

Accessible Material

December 2011 Tealbook Tables and Charts

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December 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 2013. Data are quarterly average. 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. From 2009:Q4 to 2012:Q3 it fluctuates between about 0.07 and 0.18. By 2012:Q3 it is at about 0.13 and it remains constant here until 2013:Q4. Previous Tealbook follows Current Tealbook almost exactly until 2012:Q1 when it moves to 0.13. It remains constant at 0.13 until 2013:Q4. Market expected rate begins in 2011:Q4 at about 0.13 and generally decreases to about 0.05 by 2012:Q3. It then generally increases to about 0.3 by 2013:Q4. Market modal rate begins in 2011:Q4 at about 0.13 and decreases to about 0 by 2012:Q4. It then generally increases to about 0.12 by 2013:Q4.

Figure: Long-Term Interest Rates

Line chart, by percent, 2007 to 2013. Data are quarterly average. 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 9.4 by late 2008. It then generally decreases to about 4.9 by mid-2011 and then generally increases to about 5.6 by late 2013. Current Tealbook: Conforming mortgage rate begins in 2007 at about 6.2 and fluctuates but generally decreases to about 4.0 by late 2011. It then increases to about 5.2 by late 2013. 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 3.9 by early 2010 and then generally decreases to about 2.9 by mid-2010. By early 2011 it has generally increased to about 3.6 and by late 2011 it has generally decreased to about 2.1. It then generally increases to about 3.7 by late 2013. Previous Tealbook: BBB corporate yield begins in 2007 at about 6.1 and generally increases to about 9.4 by late 2008. It then generally decreases to about 4.9 by mid-2011 and then generally increases to about 5.8 by late 2013. Previous Tealbook: Conforming mortgage rate begins in 2007 at about 6.2 and fluctuates but generally decreases to about 4.0 by late 2011. It then increases to about 5.4 by late 2013. 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 3.9 by early 2010 and then generally decreases to about 2.9 by mid-2010. By early 2011 it has generally increased to about 3.6 and by late 2011 it has generally decreased to about 2.15. It then generally increases to about 3.85 by late 2013.

Figure: Equity Prices

Line chart, by ratio scale where 2007:Q1 = 100, 2007 to 2013. Data are quarter-end. There are two series, Current Tealbook: Dow Jones U.S. Total Stock Market Index and Previous Tealbook: Dow Jones U.S. Total Stock Market Index. Current Tealbook: Dow Jones U.S. 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 early 2011 it has generally increased to about 98. It then generally decreases to about 81 by mid-2011 and then increases to about 109 by late 2013. Previous Tealbook: Dow Jones U.S. 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 early 2011 it has generally increased to about 98. It then generally decreases to about 81 by mid-2011 and then increases to about 110 by late 2013.

Figure: House Prices

Line chart, by ratio scale, 2007:Q1 = 100, 2007 to 2013. 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 72.5 by early 2009. It then generally increases to about 74.8 by early 2010 and then generally decreases to about 68.3 by late 2013. Previous Tealbook: CoreLogic index begins in 2007 at about 100 and generally decreases to about 72.5 by early 2009. It then generally increases to about 74.5 by mid-2010 and then generally decreases to about 69 by late 2013.

Figure: Crude Oil Prices

Line chart, by dollars per barrel, 2007 to 2013. Data are quarterly average. There are four series, Current Tealbook: West Texas Intermediate, Current Tealbook: Imported Oil, Previous Tealbook: West Texas Intermediate and Previous Tealbook: Imported Oil. 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 early 2011 it has generally increased to about 103. It then generally decreases to about 88 by late 2011 and then increases to about 101 by early 2012. It then decreases to about 93 by late 2013. Current Tealbook: Imported Oil begins in early 2007 at about 55 and increases to about 117 by mid-2008. It then decreases to about 41 by early 2009 and then generally increases to about 109 by mid-2011. By late 2013 it has generally decreased to about 96. 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 early 2011 it has generally increased to about 103. It then generally decreases to about 89 by late 2011 and then generally increases to about 96 by late 2013. Previous Tealbook: Imported Oil begins in early 2007 at about 55 and increases to about 117 by mid-2008. It then decreases to about 41 by early 2009 and then generally increases to about 109 by mid-2011. By late 2013 it has generally decreased to about 101.

Figure: Broad Real Dollar

Line chart, by index where 2007:Q1 = 100, 2007 to 2013. Data are quarterly average. 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 by late 2009. By 2010 it has generally increased to about 94 and by mid-2011 it has generally decreased to about 85.2. It then generally increases to about 89 by late 2011 and then decreases to about 85 by late 2013. 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 by late 2009. By 2010 it has generally increased to about 94 and by mid-2011 it has generally decreased to about 85.2. It then generally increases to about 88 by late 2011 and then decreases to about 83 by late 2013.

Note: Blue shading represents the projection period, which begins in 2011:Q4.

Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2011:Q3		2011:Q4		2012:Q1	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
Real GDP	2.7	1.9	2.5	3.2	2.4	2.1
Private domestic final purchases	3.4	3.6	1.9	2.6	1.8	1.9
Personal consumption expenditures	2.2	2.1	2.0	2.4	1.9	2.3
Residential investment	1.2	1.7	3.2	3.1	3.5	3.6
Business Fixed Investment	12.8	15.8	1.3	3.7	.3	-1.2
Government Purchases	-1.2	-2	1.4	-1.9	-8	1.1
<i>Contributions to change in real GDP</i>						
Inventory investment ¹	-3	-1.5	.4	1.2	.6	.1
Net exports ¹	.4	.5	.2	.2	.4	.1
Unemployment Rate²	9.1	9.1	9.1	8.8	9.0	8.8
PCE Chain Price Index	2.3	2.3	1.2	.7	1.4	1.4
Ex. food and energy	2.1	2.0	1.5	1.1	1.6	1.6

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

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

Recent Nonfinancial Developments (1)

Figure: Real GDP and GDI

Line chart, by 4-quarter percent change, 2003 to 2011. There is a horizontal line at zero. There are two series, Gross domestic product and Gross domestic income. Gross domestic product begins in 2003 at about 1.6 and increases to about 4.1 by 2004. It then generally decreases to about 1 by early 2007 and then increases to about 2.4 by mid-2007. By 2009 it has generally decreased to about -5.3 and by 2010 it has generally increased to about 3.5. It then decreases to about 1.5 by 2011:Q3. Gross domestic income begins in 2003 at about 1.1 and increases to about 3.8 by early 2004. From early 2004 to early 2006 it fluctuates between about 3.2 and 4.2. It then decreases to about -0.5 by late 2007 and then increases to about 0.7 by early 2008. By 2009 it has decreased to about -5.5 and by 2010 it has increased to about 4.3. It then decreases to about 1 by 2011:Q3.

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

Figure: Change in Private Payroll Employment

Line chart, by thousands of employees, 2003 to 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 2003 at about 40 and generally decreases to about -210 by mid-2003. It then generally increases to about 320 by early 2004. From early 2004 to early 2006 it fluctuates between about -10 and 350. It then generally decreases to about -20 by early 2006 and then generally increases to about 220 by 2007. By early 2009 it has generally decreased to about -880 and by November 2011 it has generally increased to about 130. 3-month moving average begins in early 2003 at about -40 and generally decreases to about -130 by mid-2003. By early 2006 it has generally increased to about 300 and by early 2009 it has generally decreased to about -800. It then generally increases to about 170 by November 2011.

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

Figure: Unemployment Rate

Line chart, by percent, 2003 to 2011. The series begins in early 2003 at about 5.9 and generally increases to about 6.3 by mid-2003. It then generally decreases to about 4.3 by 2007 and then generally increases to about 10.1 by 2009. By November 2011 it has generally decreased to about 8.6.

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

Figure: Manufacturing IP excluding Motor Vehicles and Parts

Line chart, by 3-month percent change, annual rate, 2003 to 2011. There is a horizontal line at zero. The series begins in early 2003 at about 0 and then generally increases to about 5 within a month or two. It then generally decreases to about -2 by mid-2003. By early 2005 it has generally increased to about 9 and by mid-2005 it has generally decreased to about -5. It then generally increases to about 12.5 by late 2005 and then generally decreases to about -0.5 by late 2006. By early 2007 it has generally increased to about 7.5 and by early 2009 it has generally decreased to about -25. It then generally increases to about 11 by early 2010 and then generally decreases to about 3.0 by October 2011.

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

Recent Nonfinancial Developments (2)

Figure: Production of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2003 to 2011. The series begins in 2003 at about 12.8. It then fluctuates, but generally decreases to about 3.5 by early 2009 and then fluctuates, but generally increases to about 9 by October 2011.

Source: Ward's Auto Infobank.

Figure: Sales of Light Motor Vehicles

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

Source: Ward's Auto Infobank.

Figure: Real PCE Goods excluding Motor Vehicles

Line chart, by billions of chained (2005) dollars, 2003 to 2011. The series begins in 2003 at about 2400 and generally increases to about 2950 by 2007. It then generally decreases to about 2775 by 2009 and then generally increases to about 3060 by October 2011.

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

Figure: Single-Family Housing Starts

Line chart, thousands of units, annual rate, 2003 to 2011. There are two series, Starts and Adjusted permits. Starts begins in 2003 at about 1530 and generally decreases to about 1280 within a month or so. It then fluctuates, but generally increases to about 1810 by 2006 and then generally decreases to about 350 by early 2009. By early 2010 it has generally increased to about 580 and by October 2011 it has generally decreased to about 430. Adjusted permits begins in 2003 at about 1450 and generally increases to about 1840 by 2005. It then generally decreases to about 350 by 2009 and then generally increases to about 575 by early 2010. By October 2011 it has generally decreased to about 430.

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

Source: U.S. Census Bureau.

Figure: Single-Family Home Sales

Line chart, by thousands of units, annual rate, 2003 to 2011. There are two series, New and Existing. New begins in 2003 at about 1000 and fluctuates, but generally increases to about 1400 by 2005. It then generally decreases to about 300 by October 2011. Existing begins in 2003 at about 5350 and fluctuates, but generally increases to about 6350 by 2005. It then generally decreases to about 4000 by late 2008 and then generally increases to about 5650 by late 2009. By mid-2010 it has generally decreased to about 3400 and by early 2011 it has generally increased to about 4750. It then generally decreases to about 4400 by October 2011.

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

Figure: Nondefense Capital Goods Excluding Aircraft

Line chart, by billions of dollars, 2003 to 2011. There are two series, Orders and Shipments. Orders begins in 2003 at about 49. It then fluctuates, but generally increases to about 68.5 by early 2008 and then generally decreases to about 47 by 2009. By October 2011 it has generally increased to about 68. Shipments begins in 2003 at about 49.3 It then generally increases to about 66 by 2008 and then generally decreases to about 51.7 by 2009. By October 2011 it has generally increased to

about 66.

Source: U.S. Census Bureau.

Recent Nonfinancial Developments (3)

Figure: Nonresidential Construction Put in Place

Line chart, by billions of chained (2005) dollars, 2003 to 2011. The series begins in 2003 at about 226. 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 early 2011 and then generally increases to about 280 by October 2011.

Source: U.S. Census Bureau.

Figure: Inventory Ratios excluding Motor Vehicles

Line chart, by months, 2003 to 2011. There are two series, Staff flow-of-goods system and Census book-value data. Staff flow-of-goods system begins in 2003 at about 1.6 and generally decreases to about 1.48 by late 2007. It then generally increases to about 1.63 by early 2009 and then generally decreases to about 1.5 by October 2011. Census book-value data begins in 2003 at about 1.3 and generally decreases to about 1.18 by 2005. It then generally increases to about 1.26 by 2006 and then generally decreases to about 1.18 by 2008. By early 2009 it has generally increased to about 1.41 and by September 2011 it has generally decreased to about 1.22.

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

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

Figure: Defense Spending

Line chart, by billions of chained (2005) dollars, 2003 to 2011. There are two series, "Unified" in which the data are monthly and "NIPA" in which the data are quarterly. Unified begins in 2003 at about 450 and generally increases to about 555 by 2004. From 2004 to early 2007 it fluctuates between about 465 and 575. It then generally increases to about 690 by late 2010 and then generally decreases to about 575 by October 2011. NIPA begins in 2003 at about 450 and generally increases to about 525 by 2004. From 2004 to early 2007 it fluctuates between about 505 and 535. It then generally increases to about 650 by mid-2010 and then generally decreases to about 610 by early 2011. It then generally increases to about 635 by 2011:Q3.

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

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

Figure: Exports and Non-Oil Imports

Line chart, by billions of dollars, 2003 to 2011. There are two series, Non-oil imports and Exports. Non-oil imports begins in early 2003 at about 112. It then generally increases to about 180 by 2008 and then generally decreases to about 132 by 2009. By September 2011 it has generally increased to about 187. Exports begins in early 2003 at about 81. It then generally increases to about 165 by 2008 and then generally decreases to about 122 by 2009. By September 2011 it has generally increased to about 180.

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

Figure: Total PCE Prices

Line chart, by percent, 2003 to 2011. There is a horizontal line at zero. There are two series, 12-month change and 3-month change. 12-month change begins in 2003 at about 2.3 and generally decreases to about 1.8 by mid-2003. 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 early 2010 and then generally decreases to about 1.0 by late 2010. By October 2011 it has generally increased to about 2.7. 3-month change begins in early 2003 at about 2. It then generally increases to about 4 by early 2002 and then generally decreases to about -1 by mid-2003. By late 2003 it has generally increased to about 4. From late 2003 to mid-2005 it fluctuates between about 1.0 and 4.0. It then generally increases to about 8.5 by mid-2005 and then generally decreases to about -1 by late 2005. By mid-2008 it has generally increased to about 6.5 and by late 2008 it has generally decreased to about -9.0. It then generally increases to about 4.0 by 2009 and then generally decreases to about -1.2 by 2010. By early 2011 it has generally increased to about 4.7 and by October 2011 it has generally decreased to about 1.7.

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, 2003 to 2011. There are two series, 12-month change and 3-month change. 12-month change begins in early 2003 at about 1.7 and generally decreases to about 1.3 by 2003. By mid-2008 it has generally increased to about 2.5 and by 2009 it has generally decreased to about 1.3. It then generally increases to about 1.8 by early 2010 and then generally decreases to about 0.9 by late 2010. By October 2011 it generally increases to about 1.65. 3-month change begins in early 2003 at about 0.9. It then generally increases to about 3.45 by 2005. From 2005 to early 2008 it fluctuates between about 1 and 3.45. It then generally decreases

to about 0.3 by late 2008 and then generally increases to about 2.6 by 2009. By late 2010 it has generally decreased to about 0.5 and by mid-2011 it has increased to about 2.5. It then decreases to about 1 by October 2011.

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 final quarter of preceding period except as noted)

Measure	2010	2011		2012	2013
		H1	H2		
Real GDP	3.1	.8	2.6	2.3	2.5
Previous Tealbook	3.1	.8	2.6	2.5	3.2
Final sales	2.4	.8	2.7	2.1	2.2
Previous Tealbook	2.4	.8	2.5	2.3	2.8
Personal consumption expenditures	3.0	1.4	2.2	2.4	2.3
Previous Tealbook	3.0	1.4	2.1	2.4	3.1
Residential investment	-6.3	.8	2.4	5.8	7.9
Previous Tealbook	-6.3	.8	2.2	6.2	9.2
Nonresidential structures	-1.8	2.5	10.2	-1.1	.9
Previous Tealbook	-1.8	2.5	4.0	-3.4	.3
Equipment and software	16.6	7.5	9.4	3.2	6.4
Previous Tealbook	16.6	7.5	8.0	5.3	6.7
Federal purchases	2.9	-3.9	-.8	.4	-3.9
Previous Tealbook	2.9	-3.9	1.1	-.7	-4.1
State and local purchases	-1.7	-3.1	-1.2	-.4	.8
Previous Tealbook	-1.7	-3.1	-.7	-.4	.8
Exports	8.8	5.7	5.4	5.1	5.5
Previous Tealbook	8.8	5.7	6.8	6.8	6.7
Imports	10.7	4.8	2.3	3.8	4.2
Previous Tealbook	10.7	4.8	3.6	3.7	4.9
	Contributions to change in real GDP (percentage points)				
Inventory change	.7	.0	-.2	.3	.3
Previous Tealbook	.7	.0	.1	.2	.4
Net exports	-.6	-.1	.3	.0	.0
Previous Tealbook	-.6	-.1	.3	.3	.1

Figure: Real GDP

Line chart, by 4-quarter percent change, 1982 to 2013. There are two series, Current and Previous Tealbook. Current begins in early 1982 at about -2.3. 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 4.2 by late 1992. From late 1992 to early 2000 it fluctuates between about 2 and 5.7. It then generally decreases to about 0.2 by 2001 and then generally increases to about 4.1 by 2004. By 2009 it has generally decreased to about -5.4 and by 2010 it generally increases to about 3.8. It then generally decreases to about 1.5 by 2011 and then generally increases to about 2.3 by late 2013. Previous Tealbook follows the Current series almost exactly until 2011 when it begins decreasing at a slower rate. By late 2011 it has generally decreased to about 1.8 and by late 2013 it has generally increased to about 3.2.

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 2011:Q3.

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

Components of Final Demand

Figure: Personal Consumption Expenditures

Line chart, by 4-quarter percent change, 2007 to 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 2.75 and generally decreases to about -3.1 by 2009:Q2. It then generally increases to about 3.0 by 2010:Q4 and then generally decreases to about 1.8 by 2011:Q4. By 2013:Q4 it has generally increased to about 2.25. Previous Tealbook follows the Current series almost exactly until 2011 when it begins decreasing at a different rate. By 2012:Q1 it has generally decreased to about 1.7 and by 2013:Q4 it has increased to about 3.1.

Figure: Residential Investment

Line chart, by 4-quarter percent change, 2007 to 2013. 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 -8.5 by 2010:Q3. By 2011:Q1 it has generally increased to about -2.5 and by 2011:Q2 it has generally decreased to about -7.5. It then generally increases to about 8 by 2013:Q4. Previous Tealbook follows the Current Tealbook series almost exactly until 2012:Q3 when it begins increasing at a different rate. By 2013:Q4 it has increased to about 9.8.

Figure: Equipment and Software

Line chart, by 4-quarter percent change, 2007 to 2013. 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 4.5 by 2007:Q4. It then generally decreases to about -21 by 2009:Q1. By 2010:Q3 it has generally increased to about 17.5 and by 2012:Q3 it has generally decreased to about 2. It then generally increases to about 6 by 2013:Q4. Previous Tealbook begins in 2007:Q1 at about 3 and generally increases to about 4.5 by 2007:Q4. It then generally decreases to about -21 by 2009:Q1. By 2010:Q3 it has generally increased to about 17.5 and by 2012:Q3 it has generally decreased to about 5.0. It then generally increases to about 5.65 by 2013:Q4.

Figure: Nonresidential Structures

Line chart, by 4-quarter percent change, 2007 to 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 11 and generally increases to about 17.5 by 2007:Q4. By 2009:Q4 it has generally decreased to about -29.8 and by 2012:Q1 it has generally increased to about 9.5. It then generally decreases to about -1 by 2012:Q4 and then generally increases to about 1 by 2013:Q4. 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 -29.8 and by 2011:Q3 it has generally increased to about 7. It then generally decreases to about 4 by 2011:Q4 and then generally increases to about 6 by 2012:Q1. By 2012:Q3 it has generally decreased to about -4 and by 2013:Q4 it has increased to about 0.

Figure: Government Consumption & Investment

Line chart, by 4-quarter percent change, 2007 to 2013. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 0.4 and generally increases to about 2.9 by 2008:Q1. By 2011:Q3 it has generally decreased to about -2.5. It then generally increases to about -0.01 by 2012:Q4 and then generally decreases to about -1.1 by 2013:Q4. Previous Tealbook begins in 2007:Q1 at about 0.4 and generally increases to about 2.9 by 2008:Q1. By 2011:Q3 it has generally decreased to about -2.7. It then generally increases to about -0.01 by 2012:Q3 and generally decreases to about -1.1 by 2013:Q4.

Figure: Exports and Imports

Line chart, by 4-quarter percent change, 2007 to 2013. There is a horizontal line at zero. There are four series, Exports Current Tealbook, Imports Current Tealbook, Exports Previous Tealbook and Imports Previous Tealbook. Exports Current Tealbook begins in 2007:Q1 at about 8 and generally increases to about 11.5 by 2008:Q2. It then generally decreases to about -14.8 by 2009:Q2 and then generally increases to about 14 by 2010:Q2. By 2013:Q4 it has generally decreased to about 5.2. Exports Previous begins in 2007:Q1 at about 8 and generally increases to about 11.5 by 2008:Q2. It then generally decreases to about -14.8 by 2009:Q2 and then generally increases to about 14 by 2010:Q2. By 2013:Q4 it has generally decreased to about 5.65. Imports Current Tealbook begins in 2007:Q1 at about 4 and generally decreases to about -19 by 2009:Q2. It then generally increases to about 17 by 2010:Q2 and then generally decreases to about 1.5 by 2011:Q3. By 2013:Q4 it has generally increased to about 4.5. Imports Previous Tealbook begins in 2007:Q1 at about 4 and generally decreases to about -19 by 2009:Q2. It then generally increases to about 17 by 2010:Q2 and then generally decreases to about 2 by 2011:Q3. By 2013:Q4 it has generally increased to about 5.

Note: Blue shading represents the projection period, which begins in 2011:Q3.

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

Aspects of the Medium-Term Projection

Figure: Personal Saving Rate

Line chart, by percent, 1995 to 2013. There are two series, Current and Previous Tealbook. Current begins in 1995 at about 6.05. By 1997 it has generally decreased to about 4.4 and by 1998 it has generally increased to about 5.95. It then generally decreases to about 1.5 by late 2001 and then generally increases to about 4.1 by early 2002. By 2005 it has generally decreased to about 1.2 and by 2009 it has generally increased to about 6.3. It then generally decreases to about 4.3 by 2013. Previous Tealbook follows the Current Tealbook series almost exactly until 2010 when it begins decreasing at a slower rate. It generally decreases to about 5.1 by 2013.

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

Figure: Wealth-to-Income Ratio

Line chart, by ratio, 1995 to 2013. There are two series, Current and Previous Tealbook. Current begins in 1995 at about 4.88. It then generally increases to about 6.15 by 2000 and then generally decreases to about 4.97 by 2002. By 2005 it has generally increased to about 6.45 and by 2009 it has generally decreased to about 4.63. It then generally increases to about 5.25 by early 2011 and then generally decreases to about 4.9 by late 2011. By late 2013 it has generally increased to about 5.81. Previous Tealbook begins in 1995 at about 4.88. It then generally increases to about 6.15 by 2000 and then generally decreases to about 4.97 by 2002. By 2005 it has generally increased to about 6.4 and by 2009 it has generally decreased to about 4.57. It then generally increases to about 5.18 by early 2011 and then generally decreases to about 4.8 by late 2011. It then generally increases to about 4.97 by late 2013.

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

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

Figure: Single-Family Housing Starts

Line chart, by millions of units, 1995 to 2013. There are two series, Current and Previous Tealbook. Current begins in 1995 at about 1.05. It then generally increases to about 1.75 by 2006 and then generally decreases to about 0.33 by 2009. By early 2010 it has generally increased to about 0.52 and by 2011 it has generally decreased to about 0.40. It then generally increases to about 0.55 by late 2013. Previous Tealbook follows the Current Tealbook series almost exactly.

Source: U.S. Census Bureau.

Figure: Equipment and Software Spending

Line chart, by share of nominal GDP, 1995 to 2013. There are two series, Current and Previous Tealbook. Current begins in 1995 at about 8.15. It then generally increases to about 9.6 by 2000 and then generally decreases to about 7.5 by 2004. By 2006 it has generally increased to about 8.03 and by 2009 it has generally decreased to about 6.45. It then generally increases to about 7.6 by the end of 2013. Previous Tealbook follows the Current Tealbook series almost exactly except that it ends in late 2013 at about 7.65.

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

Figure: Federal Surplus/Deficit

Line chart, by share of nominal GDP, 1995 to 2013. Data is 4-quarter moving average. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1995 at about -2.7. It then generally increases to about 2.5 by 2000 and then generally decreases to about -3.8 by 2004. By 2007 it has generally increased to about -1.2 and by 2009 it has generally decreased to about -10.7. It has generally increased to about -5.4 by the end of 2013. Previous Tealbook follows the Current Tealbook series almost exactly except that it ends in late 2013 at about -5.1.

Source: Monthly Treasury Statement.

Figure: Current Account Surplus/Deficit

Line chart, by share of nominal GDP, 1995 to 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in early 1995 at about -1.75 and generally increases to about -1.1 by late 1995. It then generally decreases to about -6.7 by 2005 and then generally increases to about -2.35 by 2009. By 2010 it has generally decreased to about -3.3 and by 2012 it has generally increased to about -2.6. It then generally decreases to about -2.98 by the end of 2013. Previous Tealbook follows the Current Tealbook series almost exactly until 2011 when it begins increasing at a different rate. By the end of 2013 it has increased to about -2.45.

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

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: March 2001-November 2001, and December 2007-June 2009. Blue shading represents the projection period, which begins in 2011:Q3.

Decomposition of Potential GDP

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

Measure	1974-1995	1996-2000	2001-2009	2010	2011	2012	2013
Potential Real GDP	3.0	3.5	2.4	1.6	1.7	2.0	2.1
Previous Tealbook	3.0	3.5	2.5	1.7	2.1	2.1	2.2
<i>Selected contributions¹</i>							
Structural labor productivity	1.5	2.7	2.4	1.4	1.5	1.6	1.7
Previous Tealbook	1.5	2.7	2.4	1.5	1.7	1.7	1.9
Capital deepening	.7	1.5	.8	.4	.5	.5	.7
Previous Tealbook	.7	1.5	.8	.4	.6	.6	.8
Multifactor productivity	.5	.9	1.4	.9	.8	.9	.9

Previous Tealbook	.5	.9	1.4	1.0	1.0	1.0	1.0
Structural hours	1.5	1.0	.6	.5	.6	.7	.6
Previous Tealbook	1.5	1.0	.6	.5	.6	.7	.6
Labor force participation	.4	.0	-.3	-.4	-.3	-.2	-.3
Previous Tealbook	.4	.0	-.3	-.4	-.3	-.2	-.3

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

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

Figure: Potential and Actual Real GDP

Line chart, by billions of chained (2005) dollars, 2001 to 2013. There are two series, Potential GDP and Actual Real GDP. Potential GDP begins in 2001 at about 11200 and increases to about 14800 by the end of 2013. Actual Real GDP begins in 2001 at about 11300 and generally increases to about 13500 by 2007. It then generally decreases to about 12650 by 2009. By the end of 2013 it has generally increased to about 14050.

Note: Blue shading represents the projection period, which begins in 2011:Q3.

Figure: Structural and Actual Labor Productivity (Nonfarm Business Sector)

Line chart, by chained (2005) dollars per hour, 2001 to 2013. There are two series, Structural labor productivity and Actual labor productivity. Structural labor productivity begins in 2001 at about 43.9 and generally increases to about 57.5 by the end of 2013. Actual labor productivity begins in 2001 at about 43.5 and generally increases to about 52 by 2007. It then generally decreases to about 51.3 by 2008 and then generally increases to about 57.5 by the end of 2013.

Note: Blue shading represents the projection period, which begins in 2011:Q3.

Figure: Structural and Actual Labor Force Participation Rate

Line chart, by percent, 2001 to 2013. There are two series, Structural Labor Force Participation Rate and Actual Labor Force Participation Rate. Structural Labor Force Participation Rate begins in 2001 at about 66.75 and generally decreases to about 64.45 by the end of 2013. Actual Labor Force Participation Rate begins in 2001 at about 67.1 and generally decreases to about 65.8 by 2005. It then generally increases to about 66.3 by 2007 and then generally decreases to about 64 by the end of 2013.

Note: Blue shading represents the projection period, which begins in 2011:Q4.

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

The Outlook for the Labor Market and Resource Utilization

(Percent change from final quarter of preceding period)

Measure	2010	2011		2012	2013
		H1	H2		
Output per hour, nonfarm business	2.5	-4	2.1	1.3	1.2
Previous Tealbook	2.5	-.3	2.4	1.2	1.7
Nonfarm private employment ¹	98	165	145	168	173
Previous Tealbook	98	165	119	174	220
Labor force participation rate ²	64.5	64.1	64.1	64.1	64.0
Previous Tealbook	64.5	64.1	64.1	64.0	64.1
Civilian unemployment rate ²	9.6	9.1	8.8	8.6	8.2
Previous Tealbook	9.6	9.1	9.1	8.6	8.1
Memo:					
GDP gap ³	-5.4	-5.8	-5.5	-5.2	-4.8
Previous Tealbook	-5.6	-6.2	-6.0	-5.6	-4.7

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

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

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

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

Figure: Nonfarm Private Employment (Average Monthly Changes)

Line chart, by thousands, 1995 to 2013. There is a shaded bar from 2011:Q4 to 2013:Q4 that represents the forecast period. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1995 at about 220. From 1995 to 1999 it fluctuates between about 100 and 320. It then generally decreases to about -350 by 2001 and then generally increases to about 320 by 2006. By 2009 it has generally decreased to about -820 and by the end of 2013 it has generally increased to about 195. Previous Tealbook follows the Current Tealbook series almost exactly until 2011. By the end of 2013 it has generally increased to about 220.

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

Figure: Unemployment Rate

Line chart, by percent, 1995 to 2013. There is a shaded bar from 2011:Q4 to 2013:Q4 that represents the forecast period. There are four series, Current Tealbook, Previous Tealbook, NAIRU, and NAIRU with EEB adjustment. Current Tealbook begins in early 1995 at about 5.5 and generally increases to about 5.75 by mid-1995. It then generally decreases to about 3.95 by 2000 and then generally increases to about 6.2 by 2003. By 2007 it has generally decreased to about 4.5 and by 2009 it has generally increased to about 10. It then generally decreases to about 8.1 by the end of 2013. Previous Tealbook follows Current Tealbook exactly except that it ends in late 2013 at about 8.05. NAIRU begins in 1995 at about 5.0 and remains constant at 5.0 until 2008. It then generally increases to about 6 by 2009 and remains constant here until the end of 2013. NAIRU with EEB adjustment begins in 1995 at about 5.01 and remains relatively constant at 5 until 2001. It then increases to about 5.1 by 2002. It then generally decreases to about 5 by 2004 and remains constant here until 2008. By 2010 it has increased to about 6.85 and by the end of 2013 it has generally decreased to about 6.0.

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

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

Figure: GDP Gap

Line chart, by percent, 1995 to 2013. There is a shaded bar from 2011:Q3 to 2013:Q4 that represents the forecast period. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1995 at about -1.4. It then generally increases to about 3.5 by 2000 and then generally decreases to about -2.7 by 2003. By 2006 it has generally increased to about 0.7 and by 2009 it has generally decreased to about -7.8. It then generally increases to about -4.7 by the end of 2013. Previous Tealbook follows Current Tealbook exactly until 2010. By the end of 2013 it has generally increased to about -4.6.

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

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

Figure: Manufacturing Capacity Utilization Rate

Line chart, by percent, 1995 to 2013. There is a shaded bar from 2011:Q4 to 2013: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 1995 at about 84.3 and generally decreases to about 82 by 1996. It then generally increases to about 84 by 1997 and then generally decreases to about 71.5 by 2001. By 2007 it has generally increased to about 79.7 and by 2009 it has generally decreased to about 64.5. It then generally increases to about 77.3 by the end of 2013. Previous Tealbook follows the Current Tealbook series almost exactly until 2010 when it begins increasing at a faster rate. By the end of 2013 it has generally increased to about 78.5.

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

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

[Box:] Small and New Business Employment and Financing

Figure: Private Employment by Firm Size

Line chart, by millions, 2005 to 2011. There are two series, Large and Small. Large begins in 2005 at about 55.5 and increases to about 58.5 by 2008. It then decreases to about 54.1 by 2010 and then increases to about 55.5 by 2011. Small begins in 2005 at about 20.4 and increases to about 20.85 by 2007. It then decreases to about 19.4 by 2010 and then increases to about 19.45 by 2011.

Note: Small is firms with 1-19 employees; large is 250 and above. Data are for March each year. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research: December 2007-June 2009.

Source: Staff calculations using BLS data.

Figure: Amount Outstanding on Loans to Businesses by Original Loan Size

Line chart, by billions of dollars, ratio scale, 2005 to 2011. There are two series, Larger (Over \$1m) and Small (\$1m or less). Larger begins in 2005 at about 1000 and increases to about 1500 by 2009. It then decreases to about 1390 by 2010 and then increases to about 1500 by 2011:Q3. Small begins in 2005 at about 560 and increases to about 675 by 2008. It then generally decreases to about 560 by 2011:Q3.

Note: In March 2010 data reporting frequency changed from annual to quarterly. Sum of C&I and CRE loans to businesses by domestic banks. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research: December 2007-June 2009.

Source: Staff calculations of the Call Reports.

Figure: Small Business Credit Conditions

Line chart, by percent, 2005 to 2011. Data are 3-month moving averages. There are two series, Respondents with borrowing needs and Credit more difficult to obtain than 3 months ago, net. Respondents with borrowing needs begins in 2005:Q1 at about 41.5 and increases to about 44.5 by 2005:Q2. It then decreases to about 39 by 2005:Q3 and generally increases to about 43 by 2006:Q3. By 2011:Q3 it has fluctuated, but decreased to about 34.98 and by November 2011 it has generally increased to about 37. Credit more difficult to obtain than 3 months ago, net, begins in 2005:Q1 at about 3.9 and generally increases to about 15 by 2009:Q2. It then generally decreases to about 8.7 by 2011:Q2 and then generally increases to about 11.6 by early 2011:Q4. It then decreases to about 10.2 by November 2011.

Note: Respondents with borrowing needs is not seasonally adjusted. Credit more difficult to obtain than 3 months ago, net, is for borrowers who sought credit in the past three months, and is seasonally adjusted. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research: December 2007-June 2009.

Source: National Federation of Independent Business.

Figure: Net Job Creation Rate by Firm Age

Line chart, by percent, 2004 to 2009. There is a horizontal line at zero. There are two series, Young (0-2 years old) and Older (3+ years old). Young begins in 2004 at about 37.5 and increases to about 41 by 2006. By 2007 it has decreased to about 31 where it remains until 2008. It then decreases to about 24 by 2009. Older begins in 2004 at about -0.3 and remains relatively stable here until 2005. It then increases to about 0.4 by 2006 and then decreases to about -0.8 by 2007. It remains constant here until 2008 and then decreases to about -7 by 2009.

Note: Job creation less job destruction as a percent of the average of current and previous year's employment. Data are for March each year. The shaded bar indicates a period of business recession as defined by the National Bureau of Economic Research: December 2007-June 2009.

Source: Staff calculations using Census Bureau data.

How Much Slack Is There in the Labor Market?

Figure: Job Market Perceptions

Line chart, 1999 to 2011. There are two series, Perceptions which is measured by index and Unemployment gap which is measured by percentage points. There is a horizontal line that crosses Perceptions y-axis scale at about 106 and Unemployment gaps y-axis scale at zero. Perceptions begins in 1999 at about 135 and generally increases to about 150 by 2000. It then generally decreases to about 75 by 2003 and then generally increases to about 112 by 2007. By 2009 it has generally decreased to about 54 and by November 2011 it has generally increased to about 63. Unemployment gap begins in 1999 at about 0.8 and generally increases to about 1.1 by 2000. It then generally decreases to about -1 by 2003 and then generally increases to about 0.5 by 2006. By 2009 it has generally decreased to about -3.3 and by 2011:Q4 it has generally increased to about -2.2.

Note: Job market perceptions are the proportion of households believing jobs are plentiful minus the proportion believing jobs are hard to get plus 100. The unemployment gap is the staff effective NAIRU minus the unemployment rate.

Source: Conference Board.

Figure: Jobs Hard to Fill

Line chart, 1999 to 2011. There are two series, Jobs hard to fill, which is measured by percent, and Unemployment gap, which is measured in percentage points. There is a horizontal line that crosses the Jobs hard to fill y-axis at about 24 and Unemployment gaps y-axis at 0. Jobs hard to fill begins in early 1999 at about 29 and generally decreases to about 26 by mid-1999. It then generally increases to about 36 by 2000 and then generally decreases to about 15 by 2003. By 2006 it has generally increased to about 31 and by 2009 it has generally decreased to about 7.5. It then generally increases to about 17.5 by November 2011. Unemployment gap begins in 1999 at about 0.8 and generally increases to about 1.1 by 2000. It then generally decreases to about -1 by 2003 and then generally increases to about 0.5 by 2006. By 2009 it has generally decreased to about -3.3 and by 2011:Q4 it has generally increased to about -2.2.

Note: Jobs hard to fill is the percent of small businesses surveyed with at least one "hard to fill" job opening. The unemployment gap is the staff effective NAIRU minus the unemployment rate.

Source: NFIB.

Figure: Persons Working Part-Time for Economic Reasons

Line chart, by percent of household employment, 1999 to 2011. The series begins in 1999 at about 2.5 and generally decreases to about 2.1 by 2000. It then generally increases to about 3.5 by 2003 and then generally decreases to about 2.7 by 2006. By 2009 it has generally increased to about 6.6. From 2009 to 2011 it fluctuates between about 5.9 and 6.9. By November 2011 it is at about 5.95.

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

Inflation Projections

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

Measure	2010	2011		2012	2013
		H1	H2		
PCE chain-weighted price index	1.3	3.6	1.5	1.4	1.2
Previous Tealbook	1.3	3.6	1.8	1.4	1.4
Food and beverages	1.3	6.4	4.1	1.2	1.2
Previous Tealbook	1.3	6.4	4.2	1.2	1.2
Energy	6.2	27.2	-2.6	-.3	-1.6
Previous Tealbook	6.2	27.2	-1.3	-.4	1.2
Excluding food and energy	1.0	1.9	1.6	1.5	1.4
Previous Tealbook	1.0	1.9	1.8	1.5	1.4
Prices of core goods imports ¹	2.6	7.7	.8	.4	1.4
Previous Tealbook	2.6	7.7	1.2	1.2	1.7

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

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

Figure: Total PCE Prices

Line chart, by 4-quarter percent change, 1995 to 2013. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in early 1995 at about 2.4. It then generally decreases to about 2.0 by late 1995 and then generally increases to about 2.4 by 1996. It then generally decreases to about 0.95 by 1998 and then generally increases to about 2.7 by 2000. By 2002 it has generally decreased to about 0.7 and by 2005 it has generally increased to about 3.2. It then generally decreases to about 1.7 by 2006 and then generally increases to about 4.4 by 2008. By 2009 it has generally decreased to about -0.9 and by early 2010 it has generally increased to about 2.5. It then generally decreases to about 1.1 by late 2010 and then increases to about 2.9 by 2011. By the end of 2013 it has generally decreased to about 1.2. Previous Tealbook follows the Current series almost exactly except it ends in late 2013 at about 1.3.

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

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 1995 to 2013. There are four series, Current Tealbook, Previous Tealbook, Current Tealbook: Market based and Previous Tealbook: Market based. Current Tealbook begins in early 1995 at about 2.4. It then generally decreases to about 1.3 by 1998 and then generally increases to about 2.6 by 2007. By late 2010 it has generally decreased to about 0.95 and by early 2012 it has generally increased to about 1.8. It then generally decreases to about 1.35 by late 2013. Current Tealbook: Market based begins in early 1995 at about 2.15. It then generally decreases to about 0.95 by 1998 and then generally increases to about 1.9 by 2001. By 2003 it has generally decreased to about 1.2 and by 2008 it has generally increased to about 2.45. It then generally decreases to about 0.7 by late 2010 and then generally increases to about 1.8 by early 2012. It then generally decreases to about 1.2 by the end of 2013. Previous Tealbook: Market based follows Current Tealbook: Market based almost exactly until 2011. By early 2012 it has generally increased to about 1.95 and by the end of 2013 it has generally decreased to about 1.2.

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

Figure: Compensation per Hour

Line chart, by 4-quarter percent change, 1995 to 2013. There is a horizontal line at zero. There are four series, Current Productivity and Costs, Previous Tealbook Productivity and Costs, Current Employment cost index, and Previous Tealbook Employment cost index. Current Productivity and Costs begins in early 1995 at about 1.2 and generally increases to about 3.7 by 1996. It then generally decreases to about 2.5 by 1997 and then generally increases to about 7 by 1998. By 1999 it has generally decreased to about 3 and by 2000 it has generally increased to about 8.7. It then generally decreases to about 2.5 by 2002 and then generally increases to about 5.7 by 2003. By 2009 it has generally decreased to about 0 and by 2010 it has generally increased to about 3. It then generally decreases to about 2.1 by the end of 2013. Previous Tealbook Productivity and Costs follows Current Productivity and Costs almost exactly until the end of 2010. By late 2010 it has generally decreased to about 1.6 and by late 2011 it has generally increased to about 2.7. It then generally decreases to about 2.2 by the end of 2013. Current Employment cost index begins in 1995 at about 2.8. It then generally increases to about 4.7 by 2000 and then generally decreases to about 1.2 by 2009. By the end of 2013 it has generally increased to about 2.3. Previous Tealbook Employment cost index follows the Current Employment cost index almost exactly.

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

Figure: Long-Term Inflation Expectations

Line chart, by percent, 1995 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 1995 at about 3.1. It then generally decreases to about 2.7 by 1998. From 1998 to early 2005 it fluctuates between about 2.2 and 3.25. From early 2005 to late 2010 it fluctuates between about 2.4 and 3.4. By November 2011 it is at about 2.7. SPF begins in early 2007 at about 2.0 and generally increases to about 2.25 by 2009. It then generally decreases to about 2.0 by 2010 and then generally increases to about 2.1 by 2011:Q4.

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

Note: The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: March 2001-November 2001, and December 2007-June 2009. Blue shading represents the projection period, which begins in 2011:Q3.

The Long-Term Outlook

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

Item	2011	2012	2013	2014	2015	2016
Real GDP	1.7	2.3	2.5	3.4	4.2	3.7
Civilian unemployment rate ¹	8.8	8.6	8.2	7.8	7.1	6.4
PCE prices, total	2.5	1.4	1.2	1.4	1.5	1.6
Core PCE prices	1.7	1.5	1.4	1.4	1.5	1.6
Federal funds rate ¹	.1	.1	.1	.4	1.7	2.7
10-year Treasury yield ¹	2.2	2.9	3.6	3.8	4.0	4.2

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

Figure: Real GDP

Line chart, by 4-quarter percent change, 2002 to 2016. 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 -5.1 by 2009 and then generally increases to about 3.5 by 2010. By 2011 it has generally decreased to about 1.5 and by 2015 it has generally increased to about 4.1. It then generally decreases to about 3.6 the end of 2016. 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 1.0 by 2009. By the end of 2016 it has generally increased to about 2.6.

Figure: Unemployment Rate

Line chart, by percent, 2002 to 2016. 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 by 2009. By the end of 2016 it has generally decreased to about 6.3. 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 5.4 by the end of 2016. 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 2014. By the end of 2016 it has decreased to about 5.4.

Figure: PCE Prices

Line chart, by 4-quarter percent change, 2002 to 2016. 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 2.5 by 2008. By 2009 it has generally decreased to about 1.3 and by early 2010 it has generally increased to about 1.8. It then generally decreases to about 0.95 by late 2010 and generally increases to about 1.8 by 2012. By 2014 it has generally decreased to about 1.3 and by the end of 2016 it has generally increased to about 1.6. 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 1.9 by 2006 and then generally increases to about 4.25 by 2008. By 2009 it has generally decreased to about -0.7 and by early 2010 it has generally increased to about 2.35. It then generally decreases to about 1.3 by late 2010 and then generally increases to about 2.9 by 2011. By 2012 it has decreased to about 1.1 and by end of 2016 it has generally increased to about 1.6.

Figure: Interest Rates

Line chart, by percent, 2002 to 2016. 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 early 2014. It then generally increases to about 2.75 by the end of 2016. 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 2.1 by late 2011. By the end of 2016 it has generally increased to about 4.2. BBB corporate begins in 2002 at about 7.6 and generally decreases to about 5.4 by 2004. It then generally increases to about 9.3 by 2008 and then generally decreases to about 4.8 by 2011. By the end of 2016 it has generally increased to about 5.9.

Note: In each panel, blue shading represents the projection period, which begins in 2011:Q4.

Evolution of the Staff Forecast

Figure: Change in Real GDP

Line chart, by percent, January 20, 2010 to December 7, 2011. Data are Q4 over Q4 and are plotted on the Tealbook publication dates. There are three series 2011, 2012, and 2013. 2011 begins on January 20, 2010 at about 4.75. It then generally decreases to about 3.25 by September 15, 2010 and then generally increases to about 3.8 by January 19, 2011. By September 14, 2011 it has decreased to about 1.4 and by December 7, 2011 it has increased to about 1.75. 2012 begins on September 15, 2010 at about 4.3 and increases to about 4.75 by October 27, 2010. It then decreases to about 4.3 by December 8, 2010 and remains constant here until March 9, 2011. By December 7, 2011 it has decreased to about 2.25. 2013 begins on September 14, 2011 at about 3.3 and decreases to about 2.6 by December 7, 2011.

Figure: Unemployment Rate

Line chart, by percent, January 20, 2010 to December 7, 2011. Data are from the fourth quarter and are plotted on the Tealbook publication dates. There are three series, 2011, 2012 and 2013. 2011 begins on January 20, 2010 at about 8.15 and generally increases to about 9.1 by September 15, 2010. It then generally decreases to about 8.55 by March 9, 2011 and then increases to about 9.2 by August 3, 2011. By December 7, 2011 it has generally decreased to about 8.8. 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. By December 7, 2011 it has generally increased to about 8.65. 2013 begins on September 14, 2011 at about 8.1 and generally increases to about 8.25 by December 7, 2011.

Figure: Change in PCE Prices excluding Food and Energy

Line chart, by percent, January 20, 2010 to December 7, 2011. Data are Q4 over Q4 and are plotted on the Tealbook publication dates. There are three series, 2011, 2012 and 2013. 2011 begins on January 20, 2010 at about 1.1. It then generally decreases to about 0.8 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 September 14, 2011 it has increased to about 1.9. It then decreases to about 1.65 by December 7, 2011. 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 June 15, 2011 it has increased to about 1.5. It remains constant here until December 7, 2011. 2013 begins on September 14, 2011 at about 1.3 and generally increases to about 1.4 by December 7, 2011.

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

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

Last update: February 3, 2017

International Economic Developments and Outlook

Recent Foreign Indicators

Figure: Nominal Exports

Line chart, by index where January 2007 = 100, 2007 to 2011. 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 133 by mid-2008. It then generally decreases to about 85 by early 2009 and then generally increases to about 140 by late 2011. AFE begins in early 2007 at about 100 and generally increases to about 130 by mid-2008. It then generally decreases to about 81 by early 2009 and then generally increases to about 127 by late 2011. EME begins in early 2007 at about 100 and generally increases to about 134 by mid-2008. By early 2009 it has generally decreased to about 88 and by early 2011 it has generally increased to about 160. It then generally decreases to about 153 by late 2011.

Note: EME excludes Venezuela.

Figure: Industrial Production

Line chart, by index where January 2007 = 100, 2007 to 2011. 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 103.5 by early 2008. It then generally decreases to about 90 by early 2009 and then generally increases to about 107 by late 2011. AFE begins in early 2007 at about 100 and generally increases to about 101 by mid-2007. It then generally decreases to about 84 by early 2009 and then generally increases to about 95.5 by late 2011. 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 122 by late 2011.

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

Figure: Retail Sales

Line chart, by 12-month percent change, 2007 to 2011. 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 -2.3 by early 2009 and then generally increases to about 6.2 by early 2010. By late 2011 it has generally decreased to about 2.5. 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 -4.3 by early 2009 and then generally increases to about 5.1 by early 2010. By early 2011 it has generally decreased to about -1.5 and by mid-2011 it has generally increased to about 1. EME begins in early 2007 at about 6 and generally increases to about 10.5 within a month or so. It then generally decreases to about 3.3 by late 2008. By early 2010 it has generally increased to about 11 and by early 2011 it has generally decreased to about 4.0. It then generally increase to about 7.5 by mid-2011 and then generally decreases to about 5.1 by late 2011.

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 2011. 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 2.02 by mid-2007. It then increases to about 2.3 by late 2007 and then generally decreases to about -1.25 by mid-2009. By mid-2011 it has generally increased to about 1.6. 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 -1.8 by mid-2009 and then generally increases to about 1.0 by mid-2011. EME begins in early 2007 at about 2.9 and generally increases to about 3.3 by late 2007. It then generally decreases to about 0.4 by mid-2009 and then generally increases to about 2.98 by mid-2011.

Note: EME excludes Argentina and Mexico.

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 -0.95 by mid-2009. By late 2011 it has generally increased to about 2.5. Core begins in early 2007 at about 1.28 and generally increases to about 1.4 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 0.6 and by late 2011 it has generally increased to about 1.25.

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 2011 it has generally increased to about 4.7. Excluding food -- East Asia begins in early 2007 at about 1.3. It then generally increases to about 4.1 by mid-2008 and then generally decreases to about -2.1 by mid-2009. By late 2011 it has generally increased to about 2.2. Excluding food -- Latin America begins in early 2007 at about 3.6 and then generally decreases to about 3.2 within a few months. It then generally increases to about 5.8 by late 2008 and then generally decreases to about 3.4 by late 2009. By early 2010 it has generally increased to about 4.6 and by late 2011 it has generally decreased to about 3.3.

The Foreign Outlook

(Percent change, annual rate)

	2010	2011				2012	2013
		Q1	Q2	Q3	Q4		
Real GDP							
Total foreign	4.3	3.9	2.4	3.6	2.3	2.5	3.0
Previous Tealbook	4.3	4.0	2.3	3.6	2.8	3.0	3.4
Advanced foreign economies	2.7	2.2	.1	2.7	1.0	.8	1.6
Previous Tealbook	2.7	2.2	.1	2.3	1.5	1.6	2.1
Emerging market economies	6.1	5.7	5.0	4.7	3.7	4.4	4.6
Previous Tealbook	6.1	6.0	4.7	4.9	4.2	4.5	4.8
Consumer Prices							
Total foreign	3.2	4.3	3.2	3.1	3.5	2.3	2.3
Previous Tealbook	3.2	4.3	3.2	3.1	2.7	2.3	2.4
Advanced foreign economies	1.7	3.2	2.1	1.1	2.9	1.2	1.1
Previous Tealbook	1.7	3.2	2.1	1.1	1.7	1.2	1.5
Emerging market economies	4.3	5.1	4.1	4.6	3.9	3.2	3.2
Previous Tealbook	4.4	5.1	4.0	4.7	3.6	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, 2008 to 2013. Data are annual rate. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in early 2008 at about 3 and generally decreases to about -9.8 by early 2009. It then generally increases to about 5.5 by late 2009 and then generally decreases to about 2 by late 2011. By the end of 2013 it has generally increased to about 3.5. Previous Tealbook follows the Current Tealbook series almost exactly except that it decreases to about 3 by late 2011 and then increases to about 3.7 by the end of 2013.

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

Line chart, by percent change, 2008 to 2013. 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 2008 at about 1 and generally decreases to about -9.7 by early 2009. It then generally increases to about 4.5 by early 2010 and then generally decreases to about 0 by early 2011. By mid-2011 it has generally increased to about 3 and by 2012 it has generally decreased to about 0.5. It then generally increases to about 1.7 by the end of 2013. Advanced Foreign Economies Previous Tealbook follows the Advanced Foreign Economies Current Tealbook series almost exactly until mid-2011 when it generally increases to about 2. It then generally decreases to about 2.5 by 2012 and then generally increases to about 2 by the end of 2013. Emerging Market Economies Current Tealbook begins in early 2008 at about 5.2 and generally decreases to about -9.7 by early 2009. By mid-2009 it has generally increased to about 10 and by late 2011 it has generally decreased to about 3.5. It then generally increases to about 4.8 by the end of 2013. Emerging Market Economies Previous Tealbook follows the Emerging Market Economies Current Tealbook series almost exactly until early 2011. By late 2011 it has generally decreased to about 4.5 and by the end of 2013 it has generally increased to about 4.9.

Figure: Consumer Prices [Total Foreign]

Line chart, by percent change, 2008 to 2013. Data are annual rate. There is a horizontal line at zero. There are two series, Current Tealbook and Previous Tealbook. Current Tealbook begins in early 2008 at about 5. It then generally decreases to about -1 by late 2008 and then generally increases to about 3.3 by early 2010. By mid-2010 it has generally decreased to about 1.8 and by late 2010 it has generally increased to about 5.2. It then generally decreases to about 2.2 by the end of 2013. Previous Tealbook follows Current Tealbook almost exactly until mid-2011. By the end of 2013 it has generally decreased to about 2.5.

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

Line chart, by percent change, 2008 to 2013. 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 2008 at about 2.7 and generally increases to about 3.95 by mid-2008. It then generally decreases to about -2.2 by late 2008. It then generally increases to about 2 by early 2010 and then generally decreases to about 0.4 by mid-2010. By late 2010 it has generally increased to about 3.1 and by mid-2011 it has generally decreased to about 0.7. It then generally increases to about 3.0 by late 2011 and generally decreases to about 1.2 by the end of 2013. Advanced Foreign Economies Previous Tealbook follows the Advanced Foreign Economies Current Tealbook series almost exactly until mid-2011. By late 2011 it increases to about 1.6 and by mid-2012 it has generally decreased to about 1.0. It then generally increases to about 1.7 by the end of 2013. Emerging Market Economies Current Tealbook begins in early 2008 at about 7.1. It then generally decreases to about -0.7 by early 2009 and then generally increases to about 4.5 by early 2010. By mid-2010 it has generally decreased to about 2.7 and by late 2010 it has generally increased to about 6.7. It then generally decreases to about 3.2 by the end of 2013. Emerging Market Economies Previous Tealbook follows Emerging Market Economies Current Tealbook almost exactly.

Blue shading represents the projection period, which begins in 2011:Q3.

Evolution of Staff's International Forecast

Figure: Total Foreign GDP

Line chart, by percent change, Q4 over Q4, January 22, 2009 to December 7, 2011. The x-axis is Tealbook publication dates. There are four series, 2010, 2011, 2012 and 2013. 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 4.3 by December 7, 2011. 2011 begins on September 16, 2009 at about 4.05 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 3.6 by June 15, 2011. By December 7, 2011 it has decreased to about 3.05. 2012 begins on September 15, 2010 at about 3.5. From September 15, 2010 to June 15, 2011 it fluctuates between about 3.5 and 3.7. It then decreases to about 2.5 by December 7, 2011. 2013 begins on September 14, 2011 at about 3.4 and decreases to about 3.0 by December 7, 2011.

Figure: Total Foreign CPI

Line chart, by percent change, Q4 over Q4, January 22, 2009 to December 7, 2011. The x-axis is Tealbook publication dates. There are four series, 2010, 2011, 2012 and 2013. 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 2.55 by April 21, 2010 and then generally decreases to about 2.15 by August 4, 2010. By December 7, 2011 it has generally increased to about 3.15. 2011 begins on September 16, 2009 at about 1.75 and generally increases to about 3.17 by April 20, 2011. It then decreases to about 3.0 by June 15, 2011 and then increases to about 3.5 by December 7, 2011. 2012 begins on September 15, 2010 at about 2.3 and generally increases to about 2.4 by August 3, 2011. It then decreases to about 2.35 by December 7, 2011. 2013 begins on September 14, 2011 at about 2.4 and increases to about 2.45 by October 26, 2011. It then decreases to about 2.25 by December 7, 2011.

Figure: U.S. Current Account Balance

Line chart, by percent of GDP, January 22, 2009 to December 7, 2011. The x-axis is Tealbook publication dates. There are four series, 2010, 2011, 2012 and 2013. 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 by April 20, 2011. It remains relatively stable here until December 7, 2011. 2011 begins on September 16, 2009 at about -3.05 and generally increases to about -2.95 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 June 15, 2011 it has increased to about -2.5. It then decreases to about -2.8 by August 3, 2011 and then increases to about -2.65 by December 7, 2011. 2012 begins on September 15, 2010 at about -2.9 and decreases to about -3.1 by December 8, 2010. It then increases to about -2.0 by June 15, 2011 and then decreases to about -2.8 by December 7, 2011. 2013 begins on September 14, 2011 at about -2.2 and decreases to about -2.98 by December 7, 2011.

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

Last update: February 3, 2017

December 2011 Tealbook A Tables and Charts[†]

Financial Developments

Policy Expectations and Treasury Yields

Figure: Selected Interest Rates

Line chart, by percent, October 31, 2011 to December 6, 2011. There is a vertical line on November 2nd noting the November FOMC, on November 3rd noting ISM, on November 4th noting Nonfarm payrolls, on November 15th noting Retail Sales, on November 16th noting CPI, on November 22nd noting the FOMC minutes, on November 30th noting the swap line announcement and on December 2nd noting nonfarm payrolls. There are two series, 2-year Treasury yield and 10-year Treasury yield. 2-year Treasury yield begins on October 31st at about 0.29 and generally decreases to about 0.21 by November 2nd. From November 2nd to November 15th it fluctuates between about 0.21 and 0.23. It then generally increases to about 0.29 by November 18th. From November 18th to December 6th it fluctuates between about 0.24 and 0.29. On December 6th it is at about 0.25. 10-year Treasury yield begins on October 31st at about 2.24 and generally decreases to about 1.94 by November 1st. It then generally increases to about 2.1 by November 4th and then generally decreases to about 1.91 by November 9th. By November 10th it has generally increased to about 2.09 and by November 23rd it has generally decreased to about 1.88. It then generally increases to about 2.13 by December 1st and then generally decreases to about 2.09 by December 6th.

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 December 2011. Data are daily. There is a vertical line in early November 2011 marking the November FOMC. 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 5.8 by early August 2010. By late August 2010 it has generally increased to about 7.6 and by November 2010 it has generally decreased to about 6.0. It then generally increases to about 9.1 by December 2010 and then generally decreases to about 5.9 by May 2011. By October 2011 it has generally increased to about 8 and by December 6, 2011 it has generally decreased to about 6.6.

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

Source: Bloomberg.

Figure: Implied Federal Funds Rate

Line chart, by percent, 2012:Q1 to 2015:Q3. There are four series, "Mean: December 6, 2011", "Mean: November 1, 2011", "Mode: December 6, 2011" and "Mode: November 1, 2011". "Mean: December 6, 2011" begins in 2012:Q2 at about 0.12 and remains relatively stable here until 2013:Q1. It then generally increases to about 1.35 by 2015:Q3. "Mean: November 1, 2011" begins in 2012:Q1 at about 0.1 and generally decreases to about 0.09 by 2012:Q4. It then increases to about 1.25 by 2015:Q2. "Mode: December 6, 2011" begins in 2012:Q1 at about 0.09 and generally decreases to about 0.05 by 2012:Q3. It then generally increases to about 0.25 by 2015:Q2. "Mode: November 1, 2011" begins in 2012:Q1 at about 0.1 and generally decreases to about 0.03 by 2013:Q1. It then generally increases to about 0.17 by 2015:Q2.

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

Source: Bloomberg and CME Group.

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

Bar chart, by percent, from 2013:Q1 to 2016:Q4. There are two series, "Recent: 19 respondents" and "Nov. FOMC: 19 respondents". "Recent: 19 respondents" begins in 2013:Q1 at about 0 and increases to about 11 by 2013:Q3. It then decreases to about 5 by 2013:Q4 and then increases to about 26 by 2014:Q2. By 2015:Q2 it has decreased to 0 and remains constant here until 2016:Q1. It then increases to about 5 by 2016:Q2 and then decreases to 0 in 2016:Q3 and remains here until 2016:Q4. "Nov. FOMC: 19 respondents" begins in 2013:Q1 at about 0 and increases to about 15 by 2013:Q3. It then decreases to about 11 by 2014:Q1 and then increases to about 26 by 2014:Q2. By 2015:Q1 it has decreased to about 0 and by 2015:Q2 it has increased to about 5. It then decreases to about 0 by 2015:Q3 and remains constant here until 2016:Q4.

Source: Desk's Dealer Survey from December 5, 2011.

Figure: Inflation Compensation

Line chart, by percent, 2010 to 2011. Data are daily. There is a vertical line in November 2011 marking the November FOMC. There are two series, 5 to 10 years ahead and Next 5 years. 5 to 10 years ahead begins in 2010:Q1 at about 3.25 and generally decreases to about 2.1 by 2010:Q3. It then generally increases to about 3.3 by 2010:Q4 and then generally decreases to about 2.7 by 2011:Q2. By 2011:Q3 it has generally increased to about 3.25 and by December 6, 2011 it has generally decreased to about 2.5. Next 5 years begins in 2010:Q1 at about 2.0 and decreases to about 1.1 by 2010:Q3. It then generally increases to about 2.3 by 2011:Q1 and

then generally decreases to about 1.4 by 2011:Q3. By December 6, 2011 it has generally increased to about 1.9.

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

Source: Barclays PLC and staff estimates.

Short-Term Funding Markets and Financial Institutions

Figure: Selected Interest Rate Spreads

Line chart, by basis points, January 2010 to December 2011. Data are daily. There is a vertical line in November 2011 marking the November FOMC. There are two series, 3-month Libor over OIS and 1-week Libor over OIS. 3-month Libor over OIS begins in January 2010 at about 9 and generally decreases to about 6 by March 2010. It then generally increases to about 34 by July 2010 and then generally decreases to about 10 by September 2010. By March 2011 it has generally increased to about 17 and by June 2011 it has generally decreased to about 11. It then generally increases to about 43 by December 6, 2011. 1-week Libor over OIS begins in January 2010 at about 8 and generally decreases to about 2 by April 2010. It then generally increases to about 17 by June 2010 and then generally decreases to about 5 by December 2010. By March 2011 it has generally increased to about 11 and by June 2011 it has generally decreased to about 5. It then generally increases to about 11 by December 6, 2011.

Source: Bloomberg.

Figure: Dollar Funding Spreads

Line chart, by basis points, April 2010 to December 2011. Data are daily. There is a vertical line in November 2011 representing the November FOMC. There are two series, USD 3x6 FRA-OIS and 3-month euro-dollar implied basis swap. USD 3x6 FRA-OIS begins in April 2010 at about 13 and generally increases to about 69 by May 2010. It then generally decreases to about 17 by October 2010 and then generally increases to about 38 by November 2010. By April 2011 it has generally decreased to about 14 and by December 6, 2011 it has generally increased to about 48. 3-month euro-dollar implied basis swap begins in April 2010 at about 30 and generally increases to about 62 by May 2010. It then generally decreases to about 18 in July 2010 and then generally increases to about 46 by August 2010. By October 2010 it has generally decreased to about 12 and by December 2010 it has generally increased to about 55. By May 2011 it has generally decreased to about -1 and by December 6, 2011 it has generally increased to about 108.

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

Source: Bloomberg; staff estimates.

Figure: Unsecured Dollar Financial Commercial Paper Outstanding

Line chart, by billions of dollars, January 2011 to December 2011. Data are daily. There is a vertical line in November 2011 representing the November FOMC. There are two series, European issuers and U.S. issuers. European issuers begins in January at about 340 and generally increases to about 410 by May. It then generally decreases to about 225 by December 6. U.S. issuers begins in January at about 100 and remains relatively stable here until late April. It then gradually decreases to about 80 by December 6.

Source: Depository Trust & Clearing Corporation.

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

Line chart, by days, January 2010 to November 2011. Data are weekly. There is a vertical line in November 2011 representing the November FOMC. There are two series, U.S. parent and European parent. U.S. parent begins in January 2010 at about 41.5 and generally increases to about 49.5 by March 2010. It then generally decreases to about 35 by June 2010 and then generally increases to about 52.5 by September 2010. By January 2011 it has generally decreased to about 39.8 and by March 2011 it has generally increased to about 51. It then generally decreases to about 44 by May 2011 and then generally increases to about 50 by June 2011. By August 2011 it has generally decreased to about 43 and by November 30, 2011 it has generally increased to about 46. European parent begins in January 2010 at about 41.5 and generally increases to about 48 by March 2011. It then generally decreases to about 35 by June 2010 and then generally increases to about 56.5 by November 2010. By January 2011 it has generally decreased to about 43 and by June 2011 it has generally increased to about 55. It then generally decreases to about 38 by November 30, 2011.

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

Figure: S&P 500 Diversified Financials Stock Price Index

Line chart, by log scale where Nov. 1, 2011 = 100, January 2010 to December 2011. Data are daily. There is a vertical line in November 2011 representing the November FOMC. The series begins in January 2010 at about 139 and generally decreases to about 123 by February 2010. It then generally increases to about 159 by April 2010 and then generally decreases to about 116 by August 2010. By February 2011 it has generally increased to about 151 and by early October 2011 it has generally decreased to about 87. It then generally increases to about 113 by late October 2011. By November 2011 it has generally decreased to about 88 and by December 6, 2011 it has generally increased to about 101.

Source: Bloomberg.

Figure: CDS Spreads of Large Bank Holding Companies

Line chart, by basis points, January 2010 to December 2011. Data are daily. There is a vertical line in November 2011 representing the November FOMC. There are six series, Citigroup, JPMorgan Chase, Wells Fargo, Goldman Sachs, Bank of America, and Morgan Stanley. Citigroup begins in January 2010 at about 155 and increases to about 235 by February 2010. It then generally decreases to about 125 by April 2010 and then generally increases to about 220 by June 2010. By April 2011 it has generally decreased to about 110 and by early October 2011 it has generally increased to about 360. It then generally decreases to about 200 by late October 2011 and then generally increases to about 320 by November 2011. By December 6, 2011 it has generally decreased to about 240. JPMorgan Chase begins in January 2010 at about 50 and generally increases to about 90 by February 2010. It then generally decreases to about 50 by April 2010 and then generally increases to about 120 by June 2010. By February 2011 it has generally decreased to about 60 and by December 6, 2011 it has generally increased to about 140. Wells Fargo begins in January 2010 at about 90 and generally increases to about 110 by February 2010. It then generally decreases to about 75 by April 2010 and then generally increases to about 145 by June 2010. By August 2010 it has generally decreased to about 90 and by October 2010 it has generally increased to about 130. It then generally decreases to about 80 by April 2011 and then generally increases to about 140 by December 6, 2011. Goldman Sachs begins in January 2010 at about 90 and generally increases to about 145 by February 2010. It then generally decreases to about 95 by April 2010 and then generally increases to about 210 by June 2010. By February 2011 it has generally decreased to about 100 and by December 6, 2011 it has generally increased to about 300. Bank of America begins in January 2010 at about 100 and generally increases to about 150 by February 2010. It then generally decreases to about 100 by April 2010 and then generally increases to about 220 by November 2010. By April 2011 it has generally decreased to about 120 and by December 6, 2011 it has generally increased to about 400. Morgan Stanley begins in January 2010 at about 100 and generally increases to about 160 by February 2010. It then generally decreases to about 120 by April 2010 and then generally increases to about 300 by June 2010. By April 2011 it has generally decreased to about 125 and by September 2011 it has generally increased to about 598. It then generally decreases to about 300 by October 2011 and then generally increases to about 530 by November 2011. By December 6, 2011 it has generally decreased to about 397.

Source: Markit.

[Box:] U.S. Dollar Funding Pressures and Dollar Liquidity Swap Arrangements

Figure: Dollar Funding Costs in Europe

Line chart, by basis points, January 2011 to December 2011. Data are three-month dollar funding costs. There is shading from the end of October through December to denote the period since the previous FOMC meeting. There are three series, Swap line cost, Cost of 3-month funding through FX swap market and Dollar Libor. Swap line cost begins in January 2011 at about 119 and generally declines slowly to about 115 by late November 2011. It then drops abruptly to about 60 by early December 2011. Cost of 3-month funding through FX swap market begins in January 2011 at about 76 and generally decreases to about 28 by May 2011. It then generally increases to about 203 by November 2011 and then generally decreases to about 156 by December 2011. Dollar Libor begins in January 2011 at about 30 and remains relatively constant here until late March 2011. It then generally decreases to about 25 by late July 2011. By December 2011 it has generally increased to about 55.

Note: The cost of 3-month funding through FX swap market series is assuming banks pay euro Libor to obtain funding. The new swap line cost was announced November 30, 2011 for the swap line cost series.

Foreign Developments

Figure: Euro-Area 10-Year Government Bond Spreads

Line chart, by percentage points, 2010 to 2011. Data are daily. There is a vertical line in November 2011 marking the November FOMC. There are five series, Greece, Portugal, Spain, Ireland, and Italy. Greece begins in 2010:Q1 at about 2.2 and generally increases to about 9.7 by early 2010:Q2. It then generally decreases to about 4.2 by mid-2010:Q2 and then generally increases to about 9.56 by late 2010:Q3. By early 2010:Q4 it has generally decreased to about 6.5 and by early 2011:Q1 has generally increased to about 9.8. It then generally decreases to about 7.5 by mid-2011:Q1 and then generally increases to about 15.8 by early 2011:Q3. Within a week or so it decreases to about 11.8 and by December 6, 2011 it has generally increased to about 31.0. Portugal begins in 2010:Q1 at about 0.6 and generally increases to about 3.7 by mid-2010:Q2. It then generally decreases to about 1.5 within a week or so. By mid-2010:Q4 it has generally increased to about 4.5 and by late 2010:Q4 it has generally decreased to about 3. It then generally increases to about 11.0 by early 2011:Q3 and then generally decreases to about 7.7 by mid-2011:Q3. By December 6, 2011 it has generally increased to about 10.8. Spain begins in early 2010:Q1 at about 0.6 and generally increases to about 2.2 by late 2010:Q2. From late 2010:Q2 to early 2010:Q4 it generally fluctuates between 1.3 and 2.2. It then generally increases to about 3.0 by mid-2010:Q4 and then generally decreases to about 1.5 by early 2011:Q2. By mid-2011:Q4 it has generally increased to about 4.7 and by December 6, 2011 it has generally decreased to about 2.8. Ireland begins in 2010:Q1 at about 1.4 and generally increases to about 3.0 by mid-2010:Q2. It then generally decreases to about 1.7 within a week or so. By mid-2010:Q4 it has generally increased to about 7.0 and by late 2010:Q4 it has generally decreased to about 5.0. It then generally increases to about 11.7 by early 2011:Q3 and then generally decreases to about 5.2 by the end of 2011:Q3. It then generally increases to about 6.8 by December 6, 2011. Italy begins in early 2010:Q1 at about 0.65 and generally increases to about 1.7 by late 2010:Q2. From late 2010:Q2 to late 2011:Q2 it generally fluctuates between 1.0 and 2.0. It then generally increases to about 6.0 by mid-2011:Q4 and then generally decreases to about 3.6 by December 6, 2011.

Note: Spread over German bunds.

Source: Bloomberg.

Figure: Nominal 10-Year Government Bond Yields

Line chart, by percent, 2010 to 2011. Data are daily. There is a vertical line in November 2011 marking the November FOMC. There are three series, Germany, United Kingdom, and Japan. Germany begins in 2010:Q1 at about 3.3 and generally decreases to about 2.05 by 2010:Q3. It then generally increases to about 3.5 by 2011:Q2 and then generally decreases to about 1.55 by late 2011:Q3. By December 6, 2011 it has generally increased to about 2.2. United Kingdom begins in early 2010:Q1 at about 4.0. From early 2010:Q1 to early 2010:Q2 it fluctuates between about 3.9 and 4.2. It then generally decreases to about 2.7 by 2010:Q3 and then generally increases to about 3.9 by 2011:Q1. By December 6, 2011 it has generally decreased to about 2.25. Japan begins in early 2010:Q1 at about 1.3. From early 2010:Q1 to early 2010:Q2 it fluctuates between about 1.25 and 1.4. It then generally decreases to about 0.9 by early 2010:Q4 and then increases to about 1.25 by late 2011:Q1. It then generally decreases to about 1.01 by December 6, 2011.

Source: Bloomberg.

Figure: Stock Price Indexes

Line chart, by index where January 1, 2010=100, 2010 to 2011. Data are daily. There is a vertical line in November 2011 marking the November FOMC. There are four series, DJ Euro, Topix, FTSE, and MSCI Emerging Markets. DJ Euro begins in early 2010:Q1 at about 100 and generally decreases to about 90 by mid-2010:Q1. It then generally increases to about 104 by early 2010:Q2 and then generally decreases to about 86 by mid-2010:Q2. By mid-2011:Q1 it has generally increased to about 109 and by late 2011:Q1 it has generally decreased to about 97. It then generally increases to about 107 by mid-2011:Q2 and then generally decreases to about 72 by late 2011:Q3. By early 2011:Q1 it has generally increased to about 89 and by mid-2011:Q4 it has generally decreased to about 73. It then generally increases to about 84 by December 6, 2011. Topix begins in early 2010:Q1 at about 100 and generally increases to about 107 within a few weeks. It then generally decreases to about 97 by mid-2010:Q1 and then generally increases to about 110 by early 2010:Q2. By 2010:Q4 it has generally decreased to about 89 and by mid-2011:Q1 it has generally increased to about 108. It then generally decreases to about 84 by late 2011:Q1. Within a week or so it generally increases to about 97 and by late 2011:Q2 it has generally decreased to about 89. It then generally increases to about 97 by early 2011:Q3 and then generally decreases to about 81 by December 6, 2011. FTSE begins in early 2010:Q1 at about 100 and generally decreases to about 93 by mid-2010:Q1. It then generally increases to about 109 by early 2010:Q2 and then generally decreases to about 88 by early 2010:Q3. It then generally increases to about 113 by early 2011:Q1 and then generally decreases to about 103 by late 2011:Q1. By early 2011:Q3 it has generally increased to about 112.5 and by early 2011:Q4 it has generally decreased to about 91. It then generally increases to about 103 by December 6, 2011. MSCI Emerging Markets begins in early 2010:Q1 at about 100 and generally increases to about 104 within a few weeks. It then generally decreases to about 90 by mid-2010:Q1 and then generally increases to about 106 by early 2010:Q2. By mid-2010:Q2 it has generally decreased to about 86 and by 2010:Q4 it has generally increased to about 117. From early 2010:Q4 to mid-2011:Q1 it fluctuates between about 109 and 119. It then generally increases to about 122 by early 2011:Q2 and then generally decreases to about 83 by early 2011:Q4. By December 6, 2011 it has generally increased to about 97.

Source: Bloomberg.

Figure: Nominal Trade-Weighted Dollar Indexes

Line chart, by index where January 1, 2010 = 100, 2010 to 2011. Data are daily. There is a vertical line in November 2011 marking the November FOMC. There are three series, Broad, Major, and OITP (other important trading partners). Broad begins in early 2010:Q1 at about 100 and generally increases to about 102 by mid-2010:Q1. It then generally decreases to about 99 by early 2010:Q2 and then generally increases to about 105 by mid-2010:Q2. By early 2010:Q3 it has generally decreased to about 99.8 and by mid-2010:Q3 it has generally increased to about 102. It then generally decreases to about 95.2 by early 2010:Q4 and then generally increases to about 99.5 by mid-2010:Q4. By 2011:Q2 it has generally decreased to about 92 and by early 2011:Q4 it has generally increased to about 100. It then generally decreases to about 96 by mid-2011:Q4 and then generally increases to about 97.5 by December 6, 2011. Major begins in early 2010:Q1 at about 100 and generally increases to about 103 by mid-2010:Q1. From mid-2010:Q1 to early 2010:Q2 it fluctuates between about 100.3 and 103. It then generally increases to about 109 by mid-2010:Q2. By early 2010:Q3 it has generally decreased to about 100.5 and by mid-2010:Q3 it has generally increased to about 104.3. It then generally decreases to about 95.5 by early 2010:Q4 and then generally increases to about 101 by mid-2010:Q4. By 2011:Q3 it has generally decreased to about 91.5 and by December 6, 2011 it has generally increased to about 97.5. OITP begins in early 2010:Q1 at about 100 and generally increases to about 101.5 by mid-2010:Q1. It then generally decreases to about 97.5 by early 2010:Q2 and then generally increases to about 101.8 by mid-2010:Q2. By 2011:Q2 it has generally decreased to about 92.5 and by early 2011:Q4 it has generally increased to about 100. By mid-2011:Q4 it has generally increased to about 95.3 and by December 6, 2011 it has generally increased to about 97.5.

Source: Federal Reserve Board; Bloomberg.

Figure: Policy Rates

Line chart, by percent, 2010 to 2011. There is a vertical line in November 2011 marking the November FOMC. There are three series, China required reserve rate, Brazil, and Euro Area. China required reserve rate begins in 2010:Q1 at about 16 and generally increases to about 17 by mid-2010:Q2. It remains constant here until 2010:Q4 and then generally increases to about 21.5 by 2011:Q2. It remains constant at 21.5 until mid-2011:Q4 and then decreases to about 21 by December 6, 2011. Brazil begins in early 2010:Q1 at about 8.5 and remains constant here until early 2010:Q2. It then generally increases to about 10.5 by early 2010:Q3 and remains constant here until early 2011:Q1. By 2011:Q3 it has generally increased to about 12.5 and by December 6, 2011 it has generally decreased to about 11. Euro area begins in 2010:Q1 at about 1 and remains constant here until 2011:Q2. It then generally increases to about 1.75 by 2011:Q3 and remains constant here until 2011:Q4. It then decreases to about 1.5 by December 6, 2011.

Note: The China required reserve rate is for large banks.

Source: Bloomberg.

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

Bar chart, by billions of dollars, annual rate, 2009 to 2011. There is a horizontal line at zero. There are two series, Official and Private. Approximate values: 2009: Official 580, Private -10. 2010: Official 400, Private 240. 2011:H1: Official 200, Private -100. 2011:Q3: Official 190, Private 400. October 2011: Official -230, Private 150.

Source: Treasury International Capital data adjusted for staff estimates.

Domestic Asset Market Developments

Figure: S&P 500 Stock Price Index

Line chart, by log scale where November 1, 2011 = 100, January 2010 to December 2011. There is a vertical line in November 2011 marking the November FOMC.

Data are daily. The series begins in January 2010 at about 93 and generally decreases to about 87 by February 2010. It then generally increases to about 100 by April 2010 and then generally decreases to about 84 by July 2010. By April 2011 it has generally increased to about 112 and by October 2011 it has generally decreased to about 90. It then generally increases to about 113 by December 6, 2011.

Source: Bloomberg.

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

Line chart, by percent, log scale, 2007 to 2011. Data are daily. There is a vertical line in November 2011 marking the November FOMC. The series begins in 2007:Q1 at about 9 and generally increases to about 33 by 2008:Q1. It then generally decreases to about 13.2 by 2008:Q2 and then generally increases to about 80 by 2008:Q4. By early 2010:Q2 it has generally decreased to about 13 and by mid-2010:Q2 it has generally increased to about 45. It then generally decreases to about 12 by 2011:Q2 and then generally increases to about 48 by 2011:Q3. By December 6, 2011 it has generally decreased to about 28.

Source: Chicago Board Options Exchange.

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 2.1 and by 2002 it has generally increased to about 6.9. It then generally decreases to about 4.8 by 2004 and then generally increases to about 12 by 2008. By 2010 it has generally decreased to about 8 and by December 6, 2011 it has generally increased to about 9.2. 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 4.5 by 1995. From 1995 to 2000 it fluctuates between about 2.2 and 4.5. It then generally decreases to about 0.8 by 2003 and then generally increases to about 2.7 by 2007. By December 6, 2011 it has generally decreased to about -0.1.

Note: Expected real yield on 10-year Treasury is off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation. December 6, 2011 values are the latest observations using daily interest rates and stock prices and latest earnings data.

Source: Thomson Financial.

Figure: S&P 500 Earnings per Share

Line chart, dollars per share, 2000 to 2011. Data are quarterly. The series begins in early 2000 at about 14 and generally increases to about 14.4 by mid-2000. It then generally decreases to about 10.3 by late 2001 and then generally increases to about 24 by mid-2007. By late 2007 it has generally decreased to about 16 and by early 2008 it has generally increased to about 19.5. It then generally decreases to about 5.6 by late 2008 and then generally increases to about 25.5 by 2011:Q3.

Note: Data are seasonally adjusted by staff.

Source: Thomson Financial.

Figure: Corporate Bond Spreads

Line chart, by basis points, 2007 to 2011. Data are daily. There is a vertical line in November 2011 marking the November FOMC. 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 360 by 2011:Q1 and then generally increases to about 550 by December 6, 2011. 10-year BBB begins in 2007:Q1 at about 140 and then generally increases to about 650 by 2008:Q4. It then generally decreases to about 160 by early 2010:Q2 and then generally increases to about 220 by late 2010:Q2. By 2011:Q2 it has generally decreased to about 170 and by December 6, 2011 it has generally increased to about 275.

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

Source: Merrill Lynch and staff estimates.

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

Line chart, by basis points, 2009 to 2011. Data are 5-day moving averages. There is a vertical line in November 2011 marking the November FOMC. The series begins in April 2009 at about 86 and generally decreases to about 7 by January 2010. It then generally increases to about 25 by July 2010. From July 2010 to April 2011 it fluctuates between about 13 and 25. By December 6, 2011 it generally increases to about 39.

Note: The A2/P2 spread is the A2/P2 nonfinancial rate minus the AA nonfinancial rate. The December 6, 2011 value is the latest available single-day observation.

Source: Depository Trust & Clearing Corporation.

Business Finance

Figure: Selected Components of Net Debt Financing, Nonfinancial Firms

Bar chart, by billions of dollars, 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 curve 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 6, Commercial paper 1, Total 24. 2009: Bonds 32, C&I -27, Commercial paper -5, Total 0. 2010: Bonds 34, C&I -5, Commercial paper 2, Total 31. 2011:H1: Bonds 34, C&I 6, Commercial paper 3, Total 43. 2011:Q3: Bonds 24, C&I 13, Commercial paper 3, Total 40. October 2011: Bonds 15, C&I 17, Commercial paper 17, Total 49. November 2011 (estimates): Bonds 53, C&I 5, Commercial paper 3, Total 61.

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

Figure: Gross Issuance of Institutional Leveraged Loans

Bar chart, by billions of dollars, 2007 to 2011. Data are monthly rate. The series begins in 2007 at about 36 and decreases to about 4 by 2009. It then increases to about 33 by 2011:H1 and then decreases to about 11 by 2011:Q3. By October 2011 it has increased to about 12.

Source: Reuters Loan Pricing Corporation.

Figure: Selected Components of Net Equity Issuance, Nonfinancial Firms

Bar chart, by billions of dollars, 2007 to 2011. 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 curve 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 -31, Cash mergers -17, Total -22. 2009: Private issuance 15, Public issuance 6, Repurchases -12, Cash mergers -12, Total -3. 2010: Private issuance 9, Public issuance 5, Repurchases -25, Cash mergers -13, Total -23. 2011:H1: Private issuance 9, Public issuance 8, Repurchases -28, Cash mergers -16, Total -27. 2011:Q3 (estimates): Private issuance 10, Public issuance 1, Repurchases -40, Cash mergers -18, Total -47.

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

Figure: Financial Ratios for Nonfinancial Corporations

Line chart, by ratio, 1989 to 2011. There are two series, Debt over total assets, and Liquid assets over total assets. Debt over total assets begins in 1989 at about 0.333 and generally decreases to about 0.275 by 1996. It then generally increases to about 0.315 by 2002 and then generally decreases to about 0.248 by 2005. By 2009 it has generally increased to about 0.299 and by 2011:Q3 it has generally decreased to about 0.268. Liquid assets over total assets begins in 1989 at about 0.055 and decreases to about 0.048 by 1990. It then generally increases to about 0.103 by 2004 and generally decreases to about 0.085 by 2008. By 2011:Q3 it has generally increased to about 0.108.

Note: Data are annual through 1999 and quarterly thereafter. 2011:Q3 values are preliminary.

Source: Compustat.

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 generally increases to about 14 by 2011:H1. By 2011:Q3 it has decreased to about 9 and by October 2011 it increases to about 17. It then decreases to about 8 by November 2011. 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 5 by 2011:Q3 and increases to about 9 by October 2011. By November 2011 it has decreased to about 8.

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

Figure: CMBS Issuance

Bar chart, by billions of dollars, 2007 to 2011. Data are annual rate. The series begins in 2007 at about 230 and decreases to about 0 by 2009. It then increases to about 35 by 2011:H1 and then decreases to about 30 by 2011:Q4. Part of the 2011:Q4 bar is hollow, about 1 billion dollars, indicating issuance in the pipeline.

Source: Commercial Mortgage Alert.

Household Finance

Figure: Mortgage Rate and MBS Yield

Line chart, by percent, 2007 to 2011. There is a vertical line in November 2011 marking the November FOMC. 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 5.49 by 2008:Q1 and then generally increases to about 6.6 by 2008:Q3. By early 2009:Q2 it has generally decreased to about 4.75 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 5.05 by 2011:Q1. By December 6, 2011 it has generally decreased to about 4.97. 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 2011:Q1 it has generally increased to about 4.5. It then generally decreases to about 3.1 by December 6, 2011.

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

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

Figure: Refinance Activity

Line chart, by index where March 16, 1990=100, 2002 to 2011. Data are weekly. The series begins in 2002 to 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 4100 by early 2008. By late 2008 it has generally decreased to about 1000 and by the end of 2008 it has generally increased to about 6500. It then generally decreases to about 1900 by mid-2009 and then generally increases to about 5000 by mid-2010. By early 2011 it has generally decreased to about 1800 and by December 2, 2011 it has generally increased to about 2700.

Note: Seasonally adjusted by FRB staff.

Source: Mortgage Bankers Association.

Figure: Delinquencies on Prime Mortgages, Transition Rate

Line chart, by percent of loans, 2003 to 2011. There are two series, 3-month moving average and monthly rate. 3-month moving average begins in 2003 at about 1.09 and generally decreases to about 0.81 by 2006. It then generally increases to about 1.47 by the beginning of 2009 and then generally decreases to about 1.07 by October 2011. Monthly rate begins in 2003 at about 1.03 and generally decreases to about 0.76 by 2006. It then generally increases to about 1.71 by 2008 and then generally decreases to about 1.1 by October 2011.

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

Source: LPS Applied Analytics.

Figure: Prices of Existing Homes

Line chart, by index peaks normalized to 100, 2005 to 2011. Data are monthly. The series 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 mid-2010. By October 2011 it has generally decreased to about 67.

Source: CoreLogic.

Figure: Volume of Credit Card Solicitation Mail

Line chart, by millions of mailings, 2002 to 2011. Data are monthly. The series begins in early 2002 at about 480 and increases to about 600 by mid-2002. It then generally decreases to about 370 by 2003 and then generally increases to about 660 by 2005. By 2009 it generally decreases to about 100 and by October 2011 it generally increases to about 390.

Note: In early 2010 there is a break in the series.

Source: Mintel.

Figure: Gross Consumer ABS Issuance

Bar chart, by billions of dollars, 2007 to 2011. Data are monthly rate. There are three series, Auto, Credit card, and Student loan. Approximate values are: 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 0.9, Credit card 1.8, 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:H2: Auto 4.0, Credit card 0.2, Student loan 2.3. 2011:H1: Auto 4.1, Credit card 0.5, Student loan 2.2. 2011:Q3: Auto 5.0, Credit card 0.3, Student loan 1.7. October 2011: Auto 4.3, Credit card 1.5, Student loan 0.4. November 2011: Auto 8.6, Credit card 2.4, Student loan 1.6.

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

Commercial Banking and Money

Figure: Changes in Bank Credit

Line chart, by percent, 2005 to 2011. Data are 3-month change, a.r. There is a horizontal line at zero. There are two series, Total bank credit and C&I loans. Total bank credit begins in 2005:Q1 at about 10. From 2005:Q1 to 2008:Q1 it fluctuates between about 4 and 13. It then generally decreases to about -1 by 2008:Q2 and then generally increases to about 9.8 by 2008:Q4. By 2009:Q3 it has generally decreased to about -12 and by 2010:Q3 it has generally increased to about 1.5. It then generally decreases to about -1.5 by 2011:Q2 and then generally increases to about 5 by November 2011. C&I loans begins in 2005:Q1 at about 12 and generally increases to about 17 by 2005:Q2. It then generally decreases to about 9.8 by 2005:Q4 and then generally increases to about 24 by 2006:Q2. By 2006:Q4 it has generally decreased to about 3 and by 2007:Q4 it has generally increased to about 29.5. It then generally decreases to about 5 by 2008:Q2 and then generally increases to about 25 by 2008:Q4. By 2009:Q3 it has generally decreased to about -29.8 and by November 2011 it has generally increased to about 9.

Source: Federal Reserve Board.

Figure: Return on Assets, by BHC Size

Line chart, by percent, 1997 to 2011. Data are quarterly, s.a.a.r. There is a horizontal line at zero. There are two series, Top 6 BHCs and All other BHCs. Top 6 BHCs begins in 1997 at about 1. From 1997 to late 2006 it fluctuates between about 0.4 and 1.7. It then generally decreases to about -1.3 by 2008 and then generally increases to about 0.95 by late 2010. By 2011:Q2 it has decreased to about 0 and by 2011:Q3 it has increased to about 1.05. All other BHCs begins in 1997 at about 1.2. From 1997 to early 2000 it fluctuates between about 1.1 and 1.3. It then generally decreases to about 0.7 by 2001 and then generally increases to about 1.3 by 2003. By late 2008 it has generally decreased to about -1.7 and by 2011:Q3 it has generally increased to about 0.85.

Note: BHC is a bank holding company.

Source: Federal Reserve Board.

Figure: Bank Holding Company Pretax Income

Bar chart, by percent of average total assets, 2005 to 2011. There is a horizontal line at zero. There are four series, Net interest income, Noninterest income, Noninterest expense, and Provisions. There is also a "Net pretax income" series presented as a curve which sums the total of the other series. Net interest income begins in 2005:Q1 at about 2.7 and generally decreases very gradually to 2.25 by 2007:Q3. It then generally increases to about 2.75 by 2008:Q4 and then decreases to about 2.25 by 2009:Q1. By 2010:Q1 it has generally increased to about 2.5 and by 2011:Q3 it has generally decreased to about 2.25. Noninterest income begins in 2005:Q1 at about 2.7. From 2005:Q1 to 2007:Q2 it fluctuates between about 2.5 and 3.0. It then generally decreases to about 1.2 by 2008:Q4 and then increases to about 2.8 by 2009:Q3. From 2009:Q3 to 2011:Q3 it fluctuates between about 2.4 and 2.8. Noninterest expense begins in 2005:Q1 at about -3.5 and generally decreases very gradually to -2.8 by 2008:Q1. It then increases to about -4 by 2008:Q4 and then decreases to about -3.2 by 2009:Q1. From 2009:Q1 to 2011:Q3 it fluctuates between about -3.1 and -3.5. Provisions begins in 2005:Q1 at about -0.2. From 2005:Q1 to 2006:Q4 it fluctuates between about -0.1 and -0.3. It then generally increases to about -1.7 by 2008:Q4 and then generally decreases to about -0.5 by 2011:Q3. Net pretax income begins in 2005:Q1 at about 1.75. From 2005:Q1 to 2006:Q4 it fluctuates between about 1.5 and 1.85. It then generally decreases to about -1.9 by 2008:Q4 and then generally increases to about 1.0 by 2011:Q3.

Note: Quarterly, s.a.a.r.

Source: Federal Reserve Board

Figure: Weighted-Average C&I Loan Rate Spread

Line chart, by basis points, 1997 to 2011. Data are quarterly. There are two series, Unadjusted and Adjusted. Unadjusted begins in 1997 at about 190 and generally increases to about 257 by 2003. It then generally decreases to about 220 by 2008 and then generally increases to about 347 by 2010. By 2011:Q4 it has generally decreased to about 320. Adjusted begins in 1997 at about 190 and generally increases to about 225 by 2002. It then generally decreases to about 170 by 2008 and then generally increases to about 302 by 2010. By 2011:Q4 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.

Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	Retail MMMFs	Curr.
2010	3.2	10.9	-21.5	-15.5	5.9
2011:H1	5.6	10.0	-18.9	-6.7	10.1
2011:Q3	19.9	27.9	-20.5	11.2	7.9
Sept.	6.0	9.7	-21.0	-1.2	6.4
Oct.	3.7	5.9	-21.8	10.9	2.9
Nov.(e)	4.8	9.1	-22.8	-13.0	8.3

Note: Retail MMMFs are retail money market mutual funds.

e Estimate. [Return to table](#)

Source: Federal Reserve Board.

Figure: Level of Liquid Deposits

Line chart, by trillion of dollars, 2008 to 2011. Data are weekly. There is a vertical line in November 2011 marking the November FOMC. The series begins in early 2008 at about 4.5 and generally increases to about 7.15 by November 28, 2011.

Note: Seasonally adjusted.

Source: Federal Reserve Board.

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

[Box:] Balance Sheet Developments over the Intermeeting Period

Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (12/05/11)
Total assets	-21	2,812
Selected assets:		
Liquidity programs for financial firms	+0	2
Primary, secondary, and seasonal credit	+0	+0
Foreign central bank liquidity swaps	+0	2
Term Asset-Backed Securities Loan Facility (TALF)	-1	10
Net portfolio holdings of Maiden Lane LLCs	-3	38
Maiden Lane	-2	11
Maiden Lane II	-0	9
Maiden Lane III	-0	18
Securities held outright*	-21	2,599
U.S. Treasury securities	3	1,666
Agency debt securities	-2	106
Agency mortgage-backed securities	-22	827
Total liabilities	-23	2,758
Selected liabilities:		
Federal Reserve notes in circulation	13	1,020
Reverse repurchase agreements	4	87
Foreign official and international accounts	4	87
Others	0	0
Reserve balances of depository institutions**	-30	1,546
Term deposits held by depository institutions	5	5
U.S. Treasury, General Account	-34	27
U.S. Treasury, Supplementary Financing Account	0	0
Other deposits	17	54
Total capital	2	54

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

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

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

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

Last update: February 3, 2017

Accessible Material

December 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 H2	2012	2013	2014	2015-16
<i>Real GDP</i>					
Extended Tealbook baseline	2.6	2.3	2.5	3.4	3.9
European crisis with severe spillovers	2.5	-3.5	-1.2	2.9	5.4
Faster European recovery	2.6	3.2	3.6	3.7	3.6
Homegrown recession	2.6	-3.6	1.6	3.7	5.3
Faster snapback	2.9	3.2	3.1	3.2	3.1
Greater supply-side damage	2.5	1.8	1.8	2.3	3.0
Further disinflation	2.6	2.2	2.1	2.7	3.9
<i>Unemployment rate¹</i>					
Extended Tealbook baseline	8.8	8.6	8.2	7.8	6.4
European crisis with severe spillovers	8.8	10.4	11.8	11.7	9.2
Faster European recovery	8.8	8.3	7.4	6.8	5.5
Homegrown recession	8.8	11.0	11.7	11.3	8.4
Faster snapback	8.8	8.2	7.3	6.8	6.3
Greater supply-side damage	8.8	8.5	8.1	8.1	7.6
Further disinflation	8.8	8.6	8.4	8.3	7.0
<i>Total PCE prices</i>					
Extended Tealbook baseline	1.5	1.4	1.2	1.4	1.5
European crisis with severe spillovers	1.5	-1.2	-.1	1.3	2.2
Faster European recovery	1.5	2.5	1.8	1.7	1.6
Homegrown recession	1.5	1.2	.3	-.2	-.3
Faster snapback	1.5	1.4	1.4	1.7	1.9
Greater supply-side damage	1.5	1.7	1.8	2.2	2.3
Further disinflation	1.5	.7	.2	.1	.0
<i>Core PCE prices</i>					
Extended Tealbook baseline	1.6	1.5	1.4	1.4	1.5
European crisis with severe spillovers	1.6	.2	.4	1.1	1.9
Faster European recovery	1.6	1.9	1.9	1.6	1.6
Homegrown recession	1.6	1.3	.5	-.2	-.3
Faster snapback	1.6	1.5	1.6	1.7	1.9
Greater supply-side damage	1.6	1.8	2.0	2.2	2.3
Further disinflation	1.6	.8	.4	.1	.0
<i>Federal funds rate¹</i>					
Extended Tealbook baseline	.1	.1	.1	.4	2.7
European crisis with severe spillovers	.1	.1	.1	.1	.3
Faster European recovery	.1	.1	.1	1.4	3.7

Homegrown recession	.1	.1	.1	.1	.1
Faster snapback	.1	.3	.6	1.4	2.8
Greater supply-side damage	.1	.1	.9	1.8	3.5
Further disinflation	.1	.1	.1	.1	.1

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

Forecast Confidence Intervals and Alternative Scenarios

Confidence Intervals Based on FRB/US Stochastic Simulations

Figure: Real GDP

Line chart, by 4-quarter percent change, 2008 to 2016. There is a horizontal line at zero. There are nine series, Extending Tealbook baseline, European crisis with severe spillovers, Faster European recovery, Homegrown recession, Faster snapback, Greater supply-side damage, Further disinflation, 70 percent interval and 90 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 2 and generally decreases to about -5.1 by 2009:Q2. It then generally increases to about 3.5 by 2010:Q3 and then generally decreases to about 1.5 by 2011:Q3. By 2015:Q4 it has generally increased to about 4.2 and by 2016:Q4 it has generally decreased to about 3.65. European crisis with severe spillovers begins in 2011:Q3 at about 1.6 and generally decreases to about -4.05 by 2013:Q1. It then generally increases to about 5.7 by 2016:Q4. Faster European recovery begins in 2011:Q3 at about 1.6 and generally increases to about 4.0 by 2013:Q1. It then generally decreases to about 3.5 by 2014:Q1 and then generally increases to about 4.2 by 2015:Q4. By 2016:Q4 it has generally decreased to about 3.1. Homegrown recession begins in 2011:Q3 at about 1.6 and generally decreases to about -3.7 by 2012:Q4. It then generally increases to about 5.5 by 2016:Q4. Faster snapback begins in 2011:Q3 at about 1.6 and generally increases to about 3.5 by 2013:Q1. It then generally decreases to about 3.0 by 2013:Q3 and then generally increases to about 3.6 by 2015:Q2. By 2016:Q4 it has generally decreased to about 2.8. Greater supply-side damage begins in 2011:Q3 at about 1.6 and generally increases to about 2.0 by 2012:Q1. It then generally decreases to about 1.8 by 2013:Q1 and then generally increases to about 3.0 by 2016:Q4. Further disinflation begins in 2011:Q3 at about 1.6 and generally increases to about 2.4 by 2012:Q3. It then generally decreases to about 2.0 by 2013:Q4 and then generally increases to about 4.0 by 2016:Q4. The other two series track each other closely throughout the chart with the 70 percent interval beginning in 2011:Q3 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 by 2016:Q4. The 90 percent interval begins in 2011:Q3 at about 0.2 percent both lesser and greater than the Extended Tealbook baseline and widens out to about 3.5 percent both lesser and greater than the Extended Tealbook baseline by 2016:Q4.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2016. There are nine series, Extending Tealbook baseline, European crisis with severe spillovers, Faster European recovery, Homegrown recession, Faster snapback, Greater supply-side damage, Further disinflation, 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 8.9 by 2011:Q1 and then generally increases to about 9.15 by 2011:Q3. It then generally decreases to about 6.5 by 2016:Q4. European crisis with severe spillovers begins in 2011:Q3 at about 9.15 and generally decreases to about 8.8 by 2011:Q4. It then generally increases to about 11.9 by 2014:Q1 and then generally decreases to about 9.25 by 2016:Q4. Faster European recovery begins in 2011:Q3 at about 9.15 and generally decreases to about 5.5 by 2016:Q4. Homegrown recession begins in 2011:Q3 at about 9.15 and generally decreases to about 8.8 by 2011:Q4. It then generally increases to about 11.6 by 2013:Q4 and then generally decreases to about 8.5 by 2016:Q4. Faster snapback begins in 2011:Q3 at about 9.15 and generally decreases to about 6.3 by 2016:Q4. Greater supply-side damage begins in 2011:Q3 at about 9.15 and generally decreases to about 7.6 by 2016:Q4. Further disinflation begins in 2011:Q3 at about 9.15 and generally decreases to about 7.0 by 2016:Q4. The other two series track each other closely throughout the chart with the 70 percent interval beginning in 2011:Q3 at about 0.1 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 1.12 percent both lesser and greater than the Extended Tealbook baseline by 2016:Q4. The 90 percent interval begins in 2011:Q3 at about 0.2 percent both lesser and greater than the Extended Tealbook baseline and widens out to about 1.75 percent both lesser and greater than the Extended Tealbook baseline by 2016:Q4.

Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 2008 to 2016. There is a horizontal line at zero. There are nine series, Extending Tealbook baseline, European crisis with severe spillovers, Faster European recovery, Homegrown recession, Faster snapback, Greater supply-side damage, Further disinflation, 70 percent interval and 90 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 2.3 and generally increases to about 2.45 by 2008:Q2. It then generally decreases to about 1.4 by 2009:Q3 and then generally increases to about 1.75 by 2010:Q1. By 2010:Q4 it has generally decreased to about 0.9 and by 2012:Q1 it has generally increased to about 1.75. It then generally decreases to about 1.4 by 2014:Q3 and then generally increases to about 1.6 by 2016:Q4. European crisis with severe spillovers begins in 2011:Q3 at about 1.7. It then generally decreases to about -0.1 by 2013:Q1 and then generally increases to about 2.15 by 2016:Q4. Faster European recovery begins in 2011:Q3 at about 1.7 and generally increases to about 1.75 by 2012:Q1. It then generally decreases to about 1.65 by 2012:Q3 and then generally increases to about 2.1 by 2013:Q2. By 2016:Q4 it has generally decreased to about 1.6. Homegrown recession begins in 2011:Q3 at about 1.7 and generally decreases to about -0.4 by 2015:Q4. It then generally increases to about -0.2 by 2016:Q4. Faster snapback begins in 2011:Q3 at about 1.7 and generally decreases to about 1.45 by 2012:Q3. It then generally increases to about 2.0 by 2016:Q4. Greater supply-side damage begins in 2011:Q3 at about 1.7 and generally increases to about 1.75 by 2012:Q1. It then generally decreases to about 1.6 by 2012:Q3 and then generally increases to about 2.3 by 2016:Q4. Further disinflation begins in 2011:Q3 at about 1.7 and generally decreases to about -0.05 by 2016:Q4. The other two series track each other closely throughout the chart with the 70 percent interval beginning in 2011:Q3 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 by 2016:Q4. The 90 percent interval begins in 2011:Q3 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 by 2016:Q4.

Figure: Federal Funds Rate

Line chart, by percent, 2008 to 2016. There are nine series, Extending Tealbook baseline, European crisis with severe spillovers, Faster European recovery, Homegrown recession, Faster snapback, Greater supply-side damage, Further disinflation, 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 2014:Q2. It then generally increases to about 2.65 by 2016:Q4. European crisis and severe spillovers begins in 2011:Q3 at about 0.13 and remains stable here until 2016:Q3. It then generally increases to about 0.1 by 2016:Q4. Faster European recovery begins in 2011:Q3 at about 0.13 and remains stable here until 2013:Q4. By 2016:Q4 it has generally increased to about 3.75. Homegrown recession begins in 2011:Q3 at about 0.13 and remains stable here until 2016:Q4. Faster snapback begins in 2011:Q3 at about 0.13 and remains stable here until 2012:Q3. It then generally increases to about 2.8 by 2016:Q4. Greater supply-side damage begins in 2011:Q3 at about 0.13 and remains relatively stable here until 2016:Q4. The other two series track each other closely throughout the chart with the 70 percent interval beginning in 2014:Q2 at about 1.5 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 by 2016:Q4. The 90 percent interval begins in 2014:Q2 at about 1.6 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 by 2016:Q4.

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

Measure	2011	2012	2013	2014	2015	2016
<i>Real GDP (percent change, Q4 to Q4)</i>						
Projection	1.7	2.3	2.5	3.4	4.2	3.7
Confidence interval						
Tealbook forecast errors	1.2-2.2	.6-4.0	.7-4.2	...	...	...
FRB/US stochastic simulations	1.3-2.1	.9-4.0	.7-4.3	1.2-5.2	1.8-6.1	1.5-5.9
<i>Civilian unemployment rate (percent, Q4)</i>						
Projection	8.8	8.6	8.2	7.8	7.1	6.4
Confidence interval						
Tealbook forecast errors	8.7-8.9	7.9-9.3	7.0-9.4	...	...	...
FRB/US stochastic simulations	8.7-8.9	7.9-9.3	7.1-9.2	6.6-9.1	6.0-8.5	5.4-7.8
<i>PCE prices, total (percent change, Q4 to Q4)</i>						
Projection	2.5	1.4	1.2	1.4	1.5	1.6
Confidence interval						
Tealbook forecast errors	2.3-2.8	.1-2.6	.0-2.4	...	...	...
FRB/US stochastic simulations	2.3-2.8	.4-2.5	.0-2.4	.1-2.7	.2-2.8	.2-2.9
<i>PCE prices excluding food and energy (percent change, Q4 to Q4)</i>						
Projection	1.7	1.5	1.4	1.4	1.5	1.6
Confidence interval						
Tealbook forecast errors	1.5-2.0	.8-2.2	.6-2.2	...	...	...
FRB/US stochastic simulations	1.6-1.9	.8-2.2	.6-2.3	.4-2.3	.5-2.4	.5-2.5
<i>Federal funds rate (percent, Q4)</i>						
Projection	.1	.1	.1	.4	1.7	2.7
Confidence interval						
FRB/US stochastic simulations	-.1-.1	.1-1.0	.1-1.7	.1-2.6	.1-3.8	.7-4.7

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

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

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

Tealbook Forecast Compared with Blue Chip

(Blue Chip survey released November 10, 2011)

Figure: Real GDP

Line chart, by percent change, annual rate, 2008 to 2012. There is a horizontal line at zero. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about -1.9 and generally increases to about 1.5 by 2008:Q2. It then generally decreases to about -9.2 by 2008:Q4 and then generally increases to about 4 by 2010:Q1. By 2011:Q1 it has generally decreased to about 0.3 and by 2012:Q4 it has generally increased to about 2.5. Staff forecast begins in 2008:Q1 at about -1.9 and generally increases to about 1.5 by 2008:Q2. It then generally decreases to about -9.2 by 2008:Q4 and then generally increases to about 4 by 2010:Q1. By 2011:Q1 it has generally decreased to about 0.3 and by 2011:Q4 it has generally increased to about 3.3. It then generally decreases to about 2.0 by 2012:Q2 and then generally increases to about 3.0 by 2012:Q4. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q3 at about 0.1 percent both lesser and greater than the Blue Chip consensus and widens out to about 1 percent both lesser and greater than the Blue Chip consensus by 2012:Q1 and remains generally stable here until 2012:Q4.

Figure: Real PCE

Line chart, by percent change, annual rate, 2008 to 2012. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about -1.0 and generally increases to about 0 by 2008:Q2. It then generally decreases to about -5.2 by 2008:Q4 and then generally increases to about 2.4 by 2009:Q3. By 2009:Q4 it has generally decreased to about 0.3 and by 2010:Q4 it has generally increased to about 3.5. It then generally decreases to about 0.5 by 2011:Q2 and then generally increases to about 2.3 by 2011:Q3. By 2012:Q1 it has generally decreased to about 1.8 and by 2012:Q4 it has generally increased to about 2.4. Staff forecast begins in 2008:Q1 at about -1.0 and generally increases to about 0 by 2008:Q2. It then generally decreases to about -5.2 by 2008:Q4 and then generally increases to about 2.4 by 2009:Q3. By 2009:Q4 it has generally decreased to about 0.3 and by 2010:Q4 it has generally increased to about 3.5. It then generally decreases to about 0.5 by 2011:Q2 and then generally increases to about 2.9 by 2012:Q4. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q3 at about 0.1 percent both lesser and greater than the Blue Chip consensus and widens out to about 1.0 percent both lesser and greater than the Blue Chip consensus by 2012:Q1. It then narrows to about 0.8 percent both lesser and greater than the Blue Chip consensus by 2012:Q4.

Figure: Unemployment Rate

Line chart, by percent, 2008 to 2012. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about 5 and generally increases to about 10 by 2009:Q4. It then generally decreases to about 9.6 by 2010:Q2 and remains constant here until 2010:Q4. By 2011:Q1 it has generally decreased to about 8.9 and by 2011:Q2 it has generally increased to about 9.05. It remains constant here until 2012:Q1 and then generally decreases to about 8.97 by 2012:Q4. Staff forecast begins in 2008:Q1 at about 5 and generally increases to about 10 by 2009:Q4. It then generally decreases to about 9.6 by 2010:Q2 and remains constant here until 2010:Q4. By 2011:Q1 it has generally decreased to about 8.9 and by 2011:Q2 it has generally increased to about 9.05. It then generally decreases to about 8.7 by 2012:Q4. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q3 at about 0.1 percent both lesser and greater than the Blue Chip consensus and widens out to about 0.6 percent both lesser and greater than the Blue Chip consensus by 2012:Q4.

Figure: Consumer Price Index

Line chart, by percent change, annual rate, 2008 to 2012. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about 4.4 and increases to about 6.5 by 2008:Q3. It then decreases to about -9.5 by 2008:Q4 and then increases to about 3.8 by 2009:Q3. By 2010:Q2 it has generally decreased to about -0.6 and by 2011:Q1 it has generally increased to about 5.2. It then generally decreases to about 2.0 by 2011:Q4 and remains relatively stable here until 2012:Q4. Staff forecast begins in 2008:Q1 at about 4.4 and increases to about 6.5 by 2008:Q3. It then decreases to about -9.5 by 2008:Q4 and then increases to about 3.8 by 2009:Q3. By 2010:Q2 it has generally decreased to about -0.6 and by 2011:Q1 it has generally increased to about 5.2. By 2011:Q4 it has generally decreased to about 0.8 and by 2012:Q1 it has generally increased to about 1.6. It then generally decreases to about 1.3 by 2012:Q4. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q3 at about 0.1 percent both lesser and greater than the Blue Chip consensus and widens out to about 1.3 percent both lesser and greater than the Blue Chip consensus by 2011:Q4. It then generally narrows to about 0.8 percent both lesser and greater than the Blue Chip consensus by 2012:Q4.

Figure: Treasury Bill Rate

Line chart, by percent, 2008 to 2012. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about 2.02 and generally decreases to about 0.02 by 2009:Q4. It generally increases to about 0.1 by 2010:Q3 and then generally decreases to about 0 by 2011:Q3. By 2012:Q4 it has generally increased to about 0.1. Staff forecast begins in 2008:Q1 at about 2.02 and generally decreases to about 0.02 by 2009:Q4. It generally increases to about 0.1 by 2010:Q3 and then generally decreases to about 0 by 2011:Q3. It then generally increases to about 0.08 by 2012:Q4. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q4 at about 0.01 percent both lesser and greater than the Blue Chip consensus and widens out to about 0.15 percent both lesser and greater than the Blue Chip consensus by 2012:Q4.

Figure: 10-Year Treasury Yield

Line chart, by percent, 2008 to 2012. There are two series, Blue Chip consensus and Staff forecast. Blue chip consensus begins in 2008:Q1 at about 3.65 and generally increases to about 3.9 by 2008:Q2. It then generally decreases to about 2.7 by 2009:Q1 and then generally increases to about 3.7 by 2010:Q1. By 2010:Q3 it has generally decreased to about 2.75 and by 2011:Q1 it has generally increased to about 3.5. It then generally decreases to about 2.25 by 2011:Q4 and then generally increases to about 2.8 by 2012:Q4. Staff forecast begins in 2008:Q1 at about 3.65 and generally increases to about 3.9 by 2008:Q2. It then generally decreases to about 2.7 by 2009:Q1 and then generally increases to about 3.7 by 2010:Q1. By 2010:Q3 it has generally decreased to about 2.75 and by 2011:Q1 it has generally increased to about 3.5. It then generally decreases to about 2.05 by 2012:Q1 and then generally increases to about 2.7 by 2012:Q4. There is a shaded area that represents the area between the Blue Chip top 10 and bottom 10 averages. It begins in 2011:Q3 at about 0.05 percent both lesser and greater than the Blue Chip consensus and widens out to about 0.75 percent both lesser and greater than the Blue Chip consensus by 2012:Q4.

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

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

Last update: February 3, 2017

Accessible Material

December 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	
	10/26/11	12/07/11	10/26/11	12/07/11	10/26/11	12/07/11	10/26/11	12/07/11	10/26/11	12/07/11
<i>Quarterly</i>										
2011: Q1	3.1	3.1	.4	.4	3.9	3.9	1.6	1.6	8.9	8.9
Q2	4.0	4.0	1.3	1.3	3.3	3.3	2.3	2.3	9.1	9.1
Q3	5.2	4.5	2.7	1.9	2.3	2.3	2.1	2.0	9.1	9.1
Q4	3.9	4.3	2.5	3.2	1.2	.7	1.5	1.1	9.1	8.8
2012: Q1	3.5	3.8	2.4	2.1	1.4	1.4	1.6	1.6	9.0	8.8
Q2	5.0	3.5	2.5	1.9	1.4	1.5	1.6	1.5	8.9	8.8
Q3	4.0	4.1	2.6	2.5	1.3	1.3	1.5	1.5	8.8	8.7
Q4	3.9	4.4	2.7	2.9	1.3	1.3	1.4	1.4	8.6	8.6
2013: Q1	4.0	3.7	2.9	2.2	1.4	1.3	1.4	1.4	8.4	8.5
Q2	5.5	3.7	3.1	2.3	1.4	1.2	1.4	1.4	8.4	8.4
Q3	4.8	3.9	3.4	2.5	1.4	1.2	1.4	1.4	8.3	8.3
Q4	4.8	4.4	3.5	2.9	1.4	1.2	1.4	1.4	8.1	8.2
<i>Two-quarter²</i>										
2011: Q2	3.5	3.5	.8	.8	3.6	3.6	1.9	1.9	-5	-5
Q4	4.6	4.4	2.6	2.6	1.8	1.5	1.8	1.6	.0	-3
2012: Q2	4.2	3.6	2.4	2.0	1.4	1.4	1.6	1.5	-2	.0
Q4	4.0	4.2	2.6	2.7	1.3	1.3	1.4	1.4	-3	-2
2013: Q2	4.7	3.7	3.0	2.2	1.4	1.2	1.4	1.4	-2	-2
Q4	4.8	4.2	3.4	2.7	1.4	1.2	1.4	1.4	-3	-2
<i>Four-quarter³</i>										
2010:Q4	4.7	4.7	3.1	3.1	1.3	1.3	1.0	1.0	-4	-4
2011:Q4	4.1	4.0	1.7	1.7	2.7	2.5	1.8	1.7	-5	-8
2012:Q4	4.1	3.9	2.5	2.3	1.4	1.4	1.5	1.5	-5	-2
2013:Q4	4.8	3.9	3.2	2.5	1.4	1.2	1.4	1.4	-5	-4
<i>Annual</i>										
2010	4.2	4.2	3.0	3.0	1.8	1.8	1.4	1.4	9.6	9.6
2011	4.0	3.9	1.8	1.8	2.5	2.4	1.5	1.4	9.0	9.0
2012	4.2	4.0	2.4	2.3	1.6	1.5	1.6	1.5	8.8	8.7
2013	4.5	3.9	2.9	2.4	1.4	1.3	1.4	1.4	8.3	8.3

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

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

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

Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

Item	2011				2012				2013				2011 ¹	2012 ¹	2013 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	.4	1.3	1.9	3.2	2.1	1.9	2.5	2.9	2.2	2.3	2.5	2.9	1.7	2.3	2.5
<i>Previous Tealbook</i>	.4	1.3	2.7	2.5	2.4	2.5	2.6	2.7	2.9	3.1	3.4	3.5	1.7	2.5	3.2
Final sales	.0	1.6	3.5	1.9	1.9	2.0	1.9	2.5	2.1	2.1	2.2	2.2	1.8	2.1	2.2
<i>Previous Tealbook</i>	.0	1.6	3.0	2.1	1.7	2.3	2.3	2.9	2.7	2.8	2.9	2.8	1.7	2.3	2.8
Priv. dom. final purch.	2.0	1.9	3.6	2.6	1.9	2.3	2.6	3.0	2.5	2.6	2.8	3.2	2.5	2.5	2.8
<i>Previous Tealbook</i>	2.0	1.9	3.4	1.9	1.8	2.4	2.8	3.2	3.1	3.4	3.7	3.8	2.3	2.5	3.5
Personal cons. expend.	2.1	.7	2.1	2.4	2.3	2.2	2.4	2.8	2.1	2.1	2.3	2.7	1.8	2.4	2.3
<i>Previous Tealbook</i>	2.1	.7	2.2	2.0	1.9	2.2	2.5	2.8	2.9	3.0	3.2	3.3	1.7	2.4	3.1
Durables	11.7	-5.3	5.5	16.2	4.9	5.7	5.5	6.9	8.5	7.2	7.9	8.0	6.7	5.8	7.9
Nondurables	1.6	.2	-.6	2.0	3.2	1.4	1.6	1.8	.9	1.1	1.2	1.8	.8	2.0	1.2
Services	.8	1.9	2.5	.4	1.6	1.9	2.2	2.4	1.5	1.7	1.7	2.2	1.4	2.0	1.8
Residential investment	-2.4	4.2	1.7	3.1	3.6	6.3	6.5	6.9	7.2	7.6	8.1	8.5	1.6	5.8	7.9
<i>Previous Tealbook</i>	-2.4	4.2	1.2	3.2	3.5	6.9	7.1	7.5	8.9	9.5	9.3	9.1	1.5	6.2	9.2
Business fixed invest.	2.1	10.3	15.8	3.7	-1.2	1.8	3.3	4.1	4.4	4.8	5.4	5.1	7.8	2.0	4.9
<i>Previous Tealbook</i>	2.1	10.3	12.8	1.3	.3	2.6	4.0	4.7	3.4	4.8	5.9	5.9	6.5	2.9	5.0
Equipment & software	8.7	6.2	16.2	3.0	.6	2.5	4.5	5.2	5.9	6.1	7.1	6.7	8.4	3.2	6.4
<i>Previous Tealbook</i>	8.7	6.2	12.3	3.8	2.0	5.1	6.7	7.3	4.8	6.4	7.9	7.6	7.7	5.3	6.7
Nonres. structures	-14.3	22.6	14.7	5.8	-5.6	.0	.0	1.2	.6	1.4	1.0	.8	6.2	-1.1	.9
<i>Previous Tealbook</i>	-14.3	22.6	14.1	-5.2	-4.2	-3.8	-3.2	-2.3	-.7	.2	.5	1.1	3.2	-3.4	.3
Net exports ²	-424	-416	-401	-394	-391	-384	-388	-386	-386	-383	-378	-377	-409	-387	-381
<i>Previous Tealbook²</i>	-424	-416	-403	-397	-382	-369	-366	-354	-348	-342	-338	-336	-410	-368	-341
Exports	7.9	3.6	4.3	6.4	5.7	4.8	4.8	5.1	5.5	5.5	5.5	5.5	5.5	5.1	5.5
Imports	8.3	1.4	.5	4.0	4.0	2.7	4.8	3.8	4.5	4.0	3.7	4.4	3.5	3.8	4.2
Gov't. cons. & invest.	-5.9	-.9	-.2	-1.9	1.1	-.5	-.4	-.4	.0	-.8	-1.3	-2.5	-2.2	-.1	-1.2
<i>Previous Tealbook</i>	-5.9	-.9	-1.2	1.4	-.8	-.5	-.4	-.3	-.3	-.8	-1.5	-2.2	-1.7	-.5	-1.2
Federal	-9.4	1.9	1.9	-3.3	4.1	-.6	-.8	-1.0	-.8	-2.9	-4.5	-7.3	-2.3	.4	-3.9
Defense	-12.6	7.0	4.7	-6.4	6.8	.2	.0	-.2	.0	-3.0	-5.4	-9.5	-2.1	1.7	-4.6
Nondefense	-2.7	-7.6	-3.8	3.5	-1.0	-2.1	-2.5	-2.5	-2.5	-2.6	-2.6	-2.6	-2.7	-2.1	-2.6
State & local	-3.4	-2.8	-1.6	-.9	-.9	-.5	-.2	.0	.5	.7	.9	.9	-2.2	-.4	.8
Change in bus. inventories ²	49	39	-5	32	37	34	53	66	68	73	82	106	29	47	82
<i>Previous Tealbook²</i>	49	39	34	47	67	73	80	72	81	91	105	130	42	73	102
Nonfarm ²	60	51	5	35	38	34	52	65	67	72	81	105	38	47	81
Farm ²	-8	-9	-11	-3	-1	0	1	1	1	1	1	1	-8	0	1

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

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

Changes in Real Gross Domestic Product and Related Items

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013
Real GDP	2.8	2.4	2.2	-3.3	-.5	3.1	1.7	2.3	2.5
<i>Previous Tealbook</i>	2.8	2.4	2.2	-3.3	-.5	3.1	1.7	2.5	3.2
Final sales	2.7	2.8	2.4	-2.6	-.8	2.4	1.8	2.1	2.2
<i>Previous Tealbook</i>	2.7	2.8	2.4	-2.6	-.8	2.4	1.7	2.3	2.8
Priv. dom. final purch.	3.2	2.4	1.2	-4.5	-2.5	3.6	2.5	2.5	2.8

<i>Previous Tealbook</i>	3.2	2.4	1.2	-4.5	-2.5	3.6	2.3	2.5	3.5
Personal cons. expend.	2.8	3.2	1.7	-2.5	-2	3.0	1.8	2.4	2.3
<i>Previous Tealbook</i>	2.8	3.2	1.7	-2.5	-2	3.0	1.7	2.4	3.1
Durables	2.8	7.0	4.6	-13.0	3.0	10.9	6.7	5.8	7.9
Nondurables	3.1	2.9	.8	-3.1	.6	3.5	.8	2.0	1.2
Services	2.7	2.6	1.4	-.5	-.9	1.6	1.4	2.0	1.8
Residential investment	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	1.6	5.8	7.9
<i>Previous Tealbook</i>	5.3	-15.7	-20.7	-24.4	-12.9	-6.3	1.5	6.2	9.2
Business fixed invest.	4.5	7.8	7.9	-9.4	-14.4	11.1	7.8	2.0	4.9
<i>Previous Tealbook</i>	4.5	7.8	7.9	-9.4	-14.4	11.1	6.5	2.9	5.0
Equipment & software	6.2	6.0	3.9	-13.6	-5.8	16.6	8.4	3.2	6.4
<i>Previous Tealbook</i>	6.2	6.0	3.9	-13.6	-5.8	16.6	7.7	5.3	6.7
Nonres. structures	-.1	13.0	17.3	-1.2	-29.3	-1.8	6.2	-1.1	.9
<i>Previous Tealbook</i>	-.1	13.0	17.3	-1.2	-29.3	-1.8	3.2	-3.4	.3
Net exports ¹	-723	-729	-649	-495	-359	-422	-409	-387	-381
<i>Previous Tealbook¹</i>	-723	-729	-649	-495	-359	-422	-410	-368	-341
Exports	6.7	10.2	10.1	-2.5	-.1	8.8	5.5	5.1	5.5
Imports	5.2	4.1	.8	-5.9	-6.5	10.7	3.5	3.8	4.2
Gov't. cons. & invest.	.7	1.5	1.9	2.7	1.1	.1	-2.2	-.1	-1.2
<i>Previous Tealbook</i>	.7	1.5	1.9	2.7	1.1	.1	-1.7	-.5	-1.2
Federal	1.2	2.2	3.1	8.8	4.6	2.9	-2.3	.4	-3.9
Defense	.4	4.4	2.6	9.8	3.5	1.5	-2.1	1.7	-4.6
Nondefense	2.6	-2.3	4.2	6.8	6.9	5.7	-2.7	-2.1	-2.6
State & local	.4	1.2	1.2	-.9	-1.1	-1.7	-2.2	-.4	.8
Change in bus. inventories ¹	50	59	28	-36	-145	59	29	47	82
<i>Previous Tealbook¹</i>	50	59	28	-36	-145	59	42	73	102
Nonfarm ¹	50	63	29	-38	-144	61	38	47	81
Farm ¹	0	-4	-1	1	-1	-1	-8	0	1

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

Contributions to Changes in Real Gross Domestic Product

(Percentage points, annual rate except as noted)

Item	2011				2012				2013				2011 ¹	2012 ¹	2013 ¹
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	.4	1.3	1.9	3.2	2.1	1.9	2.5	2.9	2.2	2.3	2.5	2.9	1.7	2.3	2.5
<i>Previous Tealbook</i>	.4	1.3	2.7	2.5	2.4	2.5	2.6	2.7	2.9	3.1	3.4	3.5	1.7	2.5	3.2
Final sales	.0	1.6	3.5	2.0	1.9	2.0	1.9	2.5	2.1	2.1	2.2	2.2	1.8	2.1	2.1
<i>Previous Tealbook</i>	.0	1.6	3.0	2.1	1.7	2.3	2.3	2.9	2.7	2.8	2.9	2.8	1.7	2.3	2.8
Priv. dom. final purch.	1.6	1.6	3.0	2.2	1.6	1.9	2.2	2.5	2.1	2.2	2.3	2.7	2.1	2.1	2.3
<i>Previous Tealbook</i>	1.6	1.6	2.8	1.6	1.5	2.0	2.4	2.6	2.6	2.8	3.1	3.2	1.9	2.1	2.9
Personal cons. expend.	1.5	.5	1.5	1.7	1.6	1.6	1.7	2.0	1.5	1.5	1.6	1.9	1.3	1.7	1.6
<i>Previous Tealbook</i>	1.5	.5	1.6	1.4	1.4	1.6	1.8	2.0	2.0	2.1	2.3	2.4	1.2	1.7	2.2
Durables	.9	-.4	.4	1.2	.4	.4	.4	.5	.6	.6	.6	.6	.5	.4	.6
Nondurables	.3	.0	-.1	.3	.5	.2	.3	.3	.1	.2	.2	.3	.1	.3	.2
Services	.4	.9	1.2	.2	.7	.9	1.0	1.1	.7	.8	.8	1.0	.6	.9	.8

Output per hour	-6	-1	2.2	2.1	.7	.9	1.5	1.9	1.0	1.1	1.2	1.6	.9	1.3	1.2
<i>Previous Tealbook</i>	-6	-1	3.4	1.5	.9	1.2	1.3	1.4	1.5	1.7	1.7	1.8	1.0	1.2	1.7
Compensation per hour	5.6	-3	-2	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.1	1.8	2.3	2.2
<i>Previous Tealbook</i>	5.6	2.7	1.7	1.7	2.4	2.2	2.3	2.3	2.2	2.2	2.2	2.2	2.9	2.3	2.2
Unit labor costs	6.2	-2	-2.4	.1	1.5	1.3	.8	.3	1.2	1.1	1.0	.5	.9	1.0	.9
<i>Previous Tealbook</i>	6.2	2.8	-1.6	.2	1.5	1.0	1.0	.9	.7	.5	.5	.5	1.9	1.1	.6
Core goods imports chain-wt. price index ³	8.3	7.2	2.3	-.7	-.9	.4	.7	1.2	1.4	1.4	1.4	1.4	4.2	.4	1.4
<i>Previous Tealbook</i> ³	8.3	7.2	2.6	-.3	.0	1.5	1.5	1.8	1.8	1.7	1.6	1.6	4.4	1.2	1.7

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

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

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

Changes in Prices and Costs

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

Item	2005	2006	2007	2008	2009	2010	2011	2012	2013
GDP chain-wt. price index	3.5	2.9	2.6	2.1	.7	1.6	2.1	1.6	1.4
<i>Previous Tealbook</i>	3.5	2.9	2.6	2.1	.7	1.6	2.2	1.5	1.5
PCE chain-wt. price index	3.2	1.9	3.5	1.7	1.5	1.3	2.5	1.4	1.2
<i>Previous Tealbook</i>	3.2	1.9	3.5	1.7	1.5	1.3	2.7	1.4	1.4
Energy	21.5	-3.7	19.3	-8.8	2.6	6.2	11.3	-.3	-1.6
<i>Previous Tealbook</i>	21.5	-3.7	19.3	-8.8	2.6	6.2	12.1	-.4	1.2
Food	1.5	1.7	4.7	7.0	-1.7	1.3	5.2	1.2	1.2
<i>Previous Tealbook</i>	1.5	1.7	4.7	7.0	-1.7	1.3	5.3	1.2	1.2
Ex. food & energy	2.3	2.3	2.4	2.0	1.7	1.0	1.7	1.5	1.4
<i>Previous Tealbook</i>	2.3	2.3	2.4	2.0	1.7	1.0	1.8	1.5	1.4
Ex. food & energy, market based	2.0	2.2	2.1	2.2	1.7	.7	1.7	1.4	1.3
<i>Previous Tealbook</i>	2.0	2.2	2.1	2.2	1.7	.7	1.8	1.4	1.3
CPI	3.7	2.0	4.0	1.6	1.5	1.2	3.3	1.4	1.2
<i>Previous Tealbook</i>	3.7	2.0	4.0	1.6	1.5	1.2	3.4	1.4	1.5
Ex. food & energy	2.1	2.7	2.3	2.0	1.7	.6	2.2	1.6	1.5
<i>Previous Tealbook</i>	2.1	2.7	2.3	2.0	1.7	.6	2.2	1.6	1.5
ECl, hourly compensation ¹	2.9	3.2	3.0	2.4	1.2	2.1	2.2	2.4	2.3
<i>Previous Tealbook</i> ¹	2.9	3.2	3.0	2.4	1.2	2.1	2.5	2.4	2.3
Nonfarm business sector									
Output per hour	1.6	.8	2.5	-1.1	5.3	2.5	.9	1.3	1.2
<i>Previous Tealbook</i>	1.6	.8	2.5	-1.1	5.3	2.5	1.0	1.2	1.7
Compensation per hour	3.5	4.5	3.6	2.5	1.8	1.6	1.8	2.3	2.2
<i>Previous Tealbook</i>	3.5	4.5	3.6	2.5	1.8	1.6	2.9	2.3	2.2
Unit labor costs	1.9	3.6	1.1	3.7	-3.3	-.9	.9	1.0	.9
<i>Previous Tealbook</i>	1.9	3.6	1.1	3.7	-3.3	-.9	1.9	1.1	.6
Core goods imports chain-wt. price index ²	2.2	2.5	2.9	3.7	-1.7	2.6	4.2	.4	1.4
<i>Previous Tealbook</i> ²	2.2	2.5	2.9	3.7	-1.7	2.6	4.4	1.2	1.7

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

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

Other Macroeconomic Indicators

Nonfarm payroll employment ¹	2.4	2.1	1.2	-2.8	-5.6	.7	1.6	1.8	2.2
Unemployment rate ²	5.0	4.5	4.8	6.9	10.0	9.6	8.8	8.6	8.2
<i>Previous Tealbook</i> ²	5.0	4.5	4.8	6.9	10.0	9.6	9.1	8.6	8.1
NAIRU ²	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0
<i>Previous Tealbook</i> ²	5.0	5.0	5.0	5.3	6.0	6.0	6.0	6.0	6.0
GDP gap ³	.0	.0	-2	-5.4	-6.9	-5.4	-5.5	-5.2	-4.8
<i>Previous Tealbook</i> ³	.1	.0	-2	-5.4	-7.0	-5.6	-6.0	-5.6	-4.7
Industrial production ⁴	2.3	2.3	2.5	-9.1	-5.5	6.2	3.3	2.3	3.2
<i>Previous Tealbook</i> ⁴	2.3	2.3	2.5	-9.1	-5.5	6.2	3.7	2.6	3.5
Manufacturing industr. prod. ⁴	3.4	2.0	2.8	-11.8	-6.1	6.1	3.5	2.2	3.4
<i>Previous Tealbook</i> ⁴	3.4	2.0	2.8	-11.8	-6.1	6.1	3.9	2.8	3.9
Capacity utilization rate - mfg. ²	78.5	78.4	79.0	70.1	67.7	73.3	75.3	76.1	77.5
<i>Previous Tealbook</i> ²	78.5	78.4	79.0	70.1	67.7	73.3	75.5	76.8	78.7
Housing starts ⁵	2.1	1.8	1.4	.9	.6	.6	.6	.7	.9
Light motor vehicle sales ⁵	16.9	16.5	16.1	13.1	10.3	11.5	12.7	13.4	14.2
<i>Income and saving</i>									
Nominal GDP ⁴	6.4	5.3	4.9	-1.2	.0	4.7	4.0	3.9	3.9
Real disposable pers. income ⁴	.6	4.6	1.6	1.0	-2.4	3.5	.7	3.2	1.7
<i>Previous Tealbook</i> ⁴	.6	4.6	1.6	1.0	-2.4	3.5	1.5	2.5	3.1
Personal saving rate ²	1.6	2.8	2.5	6.2	4.3	5.2	4.3	5.0	4.4
<i>Previous Tealbook</i> ²	1.6	2.8	2.5	6.2	4.3	5.2	5.1	5.1	5.1
Corporate profits ⁶	19.6	3.7	-8.1	-33.5	61.8	18.2	6.0	-1.4	-.3
Profit share of GNP ²	11.8	11.6	10.1	6.8	11.0	12.4	12.6	12.0	11.6
Net federal saving ⁷	-283	-204	-245	-613	-1218	-1274	-1205	-1091	-859
Net state & local saving ⁷	26	51	12	-72	-78	-25	-63	-48	-28
Gross national saving rate ²	15.6	16.5	13.9	12.6	11.3	12.3	12.4	12.6	13.1
Net national saving rate ²	3.6	4.4	1.7	-.6	-1.9	-.4	-.1	.0	.6

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

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

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

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

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

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

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

Staff Projections of Federal Sector Accounts and Related Items

(Billions of dollars except as noted)

Item	Fiscal year				2011				2012				2013			
	2010 ^a	2011 ^a	2012	2013	Q1 ^a	Q2 ^a	Q3 ^a	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts ¹	2163	2302	2459	2716	488	714	568	554	520	760	625	607	569	839	701	650
Outlays ¹	3456	3598	3608	3620	949	855	894	902	957	895	854	934	933	892	861	938
Surplus/deficit ¹	-1293	-1296	-1149	-904	-460	-141	-325	-348	-437	-135	-228	-328	-364	-53	-159	-288

	2	3.9	-2.2	-2.5	-3.3	-1.3		-5	22.5	5.4
	3	3.7	-2.2	-2.5	-2.2	1.8		2.1	16.0	3.9
	4	4.9	-.7	-1.8	2.3	2.4		4.8	16.4	4.2
2011:	1	2.3	-1.8	-2.6	2.2	4.2		-3.3	7.9	3.1
	2	3.1	-.6	-2.4	3.4	4.5		-3.5	8.6	4.0
	3	4.3	-1.2	-1.8	1.2	3.5		.0	14.1	4.5
	4	4.7	.0	-1.2	3.3	3.8		1.9	12.8	4.3
2012:	1	5.2	.5	-.7	3.6	3.1		2.2	14.3	3.8
	2	4.3	.9	-.3	4.4	3.3		2.0	10.1	3.5
	3	3.3	1.3	.0	4.8	3.4		1.9	5.9	4.1
	4	5.3	1.5	.1	5.5	3.5		1.9	12.5	4.4
2013:	1	4.9	1.6	.1	5.9	3.7		1.9	10.7	3.7
	2	3.6	1.6	.1	6.0	3.8		1.9	6.3	3.7
	3	3.2	1.6	.1	6.1	3.9		1.9	4.5	3.9
	4	4.9	1.7	.1	6.1	3.9		1.9	10.2	4.4

Note: Quarterly data are at seasonally adjusted annual rates.

1. Data after 2011:Q3 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	2010	2011	2012	2013	2011		2012				2013			
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<i>Domestic nonfinancial sectors</i>														
Net funds raised														
Total	1167.1	882.8	1352.6	1343.2	1029.5	1332.3	1608.2	1282.2	864.3	1655.5	1627.2	1157.9	935.2	1652.3
Net equity issuance	-278.0	-472.4	-400.0	-340.0	-593.4	-460.0	-380.0	-380.0	-420.0	-420.0	-320.0	-320.0	-360.0	-360.0
Net debt issuance	1445.1	1355.2	1752.6	1683.2	1622.9	1792.3	1988.2	1662.2	1284.3	2075.5	1947.2	1477.9	1295.2	2012.3
Borrowing indicators														
Debt (percent of GDP) ¹	249.1	249.1	249.4	250.5	248.0	248.2	248.9	249.7	249.6	249.5	250.4	250.8	250.5	250.3
Borrowing (percent of GDP)	9.9	9.0	11.2	10.3	10.7	11.7	12.8	10.6	8.1	13.0	12.1	9.1	7.9	12.1
Households														
Net borrowing ²	-278.4	-121.0	136.6	217.1	-158.8	3.7	62.2	123.4	165.7	195.1	208.7	214.8	220.7	224.0
Home mortgages	-298.2	-200.9	-22.2	9.8	-181.4	-118.7	-69.0	-29.5	0.0	9.8	9.8	9.8	9.8	9.8
Consumer credit	-44.2	62.1	116.6	160.7	29.5	82.4	90.6	111.6	123.0	141.3	153.8	158.7	163.8	166.3
Debt/DPI (percent) ³	120.3	114.6	110.3	108.3	114.4	112.8	111.7	110.7	109.7	108.8	109.2	108.7	108.0	107.3
Business														
Financing gap ⁴	-197.1	-210.3	-105.5	72.7	-278.0	-209.0	-173.0	-134.3	-85.0	-29.7	22.4	49.1	82.2	137.2
Net equity issuance	-278.0	-472.4	-400.0	-340.0	-593.4	-460.0	-380.0	-380.0	-420.0	-420.0	-320.0	-320.0	-360.0	-360.0
Credit market borrowing	77.0	451.2	391.6	464.1	398.0	433.7	364.6	385.4	401.4	415.0	443.0	459.1	473.6	480.8
State and local governments														
Net borrowing	66.2	-36.9	61.0	58.0	1.0	58.0	66.0	62.0	58.0	58.0	58.0	58.0	58.0	58.0
Current surplus ⁵	257.0	201.5	200.2	228.0	163.6	169.9	183.6	199.2	205.6	212.4	216.1	230.0	231.7	234.1
Federal government														
Net borrowing	1580.2	1061.9	1163.4	944.0	1382.6	1296.9	1495.5	1091.4	659.3	1407.5	1237.6	746.0	543.0	1249.6
Net borrowing (n.s.a.)	1580.2	1061.9	1163.4	944.0	389.1	319.9	448.7	159.0	208.2	347.5	384.2	72.6	179.1	308.1
Unified deficit (n.s.a.)	1275.1	1278.1	1127.9	864.0	328.1	348.4	436.8	135.2	228.4	327.5	364.2	52.6	159.1	288.1

Depository institutions														
Funds supplied	-181.1	182.8	352.8	374.7	785.2	248.5	398.2	323.9	342.5	346.5	352.2	358.2	392.9	395.4

Note: Data after 2011:Q3 are staff projections.

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

Foreign Real GDP and Consumer Prices: Selected Countries

(Quarterly percent changes at an annual rate)

Measure and country	Projected											
	2011				2012				2013			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Real GDP¹												
Total foreign	3.9	2.4	3.6	2.3	2.5	2.4	2.6	2.7	2.9	3.0	3.0	3.1
<i>Previous Tealbook</i>	4.0	2.3	3.6	2.8	2.8	2.9	3.0	3.1	3.3	3.4	3.4	3.4
Advanced foreign economies	2.2	.1	2.7	1.0	.7	.6	.9	1.2	1.4	1.5	1.6	1.8
Canada	3.5	-5	3.5	2.1	2.1	1.8	2.0	2.2	2.1	2.0	2.0	2.1
Japan	-2.7	-1.3	6.0	1.9	2.3	1.8	1.7	1.6	1.5	1.4	1.3	1.3
United Kingdom	1.6	.4	2.0	.5	.4	.7	1.0	1.2	1.5	1.7	1.9	2.1
Euro area	3.1	.7	.6	-1.0	-2.0	-1.8	-1.2	-.5	.1	.4	.6	1.0
Germany	5.5	1.1	2.0	.0	-1.2	-1.0	-.4	.1	.7	1.1	1.2	1.7
Emerging market economies	5.7	5.0	4.7	3.7	4.4	4.3	4.4	4.4	4.5	4.5	4.6	4.6
Asia	7.9	5.3	4.9	4.3	5.7	5.5	5.5	5.5	5.6	5.7	5.8	5.8
Korea	5.4	3.6	3.3	3.9	3.5	3.5	3.5	3.5	3.6	3.8	4.0	4.2
China	8.2	10.0	9.5	8.2	8.0	7.9	7.9	7.9	8.0	8.1	8.1	8.1
Latin America	3.5	4.9	4.5	3.0	3.2	3.0	3.2	3.2	3.2	3.2	3.2	3.3
Mexico	2.3	5.2	5.5	3.0	3.1	2.8	3.1	3.1	3.1	3.1	3.1	3.1
Brazil	3.2	2.9	-2	2.3	3.0	3.1	3.1	3.1	3.5	3.6	3.6	3.8
Consumer prices²												
Total foreign	4.3	3.2	3.1	3.5	2.6	2.3	2.2	2.2	2.2	2.2	2.3	2.3
<i>Previous Tealbook</i>	4.3	3.2	3.1	2.7	2.5	2.2	2.3	2.3	2.3	2.4	2.5	2.5
Advanced foreign economies	3.2	2.1	1.1	2.9	1.4	1.1	1.1	1.2	1.0	1.0	1.0	1.2
Canada	3.6	3.1	1.1	3.8	2.3	1.9	1.7	1.6	1.6	1.6	1.7	1.7
Japan	.4	-.8	-.3	-.6	-.5	-.4	-.4	-.3	-.3	-.3	-.3	-.3
United Kingdom	7.2	3.8	3.5	4.3	1.7	1.3	1.3	2.6	1.5	1.3	1.5	2.8
Euro Area	3.6	2.7	1.4	4.1	1.5	1.3	1.2	1.2	1.1	1.0	1.0	1.1
Germany	3.5	2.2	1.7	4.3	2.0	2.0	1.8	1.7	1.5	1.4	1.5	1.6
Emerging market economies	5.1	4.1	4.6	3.9	3.6	3.2	3.1	3.1	3.2	3.2	3.2	3.2
Asia	5.3	4.8	5.3	3.5	3.3	2.9	2.9	2.9	3.0	3.0	3.0	3.0
Korea	6.0	2.8	4.8	3.2	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
China	4.6	5.8	6.2	3.5	3.2	2.7	2.7	2.7	2.8	2.9	2.9	2.9
Latin America	4.3	2.5	3.6	4.8	4.4	3.9	3.7	3.7	3.7	3.7	3.7	3.7
Mexico	3.6	1.8	3.3	4.6	4.2	3.6	3.4	3.4	3.4	3.4	3.4	3.4
Brazil	9.5	7.5	5.6	6.2	5.7	5.3	4.9	4.9	5.3	5.1	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	2005	2006	2007	2008	2009	2010	Projected		
							2011	2012	2013
Real GDP¹									
Total foreign	4.1	4.1	4.4	-.9	.8	4.3	3.1	2.5	3.0
<i>Previous Tealbook</i>	4.1	4.2	4.4	-.9	.8	4.3	3.2	3.0	3.4
Advanced foreign economies	2.8	2.6	2.6	-1.9	-1.4	2.7	1.5	.8	1.6
Canada	3.1	1.9	2.5	-.7	-1.4	3.3	2.1	2.1	2.1
Japan	2.9	2.1	1.7	-4.7	-1.9	2.5	.9	1.9	1.4
United Kingdom	2.8	2.1	4.1	-5.4	-.8	1.3	1.1	.8	1.8
Euro area	2.1	3.8	2.4	-2.1	-2.1	1.9	.8	-1.4	.6
Germany	1.6	4.9	2.4	-1.9	-2.2	3.8	2.1	-.6	1.2
Emerging market economies	5.8	6.3	6.7	.4	3.5	6.1	4.8	4.4	4.6
Asia	7.6	7.8	8.8	.9	8.0	7.6	5.6	5.5	5.7
Korea	5.2	4.6	5.8	-3.2	6.3	4.7	4.0	3.5	3.9
China	10.3	12.8	13.7	7.7	11.4	9.6	9.0	7.9	8.1
Latin America	3.9	4.8	4.4	-.4	-.9	4.5	4.0	3.1	3.2
Mexico	3.6	4.1	3.5	-1.2	-2.3	4.2	4.0	3.0	3.1
Brazil	2.2	4.8	6.6	.9	5.3	5.4	2.0	3.1	3.6
Consumer prices²									
Total foreign	2.3	2.2	3.7	3.3	1.3	3.2	3.5	2.3	2.3
<i>Previous Tealbook</i>	2.3	2.2	3.7	3.3	1.3	3.2	3.3	2.3	2.4
Advanced foreign economies	1.6	1.4	2.2	2.0	.2	1.7	2.3	1.2	1.1
Canada	2.3	1.4	2.5	1.8	.8	2.2	2.9	1.9	1.6
Japan	-.7	.3	.5	1.0	-2.0	-.3	-.3	-.4	-.3
United Kingdom	2.1	2.7	2.1	3.9	2.2	3.4	4.7	1.7	1.8
Euro Area	2.3	1.8	2.9	2.3	.4	2.0	3.0	1.3	1.0
Germany	2.2	1.3	3.1	1.7	.3	1.6	2.9	1.9	1.5
Emerging market economies	3.0	2.9	5.1	4.6	2.1	4.3	4.4	3.2	3.2
Asia	2.5	2.4	5.5	3.6	1.3	4.3	4.7	3.0	3.0
Korea	2.5	2.1	3.4	4.5	2.4	3.2	4.2	3.0	3.0
China	1.4	2.1	6.7	2.5	.6	4.7	5.0	2.8	2.9
Latin America	3.8	4.2	4.2	6.7	3.9	4.4	3.8	3.9	3.7
Mexico	3.1	4.1	3.8	6.2	4.0	4.3	3.3	3.7	3.4
Brazil	6.1	3.2	4.3	6.2	4.2	5.4	7.2	5.2	5.1

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

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

U.S. Current Account

Quarterly Data

	Projected		
	2011	2012	2013

	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	<i>Billions of dollars, s.a.a.r.</i>											
U.S. current account balance	-478.4	-472.0	-390.7	-402.7	-439.8	-396.8	-416.6	-440.7	-477.6	-448.4	-463.9	-485.2
<i>Previous Tealbook</i>	-478.4	-472.0	-426.8	-416.4	-422.7	-376.4	-381.9	-390.2	-416.1	-386.0	-397.7	-416.4
Current account as percent of GDP	-3.2	-3.1	-2.6	-2.6	-2.8	-2.5	-2.6	-2.8	-3.0	-2.8	-2.8	-2.9
<i>Previous Tealbook</i>	-3.2	-3.1	-2.8	-2.7	-2.7	-2.4	-2.4	-2.4	-2.6	-2.4	-2.4	-2.5
Net goods & services	-559.9	-580.0	-534.6	-545.0	-577.7	-523.9	-527.0	-532.6	-554.0	-508.9	-501.9	-508.2
Investment income, net	219.5	253.5	279.5	279.6	273.7	258.9	245.6	229.3	212.2	192.4	173.3	160.3
Direct, net	315.9	339.3	352.7	333.4	316.2	302.9	291.8	280.9	271.4	259.6	249.1	244.8
Portfolio, net	-96.4	-85.8	-73.2	-53.8	-42.5	-43.9	-46.2	-51.6	-59.2	-67.2	-75.8	-84.5
Other income and transfers, net	-138.0	-145.5	-135.6	-137.3	-135.8	-131.9	-135.2	-137.3	-135.8	-131.9	-135.2	-137.3

Annual Data

	2005	2006	2007	2008	2009	2010	Projected		
							2011	2012	2013
	<i>Billions of dollars</i>								
U.S. current account balance	-745.8	-800.6	-710.3	-677.1	-376.6	-470.9	-435.9	-423.5	-468.8
<i>Previous Tealbook</i>	-745.8	-800.6	-710.3	-677.1	-376.6	-470.9	-448.4	-392.8	-404.1
Current account as percent of GDP	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-2.9	-2.7	-2.9
<i>Previous Tealbook</i>	-5.9	-6.0	-5.1	-4.7	-2.7	-3.2	-3.0	-2.5	-2.5
Net goods & services	-708.6	-753.3	-696.7	-698.3	-381.3	-500.0	-554.9	-540.3	-518.2
Investment income, net	78.7	54.7	111.1	157.8	137.1	174.5	258.0	251.9	184.5
Direct, net	173.2	174.0	244.6	284.3	262.2	280.6	335.3	297.9	256.2
Portfolio, net	-94.5	-119.4	-133.5	-126.5	-125.1	-106.2	-77.3	-46.1	-71.7
Other income and transfers, net	-115.9	-102.0	-124.7	-136.6	-132.3	-145.3	-139.1	-135.1	-135.1

Last update: February 3, 2017

Monetary Policy Strategies

Equilibrium Real Federal Funds Rate

Figure: Short-Run Estimates with Confidence Intervals

Line chart, 1991 to 2011. 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 2 and generally decreases to about 0 in 1992:Q4. It generally increases to about 4 in 2000:Q4 then generally decreases to about -1 in 2004:2. It generally increases to about 3 in 2006:Q3 then generally decreases to about -2 in 2008:Q4. It generally increases to about -1 in 2011:Q1 then generally decreases ending at about -2. Range of four model-based estimates begins at about [-.5, 2] and generally increases to about [2, 5] in 1999:Q4. It generally decreases to about [0, 1] in 2003:Q1 then generally increases to about [.5, .75] in 2004:Q4. It generally decreases to about [-7, -2] in 2009:Q2 then generally increases ending at about [-4, 0]. 70 percent confidence interval begins at about [-1, 2.25] and generally increases to about [1, 5] in 2000:Q1. It generally decreases to about [-1.75, 1] in 2003:Q2 then generally increases to about [-1, 3] in 2006:Q3. It generally decreases to about [-7, -2] in 2009:Q2. It generally increases ending at about [-4, 0]. 90 percent confidence interval begins at about [-2, 3.5] and generally increases to about [-1, 6] in 2000:Q1. It generally decreases to about [-3, 2] in 2003:Q2 then generally increases to about [-2, 4] in 2006:Q2. It generally decreases to about [-8, 0.25] in 2009:Q2 then generally increases ending at about [-5, 2]. Tealbook-consistent measure (FRB/US) begins in 1997:Q3 at about 4, and roughly follows the actual real funds rate curve. It reaches about 5.5 by 2000:Q2, decreases to about 0 by 2002:Q4, increases to about 3 by 2007:Q2, and decreases to about -4 by 2009:Q1. It then fluctuates between about -4 and -1.5 for the remainder of the period, ending at about -3.5 in 2011:Q4.

Short-Run and Medium-Run Measures

	Current Tealbook	Previous Tealbook
Short-Run Measures		
Single-equation model	-1.8	-2.2
Small structural model	-3.9	-4.2
EDO model	0.3	-0.3
FRB/US model	-3.1	-3.2
Confidence intervals for four model-based estimates		
70 percent confidence interval	-4.3 to 0.2	
90 percent confidence interval	-5.3 to 1.5	
Tealbook-consistent measures		
EDO model	-4.4	-4.3
FRB/US model	-3.3	-3.3
Medium-Run Measures		
Single-equation model	0.9	0.9
Small structural model	0.5	0.6
Confidence intervals for two model-based estimates		
70 percent confidence interval	-0.2 to 1.6	
90 percent confidence interval	-0.7 to 2.4	
TIPS-based factor model	1.7	1.8
Memo		
Actual real federal funds rate	-1.5	-1.5

Note: Explanatory Note A provides background information regarding the construction of these measures and confidence intervals. The actual real federal funds rate shown is generated using lagged core inflation as a proxy for inflation expectations. For information regarding alternative measures, see Explanatory Note A.

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

Figure: Nominal Federal Funds Rate

Line chart, 2011 to 2020. Unit is percent. There are three series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," and "Current Tealbook: Unconstrained." Current Tealbook: Constrained begins at about 0 and remains about constant until 2016:Q1. It generally increases ending at about 5. Previous Tealbook: Constrained begins at about 0 and remains about constant until 2015:Q4. It generally increases ending at about 5. Current Tealbook: Unconstrained begins at about 0 and generally decreases to about -3 in 2013:Q1 then generally increases ending at about 4.5.

Figure: Real Federal Funds Rate

Line chart, 2011 to 2020. Unit is percent. There are three series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," and "Current Tealbook: Unconstrained." Current Tealbook: Constrained begins at about -1 and generally decreases to about -2 in 2013:Q1. It remains about constant until 2016:Q2 then generally increases ending at about 3. Previous Tealbook: Constrained begins at about -1 and generally decreases to about -2 in 2012:Q1. It remains about constant to in 2015:Q4. It generally increases ending at about 3. Current Tealbook: Unconstrained begins at about -1 and generally decreases to about -5 in 2013:Q2. It generally increases ending at about 2.5.

Figure: Civilian Unemployment Rate

Line chart, 2011 to 2020. Unit is percent. There are three series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," and "Current Tealbook: Unconstrained." Current Tealbook: Constrained begins at about 9 and generally decreases to about 5 in 2018:Q1. It generally increases ending at about 5.5. Previous Tealbook: Constrained begins at about 9 and generally decreases to about 5 in 2017:Q1. It generally increases ending at about 5.5. Current Tealbook: Unconstrained begins at about 9 and generally decreases to about 5.5 in 2015:Q2. It remains about constant to the end of the timeline.

Figure: PCE Inflation

Line chart, 2011 to 2020. Unit is percent. Data are four-quarter averages. There are three series, "Current Tealbook: Constrained," "Previous Tealbook: Constrained," and "Current Tealbook: Unconstrained." Current Tealbook: Constrained begins at about 1.75 and generally increases to about 2.9 in 2011:Q4. It generally decreases to about 1.6 in 2012:Q4 then generally increases to about 2.25 in 2018:Q2. It generally decreases ending at about 2.0. Previous Tealbook: Constrained begins at about 1.75 and generally increases to about 2.8 in 2011:Q4. It generally decreases to about 2.0 in 2012:Q4 then generally increases to about 2.25 in 2017:Q4. It generally decreases ending at about 2.0. Current Tealbook: Unconstrained begins at about 1.75 and generally increases to about 2.9 in 2011:Q4. It generally decreases to about 1.6 in 2012:Q3 then generally increases to about 2.25 in 2015:Q4 then generally decreases ending at about 1.9.

Policy Rules and Market-Based Expectations for the Federal Funds Rate

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

Line chart, 2011:Q4 to 2016:Q4. Unit is percent. There are two series, "Current Tealbook" and "Previous Tealbook." Current Tealbook begins at about 0 and remains about constant until 2014:Q2. It generally increases ending at about 2.75. Previous Tealbook begins at about 0 and remains about constant until 2014:Q1. It generally increases ending at about 3. 70 percent confidence interval is presented as a dark shaded range. It begins at about 0 and generally increases ending at about [0.75, 4.75]. 90 percent interval is presented as a light shaded range. It begins at about 0 and generally increases ending at about [0, 6].

Note: The staff baseline projection for the federal funds rate is derived from the outcome-based policy rule. Explanatory Note B provides further background information.

Figure: Market-Based Expectations for the Federal Funds Rate

Line chart, 2011:Q4 to 2016:Q4. Unit is percent. There are two series, "Current Tealbook" and "Previous Tealbook." Current Tealbook begins at about 0 and remains about constant until 2012:Q4. It generally increases ending at about 2. Previous Tealbook begins at about 0 and remains about constant until 2012:Q3. It generally increases ending at about 2.25. Current Tealbook 70 percent confidence interval is presented as a dark shaded range that begins at about 0 and generally increases ending at about [.5, 3.5]. Current Tealbook 90 percent confidence interval is presented as a light shaded range that begins at about 0 and generally increases ending at about [0.25, 5.5]. The Previous Tealbook 70 and 90 percent confidence intervals follow paths similar to the Current Tealbook 70 and 90 percent confidence intervals, but end about 0.1-0.3 percent higher.

Note: The panel depicts the mean path and confidence intervals of future federal funds rates derived from market quotes as of December 7. Explanatory Note B provides further background information.

Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2012Q1	2012Q2	2012Q1	2012Q2
Taylor (1993) rule	0.90	0.59	0.90	0.59
Previous Tealbook	0.86	0.62	0.86	0.62

Taylor (1999) rule	0.13	0.13	-1.82	-2.15
<i>Previous Tealbook</i>	0.13	0.13	-2.09	-2.28
Estimated outcome-based rule	0.13	0.13	-0.11	-0.42
<i>Previous Tealbook Outlook</i>	0.13	0.13	-0.12	-0.39
Estimated forecast-based rule	0.13	0.13	-0.27	-0.61
<i>Previous Tealbook Outlook</i>	0.13	0.13	-0.24	-0.60
First-difference rule	0.13	0.13	-0.02	-0.14
<i>Previous Tealbook Outlook</i>	0.13	0.13	0.03	0.01

Memo

	2012Q1	2012Q2
Staff assumption	0.08	0.10
Fed funds futures	0.10	0.13
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (December 1, 2011)	0.10	0.10

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.

[Box:] Policy Rule Prescriptions and the Lower Bound on Interest Rates

Figure: Outcome-based rule

Line chart, 2008 to 2016. Unit is percent. There are two series, "Unconstrained" and "Baseline." Unconstrained begins at about 3 and generally decreases to about -4 in 2009:Q3. It generally increases ending at about 3. Baseline begins at about 3 and generally decreases to about 0 in 2009:Q1. It remains about constant until 2014:Q3 then generally increases ending at about 3.

Figure: First-difference rule

Line chart, 2008 to 2016. Unit is percent. There are three series, "Unconstrained," "Constrained," and "Baseline." Unconstrained begins at about 3 and generally decreases to about -3 in 2009:Q3. It fluctuates but remains about constant until 2013:Q4. It generally increases ending at about 1. Constrained begins at about 3 and generally decreases to about 0 in 2009:Q2. It remains about constant until 2003:Q3. It generally increases ending at about 4.5. Baseline begins at about 3 and generally decreases to about 0 in 2009:Q2. It remains about constant until 2014:Q4 then generally increases ending at about 2.75.

Figure: Unconstrained Taylor rules

Line chart, 2008 to 2016. Unit is percent. There are three series, "Taylor 1993," "Taylor 1999," and "Baseline." Taylor 1993 begins at about 3 and generally decreases to about -1 in 2009:Q3. It fluctuates but generally increases ending at about 3. Taylor 1999 begins at about 3 and generally decreases to about -5 in 2009:Q3. It generally increases ending at about 2. Baseline begins at about 3 and generally decreases to about 0 in 2009:Q1. It remains about constant until 2014:Q4 then generally increases ending at about 2.75.

Funds rate deviations

	Cumulative Deviation*	Departure Date**
Outcome based	7.4	2014Q4
First difference	8.9	2013Q3
Taylor 1993	0.6	2012Q1
Taylor 1999	10.3	2015Q2

* The sum of the deviations of the constrained from the unconstrained rules over 2009Q1-2011Q4 in percentage-point years. [Return to table](#)

** The date that the unadjusted, constrained rule rises above the effective lower bound. [Return to table](#)

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

Monetary Policy Alternatives

Table 1: Overview of Policy Alternatives for the December 13 FOMC Statement

Selected Elements	November Statement	December Alternatives		
		A	B	C
Balance Sheet				
MEP	\$400 billion; complete by end of June 2012	unchanged		cut to \$200 billion; complete by end of March 2012
Additional Purchases	none	\$500 billion of agency MBS by end of December 2012 OR \$40 billion of agency MBS per month; will adjust this program as needed to foster objectives	none	
Reinvestment Policies	payments of agency debt and MBS into agency MBS; Treasuries into Treasuries	unchanged		
Forward Rate Guidance				
First Option	at least through mid-2013	at least through end of 2014	unchanged	at least through 2012
Second Option	none	at least through end of 2014 and projections of unemployment and inflation rates at end of 2014	none	
Future Policy Action				
Approach	assess economic outlook;	monitor economic outlook and financial developments;		unchanged
	prepared to employ its tools to promote recovery	unchanged		prepared to employ its tools as appropriate to promote objectives

[Note: In the December 2011 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.]

December FOMC Statement--Alternative A

1. Information received since the Federal Open Market Committee met in ~~September~~ **November** indicates ~~suggests~~ that ~~economic growth strengthened somewhat in the third quarter, reflecting in part a reversal of the temporary factors that had weighed on growth earlier in the year~~ **the economy has been expanding modestly, while global growth appears to be slowing. Nonetheless** ~~Although~~ recent indicators point to ~~continuing weakness~~ **some improvement** in overall labor market conditions, ~~and the unemployment rate remains elevated. Household spending has increased at a somewhat faster pace in recent months.~~ **continued to advance, but business fixed investment in equipment and software has continued to expand appears to be increasing less rapidly** but investment in nonresidential structures is ~~still weak~~; and the housing sector remains depressed. Inflation ~~appears to have~~ **has** moderated since earlier in the year, as ~~prices of energy and some commodities have declined from their peaks.~~ **and** longer-term inflation expectations have remained stable.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee ~~continues to~~ **expects that, absent further policy action, a moderate** the pace of economic growth **would remain modest** over coming quarters and consequently anticipates that the unemployment rate ~~will~~ **would** decline only **very** gradually toward levels that the Committee judges to be consistent with its dual mandate. Moreover, ~~there are significant downside risks to the economic outlook, including strains in global financial markets;~~ the Committee ~~also~~ anticipates that inflation ~~will~~ **would** settle, over coming quarters, at levels at or below those consistent with the Committee's dual mandate ~~as the effects of past energy and other commodity price increases dissipate further.~~ **Strains in global financial markets continue to pose significant downside risks to the economic outlook, and the risks to the outlook for inflation also appear to be tilted to the downside.** ~~However, the Committee will continue to pay close attention to the evolution of inflation and inflation expectations.~~

3. To support a stronger economic recovery and to help ensure that inflation, over time, is at levels consistent with the dual mandate, the Committee decided today to **purchase a further \$500 billion of agency mortgage-backed securities by the end of December 2012. In addition, the Committee intends to** continue its

program to extend the average maturity of its holdings of securities as announced in September. The Committee is **also** maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. **These programs should put downward pressure on longer-term interest rates, provide support to mortgage markets, and help make broader financial conditions more accommodative.** The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate.

OR

3'. To support a stronger economic recovery and to help ensure that inflation, over time, is at levels consistent with the dual mandate, the Committee decided today to **undertake a program of purchases of agency mortgage-backed securities. The Committee has initially authorized purchases of agency mortgage-backed securities of \$40 billion per month, and will adjust this program as needed to foster its objectives of maximum employment and stable prices. In addition, the Committee will** continue its program to extend the average maturity of its holdings of securities as announced in September. The Committee is **also** maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. **These programs should put downward pressure on longer-term interest rates, provide support to mortgage markets, and help make broader financial conditions more accommodative.** The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate.

4. The Committee also decided to keep the target range for the federal funds rate at 0 to ¼ percent. ~~and currently~~ **The Committee now** anticipates that economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant **this** exceptionally low levels range for the federal funds rate at least through ~~mid-2013~~ **the end of 2014. Specifically, given its anticipated path for monetary policy, the Committee currently projects that the unemployment rate will be roughly [7] percent and the inflation rate (as measured by the price index for personal consumption expenditures) will be around [2] percent at the end of 2014.**

5. The Committee will ~~continue to assess~~ **monitor** the economic outlook in light of incoming information and financial developments and is prepared to employ its tools to promote a stronger economic recovery in a context of price stability.

December FOMC Statement--Alternative B

1. Information received since the Federal Open Market Committee met in ~~September~~ **November** indicates ~~suggests~~ **that economic growth strengthened somewhat in the third quarter, reflecting in part a reversal of the temporary factors that had weighed on growth earlier in the year the economy has been expanding moderately, notwithstanding some apparent slowing in global growth. Nonetheless While** recent indicators point to ~~continuing weakness~~ **some improvement** in overall labor market conditions, ~~and the unemployment rate remains elevated. Household spending has increased at a somewhat faster pace in recent months. continued to advance, but business fixed investment in equipment and software has continued to expand appears to be increasing less rapidly but investment in nonresidential structures is still weak, and the housing sector remains depressed. Inflation appears to have~~ **has** moderated since earlier in the year, ~~as prices of energy and some commodities have declined from their peaks. and~~ longer-term inflation expectations have remained stable.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee continues to expect a moderate pace of economic growth over coming quarters and consequently anticipates that the unemployment rate will decline only gradually toward levels that the Committee judges to be consistent with its dual mandate. ~~Moreover, there are~~ **Strains in global financial markets continue to pose** significant downside risks to the economic outlook, ~~including strains in global financial markets.~~ The Committee also anticipates that inflation will settle, over coming quarters, at levels at or below those consistent with the Committee's dual mandate ~~as the effects of past energy and other commodity price increases dissipate further.~~ However, the Committee will continue to pay close attention to the evolution of inflation and inflation expectations.

3. To support a stronger economic recovery and to help ensure that inflation, over time, is at levels consistent with the dual mandate, the Committee decided today to continue its program to extend the average maturity of its holdings of securities as announced in September. The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate.

4. The Committee also decided to keep the target range for the federal funds rate at 0 to ¼ percent and currently anticipates that economic conditions--including low rates of resource utilization and a subdued outlook for inflation over the medium run--are likely to warrant exceptionally low levels for the federal funds rate at least through mid-2013.

5. The Committee will ~~continue to assess~~ **monitor** the economic outlook in light of incoming information and financial developments and is prepared to employ its tools to promote a stronger economic recovery in a context of price stability.

December FOMC Statement--Alternative C

1. Information received since the Federal Open Market Committee met in ~~September~~ **November** indicates ~~suggests~~ **that the pace of economic growth activity has** strengthened somewhat in the third quarter, reflecting in part a reversal of the temporary factors that had weighed on growth earlier in the year. ~~Nonetheless, recent indicators point to continuing weakness in overall labor market conditions, and~~ **Although** the unemployment rate remains elevated, **it has declined of late, and employment has continued to increase.** Household spending has increased at a somewhat faster pace in recent months ~~advanced further, and~~ business fixed investment in equipment and software has continued to expand, but investment in nonresidential structures is still weak, and the housing sector remains depressed. Inflation ~~appears to have~~ **has** moderated **only somewhat** since earlier in the year, ~~despite a decline in the~~ **as** prices of energy and some commodities ~~have declined from their peaks.~~ Longer-term inflation expectations have remained stable.

2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee ~~continues to expects a moderate pace~~ **some strengthening** of economic growth over coming quarters and consequently anticipates that the unemployment rate will decline ~~only~~ gradually toward levels that the Committee judges to be consistent with its dual mandate. ~~Moreover, there are significant downside risks to the economic outlook, including strains in global financial markets.~~ The Committee also anticipates that inflation will settle, over coming quarters, at levels ~~at or below those~~ consistent with the Committee's dual mandate ~~as the effects of past energy and other commodity price increases dissipate further.~~ However, the Committee will continue to pay close attention to the evolution of inflation and inflation expectations.

3. To support ~~a stronger~~ **the** economic recovery ~~and to while helping~~ to ensure that inflation, over time, ~~is at~~ **does not exceed** levels ~~that are~~ consistent with the dual mandate, the Committee decided today to ~~continue its~~ **reduce by half the size of the** program to extend the average maturity of its holdings of securities ~~as that it~~ announced in September. **In particular, the Committee intends to limit purchases and sales of securities under this program to \$200 billion each and to complete these operations by the end of March 2012.** The Committee is maintaining its existing policies of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities and of rolling over maturing Treasury securities at auction. The Committee will regularly review the size and composition of its securities holdings and is prepared to adjust those holdings as appropriate.

4. The Committee also decided to keep the target range for the federal funds rate at 0 to ¼ percent and ~~currently~~ **now** anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through ~~mid-2013~~ **2012**.

5. The Committee will ~~continue to~~ assess the economic outlook in light of incoming information and is prepared to employ its tools **as appropriate** to promote a ~~stronger economic recovery in a context of price stability~~ **its objectives of maximum employment and stable prices**.

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 four series, "Alt A," "Alt B," "Alt C," and "October Alt B." The series begin at about 750 and remain about constant until late 2008. They generally increase together to about 2250 in early 2009 then generally decrease together to about 1800 in early 2009. They generally increase together to about 3000 in mid-2011. Alt A generally increases to about 3400 in early 2013. It generally decreases to about 1750 in early 2018 then generally increases ending at about 2000. Alt B remains about constant until mid-2014 then generally decreases to about 1500 in mid-2017. It generally increases ending in about 2000. Alt C generally decreases to about 1500 in early 2016 then generally increases ending at about 2000. October Alt B remains about constant until early 2014 then generally decreases to about 1500 in mid-2017. It generally increases ending at about 2000.

Growth Rates for the Monetary Base

Date	Alternative B	Alternative A	Alternative C	Memo: October Tealbook
Percent, annual rate				
Monthly				
Jan-11	23.3	23.3	23.3	23.3
Feb-11	57.6	57.6	57.6	57.6
Mar-11	97.8	97.8	97.8	97.8
Apr-11	74.4	74.4	74.4	74.4
May-11	42.1	42.1	42.1	42.1
Jun-11	35.9	35.9	35.9	35.9
Jul-11	27.0	27.0	27.0	27.0
Aug-11	2.0	2.0	2.0	2.0
Sep-11	-10.6	-10.6	-10.6	-10.5
Oct-11	-4.5	-4.5	-4.5	1.5
Nov-11	-8.0	-8.0	-8.0	10.6
Dec-11	12.1	11.9	11.5	0.8
Jan-12	15.1	16.5	14.0	-8.8
Feb-12	10.3	18.8	9.2	9.8
Mar-12	4.4	19.8	3.4	16.6
Apr-12	-29.5	-12.1	-31.2	3.5
May-12	0.9	18.0	-1.4	3.3
Jun-12	15.4	31.6	13.2	3.2
Quarterly				
2011 Q1	36.8	36.8	36.8	36.8
2011 Q2	69.3	69.3	69.3	69.4
2011 Q3	21.0	21.0	21.0	21.1
2011 Q4	-4.1	-4.1	-4.1	0.8
2012 Q1	9.7	13.8	8.8	2.4
2012 Q2	-5.9	10.0	-7.6	7.1
2012 Q3	4.7	21.2	-2.2	2.0
2012 Q4	5.4	20.7	-4.9	0.8
Annual - Q4 to Q4				
2010	0.9	0.9	0.9	0.9

2011	33.5	33.5	33.5	35.2
2012	3.5	17.4	-1.5	3.1
2013	0.5	4.7	-10.8	-0.8
2014	-4.8	-4.5	-14.6	-6.1
2015	-11.3	-11.9	-15.8	-12.2
2016	-19.6	-20.1	-11.7	-19.9

Note: Not seasonally adjusted.

Growth Rates for M2

(Percent, seasonally adjusted annual rate)

Tealbook Forecast *	
Monthly Growth Rates	
Apr-11	4.3
May-11	6.9
Jun-11	11.6
Jul-11	26.6
Aug-11	30.0
Sep-11	6.0
Oct-11	3.7
Nov-11	4.8
Dec-11	5.0
Jan-12	3.3
Feb-12	3.3
Mar-12	3.3
Quarterly Growth Rates	
2011 Q2	6.0
2011 Q3	19.9
2011 Q4	7.5
2012 Q1	3.8
Annual Growth Rates	
2010	3.2
2011	9.9
2012	3.9
2013	3.1

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

[Note: In the December 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.]

December 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 continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. **[The Committee also directs the Desk to execute purchases of agency mortgage-backed securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately \$3.1 trillion by the end of December 2012.]** **The Committee also directs the Desk to execute purchases of agency mortgage-backed securities in order to increase the total face value of domestic securities held in the System Open Market Account by approximately \$40 billion per month.**] The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities ~~in order to maintain the total face value of domestic securities at approximately \$2.6 trillion.~~ The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment

over time of the Committee's objectives of maximum employment and price stability.

December 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 continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of \$400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of \$400 billion. The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities in order to maintain the total face value of domestic securities at approximately \$2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

December 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 ~~continue~~ **modify** the maturity extension program it began in September ~~so as~~ to purchase, by the end of ~~June~~ **March** 2012, Treasury securities with remaining maturities of approximately 6 years to 30 years with a total face value of ~~\$400~~ **\$200** billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of ~~\$400~~ **\$200** billion. The Committee also directs the Desk to maintain its existing policies of rolling over maturing Treasury securities into new issues and of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities in order to maintain the total face value of domestic securities at approximately \$2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

† 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, prices 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 exogenous variables in the extended baseline forecast.
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)	Projected real funds rate (twelve-quarter-ahead average)
Lagged core inflation	-1.5	-3.3	-1.4
Lagged headline inflation	-2.7	-3.4	-1.4
Projected headline inflation	-1.2	-3.2	-1.2

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), the forecast of inflation two and three quarters ahead ($\pi_{t+2|t}$ and $\pi_{t+3|t}$), the output gap estimate for the current period as well as its one quarter ahead forecast ($y_t - y_t$ and $y_{t+1|t} - y_{t+1|t}$), and the forecast of three-quarter-ahead annual average GDP growth relative to potential ($\Delta^4 y_{t+3|t} - \Delta^4 y_{t+3|t}$). The assumed value of the inflation objective is denoted π^* . The outcome-based and forecast-based rules were estimated using real-time data over the sample 1988:1-1998:4. The Taylor (1999) rule was chosen using the Bayesian information criterion. Each rule incorporates a 75 basis point shift in the intercept, specified as a sequence of 25 basis point increments during the first three quarters of 1998. The first two simple rules were proposed by Taylor (1993, 1999). The prescriptions of the first-difference rule do not depend on assumptions regarding r or the level of the output gap; see Orphanides (2003).

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

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

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

Billions of dollars

	Nov 30, 2011	2012	2014	2016	2018	2020
Total assets	2,817	3,252	3,158	2,240	1,793	2,002
Selected assets						
Liquidity programs for financial firms	3	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	2	0	0	0	0	0
Lending through other credit facilities	10	4	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	10	4	0	0	0	0
Support for specific institutions	38	29	21	11	7	4
Credit extended to AIG	0	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	38	29	21	11	7	4
Securities held outright	2,605	3,030	2,979	2,098	1,674	1,896
U.S. Treasury securities	1,672	1,662	1,611	1,238	1,347	1,896
Agency debt securities	106	77	39	16	2	0
Agency mortgage-backed securities	827	1,291	1,330	843	324	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	161	188	157	130	112	103
Total liabilities	2,763	3,182	3,066	2,117	1,630	1,788
Selected liabilities						
Federal Reserve notes in circulation	1,020	1,090	1,217	1,365	1,515	1,673
Reverse repurchase agreements	93	70	70	70	70	70
Deposits with Federal Reserve Banks	1,578	2,006	1,762	666	30	30
Reserve balances held by depository institutions	1,492	1,988	1,757	661	25	25
U.S. Treasury, General Account	86	17	5	5	5	5
U.S. Treasury, Supplementary Financing Account	0	0	0	0	0	0
Other balances	0	0	0	0	0	0
Interest of Federal Reserve Notes due to U.S. Treasury	1	0	0	0	0	0
Total capital	54	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 B

Billions of dollars

	Nov 30, 2011	2012	2014	2016	2018	2020
Total assets	2,817	2,828	2,680	1,934	1,793	2,002
Selected assets						
Liquidity programs for financial firms	3	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	2	0	0	0	0	0
Lending through other credit facilities	10	4	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	10	4	0	0	0	0
Support for specific institutions	38	29	21	11	7	4
Credit extended to AIG	0	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	38	29	21	11	7	4
Securities held outright	2,605	2,610	2,504	1,795	1,675	1,897

U.S. Treasury securities	1,672	1,662	1,611	1,238	1,465	1,897
Agency debt securities	106	77	39	16	2	0
Agency mortgage-backed securities	827	871	855	540	208	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	161	185	154	128	110	101
Total liabilities	2,763	2,758	2,587	1,811	1,630	1,788
Selected liabilities						
Federal Reserve notes in circulation	1,020	1,090	1,217	1,365	1,515	1,673
Reverse repurchase agreements	93	70	70	70	70	70
Deposits with Federal Reserve Banks	1,578	1,582	1,284	361	30	30
Reserve balances held by depository institutions	1,492	1,564	1,279	356	25	25
U.S. Treasury, General Account	86	17	5	5	5	5
U.S. Treasury, Supplementary Financing Account	0	0	0	0	0	0
Other balances	0	0	0	0	0	0
Interest of Federal Reserve Notes due to U.S. Treasury	1	0	0	0	0	0
Total capital	54	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

	Nov 30, 2011	2012	2014	2016	2018	2020
Total assets	2,817	2,662	2,038	1,603	1,793	2,002
Selected assets						
Liquidity programs for financial firms	3	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0
Central bank liquidity swaps	2	0	0	0	0	0
Lending through other credit facilities	10	4	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	10	4	0	0	0	0
Support for specific institutions	38	29	16	11	7	4
Credit extended to AIG	0	0	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	38	29	16	11	7	4
Securities held outright	2,605	2,469	1,890	1,482	1,689	1,908
U.S. Treasury securities	1,672	1,598	1,338	1,246	1,689	1,908
Agency debt securities	106	77	39	16	0	0
Agency mortgage-backed securities	827	794	513	220	0	0
Net portfolio holdings of TALF LLC	1	1	1	0	0	0
Total other assets	161	159	131	110	97	90
Total liabilities	2,763	2,592	1,945	1,481	1,630	1,788
Selected liabilities						
Federal Reserve notes in circulation	1,020	1,090	1,217	1,365	1,515	1,673
Reverse repurchase agreements	93	70	70	70	70	70
Deposits with Federal Reserve Banks	1,578	1,416	642	30	30	30
Reserve balances held by depository institutions	1,492	1,398	637	25	25	25
U.S. Treasury, General Account	86	17	5	5	5	5
U.S. Treasury, Supplementary Financing Account	0	0	0	0	0	0
Other balances	0	0	0	0	0	0
Interest of Federal Reserve Notes due to U.S. Treasury	1	0	0	0	0	0
Total capital	54	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.

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