

Accessible Material

March 2011 Tealbook Tables and Charts

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March 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, by percent, 2007 to 2012. Data are quarterly averages. There are four series, Current Tealbook, Previous Tealbook, Market expected rate, and Market modal rate. Current Tealbook begins in 2007:Q1 at about 5.25 and generally decreases to about 0.13 by 2009:Q4. It remains relatively constant here until 2012:Q2. By 2012:Q4 it has increased to about 0.5. Previous Tealbook follows Current Tealbook almost exactly until 2012:Q4 when it decreases to about 0.1. Market expected rate begins in 2011:Q1 at about 0.13 and remains relatively stable here until 2011:Q3. It then generally increases to about 1.2 by 2012:Q4. Market modal rate begins in 2011:Q1 at about 0.13 and remains relatively stable here until 2011:Q3. It then generally increases to about 0.3 by 2012:Q4.

Figure: Long-Term Interest Rates

Line chart, by percent, 2007 to 2012. Data are quarterly averages. There are six series, "Current Tealbook: BBB corporate yield", "Current Tealbook: Conforming mortgage rate", "Current Tealbook: 10-year Treasury yield", "Previous Tealbook: BBB corporate yield", "Previous Tealbook: Conforming mortgage rate", and "Previous Tealbook: 10-year Treasury yield". Current Tealbook: BBB corporate yield begins in 2007 at about 6.1 and generally increases to about 9.5 by late 2008. It then generally decreases to about 5.1 by late 2010 and then generally increases to about 6.2 by late 2012. Current Tealbook: Conforming mortgage rate begins in 2007 at about 6.25 and fluctuates but generally decreases to about 4.5 by late 2010. It then increases to about 6.1 by late 2012. Current Tealbook: 10-year Treasury yield begins in 2007 at about 4.8 and fluctuates but generally decreases to about 3.2 by early 2009. It then generally increases to about 4.0 by early 2010 and then generally decreases to about 2.9 by late 2010. By late 2012 it has generally increased to about 4.5. Previous Tealbook: BBB corporate yield begins in 2007 at about 6.1 and generally increases to about 9.5 by late 2008. It then generally decreases to about 5.1 by late 2010 and then generally increases to about 6.1 by late 2012. Previous Tealbook: Conforming mortgage rate begins in 2007 at about 6.25 and fluctuates but generally decreases to about 4.5 by late 2010. It then increases to about 6.0 by late 2012. Previous Tealbook: 10-year Treasury yield begins in 2007 at about 4.8 and fluctuates but generally decreases to about 3.2 by early 2009. It then generally increases to about 4.0 by early 2010 and then generally decreases to about 2.9 by late 2010. By late 2012 it has generally increased to about 4.4.

Figure: Equity Prices

Line chart, by ratio scale where 2007:Q1 = 100, from 2007 to 2012. Data are quarter-end. There are two series, Current Tealbook: Dow Jones Total Stock Market Index and Previous Tealbook: Dow Jones Total Stock Market Index. Current Tealbook: Dow Jones Total Stock Market Index begins in early 2007 at about 100 and generally increases to about 107 by mid-2007. It then generally decreases to about 56 by 2009 and then generally increases to about 85 by early 2010. By mid-2010 it has generally decreased to about 74 and by late 2012 it has generally increased to about 114. Previous Tealbook: Dow Jones Total Stock Market Index begins in early 2007 at about 100 and generally increases to about 107 by mid-2007. It then generally decreases to about 56 by 2009 and then generally increases to about 85 by early 2010. By mid-2010 it has generally decreased to about 74 and by late 2012 it has generally increased to about 111.

Figure: House Prices

Line chart, by ratio scale, 2007:Q1 = 100, from 2007 to 2012. Data are quarterly. There are two series, Current Tealbook: CoreLogic index and Previous Tealbook: CoreLogic index. Current Tealbook: CoreLogic index begins in 2007 at about 100 and generally decreases to about 72 by early 2009. It then generally increases to about 74.5 by mid-2010 and then generally decreases to about 68 by late 2012. Previous Tealbook: CoreLogic index begins in 2007 at about 100 and generally decreases to about 72 by early 2009. It then generally increases to about 74.5 by mid-2010 and then generally decreases to about 66.5 by late 2012.

Figure: Crude Oil Prices

Line chart, by dollars per barrel, 2007 to 2012. Data are quarterly averages. There are two series, Current Tealbook: West Texas Intermediate and Previous Tealbook: West Texas Intermediate. Current Tealbook: West Texas Intermediate begins in early 2007 at about 58 and generally increases to about 125 by 2008. By 2009 it has generally decreased to about 42 and by 2011 it has generally increased to about 108. It then generally decreases to about 104 by late 2012. Previous Tealbook: West Texas Intermediate begins in early 2007 at about 58 and generally increases to about 125 by 2008. By 2009 it has generally decreased to about 42 and by late 2012 it has generally increased to about 97.

Figure: Broad Real Dollar

Line chart, by index where 2007:Q1 = 100, from 2007 to 2012. Data are quarterly averages. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in 2007 at about 100 and generally decreases to about 89 by 2008. It then generally increases to about 101 by early 2009 and then generally decreases to about 92.5 by late 2009. By 2010 it has generally increased to about 94 and by late 2012 it has generally decreased to about 82. Previous Tealbook begins in 2007 at about 100 and generally decreases to about 89 by 2008. It then generally increases to about 101 by early 2009 and then generally decreases to about 92.5 by late 2009. By 2010 it has generally increased to about 94 and by late 2012 it has generally decreased to about 82.5.

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

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2010:Q4		2011:Q1		2011:Q2	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	3.8	3.2	3.6	3.2	3.7	3.8
Private domestic final purchases	4.0	4.4	3.9	3.0	4.3	4.2
Personal consumption expenditures	4.1	4.1	3.1	2.5	3.5	3.5
Residential investment	.7	2.8	3.2	3.7	9.2	7.3
Nonres. structures	3.7	6.7	-.8	-10.4	.0	-.9
Equipment and software	3.7	6.6	13.3	12.7	13.0	12.5
Federal purchases	1.1	-.2	2.1	-4.7	.9	4.6
State and local purchases	-.9	-2.6	-.1	-2.1	.2	-.7
	Contribution to change in real GDP (percentage points)					
Inventory investment	-3.0	-3.5	.5	1.1	.3	.1
Net exports	3.5	3.3	-.2	.2	-.3	-.1

Recent Nonfinancial Developments (1)

Figure: Change in Private Payroll Employment

Line chart, by thousands of employees, 2001 to 2011. There is a horizontal line at zero. There are two series, Change in Private Payroll Employment and 3-month moving average. Change in Private Payroll Employment begins in early 2001 at about -40 and generally decreases to about -360 by late 2001. It then generally increases to about 150 by late 2002 and then generally decreases to about -210 by early 2003. By early 2005 it has generally increased to about 350 and by early 2009 it has generally decreased to about -820. It then generally increases to about 220 by February 2011. 3-month moving average begins in early 2001 at about 90 and generally decreases to about -320 by late 2001. It then generally increases to about 25 by late 2002 and then generally decreases to about -140 by early 2003. By early 2006 it has generally increased to about 300 and by early 2009 it has generally decreased to about -790. It then generally increases to about 160 by February 2011.

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

Figure: Unemployment Rate

Line chart, by percent, 2001 to 2011. The series begins in 2001 at about 4.2 and generally increases to about 6.4 by 2003. It then generally decreases to about 4.4 by 2007 and then generally increases to about 10.1 by 2009. By February 2011 it has generally decreased to about 8.9.

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

Figure: Manufacturing IP excluding Motor Vehicles and Parts

Line chart, by 3-month percent change, annual rate, 2001 to 2011. There is a horizontal line at zero. The series begins in early 2001 at about -3 and then generally decreases to about -8 by mid-2001. It then generally increases to about 7 by mid-2002 and then generally decreases to about -2.5 by late 2002. By early 2005 it has generally increased to about 8 and by mid-2005 it has generally decreased to about -4.5. It then generally increases to about 12 by late 2005 and then generally decreases to about -1 by late 2006. By early 2007 it has generally increased to about 7.5 and by early 2009 it has generally decreased to about -22. It then generally increases to about 12.5 by early 2010 and then generally decreases to about 2 by late 2010. By January 2011 it has generally increased to about 6.5.

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

Figure: Production of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2001 to 2011. The series begins in 2001 at about 10.6 and generally increases to about 13.2 by 2003. It then generally decreases to about 3.6 by the end of 2008 and then generally increases to about 7.8 by January 2011. There is also one "Schedules: Q1" data point on the graph at 8.5 in 2011:Q1.

Note: Schedules data are from Ward's Communications.

Source: Ward's Auto Infobank.

[Box:] The Labor Force Participation Rate

Figure: Labor Force Participation Rate

Line chart, by percent, 1980 to 2012. There are three series, "Actual and forecast," "Influence of population aging," and "Trend." The Actual and forecast series accounts for periodic revisions to the level of population in the Current Population Survey. It begins in 1980 at about 64.0 and generally increases to about 67.0 by 1989. It then generally decreases to about 66.25 by 1996 and then generally increases to about 67.3 by 2000. By 2005 it has generally decreased to about 65.65 and by 2007 it has generally increased to about 66.1. It then generally decreases to about 64.15 by 2011 and then generally increases to about 64.4 by 2012. Influence of population aging begins in 1980 at about 66.15 and generally increases to about 66.9 by 1991. It then generally decreases to about 64.75. Trend begins in 1980 at about 63.75 and then generally increases to about 66.75 by 1994. It then generally decreases to about 64.75 by 2012.

Note: The grey shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: January 1980-July 1980, July 1981-November 1982, July 1990-March 1991, March 2001-November 2001, December 2007-June 2009.

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

Recent Nonfinancial Developments (2)

Figure: Real PCE Goods excluding Motor Vehicles

Line chart, by billions of chained (2005) dollars, 2001 to 2011. The series begins in 2001 at about 2250 and generally increases to about 2925 by 2007. It then generally decreases to about 2775 by late 2008 and then generally increases to about 3000 by January 2011.

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

Figure: Sales of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2001 to 2011. The series begins in early 2001 at about 17.5 and generally decreases to about 16 by mid-2001. Within a month or so it increases to about 21.7 and then decreases to about 15.7 by late 2001. From late 2001 to early 2005 it fluctuates between about 15.2 and 18.2. It then generally increases to about 20.5 by mid-2005 and then decreases to about 14.5 by late 2005. By early 2006 it has generally increased to about 18 and by early 2009 it has generally decreased to about 9.1. It then generally increases to about 14 by mid-2009 and within a month or so decreases to about 8.8. By February 2011 it has generally increased to about 13.5.

Source: Ward's Auto Infobank.

Figure: Single-Family Housing Starts

Line chart, thousands of units, annual rate, 2001 to 2011. There are two series, Starts and Adjusted permits. Starts begins in 2001 at about 1280 and generally increases to about 1830 by 2006. It then generally decreases to about 370 by 2009 and then generally increases to about 590 by early 2010. By January 2011 it has generally decreased to about 420. Adjusted permits begins in 2001 at about 1280 and generally increases to about 1870 by 2005. It then generally decreases to about 365 by 2009 and then generally increases to about 590 by early 2010. By January 2011 it has generally decreased to about 425.

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

Source: U.S. Census Bureau.

Figure: Single-Family Home Sales

Line chart, by thousands of units, annual rate, 2001 to 2011. There are two series, New and Existing. New begins in 2001 at about 950 and generally increases to about 1400 by 2005. It then generally decreases to about 290 by January 2011. Existing begins in 2001 at about 4550 and generally increases to about 6350 by 2005. It then generally decreases to about 4000 by late 2008 and then generally increases to about 5700 by late 2009. By mid-2010 it has generally decreased to about 3400 and by January 2011 it has generally increased to about 4750.

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

Figure: Nondefense Capital Goods Excluding Aircraft

Line chart, by billions of dollars, 2001 to 2011. There are two series, Orders and Shipments. Orders begins in 2001 at about 62.3 and generally decreases to about 46 by early 2002. It then generally increases to about 71.7 by late 2007 and then generally decreases to about 47.7 by 2009. By January 2011 it has generally increased to about 62.5. Shipments begins in 2001 at about 62.3 and generally decreases to about 49 by early 2003. It then generally increases to about 67.5 by mid-2008 and then generally decreases to about 53.2 by 2009. By January 2011 it has generally increased to about 62.2.

Source: U.S. Census Bureau.

Figure: Nonresidential Construction Put in Place

Line chart, by billions of chained (2005) dollars, 2001 to 2011. The series begins in 2001 at about 275 and generally decreases to about 220 by late 2002. It then generally increases to about 410 by late 2007. From late 2007 to late 2008 it fluctuates between about 400 and 415. It then generally decreases to about 245 by January 2011.

Source: U.S. Census Bureau.

Recent Nonfinancial Developments (3)

Figure: Inventory Ratios excluding Motor Vehicles

Line chart, by months, 2001 to 2011. There are two series, Staff flow-of-goods system and Census book-value data. Staff flow-of-goods system begins in 2001 at about 1.69 and generally decreases to about 1.48 by late 2007. It then generally increases to about 1.63 by early 2009 and then generally decreases to about 1.5 by January 2011. Census book-value data begins in 2001 at about 1.39 and generally decreases to about 1.18 by 2005. It then generally increases to about 1.25 by 2006 and then generally decreases to about 1.19 by 2008. By early 2009 it has generally increased to about 1.4 and by December 2010 it has generally decreased to about 1.2.

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

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

Figure: Defense Spending

Line chart, by billions of chained (2005) dollars, 2001 to 2011. There are two series, "Unified" in which the data are monthly and "NIPA" in which the data are quarterly. Unified begins in 2001 at about 385 and generally increases to about 555 by 2004. From 2004 to early 2007 it fluctuates between about 460 and 575. It then generally increases to about 610 by January 2011. NIPA begins in 2001 at about 390 and generally increases to about 525 by 2004. From 2004 to early 2007 it fluctuates between about 505 and 540. It then generally increases to about 648 by 2010:Q4.

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

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

Figure: Trade Balance

Line chart, by billions of dollars, 2001 to 2011. The series begins in early 2001 at about -35 and generally increases to about -26 by late 2001. It then generally decreases to about -68 by 2005 and then generally increases to about -56 by 2007. By 2008 it has generally decreased to about -68 and by 2009 it has generally increased to about -24. It then generally decreases to about -52 by 2010 and then generally increases to about -40 by December 2011.

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

Figure: Exports and Non-Oil Imports

Line chart, by billions of dollars, 2001 to 2010. There are two series, Non-oil imports and Exports. Non-oil imports begins in early 2001 at about 115 and generally decreases to about 97 by late 2001. It then generally increases to about 182 by 2008 and then generally decreases to about 132 by 2009. By December 2010 it has generally increased to about 172. Exports begins in early 2001 at about 89 and generally decreases to about 77 by late 2001. It then generally increases to about 167 by 2008 and then generally decreases to about 123 by 2009. By December 2010 it has generally increased to about 162.

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

Figure: Total PCE Prices

Line chart, by percent, 2001 to 2011. There is a horizontal line at zero. There are two series, 12-month change and 3-month change. 12-month change begins in 2001 at about 2.5 and generally decreases to about 0.7 by early 2002. It then generally increases to about 4 by 2005 and then generally decreases to about 1.5 by 2006. By 2008 it has generally increased to about 4.5 and by 2009 it has generally decreased to about -1. It then generally increases to about 2.5 by 2010 and then generally decreases to about 1.2 by January 2011. 3-month change begins in late 2001 at about 0 and generally increases to about 4 by early 2002. It then generally decreases to about 1.5 by late 2002 and then generally increases to about 4 by early 2003. By mid-2003 it has generally decreased to about -0.8 and by late 2003 it has generally increased to about 4.1. From late 2003 to mid-2005 it fluctuates between about 1.2 and 4.1. It then generally increases to about 8.7 within a month or so and then generally decreases to about -1.5 by late 2006. By mid-2008 it has generally increased to about 7 and by late 2008 it has generally decreased to about -9. It then generally increases to about 4 by 2009 and then generally decreases to about -1.3 by mid-2010. By January 2011 it has generally increased to about 2.5.

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

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

Figure: PCE Prices excluding Food and Energy

Line chart, by percent, 2001 to 2011. There is a horizontal line at zero. There are two series, 12-month change and 3-month change. 12-month change begins in early 2001 at about 1.8 and generally decreases to about 1 by late 2001. It then generally increases to about 2.7 by late 2002 and then generally decreases to about 1.3 by 2003. By mid-2008 it has generally increased to about 2.7 and by 2009 it has generally decreased to about 1.25. It then generally increases to about 1.75 by early 2010 and then generally decreases to about 0.8 by January 2011. 3-month change begins in early 2001 at about 2.45 and generally decreases to about -1.1 by late 2001. Within a month or so it generally increases to about 4 and then generally decreases to about 0.75 by early 2003. It then generally increases to about 3.5 by 2005. From 2005 to early 2008 it fluctuates between about 1 and 3.5. It then generally decreases to about 0.1 by 2008 and then generally increases to about 2.6 by 2009. By 2010 it has generally decreased to about 0.2 and by January 2011 it has increased to about 1.

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

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

Projections of Real GDP and Related Components

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

Measure	2009	2010	2011	2012
Real GDP	.2	2.8	3.7	4.4
Previous Tealbook	.2	2.9	3.8	4.4
Final sales	-.3	2.4	3.6	4.1
Previous Tealbook	-.3	2.4	3.8	4.1
Personal consumption expenditures	.2	2.6	3.2	3.9
Previous Tealbook	.2	2.6	3.5	3.8
Residential investment	-13.4	-4.7	8.4	13.4
Previous Tealbook	-13.4	-5.2	9.1	13.5
Nonresidential structures	-26.5	-4.2	-3.0	-.1
Previous Tealbook	-26.5	-4.9	-.4	.0
Equipment and software	-4.9	16.6	13.0	9.6
Previous Tealbook	-4.9	15.8	13.6	10.6
Federal purchases	3.6	4.8	.3	-.8
Previous Tealbook	3.6	5.2	1.0	.0
State and local purchases	-1.0	-1.3	-.7	.5
Previous Tealbook	-1.0	-.8	.3	1.2
Exports	-.1	9.2	10.0	9.0
Previous Tealbook	-.1	9.0	9.2	8.6
Imports	-7.2	11.0	5.9	5.5
Previous Tealbook	-7.2	10.6	6.7	6.0
	Contributions to change in real GDP (percentage points)			
Inventory change	.5	.4	.2	.3
Previous Tealbook	.5	.5	.0	.3
Net exports	1.2	-.5	.3	.3
Previous Tealbook	1.2	-.5	.1	.2

Figure: Real GDP

Line chart, by 4-quarter percent change, 1981 to 2012. There are two series, Current and Previous Tealbook. Current begins in early 1981 at about 1.7 and increases to about 4.6 by late 1981. It then generally decreases to about -3 by 1982. By 1984 it has generally increased to about 8.5 and by 1991 it has generally decreased to about -1.2. It then generally increases to about 4.5 by late 1992. From late 1992 to early 2000 it fluctuates between about 2 and 5.5. It then generally decreases to about 0.2 by 2001 and then generally increases to about 4 by 2004. By 2009 it has generally decreased to about -4.2 and by late 2012 it has generally increased to about 4.4. Previous Tealbook follows the Current series almost exactly.

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. Blue shading represents the projection period, which begins in 2010:Q4.

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

[Box:] The Fiscal Condition of State and Local Governments

Figure: State & Local Tax Receipts

Line chart, by percent change from year earlier, 2000 to 2012. There is a horizontal line at zero. There is one series, 4-quarter moving average. It begins in 2000 at about 6.2 and generally decreases to about 0 in 2002. It then generally increases to about 10 in 2005 and then generally decreases to about -5.5 in 2009. By 2012 it has generally increased to about 6.

Note: The values from 2011:Q1 to the end of 2012 are forecast values.

Source: U.S. Census Bureau and staff projection.

Figure: Operating Budget: State & Local Revenues and Expenditures Excluding Infrastructure

Line chart, by percent of potential GDP, 2000 to 2012. There are three series, Revenues, Expenditures, and Stimulus grants. Revenues begins in 2000 at about 13.6 and generally decreases to about 13.05 by 2002. It then generally increases to about 13.7 by 2005 and then generally decreases to about 13.2 by 2009. By 2010 it has increased to about 13.6 and by 2012 it has decreased to about 13.5. Expenditures begins in 2000 at about 13.2 and generally increases to about 13.55 by 2002. It then generally decreases to about 13.25 by 2006 and then generally increases to about 13.7 by 2008. By 2009 it has generally decreased to about 13.4 and by 2010 it has increased to about 13.45. It then generally decreases to about 13.22 by 2012. Stimulus grants is depicted as a shaded area on the chart over the time period of 2008 to 2012. The upper bound of the shaded area is Revenues. The lower bound of the shaded area begins in 2008 at about 13.4 and decreases to about 12.75 by 2009. It then increases to about 13.5 by 2012.

Note: The values from 2011:Q1 to the end of 2012 are forecast values.

Source: BEA and staff projection.

Figure: State & Local Government Employment

Line chart, by millions, 2000 to 2010. There are two series, State and Local. State begins in 2000 at about 4.75 and increases to about 5.05 by early 2003. It then decreases to about 4.95 by early 2004 and then generally increases to about 5.2 by late 2008. By the end of 2010 it has generally decreased to about 5.1. Local begins in 2000 at about 13.03 and generally increases to about 14.6 by late 2008. It then generally decreases to about 14.25 by the end of 2010.

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

Figure: Contribution of Real State & Local Purchases to Real GDP Growth

Line chart, by percentage points, 1990 to 2012. Data are 4-quarter moving averages. There is a horizontal line at zero. There is also a horizontal line at 0.37 that represents the 1960-2000 average. The series begins in early 1990 at 0.45 and increases to about 0.58 within a month or two. It then generally decreases to about 0 by 1993 and then fluctuates but generally increases to about 0.68 by 1999. By 2000 it has generally decreased to about 0.22 and by late 2001 it has generally increased to about 0.57. It then generally decreases to about -0.07 by 2005 and then generally increases to about 0.22 by 2007. By 2010 it has generally decreased to about -0.2 and by 2012 it has generally increased to about 0.07.

Note: The values from 2011:Q1 to the end of 2012 are forecast values.

Source: Bureau of Economic Analysis and staff projection.

Note: Shaded bars indicate recessions defined by the National Bureau of Economic Research: July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009.

Components of Final Demand

Figure: Personal Consumption Expenditures

Line chart, by 4-quarter percent change, 2007 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 2.75 and generally decreases to about -2.3 by 2009:Q2. By 2012:Q4 it has generally increased to about 3.9. Previous Tealbook begins in 2007:Q1 at about 2.75 and generally decreases to about -2.3 by 2009:Q2. It then increases to about 3.8 by 2012:Q4.

Figure: Residential Investment

Line chart, by 4-quarter percent change, 2007 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about -18.5 and generally decreases to about -28 by 2009:Q2. It then generally increases to about 5 by 2010:Q2 and then generally decreases to about -5.5 by 2010:Q3. By 2011:Q1 it has generally increased to about -0.5 and by 2011:Q2 it has generally decreased to about -5. It then generally increases to about 14 by 2012:Q4. Previous Tealbook follows the Current Tealbook series almost exactly.

Figure: Equipment and Software

Line chart, by 4-quarter percent change, 2007 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in

2007:Q1 at about 3 and generally increases to about 4.8 by 2007:Q4. It then generally decreases to about -20.3 by 2009:Q1. By 2010:Q3 it has generally increased to about 19 and by 2011:Q3 it has generally decreased to about 11. It then generally increases to about 13 by 2011:Q4 and then generally decreases to about 9.5 by 2012:Q4. Previous Tealbook begins in 2007:Q1 at about 3 and generally increases to about 4.8 by 2007:Q4. It then generally decreases to about -20.3 by 2009:Q1. By 2010:Q3 it has generally increased to about 19 and by 2011:Q3 it has generally decreased to about 11. It then generally increases to about 13.5 by 2011:Q4 and then generally decreases to about 10 by 2012:Q4.

Figure: Nonresidential Structures

Line chart, by 4-quarter percent change, 2007 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 11 and generally increases to about 17.5 by 2007:Q4. By 2009:Q4 it has generally decreased to about -27 and by 2012:Q4 it has generally increased to about 0. Previous Tealbook begins in 2007:Q1 at about 11 and generally increases to about 17.5 by 2007:Q4. By 2009:Q4 it has generally decreased to about -27 and by 2011:Q3 it has generally increased to about 0.05. It then generally decreases to about 0 by 2012:Q4.

Figure: Government Consumption & Investment

Line chart, by 4-quarter percent change, 2007 to 2012. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 0.4 and generally increases to about 3.1 by 2008:Q4. By 2011:Q3 it has generally decreased to about -0.75. It then generally increases to about 0.5 by 2012:Q1 and then generally decreases to about -0.02 by 2012:Q4. Previous Tealbook begins in 2007:Q1 at about 0.4 and generally increases to about 3.1 by 2008:Q4. By 2010:Q2 it has generally decreased to about 0.55. It then generally increases to about 2.2 by 2011:Q1 and then generally decreases to about 0.45 by 2011:Q3. By 2012:Q4 it has generally increased to about 0.7.

Figure: Exports and Imports

Line chart, by 4-quarter percent change, 2007 to 2012. There is a horizontal line at zero. There are four series, Exports Current Tealbook, Imports Current Tealbook, Exports Previous Tealbook and Imports Previous Tealbook. Exports Current Tealbook begins in 2007:Q1 at about 8 and generally increases to about 12 by 2008:Q2. It then generally decreases to about -15 by 2009:Q2 and then generally increases to about 14 by 2010:Q2. By 2010:Q4 it has generally decreased to about 9.5 and remains relatively constant here until 2012:Q4. Exports Previous Tealbook begins in 2007:Q1 at about 8 and generally increases to about 12 by 2008:Q2. It then generally decreases to about -15 by 2009:Q2 and then generally increases to about 14 by 2010:Q2. By 2011:Q2 it has generally decreased to about 9 and remains relatively constant here until 2012:Q4. Imports Current Tealbook begins in 2007:Q1 at about 3.5 and generally decreases to about -18.5 by 2009:Q2. It then generally increases to about 17.5 by 2010:Q2 and then generally decreases to about 2.5 by 2011:Q3. By 2011:Q4 it has generally increased to about 6 and by 2012:Q3 it has generally decreased to about 4. It then increases to about 5.03 by 2012:Q4. Imports Previous Tealbook begins in 2007:Q1 at about 3.5 and generally decreases to about -18.5 by 2009:Q2. It then generally increases to about 17.5 by 2010:Q2 and then generally decreases to about 2.5 by 2011:Q3. By 2011:Q4 it has generally increased to about 6.5 and by 2012:Q3 it has generally decreased to about 5. It then increases to about 6 by 2012:Q4.

Note: Shading represents the projection period, which begins in 2010:Q4.

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

Aspects of the Medium-Term Projection

Figure: Personal Saving Rate

Line chart, by percent, 1990 to 2012. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 6.4 and generally increases to about 7.7 by 1992. It then generally decreases to about 1.1 by 2005 and then generally increases to about 7.2 by 2009. By 2012 it has generally decreased to about 5.2. Previous Tealbook follows the Current Tealbook series almost exactly.

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

Figure: Wealth-to-Income Ratio

Line chart, by ratio, 1990 to 2012. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 4.85. From 1990 to 1995 it fluctuates between about 4.65 and 4.9. It then generally increases to about 6.15 by 2000 and then generally decreases to about 5.0 by 2002. By 2005 it has generally increased to about 6.4 and by 2009 it has generally decreased to about 4.45. It then generally increases to about 4.95 by the end of 2012. Previous Tealbook begins in 1990 at about 4.85. From 1990 to 1995 it fluctuates between about 4.65 and 4.9. It then generally increases to about 6.15 by 2000 and then generally decreases to about 5.0 by 2002. By 2005 it has generally increased to about 6.4 and by 2009 it has generally decreased to about 4.45. It then generally increases to about 4.85 by the end of 2012.

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

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

Figure: Single-Family Housing Starts

Line chart, by millions of units, 1990 to 2012. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 1.05 and generally decreases to about 0.7 by 1991. It then generally increases to about 1.75 by 2006 and then generally decreases to about 0.35 by 2009. By then end of 2012 it has generally increased to about 0.68. Previous Tealbook follows the Current Tealbook series exactly.

Source: U.S. Census Bureau.

Figure: Equipment and Software Spending

Line chart, by share of nominal GDP, 1990 to 2012. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 7.4 and generally decreases to about 6.7 by 1992. It then generally increases to about 9.6 by 2000 and then generally decreases to about 7.5 by 2004. By 2006 it has generally increased to about 8.1 and by 2009 it has generally decreased to about 6.45. It then generally increases to about 8.05 by the end of 2012. Previous Tealbook follows the Current Tealbook series almost exactly.

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

Figure: Federal Surplus/Deficit

Line chart, by share of nominal GDP, 1990 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about -3.1 and generally decreases to about -5.4 by 1992. It then generally increases to about 2.5 by 2000 and then generally decreases to about -3.7 by 2004. By 2007 it has generally increased to about -1 and by 2009 it has generally decreased to about -10.4. It has generally increased to about -6.3 by the end of 2012. Previous Tealbook follows the Current Tealbook series almost exactly.

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, by share of nominal GDP, 1990 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about -1.6 and generally increases to about 0.9 by 1991. It then generally decreases to about -6.7 by 2005 and then generally increases to about -2.25 by 2009. By 2011 it has generally decreased to about -3.5 and by the end of 2012 it has generally increased to about -2.8. Previous Tealbook begins in 1990 at about -1.6 and generally increases to about 0.9 by 1991. It then generally decreases to about -6.7 by 2005 and then generally increases to about -2.25 by 2009. By 2011 it has generally decreased to about -3.5 and by the end of 2012 it has generally increased to about -2.8.

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

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009. Blue shading represents the projection period, which begins in 2010:Q4.

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	2.1	2.4	2.6
Previous Tealbook	3.0	3.5	2.7	2.2	2.5	2.5	2.6
<i>Selected contributions¹</i>							
Structural labor productivity	1.5	2.7	2.5	2.3	2.0	2.0	2.1
Previous Tealbook	1.5	2.7	2.5	2.3	2.0	2.0	2.1
Capital deepening	.7	1.5	.7	.4	.5	.7	.9
Previous Tealbook	.7	1.5	.7	.3	.4	.7	.9
Multifactor productivity	.5	.9	1.6	1.8	1.3	1.2	1.2
Previous Tealbook	.5	.9	1.6	1.9	1.5	1.3	1.2
Trend hours	1.5	1.1	.8	-.1	.5	.6	.7
Previous Tealbook	1.5	1.1	.8	.0	.7	.7	.7
Labor force participation	.4	.0	-.2	-.3	-.4	-.3	-.2
Previous Tealbook	.4	.0	-.2	-.2	-.2	-.2	-.2

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

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

Source: Staff assumptions.

Figure: Nonfarm Business Productivity

Line chart, by chained (2005) dollars per hour, 2001 to 2012. There is a shaded bar from 2010:Q4 to 2012:Q4 that represents the forecast period. There are two series, Nonfarm business productivity and Structural productivity. Nonfarm business productivity begins in 2001:Q1 at about 43.7 and generally increases to about 58.2 by 2012:Q4. Structural productivity begins in 2001:Q1 at about 44 and increases to about 58.05 by 2012:Q4.

Figure: Labor Force Participation Rate

Line chart, by percent, 2001 to 2012. There is a shaded bar from 2011:Q1 to 2012:Q4 that represents the forecast period. There are two series, Labor Force Participation Rate and Trend. Labor Force Participation Rate begins in 2001:Q1 at about 67.2 and generally decreases to about 65.95 by 2005:Q1. It then generally increases to about 66.3 by 2007:Q1 and then generally decreases to about 64.15 by 2011:Q1. By 2012:Q4 it has generally increased to about 64.45. Trend begins in 2001:Q1 at about 66.7 and generally decreases to about 64.8 by 2012:Q4.

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	1.4	1.7
Previous Tealbook	6.2	1.7	1.5	1.9
Nonfarm private employment	-5.0	.9	2.4	3.2
Previous Tealbook	-4.7	1.1	2.3	3.2
Labor force participation rate ¹	64.9	64.5	64.3	64.4
Previous Tealbook	64.9	64.5	64.6	64.6
Civilian unemployment rate ¹	10.0	9.6	8.6	7.5
Previous Tealbook	10.0	9.6	8.9	7.8
Memo:				
GDP gap ²	-6.6	-5.9	-4.7	-3.0
Previous Tealbook	-6.7	-6.3	-5.1	-3.3

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, by thousands, 1990 to 2012. There is a shaded bar from 2011:Q1 to 2012:Q4 that represents the forecast period. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 200 and generally decreases to about -220 by 1991. It then generally increases to about 320 by 1994. From 1994 to 1999 it fluctuates between about 100 and 320. It then generally decreases to about -320 by 2001 and then generally increases to about 330 by 2006. By 2009 it has generally decreased to about -810 and by the end of 2012 it has generally increased to about 290. Previous Tealbook follows the Current Tealbook series exactly.

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

Figure: Unemployment Rate

Line chart, by percent, 1990 to 2012. There is a shaded bar from 2011:Q1 to 2012:Q4 that represents the forecast period. There are four series, Current Tealbook, Previous Tealbook, NAIRU, and NAIRU with EEB adjustment. Current Tealbook begins in 1990 at about 5.25 and generally increases to about 7.7 by 1992. It then generally decreases to about 4 by 2000 and then generally increases to about 6.2 by 2003. By 2007 it has generally decreased to about 4.5 and by 2009 it has generally increased to about 10. It then generally decreases to about 7.5 by the end of 2012. Previous Tealbook follows Current Tealbook exactly until 2010 when it begins decreasing at a slower pace. By the end of 2012 it has decreased to about 7.8. NAIRU begins in 1990 at about 5.8 and generally decreases to about 5.0 by 2008. It then generally increases to about 6 by 2009 and remains constant here until the end of 2012. NAIRU with EEB adjustment begins in 1990 at about 5.8. It then generally decreases to about 5 by 2008 and then generally increases to about 6.8 by 2010. By the end of 2012 it has generally decreased to about 6.05.

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

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

Figure: GDP Gap

Line chart, by percent, 1990 to 2012. There is a shaded bar from 2010:Q4 to 2012:Q4 that represents the forecast period. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 1.0 and generally decreases to about -3.5 by 1991. It then generally increases to about 3.8 by 2000 and then generally decreases to about -2.5 by 2003. By 2006 it has generally increased to about 0.8 and by 2009 it has generally decreased to about -7.2. It then generally increases to about -3.0 by the end of 2012. Previous Tealbook follows Current Tealbook exactly until 2009 when it begins increasing at a slower pace. By the end of 2012 it has increased to about -3.5.

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

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

Figure: Manufacturing Capacity Utilization Rate

Line chart, by percent, 1990 to 2012. There is a shaded bar from 2011:Q1 to 2012:Q4 that represents the forecast period. There is a horizontal line at about 79 which represents the average rate from 1972 to 2010. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 82.5 and generally decreases to about 77.5 by 1991. It then generally increases to about 84.5 by 1995 and then generally decreases to about 71 by 2001. By 2007 it has generally increased to about 80 and by 2009 it has generally decreased to about 65. It then generally increases to about 79 by the end of 2012. Previous Tealbook follows the Current Tealbook series almost exactly.

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.

Inflation Projections

(Percent change, Q4 to Q4)

Measure	2009	2010	2011	2012
PCE chain-weighted price index	1.5	1.2	1.9	1.1
Previous Tealbook	1.5	1.2	1.3	1.0
Food and beverages	-1.6	1.3	3.4	1.3
Previous Tealbook	-1.6	1.3	1.7	1.1
Energy	2.7	5.9	11.0	-1.3
Previous Tealbook	2.7	6.3	6.2	.1
Excluding food and energy	1.7	.8	1.2	1.2
Previous Tealbook	1.7	.8	1.0	1.0
Prices of core goods imports ¹	-1.9	2.7	4.6	1.4
Previous Tealbook	-1.9	3.1	3.2	1.4

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

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

Figure: Total PCE Prices

Line chart, by 4-quarter percent change, 1990 to 2012. There is a shaded bar from 2010:Q4 to 2012:Q4 that represents the forecast period. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in early 1990 at about 4.2 and generally increases to about 5.4 by late 1990. It then generally decreases to about 1 by 1998 and then generally increases to about 2.7 by 2000. By 2002 it has generally decreased to about 0.8 and by 2005 it has generally increased to about 3.3. It then generally decreases to about 1.8 by 2006 and then generally increases to about 4.5 by 2008. By 2009 it has generally decreased to about -0.9 and by 2010 it has generally increased to about 2.5. It then generally decreases to about 1.03 by the end of 2012. Previous Tealbook follows Current almost exactly until 2010 when it begins decreasing at a faster rate. By the end of 2012 it has generally decreased to about 1.0.

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

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 1990 to 2012. There is a shaded bar from 2010:Q4 to 2012:Q4 that represents the forecast period. There are 4 series, Current Tealbook, Previous Tealbook, Current Market based and Previous Market based. Current Tealbook begins in early 1990 at about 3.8 and generally increases to about 4.6 by mid-1990. It then generally decreases to about 1.3 by 1998 and then generally increases to about 2.6 by 2008. By late 2010 it has generally decreased to about 0.8 and by the end of 2012 it has generally increased to about 1.2. Previous Tealbook follows Current Tealbook almost exactly until 2010 when it starts increasing at a slower rate. By the end of 2012 it has decreased to about 1.0. Current Market based begins in early 1990 at about 4.4 and generally increases to about 4.8 by mid-1990. It then generally decreases to about 1.0 by 1998 and then generally increases to about 1.9 by 2001. By 2003 it has generally decreased to about 1.3 and by 2008 it has generally increased to about 2.6. It then generally decreases to about 0.9 by late 2010 and then generally increases to about 1.01 by the end of 2012. Previous Market based follows Current Market based almost exactly until 2010 when it starts increasing at a slower rate. By the end of 2012 it has generally increased to about 0.95.

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

Figure: Compensation per Hour

Line chart, by 4-quarter percent change, 1990 to 2012. There is a shaded bar from 2010:Q4 to 2012:Q4 that represents the forecast period. There is a horizontal line at zero. There are four series, Current Productivity and Costs, Previous Productivity and Costs, Current Employment cost index, and Previous Employment cost index. Current Productivity and Costs begins in early 1990 at about 4.4 and generally increases to about 7.25 by mid-1990. It then generally decreases to about 1 by 1995 and then generally increases to about 7 by 1998. By 1999 it has generally decreased to about 3 and by 2000 it has generally increased to about 8.8. It then generally decreases to about 2.5 by 2002 and then generally increases to about 5.9 by 2003. By 2009 it has generally decreased to about -0.1 and by early 2010 it has generally increased to about 3.9. It then generally decreases to about 1.8 by late 2010 and then generally increases to about 2.4 by the end of 2012. Previous Productivity and Costs follows Current Productivity and Costs almost exactly until the end 2009. It generally decreases to about 1.3 by late 2010 and then generally increases to about 2.3 by the end of 2012. Current Employment cost index begins in 1990 at about 5.1 and generally decreases to about 2.5 by 1995. It then generally increases to about 4.7 by 2000 and then generally decreases to about 1.2 by 2009. By the end of 2012 it has generally increased to about 2.5. Previous Employment cost index follows the Current Employment cost index almost exactly until 2011 when it starts increasing at a slower rate. By the end of 2012 it is at about 2.4.

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

Figure: Long-Term Inflation Expectations

Line chart, by percent, 1990 to 2011. There are two series, Thomson Reuters/Michigan next 5 to 10 yrs. and SPF next 10 yrs. Thomson Reuters/Michigan begins in early 1990 at about 4 and generally increases to about 4.75 by mid-1990. It then generally decreases to about 2.65 by 1998. From 1998 to early 2005 it fluctuates between about 2.5 and 3.25. From early 2005 to late 2007 it fluctuates between about 2.9 and 3.3. It then generally increases to about 3.4 by 2008 and then generally decreases to about 2.95 by February 2011. SPF begins in early 1990 at about 3.99 and generally increases to about 4.2 by mid-1990. It then generally decreases to about 2.3 by early 1999 and then generally increases to about 2.5 by mid-1999. It remains relatively stable here at 2.5 until late 2009 and then generally decreases to about 2.3 by 2011:Q1.

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

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

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: 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	3.7	4.4	4.4	4.2	3.2
Civilian unemployment rate ¹	9.6	8.6	7.5	6.7	5.9	5.3
PCE prices, total	1.2	1.9	1.1	1.4	1.5	1.7
Core PCE prices	.8	1.2	1.2	1.3	1.5	1.7
Federal funds rate ¹	.2	.1	.5	2.1	3.7	4.2
10-year Treasury yield ¹	3.0	4.0	4.5	4.8	5.0	5.1

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

Figure: Real GDP

Line chart, by 4-quarter percent change, 2002 to 2015. There is a horizontal line at zero. There are two series, Real GDP and Potential GDP. Real GDP begins in 2002 at about 1.6 and generally increases to about 4.1 by 2004. It then generally decreases to about -4.1 by 2009 and then generally increases to about 4.4 by 2013. By the end of 2015 it has decreased to about 3.1. Potential GDP begins in 2002 at about 3.4 and generally decreases to about 2.1 by late 2004. It then generally increases to about 2.4 by 2007 and then generally decreases to about 2.0 by late 2009. By the end of 2015 it has generally increased to about 2.8.

Figure: Unemployment Rate

Line chart, by percent, 2002 to 2015. There are three series, Unemployment rate, NAIRU with EEB adjustment and NAIRU. Unemployment rate begins in 2002 at about 5.7 and generally increases to about 6.1 by 2003. It then generally decreases to about 4.3 by late 2006 and then generally increases to about 10.05 by 2009. By the end of 2015 it has generally decreased to about 5.25. NAIRU with EEB adjustment begins in early 2002 at about 5 and generally increases to about 5.2 by mid-2002. It then generally decreases to about 5 by 2004 and remains constant here until 2008. It then generally increases to about 6.75 by 2010 and then generally decreases to about 5.25 by the end of 2015. NAIRU begins in 2002 at about 5 and remains constant here until 2008. It then generally increases to about 6 by 2009 and remains constant here until late 2012. By the end of 2015 it has decreased to about 5.25.

Figure: PCE Prices

Line chart, by 4-quarter percent change, 2002 to 2015. There are two series, PCE prices excluding food and energy and Total PCE prices. PCE prices excluding food and energy begins in early 2002 at about 1.5 and generally increases to about 2 by mid-2002. It then generally decreases to about 1.4 by 2003 and then generally increases to about 2.6 by 2008. By 2009 it has generally decreased to about 1.4 and by 2010 it has generally increased to about 1.8. It then generally decreases to about 0.8 by 2011 and generally increases to about 1.65 by the end of 2015. Total PCE prices begins in 2002 at about 0.8 and generally increases to about 3.25 by 2005. It then generally decreases to about 1.8 by 2006 and then generally increases to about 4.3 by 2008. By 2009 it has generally decreased to about -0.75 and by 2010 it has generally increased to about 2.45. It then generally decreases to about 1 by 2012 and generally increases to about 1.65 by the end of 2015.

Figure: Interest Rates

Line chart, by percent, 2002 to 2015. There are three series, Federal funds rate, 10-year Treasury and BBB corporate. Federal funds rate begins in 2002 at about 1.75 and generally decreases to about 1 by 2003. It then generally increases to about 5.25 by 2006 and then generally decreases to about 0.13 by 2009. It remains relatively stable here until mid-2012. It then generally increases to about 4.1 by the end of 2015. 10-year Treasury begins in 2002 at about 5.4 and generally decreases to about 3.75 by 2003. It then generally increases to about 5.1 by 2006 and then generally decreases to about 2.9 by 2010. By the end of 2015 it has generally increased to about 5.05. BBB corporate begins in 2002 at about 7.6 and generally decreases to about 5.4 by 2004. It then generally increases to about 9.5 by 2008 and then generally decreases to about 5.0 by 2010. By the end of 2015 it has generally increased to about 6.6.

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, by percent, 2009 to 2011. Data are Q4 over Q4 and are plotted on the Tealbook publication dates. There are three series 2010, 2011 and 2012. 2010 begins on January 22, 2009 at about 2.6 and decreases to about 1.5 by March 12, 2009. By January 20, 2010 it has generally increased to about 3.5 and by October 27, 2010 it has generally decreased to about 2.3. It then generally increases to about 2.75 by March 9, 2011. 2011 begins on September 16, 2009 at about 4.5 and generally increases to about 4.75 by January 20, 2010. It then generally decreases to about 3.25 by September 15, 2010 and then generally increases to about 3.7 by March 9, 2011. 2012 begins on September 15, 2010 at about 4.25 and increases to about 4.75 by October 27, 2010. It then decreases to about 4.25 by December 8, 2010 and remains constant here until March 9, 2011.

Figure: Unemployment Rate

Line chart, by percent, 2009 to 2011. Data are from the fourth quarter and are plotted on the Tealbook publication dates. There are three series, 2010, 2011 and 2012. 2010 begins on January 22, 2009 at about 8.1 and generally increases to about 9.5 by March 12, 2009. It then decreases to about 9.1 by April 22, 2009 and then increases to about 9.7 by June 17, 2009. By September 16, 2009 it has decreased to about 9.2 and by December 9, 2009 it has increased to about 9.6. It then decreases to about 9.3 by April 21, 2010 and then generally increases to about 9.6 by March 9, 2011. 2011 begins on September 16, 2009 at about 7.9 and generally increases to about 9.1 by September 15, 2010. It then generally decreases to about 8.5 by March 9, 2011. 2012 begins on September 15, 2010 at about 8.0 and decreases to about 7.9 by October 27, 2010. It then increases to about 8.0 by December 8, 2010 and then decreases to about 7.5 by March 9, 2011.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, by percent 2009 to 2011. Data are Q4 over Q4 and are plotted on the Tealbook publication dates. There are three series, 2010, 2011 and 2012. 2010 begins on January 22, 2009 at about 0.8 and decreases to about 0.5 by March 12, 2009. It then generally increases to about 1.25 by December 9, 2009 and then generally decreases to about 0.75 by June 16, 2010. By August 4, 2010 it has generally increased to about 1.1 and it remains here until October 27, 2010. It then generally decreases to about 0.75 by March 9, 2011. 2011 begins on September 16, 2009 at about 1 and generally increases to about 1.1 by December 9, 2009. It then generally decreases to about 0.75 by June 16, 2010 and then generally increases to about 1.0 by October 27, 2010. By December 8, 2010 it has decreased to about 0.9 and by March 9, 2011 it has increased to about 1.2. 2012 begins on September 15, 2010 at about 0.9 and increases to about 1.0 by October 27, 2010. By December 8, 2010 it has decreased to about 0.9 and by March 9, 2011 it has increased to about 1.2.

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

International Economic Developments and Outlook

Recent Foreign Indicators

Figure: Nominal Exports

Line chart, by index where January 2007 = 100, from 2007 to 2010. There is a horizontal line at 100. There are three series, Foreign, AFE, and EME. Foreign begins in early 2007 at about 100 and generally increases to about 132 by mid-2008. It then generally decreases to about 85 by early 2009 and then generally increases to about 130 by late 2010. AFE begins in early 2007 at about 100 and generally increases to about 129 by mid-2008. It then generally decreases to about 82 by early 2009 and then generally increases to about 115 by late 2010. EME begins in early 2007 at about 100 and generally increases to about 133.5 by mid-2008. By early 2009 it has generally decreased to about 89 and by late 2010 it has generally increased to about 145.

Note: EME excludes Venezuela.

Figure: Industrial Production

Line chart, by index where January 2007 = 100, from 2007 to 2010. There is a horizontal line at 100. There are three series, Foreign, AFE and EME. Foreign begins in early 2007 at about 100 and generally increases to about 104 by early 2008. It then generally decreases to about 89.5 by early 2009 and then generally increases to about 102 by late 2010. AFE begins in early 2007 at about 100 and generally increases to about 101.5 by mid-2007. It then generally decreases to about 83.5 by early 2009 and then generally increases to about 91 by late 2010. EME begins in early 2007 at about 100 and generally increases to about 109 by early 2008. It then generally decreases to about 95 by early 2009 and then generally increases to about 116.5 by late 2010.

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

Figure: Retail Sales

Line chart, by 12-month percent change, 2007 to 2010. There is a horizontal line at zero. There are three series, Foreign, AFE and EME. Foreign begins in early 2007 at about 4.5. From early 2007 to early 2008 it fluctuates between about 4 and 5.3. It then generally decreases to about -2.7 by early 2009 and then generally increases to about 5.4 by early 2010. By late 2010 it has generally decreased to about 3. AFE begins in early 2007 at about 3.5. From early 2007 to early 2008 it fluctuates between about 2.5 and 4.5. It then generally decreases to about -4.5 by early 2009 and then generally increases to about 4.8 by early 2010. By late 2010 it has generally decreased to about 2. EME begins in early 2007 at about 7 and generally increases to about 10 within a month or so. It then generally decreases to about 3 by early 2009. By early 2010 it has generally increased to about 10 and by late 2010 it has generally decreased to about 6.5.

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

Figure: Employment

Line chart, by 4-quarter percent change, 2007 to 2010. There is a horizontal line at zero. There are three series, Foreign, AFE and EME. Foreign begins in early 2007 at about 2.1 and decreases to about 1.95 by mid-2007. It then generally increases to about 2.3 by late 2007 and then generally decreases to about -1.1 by mid-2009. By mid-2010 it has generally increased to about 1.2. AFE begins in early 2007 at about 1.95 and generally decreases to about 1.8 by mid-2007. It generally increases to about 1.95 by late 2007. It then generally decreases to about -1.9 by mid-2009 and then generally increases to about 1 by mid-2010. EME begins in early 2007 at about 2.3 and generally decreases to about 2.05 by mid-2007. It then generally increases to about 3 by late 2007 and then generally decreases to about -0.1 by mid-2009. By early 2010 it has generally increased to about 2.6 and by mid-2010 it has generally decreased to about 1.9.

Figure: Consumer Prices: Advanced Foreign Economies

Line chart, by 12-month percent change, 2007 to 2011. There is a horizontal line at zero. There are two series, Headline and Core. Headline begins in early 2007 at about 1.3 and generally increases to about 3.5 by mid-2008. It then generally decreases to about -1 by mid-2009. By late 2010 it has generally increased to about 2. Core begins in early 2007 at about 1.28 and generally increases to about 1.5 by mid-2007. It then generally decreases to about 0.95 by early 2008 and then generally increases to about 1.3 by late 2008. By mid-2010 it has generally decreased to about 0.55 and by late 2010 it has generally increased to about 1.05.

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

Source: Haver Analytics and CEIC.

Figure: Consumer Prices: Emerging Market Economies

Line chart, by 12-month percent change, 2007 to 2011. There is a horizontal line at zero. There are three series, Headline, Excluding food -- East Asia*, and Excluding food -- Latin America. Headline begins in early 2007 at about 2.9. It then generally increases to about 6.8 by mid-2008 and then generally decreases to about 0.6 by mid-2009. By late 2010 it has generally increased to about 4.4. Excluding food -- East Asia begins in early 2007 at about 1.3. It then generally increases to about 3.8

by mid-2008 and then generally decreases to about -2.2 by mid-2009. By late 2010 it has generally increased to about 1.9. Excluding food -- Latin America begins in early 2007 at about 3.6 and then generally decreases to about 3.2 by late 2007. It then generally increases to about 5.5 by late 2008 and then generally decreases to about 3.9 by late 2009. By late 2010 it has generally increased to about 4.5.

The Foreign Outlook

(Percent change, annual rate)

	2010			2011			2012 ^P
	H1	Q3	Q4 ^e	Q1 ^P	Q2 ^P	H2 ^P	
Real GDP							
Total foreign	5.5	2.3	3.3	3.6	3.3	3.3	3.5
Previous Tealbook	5.5	2.1	3.1	3.2	3.4	3.5	3.6
Advanced foreign economies	3.5	1.9	1.7	2.3	2.0	2.0	2.3
Previous Tealbook	3.6	1.7	1.7	2.0	2.1	2.2	2.4
Emerging market economies	8.1	2.8	5.4	5.2	4.9	4.9	4.9
Previous Tealbook	7.9	2.5	4.9	4.8	5.0	5.1	5.1
Consumer Prices							
Total foreign	2.4	2.3	5.3	4.3	3.1	2.5	2.3
Previous Tealbook	2.3	2.2	4.9	3.7	2.6	2.2	2.3
Advanced foreign economies	1.3	1.1	3.6	2.8	2.0	1.5	1.4
Previous Tealbook	1.0	1.0	3.4	2.3	1.3	1.2	1.4
Emerging market economies	3.5	3.4	6.9	5.7	4.0	3.4	3.2
Previous Tealbook	3.6	3.3	6.4	5.1	3.7	3.2	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, by percent change, 2007 to 2012. Data are annual rate. There is a horizontal line at zero. There are two series, Total Foreign Current Tealbook and Total Foreign Previous Tealbook. Current Tealbook begins in early 2007 at about 5 and generally decreases to about -10 by early 2009. It then generally increases to about 6 by early 2010 and then generally decreases to about 2.5 by late 2010. By late 2012 it has generally increased to about 4. Previous Tealbook follows Current Tealbook almost exactly.

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

Line chart, by percent change, 2007 to 2012. Data are annual rate. There is a horizontal line at zero. There are four series, Advanced Foreign Economies Current Tealbook, Advanced Foreign Economies Previous Tealbook, Emerging Market Economies Current Tealbook and Emerging Market Economies Previous Tealbook. Advanced Foreign Economies Current Tealbook begins in early 2007 at about 3.5 and generally decreases to about -9 by early 2009. It then generally increases to about 4 by early 2010 and then generally decreases to about 2 by late 2010. By late 2012 it has generally increased to about 2.5. Advanced Foreign Economies Previous Tealbook follows Advanced Foreign Economies Current Tealbook almost exactly. Emerging Market Economies Current Tealbook begins in early 2007 at about 7.5 and generally decreases to about -11 by early 2009. By mid-2009 it has generally increased to about 10 and by early 2010 it has generally decreased to about 7. It then generally increases to about 9 by mid-2010 and then generally decreases to about 2.5 within a few months. By late 2010 it has generally increased to about 5 and remains relatively constant here until late 2012. Emerging Market Economies Previous Tealbook follows Emerging Market Economies Current Tealbook almost exactly.

Figure: Consumer Prices [Total Foreign]

Line chart, by percent change, 2007 to 2012. Data are annual rate. There is a horizontal line at zero. There are two series, Total Foreign Current Tealbook and Total Foreign Previous Tealbook. Current Tealbook begins in early 2007 at about 3.2 and generally increases to about 5.3 by early 2008. It then generally decreases to about -0.8 by late 2008 and then generally increases to about 3.5 by early 2010. By mid-2010 it has generally decreased to about 1.5 and by late 2010 it has generally increased to about 5.5. It then generally decreases to about 2.3 by late 2012. Previous Tealbook begins in early 2007 at about 3.2 and generally increases to about 5.3 by early 2008. It then generally decreases to about -0.8 by late 2008 and then generally increases to about 3.5 by early 2010. By mid-2010 it has generally decreased to about 1.3 and by late 2010 it has generally increased to about 5. It then generally decreases to about 2.3 by late 2012.

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

Line chart, by percent change, 2007 to 2012. Data are annual rate. There is a horizontal line at zero. There are four series, Advanced Foreign Economies Current Tealbook, Advanced Foreign Economies Previous Tealbook, Emerging Market Economies Current Tealbook and Emerging Market Economies Previous Tealbook. Advanced Foreign Economies Current Tealbook begins in early 2007 at about 2.5 and generally decreases to about 0.6 by mid-2007. It then generally increases to

about 3.8 by late 2007 and then generally decreases to about 2.6 by early 2008. By mid-2008 it generally increases to about 3.95 and by late 2008 it generally decreases to about -2.2. It then generally increases to about 2.1 by early 2010 and then generally decreases to about 0.5 by mid-2010. By late 2010 it has generally increased to about 3.6 and by late 2012 it has generally decreased to about 1.6. Advanced Foreign Economies Previous Tealbook begins in early 2007 at about 2.5 and generally decreases to about 0.6 by mid-2007. It then generally increases to about 3.8 by late 2007 and then generally decreases to about 2.6 by early 2008. By mid-2008 it generally increases to about 3.8 and by late 2008 it generally decreases to about -2.1. It then generally increases to about 2.2 by late 2009 and then generally decreases to about 0 by mid-2010. By late 2010 it has generally increased to about 3.5 and by late 2012 it has generally decreased to about 1.6. Emerging Market Economies Current Tealbook begins in early 2007 at about 3.8 and generally increases to about 7.8 by early 2008. It then generally decreases to about -0.2 by early 2009 and then generally increases to about 4.5 by early 2010. By mid-2010 it has generally decreased to about 2.4 and by late 2010 it has generally increased to about 7. It then generally decreases to about 3.1 by late 2012. Emerging Market Economies Previous Tealbook begins in early 2007 at about 3.8 and generally increases to about 7.8 by early 2008. It then generally decreases to about -0.2 by early 2009 and then generally increases to about 5 by early 2010. By mid-2010 it has generally decreased to about 2.4 and by late 2010 it has generally increased to about 6.5. It then generally decreases to about 3.1 by late 2012.

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

[Box:] Economic Risks from the Middle East and North Africa

Figure: Oil Production In the Middle East and North Africa, 2010

Bar chart, by million barrels per day. Approximate values are: Saudi Arabia: 9.8. Iran: 4.2. UAE: 2.8. Iraq: 2.3. Kuwait: 2.1. Algeria: 2.0. Qatar: 1.7. Libya: 1.6. Oman: 0.8. Egypt: 0.7. Syria: 0.4. Yemen: 0.3. Bahrain: 0.1.

Source: International Energy Agency/Organisation for Economic Co-operation and Development.

Figure: Spare Oil Production Capacity

Line chart, by million barrels per day, 2000 to 2010. There are two series, OPEC and Saudi Arabia. OPEC begins in early 2000 at about 3.9 and decreases to about 1.9 by late 2000. It then generally increases to about 7 by 2002 and then generally decreases to about 0.7 by 2004. By 2007 it has generally increased to about 3.9 and by 2008 it has generally decreased to about 2.6. It then generally increases to about 6.6 by 2009 and then generally decreases to about 5.1 by 2010. Saudi Arabia begins in early 2000 at about 2.2 and generally decreases to about 1 by late 2000. It then generally increases to about 3.2 by 2001 and then fluctuates, but generally decreases to about 0 by 2004. By 2007 it has generally increased to about 2.3 and by 2008 it has generally decreased to about 1.1. It then generally increases to about 3.8 by early 2010 and then generally decreases to about 3.6 by late 2010.

Source: International Energy Agency/Organisation for Economic Co-operation and Development.

Figure: OECD Oil Inventories

Line chart, by days of consumption, 2000 to 2010. There are two series, Private commercial and Government. Private commercial begins in 2000 at about 52 and generally increases to about 56 by early 2002. It then generally decreases to about 50 by late 2002. From late 2002 to 2005 it fluctuates between about 50 and 53. It then generally increases to about 55 by 2006 and then generally decreases to about 53 by 2007. By 2009 it has generally increased to about 62 and by 2010 it has generally decreased to about 58. Government begins in early 2000 at about 27 and generally decreases to about 26 by late 2000. It then fluctuates but generally increases to about 35 by 2009 and then generally decreases to about 34 by 2010.

Source: International Energy Agency/Organisation for Economic Co-operation and Development.

[Box:] Food Prices and Foreign Inflation

Figure: IMF Food Price Index

Line chart, by index where January 2010 = 100, from 2005 to 2012. There is a horizontal line at 100. The period from 2011:Q2 to 2012:Q4 is shaded to indicate it is the staff forecast based on futures markets. The series begins in 2005 at about 70 and generally increases to about 130 by mid-2008. It then generally decreases to about 85 by late 2008 and then generally increases to about 140 by 2011. By 2012 it has generally decreased to about 135.

Source: International Monetary Fund (IMF) and staff forecasts.

Figure: Spot Prices

Line chart, by index where January 4, 2010 = 100, January 2010 to March 2011. There is a horizontal line at 100. There are three series, Soybeans, Wheat, and Corn. Soybeans begins in January 2010 at about 100 and generally decreases to about 84 by February 2010. It then generally increases to about 131 by March 2011. Wheat begins in January 2010 at about 100 and generally decreases to about 74 by June 2010. It then generally increases to about 182 by February 2011 and then generally decreases to about 157 by March 2011. Corn begins in January 2010 at about 100 and generally decreases to about 80 by June 2010. It then generally increases to about 152 by late October 2010 and then decreases to about 130 by November 2010. By March 2011 it has generally increased to about 175.

Source: Commodity Research Bureau.

Figure: Advanced Foreign Economies

Line chart, by 12-month percent change, 2005 to 2011. There is a horizontal line at zero. There are three series, Headline, Excluding food and energy, and Excluding food. Headline begins in 2005 at about 1.5. From early 2005 to late 2007 it fluctuates between about 1.1 and 2.25. It then generally increases to about 3.6 by 2008 and then generally decreases to about -1 by 2009. By early 2011 it has generally increased to about 2. Excluding food and energy begins in early 2005 at about 1.05 and generally decreases to about 0.8 by mid-2005. It then generally increases to about 1.4 by 2007 and then generally decreases to about 0.95 by early 2008. By late 2008 it has generally increased to about 1.3 and by late 2009 it has generally decreased to about 0.5. It then generally increases to about 1.05 by early 2011. Excluding food begins in early 2005 at about 1.6 and generally increases to about 2.6 by mid-2005. It then generally decreases to about 0.7 by 2006 and then generally increases to about 3.1 by 2008. By 2009 it has generally decreased to about -1.75 and by early 2011 it has generally increased to about 2.

Note: Excludes Australia, Sweden, and Switzerland.

Source: Haver Analytics.

Figure: Emerging Market Economies

Line chart, by 12-month percent change, 2005 to 2011. There is a horizontal line at zero. There are two series, Headline and Excluding food. Headline begins in early 2005 at about 3.1 and within a month or so increases to about 4. It then generally decreases to about 2.5 by 2006 and then generally increases to about 6.7 by 2008. By 2009 it has generally decreased to about 0.7 and by late 2010 it has generally increased to about 4.5. Excluding food begins in 2005 at about 2.9 and within a month or so increases to about 3.2. It then generally decreases to about 2.8 by late 2005 and then generally increases to about 3.7 by 2006. By 2007 it has generally decreased to about 2 and by 2008 it has generally increased to about 4.3. It then generally decreases to about -0.3 by 2009 and then generally increases to about 2.9 by late 2010.

Source: Haver Analytics and CEIC.

Evolution of Staff's International Forecast

Figure: Total Foreign GDP

Line chart, by percent change, Q4 over Q4, January 22, 2009 to March 9, 2011. The x-axis is Tealbook publication dates. There are three series, 2010, 2011 and 2012. 2010 begins on January 22, 2009 at about 2.9 and generally decreases to about 2.2 by March 12, 2009. It then generally increases to about 4.1 by March 9, 2011. 2011 begins on September 16, 2009 at about 4.1 and remains relatively stable here until January 20, 2010. It then generally decreases to about 3.1 by December 8, 2010 and then generally increases to about 3.3 by March 9, 2011. 2012 begins on September 15, 2010 at about 3.5 and increases to about 3.7 by October 27, 2010. It then decreases to about 3.5 by December 8, 2010 and then increases to about 3.7 by January 19, 2011. By March 9, 2011 it has decreased to about 3.5.

Figure: Total Foreign CPI

Line chart, by percent change, Q4 over Q4, January 22, 2009 to March 9, 2011. The x-axis is Tealbook publication dates. There is a horizontal line at zero. There are three series, 2010, 2011 and 2012. 2010 begins on January 22, 2009 at about 2.0 and generally decreases to about 1.5 by March 12, 2009. It then generally increases to about 2.5 by April 21, 2010 and then generally decreases to about 2.1 by August 4, 2010. By March 9, 2011 it has generally increased to about 3.1. 2011 begins on September 16, 2009 at about 1.75 and generally increases to about 3.05 by March 9, 2011. 2012 begins on September 15, 2010 at about 2.2 and generally increases to about 2.3 by March 9, 2011.

Figure: U.S. Current Account Balance

Line chart, by percent of GDP, January 22, 2009 to March 9, 2011. The x-axis is Tealbook publication dates. There are three series, 2010, 2011 and 2012. 2010 begins on January 22, 2009 at about -3.5 and generally decreases to about -4.2 by March 12, 2009. It then generally increases to about -3 by October 29, 2009. From October 29, 2009 to September 15, 2010 it fluctuates between about -3.25 and -3. It then decreases to about -3.4 by October 27, 2010 and then generally increases to about -3.1 by March 9, 2011. 2011 begins on September 16, 2009 at about -3.1 and generally increases to about -2.9 by October 29, 2009. It then generally decreases to about -3.25 by June 16, 2010 and then generally increases to about -2.9 by August 4, 2010. By December 8, 2010 it has decreased to about -3.4 and by March 9, 2011 it has increased to about -3.1. 2012 begins on September 15, 2010 at about -2.9 and decreases to about -3.1 by October 27, 2010. It then increases to about -2.6 by March 9, 2011.

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

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March 2011 Tealbook A Tables and Charts[‡]

Financial Developments

Policy Expectations and Treasury Yields

Figure: Implied Federal Funds Rate

Line chart, by percent, 2011:Q1 to 2013:Q1. There are four series, "Mean: March 8, 2011", "Mean: January 25, 2011", "Mode: March 8, 2011" and "Mode: January 25, 2011". "Mean: March 8, 2011" begins in 2011:Q4 at about 0.15 and generally decreases to about 0.1 by 2011:Q2. It then generally increases to about 1.55 by 2013:Q1. "Mean: January 25, 2011" begins in 2011:Q1 at about 0.15 and generally decreases to about 0.1 by 2011:Q2. It then generally increases to about 1.27 by 2013:Q1. "Mode: March 8, 2011" begins in 2011:Q1 at about 0.15 and generally decreases to about 0.05 by 2011:Q3. It then generally increases to about 0.76 by 2013:Q1. "Mode: January 25, 2011" begins in 2011:Q1 at about 0.11 and generally decreases to about 0.04 by 2011:Q3. It then generally increases to about 0.6 by 2013:Q1.

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, by percent, from 2011:Q1 to 2013:Q1 and later. There are two series, "Recent: 20 respondents" and "January FOMC: 18 respondents". "Recent: 20 respondents" begins in 2011:Q1 at about 0 and increases to about 15 by 2012:Q1. It then decreases to about 14 by 2012:Q2 and then increases to about 25 by 2013:Q1 or later. "January FOMC: 18 respondents" begins in 2011:Q1 at about 0 and increases to about 18 by 2012:Q2. It then generally decreases to about 16 by 2013:Q1 or later.

Source: Desk's Dealer Survey from March 8, 2011.

Figure: Selected Interest Rates

Line chart, by percent, January 24, 2011 to March 8, 2011. There is a vertical line on January 26th noting the January FOMC, on January 31st noting PMI, on February 1st noting ISM, on February 4th noting the January employment report, on February 15th noting Retail Sales, on February 16th noting PPI, on February 16th noting the January FOMC minutes, on February 19th noting Escalation of Libyan turmoil, on February 25th noting Michigan confidence, on March 1st noting the Chairman's testimony, and on March 4th noting the February employment report. There are two series, June 2012 Eurodollar and 10-year Treasury yield. June 2012 Eurodollar begins on January 24th at about 1.27 and generally decreases to about 1.08 by January 28th. It then generally increases to about 1.59 by February 14th and then generally decreases to about 1.15 by March 2nd. By March 4th it has generally increased to about 1.4 and by March 7th it has generally decreased to about 1.17. It then generally increases to about 1.24 by March 8th. 10-year Treasury yield begins on January 24th at about 3.4 and generally decreases to about 3.31 by January 25th. It then generally increases to about 3.45 by January 27th and then generally decreases to about 3.31 by January 28th. By February 8th it has generally increased to about 3.74 and by February 28th it has generally decreased to about 3.4. It then generally increases to about 3.6 by March 4th and then generally decreases to about 3.47 by March 7th. By March 8th it has generally increased to about 3.55.

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

Source: Bloomberg.

Figure: Long-Term Interest Rate Implied Volatility

Line chart, by percent, January 2010 to March 2011. There is a vertical line in late January 2011 representing the January FOMC meeting. The series begins in January 2010 at about 7 and generally decreases to about 5 by March 2010. It then generally increases to about 8.1 by May 2010 and then generally decreases to about 5.75 by early August 2010. By late August 2010 it has generally increased to about 7.5 and by November 2010 it has generally decreased to about 6. It then generally increases to about 9.1 by December 2010 and then generally decreases to about 7.2 by March 8, 2011.

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

Source: Bloomberg.

Figure: Inflation Compensation

Line chart, by percent, 2007 to 2011. Data are daily. There is a vertical line in late January 2011 representing the January FOMC meeting. There is also a horizontal line at zero. There are two series, 5 to 10 years ahead and Next 5 years. 5 to 10 years ahead begins in 2007:Q1 at about 2.5 and generally increases to about 3.1 by 2008:Q1. It then generally decreases to about 2.5 by early 2008:Q4 and then generally increases to about 3.7 by mid-2008:Q4. By late 2008:Q4 it has generally decreased to about 2 and by 2010:Q1 it has generally increased to about 3.25. It then generally decreases to about 2.1 by 2010:Q3 and then generally increases to about 3 by March 8, 2011. Next 5 years begins in 2007:Q1 at about 2.3. From 2007:Q1 to 2008:Q1 it fluctuates between about 1.75 and 2.4. It then generally increases to about 2.6 by 2008:Q3 and then generally decreases to about -1.7 by 2008:Q4. By 2010:Q1 it has generally increased to about 2.1 and by 2010:Q3 it has

generally decreased to about 1.1. It then generally increases to about 2.3 by March 8, 2011.

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

Source: Barclays PLC and staff estimates.

Asset Market Developments

Figure: Stock Market Price and Volatility

Line chart, January 24, 2011 to March 8, 2011. There is a vertical line on January 26th noting the January FOMC, on January 28th noting Army and tanks ordered into Cairo, on February 1st noting ISM, on February 4th noting the January employment report, on February 14th noting Mubarak's resignation, on February 19th noting the Escalation of Libyan turmoil, and on March 4th noting the February employment report. There are two series, VIX which is measured in percent, and S&P 500 which is measured by index. VIX begins on January 24th at about 18.8 and generally decreases to about 15.9 by January 28th. It then generally increases to about 20 by January 31st and then generally decreases to about 15.8 by February 7th. From February 7th to February 18th it fluctuates between about 15.3 and 17.1. It then generally increases to about 23.1 by February 23rd and then generally decreases to about 17.6 by March 1st. By March 2nd it has generally increased to about 21 and by March 3rd it has generally decreased to about 18.25. It then generally increases to about 21.75 by March 7th and then generally decreases to about 19.7 by March 8th. S&P 500 begins on January 24th at about 1283 and generally increases to about 1302 by early January 28th. It then generally decreases to about 1275 by late January 28th and then generally increases to about 1345 by February 18th. By February 24th it has generally decreased to about 1296 and by March 1st it has generally increased to about 1331. It then generally decreases to about 1303 by March 2nd and then generally increases to about 1332 by March 3rd. By March 7th it has generally decreased to about 1305 and by March 8th it has generally increased to about 1322.

Note: 5-minute intervals. 9:30 a.m. to 4:00 p.m.

Source: Bloomberg.

Figure: Equity Risk Premium

Line chart, by percent, 1990 to 2011. Data are monthly. There are two series, Expected 10-year real equity return and Expected real yield on 10-year Treasury. Expected 10-year real equity return begins in early 1990 at about 7.6 and then increases to about 9.6 by late 1990. It then generally decreases to about 7 by 1992 and then generally increases to about 8.7 by 1995. By 2000 it has generally decreased to about 2.2 and by 2002 it has generally increased to about 6.9. It then generally decreases to about 5 by 2004 and then generally increases to about 12 by 2008. By 2009 it has generally decreased to about 8 and by mid-2010 it has generally increased to about 10. It then generally decreases to about 8.3 by March 8, 2011. Expected real yield on 10-year Treasury begins in 1990 at about 4.3 and generally decreases to about 2 by 1993. It then generally increases to about 4.6 by 1995. From 1995 to 2000 it fluctuates between about 2.4 and 4.6. It then generally decreases to about 0.8 by 2003 and then generally increases to about 2.7 by 2007. By March 8, 2011 it has generally decreased to about 1.4.

Note: Expected real yield on 10-year Treasury is off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation. March 8, 2011 values are the latest observations using daily interest rates and stock prices and latest earnings data from I/B/E/S.

Source: Thomson Financial.

Figure: Corporate Bond Spreads

Line chart, by basis points, 2007 to 2011. Data are daily. There is a vertical line in late January 2011 representing the January FOMC meeting. There are two series, 10-year high-yield and 10-year BBB. 10-year high-yield begins in 2007:Q1 at about 350 and generally increases to about 1680 by 2008:Q4 and then generally decreases to about 430 by early 2010:Q2 and generally increases to about 550 by mid-2010:Q2. It then generally decreases to about 375 by March 8, 2011. 10-year BBB begins in 2007:Q1 at about 140 and then generally increases to about 660 by 2008:Q4. It then generally decreases to about 160 by early 2010:Q2 and then generally increases to about 230 by late 2010:Q2. By March 8, 2011 it has generally decreased to about 180.

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

Source: Merrill Lynch and staff estimates.

Figure: Libor over OIS Spreads

Line chart, by basis points, 2009 to 2011. Data are daily. There is a vertical line in late January 2011 representing the January FOMC meeting. There are three series, 1-month, 3-month, and 6-month. 1-month begins in 2009:Q2 at about 13. From 2009:Q2 to 2010:Q1 it fluctuates between about 7 and 13. It then generally decreases to about 4 by 2010:Q2 and then generally increases to about 15 by early 2010:Q3. By late 2010:Q3 it has generally decreased to about 5 and by March 9, 2011 it has generally increased to about 7. 3-month begins in 2009:Q2 at about 44 and generally decreases to about 10 by 2009:Q3. From 2009:Q3 to 2010:Q2 it fluctuates between about 6 and 13. It then generally increases to about 33 by early 2010:Q3 and then generally decreases to about 10 by late 2010:Q3. By March 9, 2011 it has generally increased to about 17. 6-month begins in 2009:Q2 at about 100 and generally decreases to about 18 by 2010:Q1. It then generally increases to about 55 by 2010:Q2 and then generally decreases to about 26 by 2010:Q4. By March 9, 2011 it has generally increased to about 31.

Source: British Bankers' Association and Prebon.

Figure: Spread on 30-Day Commercial Paper

Line chart, by basis points, 2009 to 2011. Data are 5-day moving averages. There is a vertical line in late January 2011 representing the January FOMC meeting. There are two series, A2/P2 and ABCP. A2/P2 begins in April 2009 at about 85 and generally decreases to about 5 by January 2010. It then generally increases to about 25 by July 2010. From July 2010 to March 2011 it fluctuates between about 13 and 25. By March 8, 2011 it is at about 16. ABCP begins in April 2009 at about

35 and generally decreases to about 10 by May 2009. From May 2009 to December 2009 it fluctuates between about 7 and 25. It then generally decreases to about 5 by April 2010 and then generally increases to about 23 by June 2010. By October 2010 it has generally decreased to about 4 and by November 2010 it has generally increased to about 23. It then generally decreases to about 10 by March 8, 2011.

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.

Business Finance

Figure: Selected Components of Net Debt Financing, Nonfinancial Firms

Bar chart, by billions of dollars, 2007 to 2011. Data are monthly rate. There is a horizontal line at zero. There are three series, Commercial paper, C&I loans, and Bonds. Commercial paper and C&I loans are seasonally adjusted on a period-end basis, bonds are not. There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2007: Bonds 25, C&I 22, Commercial paper 0, Total 47. 2008: Bonds 17, C&I 10, Commercial paper 2, Total 29. 2009: Bonds 32, C&I -25, Commercial paper -7, Total 0. 2010:H1: Bonds 28, C&I -16, Commercial paper 5, Total 17. 2010:Q3: Bonds 42, C&I 0, Commercial paper 4, Total 46. 2010:Q4: Bonds 41, C&I -4, Commercial paper 4, Total 41. January 2011: Bonds 28, C&I 0, Commercial paper -8, Total 20. February 2011 (estimates): Bonds 22, C&I 5, Commercial paper 7, Total 34.

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

Figure: Institutional Loan Issuance

Bar chart, by billions of dollars, 2005 to 2011. Data are quarterly. The series begins in 2005:Q1 at about 58 and increases to about 64 by 2005:Q2. It then decreases to about 48 by 2005:Q3 and increases to about 103 by 2006:Q2. By 2006:Q3 it has decreased to about 67 and by 2007:Q1 it has increased to about 145. It then decreases to about 15 by 2008:Q1 and then increases to about 30 by 2008:Q3. By 2008:Q4 it has decreased to about 2 and by 2011:Q1 it has increased to about 70.

Note: Data through March 2, 2011.

Source: Reuters Loan Pricing Corporation.

Figure: Selected Components of Net Equity Issuance, Nonfinancial Firms

Bar chart, by billions of dollars, 2007 to 2010. Data are monthly rate. There is a horizontal line at zero. There are four series, Private issuance, Public issuance, Repurchases, and Cash mergers. There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2007: Private issuance 20, Public issuance 5, Repurchases -46, Cash mergers -39, Total -60. 2008: Private issuance 22, Public issuance 4, Repurchases -34, Cash mergers -14, Total -22. 2009: Private issuance 13, Public issuance 7, Repurchases -12, Cash mergers -12, Total -4. 2010:H1: Private issuance 11, Public issuance 4, Repurchases -24, Cash mergers -13, Total -22. 2010:Q3: Private issuance 10, Public issuance 4, Repurchases -25, Cash mergers -13, Total -24. 2010:Q4 (preliminary): Private issuance 9, Public issuance 8, Repurchases -26, Cash mergers -21, Total -30.

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

Figure: S&P 500 Earnings Per Share

Line chart, dollars per share, 2000 to 2010. Data are quarterly. The series begins in 2000:Q1 at about 14 and generally increases to about 14.4 by 2000:Q2. It then generally decreases to about 10.3 by 2001:Q4 and then generally increases to about 24 by 2007:Q2. By 2007:Q4 it has generally decreased to about 16 and by 2008:Q1 it has generally increased to about 19.5. It then generally decreases to about 5.6 by 2008:Q4 and then generally increases to about 22.7 by 2010:Q4.

Note: 2010:Q4 value is a staff estimate. Data are seasonally adjusted by staff.

Source: Thomson Financial.

Figure: Bond Ratings Changes of Nonfinancial Firms

Bar chart, by percent of outstandings, 1990 to 2011. Data are annual rate. There is a horizontal line at zero. There are two series, Upgrades and Downgrades. Upgrades begins in 1990 at about 10 and increases to about 16 by 1991. It then decreases to about 8 by 1992 and then increases to about 10 by 1993. By 1994 it has decreased to about 7 and by 1995 it has increased to about 21. It then decreases to about 9 by 1997 and then increases to about 14 by 1998. By 2002 it has decreased to about 3 and by 2007 it has generally increased to about 10. It then decreases to about 4 by 2008 and then increases to about 13 by 2010:H1. By February 2011 it has generally decreased to about 9. Downgrades begins in 1990 at about 32 and increases to about 44 by 1992. It then decreases to about 8 by 1995 and generally increases to about 37 by 2002. By 2004 it has decreased to about 10 and by 2009 it has generally increased to about 20. It then decreases to about 4 by 2010:H1 and increases to about 7 by 2010:H2. By February 2011 it has decreased to about 1.

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

Figure: CMBS Issuance

Bar chart, by billions of dollars, 2000 to 2011. Data are annual rate. The series begins in 2000 at about 45 and increases to about 62 by 2001. It then decreases to about 50 by 2002 and then increases to about 230 by 2007. By 2009 it has decreased to about 0 and by 2010:Q4 it has increased to about 24. It then decreases to about 20 by 2011:Q1.

Note: The 2011:Q1 value is an estimate from deals in 2011:Q1 pipeline.

Source: Commercial Mortgage Alert.

[Box:] Recent Developments in Overnight Money Market Rates

Figure: Overnight Money Market Rates

Line chart, by percent, July 2010 to February 2011. There are three series, Effective federal funds rate, Treasury GC repo and Effective Eurodollar. Effective federal funds begins in July 2010 at about 0.18 and generally increases to about 0.205 by early September 2010. It then decreases to about 0.15 by late September 2010 and within a few days increases to about 0.20. From late September 2010 to late November 2010 it fluctuates between about 0.17 and 0.205. It then generally decreases to about 0.158 by early December 2010 and then generally increases to about 0.205 by mid-December 2010. By late February 2011 it has generally decreased to about 0.14. Treasury GC repo begins in early July 2010 at about 0.23 and fluctuates but generally increases to about 0.293 by September 2010. It then fluctuates but generally decreases to about 0.13 by December 2010 and then fluctuates but increases to about 0.23 by January 2011. By late February 2011 it has fluctuated but generally decreased to about 0.13. Effective Eurodollar begins in July 2010 at about 0.22 and generally decreases to about 0.19 by August 2010. From August 2010 to early December 2010 it fluctuates between about 0.175 and 0.23. It then generally decreases to about 0.16 by late February 2011.

Note: Changes from 2010:Q4 average to February 2011 average are -0.03 for federal funds, -0.06 for Treasury GC, and -0.04 for Eurodollar.

Source: Federal Reserve Bank of New York and ICAP.

Household Finance

Figure: Mortgage Rate and MBS Yield

Line chart, by percent, 2007 to 2011. Data are weekly. There is a vertical line in late January 2011 representing the January FOMC meeting. There are two series, 30-year conforming fixed mortgage rate and MBS yield. 30-year conforming fixed mortgage rate begins in 2007:Q1 at about 6.3 and generally increases to about 6.75 by 2007:Q2. It then generally decreases to about 5.48 by 2008:Q1 and then generally increases to about 6.6 by 2008:Q3. By early 2009:Q2 it has generally decreased to about 4.8 and by late 2009:Q2 it has generally increased to about 5.6. It then generally decreases to about 4.1 by 2010:Q4 and then generally increases to about 4.85 by March 2, 2011. MBS yield begins in 2007:Q1 at about 5.8 and generally increases to about 6.45 by 2007:Q2. It then generally decreases to about 4.7 by 2008:Q1 and then generally increases to about 6.1 by 2008:Q4. By 2009:Q1 it has generally decreased to about 3.6 and by 2009:Q2 it has generally increased to about 5.1. It then generally decreases to about 3.85 by 2009:Q4 and then generally increases to about 4.6 by 2010:Q2. By 2010:Q4 it has generally decreased to about 3.2 and by March 8, 2011 it has generally increased to about 4.25.

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, by index where March 16, 1990 = 100, from 2002 to 2011. Data are weekly. There are two series, Purchase Index and Refinance Index. Purchase Index begins in 2002 at about 305 and generally increases to about 510 by 2005. It then generally decreases to about 340 by 2006 and then generally increases to about 460 by 2007. By March 4, 2011 it has generally decreased to about 200. Refinance Index begins in 2002 at about 1500 and generally increases to about 10,200 by 2003. It then generally decreases to about 1100 by 2006 and then generally increases to about 4000 by early 2008. By late 2008 it has generally decreased to about 1100 and by the end of 2008 it has generally increased to about 6100. It then generally decreases to about 1900 by early 2010 and then generally increases to about 5200 by late 2010. By March 4, 2011 it has generally decreased to about 2100.

Note: Seasonally adjusted by FRB staff.

Source: Mortgage Bankers Association.

Figure: Prices of Existing Homes

Line chart, by index peaks normalized to 100, from 2005 to 2011. Data are monthly. There are three series, FHFA, CoreLogic, and 20-city S&P/Case-Shiller. FHFA begins in 2005 at about 89 and generally increases to about 100 by 2007. It then generally decreases to about 84 by December 2010. CoreLogic begins in 2005 at about 86 and generally increases to about 100 by early 2006. It then generally decreases to about 70 by early 2009 and then generally increases to about 72.5 by early 2010. By January 2011 it has generally decreased to about 68. 20-city S&P/Case-Shiller begins in 2005 at about 86 and generally increases to about 100 by early 2006. It then generally decreases to about 98 by late 2006 and then generally increases to about 99 by early 2007. By 2009 it has generally decreased to about 68 and by mid-2010 it has generally increased to about 71. It then generally decreases to about 69 by December 2010.

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

Figure: Growth of Home Mortgage Debt

Line chart, by percent, 1992 to 2010. Data are quarterly, s.a.a.r. There is a horizontal line at zero. The series begins in 1992 at about 8 and generally decreases to about 3.3 by 1993. It then generally increases to about 15.2 by 2003 and then generally decreases to about -4.8 by early 2010. By 2010:Q4 it has generally increased to about -1.

Note: 2010:Q4 value is an estimate.

Source: Federal Reserve Board.

Figure: Delinquency Rates

Line chart, by percent of loans, 2003 to 2011. Data are monthly. There are three series, Credit card loans in securitized pools, Prime mortgages, and Auto loans at captive finance companies. Credit card loans in securitized pools begins in 2003 at about 5.3 and then generally decreases to about 3.2 by 2005. By 2009 it has generally increased to about 6.3 and by January 2011 it has generally decreased to about 3.9. Prime mortgages begins in 2003 at about 1.4 and generally decreases to about 0.9 by 2005. It then generally increases to about 7.0 by 2010 and then generally decreases to about 6.1 by January 2011. Auto loans at captive finance companies begins in 2003 at about 2.2 and generally decreases to 1.8 by 2004. By 2009 it has generally increased to about 3.3 and by January 2011 it has generally decreased to about 2.5.

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

Bar chart, by billions of dollars, 2006 to 2011. Data are monthly rate. There are three series, Auto, Credit card, and Student loan. Approximate values are: 2006: Auto 7.5, Credit card 5.5, Student loan 6.5. 2007: Auto 6, Credit card 8, Student loan 5.6. 2008:H1: Auto 5, Credit card 8.5, Student loan 4.5. 2008:H2: Auto 0.8, Credit card 1.7, Student loan 1. 2009:H1: Auto 6.3, Credit card 7.8, Student loan 2.4. 2009:H2: Auto 9.5, Credit card 6, Student loan, 2.5. 2010:H1: Auto 4.5, Credit card 0.8, Student loan 2.2. 2010:Q3: Auto 4.7, Credit card 0.5, Student loan 2.5. 2010:Q4: Auto 3.6, Credit card 0, Student loan 1.7. January 2011: Auto 2.8, Credit card 1, Student loan 0. February 2011: Auto 6, Credit card 0, Student loan 0.7. March 2011: Auto 0, Credit card 0, Student loan 0.9.

Note: The March 2011 value is through March 4, 2011.

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

Foreign Developments

Figure: Stock Price Indexes

Line chart, by index where January 1, 2008 = 100, from 2008 to 2011. Data are daily. There is a vertical line in late January 2011 representing the January FOMC meeting. There are four series, DJ Euro, Topix, FTSE, and MSCI Emerging Markets. DJ Euro begins in early 2008 at about 100 and generally decreases to about 41 by early 2009. It then generally increases to about 69 by early 2010 and then generally decreases to about 58 by mid-2010. By March 8, 2011 it has generally increased to about 68. Topix begins in early 2008 at about 100 and generally decreases to about 77 within a few months. It then generally increases to about 99 by mid-2008 and then generally decreases to about 45 by early 2009. By mid-2009 it increases to about 65 and by late 2009 it decreases to about 52. It then generally increases to about 67 by early 2010 and then generally decreases to about 52 by mid-2010. By March 8, 2011 it has generally increased to about 64. FTSE begins in early 2008 at about 100 and generally decreases to about 85 within a few months. It then generally increases to about 100 by mid-2008 and then generally decreases to about 56 by early 2009. It then generally increases to about 90 by early 2010 and then generally decreases to about 75 by mid-2010. By March 8, 2011 it has generally increased to about 92. MSCI Emerging Markets begins in early 2008 at about 100 and generally decreases to about 83 within a few months. It then generally increases to about 101 by mid-2008 and then generally decreases to about 36 by late 2008. It then generally increases to about 84 by early 2010 and then generally decreases to about 67 by mid-2010. By March 8, 2011 it has generally increased to about 91.

Source: Bloomberg.

Figure: Nominal 10-year Government Bond Yields

Line chart, by percent, 2008 to 2011. Data are daily. There is a vertical line in late January 2011 representing the January FOMC meeting. There are three series, Germany, United Kingdom, and Japan. Germany begins in early 2008 at about 4.1 and generally decreases to about 3.6 within a few months. It then generally increases to about 4.8 by mid-2008. By early 2009 it has generally decreased to about 2.8 and by mid-2009 it has generally increased to about 3.8. It then generally decreases to about 2.1 by mid-2010 and then generally increases to about 3.3 by March 8, 2011. United Kingdom begins in early 2008 at about 4.4 and generally increases to about 5.3 by mid-2008. By early 2009 it has generally decreased to about 2.9 and by early 2010 it has generally increased to about 4.3. It then generally decreases to about 2.75 by late 2010 and then generally increases to about 3.7 by March 8, 2011. Japan begins in early 2008 at about 1.4 and generally increases to about 1.9 by mid-2008. By early 2009 it has generally decreased to about 1.1. From early 2009 to early 2010 it fluctuates between about 1.1 and 1.5. It then generally decreases to about 0.8 by late 2010 and then generally increases to about 1.3 by March 8, 2011.

Source: Bloomberg.

Figure: Euro-Area 10-Year Government Bond Spreads

Line chart, by percentage points, 2008 to 2011. Data are daily. There is a vertical line in late January 2011 representing the January FOMC meeting. There is a horizontal line at zero. There are four series, Greece, Portugal, Spain, and Ireland. Greece begins in 2008:Q1 at about 0.4 and generally increases to about 3.1 by 2009:Q1. It then generally decreases to about 1 by 2009:Q3. By early 2010:Q2 it has generally increased to about 9.7 and within a week or so has generally decreased to about 4. It then generally increases to about 9.7 by 2010:Q3 and then generally decreases to about 6.2 by 2010:Q4. By March 8, 2011 it has generally increased to about 9.5. Portugal begins in 2008:Q1 at about 0.35 and generally increases to about 1.7 by 2009:Q1. It then generally decreases to about 0.4 by 2009:Q4. By 2010:Q4 it has generally increased to about 4.5 and within a few weeks it has generally decreased to about 3. It then generally increases to about 4.2 by March 8, 2011. Spain begins in 2008:Q1 at about 0.1 and generally increases to about 1.25 by 2009:Q1. It then generally decreases to about 0.4 by 2009:Q3. By

2010:Q2 it has generally increased to about 2.2 and by 2010:Q3 it has generally decreased to about 1.2. It then generally increases to about 2.9 by 2010:Q4 and then generally decreases to about 2.1 by March 8, 2011. Ireland begins in 2008:Q1 at about 0.25 and generally increases to about 3 by 2009:Q1. It then generally decreases to about 1.2 by 2010:Q1. By March 8, 2011 it has generally increased to about 6.2.

Note: Spread over German bunds.

Source: Bloomberg.

Figure: Nominal Trade-Weighted Dollar Indexes

Line chart, by index where January 1, 2008 = 100, from 2008 to 2011. Data are daily. There is a vertical line in late January 2011 representing the January FOMC meeting. There are three series, Broad, Major, and OITP (other important trading partners). Broad begins in early 2008 at about 100 and generally decreases to about 95 by mid-2008. It then generally increases to about 116.5 by early 2009 and then generally decreases to about 99.8 by late 2009. By mid-2010 it has generally increased to about 108 and by March 8, 2011 it has generally decreased to about 97.5. Major begins in early 2008 at about 100 and generally decreases to about 94.5 within a month or two. It then generally increases to about 116.5 by late 2008 and then generally decreases to about 105.4 by the end of 2008. It then generally increases to about 118 by early 2009 and then generally decreases to about 96 by late 2009. By mid-2010 it has generally increased to about 110 and by March 8, 2011 it has generally decreased to about 96. OITP begins in early 2008 at about 100 and generally decreases to about 95.2 by mid-2008. It then generally increases to about 115.5 by early 2009 and then generally decreases to about 99.3 by March 8, 2011.

Source: Federal Reserve Board and Bloomberg.

Figure: Bilateral Exchange Rates

Line chart, by index where January 1, 2008 = 100, from 2008 to 2011. Data are foreign currency per dollar, daily. There is a vertical line in late January 2011 representing the January FOMC meeting. There are four series, Euro, Yen, Chilean peso, and Korean won. Euro begins in 2008:Q1 at about 100 and generally decreases to about 90 by 2008:Q3. It then generally increases to about 118 by 2008:Q4 and then generally decreases to about 95 by 2009:Q4. By 2010:Q2 it has generally increased to about 122 and by March 8, 2011 it has generally decreased to about 104. Yen begins in 2008:Q1 at about 100 and generally decreases to about 83 by the end of the quarter. It then generally decreases to about 100 by 2008:Q3 and then generally decreases to about 79 by 2009:Q1. By 2009:Q2 it has generally increased to about 91 and by March 8, 2011 it has generally decreased to about 73. Chilean peso begins in 2008:Q1 at about 100 and generally decreases to about 85 by the end of the quarter. It then generally increases to about 138 by 2008:Q4 and then generally decreases to about 98 by 2010:Q1. By 2010:Q2 it has generally increased to about 112 and by March 8, 2011 it has generally decreased to about 95. Korean won begins in 2008:Q1 at about 100 and generally increases to about 170 by 2009:Q1. It then generally decreases to about 117 by early 2010:Q2 and then generally increases to about 135 by late 2010:Q2. By March 8, 2011 it has generally decreased to about 119.

Source: Federal Reserve Bank of New York.

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

Bar chart, by billions of dollars, annual rate, 2007 to 2011. There is a horizontal line at zero. There are two series, Official and Private. Official begins in 2007 at about 100 and increases to about 580 by 2009. It then decreases to about 220 by 2010:H1 and then increases to about 720 by 2010:Q3. By January 2011 it has decreased to about 50. Private begins in 2007 at about 70 and increases to about 175 by 2008. It then decreases to about 10 by 2009 and then increases to about 400 by 2010:H1. By January 2011 it has generally decreased to about 120.

Source: Treasury International Capital data adjusted for staff estimates.

[Box:] Balance Sheet Developments over the Intermeeting Period

Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (03/07/11)	Maximum level	Date of maximum level
Total assets	128	2,566	2,566	03/07/11
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)	-3	20	49	03/11/10
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	+0	65	75	12/30/08
Securities held outright*	128	2,344	2,344	03/07/11
U.S. Treasury securities	145	1,252	1,252	03/07/11
Agency debt securities	-1	143	169	03/11/10
Agency mortgage-backed securities	-16	949	1,129	06/14/10

Total liabilities	128	2,513	2,513	03/07/11
Selected liabilities:				
Federal Reserve notes in circulation	23	958	958	03/07/11
Reverse repurchase agreements	4	56	110	10/14/08
Foreign official and international accounts	4	56	92	12/22/08
Others	0	0	26	09/26/08
Reserve balances of depository institutions**	284	1,359	1,364	03/04/11
Term deposits held by depository institutions	5	5	5	11/03/10
U.S. Treasury, general account	-59	37	187	12/31/09
U.S. Treasury, supplementary financing account	-125	75	559	10/22/08
Funds from AIG asset dispositions, held as agent	0	0	27	01/13/11
Other deposits	+0	1	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](#)

[Box:] The Municipal Bond Market

Figure: Net Flows of Mutual Funds

Line chart, by percent of assets, 1997 to 2011. Data are 3-month moving averages. There is a horizontal line at zero. There are two series, Government and Tax-exempt (Municipal). Government begins in 1997 at about -1.1 and generally increases to about 1.7 by 1998. It then generally decreases to about -2.25 by 2000 and then fluctuates, but generally increases to about 5.8 by 2002. By 2003 it has generally decreased to about -2.5 and by 2005 it has generally increased to about 0. It then generally decreases to about -1.3 by 2006 and then generally increases to about 2.1 by 2009. By February 2011 it has generally decreased to about -1. Tax-exempt (Municipal) begins in 1997 at about 0 and generally increases to about 0.6 by 1999. It then generally decreases to about -1.75 by 2000 and then generally increases to about 1.02 by 2002. By 2004 it has generally decreased to about -1.2 and by early 2008 it has generally increased to about 0.8. It then generally decreases to about -1.25 by late 2008 and then generally increases to about 2.2 by 2009. By February 2011 it has generally decreased to about -2.1.

Note: Government series includes funds investing in federal agency and mortgage-backed securities. The February 2011 values are staff estimates.

Source: Investment Company Institute.

Figure: Municipal Bond Yield Ratio (20-year general obligation)

Line chart, by ratio, 1997 to 2011. There are two series, Over Treasury and Over Corporates. Over Treasury is a Bond Buyer GO 20-year index over 20-year Treasury. The series begins in 1997 at about 0.83. It generally increases to about 0.94 by 1998 and then generally decreases to about 0.83 by 1999. By 2000 it has generally increased to about 0.95. From 2000 to 2005 it fluctuates between about 0.87 and 0.99. It then generally decreases to about 0.84 by 2007 and then generally increases to about 1.87 by 2008. By 2010 it has generally decreased to about 0.9 and by March 3, 2011 it has generally increased to about 1.09. Over corporates is a Bond Buyer GO 20-year index over estimated AAA 20-year yield. The series begins in 1997 at about 0.79. It generally increases to about 0.85 by 1998 and then generally decreases to about 0.72 by 2001. By 2005 it has generally increased to about 0.82 and by 2007 it has generally decreased to about 0.72. It then generally increases to about 1.21 by 2008 and then generally decreases to about 0.79 by 2010. By March 3, 2011 it has generally increased to about 0.925.

Note: The Over Treasury yield ratio peak is at 1.87 on December 15, 2008.

Figure: State-Specific Muni CDS 5-Year Spreads

Line chart, by percent, 2007 to 2011. Data are daily. There is a vertical line in late January 2011 representing the January FOMC meeting. There are four series, Municipal Credit Default Swap (CDS) Index 5YR, California, Illinois, and New York. Municipal CDS Index 5YR begins in early 2008 at about 0.3 and generally increases to about 2.95 by early 2009. It then generally decreases to about 0.9 by late 2009 and then generally increases to about 2.5 by mid-2010. By March 8, 2011 it has generally decreased to about 1.4. California begins in early 2007 at about 0.05 and generally increases to about 5 by late 2008. It then generally decreases to about 2.3 by early 2009 then generally increases to about 4 by mid-2009. By late 2009 it has generally decreased to about 1.5 and by early 2010 it has generally increased to about 3.65. It then generally decreases to about 1.7 within a month or two and then generally increases to about 3.5 by mid-2010. By March 8, 2011 it has generally decreased to about 1.7. Illinois begins in mid-2007 at about 0.05 and generally increases to about 2.8 by late 2008. It then generally decreases to about 0.55 by late 2009 and then generally increases to about 3.6 by mid-2010. By late 2010 it has generally decreased to about 2.3 and by the end of 2010 it has generally increased to about 3.5. It then generally decreases to about 2.2 by March 8, 2011. New York begins in mid-2007 at about at about 0.05 and generally increases to about 3.8 by late 2008. It then generally decreases to about 2.3 by early 2009 and then increases to about 3.3 within a month. By late 2009 it has generally decreased to about 0.7 and by mid-2010 it has generally increased to about 2.9. It then generally decreases to about 1.15 by March 8, 2011.

Source: Markit.

Figure: Ratings Changes

Bar chart, by number of ratings changes, 1989 to 2010. Data are annual rate. There is a horizontal line at zero. There are two series, Upgrades and Downgrades. Upgrades begins in 1989 at about 240 and generally increases to about 310 by 1995. It then decreases to about 270 by 1997 and then increases to about 700 by 1998. By 1999 it has decreased to about 570 and by 2001 it has increased to about 650. It then decreases to about 410 by 2003 and then generally increases to about 670 by 2007. By 2010:Q4 it has decreased to about 180. Downgrades begins in 1989 at about 200 and remains constant here until 1992. It then decreases to about 170 by 1993 and then increases to about 220 by 1995. By 1996 it has decreased to about 80 and by 1998 it has increased to about 170. It then decreases to about 130 by 2000 and then increases to about 310 by 2003. By 2007 it has decreased to about 160 and by 2009 it has increased to about 580. It then decreases to about 370 by 2010:Q3 and then increases to about 800 by 2010:Q4.

Source: Moody's Credit Trends.

Commercial Banking and Money

Figure: Bank Credit

Line chart, by index where January 2008 = 100, January 2008 to February 2011. Data are 4-week moving averages. There are two series, Total loans and Securities. Total loans begins in January 2008 at about 100 and generally increases to about 104 by October 2008. It then generally decreases to about 85 by February 23, 2011. Securities begins in January 2008 at about 100 and generally increases to about 108 by October 2008. By December 2008 it has generally decreased to about 103 and by April 2010 it has generally increased to about 110.5. It then generally decreases to about 109 by July 2010 and then generally increases to about 115 by December 2010. By February 23, 2011 it has decreased to about 113.5.

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: Weighted-Average C&I Loan Rate Spread, Domestic Banks

Line chart, by basis points, 1997 to 2011. Data are quarterly. The series begins in 1997 at about 188 and generally increases to about 225 by 2002. It then generally decreases to about 165 by 2008 and then generally increases to about 301 by 2010. By 2011:Q1 it has generally decreased to about 285.

Note: The rate on C&I loans of less than \$25 million over a market interest rate on an instrument of comparable maturity, adjusted for changes in nonprice loan characteristics.

Source: Survey of Terms of Business Lending.

Figure: Return on Assets

Line chart, by percent, 1985 to 2010. Data are quarterly, s.a.a.r. There is a horizontal line at zero. The series begins in 1985 at about 0.6 and generally decreases to about -1.5 by 1987. It then generally increases to about 1.0 by 1988 and then generally decreases to about -0.05 by 1989. By 1993 it has generally increased to about 1.25. From 1993 to 2006 it fluctuates between about 1.0 and 1.55. It then generally decreases to about -0.9 by 2008 and then generally increases to about 0.9 by 2010:Q4.

Source: Call Report.

Figure: Pre-Tax Net Income and Loan Loss Provisions

Stack area chart, by percent, 2005 to 2010. Data are quarterly, s.a.a.r. There is a horizontal line at zero. There are two series, Pre-tax net income and loan loss provisions. Pre-tax net income begins in 2005:Q1 with a range of about [0, 2] and remains relatively stable here until about 2006:Q3. It then increases to about [0, 2.2] by 2006:Q4 and then generally decreases to about [0, 0.7] by 2007:Q4. By 2008:Q1 it has increased to about [0, 1.0] and by 2008:Q4 it has decreased to about [-1.4, -1.1]. It then generally increases to about [0, 1.2] by 2010:Q4. Loan loss provisions begins in 2005:Q1 with a range of about [2, 2.3] and remains relatively stable here until 2006:Q3. It then increases to about [2.2, 2.5] by 2006:Q4 and then generally decreases to about [0.7, 1.5] by 2007:Q4. By 2008:Q1 it has increased to about [1.0, 2.0] and by 2008:Q4 it has decreased to about [-1.1, 0.85]. It then increases to about [0.5, 2.2] by 2009:Q4 and then decreases to about [1.2, 2.05] by 2010:Q4.

Source: Call Report.

Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	RMMMF	Currency
2008	8.5	6.9	12.3	13.6	5.8
2009	5.0	17.1	-15.7	-22.0	6.9
2010					
H1	1.3	9.6	-22.4	-22.9	4.5
Q3	4.5	10.6	-21.3	-7.5	5.9
Q4	5.6	12.9	-26.0	-13.0	8.0

2011					
Jan.	2.9	6.7	-22.3	-1.5	5.8
Feb. (p)	7.1	12.5	-16.9	-16.0	11.2

RMMMF Retail money market mutual funds. [Return to table](#)

p Preliminary. [Return to table](#)

Source: Federal Reserve Board.

Figure: Interest Rates on Selected Components of M2

Line chart, by percent, 2008 to 2011. Data are monthly. There are three series, Retail money market mutual funds, 6-month small time deposits, and Liquid deposits. Retail money market mutual funds begins in January 2008 at about 3.4 and generally decreases to about 1.7 by June 2008. It remains relatively stable here until September 2008. It then generally decreases to about 0 by September 2009 and remains relatively stable here until February 2011. 6-month small time deposits begins in January 2008 at about 3 and generally decreases to about 1.7 by March 2008. It then generally increases to about 2.05 by October 2008 and then generally decreases to about 0.2 by February 2011. Liquid deposits begins in January 2008 at about 2.1 and generally decreases to about 1.1 by March 2008. It then generally increases to about 1.4 by June 2008 and then generally decreases to about 0.25 by February 2011.

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. February 2011 values are preliminary.

Source: Federal Reserve Board.

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

Last update: February 3, 2017

Accessible Material

March 2011 Tealbook A Tables and Charts[‡]

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			
<i>Real GDP</i>					
Extended Tealbook baseline	3.5	4.0	4.4	4.4	3.7
Greater commodity price increases	3.2	3.5	3.9	4.2	3.6
Persistent rise in inflation	3.0	3.3	3.8	3.8	3.2
Further disinflation	3.5	4.0	4.1	4.3	4.2
Weaker recovery	2.5	2.1	2.8	4.1	5.0
Stronger expansion	4.0	4.8	5.4	4.5	2.8
Greater geopolitical risk	3.0	2.4	2.9	4.2	3.9
<i>Unemployment rate¹</i>					
Extended Tealbook baseline	8.9	8.6	7.5	6.7	5.3
Greater commodity price increases	8.9	8.7	7.9	7.3	5.9
Persistent rise in inflation	9.1	9.0	8.4	8.1	7.4
Further disinflation	8.9	8.6	7.6	6.9	5.0
Weaker recovery	9.0	9.1	8.8	8.4	5.9
Stronger expansion	8.8	8.4	6.7	5.7	5.1
Greater geopolitical risk	9.0	8.9	8.4	7.8	6.2
<i>Core PCE inflation</i>					
Extended Tealbook baseline	1.2	1.2	1.2	1.3	1.6
Greater commodity price increases	1.3	1.4	1.6	1.6	1.7
Persistent rise in inflation	1.5	1.8	2.7	3.7	3.6
Further disinflation	1.3	.9	.6	.4	.4
Weaker recovery	1.2	1.1	1.0	.8	.9
Stronger expansion	1.2	1.2	1.2	1.5	2.0
Greater geopolitical risk	1.1	.8	.8	1.0	1.4
<i>Federal funds rate¹</i>					
Extended Tealbook baseline	.1	.1	.5	2.1	4.2
Greater commodity price increases	.1	.1	.3	1.9	3.5
Persistent rise in inflation	.1	.1	1.1	4.0	5.3
Further disinflation	.1	.1	.1	.7	2.8
Weaker recovery	.1	.1	.1	.1	3.1
Stronger expansion	.3	.6	1.9	3.5	4.2
Greater geopolitical risk	.1	.1	.1	1.2	3.3

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

Measures of PCE Inflation in Selected Alternative Scenarios

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

Measure and scenario	2011	2012	2013	2014-15
Total PCE Inflation				
Extended Tealbook baseline	1.9	1.1	1.4	1.6
Greater commodity price increases	2.8	2.3	1.8	1.7
Persistent rise in inflation	3.1	3.4	3.7	3.5
Core PCE Inflation				
Extended Tealbook baseline	1.2	1.2	1.3	1.6
Greater commodity price increases	1.4	1.6	1.6	1.7
Persistent rise in inflation	1.6	2.7	3.7	3.6

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

Figure: Real GDP

Line chart, by 4-quarter percent change, 2008 to 2015. There is a horizontal line at zero. There are nine series, Extending Tealbook baseline, Greater commodity price increases, Persistent rise in inflation, Further disinflation, Weaker recovery, Stronger expansion, Greater geopolitical risk, 70 percent interval, and 90 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 2 and generally decreases to about -4.2 by 2009:Q2. It then generally increases to about 3.3 by 2010:Q3 and then generally decreases to about 2.6 by 2011:Q1. By 2013:Q2 it has generally increased to about 4.4 and by 2015:Q4 it has generally decreased to about 3.2. Greater commodity price increases begins in 2010:Q4 at about 2.8 and generally decreases to about 2.55 by 2011:Q1. It then generally increases to about 4.2 by 2014:Q1 and then generally decreases to about 3.2 by 2015:Q4. Persistent rise in inflation begins in 2010:Q4 at about 2.8 and generally decreases to about 2.5 by 2011:Q1. It then generally increases to about 3.9 by 2013:Q1 and then generally decreases to about 2.8 by 2015:Q4. Further disinflation begins in 2010:Q4 at about 2.8 and generally decreases to about 2.6 by 2011:Q1. It then generally increases to about 4.05 by 2012:Q3 and then generally decreases to about 4.0 by 2013:Q2. By 2014:Q4 it has generally increased to about 4.7 and by 2015:Q4 it has generally decreased to about 3.8. Weaker recovery begins in 2010:Q4 at about 2.8 and generally decreases to about 2.4 by 2011:Q1. It then generally increases to about 2.6 by 2011:Q2 and then generally decreases to about 2.2 by 2012:Q1. By 2014:Q4 it has generally increased to about 5.3 and by 2015:Q4 it has generally decreased to about 4.7. Stronger expansion begins in 2010:Q4 at about 2.8 and generally decreases to about 2.75 by 2011:Q1. It then generally increases to about 5.4 by 2012:Q4 and then generally decreases to about 2.2 by 2015:Q4. Greater geopolitical risk begins in 2010:Q4 at about 2.8 and generally decreases to about 2.6 by 2011:Q1. It then generally increases to about 2.9 by 2011:Q2 and then generally decreases to about 2.4 by 2012:Q2. By 2014:Q2 it has generally increased to about 4.4 and by 2015:Q4 it has generally decreased to about 3.4. The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in 2010:Q4 at about 0.1 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 2.0 percent both lesser and greater than the Extended Tealbook baseline. The 90 percent interval begins in 2010:Q4 at about 0.2 percent both lesser and greater than the Extended Tealbook baseline and widens out to about 3.25 percent both lesser and greater than the Extended Tealbook baseline.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2015. There are nine series, Extending Tealbook baseline, Greater commodity price increases, Persistent rise in inflation, Further disinflation, Weaker recovery, Stronger expansion, Greater geopolitical risk, 70 percent interval and 90 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 4.9 and generally increases to about 10.1 by 2009:Q4. It then generally decreases to about 5.3 by 2015:Q4. Greater commodity price increases begins in 2011:Q1 at about 9.6 and generally decreases to about 5.9 by 2015:Q4. Persistent rise in inflation begins in 2011:Q1 at about 9.6 and generally decreases to about 7.35 by 2015:Q4. Further disinflation begins in 2011:Q1 at about 9.6 and generally decreases to about 5.1 by 2015:Q4. Weaker recovery begins in 2011:Q1 at about 9.6 and generally decreases to about 9.0 by 2011:Q2. It then generally increases to about 9.05 by 2012:Q2 and then generally decreases to about 6.0 by 2015:Q4. Stronger expansion begins in 2011:Q1 at about 9.6 and generally decreases to about 5.15 by 2015:Q4. Greater geopolitical risk begins in 2011:Q1 at about 9.6 and generally decreases to about 6.25 by 2015:Q4. The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in 2011:Q2 at about 0.1 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 1 percent both lesser and greater than the Extended Tealbook baseline. The 90 percent interval begins in 2011:Q2 at about 0.2 percent both lesser and greater than the Extended Tealbook baseline and widens out to about 1.5 percent both lesser and greater than the Extended Tealbook baseline.

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 2008 to 2015. There is a horizontal line at zero. There are nine series, Extending Tealbook baseline, Greater commodity price increases, Persistent rise in inflation, Further disinflation, Weaker recovery, Stronger expansion, Greater geopolitical risk, 70 percent interval and 90 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 2.3 and generally increases to about 2.55 by 2008:Q2. It then generally decreases to about 1.3 by 2009:Q3 and then generally increases to about 1.75 by 2010:Q1. By 2011:Q1 it has generally decreased to about 0.8 and by 2015:Q4 it has generally increased to about 1.65. Greater commodity price increases begins in 2010:Q4 at about 0.85 and generally increases to about 1.7 by 2013:Q3. It then generally decreases to about 1.65 by 2015:Q4. Persistent rise in inflation begins in 2010:Q4 at about 0.85 and generally increases to about 3.8 by 2014:Q1. It then generally increases to about 3.5 by 2015:Q4. Further disinflation begins in 2010:Q4 at about 0.85 and generally decreases to about 0.8 by 2011:Q1. It then generally increases to about 1.05 by 2011:Q4 and then generally decreases to about 0.3 by 2014:Q3. By 2015:Q4 it has generally increased to about 0.4. Weaker recovery begins in 2010:Q4 at about 0.85 and generally increases to about 1.15 by 2011:Q4. It then generally decreases to about 0.88 by 2014:Q2 and then generally increases to about 0.98 by 2015:Q4. Stronger expansion begins in 2010:Q4 at about 0.85 and generally increases to about 2.15 by 2015:Q4. Greater geopolitical risk begins in 2010:Q4 at about 0.85 and generally

decreases to about 0.77 by 2011:Q2. It then generally increases to about 1.0 by 2011:Q4 and then generally decreases to about 0.75 by 2012:Q3. By 2015:Q4 it has generally increased to about 1.5. The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in 2010:Q4 at about 0.05 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 1 percent both lesser and greater than the Extended Tealbook baseline. The 90 percent interval begins in 2010:Q4 at about 0.1 percent both lesser and greater than the Extended Tealbook baseline and widens out to about 1.5 percent both lesser and greater than the Extended Tealbook baseline.

Figure: Federal Funds Rate

Line chart, by percent, 2008 to 2015. There are nine series, Extending Tealbook baseline, Greater commodity price increases, Persistent rise in inflation, Further disinflation, Weaker recovery, Stronger expansion, Greater geopolitical risk, 70 percent interval and 90 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 3.2 and generally decreases to about 0.13 by 2010:Q1. It remains relatively stable here until 2012:Q2. It then generally increases to about 4.2 by 2015:Q4. Greater commodity price increases begins in 2010:Q4 at about 0.13 and remains stable here until 2012:Q3. It then generally increases to about 3.5 by 2015:Q4. Persistent rise in inflation begins in 2010:Q4 at about 0.13 and remains stable here until 2012:Q2. It then generally increases to about 5.5 by 2015:Q2 and then generally decreases to about 5.3 by 2015:Q4. Further disinflation begins in 2010:Q4 at about 0.13 and remains stable here until 2013:Q1. It then generally increases to about 2.75 by 2015:Q4. Weaker recovery begins in 2010:Q4 at about 0.13 and remains stable here until 2013:Q4. It then generally increases to about 4.30 by 2015:Q4. Stronger expansion begins in 2010:Q4 at about 0.13. It generally increases to about 4.4 by 2014:Q4 and then generally decreases to about 4.2 by 2015:Q4. Greater geopolitical risk begins in 2010:Q4 at about 0.13 and remains stable here until 2013:Q2. It then generally increases to about 3.3 by 2015:Q4. The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in 2012:Q2 at about 1 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 2 percent both lesser and greater than the Extended Tealbook baseline. The 90 percent interval begins in 2012:Q2 at about 1.75 percent both lesser and greater than the Extended Tealbook baseline and widens out to about 3 percent both lesser and greater than the Extended Tealbook baseline.

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

Measure	2011	2012	2013	2014	2015
<i>Real GDP (percent change, Q4 to Q4)</i>					
Projection	3.7	4.4	4.4	4.2	3.2
Confidence interval					
Tealbook forecast errors	2.1-5.3	2.7-6.1	...	...	...
FRB/US stochastic simulations	2.5-5.2	2.5-6.1	2.2-6.2	2.0-6.3	1.2-5.4
<i>Civilian unemployment rate (percent, Q4)</i>					
Projection	8.6	7.5	6.7	5.9	5.3
Confidence interval					
Tealbook forecast errors	8.0-9.2	6.5-8.5	...	...	...
FRB/US stochastic simulations	8.0-9.1	6.5-8.5	5.7-7.9	4.9-7.1	4.2-6.4
<i>PCE prices, total (percent change, Q4 to Q4)</i>					
Projection	1.9	1.1	1.4	1.5	1.7
Confidence interval					
Tealbook forecast errors	.9-2.9	-.1-2.2	...	...	...
FRB/US stochastic simulations	1.0-3.0	.0-2.3	.2-2.8	.3-2.9	.5-3.1
<i>PCE prices excluding food and energy (percent change, Q4 to Q4)</i>					
Projection	1.2	1.2	1.3	1.5	1.7
Confidence interval					
Tealbook forecast errors	.6-1.8	.4-2.0	...	...	...
FRB/US stochastic simulations	.7-1.8	.4-2.1	.5-2.3	.6-2.5	.8-2.7
<i>Federal funds rate (percent, Q4)</i>					
Projection	.1	.5	2.1	3.7	4.2
Confidence interval					
FRB/US stochastic simulations	.1-.8	.1-2.6	.6-4.2	1.8-5.8	2.4-6.4

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](#)

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

Last update: February 3, 2017

Accessible Material

March 2011 Tealbook A Tables and Charts

Greensheets

Changes in GDP, Prices, and Unemployment

(Percent, annual rate except as noted)

Interval	Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate ¹	
	01/19/11	03/09/11	01/19/11	03/09/11	01/19/11	03/09/11	01/19/11	03/09/11	01/19/11	03/09/11
<i>Quarterly</i>										
2010: Q1	4.8	4.8	3.7	3.7	2.1	2.1	1.2	1.2	9.7	9.7
Q2	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	3.8	3.6	3.8	3.2	1.9	1.8	.6	.5	9.6	9.6
2011: Q1	5.7	4.8	3.6	3.2	2.0	3.3	.9	1.1	9.5	9.0
Q2	4.7	6.2	3.7	3.8	1.1	2.3	1.0	1.2	9.3	8.9
Q3	4.9	4.9	3.8	3.9	1.2	1.2	1.0	1.3	9.1	8.7
Q4	5.1	5.0	4.2	4.0	1.0	1.0	.9	1.1	8.9	8.6
2012: Q1	5.5	5.6	4.3	4.2	1.0	1.0	1.0	1.2	8.7	8.4
Q2	5.6	5.8	4.4	4.4	1.0	1.0	1.0	1.2	8.4	8.1
Q3	5.6	5.8	4.5	4.4	1.0	1.1	1.0	1.2	8.1	7.8
Q4	5.7	5.8	4.6	4.5	1.0	1.1	1.0	1.2	7.8	7.5
<i>Two-quarter²</i>										
2010: Q2	4.3	4.3	2.7	2.7	1.0	1.0	1.1	1.1	-4	-4
Q4	4.2	4.1	3.2	2.9	1.3	1.3	.5	.5	.0	.0
2011: Q2	5.2	5.5	3.7	3.5	1.6	2.8	1.0	1.2	-3	-7
Q4	5.0	5.0	4.0	4.0	1.1	1.1	1.0	1.2	-4	-3
2012: Q2	5.6	5.7	4.4	4.3	1.0	1.0	1.0	1.2	-5	-5
Q4	5.7	5.8	4.5	4.5	1.0	1.1	1.0	1.2	-6	-6
<i>Four-quarter³</i>										
2009:Q4	.6	.6	.2	.2	1.5	1.5	1.7	1.7	3.1	3.1
2010:Q4	4.3	4.2	2.9	2.8	1.2	1.2	.8	.8	-4	-4
2011:Q4	5.1	5.2	3.8	3.7	1.3	1.9	1.0	1.2	-7	-1.0
2012:Q4	5.6	5.8	4.4	4.4	1.0	1.1	1.0	1.2	-1.1	-1.1
<i>Annual</i>										
2009	-1.7	-1.7	-2.6	-2.6	.2	.2	1.5	1.5	9.3	9.3
2010	3.9	3.8	2.9	2.9	1.7	1.7	1.3	1.3	9.6	9.6
2011	4.8	4.8	3.5	3.3	1.4	1.9	.8	1.0	9.2	8.8
2012	5.4	5.5	4.3	4.2	1.0	1.1	1.0	1.2	8.3	7.9

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

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

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

Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

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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	3.2	3.2	3.8	3.9	4.0	4.2	4.4	4.4	4.5	2.8	3.7	4.4
<i>Previous Tealbook</i>	3.7	1.7	2.6	3.8	3.6	3.7	3.8	4.2	4.3	4.4	4.5	4.6	2.9	3.8	4.4
Final sales	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
<i>Previous Tealbook</i>	1.1	.9	.9	7.0	3.1	3.4	3.7	5.1	4.0	4.1	4.0	4.6	2.4	3.8	4.1
Priv. dom. final purch.	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
<i>Previous Tealbook</i>	2.1	4.4	2.3	4.0	3.9	4.3	4.7	4.7	4.2	4.5	4.7	5.0	3.2	4.4	4.6
Personal cons. expend.	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
<i>Previous Tealbook</i>	1.9	2.2	2.4	4.1	3.1	3.5	3.6	3.7	3.5	3.7	3.9	4.2	2.6	3.5	3.8
Durables	8.8	6.8	7.6	21.0	6.8	3.6	7.4	7.0	9.2	10.0	9.7	8.1	10.9	6.2	9.3
Nondurables	4.2	1.9	2.5	4.8	3.1	4.7	3.2	2.7	2.9	2.8	3.0	3.2	3.4	3.4	3.0
Services	.1	1.6	1.6	1.4	1.6	3.0	2.9	3.1	3.2	3.2	3.4	3.7	1.2	2.7	3.4
Residential investment	-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
<i>Previous Tealbook</i>	-12.3	25.7	-27.3	.7	3.2	9.2	12.5	11.9	13.0	13.9	13.5	13.5	-5.2	9.1	13.5
Business fixed invest.	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
<i>Previous Tealbook</i>	7.8	17.2	10.0	3.7	9.4	9.5	10.4	10.1	6.8	7.9	8.1	8.9	9.6	9.8	7.9
Equipment & software	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
<i>Previous Tealbook</i>	20.4	24.8	15.4	3.7	13.3	13.0	14.3	13.8	9.2	10.5	10.8	11.8	15.8	13.6	10.6
Nonres. structures	-17.8	-.5	-3.5	6.7	-10.4	-.9	-.9	.4	-1.1	.0	.3	.3	-4.2	-3.0	-.1
<i>Previous Tealbook</i>	-17.8	-.5	-3.5	3.7	-.8	.0	-.3	-.4	-.3	.0	.0	.2	-4.9	-.4	.0
Net exports ²	-338	-449	-505	-395	-386	-387	-390	-348	-331	-318	-313	-301	-422	-378	-316
<i>Previous Tealbook²</i>	-338	-449	-505	-389	-395	-402	-408	-373	-360	-353	-355	-346	-420	-394	-354
Exports	11.4	9.1	6.8	9.6	12.3	9.5	9.0	9.1	9.3	9.0	8.8	8.9	9.2	10.0	9.0
Imports	11.2	33.5	16.8	-12.4	8.1	7.9	7.9	-.1	4.6	5.2	6.8	5.3	11.0	5.9	5.5
Gov't. cons. & invest.	-1.6	3.9	3.9	-1.7	-3.1	1.4	.7	-.1	-.1	.0	.1	-.1	1.1	-.3	.0
<i>Previous Tealbook</i>	-1.6	3.9	3.9	-.1	.8	.5	.5	.6	.5	.6	.7	.9	1.5	.6	.7
Federal	1.8	9.1	8.8	-.2	-4.7	4.6	2.0	-.4	-.7	-.7	-.7	-1.1	4.8	.3	-.8
Defense	.4	7.4	8.5	-2.1	-8.8	6.0	3.1	.0	.0	.0	.0	.0	3.4	-.1	.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	-2.1	-.7	-.2	.1	.3	.5	.6	.6	-1.3	-.7	.5
Change in bus. inventories ²	44	69	121	15	51	55	63	34	41	50	65	71	62	51	57
<i>Previous Tealbook²</i>	44	69	121	26	42	53	57	28	41	54	70	69	65	45	59
Nonfarm ²	37	61	117	14	47	51	60	31	38	47	62	68	57	47	54
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	3.7	4.4
<i>Previous Tealbook</i>	3.1	2.7	2.4	2.3	-2.8	.2	2.9	3.8	4.4
Final sales	2.8	2.7	2.8	2.5	-1.9	-.3	2.4	3.6	4.1
<i>Previous Tealbook</i>	2.8	2.7	2.8	2.5	-1.9	-.3	2.4	3.8	4.1
Priv. dom. final purch.	4.2	3.1	2.5	1.3	-3.8	-2.0	3.3	4.0	4.6

<i>Previous Tealbook</i>	4.2	3.1	2.5	1.3	-3.8	-2.0	3.2	4.4	4.6
Personal cons. expend.	3.5	2.7	3.3	1.7	-1.9	.2	2.6	3.2	3.9
<i>Previous Tealbook</i>	3.5	2.7	3.3	1.7	-1.9	.2	2.6	3.5	3.8
Durables	5.5	2.1	6.3	3.9	-12.3	4.8	10.9	6.2	9.3
Nondurables	3.0	3.3	3.2	.8	-2.9	1.1	3.4	3.4	3.0
Services	3.4	2.6	2.8	1.7	.3	-.8	1.2	2.7	3.4
Residential investment	6.6	5.3	-15.7	-20.7	-24.6	-13.4	-4.7	8.4	13.4
<i>Previous Tealbook</i>	6.6	5.3	-15.7	-20.7	-24.6	-13.4	-5.2	9.1	13.5
Business fixed invest.	7.0	4.4	7.8	8.2	-8.3	-12.7	10.3	8.7	7.2
<i>Previous Tealbook</i>	7.0	4.4	7.8	8.2	-8.3	-12.7	9.6	9.8	7.9
Equipment & software	8.8	6.1	6.0	4.3	-11.8	-4.9	16.6	13.0	9.6
<i>Previous Tealbook</i>	8.8	6.1	6.0	4.3	-11.8	-4.9	15.8	13.6	10.6
Nonres. structures	1.7	-.1	13.0	17.3	-1.5	-26.5	-4.2	-3.0	-.1
<i>Previous Tealbook</i>	1.7	-.1	13.0	17.3	-1.5	-26.5	-4.9	-.4	.0
Net exports ¹	-688	-723	-729	-655	-504	-363	-422	-378	-316
<i>Previous Tealbook¹</i>	-688	-723	-729	-655	-504	-363	-420	-394	-354
Exports	7.1	6.7	10.2	10.1	-2.9	-.1	9.2	10.0	9.0
Imports	10.9	5.2	4.1	.7	-6.0	-7.2	11.0	5.9	5.5
Gov't. cons. & invest.	.6	.7	1.5	1.9	3.1	.8	1.1	-.3	.0
<i>Previous Tealbook</i>	.6	.7	1.5	1.9	3.1	.8	1.5	.6	.7
Federal	2.3	1.2	2.2	3.1	9.2	3.6	4.8	.3	-.8
Defense	2.4	.4	4.4	2.6	9.5	3.3	3.4	-.1	.0
Nondefense	2.3	2.6	-2.3	4.2	8.5	4.5	7.7	1.1	-2.5
State & local	-.4	.4	1.2	1.2	-.4	-1.0	-1.3	-.7	.5
Change in bus. inventories ¹	66	50	59	28	-38	-113	62	51	57
<i>Previous Tealbook¹</i>	66	50	59	28	-38	-113	65	45	59
Nonfarm ¹	58	50	63	29	-39	-117	57	47	54
Farm ¹	8	0	-4	-1	1	3	5	4	4

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

Contributions to Changes in Real Gross Domestic Product

(Percentage points, annual rate except as noted)

Item	2010				2011				2012				2010 ¹	2011 ¹	2012 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	3.7	1.7	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
<i>Previous Tealbook</i>	3.7	1.7	2.6	3.8	3.6	3.7	3.8	4.2	4.3	4.4	4.5	4.6	2.9	3.8	4.4
Final sales	1.1	.9	.9	6.6	2.1	3.7	3.6	4.9	4.0	4.1	4.0	4.3	2.4	3.6	4.1
<i>Previous Tealbook</i>	1.1	.9	.9	6.8	3.2	3.4	3.7	5.0	4.0	4.1	4.0	4.6	2.4	3.8	4.1
Priv. dom. final purch.	1.7	3.6	1.9	3.6	2.5	3.5	3.6	3.7	3.6	3.8	3.9	4.0	2.7	3.3	3.8
<i>Previous Tealbook</i>	1.7	3.6	1.9	3.3	3.2	3.6	3.8	3.9	3.5	3.7	3.9	4.2	2.6	3.6	3.8
Personal cons. expend.	1.3	1.5	1.7	2.9	1.8	2.5	2.5	2.5	2.7	2.7	2.8	2.9	1.9	2.3	2.8
<i>Previous Tealbook</i>	1.3	1.5	1.7	2.9	2.2	2.5	2.6	2.6	2.5	2.6	2.8	2.9	1.9	2.5	2.7
Durables	.6	.5	.5	1.4	.5	.3	.5	.5	.7	.7	.7	.6	.8	.5	.7
Nondurables	.7	.3	.4	.8	.5	.8	.5	.5	.5	.5	.5	.5	.5	.6	.5
Services	.0	.8	.7	.7	.8	1.4	1.4	1.5	1.5	1.5	1.6	1.7	.6	1.2	1.6

Output per hour	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
<i>Previous Tealbook</i>	3.9	-1.8	2.3	2.6	1.8	1.4	1.3	1.6	1.8	2.0	1.9	2.0	1.7	1.5	1.9
Compensation per hour	-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
<i>Previous Tealbook</i>	-9	2.9	2.1	2.1	2.4	1.8	1.8	1.8	2.5	2.2	2.2	2.3	1.5	1.9	2.3
Unit labor costs	-4.6	4.9	.1	-1.0	.2	1.2	.6	.4	1.2	.5	.6	.5	-.2	.6	.7
<i>Previous Tealbook</i>	-4.6	4.9	-.2	-.4	.6	.4	.5	.1	.7	.2	.3	.3	-.2	.4	.4
Core goods imports chain-wt. price index 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
<i>Previous Tealbook</i> ³	4.2	3.1	-.8	6.2	5.5	3.6	2.2	1.5	1.3	1.4	1.4	1.4	3.1	3.2	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	1.4	1.5	1.3
<i>Previous Tealbook</i>	3.2	3.5	2.9	2.6	2.1	.5	1.3	1.2	1.1
PCE chain-wt. price index	3.0	3.3	1.9	3.5	1.7	1.5	1.2	1.9	1.1
<i>Previous Tealbook</i>	3.0	3.3	1.9	3.5	1.7	1.5	1.2	1.3	1.0
Energy	18.6	21.5	-3.7	19.4	-9.0	2.7	5.9	11.0	-1.3
<i>Previous Tealbook</i>	18.6	21.5	-3.7	19.4	-9.0	2.7	6.3	6.2	.1
Food	2.7	1.5	1.7	4.8	6.9	-1.6	1.3	3.4	1.3
<i>Previous Tealbook</i>	2.7	1.5	1.7	4.8	6.9	-1.6	1.3	1.7	1.1
Ex. food & energy	2.2	2.3	2.3	2.4	2.0	1.7	.8	1.2	1.2
<i>Previous Tealbook</i>	2.2	2.3	2.3	2.4	2.0	1.7	.8	1.0	1.0
Ex. food & energy, market based	1.9	2.1	2.2	2.2	2.2	1.7	.8	1.0	1.1
<i>Previous Tealbook</i>	1.9	2.1	2.2	2.2	2.2	1.7	.8	.8	.9
CPI	3.4	3.7	2.0	4.0	1.6	1.5	1.2	2.3	1.0
<i>Previous Tealbook</i>	3.4	3.7	1.9	4.0	1.6	1.5	1.2	1.5	.9
Ex. food & energy	2.2	2.1	2.7	2.3	2.0	1.7	.6	1.2	1.2
<i>Previous Tealbook</i>	2.2	2.1	2.7	2.3	2.0	1.7	.6	1.0	1.0
ECl, hourly compensation ¹	3.8	2.9	3.2	3.0	2.4	1.2	2.1	2.3	2.6
<i>Previous Tealbook</i> ¹	3.8	2.9	3.2	3.0	2.4	1.2	2.0	2.1	2.4
Nonfarm business sector									
Output per hour	1.5	1.4	.9	2.6	-.4	6.5	2.0	1.4	1.7
<i>Previous Tealbook</i>	1.5	1.4	.9	2.6	-.4	6.2	1.7	1.5	1.9
Compensation per hour	3.3	3.5	4.5	3.6	2.3	2.8	1.8	2.1	2.5
<i>Previous Tealbook</i>	3.3	3.5	4.5	3.6	2.3	2.5	1.5	1.9	2.3
Unit labor costs	1.9	2.0	3.5	.9	2.7	-3.5	-.2	.6	.7
<i>Previous Tealbook</i>	1.9	2.0	3.5	.9	2.7	-3.5	-.2	.4	.4
Core goods imports chain-wt. price index ²	3.6	2.2	2.5	2.9	3.5	-1.9	2.7	4.6	1.4
<i>Previous Tealbook</i> ²	3.6	2.2	2.5	2.9	3.5	-1.9	3.1	3.2	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			
<i>Employment and production</i>															
Nonfarm payroll employment ²	-.1	.6	-.1	.2	.4	.6	.7	.8	.9	.9	.9	.9	.7	2.5	3.6
Unemployment rate 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
<i>Previous Tealbook</i> ³	9.7	9.6	9.6	9.6	9.5	9.3	9.1	8.9	8.7	8.4	8.1	7.8	9.6	8.9	7.8
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	-6.3	-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
<i>Previous Tealbook</i> ⁴	-6.4	-6.6	-6.6	-6.3	-6.0	-5.8	-5.4	-5.1	-4.7	-4.2	-3.8	-3.3	-6.3	-5.1	-3.3
<i>Industrial production</i>															
Industrial production 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
<i>Previous Tealbook</i> ⁵	7.1	7.2	6.5	2.4	6.7	3.2	4.3	3.6	4.1	5.3	5.2	4.3	5.8	4.4	4.7
Manufacturing industr. prod. 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
<i>Previous Tealbook</i> ⁵	6.2	9.4	4.5	3.3	6.9	4.7	4.8	4.3	5.0	6.2	5.9	5.1	5.8	5.2	5.5
Capacity utilization rate - mfg. 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
<i>Previous Tealbook</i> ³	70.0	71.6	72.4	73.0	74.0	74.7	75.4	76.1	76.7	77.5	78.4	79.0	73.0	76.1	79.0
<i>Housing starts</i>															
Housing starts ⁶	.6	.6	.6	.5	.6	.6	.7	.7	.8	.8	.9	1.0	.6	.6	.9
<i>Light motor vehicle sales</i>															
Light motor vehicle sales ⁶	11.0	11.3	11.6	12.3	12.9	13.0	13.2	13.4	13.9	14.6	15.2	15.6	11.5	13.1	14.8
<i>Income and saving</i>															
Nominal GDP ⁵	4.8	3.7	4.6	3.6	4.8	6.2	4.9	5.0	5.6	5.8	5.8	5.8	4.2	5.2	5.8
Real disposable pers. income 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
<i>Previous Tealbook</i> ⁵	1.3	5.6	.9	1.3	5.3	3.4	3.6	4.1	.1	3.9	4.1	4.3	2.3	4.1	3.1
Personal saving rate 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
<i>Previous Tealbook</i> ³	5.5	6.2	5.9	5.4	5.9	5.9	5.9	6.0	5.2	5.2	5.2	5.2	5.4	6.0	5.2
<i>Corporate profits</i>															
Corporate profits ⁷	48.9	12.7	6.6	3.9	11.1	14.1	11.5	5.7	4.0	4.7	5.4	5.4	16.8	10.5	4.9
Profit share of GNP ³	10.7	10.9	11.0	11.0	11.2	11.4	11.5	11.6	11.5	11.5	11.5	11.5	11.0	11.6	11.5
<i>Net federal saving</i>															
Net federal saving ⁸	-1,314	-1,337	-1,343	-1,362	-1,399	-1,380	-1,345	-1,323	-1,160	-1,111	-1,085	-1,055	-1,339	-1,362	-1,103
<i>Net state & local saving</i>															
Net state & local saving ⁸	29	16	48	37	49	29	25	21	30	41	54	60	32	31	46
<i>Gross national saving</i>															
Gross national saving rate ³	11.1	11.7	11.6	11.3	11.4	11.6	12.1	12.5	12.8	13.2	13.5	13.7	11.3	12.5	13.7
<i>Net national saving</i>															
Net national saving rate ³	-1.8	-1.1	-1.1	-1.3	-1.1	-7	-2	.2	.6	1.1	1.4	1.7	-1.3	.2	1.7

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

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

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

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

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

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

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

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

Other Macroeconomic Indicators

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

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

Nonfarm payroll employment ¹	2.0	2.4	2.1	1.2	-2.8	-5.6	.7	2.5	3.6
Unemployment rate ²	5.4	5.0	4.5	4.8	6.9	10.0	9.6	8.6	7.5
<i>Previous Tealbook</i> ²	5.4	5.0	4.5	4.8	6.9	10.0	9.6	8.9	7.8
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	.0	.0	-.1	-4.9	-6.6	-5.9	-4.7	-3.0
<i>Previous Tealbook</i> ³	-4	.0	.0	.0	-4.9	-6.7	-6.3	-5.1	-3.3
Industrial production ⁴	2.9	2.3	2.5	2.3	-7.6	-3.8	5.9	4.9	4.2
<i>Previous Tealbook</i> ⁴	2.9	2.3	2.5	2.3	-7.6	-3.8	5.8	4.4	4.7
Manufacturing industr. prod. ⁴	3.5	3.5	2.0	2.6	-10.0	-4.1	6.0	5.7	4.9
<i>Previous Tealbook</i> ⁴	3.5	3.5	2.0	2.6	-10.0	-4.1	5.8	5.2	5.5
Capacity utilization rate - mfg. ²	77.4	78.8	79.0	79.1	70.9	68.8	73.0	76.7	79.2
<i>Previous Tealbook</i> ²	77.4	78.8	79.0	79.1	70.9	68.8	73.0	76.1	79.0
Housing starts ⁵	2.0	2.1	1.8	1.4	.9	.6	.6	.6	.9
Light motor vehicle sales ⁵	16.8	16.9	16.5	16.1	13.1	10.3	11.5	13.1	14.8
<i>Income and saving</i>									
Nominal GDP ⁴	6.4	6.3	5.4	5.0	-.7	.6	4.2	5.2	5.8
Real disposable pers. income ⁴	3.5	.6	4.6	1.5	1.0	.4	2.3	3.7	3.3
<i>Previous Tealbook</i> ⁴	3.5	.6	4.6	1.5	1.0	.4	2.3	4.1	3.1
Personal saving rate ²	3.6	1.5	2.5	2.1	5.2	5.5	5.4	5.8	5.2
<i>Previous Tealbook</i> ²	3.6	1.5	2.5	2.1	5.2	5.5	5.4	6.0	5.2
Corporate profits ⁶	21.9	19.6	3.7	-8.1	-31.9	42.5	16.8	10.5	4.9
Profit share of GNP ²	10.5	11.8	11.6	10.1	6.9	9.8	11.0	11.6	11.5
Net federal saving ⁷	-379	-283	-204	-245	-616	-1252	-1339	-1362	-1103
Net state & local saving ⁷	-8	26	51	12	-47	-20	32	31	46
Gross national saving rate ²	14.3	15.5	16.3	13.6	11.8	10.8	11.3	12.5	13.7
Net national saving rate ²	2.7	3.5	4.2	1.3	-1.4	-2.3	-1.3	.2	1.7

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	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts ¹	2105	2163	2273	2558	466	643	565	532	479	671	592	560	554	774	671	641
Outlays ¹	3518	3456	3698	3672	795	930	855	901	927	939	931	919	967	916	869	965
Surplus/deficit ¹	-1413	-1293	-1424	-1113	-329	-287	-290	-369	-448	-268	-339	-360	-413	-142	-198	-324

<i>Previous Tealbook</i>	-1416	-1294	-1394	-1105	-329	-287	-290	-371	-459	-249	-315	-370	-408	-129	-197	-325
On-budget	-1550	-1370	-1441	-1187	-359	-351	-267	-390	-436	-309	-307	-385	-409	-209	-184	-375
Off-budget	137	77	17	74	30	64	-23	21	-13	41	-33	25	-4	67	-14	51
Means of financing																
Borrowing	1743	1474	1414	1193	478	344	390	368	241	291	514	365	418	182	228	329
Cash decrease	96	-35	60	0	-25	-71	-20	-33	278	-31	-155	15	15	-20	-10	15
Other ²	-427	-146	-50	-80	-124	14	-80	34	-71	7	-20	-20	-20	-20	-20	-20
Cash operating balance, end of period	275	310	250	250	219	290	310	343	65	95	250	235	220	240	250	235
NIPA federal sector																
					Seasonally adjusted annual rates											
Receipts	2261	2334	2437	2710	2323	2365	2417	2415	2406	2443	2482	2522	2726	2771	2820	2867
Expenditures	3355	3660	3808	3879	3637	3701	3761	3777	3805	3824	3827	3845	3886	3883	3905	3922
Consumption expenditures	977	1030	1070	1096	1017	1038	1062	1057	1060	1076	1085	1088	1096	1098	1100	1101
Defense	659	691	708	729	684	695	711	703	699	711	719	722	729	732	734	737
Nondefense	318	339	362	367	333	343	350	354	361	365	366	367	368	367	366	364
Other spending	2378	2630	2739	2784	2620	2663	2699	2720	2745	2747	2742	2756	2789	2785	2805	2821
Current account surplus	-1094	-1326	-1372	-1170	-1314	-1337	-1343	-1362	-1399	-1380	-1345	-1323	-1160	-1111	-1085	-1055
Gross investment	151	165	181	183	161	168	172	182	177	181	183	183	183	183	183	183
Gross saving less gross investment ³	-1122	-1363	-1417	-1211	-1348	-1376	-1385	-1411	-1442	-1426	-1391	-1366	-1201	-1151	-1123	-1092
Fiscal indicators⁴																
High-employment (HEB) surplus/deficit	-838	-1029	-1122	-975	-1019	-1044	-1056	-1087	-1142	-1139	-1119	-1110	-949	-922	-919	-914
Change in HEB, percent of potential GDP	2.2	1.1	.3	-1.1	.1	.1	.0	.2	.3	-.1	-.2	-.1	-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	-0.0	0.4	0.1	-0.3	-1.6	-1.0	-0.9	-0.8
<i>Previous Tealbook</i>	1.2	0.7	0.1	-1.0	1.0	1.0	0.6	-0.1	0.5	0.1	0.1	-0.2	-1.4	-0.8	-0.8	-0.7

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	4.6	-1.8	-2.6	-1.8	1.5	4.4	20.2	4.2
2011	5.2	.5	-1.2	3.8	2.8	3.4	15.0	5.2
2012	5.5	2.2	.0	7.8	4.6	4.9	10.7	5.8
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	-2.0	-4.4	-4.0	.3		5.7	20.5	4.8
	2	4.6	-2.5	-2.2	-3.4	-.1		-1.4	24.4	3.7
	3	4.2	-2.0	-2.6	-1.8	2.2		5.4	16.0	4.6
	4	5.1	-.6	-1.3	2.0	3.6		7.9	14.6	3.6
2011:	1	2.5	-.0	-1.5	2.5	2.3		.6	7.0	4.8
	2	6.1	.3	-1.3	3.1	2.6		4.1	18.7	6.2
	3	6.5	.7	-1.1	4.4	2.9		4.2	18.9	4.9
	4	5.1	.9	-1.0	5.2	3.5		4.5	12.5	5.0
2012:	1	5.7	1.7	-.3	6.4	4.1		4.9	12.6	5.6
	2	5.9	2.1	-.1	7.3	4.4		4.9	12.2	5.8
	3	4.5	2.5	.2	8.2	4.7		4.8	6.5	5.8
	4	5.6	2.7	.3	8.6	4.9		4.8	10.0	5.8

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
<i>Domestic nonfinancial sectors</i>														
Net funds raised														
Total	953.7	1336.1	1609.4	1852.9	1163.3	1486.4	682.9	1975.8	2127.4	1651.3	1926.5	2011.8	1504.9	1968.5
Net equity issuance	-64.6	-274.0	-264.0	-256.0	-337.6	-344.0	-240.0	-240.0	-288.0	-288.0	-256.0	-256.0	-256.0	-256.0
Net debt issuance	1018.3	1610.1	1873.4	2108.9	1500.9	1830.4	922.9	2215.8	2415.4	1939.3	2182.5	2267.8	1760.9	2224.5
Borrowing indicators														
Debt (percent of GDP) ¹	241.6	241.9	242.3	242.0	241.8	242.5	241.9	240.8	241.7	242.3	242.2	242.3	242.0	241.6
Borrowing (percent of GDP)	7.2	11.0	12.2	13.0	10.2	12.3	6.1	14.5	15.6	12.4	13.8	14.1	10.8	13.4
Households														
Net borrowing ²	-234.5	-239.0	63.0	301.5	-269.2	-78.2	-1.7	37.0	91.3	125.5	229.4	277.5	336.5	362.4
Home mortgages	-155.7	-269.1	-122.8	2.5	-268.3	-128.7	-151.1	-130.4	-110.0	-99.7	-29.8	-9.9	19.9	29.8
Consumer credit	-115.3	-44.2	93.4	198.1	-44.2	48.5	60.4	76.1	108.0	129.2	161.3	187.2	214.4	229.6
Debt/DPI (percent) ³	124.0	118.3	112.2	109.0	117.5	116.2	114.1	112.7	111.5	110.3	110.2	109.2	108.5	107.8
Business														
Financing gap ⁴	-44.7	48.9	32.8	136.3	156.4	-24.7	47.5	31.4	32.8	19.6	78.7	118.1	158.3	190.0
Net equity issuance	-64.6	-274.0	-264.0	-256.0	-337.6	-344.0	-240.0	-240.0	-288.0	-288.0	-256.0	-256.0	-256.0	-256.0
Credit market borrowing	-300.3	164.1	315.6	524.2	245.2	397.5	254.9	287.2	326.9	393.6	463.4	510.7	550.6	572.0
State and local governments														
Net borrowing	109.1	104.8	83.8	125.8	129.0	190.9	13.8	101.8	105.8	113.8	125.8	125.8	125.8	125.8
Current surplus ⁵	248.2	291.7	261.2	283.8	327.4	270.0	277.2	258.0	255.7	253.8	264.3	277.5	292.3	300.9
Federal government														
Net borrowing	1443.9	1580.2	1410.9	1157.5	1395.9	1320.2	656.0	1789.9	1891.5	1306.4	1363.9	1353.8	748.0	1164.3
Net borrowing (n.s.a.)	1443.9	1580.2	1410.9	1157.5	390.1	367.9	241.0	291.5	513.9	364.6	418.0	182.5	228.0	329.1
Unified deficit (n.s.a.)	1471.3	1275.1	1414.9	1077.5	290.2	369.0	448.1	267.9	339.3	359.6	413.0	142.5	198.0	324.1

Depository institutions														
Funds supplied	-639.6	-199.1	129.6	336.8	729.2	-522.2	-254.2	191.8	273.2	307.5	332.6	342.8	366.7	305.1

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 GDP¹												
Total foreign	5.3	5.7	2.3	3.3	3.6	3.3	3.3	3.3	3.4	3.5	3.5	3.6
<i>Previous Tealbook</i>	5.4	5.5	2.1	3.1	3.2	3.4	3.4	3.5	3.5	3.6	3.6	3.7
Advanced foreign economies	3.8	3.1	1.9	1.7	2.3	2.0	2.0	2.0	2.2	2.3	2.4	2.5
Canada	5.5	2.2	1.8	3.3	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5
Japan	6.0	2.1	3.3	-1.1	1.8	1.6	1.6	1.7	1.9	2.0	2.1	2.2
United Kingdom	1.3	4.2	2.8	-2.3	2.7	2.0	2.2	2.3	2.5	2.4	2.5	2.5
Euro area	1.6	4.0	1.4	1.1	2.0	1.3	1.2	1.2	1.6	1.9	2.2	2.5
Germany	2.6	9.2	2.8	1.5	2.8	2.0	1.8	1.8	2.1	2.3	2.6	2.8
Emerging market economies	7.1	9.0	2.8	5.4	5.2	4.9	5.0	4.9	4.9	4.9	4.9	5.0
Asia	13.7	9.2	2.5	5.7	6.1	5.7	5.8	5.8	5.9	5.9	5.9	5.9
Korea	8.8	5.8	3.0	2.2	3.5	4.0	4.1	4.0	4.3	4.3	4.4	4.5
China	9.3	8.9	10.1	10.7	8.9	8.5	8.4	8.4	8.4	8.4	8.4	8.4
Latin America	1.3	9.4	2.9	4.3	4.4	4.2	4.2	4.1	4.0	4.0	4.0	4.0
Mexico	-.3	9.9	3.2	5.1	4.5	4.2	4.2	4.1	4.1	4.1	4.1	4.1
Brazil	9.0	6.5	1.6	3.0	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Consumer prices²												
Total foreign	3.3	1.6	2.3	5.3	4.3	3.1	2.5	2.4	2.4	2.3	2.3	2.4
<i>Previous Tealbook</i>	3.4	1.3	2.2	4.9	3.7	2.6	2.3	2.2	2.3	2.3	2.3	2.4
Advanced foreign economies	2.1	.5	1.1	3.6	2.8	2.0	1.5	1.4	1.4	1.3	1.4	1.6
Canada	2.2	-.1	2.4	4.4	2.8	2.4	2.0	1.9	2.2	1.9	2.0	2.0
Japan	.7	-1.2	-1.3	2.3	-.0	-.4	-.6	-.6	-.6	-.5	-.5	-.4
United Kingdom	5.1	2.7	1.4	4.5	7.6	3.3	2.0	1.8	1.7	1.7	1.9	3.3
Euro Area	2.0	1.7	1.1	3.3	3.5	2.7	2.0	1.8	1.6	1.6	1.7	1.8
Germany	1.6	.8	1.0	3.1	3.2	2.3	1.9	1.7	1.5	1.5	1.7	1.7
Emerging market economies	4.5	2.6	3.4	6.9	5.7	4.0	3.5	3.3	3.2	3.2	3.2	3.2
Asia	3.6	2.2	3.6	7.6	5.7	3.5	3.1	2.9	2.8	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	4.9	3.5	3.0	2.8	2.7	2.7	2.7	2.7
Latin America	7.0	3.4	2.9	5.1	5.4	5.4	4.4	4.3	4.2	4.1	4.1	4.1
Mexico	6.9	2.5	2.9	4.8	4.6	4.9	3.9	3.9	3.7	3.7	3.7	3.7
Brazil	7.4	5.9	1.1	7.4	9.3	6.9	5.3	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	Projected		
							2010	2011	2012
Real GDP¹									
Total foreign	3.9	4.0	4.1	4.3	-8	.5	4.1	3.4	3.5
<i>Previous Tealbook</i>	3.9	4.0	4.0	4.2	-8	.5	4.0	3.4	3.6
Advanced foreign economies	2.6	2.8	2.6	2.4	-1.8	-1.5	2.6	2.1	2.3
Canada	3.7	3.1	1.9	2.5	-9	-1.1	3.2	2.6	2.5
Japan	1.1	2.9	2.1	1.8	-4.6	-1.8	2.6	1.7	2.0
United Kingdom	2.4	2.4	2.7	2.4	-2.7	-2.8	1.5	2.3	2.5
Euro area	1.7	2.1	3.6	2.2	-2.1	-2.0	2.0	1.4	2.1
Germany	.2	1.6	4.5	1.8	-2.0	-2.0	4.0	2.1	2.4
Emerging market economies	5.6	5.8	6.2	6.7	.4	3.0	6.0	5.0	4.9
Asia	6.0	7.7	7.8	8.8	.8	7.4	7.7	5.8	5.9
Korea	2.7	5.2	4.6	5.7	-3.2	6.1	4.9	3.9	4.4
China	9.9	10.3	12.8	13.7	7.7	11.4	9.7	8.5	8.4
Latin America	5.2	3.9	4.8	4.5	-2	-8	4.4	4.2	4.0
Mexico	4.6	3.6	4.1	3.7	-9	-2.2	4.4	4.2	4.1
Brazil	6.1	2.1	4.9	6.6	.8	5.0	5.0	3.8	3.8
Consumer prices²									
Total foreign	2.8	2.3	2.2	3.7	3.3	1.2	3.1	3.1	2.3
<i>Previous Tealbook</i>	2.8	2.3	2.1	3.7	3.3	1.2	2.9	2.7	2.3
Advanced foreign economies	1.8	1.6	1.4	2.2	2.0	.2	1.8	1.9	1.4
Canada	2.3	2.3	1.4	2.5	1.8	.8	2.2	2.3	2.0
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	3.7	2.2
Euro Area	2.3	2.3	1.8	2.9	2.3	.4	2.0	2.5	1.7
Germany	2.1	2.2	1.3	3.1	1.7	.3	1.6	2.3	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	3.8	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	3.6	2.7
Latin America	5.6	3.8	4.2	4.2	6.7	4.0	4.6	4.9	4.1
Mexico	5.3	3.1	4.1	3.8	6.2	4.0	4.3	4.3	3.7
Brazil	7.2	6.1	3.2	4.3	6.2	4.2	5.4	6.6	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	-434.9	-491.2	-507.2	-462.5	-510.1	-509.6	-528.2	-483.8	-480.9	-451.4	-449.0	-430.5
<i>Previous Tealbook</i>	-436.6	-492.9	-508.9	-461.6	-503.6	-508.2	-525.6	-486.0	-483.6	-461.6	-465.9	-448.2
Current account as percent of GDP	-3.0	-3.4	-3.4	-3.1	-3.4	-3.3	-3.4	-3.1	-3.0	-2.8	-2.8	-2.6
<i>Previous Tealbook</i>	-3.0	-3.4	-3.5	-3.1	-3.3	-3.3	-3.4	-3.1	-3.1	-2.9	-2.9	-2.7
Net goods & services	-456.1	-530.6	-535.9	-468.7	-541.4	-550.3	-564.4	-520.1	-500.5	-483.0	-478.5	-465.1
Investment income, net	168.8	180.4	172.6	150.9	168.5	163.9	163.0	159.7	157.0	154.8	156.2	158.0
Direct, net	275.9	286.6	276.0	267.2	287.6	290.8	292.9	295.1	297.3	303.9	309.4	316.8
Portfolio, net	-107.1	-106.2	-103.4	-116.3	-119.0	-126.9	-129.9	-135.4	-140.4	-149.1	-153.2	-158.8
Other income and transfers, net	-147.6	-141.0	-143.9	-144.7	-137.3	-123.2	-126.8	-123.4	-137.3	-123.2	-126.8	-123.4

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	-473.9	-507.9	-453.0
<i>Previous Tealbook</i>	-630.5	-747.6	-802.6	-718.1	-668.9	-378.4	-475.0	-505.8	-464.8
Current account as percent of GDP	-5.3	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.3	-2.8
<i>Previous Tealbook</i>	-5.3	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.3	-2.9
Net goods & services	-609.3	-714.2	-759.2	-702.1	-698.8	-374.9	-497.8	-544.1	-481.8
Investment income, net	73.4	78.8	54.7	106.6	159.3	129.2	168.2	163.8	156.5
Direct, net	150.9	173.2	174.0	241.6	287.7	252.1	276.4	291.6	306.9
Portfolio, net	-77.5	-94.4	-119.4	-134.9	-128.4	-122.8	-108.2	-127.8	-150.4
Other income and transfers, net	-94.5	-112.2	-98.1	-122.6	-129.3	-132.8	-144.3	-127.7	-127.7

Last update: February 3, 2017

March 2011 Tealbook B Tables and Charts[‡]

Monetary Policy Strategies

Equilibrium Real Federal Funds Rate

Figure: Short-Run Estimates with Confidence Intervals

Line chart, 1990 to 2010. Unit is percent. There are five series, "The actual real funds rate based on lagged core inflation," "Range of four model-based estimates," "70 percent confidence interval," "90 percent confidence interval," and "Tealbook-consistent measure (FRB/US)." The actual real funds rate based on lagged core inflation begins at about 4 and generally decreases to about 0 in 1992:Q4. It generally increases to about 4 in 2000:Q1 then generally decreases to about -2 in 2004:Q3. It generally increases to about 3 in 2007:Q3 then generally decreases to about -2 in 2009:Q4. It generally increases ending at about -1. Range of four model-based estimates begins at a range of about [2, 4] and fluctuates but generally increases to about [2.25, 4.25] in 2000:Q1. It fluctuates but generally decreases to about [-7, -2] in 2009:Q2 then generally increases ending at about [-2, 0.5]. 70 percent confidence interval begins at a range of about [1, 4] then generally decreases to about [-1, 2.5] in 1991:Q2. It generally increases to about [0.5, 4.25] in 2000:Q1 then fluctuates but generally decreases to about [-7, -2] in 2009:Q2. It generally increases ending at about [-3, 1]. 90 percent confidence interval begins at a range of about [0, 5.5] then generally decreases to about [-2, 4] in 1991:Q2. It generally increases to about [-1, 7.5] in 2000:Q1 then fluctuates but generally decreases to about [-8, 0] in 2001:Q2. It generally increases ending at about [-4, 2]. Tealbook-consistent measure (FRB/US) begins at about 4 in 1997:Q1 and generally increases to about 6 in 2000:Q1. It generally decreases to about 0 in 2002:Q2 then generally increases to about 2 in 2007:Q1. It generally decreases to about -5 in 2009:Q1 then generally increases ending at about -1.75.

Short-Run and Medium-Run Measures

	Current Tealbook	Previous Tealbook
Short-Run Measures		
Single-equation model	-1.4	-1.6
Small structural model	-1.2	-1.5
EDO model	0.7	0.4
FRB/US model	-2.4	-2.1
Confidence intervals for four model-based estimates		
70 percent confidence interval	-3.0 to 0.8	
90 percent confidence interval	-3.9 to 2.0	
Tealbook-consistent measures		
EDO model	-0.3	-0.8
FRB/US model	-1.4	-1.5
Medium-Run Measures		
Single-equation model	1.1	1.1
Small structural model	1.2	1.4
Confidence intervals for two model-based estimates		
70 percent confidence interval	0.2 to 2.0	
90 percent confidence interval	-0.4 to 2.7	
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. Since January, the EDO model has been re-specified and re-estimated. EDO estimates for the "Previous Tealbook" have been computed from the revised model, using the data available at the time of the January Tealbook.

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

Figure: Nominal Federal Funds Rate

Line chart, 2010 to 2015. Unit is percent. There are three series, "Current Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Previous Tealbook:

Unconstrained." Current Tealbook: Constrained begins at about 0 and remains about constant until 2013:Q1. It generally increases ending at about 4. Current Tealbook: Unconstrained begins at about 0 and remains about constant until 2011:Q2. It generally decreases to about -1.5 in 2012:Q2 then generally increases ending at about 4.5. Previous Tealbook: Unconstrained begins at about 0 and remains about constant until 2011:Q1. It generally decreases to about -2 in 2012:Q1 then generally increases ending at about 4.5.

Figure: Real Federal Funds Rate

Line chart, 2010 to 2015. Unit is percent. There are three series, "Current Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Previous Tealbook: Unconstrained." Current Tealbook: Constrained begins at about -1 and generally increases to about -0.5 in 2011:Q1. It generally decreases to about -1 in 2013:Q1 then generally increases ending at about 2. Current Tealbook: Unconstrained begins at about -1 and generally increases to about -0.5 in 2011:Q1. It generally decreases to about -3 in 2012:Q1 then generally increases ending at about 2.5. Previous Tealbook: Unconstrained begins at about -1 and generally increases to about -0.5 in 2011:Q1. It generally decreases to about -4 in 2012:Q1 then generally increases ending at about 2.5.

Figure: Civilian Unemployment Rate

Line chart, 2010 to 2015. Unit is percent. There are three series, "Current Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Previous Tealbook: Unconstrained." All three series begin at about 9.5 and generally decrease together ending at about 4.5.

Figure: Core PCE Inflation

Line chart, 2010 to 2015. Unit is percent. Data are four-quarter averages. There are three series, "Current Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Previous Tealbook: Unconstrained." All three series begin at about 1.5 and generally decrease together to about 0.75 in 2010:Q4. The generally increase together ending at about 2.25.

The Policy Outlook in an Uncertain Environment

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

Line chart, 2010 to 2014. Unit is percent. There are two series, "Current Tealbook" and "Previous Tealbook." Current Tealbook begins at about 0 and remains about constant until 2012:Q1. It generally increases ending at about 3.75. Previous Tealbook begins at about 0 and remains about constant until 2012:Q2. It generally increases ending at about 3.5. 70-percent confidence interval is presented as a dark green shaded range that begins at about 0 and generally increases ending at about [2, 5.5]. 90-percent confidence interval is presented as a light green shaded range that begins at about 0 and generally increases ending at about [0.5, 7].

Figure: Information from Financial Markets

Line chart, 2010 to 2014. Unit is percent. There are two series, "Current Tealbook" and "Previous Tealbook." Both series begin at about 0 and remain about constant until 2011:Q3. They generally increase together ending at about 3. 70-Percent confidence interval is presented as a dark blue shaded range that begins at about 0 and generally increases ending at about [1.5, 4.5]. 90-percent confidence interval is presented as a light blue shaded range that begins at about 0 and generally increases ending at about [1, 5.5]. These current confidence intervals range approximately 0.1-0.3 higher than the previous confidence intervals.

Note: As in the January 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 March 9.

Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2011Q2	2011Q3	2011Q2	2011Q3
Taylor (1993) rule	0.13	0.13	-0.44	0.02
<i>Previous Tealbook</i>	0.13	0.13	-0.77	-0.42
Taylor (1999) rule	0.13	0.13	-3.17	-2.53
<i>Previous Tealbook</i>	0.13	0.13	-3.64	-3.14
Estimated outcome-based rule	0.13	0.13	-0.18	-0.45
<i>Previous Tealbook Outlook</i>	0.13	0.13	-0.28	-0.71
Estimated forecast-based rule	0.13	0.13	-0.03	-0.16
<i>Previous Tealbook Outlook</i>	0.13	0.13	-0.18	-0.48

First-difference rule	0.48	0.84	0.48	0.84
<i>Previous Tealbook Outlook</i>	<i>0.36</i>	<i>0.62</i>	<i>0.36</i>	<i>0.62</i>

Memo

	2011Q2	2011Q3
Staff assumption	0.13	0.13
Fed funds futures	0.11	0.11
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (March 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. For rules which have the lagged policy rate as a right-hand-side variable, the lines denoted "Previous Tealbook Outlook" report rule prescriptions based on the previous Tealbook's staff outlook, but jumping off from the average value for the policy rate thus far in the quarter.

† 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 March 15 FOMC Statement

Key Components	January Statement	March Alternatives		
		A	B	C
Economic Activity				
<i>Economic Recovery</i>	is continuing; rate has been insufficient to bring about a significant improvement in labor market conditions	is continuing	economic recovery is on a somewhat firmer footing	is strengthening
<i>Labor Market</i>	employers remain reluctant to add to payrolls	although improving gradually, employment remains at low levels	overall conditions appear to be improving gradually	conditions are improving
	unemployment rate is elevated	unemployment rate is elevated	unemployment rate remains elevated	
<i>Household Spending</i>	picked up late last year, but remains constrained by ...	has been increasing at a solid rate, on net, but remains constrained; recent increases in energy costs weighing on spending	has been increasing at a solid rate, on net	
Inflation				
<i>Recent Developments</i>	commodity prices have risen; expectations have remained stable; measures of underlying inflation have been trending downward, are somewhat low	energy and other commodity prices have risen significantly, boosting headline inflation; expectations have remained stable; measures of underlying inflation have trended downward, are somewhat low	commodity prices have risen significantly; sharp run-up in oil prices in recent weeks; expectations have remained stable; measures of underlying inflation have been subdued, continue to be somewhat low	
Outlook and Progress				
<i>Outlook</i>	gradual return to higher resource utilization with price stability	gradual return to higher resource utilization with price stability; downside risks remain significant	gradual return to higher resource utilization w/ price stability, although recent increases in the prices of energy and other commodities are temporarily putting upward pressure on headline inflation; expects limited pass-through to underlying inflation	
<i>Progress Toward Objectives</i>	has been disappointingly slow	n.a.		
Target Federal Funds Rate				
<i>Intermeeting Period</i>	0 to ¼ percent	0 to ¼ percent		
<i>Forward Guidance</i>	exceptionally low levels for an extended period	exceptionally low levels at least through mid-2012	exceptionally low levels for an extended period	low levels for some time

SOMA Portfolio Policy				
Approach	intends to purchase \$600 billion of Treasuries by end of 2011:Q2	will purchase \$600 billion of Treasuries by end of 2011:Q2	intends to purchase \$600 billion of Treasuries by end of 2011:Q2	will gradually reduce pace of purchases of Treasuries; limit increase to \$450 billion by end of 2011:Q2 (\$150 billion less than announced in Nov.)
	maintain reinvestment policy	maintain reinvestment policy		for the time being, maintain reinvestment policy
Future Policy Action				
Purchase Program	will regularly review and adjust as needed	is prepared to expand and extend if needed	will regularly review and adjust as needed	will continue to review and adjust as needed
Overall	will monitor and employ policy tools as necessary to support the recovery and help ensure inflation consistent with mandate	will monitor and employ policy tools as necessary to support the recovery and help ensure inflation consistent with mandate		will monitor and employ policy tools as necessary to support the recovery and ensure inflation consistent with mandate

[Note: In the March 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.]

March FOMC Statement--Alternative A

- Information received since the Federal Open Market Committee met in ~~December~~ **January** confirms that the economic recovery is continuing, ~~though at a rate that has been insufficient to bring about a significant improvement in~~ **Although overall conditions in the labor market conditions appear to be improving gradually, employment remains at low levels.** Growth in Household spending **has been increasing at a solid rate, on net, in recent months** ~~picked up late last year,~~ but remains constrained by high unemployment, ~~modest income growth,~~ lower housing wealth, and tight credit. **Recent increases in energy costs may be weighing on household spending on non-energy goods and services.** Business spending on equipment and software is rising, ~~while but~~ investment in nonresidential structures is still weak. ~~Employers remain reluctant to add to payrolls.~~ The housing sector continues to be depressed. Although **energy and other** commodity prices have risen **significantly since the summer,** ~~boosting headline inflation,~~ longer-term inflation expectations have remained stable, and measures of underlying inflation have ~~been trended~~ **ing** downward.
- Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate is elevated, and measures of underlying inflation are somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. Although the Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability, ~~progress toward its objectives has been disappointingly slow~~ **downside risks to the economic outlook remain significant.**
- 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 ~~will intends to~~ purchase \$600 billion of longer-term Treasury securities by the end of the second quarter of 2011. 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 **at least through mid-2012** ~~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.

March FOMC Statement--Alternative B

- Information received since the Federal Open Market Committee met in ~~December~~ **January suggests** ~~confirms~~ that the economic recovery is **on a somewhat firmer footing, and** continuing, though at a rate that has been insufficient to bring about a significant improvement in **overall conditions in the labor market conditions appear to be improving gradually.** Growth in Household spending **has been increasing at a solid rate, on net, in recent months, and** ~~picked up late last year,~~ but remains constrained by high unemployment, ~~modest income growth,~~ lower housing wealth, and tight credit. **business spending on equipment and software is rising has been expanding. However,** while investment in nonresidential structures is still weak, ~~and Employers remain reluctant to add to payrolls:~~ the housing sector continues to be depressed. **Although** Commodity prices **have risen significantly since the summer, and concerns about global supplies of crude oil have contributed to a sharp run-up in oil prices in recent weeks. Nonetheless,** longer-term inflation expectations have remained stable, and measures of underlying inflation have been ~~trending downward~~ **subdued.**
- Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate

remains is elevated, and measures of underlying inflation **are continue to be** somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. ~~Although~~ **The recent increases in the prices of energy and other commodities are temporarily putting upward pressure on headline inflation, but** the Committee **expects limited pass-through to underlying inflation and continues to** anticipates a gradual return to higher levels of resource utilization in a context of price stability, ~~progress toward its objectives has been disappointingly slow.~~

- 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 purchase \$600 billion of longer-term Treasury securities by the end of the second quarter of 2011, **a pace of about \$80 billion a month**. 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 the program 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.

March FOMC Statement--Alternative C

- Information received since the Federal Open Market Committee met in ~~December~~ **January** confirms that the economic recovery is **strengthening and conditions in the labor market are improving**, ~~continuing, though at a rate that has been insufficient to bring about a significant improvement in labor market conditions. Growth in Household spending has been increasing at a solid rate, on net, and picked up late last year, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit business investment has been expanding. Spending on equipment and software is rising, while investment in nonresidential structures is still weak. Employers remain reluctant to add to payrolls. However, the housing sector continues to be depressed. Although~~ **Commodity prices have risen significantly since the summer, and concerns about global supplies of crude oil have contributed to a sharp run-up in oil prices in recent weeks. Nonetheless,** longer-term inflation expectations have remained stable, and measures of underlying inflation have been ~~trending downward~~ **subdued**.
- Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate is **remains** elevated, and measures of underlying inflation **are continue to be** somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. ~~Although~~ **The recent increases in the prices of energy and other commodities are temporarily putting upward pressure on headline inflation, but** the Committee **expects limited pass-through to underlying inflation and continues to** anticipates a gradual return to higher levels of resource utilization in a context of price stability, ~~progress toward its objectives has been disappointingly slow.~~
- To ~~support the 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~~. **However, in light of incoming economic information, the Committee will gradually reduce the pace of its purchases of longer-term Treasury securities with the intention of limiting the increase in its holdings to a total of \$450 billion by the end of the second quarter of 2011--\$150 billion less than announced in November. In particular For the time being,** 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 **continue to** 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 the program 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 **some time 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.

Long-Run Projections of the Balance Sheet and Monetary Base

Figure: Total Assets

Line chart, 2006 to 2020. Unit is billions of dollars. Data are monthly. There are three series, "January Alt B," "Alt C," and "Alt A and B." All three series begin at about 900 and remain about constant until late 2008. They fluctuate but generally increase together to about 2700 in early 2011. January Alt B generally increases to about 2900 in early 2011 and remains about constant until mid-2013. It generally decreases to about 1500 in late 2016 then generally increases ending at about 1900. Alt C generally increases to about 2500 and remains about constant until late 2012. It generally decreases to about 1500 in late 2015 then generally increases ending at about 1800. Alt A and B generally increases to about 2900 in early 2011 and remains about constant until late 2012. It generally decreases to about 1500 in early 2016 then generally increases ending at about 1900.

Growth Rates for the Monetary Base

Date	Alternatives A and B	Alternative C	Memo: January Tealbook
	Percent, annual rate		

Monthly			
Apr-10	-28.6	-28.6	-28.6
May-10	-20.1	-20.1	-20.1
Jun-10	-3.9	-3.9	-3.9
Jul-10	-5.1	-5.1	-5.1
Aug-10	-2.4	-2.4	-2.4
Sep-10	-10.1	-10.1	-10.1
Oct-10	-9.8	-9.8	-9.8
Nov-10	3.2	3.2	3.2
Dec-10	16.8	16.8	16.8
Jan-11	23.3	23.3	28.6
Feb-11	57.6	57.6	98.9
Mar-11	103.4	99.8	123.2
Quarterly			
2010 Q2	-6.2	-6.2	-6.2
2010 Q3	-6.4	-6.4	-6.4
2010 Q4	-3.2	-3.2	-3.2
2011 Q1	37.5	37.0	52.2
2011 Q2	69.9	57.6	75.9
Annual - Q4 to Q4			
2009	52.5	52.5	52.5
2010	0.9	0.9	0.9
2011	27.3	19.4	33.6
2012	-4.1	-4.4	-0.9
2013	-17.5	-17.9	-10.0
2014	-20.2	-20.5	-19.3
2015	-21.6	-15.5	-25.4

Note: Not seasonally adjusted.

M2 Growth Rates

(Percent, seasonally adjusted annual rate)

Tealbook Forecast *	
Monthly Growth Rates	
Jun 2010	4.3
Jul 2010	2.3
Aug 2010	6.3
Sep 2010	6.6
Oct 2010	5.5
Nov 2010	5.1
Dec 2010	4.2
Jan 2011	2.9
Feb 2011	7.1
Mar 2011	3.0
Apr 2011	3.0
May 2011	3.0
Jun 2011	2.5
Quarterly Growth Rates	
2010 Q3	4.5

2010 Q4	5.6
2011 Q1	4.4
2011 Q2	3.4
2011 Q3	2.2
Annual Growth Rates	
2009	5.0
2010	3.2
2011	3.0
2012	3.3

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

[Note: In the March 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.]

March 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.

March 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.

March 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 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.

† 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	-1.4	-0.4
Lagged headline inflation	-1.3	-1.7	-0.6
Projected headline inflation	-1.2	-1.5	-0.5

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	$i_t = 1.20i_{t-1} - 0.39i_{t-2} + 0.19 \left[1.17 + 1.73\pi_t + 3.66(y_t - y_t) - 2.72(y_{t-1} - y_{t-1}) \right]$
Forecast-based rule	$i_t = 1.18i_{t-1} - 0.38i_{t-2} + 0.20 \left[0.98 + 1.72\pi_{t+2|t} + 2.29(y_{t+1|t} - y_{t+1|t}) - 1.37(y_{t-1} - y_{t-1}) \right]$
Taylor (1993) rule	$i_t = 2 + \pi_t + 0.5(\pi_t - \pi) + 0.5(y_t - y_t)$
Taylor (1999) rule	$i_t = 2 + \pi_t + 0.5(\pi_t - \pi) + (y_t - y_t)$

$$\text{First-difference rule } i_t = i_{t-1} + 0.5 \pi_{t+3|t} - \pi + 0.5 \Delta^4 y_{t+3|t} - \Delta^4 y_{t+3|t}$$

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

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

Billions of dollars

	Feb 28, 2011	2012	2014	2016	2018	2020
Total assets	2,540	2,706	1,908	1,522	1,686	1,879
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	20	9	1	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	20	9	1	0	0	0
Support for specific institutions	65	51	38	27	14	8
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	65	51	38	27	14	8
Securities held outright	2,320	2,512	1,759	1,402	1,589	1,792
U.S. Treasury securities	1,228	1,663	1,226	1,196	1,589	1,792
Agency debt securities	143	77	39	16	0	0
Agency mortgage-backed securities	949	773	494	190	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	134	133	109	92	84	79
Total liabilities	2,487	2,636	1,815	1,399	1,524	1,664
Selected liabilities:						
Federal Reserve notes in circulation	956	1,036	1,169	1,292	1,418	1,558
Reverse repurchase agreements	59	59	59	59	59	59
Deposits with Federal Reserve Banks	1,448	1,525	572	33	33	33
Reserve balances held by depository institutions	1,259	1,317	364	25	25	25
U.S. Treasury, general account	89	5	5	5	5	5
U.S. Treasury, supplementary financing account	100	200	200	0	0	0
Other balances	0	3	3	3	3	3
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

	Feb 28, 2011	2012	2014	2016	2018	2020
Total assets	2,540	2,552	1,794	1,522	1,686	1,879
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	20	9	1	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	20	9	1	0	0	0
Support for specific institutions	65	51	38	27	14	8

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	65	51	38	27	14	8
Securities held outright	2,320	2,362	1,648	1,402	1,588	1,791
U.S. Treasury securities	1,228	1,513	1,115	1,196	1,588	1,791
Agency debt securities	143	77	39	16	0	0
Agency mortgage-backed securities	949	773	494	190	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	134	128	107	92	85	80
Total liabilities	2,487	2,482	1,702	1,399	1,524	1,664
Selected liabilities:						
Federal Reserve notes in circulation	956	1,036	1,169	1,292	1,418	1,558
Reverse repurchase agreements	59	59	59	59	59	59
Deposits with Federal Reserve Banks	1,448	1,370	458	33	33	33
Reserve balances held by depository institutions	1,259	1,162	250	25	25	25
U.S. Treasury, general account	89	5	5	5	5	5
U.S. Treasury, supplementary financing account	100	200	200	0	0	0
Other balances	0	3	3	3	3	3
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