...	...
FRB/US stochastic simulations	2.0-4.5	2.3-5.8	2.2-6.0	1.9-6.2	1.1-5.4
Civilian unemployment rate (percent, Q4)					
Projection	8.7	7.7	7.0	6.2	5.6
Confidence interval					
Tealbook forecast errors	8.2-9.2	6.9-8.5	...	...	...
FRB/US stochastic simulations	8.2-9.2	6.7-8.6	6.0-8.2	5.2-7.4	4.5-6.8
PCE prices, total (percent change, Q4 to Q4)					
Projection	2.2	1.2	1.5	1.6	1.7
Confidence interval					
Tealbook forecast errors	1.5-3.0	.0-2.5	...	...	...
FRB/US stochastic simulations	1.4-3.2	.1-2.5	.3-2.9	.3-3.0	.5-3.1
PCE prices excluding food and energy (percent change, Q4 to Q4)					
Projection	1.4	1.4	1.5	1.6	1.7
Confidence interval					
Tealbook forecast errors	.9-1.8	.7-2.1	...	...	...
FRB/US stochastic simulations	.9-1.9	.6-2.3	.6-2.4	.7-2.6	.8-2.7
Federal funds rate (percent, Q4)					
Projection	.1	.5	2.0	3.3	3.8
Confidence interval					
FRB/US stochastic simulations	.1-.8	.1-2.6	.5-4.1	1.5-5.5	2.0-6.1

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

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

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

Tealbook Forecast Compared with Blue Chip

(Blue Chip survey released April 10, 2011)

Figure: Real GDP

Line chart, 2008 to 2012. Unit is percent change, annual rate. There are two series, "Blue Chip consensus," and "Staff forecast." The series begin at about -1 and generally increase together to about 1 in 2008:Q3. They generally decrease together to about -7 in 2008:Q4 then generally increase together to about 5 in 2009:Q4. They generally decrease together to about 2 in 2010:Q1 then generally increase together to about 3.5 in 2010:Q4. Blue Chip consensus fluctuates but remains about constant to the end of the timeline. Staff forecast generally decreases to about 2 in 2011:Q1. It generally increases ending at about 4. There is a shaded area that begins at about 4 in 2010:Q4 and generally increases to about [2, 4.5] in 2911:Q2. It generally decreases ending at about [2.5, 4].

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

Figure: Real PCE

Line chart, 2008 to 2012. Unit is percent change, annual rate. There are two series, "Blue Chip consensus," and "Staff forecast." The series begin at about -1 and generally increase together to about 0 in 2008:Q2. They generally decrease together to about -4 in 2008:Q3 then fluctuate but generally increase together to about 4.5 in 2010:Q4. Blue chip consensus generally decreases to about 2 in 2011:Q1 then generally increases to about 3 in 2011:Q4. It fluctuates but remains about constant to the end of the timeline. Staff forecast generally decreases to about 3 in 2011:Q1 then generally increases ending at about 4. There is a red shaded area that begins at about 4 in 2010:Q4 then generally decreases to about [1.5, 3.25] in 2011:Q1. It generally increases to about [2, 4] in 2011:Q4 then generally decreases ending at about [2.25, 3.75].

Figure: Unemployment Rate

Line chart, 2008 to 2012. Unit is percent. There are two series, "Blue Chip consensus," and "Staff forecast." The series begin at about 5 and generally increase together to about 19 in 2009:Q4. They generally decrease together ending at about 8. There is a red shaded area that begins at about 9 and generally decreases ending at a range of about [7.5, 8.5].

Figure: Consumer Price Index

Line chart, 2008 to 2012. Unit is percent change, annual rate. There are two series, "Blue Chip consensus," and "Staff forecast." The series begin at about 4.5 and generally increase together to about 6.5 in 2008:Q3. They generally decrease together to about -10 in 2008:Q4 then generally increase together to about 3.5 in 2009:Q3. They generally decrease together to about -0.5 in 2010:Q2 then generally increase together to about 5.5 in 2011:Q1. Blue chip consensus generally decreases to about 2 in 2011:Q3 and remains about constant to the end of the timeline. Staff forecast generally decreases to about 1.5 in 2011:Q3 and remains about constant to the end of the timeline. There is a red shaded area that begins at about 6 in 2010:Q4 then decreases to a range of about [1, 3] in 2011:Q1. It remains about constant to the end of the timeline.

Figure: Treasury Bill Rate

Line chart, 2008 to 2012. Unit is percent. There are two series, "Blue Chip consensus," and "Staff forecast." The series begin at about 2 and generally decrease together to about 0 in 2008:Q4. Blue chip consensus remains about constant until 2011:Q1 then generally increases ending at about 2. Staff forecast remains about constant until 2012:Q1 then generally increases ending at about .75. There is a red shaded area that begins at about 0 in 2010:Q4 then generally increases ending at a range of about [.5, 3].

Figure: 10-Year Treasury Yield

Line chart, 2008 to 2012. Unit is percent. There are two series, "Blue Chip consensus," and "Staff forecast." The series begin at about 3.6 and generally increase together to about 3.8 in 2008:Q2. They generally decrease together to about 2.6 in 2009:Q1 then generally increase together to about 3.9 in 2010:Q1. They generally decrease together to about 3.0 in 2010:Q3 then generally increase together to about 3.5 in 2011:Q1. Blue Chip consensus generally increases ending at about 4.6. Staff forecast generally increases ending at about 4.4. There is a red shaded area that begins at about 3.5 in 2010:Q4 and generally increases ending at a range of about [4.1, 5.25].

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

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

Last update: February 3, 2017

Interval		Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate ¹	
		03/09/11	04/20/11	03/09/11	04/20/11	03/09/11	04/20/11	03/09/11	04/20/11	03/09/11	04/20/11
Quarterly											
2010:	Q1	4.8	4.8	3.7	3.7	2.1	2.1	1.2	1.2	9.7	9.7
	Q2	3.7	3.7	1.7	1.7	.0	.0	1.0	1.0	9.6	9.6
	Q3	4.6	4.6	2.6	2.6	.8	.8	.5	.5	9.6	9.6
	Q4	3.6	3.5	3.2	3.1	1.8	1.7	.5	.4	9.6	9.6
2011:	Q1	4.8	3.6	3.2	1.7	3.3	3.8	1.1	1.4	9.0	8.9
	Q2	6.2	6.1	3.8	3.1	2.3	2.8	1.2	1.5	8.9	8.9
	Q3	4.9	5.4	3.9	4.1	1.2	1.2	1.3	1.3	8.7	8.8
	Q4	5.0	5.1	4.0	3.8	1.0	1.2	1.1	1.2	8.6	8.7
2012:	Q1	5.6	5.5	4.2	4.0	1.0	1.2	1.2	1.3	8.4	8.5
	Q2	5.8	5.6	4.4	4.2	1.0	1.2	1.2	1.4	8.1	8.2
	Q3	5.8	5.6	4.4	4.2	1.1	1.2	1.2	1.4	7.8	7.9
	Q4	5.8	5.7	4.5	4.3	1.1	1.3	1.2	1.4	7.5	7.7
Two-quarter ²											
2010:	Q2	4.3	4.3	2.7	2.7	1.0	1.0	1.1	1.1	-4	-4
	Q4	4.1	4.1	2.9	2.8	1.3	1.2	.5	.5	.0	.0
2011:	Q2	5.5	4.8	3.5	2.4	2.8	3.3	1.2	1.4	-7	-7
	Q4	5.0	5.3	4.0	4.0	1.1	1.2	1.2	1.3	-3	-2
2012:	Q2	5.7	5.6	4.3	4.1	1.0	1.2	1.2	1.4	-5	-5
	Q4	5.8	5.7	4.5	4.2	1.1	1.2	1.2	1.4	-6	-5
Four-quarter ³											
2009:Q4		.6	.6	.2	.2	1.5	1.5	1.7	1.7	3.1	3.1
2010:Q4		4.2	4.2	2.8	2.8	1.2	1.1	.8	.8	-4	-4
2011:Q4		5.2	5.0	3.7	3.2	1.9	2.2	1.2	1.4	-1.0	-9
2012:Q4		5.8	5.6	4.4	4.2	1.1	1.2	1.2	1.4	-1.1	-1.0
Annual											
2009		-1.7	-1.7	-2.6	-2.6	.2	.2	1.5	1.5	9.3	9.3
2010		3.8	3.8	2.9	2.9	1.7	1.7	1.3	1.3	9.6	9.6
2011		4.8	4.5	3.3	2.8	1.9	2.1	1.0	1.1	8.8	8.8
2012		5.5	5.5	4.2	4.0	1.1	1.3	1.2	1.3	7.9	8.1

Item	2010				2011				2012				2010 ¹	2011 ¹	2012 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	3.7	1.7	2.6	3.1	1.7	3.1	4.1	3.8	4.0	4.2	4.2	4.3	2.8	3.2	4.2
<i>Previous Tealbook</i>	3.7	1.7	2.6	3.2	3.2	3.8	3.9	4.0	4.2	4.4	4.4	4.5	2.8	3.7	4.4
Final sales	1.1	.9	.9	6.7	.5	3.4	3.0	4.9	3.6	3.9	3.8	4.2	2.4	2.9	3.9
<i>Previous Tealbook</i>	1.1	.9	.9	6.8	2.0	3.7	3.6	5.0	4.0	4.1	4.0	4.3	2.4	3.6	4.1
Priv. dom. final purch.	2.1	4.4	2.3	4.2	2.3	3.6	3.8	4.0	3.7	4.2	4.4	4.6	3.2	3.4	4.2
<i>Previous Tealbook</i>	2.1	4.4	2.3	4.4	3.0	4.2	4.4	4.5	4.3	4.5	4.7	4.8	3.3	4.0	4.6
Personal cons. expend.	1.9	2.2	2.4	4.0	2.5	3.0	3.1	3.1	3.3	3.7	3.9	4.0	2.6	2.9	3.7
<i>Previous Tealbook</i>	1.9	2.2	2.4	4.1	2.5	3.5	3.5	3.5	3.7	3.8	4.0	4.1	2.6	3.2	3.9
Durables	8.8	6.8	7.6	21.1	10.4	5.3	7.9	7.8	10.6	12.2	12.9	11.8	10.9	7.8	11.9
Nondurables	4.2	1.9	2.5	4.1	2.2	2.8	2.6	1.9	1.7	1.5	1.4	1.5	3.2	2.4	1.5
Services	.1	1.6	1.6	1.5	1.3	2.7	2.5	2.8	2.8	3.1	3.2	3.6	1.2	2.3	3.2
Residential investment	-12.3	25.7	-27.3	3.3	-1.8	.4	2.6	5.3	6.1	7.8	9.3	11.8	-4.6	1.6	8.7
<i>Previous Tealbook</i>	-12.3	25.7	-27.3	2.8	3.7	7.3	10.9	12.0	13.1	13.2	13.4	13.8	-4.7	8.4	13.4
Business fixed invest.	7.8	17.2	10.0	7.7	2.2	8.6	9.2	10.2	5.7	7.0	7.3	7.3	10.6	7.5	6.8
<i>Previous Tealbook</i>	7.8	17.2	10.0	6.7	6.2	8.9	9.5	10.2	6.1	7.5	7.4	7.8	10.3	8.7	7.2
Equipment & software	20.4	24.8	15.4	7.7	10.1	12.2	12.6	13.4	8.0	9.3	9.6	9.7	16.9	12.1	9.1
<i>Previous Tealbook</i>	20.4	24.8	15.4	6.6	12.7	12.5	13.2	13.6	8.5	10.0	9.7	10.1	16.6	13.0	9.6
Nonres. structures	-17.8	-.5	-3.5	7.6	-17.3	-1.4	-.7	.8	-1.4	-.3	.1	.1	-4.0	-5.0	-.4
<i>Previous Tealbook</i>	-17.8	-.5	-3.5	6.7	-10.4	-.9	-.9	.4	-1.1	.0	.3	.3	-4.2	-3.0	-.1
Net exports ²	-338	-449	-505	-398	-393	-396	-407	-357	-336	-321	-316	-302	-422	-388	-319
<i>Previous Tealbook</i> ²	-338	-449	-505	-395	-386	-387	-390	-348	-331	-318	-313	-301	-422	-378	-316
Exports	11.4	9.1	6.8	8.6	6.5	8.6	9.3	9.5	9.5	9.1	8.8	8.8	9.0	8.5	9.0
Imports	11.2	33.5	16.8	-12.6	4.4	7.5	9.7	-1.6	4.1	4.8	6.5	5.1	11.0	4.9	5.1
Gov't. cons. & invest.	-1.6	3.9	3.9	-1.7	-7.0	2.4	1.3	-.3	-.3	.0	.1	-.1	1.1	-1.0	-.1
<i>Previous Tealbook</i>	-1.6	3.9	3.9	-1.7	-3.1	1.4	.7	-.1	-.1	.0	.1	-.1	1.1	-.3	.0
Federal	1.8	9.1	8.8	-.3	-11.5	8.0	3.9	-.4	-.7	-.7	-.7	-1.1	4.8	-.3	-.8
Defense	.4	7.4	8.5	-2.2	-18.4	11.3	6.0	-.1	.0	.0	.0	.0	3.4	-1.0	.0
Nondefense	5.0	12.8	9.5	3.7	4.0	1.8	-.2	-1.2	-2.2	-2.2	-2.2	-3.3	7.7	1.1	-2.5
State & local	-3.8	.6	.7	-2.6	-3.9	-1.2	-.4	-.2	.0	.5	.7	.7	-1.3	-1.4	.4
Change in bus. inventories ²	44	69	121	16	51	44	79	46	58	66	78	80	63	55	70
<i>Previous Tealbook</i> ²	44	69	121	15	51	55	63	34	41	50	65	71	62	51	57
Nonfarm ²	37	61	117	15	47	40	75	43	55	62	75	76	57	51	67
Farm ²	8	8	5	1	4	4	4	4	4	4	4	4	5	4	4

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

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

Changes in Real Gross Domestic Product and Related Items

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

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
Real GDP	3.1	2.7	2.4	2.3	-2.8	.2	2.8	3.2	4.2
<i>Previous Tealbook</i>	3.1	2.7	2.4	2.3	-2.8	.2	2.8	3.7	4.4
Final sales	2.8	2.7	2.8	2.5	-1.9	-.3	2.4	2.9	3.9
<i>Previous Tealbook</i>	2.8	2.7	2.8	2.5	-1.9	-.3	2.4	3.6	4.1
Priv. dom. final purch.	4.2	3.1	2.5	1.3	-3.8	-2.0	3.2	3.4	4.2

Output per hour	4.6	-1.7	2.3	2.9	.8	.0	2.0	1.5	1.7	1.8	1.8	1.9	2.0	1.1	1.8
<i>Previous Tealbook</i>	4.6	-1.7	2.3	3.0	2.7	.4	1.2	1.4	1.4	1.8	1.8	2.0	2.0	1.4	1.7
Compensation per hour	-2	3.1	2.5	2.1	2.8	1.7	2.1	2.2	2.8	2.6	2.6	2.7	1.9	2.2	2.7
<i>Previous Tealbook</i>	-2	3.1	2.5	2.0	3.0	1.7	1.8	1.9	2.6	2.4	2.4	2.5	1.8	2.1	2.5
Unit labor costs	-4.6	4.9	.1	-8	2.0	1.7	.1	.7	1.1	.8	.8	.8	-2	1.1	.9
<i>Previous Tealbook</i>	-4.6	4.9	.1	-1.0	.2	1.2	.6	.4	1.2	.5	.6	.5	-2	.6	.7
Core goods imports chain-wt. price index ³	4.2	3.1	-8	4.3	8.2	5.7	3.6	2.0	1.5	1.4	1.4	1.4	2.7	4.9	1.4
<i>Previous Tealbook</i> ³	4.2	3.1	-8	4.3	7.5	5.5	3.3	2.0	1.4	1.4	1.4	1.4	2.7	4.6	1.4

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

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

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

Changes in Prices and Costs

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

Item	2004	2005	2006	2007	2008	2009	2010	2011	2012
GDP chain-wt. price index	3.2	3.5	2.9	2.6	2.1	.5	1.3	1.8	1.4
<i>Previous Tealbook</i>	3.2	3.5	2.9	2.6	2.1	.5	1.4	1.5	1.3
PCE chain-wt. price index	3.0	3.3	1.9	3.5	1.7	1.5	1.1	2.2	1.2
<i>Previous Tealbook</i>	3.0	3.3	1.9	3.5	1.7	1.5	1.2	1.9	1.1
Energy	18.6	21.5	-3.7	19.4	-9.0	2.7	5.9	12.9	-1.1
<i>Previous Tealbook</i>	18.6	21.5	-3.7	19.4	-9.0	2.7	5.9	11.0	-1.3
Food	2.7	1.5	1.7	4.8	6.9	-1.6	1.3	4.3	1.4
<i>Previous Tealbook</i>	2.7	1.5	1.7	4.8	6.9	-1.6	1.3	3.4	1.3
Ex. food & energy	2.2	2.3	2.3	2.4	2.0	1.7	.8	1.4	1.4
<i>Previous Tealbook</i>	2.2	2.3	2.3	2.4	2.0	1.7	.8	1.2	1.2
Ex. food & energy, market based	1.9	2.1	2.2	2.2	2.2	1.7	.8	1.2	1.2
<i>Previous Tealbook</i>	1.9	2.1	2.2	2.2	2.2	1.7	.8	1.0	1.1
CPI	3.4	3.7	2.0	4.0	1.6	1.5	1.2	2.8	1.2
<i>Previous Tealbook</i>	3.4	3.7	2.0	4.0	1.6	1.5	1.2	2.3	1.0
Ex. food & energy	2.2	2.1	2.7	2.3	2.0	1.7	.6	1.5	1.5
<i>Previous Tealbook</i>	2.2	2.1	2.7	2.3	2.0	1.7	.6	1.2	1.2
ECL, hourly compensation ¹	3.8	2.9	3.2	3.0	2.4	1.2	2.1	2.3	2.8
<i>Previous Tealbook</i> ¹	3.8	2.9	3.2	3.0	2.4	1.2	2.1	2.3	2.6
Nonfarm business sector									
Output per hour	1.5	1.4	.9	2.6	-.4	6.5	2.0	1.1	1.8
<i>Previous Tealbook</i>	1.5	1.4	.9	2.6	-.4	6.5	2.0	1.4	1.7
Compensation per hour	3.3	3.5	4.5	3.6	2.3	2.8	1.9	2.2	2.7
<i>Previous Tealbook</i>	3.3	3.5	4.5	3.6	2.3	2.8	1.8	2.1	2.5
Unit labor costs	1.9	2.0	3.5	.9	2.7	-3.5	-2	1.1	.9
<i>Previous Tealbook</i>	1.9	2.0	3.5	.9	2.7	-3.5	-2	.6	.7
Core goods imports chain-wt. price index ²	3.6	2.2	2.5	2.9	3.5	-1.9	2.7	4.9	1.4
<i>Previous Tealbook</i> ²	3.6	2.2	2.5	2.9	3.5	-1.9	2.7	4.6	1.4

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

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

Other Macroeconomic Indicators

Item	2010				2011				2012				2010 ¹	2011 ¹	2012 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Employment and production															
Nonfarm payroll employment ²	-1	.6	-1	.2	.4	.6	.7	.7	.8	.8	.8	.8	.7	2.4	3.2
Unemployment rate ³	9.7	9.6	9.6	9.6	8.9	8.9	8.8	8.7	8.5	8.2	7.9	7.7	9.6	8.7	7.7
<i>Previous Tealbook</i> ³	9.7	9.6	9.6	9.6	9.0	8.9	8.7	8.6	8.4	8.1	7.8	7.5	9.6	8.6	7.5
NAIRU ³	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
<i>Previous Tealbook</i> ³	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
GDP gap ⁴	-6.2	-6.2	-6.1	-5.9	-6.0	-5.8	-5.4	-5.0	-4.7	-4.3	-3.9	-3.5	-5.9	-5.0	-3.5
<i>Previous Tealbook</i> ⁴	-6.2	-6.3	-6.2	-5.9	-5.8	-5.5	-5.1	-4.7	-4.4	-3.9	-3.5	-3.0	-5.9	-4.7	-3.0
Industrial production ⁵	8.1	7.1	6.7	3.2	6.0	5.4	5.7	3.6	3.1	4.7	5.1	4.3	6.3	5.2	4.3
<i>Previous Tealbook</i> ⁵	7.1	7.2	6.2	3.2	4.7	7.2	4.4	3.3	3.6	4.6	4.7	3.9	5.9	4.9	4.2
Manufacturing industr. prod. ⁵	7.1	8.7	5.1	3.5	9.1	5.0	6.3	4.2	4.0	5.6	5.6	4.8	6.1	6.1	5.0
<i>Previous Tealbook</i> ⁵	6.2	9.4	4.3	4.0	6.8	7.5	4.7	3.8	4.6	5.6	5.0	4.5	6.0	5.7	4.9
Capacity utilization rate - mfg. ³	69.4	71.4	72.6	73.3	74.9	75.6	76.6	77.2	77.6	78.4	79.1	79.7	73.3	77.2	79.7
<i>Previous Tealbook</i> ³	70.0	71.6	72.4	73.0	74.1	75.4	76.1	76.7	77.2	78.0	78.7	79.2	73.0	76.7	79.2
Housing starts ⁶	.6	.6	.6	.5	.6	.6	.6	.6	.7	.7	.8	.9	.6	.6	.8
Light motor vehicle sales ⁶	11.0	11.3	11.6	12.3	13.0	13.0	13.2	13.4	13.9	14.5	15.1	15.5	11.5	13.1	14.7
Income and saving															
Nominal GDP ⁵	4.8	3.7	4.6	3.5	3.6	6.1	5.4	5.1	5.5	5.6	5.6	5.7	4.2	5.0	5.6
Real disposable pers. income ⁵	1.3	5.6	1.0	1.9	2.7	3.2	3.3	3.7	.5	4.2	4.0	4.5	2.4	3.2	3.3
<i>Previous Tealbook</i> ⁵	1.3	5.6	1.0	1.2	3.7	3.0	3.5	4.4	.8	4.3	4.0	4.1	2.3	3.7	3.3
Personal saving rate ³	5.5	6.2	6.0	5.6	5.7	5.7	5.8	5.9	5.3	5.3	5.4	5.5	5.6	5.9	5.5
<i>Previous Tealbook</i> ³	5.5	6.2	6.0	5.4	5.7	5.6	5.6	5.8	5.1	5.2	5.2	5.2	5.4	5.8	5.2
Corporate profits ⁷	48.9	12.7	6.6	9.7	12.8	12.2	12.6	13.0	5.4	4.2	3.8	3.8	18.3	12.6	4.3
Profit share of GNP ³	10.7	10.9	11.0	11.2	11.4	11.5	11.7	11.9	11.9	11.9	11.9	11.8	11.2	11.9	11.8
Net federal saving ⁸	-1,314	-1,337	-1,343	-1,334	-1,356	-1,367	-1,336	-1,309	-1,155	-1,110	-1,088	-1,061	-1,332	-1,342	-1,104
Net state & local saving ⁸	29	16	48	40	47	40	36	34	42	52	64	70	33	39	57
Gross national saving rate ³	11.1	11.7	11.6	11.6	11.8	11.9	12.3	12.8	13.1	13.5	13.6	13.9	11.6	12.8	13.9
Net national saving rate ³	-1.8	-1.1	-1.1	-1.1	-.7	-.5	.1	.7	1.0	1.5	1.7	1.9	-1.1	.7	1.9

Other Macroeconomic Indicators

[illegible]

Nonfarm payroll employment ¹	2.0	2.4	2.1	1.2	-2.8	-5.6	.7	2.4	3.2
Unemployment rate ²	5.4	5.0	4.5	4.8	6.9	10.0	9.6	8.7	7.7
<i>Previous Tealbook</i> ²	5.4	5.0	4.5	4.8	6.9	10.0	9.6	8.6	7.5
NAIRU ²	5.0	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0
<i>Previous Tealbook</i> ²	5.0	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0
GDP gap ³	-.5	-.1	.0	-.1	-4.9	-6.6	-5.9	-5.0	-3.5
<i>Previous Tealbook</i> ³	-.5	.0	.0	-.1	-4.9	-6.6	-5.9	-4.7	-3.0
Industrial production ⁴	3.1	2.3	2.3	2.5	-9.1	-5.5	6.3	5.2	4.3
<i>Previous Tealbook</i> ⁴	2.9	2.3	2.5	2.3	-7.6	-3.8	5.9	4.9	4.2
Manufacturing industr. prod. ⁴	3.7	3.4	2.0	2.8	-11.8	-6.1	6.1	6.1	5.0
<i>Previous Tealbook</i> ⁴	3.5	3.5	2.0	2.6	-10.0	-4.1	6.0	5.7	4.9
Capacity utilization rate - mfg. ²	77.3	78.5	78.4	79.0	70.1	67.7	73.3	77.2	79.7
<i>Previous Tealbook</i> ²	77.4	78.8	79.0	79.1	70.9	68.8	73.0	76.7	79.2
Housing starts ⁵	2.0	2.1	1.8	1.4	.9	.6	.6	.6	.8
Light motor vehicle sales ⁵	16.8	16.9	16.5	16.1	13.1	10.3	11.5	13.1	14.7
<i>Income and saving</i>									
Nominal GDP ⁴	6.4	6.3	5.4	5.0	-.7	.6	4.2	5.0	5.6
Real disposable pers. income ⁴	3.5	.6	4.6	1.5	1.0	.4	2.4	3.2	3.3
<i>Previous Tealbook</i> ⁴	3.5	.6	4.6	1.5	1.0	.4	2.3	3.7	3.3
Personal saving rate ²	3.6	1.5	2.5	2.1	5.2	5.5	5.6	5.9	5.5
<i>Previous Tealbook</i> ²	3.6	1.5	2.5	2.1	5.2	5.5	5.4	5.8	5.2
Corporate profits ⁶	21.9	19.6	3.7	-8.1	-31.9	42.5	18.3	12.6	4.3
Profit share of GNP ²	10.5	11.8	11.6	10.1	6.9	9.8	11.2	11.9	11.8
Net federal saving ⁷	-379	-283	-204	-245	-616	-1252	-1332	-1342	-1104
Net state & local saving ⁷	-8	26	51	12	-47	-20	33	39	57
Gross national saving rate ²	14.3	15.5	16.3	13.6	11.8	10.8	11.6	12.8	13.9
Net national saving rate ²	2.7	3.5	4.2	1.3	-1.4	-2.3	-1.1	.7	1.9

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

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

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

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

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

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

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

Staff Projections of Federal Sector Accounts and Related Items

(Billions of dollars except as noted)

Item	Fiscal year				2010				2011				2012			
	2009 ^a	2010 ^a	2011	2012	Q1 ^a	Q2 ^a	Q3 ^a	Q4 ^a	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts ¹	2105	2163	2280	2542	466	643	565	532	488	666	594	562	548	762	671	642
Outlays ¹	3518	3456	3673	3674	795	930	855	901	949	894	929	921	967	916	869	965
Surplus/deficit ¹	-1413	-1293	-1393	-1132	-329	-287	-290	-369	-460	-228	-335	-360	-419	-155	-199	-324

<i>Previous Tealbook</i>	-1413	-1293	-1424	-1113	-329	-287	-290	-369	-448	-268	-339	-360	-413	-142	-198	-324
On-budget	-1550	-1370	-1410	-1195	-359	-351	-267	-390	-451	-268	-301	-384	-411	-218	-182	-372
Off-budget	137	77	18	64	30	64	-23	21	-10	40	-34	24	-8	64	-17	48
Means of financing																
Borrowing	1743	1474	1389	1182	478	344	390	368	260	243	517	334	424	195	229	329
Cash decrease	96	-35	29	30	-25	-71	-20	-33	225	23	-185	45	15	-20	-10	15
Other ²	-427	-146	-26	-80	-124	14	-80	34	-24	-38	3	-20	-20	-20	-20	-20
Cash operating balance, end of period	275	310	280	250	219	290	310	343	118	95	280	235	220	240	250	235
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2261	2334	2456	2721	2323	2365	2417	2441	2422	2461	2498	2542	2735	2781	2827	2875
Expenditures	3355	3660	3804	3887	3637	3701	3761	3776	3778	3828	3834	3851	3890	3890	3916	3936
Consumption expenditures	977	1030	1062	1092	1017	1038	1062	1056	1044	1068	1081	1084	1092	1094	1096	1097
Defense	659	691	701	725	684	695	711	703	683	703	714	717	724	727	730	733
Nondefense	318	339	362	367	333	343	350	354	361	365	367	367	368	367	366	364
Other spending	2378	2630	2742	2795	2620	2663	2699	2720	2734	2760	2753	2767	2798	2796	2819	2839
Current account surplus	-1094	-1326	-1348	-1165	-1314	-1337	-1343	-1334	-1356	-1367	-1336	-1309	-1155	-1110	-1088	-1061
Gross investment	151	165	178	182	161	168	172	182	171	178	182	182	182	182	182	182
Gross saving less gross investment ³	-1122	-1363	-1392	-1205	-1348	-1376	-1385	-1384	-1393	-1409	-1380	-1351	-1196	-1148	-1125	-1096
Fiscal indicators⁴																
High-employment (HEB) surplus/deficit	-838	-1030	-1089	-950	-1019	-1045	-1059	-1062	-1088	-1111	-1095	-1076	-924	-900	-899	-893
Change in HEB, percent of potential GDP	2.2	1.1	.1	-1.1	.1	.1	.0	.0	.1	.1	-.2	-.2	-1.0	-.2	-.1	-.1
Fiscal impetus (FI), percent of GDP	1.2	0.6	-0.0	-1.1	1.0	1.0	0.6	-0.2	-0.6	0.6	0.3	-0.3	-1.6	-0.9	-0.9	-0.8
<i>Previous Tealbook</i>	1.2	0.6	0.0	-1.1	1.0	1.0	0.6	-0.2	-0.0	0.4	0.1	-0.3	-1.6	-1.0	-0.9	-0.8

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

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

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

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

a Actual. [Return to table](#)

Change in Debt of the Domestic Nonfinancial Sectors

(Percent)

Period ¹	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
Year								
2005	9.5	11.1	13.3	4.5	8.6	10.2	7.0	6.3
2006	9.0	10.1	11.2	4.1	10.5	8.3	3.9	5.4
2007	8.6	6.8	6.8	5.8	13.0	9.5	4.9	5.0
2008	6.0	-.1	-.5	1.5	5.8	2.3	24.2	-.7
2009	3.0	-1.7	-1.5	-4.4	-2.7	4.8	22.7	.6
2010	4.7	-1.8	-2.6	-1.8	1.5	4.4	20.2	4.2
2011	5.0	.5	-1.4	4.4	3.2	1.4	14.4	5.0
2012	5.5	2.2	-.1	8.2	4.5	4.1	10.9	5.6
Quarter								
2009: 1	4.6	-.8	-.2	-3.7	-.2	5.6	24.4	-3.9

	2	4.5	-1.9	-1.9	-4.8	-2.2	4.2	28.9	-4
	3	2.1	-2.2	-2.6	-3.9	-4.4	5.7	19.0	2.3
	4	.8	-1.9	-1.3	-5.6	-4.0	3.6	11.9	4.7
2010:	1	4.3	-2.1	-4.4	-4.1	.3	5.7	20.5	4.8
	2	4.6	-2.4	-2.2	-3.1	-.1	-1.4	24.4	3.7
	3	4.2	-2.0	-2.6	-1.9	2.2	5.4	16.0	4.6
	4	5.1	-.6	-1.2	2.0	3.6	7.9	14.6	3.5
2011:	1	2.7	-.1	-1.7	3.0	3.3	-3.8	7.8	3.6
	2	5.3	.3	-1.5	3.9	2.7	-.4	16.7	6.1
	3	6.4	.7	-1.2	4.9	3.1	1.4	19.1	5.4
	4	5.1	1.0	-1.1	5.7	3.4	8.4	11.3	5.1
2012:	1	5.7	1.7	-.4	6.7	4.0	4.1	12.9	5.5
	2	5.9	2.1	-.2	7.7	4.3	4.0	12.6	5.6
	3	4.4	2.5	.1	8.6	4.7	4.0	6.6	5.6
	4	5.5	2.7	.2	8.9	4.8	4.0	10.0	5.7

Note: Quarterly data are at seasonally adjusted annual rates.

1. Data after 2010: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	2009	2010	2011	2012	2010		2011				2012			
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Domestic nonfinancial sectors														
Net funds raised														
Total	953.7	1327.3	1490.1	1776.7	1160.4	1449.7	708.0	1645.3	2041.9	1565.4	1869.9	1981.9	1396.2	1858.7
Net equity issuance	-64.6	-284.0	-311.0	-320.0	-337.6	-384.0	-283.9	-280.0	-340.0	-340.0	-300.0	-300.0	-340.0	-340.0
Net debt issuance	1018.3	1611.4	1801.1	2096.7	1498.1	1833.8	991.8	1925.3	2381.9	1905.4	2169.9	2281.9	1736.2	2198.7
Borrowing indicators														
Debt (percent of GDP) ¹	241.6	241.9	242.8	242.2	241.8	242.5	242.7	241.6	241.9	242.3	242.3	242.5	242.3	241.9
Borrowing (percent of GDP)	7.2	11.0	11.8	13.0	10.2	12.3	6.6	12.6	15.4	12.2	13.7	14.2	10.7	13.3
Households														
Net borrowing ²	-234.5	-237.9	61.1	301.7	-272.2	-75.0	-10.9	34.8	93.0	127.6	227.4	278.5	338.4	362.6
Home mortgages	-155.7	-268.3	-137.8	-7.5	-268.3	-125.5	-171.2	-150.4	-119.9	-109.6	-39.7	-19.8	9.9	19.8
Consumer credit	-115.3	-44.0	107.7	208.8	-47.1	48.5	72.5	95.1	120.8	142.3	169.9	198.8	226.7	239.8
Debt/DPI (percent) ³	124.0	118.3	112.2	108.9	117.5	116.1	114.1	112.5	111.4	110.3	110.1	109.2	108.4	107.6
Business														
Financing gap ⁴	-44.7	66.9	82.5	169.0	156.4	47.2	85.3	80.5	104.2	59.8	114.2	148.3	191.0	222.4
Net equity issuance	-64.6	-284.0	-311.0	-320.0	-337.6	-384.0	-283.9	-280.0	-340.0	-340.0	-300.0	-300.0	-340.0	-340.0
Credit market borrowing	-300.3	164.1	350.9	517.3	245.2	397.4	362.7	303.3	350.4	387.0	452.1	499.4	545.6	572.2
State and local governments														
Net borrowing	109.1	104.9	34.1	101.8	129.1	191.2	-92.8	-10.2	33.8	205.8	101.8	101.8	101.8	101.8
Current surplus ⁵	248.2	304.5	269.5	294.7	327.4	321.1	274.9	269.2	267.4	266.3	276.5	288.8	302.7	310.8
Federal government														
Net borrowing	1443.9	1580.2	1355.0	1175.8	1395.9	1320.2	732.8	1597.4	1904.8	1185.0	1388.6	1402.2	750.4	1162.1
Net borrowing (n.s.a.)	1443.9	1580.2	1355.0	1175.8	390.1	367.9	260.2	243.4	517.2	334.2	424.2	194.5	228.6	328.5
Unified deficit (n.s.a.)	1471.3	1275.1	1383.2	1095.8	290.2	369.0	460.4	228.4	334.8	359.6	419.2	154.5	198.6	323.5

Depository institutions														
Funds supplied	-639.6	-199.1	115.7	311.3	729.2	-522.2	-267.4	166.8	273.2	290.2	305.4	315.8	342.7	281.1

Note: Data after 2010:Q4 are staff projections.

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

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

Foreign Real GDP and Consumer Prices: Selected Countries

(Quarterly percent changes at an annual rate)

Measure and country	Projected											
	2010				2011				2012			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP ¹												
Total foreign	5.3	5.7	2.3	3.4	4.0	2.8	3.4	3.5	3.5	3.5	3.6	3.6
<i>Previous Tealbook</i>	5.3	5.7	2.3	3.3	3.6	3.3	3.3	3.3	3.4	3.5	3.5	3.6
Advanced foreign economies	3.8	3.1	1.9	1.7	2.5	1.5	2.2	2.4	2.4	2.4	2.5	2.5
Canada	5.5	2.2	1.8	3.3	3.3	2.4	2.6	2.6	2.6	2.6	2.6	2.6
Japan	6.1	2.1	3.3	-1.3	-0	-3.5	2.5	4.5	3.3	2.9	2.6	2.4
United Kingdom	1.3	4.2	2.8	-2.3	3.1	1.7	2.2	2.3	2.4	2.4	2.5	2.5
Euro area	1.6	4.0	1.4	1.1	2.2	1.6	1.5	1.5	1.6	1.8	2.1	2.4
Germany	2.6	9.2	2.8	1.5	2.8	2.2	1.9	1.9	2.1	2.2	2.5	2.7
Emerging market economies	7.2	9.0	2.8	5.5	5.9	4.4	4.8	4.8	4.8	4.9	4.9	4.9
Asia	13.7	9.2	2.5	5.5	7.7	4.9	5.9	5.9	5.9	5.9	5.9	5.9
Korea	8.6	5.7	2.6	2.0	5.0	3.6	4.1	4.1	4.2	4.3	4.4	4.4
China	9.3	8.9	10.1	10.0	8.7	8.1	8.6	8.6	8.4	8.4	8.4	8.4
Latin America	1.3	9.6	2.8	4.7	4.4	3.9	3.8	3.7	3.8	3.9	4.0	4.0
Mexico	-.3	9.9	3.2	5.1	4.2	3.7	3.6	3.5	3.8	4.0	4.1	4.1
Brazil	9.0	6.5	1.6	3.0	3.8	3.6	3.7	3.7	3.7	3.8	3.8	3.8
Consumer prices ²												
Total foreign	3.3	1.6	2.3	5.3	4.4	3.2	2.5	2.4	2.3	2.3	2.3	2.4
<i>Previous Tealbook</i>	3.3	1.6	2.3	5.3	4.3	3.1	2.5	2.4	2.4	2.3	2.3	2.4
Advanced foreign economies	2.0	.5	1.1	3.5	3.3	2.3	1.5	1.4	1.4	1.3	1.4	1.5
Canada	2.2	-.1	2.4	4.4	3.6	3.2	2.0	1.9	2.1	1.8	1.9	1.9
Japan	.7	-1.2	-1.3	2.3	.1	-.4	-.5	-.6	-.6	-.4	-.5	-.4
United Kingdom	4.9	2.7	1.7	4.3	7.8	2.4	1.9	1.7	1.7	1.7	1.9	3.3
Euro Area	2.0	1.7	1.2	3.3	3.8	2.9	2.1	1.8	1.6	1.5	1.9	1.8
Germany	1.5	.7	1.1	3.0	3.9	3.0	2.2	1.9	1.6	1.6	1.7	1.7
Emerging market economies	4.5	2.6	3.5	6.9	5.5	4.1	3.5	3.3	3.2	3.2	3.2	3.2
Asia	3.6	2.2	3.6	7.6	5.7	4.1	3.2	2.9	2.9	2.8	2.8	2.8
Korea	3.3	1.9	3.4	6.0	6.7	3.9	3.1	2.9	2.8	2.8	2.8	2.7
China	3.0	2.6	4.3	9.0	4.6	4.5	3.1	2.8	2.7	2.7	2.7	2.7
Latin America	7.0	3.4	3.0	5.1	4.6	4.1	4.3	4.3	4.2	4.1	4.1	4.1
Mexico	6.9	2.5	2.9	4.8	3.6	3.4	3.9	3.9	3.7	3.7	3.7	3.7
Brazil	7.4	5.9	1.1	7.4	9.6	6.5	4.9	4.9	4.9	4.9	4.9	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](#)

Foreign Real GDP and Consumer Prices: Selected Countries

(Percent change, Q4 to Q4)

Measure and country	2004	2005	2006	2007	2008	2009	2010	Projected	
								2011	2012
Real GDP ¹									
Total foreign	3.9	4.0	4.1	4.3	-8	.5	4.2	3.4	3.5
Previous Tealbook	3.9	4.0	4.1	4.3	-8	.5	4.1	3.4	3.5
Advanced foreign economies	2.6	2.8	2.6	2.4	-1.8	-1.5	2.6	2.2	2.4
Canada	3.7	3.1	1.9	2.5	-9	-1.1	3.2	2.7	2.6
Japan	1.1	2.9	2.1	1.8	-4.6	-1.8	2.5	.8	2.8
United Kingdom	2.4	2.4	2.7	2.4	-2.7	-2.8	1.5	2.3	2.4
Euro area	1.7	2.1	3.6	2.2	-2.1	-2.1	2.0	1.7	2.0
Germany	.2	1.6	4.5	1.8	-2.0	-2.0	4.0	2.2	2.4
Emerging market economies	5.6	5.8	6.2	6.7	.4	3.0	6.1	5.0	4.9
Asia	5.9	7.7	7.8	8.8	.8	7.4	7.6	6.1	5.9
Korea	2.7	5.2	4.6	5.8	-3.2	6.3	4.7	4.2	4.3
China	9.9	10.3	12.8	13.7	7.7	11.4	9.6	8.5	8.4
Latin America	5.2	3.9	4.8	4.5	-.2	-.8	4.6	3.9	3.9
Mexico	4.6	3.6	4.1	3.7	-.9	-2.2	4.4	3.7	4.0
Brazil	6.1	2.1	4.9	6.6	.8	5.0	5.0	3.7	3.8
Consumer prices ²									
Total foreign	2.8	2.3	2.2	3.7	3.3	1.2	3.1	3.1	2.3
Previous Tealbook	2.8	2.3	2.2	3.7	3.3	1.2	3.1	3.1	2.3
Advanced foreign economies	1.8	1.6	1.4	2.2	2.0	.2	1.8	2.1	1.4
Canada	2.3	2.3	1.4	2.5	1.8	.8	2.2	2.7	1.9
Japan	.5	-1.0	.3	.5	1.0	-1.9	.1	-.4	-.5
United Kingdom	1.4	2.1	2.7	2.1	3.9	2.1	3.4	3.4	2.1
Euro Area	2.3	2.3	1.8	2.9	2.3	.4	2.0	2.7	1.7
Germany	2.1	2.2	1.3	3.1	1.7	.3	1.6	2.7	1.6
Emerging market economies	3.9	3.0	2.9	5.1	4.6	2.2	4.3	4.1	3.2
Asia	3.1	2.6	2.4	5.5	3.7	1.3	4.2	4.0	2.8
Korea	3.4	2.5	2.1	3.4	4.5	2.4	3.6	4.1	2.8
China	3.2	1.4	2.1	6.6	2.6	.6	4.7	3.7	2.7
Latin America	5.6	3.8	4.2	4.2	6.7	4.0	4.6	4.3	4.1
Mexico	5.3	3.1	4.1	3.8	6.2	4.0	4.3	3.7	3.7
Brazil	7.2	6.1	3.2	4.3	6.2	4.2	5.4	6.5	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		
2010	2011	2012

	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	<i>Billions of dollars, s.a.a.r.</i>											
U.S. current account balance	-434.7	-490.9	-502.0	-453.4	-515.1	-499.3	-515.5	-450.9	-439.7	-409.1	-408.4	-395.4
<i>Previous Tealbook</i>	-434.9	-491.2	-507.2	-462.5	-510.1	-509.6	-528.2	-483.8	-480.9	-451.4	-449.0	-430.5
Current account as percent of GDP	-3.0	-3.4	-3.4	-3.0	-3.4	-3.3	-3.3	-2.9	-2.8	-2.5	-2.5	-2.4
<i>Previous Tealbook</i>	-3.0	-3.4	-3.4	-3.1	-3.4	-3.3	-3.4	-3.1	-3.0	-2.8	-2.8	-2.6
Net goods & services	-455.5	-530.0	-530.5	-466.9	-541.3	-549.0	-567.4	-506.9	-482.4	-463.1	-455.7	-440.1
Investment income, net	168.5	180.1	173.8	162.8	165.4	174.9	180.6	181.4	182.0	179.1	176.0	170.0
Direct, net	275.6	286.3	276.6	261.2	286.2	283.0	284.9	288.7	296.2	306.6	314.8	324.8
Portfolio, net	-107.1	-106.2	-102.8	-98.4	-120.8	-108.1	-104.3	-107.4	-114.2	-127.4	-138.8	-154.8
Other income and transfers, net	-147.7	-141.0	-145.3	-149.3	-139.2	-125.1	-128.7	-125.3	-139.2	-125.1	-128.7	-125.3

Annual Data

	2004	2005	2006	2007	2008	2009	Projected		
							2010	2011	2012
	<i>Billions of dollars</i>								
U.S. current account balance	-630.5	-747.6	-802.6	-718.1	-668.9	-378.4	-470.2	-495.2	-413.2
<i>Previous Tealbook</i>	-630.5	-747.6	-802.6	-718.1	-668.9	-378.4	-473.9	-507.9	-453.0
Current account as percent of GDP	-5.3	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.2	-2.6
<i>Previous Tealbook</i>	-5.3	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.3	-2.8
Net goods & services	-609.3	-714.2	-759.2	-702.1	-698.8	-374.9	-495.7	-541.2	-460.3
Investment income, net	73.4	78.8	54.7	106.6	159.3	129.2	171.3	175.6	176.8
Direct, net	150.9	173.2	174.0	241.6	287.7	252.1	274.9	285.7	310.6
Portfolio, net	-77.5	-94.4	-119.4	-134.9	-128.4	-122.8	-103.6	-110.2	-133.8
Other income and transfers, net	-94.5	-112.2	-98.1	-122.6	-129.3	-132.8	-145.8	-129.6	-129.6

Last update: February 3, 2017

Monetary Policy Strategies

Equilibrium Real Federal Funds Rate

Figure: Short-Run Estimates with Confidence Intervals

Line chart, by percent, 1990 to 2011. There are five series, "The actual real funds rate based on lagged core inflation", "Tealbook-consistent measure (FRB/US)", "Range of four model-based estimates", "70 Percent confidence interval", and "90 Percent confidence interval". The actual real funds rate series starts at about 4.5 in 1990, decreases to about 0 by 1992, generally increases to about 4.8 by 2000, generally decreases to about -1 by 2004, generally increases to about 3 by 2006, generally decreases to about -2 by late 2008 and generally increases to about -0.7 by 2011:Q2. Tealbook-consistent measure starts at about 4 in 1997. It generally increases to about 5.5 by 2000, generally decreases to about 0 by 2003, generally increases to about 3 by 2007, decreases to about -4.25 by 2009, and generally increases to about -1.5 by 2011:Q2. The other three series closely track each other throughout the chart, with the 70 percent confidence interval being about 1 percent both lesser and greater than the Range of model-based estimates, and the 90 Percent confidence interval being about 2 percent both lesser and greater than the Range of model-based estimates at any given point. The Range of model-based estimates begins at a range of about [1.5, 4] in 1990, decreases to about [-1.3, 2] by 1991, generally increases to about [2, 4.5] by 2000, generally decreases to about [-0.5, 1.5] by 2003, increases to about [0.5, 2.25] by 2006, decreases to about [-7, -1.3] by 2009 and then increases to about [-2.5, 0.8] by 2011.

Short-Run and Medium-Run Measures (Percent)

	Current Tealbook	Current Quarter Estimate as of Previous Tealbook	Previous Tealbook
Short-Run Measures			
Single-equation model	-1.8	-1.3	-1.4
Small structural model	-1.1	-0.6	-1.2
EDO model	0.8	0.9	0.7
FRB/US model	-2.5	-2.3	-2.4
Confidence intervals for four model-based estimates			
70 percent confidence interval	-3.1 to 0.9		
90 percent confidence interval	-4.1 to 2.1		
Tealbook-consistent measures			
EDO model	-0.3	0.2	-0.3
FRB/US model	-1.5	-1.1	-1.4
Medium-Run Measures			
Single-equation model	1.0	1.1	1.1
Small structural model	1.2	1.3	1.2
Confidence intervals for two model-based estimates			
70 percent confidence interval	0.2 to 2.0		
90 percent confidence interval	-0.5 to 2.6		
TIPS-based factor model	2.0		2.0
Memo			
Actual real federal funds rate	-0.7		-0.7

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

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

Figure: Nominal Federal Funds Rate

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Previous Tealbook: Constrained", and "Current Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 0.25 and remains relatively constant here until 2013:Q2. It then generally increases to about 3.5 by 2015:Q4. Previous Tealbook: Constrained begins in 2010:Q2 at about 0.25 and remains relatively constant there until 2013:Q1. It then increases to about 4.1 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about 0.25 and remains relatively constant here until 2011:Q1. It then decreases to about -1.6 by 2012:Q2. It then increases to about 3.8 by 2015:Q4.

Figure: Real Federal Funds Rate

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Previous Tealbook: Constrained", and "Current Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about -1.3 and generally increases to about -0.7 by 2010:Q4. It then generally decreases to about -1.8 by 2013:Q3 and then generally increases to about 1.3 by 2015:Q4. Previous Tealbook: Constrained begins in 2010:Q2 at about -1.3 and increases to about -0.7 by 2010:Q4. It then decreases to about -1.4 by 2013:Q3 and then generally increases to about 2.0 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about -1.3 and increases to about -0.7 by 2010:Q4. It then decreases to about -3.2 by 2012:Q1 and then increases to about 1.5 by 2015:Q4.

Figure: Civilian Unemployment Rate

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Previous Tealbook: Constrained", and "Current Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 9.7 and generally decreases to about 4.8 by 2015:Q4. Previous Tealbook: Constrained begins in 2010:Q2 at about 9.7 and decreases to about 4.65 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about 9.7 and generally decreases to about 4.9 by 2015:Q4.

Figure: Core PCE Inflation

Line chart, by percent (four-quarter averages), 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Previous Tealbook: Constrained", and "Current Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 1.47 and decreases to about 0.8 by 2010:Q4. It then generally increases to about 2.15 by 2015:Q4. Previous Tealbook: Constrained begins in 2010:Q2 at about 1.47 and generally decreases to about 0.81 by 2011:Q1. It then generally increases to about 2.15 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about 1.47 and decreases to about 0.8 by 2010:Q4. It then increases to about 1.7 by 2012:Q1 and then generally decreases to about 1.65 by 2012:Q2. By 2015:Q4 it has increased to about 2.15.

The Policy Outlook in an Uncertain Environment

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

Line chart, by percent, 2011 to 2014. There are four series, "Current Tealbook", "Previous Tealbook", "70 percent confidence interval" and "90 percent confidence interval". The Current Tealbook begins at about 0.1 in 2011:Q2 and remains stable here until 2012:Q2. It then increases to about 3.3 by 2014:Q4. The Previous Tealbook begins at about 0.1 in 2011:Q2 and remains constant here until 2012:Q2. It then increases to about 3.25 by 2014:Q4. The other two series closely track the Current Tealbook series throughout the chart, with the 70 percent confidence interval being about 2% both lesser and greater than the Current Tealbook series, and the 90 Percent confidence interval being about 3% both lesser and greater than the Current Tealbook series at any given point.

Figure: Information from Financial Markets

Line chart, by percent, 2011 to 2014. There are six series, "Current Tealbook", "Previous Tealbook", "Current 70 percent confidence interval", "Current 90 percent confidence interval", "Previous 70 percent confidence interval" and "Previous 90 percent confidence interval". The Current Tealbook begins at about 0.1 in 2011:Q2 and then generally increases to about 2.9 by 2014:Q4. The Previous Tealbook begins at about 0.1 in 2011:Q2 and then increases to about 2.9 by 2014:Q4. The other 2 Current series closely track the Current Tealbook series throughout the chart. The Current 70 percent confidence interval begins at a range of about [0.05, 0.15] in 2011:Q2 and then increases to about [1.3, 4.2] by 2014:Q4. The Current 90 percent confidence interval begins at a range of about [0.05, 0.2] in 2011:Q2 and then increases to about [0.95, 5.65] by 2014:Q4. The other 2 Previous series closely track the Previous Tealbook series throughout the chart. The Previous 70 percent confidence interval begins at a range of about [0.05, 0.1] in 2011:Q2 and then increases to about [1.3, 4.18] by 2014:Q4. The Previous 90 percent confidence interval begins at a range of about [0.05, 0.1] in 2011:Q2 and then increases to about [0.9, 5.5] by 2014:Q4.

Note: As in the March Tealbook, the staff baseline projection for the federal funds rate is based on the outcome-based policy rule. Accordingly, the top-left panel does not report a separate series for the staff's projected funds rate. In both panels, the dark and light shading represent the 70 and 90 percent confidence intervals respectively. Financial market quotes are as of April 20.

Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2011Q2	2011Q3	2011Q2	2011Q3
Taylor (1993) rule	0.13	0.13	-0.49	0.03
Previous Tealbook	0.13	0.13	-0.44	0.02

Taylor (1999) rule	0.13	0.13	-3.40	-2.66
<i>Previous Tealbook</i>	<i>0.13</i>	<i>0.13</i>	<i>-3.17</i>	<i>-2.53</i>
Estimated outcome-based rule	0.13	0.13	-0.30	-0.56
<i>Previous Tealbook</i>	<i>0.13</i>	<i>0.13</i>	<i>-0.18</i>	<i>-0.45</i>
Estimated forecast-based rule	0.13	0.13	-0.05	-0.18
<i>Previous Tealbook</i>	<i>0.13</i>	<i>0.13</i>	<i>-0.03</i>	<i>-0.16</i>
First-difference rule	0.48	0.90	0.48	0.90
<i>Previous Tealbook</i>	<i>0.48</i>	<i>0.84</i>	<i>0.48</i>	<i>0.84</i>

Memo

	2011Q2	2011Q3
Staff assumption	0.10	0.13
Fed funds futures	0.10	0.11
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (April 1, 2011)	0.20	0.20

Note: In calculating the near-term prescriptions of these simple policy rules, policymakers' long-run inflation objective is assumed to be 2 percent. Explanatory Note B provides further background information.

[Box:] Considerations Related to the Timing and Pace of Policy Firming

Pace and Timing of Policy Firming under Different Scenarios

Figure: Federal Funds Rate [left]

Line chart, by percent, 2011 to 2015. There are four series, April TB baseline, Taylor 1993, Taylor 1999, and First difference. April TB baseline begins in 2011:Q1 at about 0.1 and remains constant here until 2012:Q2. It then increases to about 3.9 by 2015:Q4. Taylor 1993 begins in 2011:Q1 at about 0.1 and remains relatively constant here until 2011:Q3. It then increase to about 3.6 by 2015:Q4. Taylor 1999 begins in 2011:Q1 at about 0.1 and remains relatively constant here until 2012:Q4. It then increases to about 3.7 by 2015:Q4. First difference begins in 2011:Q1 at about 0.1 and increases to about 4.05 by 2015:Q4.

Figure: Federal Funds Rate [right]

Line chart, by percent, 2011 to 2015. There are three series, April TB baseline, Lower potential, and Weaker recovery with further disinflation. April TB baseline begins in 2011:Q1 at about 0.1 and remains constant here until 2012:Q2. It then increases to about 3.9 by 2015:Q4. Lower potential begins in 2011:Q1 at about 0.1 and generally increases to about 4.3 by 2015:Q4. Weaker recovery with further disinflation begins in 2011:Q1 at about 0.1 and remains relatively constant here until 2014:Q3. It then increases to about 2.0 by 2015:Q4.

Figure: Unemployment Rate [left]

Line chart, by percent, 2011 to 2015. There are four series, April TB baseline, Taylor 1993, Taylor 1999, and First difference. April TB baseline begins in 2011:Q1 at about 8.95 and decreases to about 5.6 by 2015:Q4. Taylor 1993 begins in 2011:Q1 at about 8.95 and decreases to about 5.5 by 2015:Q4. Taylor 1999 begins in 2011:Q1 at about 8.95 and decreases to about 5.4 by 2015:Q4. First difference begins in 2011:Q1 at about 8.95 and decreases to about 6.0 by 2015:Q4.

Figure: Unemployment Rate [right]

Line chart, by percent, 2011 to 2015. There are three series, April TB baseline, Lower potential, and Weaker recovery with further disinflation. April TB baseline begins in 2011:Q1 at about 8.95 and decreases to about 5.6 by 2015:Q4. Lower potential begins in 2011:Q1 at about 8.95 and increases to about 9.05 by 2011:Q2. It then decreases to about 6.0 by 2015:Q4. Weaker recovery with further disinflation begins in 2011:Q1 at about 8.95 and decreases to about 8.45 by 2012:Q4. It then increases to about 8.5 by 2013:Q3 and then decreases to about 6.35 by 2015:Q4.

Figure: Core PCE Inflation [left]

Line chart, by percent, 2011 to 2015. There are four series, April TB baseline, Taylor 1993, Taylor 1999, and First difference. April TB baseline begins in 2011:Q1 at about 0.9 and increases to about 1.4 by 2011:Q4. It then decreases to about 1.35 by 2012:Q2 and then increases to about 1.65 by 2015:Q4. Taylor 1993 begins in 2011:Q1 at about 0.9 and increases to about 1.45 by 2011:Q4. It then decreases to about 1.43 by 2012:Q2 and then increases to about 1.75 by 2015:Q4. Taylor 1999 begins in 2011:Q1 at about 0.9 and increases to about 1.45 by 2011:Q4. It then decreases to about 1.43 by 2012:Q2 and then increases to about 1.8 by 2015:Q4. First

difference begins in 2011:Q1 at about 0.9 and increases to about 1.2 by 2011:Q4. It then decreases to about 1.15 by 2012:Q2 and then increases to about 1.48 by 2015:Q4.

Figure: Core PCE Inflation [right]

Line chart, by percent, 2011 to 2015. There are three series, April TB baseline, Lower potential, and Weaker recovery with further disinflation. April TB baseline begins in 2011:Q1 at about 0.9 and increases to about 1.4 by 2011:Q4. It then decreases to about 1.35 by 2012:Q2 and then increases to about 1.65 by 2015:Q4. Lower potential begins in 2011:Q1 at about 0.9 and increases to about 2.55 by 2013:Q1. It then decreases to about 2.45 by 2015:Q4. Weaker recovery with further disinflation begins in 2011:Q1 at about 0.9 and increases to about 1.2 by 2011:Q4. It then decreases to about 0.25 by 2014:Q3 and then increases to about 0.51 by 2015:Q4.

Note: Results shown on the left, which are all conditioned on the staff's baseline assumptions for underlying economic conditions, report the simulated implications for unemployment, inflation and interest rates of those baseline assumptions when the federal funds rate follows the prescriptions of the indicated policy rule. Results shown in the panels on the right, which all assume that monetary policy follows the prescriptions of the estimated outcomes-based rule, represent different scenarios for the evolution of underlying economic conditions.

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

Last update: February 3, 2017

Monetary Policy Alternatives

Table 1: Overview of Alternatives for the April 27 FOMC Statement

Key Components	March Statement	April Alternatives		
		A	B	C
Economic Activity				
Economic Recovery	is on a firmer footing	proceeding at a moderate pace, albeit more slowly than had been anticipated	proceeding at a moderate pace	on a firm footing
Labor Market	conditions appear to be improving gradually	conditions are improving only gradually	conditions are improving gradually	conditions are improving
	unemployment rate remains elevated	unemployment rate remains elevated		unemployment rate has moved somewhat closer to mandate-consistent levels
Household Spending	continues to expand	continues to expand; increased energy costs may be weighing on consumer purchases	continues to expand	
Inflation				
Recent Developments	commodity prices have risen significantly since summer; sharp run-up in oil prices in recent weeks	commodity prices have risen significantly since last summer; further increase in oil prices since March		
	expectations have remained stable	while inflation has picked up in recent months, expectations have remained stable	inflation has picked up in recent months, but expectations have remained [generally] stable	
	measures of underlying inflation have been subdued, continue to be somewhat low	measures of underlying inflation are still subdued, continue to be somewhat low relative to mandate-consistent levels		measures of underlying inflation are still subdued, have moved somewhat closer to mandate-consistent levels
	commodity prices are putting upward pressure on inflation; effects expected to be transitory	commodity prices are putting upward pressure on inflation; effects expected to be transitory		commodity prices are boosting overall inflation; expected to be transitory so long as longer-run expectations remain stable
Outlook				
Outlook	anticipate gradual return to higher resource utilization with price stability	although anticipate gradual return to higher resource utilization with price stability, downside risks to outlook for growth have increased	anticipate gradual return to higher resource utilization with price stability	
Federal Funds Rate Target Range				
Intermeeting Period	0 to ¼ percent	0 to ¼ percent		
Forward	exceptionally low	exceptionally low	exceptionally low	exceptionally low

Guidance	levels for an extended period	levels at least through mid-2012	levels for an extended period	levels for some time
SOMA Portfolio Policy				
Approach	intends to purchase \$600 billion of Treasuries by end of 2011:Q2	will complete purchases of \$600 billion of Treasuries by end of current quarter		purchases to date promote appropriate progress toward mandate; complete only \$450 billion of the intended \$600 billion increase in securities holdings
	maintain reinvestment policy	maintain reinvestment policy		for now, maintain reinvestment policy
Future Policy Action				
Asset Purchases / Holdings	will regularly review pace and size of purchases and adjust as needed	prepared to expand and extend purchases if needed	will regularly review size and composition of holdings; prepared to adjust holdings as needed	will regularly review reinvestment policy and level of holdings; will make adjustments as needed
Overall	will monitor economic outlook and employ policy tools as necessary to support the recovery and to help ensure that inflation, over time, is consistent with mandate	will monitor economic outlook and employ policy tools as necessary to support the recovery and to help ensure that inflation, over time, is consistent with mandate		

[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

- Information received since the Federal Open Market Committee met in ~~January~~ **March** suggests that the economic recovery is ~~on a firmer footing~~ **proceeding at a moderate pace, albeit somewhat more slowly than had been anticipated**, and ~~that~~ overall conditions in the labor market ~~appear to be~~ **are** improving **only** gradually. Household spending and business investment in equipment and software continue to expand, **but increased energy costs may be weighing on consumer purchases of non-energy goods and services**. ~~However~~ Investment in nonresidential structures is still weak, and the housing sector continues to be depressed. Commodity prices have risen significantly since ~~the last~~ summer, and concerns about global supplies of crude oil have contributed to a ~~sharp run-up~~ **further increase** in oil prices ~~in recent weeks~~ **since the Committee met in March**. ~~Nonetheless~~, **While inflation has picked up in recent months**, longer-term inflation expectations have remained stable and measures of underlying inflation ~~have been~~ **are still** subdued.
- Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. ~~Currently~~, The unemployment rate remains elevated, and measures of underlying inflation continue to be somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. ~~The recent~~ Increases in the prices of energy and other commodities are ~~currently~~ putting upward pressure on inflation. The Committee expects these effects to be transitory, but it will pay close attention to the evolution of inflation and inflation expectations. **Although** the Committee continues to anticipate a gradual return to higher levels of resource utilization in a context of price stability, **recent developments have increased the downside risks to the outlook for economic growth**.
- To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities as announced in November. In particular, the Committee is maintaining its existing policy of reinvesting principal payments from its securities holdings and ~~intends~~ **will complete** ~~to~~ purchases of \$600 billion of longer-term Treasury securities by the end of the ~~second current~~ **quarter of 2014**. The Committee ~~will regularly review the pace of its securities purchases and the overall size of the asset purchase program in light of incoming information and will adjust~~ **is prepared to expand and extend the purchase program** ~~the program as if needed to best foster maximum employment and price stability~~.
- The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and ~~continues to currently~~ **anticipates** that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate ~~for an extended period~~ **at least through mid-2012**.
- The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate.

April FOMC Statement--Alternative B

- Information received since the Federal Open Market Committee met in ~~January~~ **March** ~~suggests~~ **indicates** that the economic recovery is ~~on a firmer footing~~ **proceeding at a moderate pace** and overall conditions in the labor market ~~appear to be~~ **are** improving gradually. Household spending and business investment in equipment and software continue to expand. However, investment in nonresidential structures is still weak, and the housing sector continues to be depressed. Commodity prices have risen significantly since ~~the last~~ summer, and concerns about global supplies of crude oil

have contributed to a ~~sharp run-up~~ **further increase** in oil prices in ~~recent weeks~~ **since the Committee met in March**. ~~Nonetheless, Inflation has picked up in recent months, but~~ longer-term inflation expectations have remained **[generally]** stable and measures of underlying inflation ~~have been~~ **are still** subdued.

- Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. ~~Currently, The unemployment rate remains elevated, and measures of underlying inflation continue to be somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. The recent~~ Increases in the prices of energy and other commodities are ~~currently~~ putting upward pressure on inflation. The Committee expects these effects to be transitory, but it will pay close attention to the evolution of inflation and inflation expectations. The Committee continues to anticipate a gradual return to higher levels of resource utilization in a context of price stability.
- To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities as announced in November. In particular, the Committee is maintaining its existing policy of reinvesting principal payments from its securities holdings and ~~intends to will complete~~ **purchases of \$600 billion** of longer-term Treasury securities by the end of the ~~second current~~ **quarter of 2014**. The Committee will regularly review the ~~pace size and composition~~ of its securities ~~purchases holdings and the overall size of the asset purchase program~~ in light of incoming information and ~~will adjust the program~~ **is prepared to adjust those holdings** as needed to best foster maximum employment and price stability.
- The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for an extended period.
- The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate.

April FOMC Statement--Alternative C

- Information received since the Federal Open Market Committee met in ~~January~~ **March** ~~suggests indicates~~ that the economic recovery is on a firmer footing and overall conditions in the labor market ~~appear to be~~ **are** improving ~~gradually~~. Household spending and business investment in equipment and software continue to expand. ~~However, investment in nonresidential structures is still weak, and the housing sector continues to be depressed. Commodity prices have risen significantly since the summer, and concerns about global supplies of crude oil have contributed to a sharp run-up~~ **further increase** in oil prices in ~~recent weeks~~ **since the Committee met in March**. ~~Nonetheless, Inflation has picked up in recent months, but~~ longer-term inflation expectations have remained **[generally]** stable and measures of underlying inflation ~~have been~~ **are still** subdued.
- Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. ~~Currently, The unemployment rate remains elevated and measures of underlying inflation continue to be somewhat low, relative~~ **have moved somewhat closer** to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. ~~However, The recent~~ increases in the prices of energy and other commodities ~~are currently putting upward pressure on~~ **are boosting overall** inflation. The Committee expects these effects to be transitory **so long as longer-term inflation expectations remain stable, but** and it will pay close attention to the evolution of inflation and inflation expectations. The Committee continues to anticipate a gradual return to higher levels of resource utilization in a context of price stability.
- ~~To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate~~ **In light of incoming information, the Committee judges that the increase in its holdings of longer-term securities since November is sufficient to promote appropriate progress toward maximum employment and price stability. Accordingly,** the Committee decided today to ~~continue~~ **expanding complete only \$450 billion of the intended \$600 billion increase** in its holdings of securities as announced in November. ~~In particular~~ **For now,** the Committee is maintaining its existing policy of reinvesting principal payments from its securities holdings and ~~intends to purchase \$600 billion of longer-term Treasury securities by the end of the second quarter of 2014. The Committee~~ will regularly review the ~~pace of its securities purchases and the overall size of the asset purchase program~~ **needed its reinvestment policy and the level of its securities holdings** in light of incoming information and ~~will adjust the program~~ **make adjustments** as needed to best foster maximum employment and price stability.
- The Committee will maintain the target range for the federal funds rate at 0 to ¼ percent and ~~continues to anticipates~~ that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for ~~an extended period~~ **some time**.
- The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate.

Long-Run Projections of the Balance Sheet and Monetary Base

Figure: Total Assets

Line chart, by billions of dollars, 2006 to 2020. Data are monthly. There are three series, Alt A and B, Alt C, and March Alt B. Alt A and B begins in 2006 at about 800 and generally increases slowly to about 900 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1850 by December 2008. By 2011 it has generally increased to about 2850 and by September 2015 it has generally decreased to about 1500. It then increases to about 1980 by the end of 2020. Alt C begins in 2006 at about 800 and generally increases slowly to about 900 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1850 by December 2008. By 2011 it has generally increased to about 2700 and by March 2015 it has generally decreased to about 1450. It then increases to about 1980 by the end of 2020. March Alt B begins in 2006 at about 800 and generally increases slowly to about 900 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1850 by December 2008. By 2011 it has generally increased to about 2850 and by March 2016 it has generally decreased to about 1475. It then increases to about 1900 by the end of 2020.

Growth Rates for the Monetary Base

Date	Alternatives A and B	Alternative C	Memo: March
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Tealbook			
	Percent, annual rate		
Monthly			
Jan-11	23.3	23.3	23.3
Feb-11	57.6	57.6	57.6
Mar-11	99.1	99.1	103.4
Apr-11	81.5	83.4	70.9
May-11	56.6	38.9	44.4
Jun-11	31.7	-5.4	35.8
Jul-11	12.8	-13.9	13.0
Aug-11	-20.8	-35.4	-16.4
Sep-11	-49.4	-62.1	-35.7
Oct-11	-19.4	-29.2	-13.2
Nov-11	5.9	-3.7	4.6
Dec-11	-4.1	-6.2	2.7
Quarterly			
2011 Q1	37.0	37.0	37.5
2011 Q2	75.4	66.7	69.9
2011 Q3	7.1	-16.1	9.3
2011 Q4	-18.9	-28.7	-12.9
2012 Q1	-6.0	-6.6	0.6
2012 Q2	-12.7	-13.8	-1.4
Annual - Q4 to Q4			
2011	25.9	13.5	27.3
2012	-11.9	-12.5	-4.1
2013	-18.0	-18.8	-17.5
2014	-20.3	-19.8	-20.2
2015	-7.3	3.9	-21.6

Note: Not seasonally adjusted.

M2 Growth Rates

(Percent, seasonally adjusted annual rate)

Tealbook Forecast [*]	
Monthly Growth Rates	
Sep-10	6.6
Oct-10	5.5
Nov-10	5.1
Dec-10	4.0
Jan-11	2.7
Feb-11	7.4
Mar-11	3.0
Apr-11	3.2
May-11	3.2
Jun-11	2.5
Jul-11	2.5
Aug-11	1.9
Sep-11	1.9
Quarterly Growth Rates	

2010 Q3	4.5
2010 Q4	5.6
2011 Q1	4.4
2011 Q2	3.6
2011 Q3	2.4
Annual Growth Rates	
2009	5.0
2010	3.2
2011	3.0
2012	2.8

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

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

April 2011 FOMC Directive -- Alternative A

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to execute purchases of longer-term Treasury securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately \$2.6 trillion by the end of June 2011. The Committee also directs the Desk to reinvest principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. 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 2011 FOMC Directive -- Alternative B

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to execute purchases of longer-term Treasury securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately \$2.6 trillion by the end of June 2011. The Committee also directs the Desk to reinvest principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. 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 2011 FOMC Directive -- Alternative C

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to execute purchases of longer-term Treasury securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately ~~\$2.6~~ **\$2.5** trillion by **mid-May** 2011. The Committee also directs the Desk to reinvest principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

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

Last update: February 3, 2017

Explanatory Notes

A. Measures of the Equilibrium Real Rate

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

Proxy used for expected inflation	Actual real federal funds rate (current value)	Tealbook-consistent FRB/US-based measure of the equilibrium real funds rate (current value)	Average actual real funds rate (twelve-quarter average)
Lagged core inflation	-0.7	-1.5	-0.5
Lagged headline inflation	-1.4	-1.8	-0.8
Projected headline inflation	-1.1	-1.6	-0.6

B. Analysis of Policy Paths and Confidence Intervals

Rule Specifications

For the following rules, i_t denotes the federal funds rate for quarter t , while the right-hand-side variables include the staff's projection of trailing four-quarter core PCE inflation (π_t), inflation two and three quarters ahead ($\pi_{t+2|t}$ and $\pi_{t+3|t}$), the output gap in the current period and one quarter ahead ($y_t - y_t$ and $y_{t+1|t} - y_{t+1|t}$), and the three-quarter-ahead forecast of annual average GDP growth relative to potential ($\Delta^4 y_{t+3|t} - \Delta^4 y_{t+3|t}$), and π denotes an assumed value of policymakers' long-run outcome-based and forecast-based rules were estimated using real-time data over the sample 1988:1-2006:4; each specification was chosen using the Bayesian information criterion. Each rule incorporates a 75 basis point shift in the intercept, specified as a sequence of 25 basis point increments during the first three quarters of 1998. The first two simple rules were proposed by Taylor (1993, 1999). The prescriptions of the first-difference rule do not depend on assumptions regarding r or the level of the output gap; see Orphanides (2003).

Rule	Specification
Outcome-based rule	$i_t = 1.20i_{t-1} - 0.39i_{t-2} + 0.19[1.17 + 1.73\pi_t + 3.66(y_t - y_t) - 2.72(y_{t-1} - y_{t-1})]$
Forecast-based rule	$i_t = 1.18i_{t-1} - 0.38i_{t-2} + 0.20[0.98 + 1.72\pi_{t+2|t} + 2.29(y_{t+1|t} - y_{t+1|t}) - 1.37(y_{t-1} - y_{t-1})]$
Taylor (1993) rule	$i_t = 2 + \pi_t + 0.5(\pi_t - \pi) + 0.5(y_t - y_t)$
Taylor (1999) rule	$i_t = 2 + \pi_t + 0.5(\pi_t - \pi) + (y_t - y_t)$
First-difference rule	$i_t = i_{t-1} + 0.5(\pi_{t+3|t} - \pi) + 0.5(\Delta^4 y_{t+3|t} - \Delta^4 y_{t+3|t})$

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

Federal Reserve Balance Sheet: End-of-Year Projections -- Alternatives A & B

Billions of dollars

	Mar 31, 2011	2012	2014	2016	2018	2020
Total assets	2,633	2,463	1,725	1,579	1,752	1,952
Selected assets						
Liquidity programs for financial firms	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0
Lending through other credit facilities	19	7	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	19	7	0	0	0	0
Support for specific institutions	64	38	29	21	9	5
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	64	38	29	21	9	5
Securities held outright	2,410	2,280	1,579	1,456	1,649	1,857
U.S. Treasury securities	1,340	1,422	1,051	1,260	1,649	1,857
Agency debt securities	132	77	39	16	0	0
Agency mortgage-backed securities	937	781	489	180	0	0
Special drawing rights certificate account	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	139	137	116	102	94	90
Total liabilities	2,581	2,392	1,632	1,456	1,590	1,737
Selected liabilities						
Federal Reserve notes in circulation	964	1,080	1,219	1,349	1,483	1,631
Reverse repurchase agreements	62	60	60	60	60	60
Deposits with Federal Reserve Banks	1,525	1,234	336	30	30	30
Reserve balances held by depository institutions	1,408	1,029	131	25	25	25
U.S. Treasury, General Account	111	5	5	5	5	5
U.S. Treasury, Supplementary Financing Account	5	200	200	0	0	0
Other balances	0	0	0	0	0	0
Interest of Federal Reserve Notes due to U.S. Treasury	0	0	0	0	0	0
Total capital	53	70	93	123	162	215

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

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

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

Billions of dollars

	Mar 31, 2011	2012	2014	2016	2018	2020
Total assets	2,633	2,237	1,557	1,579	1,752	1,952
Selected assets						
Liquidity programs for financial firms	0	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	0	0	0	0	0	0
Lending through other credit facilities	19	7	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	19	7	0	0	0	0
Support for specific institutions	64	38	29	21	9	5
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	64	38	29	21	9	5
Securities held outright	2,410	2,057	1,411	1,454	1,646	1,854
U.S. Treasury securities	1,340	1,199	883	1,257	1,646	1,854
Agency debt securities	132	77	39	16	0	0
Agency mortgage-backed securities	937	781	489	180	0	0
Special drawing rights certificate account	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	139	134	116	104	97	93
Total liabilities	2,581	2,167	1,464	1,456	1,590	1,737
Selected liabilities						
Federal Reserve notes in circulation	964	1,080	1,219	1,349	1,483	1,631
Reverse repurchase agreements	62	60	60	60	60	60
Deposits with Federal Reserve Banks	1,525	1,008	168	30	30	30
Reserve balances held by depository institutions	1,408	803	25	25	25	25
U.S. Treasury, General Account	111	5	5	5	5	5
U.S. Treasury, Supplementary Financing Account	5	200	137	0	0	0
Other balances	0	0	0	0	0	0
Interest of Federal Reserve Notes due to U.S. Treasury	0	0	0	0	0	0
Total capital	53	70	93	123	162	215

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

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

Last update: February 3, 2017