January 2011 Tealbook Tables and Charts

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## January 2011 Tealbook A Tables and Charts ${ }^{\ddagger}$

## Domestic Economic Developments and Outlook

## Key Background Factors underlying the Baseline Staff Projection

Figure: Federal Funds Rate

Line chart, 2007 to 2012. Unit is percent. Data are quarterly average. There are four series, "Current," "Previous Tealbook," "Market, Expected Rate," and "Market, modal rate." Current and Previous Tealbook begin at about 5.25 and generally decrease together to about 0 in 2009:Q1. They remain about constant to the end of the timeline. Market, expected rate and Market, modal rate begin at about 5.25 and generally decrease together to about 0 in 2009:Q1. They remain about constant until 2011:Q4 then Market, expected rate generally increases to about 1 and Market, modal rate generally increases ending at about 0.25 .


## Figure: Long-Term Interest Rates

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

## Figure: Equity Prices

Line chart, 2007 to 2012. Unit is ratio scale, 2007:Q1 = 100. Data are quarter-end. There are two series "Dow Jones Total Stock Market Index -- Current" and "Dow Jones Total Stock Market Index -- Previous Tealbook." Both series begin at about 100 and generally increase together to about 105 in 2007:Q3. They generally decrease together to about 55 in 2009:Q1 then generally increase together to about 85 in 2010:Q1 then generally decrease together to about 75 in 2010:Q3. They generally increase together ending at about 110.

## Figure: House Prices

Line chart, 2007 to 2012. Unit is ratio scale, 2007:Q1 = 100. Data are quarterly. There are two series, "Core Logic Index -- Current" and "Core Logic Index -- Previous Tealbook." Both series begin at about 100 and generally decrease together to about 83 in 2009:Q1. They generally increase together to about 75 in 2010:Q2 then generally decrease together ending at about 66.

## Figure: Crude Oil Prices

Line chart, 2007 to 2012. Unit is dollars per barrel. Data are quarterly average. There are two series, "West Texas Intermediate -- Current" and "West Texas Intermediate -- Previous Tealbook." Both series begin at about 60 and generally increase together to about 120 in 2008:Q2. They generally decrease together to about 40 in 2009:Q1 then generally increase together to about 70 in 2010:Q4. West Texas Intermediate -- Current generally increases to about 100 in 2011:Q1 and remains about constant to the end of the timeline. West Texas Intermediate -- Previous Tealbook generally increases to about 90 in 2011:Q1 and remains about constant to the end of the timeline.

## Figure: Broad Real Dollar

Line chart, 2007 to 2012. Unit is 2007:Q1 = 100. Data are quarterly average. There are two series, "Current" and "Previous Tealbook." Both series begin at about 100 and generally decrease together to about 90 in 2008:Q2. They generally increase together to about 102 in 2009:Q1 then generally decrease together to about 93 in 2009:Q4. They generally increase together to about 94 in 2010:Q2. Current generally decreases ending at about 82 . Previous Tealbook generally decreases to about 87 in 2010:Q4 then generally increases to about 90 in 2011:Q1. It generally decreases ending at about 83.

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

## Figure: Commodity Prices and the Dollar

Line chart, January 2010 through December 2010. Unit is an index, December 31, $2009=100$. Data are daily. There are four series, "CRB (Commodity Research Bureau) foods (right scale)," "WTI (West Texas Intermediate) oil (right scale)," "Broad nominal dollar (inverted, left scale)," and "CRB Industrial Metals (right scale)." CRB foods begins at about 100 and fluctuates but generally increases to about 105 in early May 2010. It generally decreases to about 100 in early June 2010 then fluctuates but generally increases to about 125 in early October 2010. It fluctuates but generally decreases to about 115 in late November 2010 then generally increases ending at about 135. WTI oil begins at about 100 then fluctuates but generally decreases to about 90 in early February 2010. It fluctuates but generally increases to about 110 in early April 2010 then fluctuates but generally decreases to about 85 in late May 2010. It fluctuates but generally increases to about 105 in early August 2010 then generally decreases to about 90 in late August 2010. It fluctuates but generally increases ending at about 115. Broad nominal dollar begins at about 100 and generally increases to about 103 in early February 2010. It fluctuates but generally decreases to about 100 in early April 2010 then generally increases to about 105 in late May 2010. It generally decreases to about 100 in early August 2010 then generally increases to about 103 in late August 2010 . It generally decreases to about 97 in early November 2010 then fluctuates but remains about constant to the end of the timeline. CRB Industrial Materials begins at about 100 and fluctuates but generally decreases to about 90 in early February 2010. It generally increases to about 105 in mid-April 2010 then generally decreases to about 85 in early June 2010. It generally fluctuates but generally increases ending at about 127.

Source: Commodity Research Bureau and staff estimate.

Figure: World IP and Commodity Prices

Line chart, 2002 to 2011. Unit is an index, January 2002 = 100. Data are monthly. There are two series, "World Industrial Production (right scale)" and "CRB (Commodity Research Bureau) Industrials (left scale)." World Industrial Production begins at about 100 and generally increases to about 135 in early 2008 . It generally decreases to about 120 in early 2009 then generally increases ending at about 140 . CRB Industrials begins at about 100 and generally increases to about 240 in early 2008. It generally decreases to about 135 in late 2008 then fluctuates but generally increases ending at about 275.

Source: Netherlands Bureau for Economic Policy Analysis, and the Commodity Research Bureau.
Figure: OPEC Spare Production Capacity

Line chart, 2002 to 2011. Unit is millions of barrels per day. Data are quarterly. The series begins at about 6.5 and fluctuates but generally decreases to about 1 in mid2004. It fluctuates but generally increases to about 4 in mid- 2007 then generally decreases to about 2.5 in early 2008 . It generally increases to about 6.5 in late 2009 then generally decreases ending at about 5.5.

Source: Oil Market Report© Organisation for Economic Co-operation and Development/International Energy Agency 2010.

Summary of the Near-Term Outlook

| Measure | 2010:Q4 |  | 2011:Q1 |  | 2011:Q2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Previous <br> Tealbook | Current <br> Tealbook | Previous <br> Tealbook | Current <br> Tealbook | Previous <br> Tealbook | Current <br> Tealbook |
| Real GDP | 2.5 | 3.8 | 3.4 | 3.6 | 3.5 | 3.7 |
| Private domestic final purchases | 2.7 | 4.0 | 3.5 | 3.9 | 4.1 | 4.3 |
| Personal consumption expenditures | 2.7 | 4.1 | 3.2 | 3.1 | 3.3 | 3.5 |
| Residential investment | -3.8 | . 7 | 2.9 | 3.2 | 8.0 | 9.2 |
| Nonres. structures | -. 9 | 3.7 | -3.5 | -. 8 | -. 7 | . 0 |
| Equipment and software | 5.8 | 3.7 | 9.4 | 13.3 | 12.7 | 13.0 |
| Federal purchases | 2.1 | 1.1 | 1.1 | 2.1 | 1.0 | . 9 |
| State and local purchases | . 1 | -. 9 | . 1 | -. 1 | . 3 | . 2 |
|  | Contribution to change in real GDP (percentage points) |  |  |  |  |  |
| Inventory investment | -1.6 | -3.0 | . 1 | . 5 | -. 2 | . 3 |
| Net exports | 1.7 | 3.5 | . 3 | -. 2 | . 2 | -. 3 |

## Recent Nonfinancial Developments (1)

Figure: Change in Private Payroll Employment
at about 0 and fluctuates but generally decreases to about -400 in late 2001. It fluctuates but generally increases to about 350 in early 2005 then fluctuates but generally decreases to about -800 in early 2009 then fluctuates but generally increases to about 300 then fluctuates but generally decreases ending at about 100 . The series runs about concurrent with a second series labeled "3-month moving average."

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

Figure: Unemployment Rate

Line chart, 2001 to 2011 . Unit is percent. The end of the series is marked December. The series begins at about 4 and fluctuates but generally increases to about 6.25 in mid-2003. It generally decreases to about 4 in late 2006 then generally increases to about 10 in late 2009. It generally decreases ending at about 9.5

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

## Figure: Manufacturing IP ex. Motor Vehicles and Parts

Line chart, 2001 to 2011. Unit is 3-month percent change, annual rate. 0 on the scale is marked by a horizontal line. The end of the series is marked December. The series begins at about -2.5 and fluctuates but generally increases to about 7 in early 2002. It generally decreases to about -1 in mid- 2003 then fluctuates but generally increases to about 8 in early 2005 then generally decreases to about -5 in mid-2005. It generally increases to about 13 in early 2006 then fluctuates but generally decreases to about -23 in early 2009. It generally increases to about 10 in late 2009 then generally decreases to about 4 in early 2010 . It generally increases to about 14 in mid-2010 then generally decreases ending at about 5 .

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

## Figure: Production of Light Motor Vehicles

Line chart, 2001 to 2011. Unit is millions of units, annual rate. The end of the series is marked December. Schedules: Q1 is marked by a circle in early 2011 at about 8 . The series begins at about 10.5 and generally increases to about 12 in late 2001. It generally decreases to about 11 in early 2002 then generally increases to about 13 in mid-2002. It fluctuates but generally decreases to about 4 in late 2008 then generally increases to about 9 in mid-2010. It generally decreases ending at about 7.5 .

Note: Schedules data are from Ward's Communications.
Source: Ward's Auto Infobank.

## [Box:] Sales of Light Vehicles in the Downturn and Recovery

## Figure: Light Vehicle Sales

Line chart, 1970 to 2010. Unit is millions of units, annual rate. A blue shaded bar representing staff forecast marks the time period 2011 . There are two series, "Sales" and "Sales Trend." Sales begins at about 13 and generally increases to about 17 in 1972. It generally decreases to about 9 in 1974 then generally increases to about 16 in 1978. It generally decreases to about 8 in 1981 then fluctuates but generally increases to about 23 in 1986 . It generally decreases to about 11 in 1990 then generally increases to about 23 in 2001. It generally decreases to about 16 in 2002 then fluctuates but remains about constant until it increases to about 20 in 2004 . It generally decreases to about 20 in 2008 then generally increases ending at about 15 . Sales trend begins at about 14 and increases ending at about 16 .
 1991, March 2001-November 2001, and December 2007-June 2009

Source: Ward's and staff estimate.

## Figure: Stock of Light Vehicles Per Capita

Line chart, 1970 to 2010 . Unit is vehicles. A blue shaded bar representing staff forecast marks the time period $2010: Q 3$ through 2011 . The series begins at about 0.8 and fluctuates but generally increases to about 1.02 in 2002 . It fluctuates but generally decreases ending at about 0.98.
 November 1982, July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009

Source: Federal Highway Administration and staff estimate

## Recent Nonfinancial Developments (2)

## Figure: Real PCE Goods ex. Motor Vehicles

Line chart, 2001 to 2011. Unit is billions of unchained (2005) dollars. The end of the series is labeled December. The series begins at about 2300 and generally increases to about 2950 in early 2008. It generally decreases to about 2800 in early 2009 then generally increases ending at about 3000.

## Figure: Sales of Light Motor Vehicles

Line chart, 2001 to 2011. Unit is millions of units, annual rate. The end of the series is labeled December. The series begins at about 18 and generally increases to about 23 in early 2002. It generally decreases to about 16 in early 2002 then generally fluctuates between about 16 and about 18 until early 2005 . It generally increases to about 21 in late 2005 then generally decreases to about 9 in early 2009 . It generally increases to about 14 in mid- 2009 then generally decreases to about 9 in late 2009. It generally increases ending at about 12.

Source: Ward's Auto Infobank.

## Figure: Single-family Housing Starts

Line chart, 2001 to 2011. Unit is thousands of units, annual rate. The end of the series is labeled December. There are two series, "Starts" and "Adjusted permits." Both series begin at about 1200 and generally increase together to about 1800 in early 2006 . They generally decrease together to about 300 in late 2008 then generally increase together to about 600 in early 2010. They generally decrease together ending at about 450.

Note: Adjusted permits equal permits plus starts outside of permit-issuing areas.
Source: U.S. Census Bureau.
Figure: Single Family Home Sales

Line chart, 2001 to 2011. Unit is thousands of units, annual rate. The end of the series is labeled November. There are two series, "New (right scale)" and "Existing (left scale)." New begins at about 950 and generally increases to about 1350 in late 2005. It generally decreases ending at about 300 . Existing begins at about 4500 and generally increases to about 6400 in early 2006. It generally decreases to about 4000 in late 2008. It generally increases to about 5600 in late 2009 then generally decreases to about 3250 in mid-2010. It generally increases ending at about 4000.

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

## Figure: Nondefense Capital Goods ex. Aircraft

Line chart, 2001 to 2011. Unit is billions of dollars. The end of the series is labeled November. There are two series, "Orders" and "Shipments." Orders begins at about 63 and generally decreases to about 45 in early 2002. It generally increases to about 72 in late 2007 then generally decreases to about 47 in early 2009 . It generally increases ending at about 65 . Shipments begins at about 63 and generally decreases to about 50 in late 2002. It generally increases to about 67 in early 2008 then generally decreases to about 53 in early 2009. It generally increases ending at about 62 .

Source: U.S. Census Bureau.

## Figure: Nonresidential Construction Put in Place

Line chart, 2001 to 2011. Unit is billions of chained (2005) dollars. The end of the series is labeled November. The series begins at about 275 and generally increases to about 400 in mid-2007. It fluctuates but remains about constant until late 2008 then generally decreases ending at about 250 .

Source: U.S. Census Bureau.

## Recent Nonfinancial Developments (3)

## Figure: Inventory Ratios ex. Motor Vehicles

Line chart, 2001 to 2011. Unit is months. The end of the upper series is labeled December. The end of the lower series is labeled November. There are two series, "Staff flow-of-goods system" and "Census book-value data." Staff flow-of-goods system begins at about 1.7 and fluctuates but generally decreases to about 1.5 in early 2008. It fluctuates but generally increases to about 1.65 in early 2009 then generally decreases ending at about 1.5 . Census book-value data begins at about 1.4 and generally decreases to about 1.2 in mid-2005. It generally increases to about 1.3 in late 2006 then generally decreases to about 1.2 in mid-2008. It generally increases to about 1.4 then generally decreases ending at about 1.2.
 and inventories are relative to sales.

Source: U.S. Census Bureau; staff calculation

## Figure: Defense Spending

Line chart, 2001 to 2011. Unit is billions of chained (2005) dollars. The end of the upper series is labeled December. The end of the lower series is labeled Q3. There are two series, "Unified (monthly)" and "NIPA (quarterly)." Unified begins at about 375 and fluctuates but generally increases ending at about 650. NIPA begins at about 400 and generally increases ending at about 650.

## Figure: Trade Balance

Line chart, 2001 to 2011. Unit is billions of dollars. The end of the series is labeled November. The series begins at about -35 and generally decreases to about -70 in late 2005. It generally increases to about -60 in late 2007 then generally decreases to about -70in mid-2008. It generally increases to about -20 in mid- 2009 then generally decreases to about -50 in mid-2010. It generally increases ending at about -40.

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

## Figure: Exports and Non-Oil Imports

Line chart, 2001 to 2011. Unit is billions of dollars. The end of the series is labeled November. There are two series, "Non-oil Imports" and "Exports." Non-oil imports begins at about 110 and generally decreases to about 100 in early 2002. It generally increases to about 180 in late 2008 then generally decreases to about 130 in mid2009. It generally increases ending at about 170. Exports begins at about 90 and generally decreases to about 80 in late 2001 . It generally increases to about 165 in late 2008 then generally decreases to about 120 in early 2009. It generally increases ending at about 160.

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; U.S. Census Bureau.
Figure: Total PCE Prices

Line chart, 2001 to 2011 . Unit is percent. 0 on the scale is marked by a horizontal line. The end of the series is labeled December (staff estimate). There are two series, "12-month change" and " 3 -month change." 12 -month change begins at about 2 and generally decreases to about . 5 in early 2002 . It generally increases to about 4 in late 2005. It generally decreases to about 2 in late 2006 then generally increases to about 5 in mid- 2008 . It generally decreases to about -1 in mid- 2009 then generally increases to about 2 in early 2010. It generally decreases ending at about 1.5 . 3 -month change begins at about -2 and generally increases to about 4 in early 2003. It generally decreases to about -1 in mid-2003 then fluctuates but generally increases to about 9 in mid-2005. It generally decreases to about -1 in late 2005 then fluctuates but generally increases to about 8 in mid-2008. It generally decreases to about -10 in late 2008 then generally increases to about 4 in late 2009 . It generally decreases to about -1 in mid- 2010 then generally increases ending at about 3.

Note: 3-month changes are at an annual rate.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.
Figure: PCE Prices ex. Food and Energy

Line chart, 2001 to 2011 . Unit is percent. 0 on the scale is marked by a horizontal line. The end of the series is labeled December (staff estimate). There are two series, "12-month change" and " 3 -month change." 12-month change begins at about 1.9 and generally decreases to about 1 in late 2001 . It generally increases to about 2.5 in late 2002 then generally decreases to about 1 in late 2003. It fluctuates but generally increases to about 3 in late 2008 then generally decreases to about 1 in late 2009. It generally increases to about 2 in early 2010 then generally decreases ending at about .9.

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

| Measure | 2009 | 2010 |  | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | H1 | H2 |  |  |
| Real GDP | . 2 | 2.7 | 3.2 | 3.8 | 4.4 |
| Previous Tealbook | . 2 | 2.7 | 2.6 | 3.7 | 4.4 |
| Final sales | -. 3 | 1.0 | 3.9 | 3.8 | 4.1 |
| Previous Tealbook | -. 3 | 1.0 | 2.7 | 3.9 | 4.1 |
| Personal consumption expenditures | . 2 | 2.0 | 3.3 | 3.5 | 3.8 |
| Previous Tealbook | . 2 | 2.0 | 2.8 | 3.5 | 4.0 |
| Residential investment | -13.4 | 5.0 | -14.4 | 9.1 | 13.5 |
| Previous Tealbook | -13.4 | 5.0 | -16.7 | 10.0 | 13.6 |
| Nonresidential structures | -26.5 | -9.5 | . 0 | -. 4 | . 0 |
| Previous Tealbook | -26.5 | -9.5 | -3.0 | -1.4 | -. 8 |
| Equipment and software | -4.9 | 22.6 | 9.4 | 13.6 | 10.6 |
| Previous Tealbook | -4.9 | 22.6 | 10.9 | 12.0 | 9.7 |


| Federal purchases | 3.6 | 5.4 | 4.9 | 1.0 | .0 |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Previous Tealbook | 3.6 | 5.4 | 5.4 | 1.0 | .2 |
| State and local purchases | -1.0 | -1.6 | -.1 | .3 | 1.2 |
| Previous Tealbook | -1.0 | -1.6 | .4 | .4 | 1.3 |
| Exports | -.1 | 10.2 | 7.8 | 9.2 | 8.6 |
| Previous Tealbook | -.1 | 10.2 | 7.2 | 8.3 | 8.1 |
| Imports | -7.2 | 21.8 | .3 | 6.7 | 6.0 |
| Previous Tealbook | -7.2 | 21.8 | 5.7 | 5.3 | 6.2 |
|  | Contributions to change in real GDP |  |  |  |  |
|  |  | (percentage points) |  |  |  |
| Inventory change | .5 | 1.7 | -.7 | .0 | .3 |
| Previous Tealbook | .5 | 1.7 | -.1 | -.1 | .4 |
| Net exports | 1.2 | -1.9 | .9 | .1 | .2 |
| Previous Tealbook | 1.2 | -1.9 | .0 | .2 | .0 |

Figure: Real GDP

Line chart, 1981 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There are gray shaded bars marking the time periods mid1981 to late 1982, mid-1990 to early 1991, 2001, and late 2007 to mid-2009. There is a blue shaded bar marking the time period late 2010 to late 2012 . There are two series, "Current" and "Previous Tealbook." Both series begin at about 2 and generally increase together to about 4.5 in late 1981 . They generally decrease together to about -2.5 in late 1982 then generally increase together to about 8 in early 1984. They generally decrease together to about -1 in late 1990 then fluctuate but generally increase together to about 5.5 in early 2000. They generally decrease together to about .5 in late 2001 then generally increase together to about 4 in mid-2004. They generally decrease together to about -4 in early 2009 then generally increase together ending at about 4.5.
 November 2001, and December 2007-June 2009.

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

## Components of Final Demand

## Figure: Personal Consumption Expenditures

Line chart, 2007 to 2012 . Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a blue shaded bar marking the time period $2010: Q 4$ to 2012:Q4. There are two series, "Current" and "Previous Tealbook." The series begin at about 2.9 and generally decrease together to about -2.5 in 2009:Q2. They generally increase together ending at about 4.

## Figure: Residential Investment

Line chart, 2007 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a blue shaded bar marking the time period 2010 Q4 to 2012:Q4. There are two series, "Current" and "Previous Tealbook." The series begin at about -20 and generally decrease together to about -30 in 2009:Q2. They generally increase together to about 5 in 2010:Q2 then generally decrease together to about -5 in 2010:Q3. They fluctuate but generally increase together ending at about 15.

## Figure: Equipment and Software

Line chart, 2007 to 2012 . Unit is 4 -quarter percent change. 0 on the scale is marked by a horizontal line. There is a blue shaded bar marking the time period 2010 :Q4 to 2012:Q4. There are two series, "Current" and "Previous Tealbook." The series begin at about 3 and remain about constant until 2008:Q1. They generally decrease together to about -20 in 2009:Q1 then generally increase together to about 20 in 2010:Q3. They generally decrease together ending at about 10 .

## Figure: Nonresidential Structures

Line chart, 2007 to 2012 . Unit is 4 -quarter percent change. 0 on the scale is marked by a horizontal line. There is a blue shaded bar marking the time period $2010:$ Q4 to 2012:Q4. There are two series, "Current" and "Previous Tealbook." The series begin at about 10 and generally increase together to about 18 in 2007:Q4. They generally decrease together to about -25 in 2009:Q4 then generally increase together to about 0 in 2011:Q1. They remain about constant to the end of the timeline.

## Figure: Government Consumption \& Investment

in 2010:Q2. They generally increase together to about 2.25 in 2011:Q1 then generally decrease together to about 0.5 in 2011:Q3. They generally increase together ending at about 0.75 .

## Figure: Exports and Imports

Line chart, 2007 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a blue shaded bar marking the time period 2010 :Q4 to 2012:Q4. There are four series, "Exports -- Current," "Exports - Previous Tealbook," "Imports -- Current," and "Imports -- Previous Tealbook." Exports -- current and Exports -- Previous Tealbook begin at about 7 and generally increase together to about 11 in 2007:Q4. They remain about constant until 2008:Q4 then generally decrease together to about -15 in 2009:Q2. They generally increase together to about 15 in 2010:Q2. Exports -- Current decreases to about 10 in 2010:Q4 and remains about constant to the end of the timeline. Exports -- Previous Tealbook decreases to about 9 in 2011:Q1 then remains about constant to the end of the timeline. Imports -- Current and Imports -- Previous Tealbook begin at about 4.5 and remain about constant until 2007:Q4. They generally decrease together to about -20 in 2009:Q2 then generally increase together to about 17 in 2010:Q2. Imports -- Current generally decreases to about 2.5 in 2011:Q3 then generally increases to about 6 in 2011:Q4. It generally decreases ending at about 5. Imports -- Previous Tealbook generally decreases to about 2.5 in 2011:Q3 then generally increases ending at about 5.

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

## Aspects of the Medium-Term Projection

## Figure: Personal Saving Rate

Line chart, 1990 to 2012. Unit is percent. There is a blue shaded bar marking the time period late 2010 to late 2012. There are two series, "Current" and "Previous Tealbook." The series begin at about 6.5 and generally increase together to about 7.5 in early 1991 . They fluctuate but generally decrease together to about 4.5 in late 1997. They generally increase together to about 6 in early 1998 then generally decrease together to about 2 in early 2001 . They generally increase together to about 4 in late 2001 then generally fluctuate together between about 3 and 4 until late 2004. They generally decrease together to about 1 in mid- 2005 then generally increase together to about 7 in mid-2009. They fluctuate but generally decrease together ending at about 5 .

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

Figure: Wealth-to-income ratio

Line chart, 1990 to 2012. Unit is ratio. There is a blue shaded bar marking the time period late 2010 to late 2012. There are two series, "Current" and "Previous Tealbook." The series begin at about 4.8 and generally increase together to about 6.2 in early 2000 . They generally decrease together to about 5.0 in late mid-2002 then generally increase together to about 6.4 in late 2005. They generally decrease together to about 4.4 in early 2009 then fluctuate but generally increase together ending at about 4.8.

Note: Household net worth as a ratio to disposable personal income.
Source: For net worth, Federal Reserve Board, flow of funds data; for income, Dept. of Commerce, Bureau of Economic Analysis.

## Figure: Single-Family Housing Starts

Line chart, 1990 to 2012. Unit is millions of units. There is a blue shaded bar marking the time period late 2010 to late 2012. There are two series, "Current" and "Previous Tealbook." The series begin at about 1.00 and generally decrease to about 0.75 in early 1991 . They generally increase together to about 1.75 in early 2006 then generally decrease together to about 0.25 in early 2009. They generally increase together ending at about 0.75 .

Source: U.S. Census Bureau.

## Figure: Equipment and Software Spending

Line chart, 1990 to 2012. Unit is share of nominal GDP. There is a blue shaded bar marking the time period late 2010 to late 2012 . There are two series, "Current" and "Previous Tealbook." The series begin at about 7.5 and generally decrease together to about 6.5 in early 1993. They generally increase together to about 9.5 in mid2000 then generally decrease together to about 7.5 in early 2004. They generally increase together to about 8.0 in early 2006 then generally decrease together to about 6.25 in early 2009. They generally increase together ending at about 8.0.

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

## Figure: Federal Surplus/Deficit

Line chart, 1990 to 2012. Unit is share of nominal GDP. 0 on the scale is marked by a horizontal line. There is a blue shaded bar marking the time period late 2010 to late 2012. There are two series, "Current" and "Previous Tealbook." The series begin at about -3 and generally decrease to about -5 in late 1992 . They generally increase together to about 3 in late 2000 then generally decrease together to about -3.5 in early 2004 then generally increase together to about -1 in mid- 2007 . They generally decrease together to about -11 in late 2009 then generally increase together ending at about -6.

## Figure: Current Account Surplus/Deficit

Line chart, 1990 to 2012. Unit is share of nominal GDP. 0 on the scale is marked by a horizontal line. There is a blue shaded bar marking the time period late 2010 to late 2012. There are two series, "Current" and "Previous Tealbook." The series begin at about -1.5 then generally increase together to about 1 in early 1990 . They generally decrease together to about -7 in late 2005 then generally increase together to about -2.5 in mid- 2009 then generally decrease together to about -3.5 in mid2010 then generally increase together ending at about -3 .

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

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

## Decomposition of Potential GDP

| Measure | 1974-1995 | 1996-2000 | 2001-2008 | 2009 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Potential GDP | 3.0 | 3.5 | 2.7 | 2.2 | 2.5 | 2.5 | 2.6 |
| Previous Tealbook | 3.0 | 3.5 | 2.7 | 2.2 | 2.5 | 2.5 | 2.6 |
| Selected contributions ${ }^{\underline{1}}$ |  |  |  |  |  |  |  |
| Structural labor productivity | 1.5 | 2.7 | 2.5 | 2.3 | 2.0 | 2.0 | 2.1 |
| Previous Tealbook | 1.5 | 2.7 | 2.5 | 2.3 | 2.0 | 2.1 | 2.1 |
| Capital deepening | . 7 | 1.5 | . 7 | . 3 | . 4 | . 7 | . 9 |
| Previous Tealbook | . 7 | 1.5 | . 7 | . 3 | . 4 | . 7 | . 9 |
| Multifactor productivity | . 5 | . 9 | 1.6 | 1.9 | 1.5 | 1.3 | 1.2 |
| Previous Tealbook | . 5 | . 9 | 1.6 | 1.9 | 1.5 | 1.3 | 1.2 |
| Trend hours | 1.5 | 1.1 | . 8 | . 0 | . 7 | . 7 | . 7 |
| Previous Tealbook | 1.5 | 1.1 | . 8 | . 0 | . 7 | . 7 | . 7 |
| Labor force participation | . 4 | . 0 | -. 2 | -. 2 | -. 2 | -. 2 | -. 2 |
| Previous Tealbook | . 4 | . 0 | -. 2 | -. 2 | -. 2 | -. 2 | -. 2 |

Note: Components may not sum to totals because of rounding. For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q 4 of the last year shown.

1. Percentage points. Return to table

Source: Staff assumptions.

## Figure: Nonfarm Business Productivity

Line chart, 2001 to 2012. Unit is chained (2005) dollars per hour. There is a blue shaded bar marking the time period 2010:Q4 to 2012:Q4. The series begins at about 44 and fluctuates but generally increases ending at about 58 . There is a second series labeled "Structural Productivity" that begins at about 44 and generally increases in a smooth line ending at about 58.

## Figure: Labor Force Participation Rate

Line chart, 2001 to 2012. Unit is percent. There is a blue shaded bar marking the time period 2011:Q1 to 2012:Q4. The series begins at about 67 and generally decreases to about 66 in 2005:Q1. It generally increases to about 66.25 in 2007:Q1 then fluctuates but generally decreases to about 64.5 in 2010:Q4. It remains about constant to the end of the timeline. There is a second series labeled "Trend" that begins at about 66.75 and generally decreases ending at about 65 .

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

## The Outlook for the Labor Market

| Output per hour, nonfarm business | 6.2 | 1.7 | 1.5 | 1.9 |
| :---: | ---: | ---: | ---: | ---: |
| Previous Tealbook | 6.2 | 1.3 | 1.7 | 2.1 |
| Nonfarm private employment | -4.7 | 1.1 | 2.3 | 3.2 |
| Previous Tealbook | -4.7 | 1.1 | 2.4 | 3.0 |
| Labor force participation rate $\boldsymbol{1}$ | 64.9 | 64.5 | 64.6 | 64.6 |
| Previous Tealbook | 64.9 | 64.5 | 64.6 | 64.6 |
| Civilian unemployment rate ${ }^{1}$ | 10.0 | 9.6 | 8.9 | 7.8 |
| Previous Tealbook | 10.0 | 9.7 | 8.9 | 8.0 |
| Memo: |  |  |  |  |
| GDP gap² | -6.7 | -6.3 | -5.1 | -3.3 |
| Previous Tealbook | -6.7 | -6.6 | -5.5 | -3.7 |

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

1. Percent, average for the fourth quarter. Return to table
2. Percent difference between actual and potential GDP in the fourth quarter of the year indicated. Return to table

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

## Figure: Private Payroll Employment, Average Monthly Changes

Line chart, 1990 to 2012 . Unit is thousands. 0 on the scale is marked by a horizontal line. There is a blue shaded bar marking the time period early 2011 to late 2012. There are two series, "Current" and "Previous Tealbook." The series begin at about 200 and generally decrease together to about -200 in early 1991 . They generally increase together to about 300 in mid-1994 then generally decrease together to about 100 in mid-1995. They fluctuate but generally increase together to about 300 in early 2000 then generally decrease together to about -350 in late 2001. They generally increase together to about 300 in early 2006 then generally decrease together to about -800 in early 2009. They generally increase ending at about 300.

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

## Figure: Unemployment Rate

Line chart, 1990 to 2012. Unit is thousands. There is a blue shaded bar marking the time period early 2011 to late 2012. There are four series, "Current," "Previous Tealbook," "NAIRU," and "NAIRU with EEB Adjustment." Current and Previous Tealbook begin at about 5.5 and generally increase together to about 7.5 in mid-1992. They generally decrease to about 4 in mid- 2000 then generally increase together to about 6 in mid- 2003 . They generally decrease together to about 4.5 in early 2007 then generally increase together to about 10 in late 2009. They generally decrease together ending at about 8 . NAIRU begins at about 6 and generally decreases to about 5 in early 1994. It remains about constant until late 2008 then generally increases to about 6 in late 2009. It remains about constant to the end of the timeline. NAIRU with EEB adjustment begins at about 6 and generally decreases to about 5 in early 1994. It remains about constant until late 2008 then generally increases to about 7 in late 2009. It generally decreases ending at about 6 .

Note: The EEB adjustment is the staff estimate of the effect of extended and emergency unemployment compensation programs on the NAIRU.
Source: U.S. Dept. of Labor, Bureau of Labor Statistics; staff assumptions

## Figure: GDP Gap

Line chart, 1990 to 2012. Unit is percent. 0 on the scale is marked by a horizontal line. There is a blue shaded bar marking the time period early 2011 to late 2012. There are two series, "Current" and "Previous Tealbook." The series begin at about 1 and generally decrease together to about -3 in early 1992 . They generally increase together to about 4 in mid-2000 then generally decrease together to about -2.5 in early 2003 . They generally increase together to about 0.5 in early 2006 then generally decrease together to about -7.5 in mid-2009. They generally increase together ending at about -3 .

Note: The GDP gap is the percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; staff assumptions.

## Figure: Manufacturing Capacity Utilization Rate

Line chart, 1990 to 2012. Unit is percent. Average Rate from 1972 to 2009 is marked by a horizontal line at about 79 . There is a blue shaded bar marking the time period early 2011 to late 2012. There are two series, "Current" and "Previous Tealbook." The series begin at about 82.5 and generally decrease together to about 78 in early 1991. They generally increase together to about 85 in early 1995 then fluctuate but generally decrease together to about 72 in late 2001 . They generally increase together to about 80 in mid- 207 then generally decrease together to about 65 in mid-2009. They generally increase together ending at about 79 .

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

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

## Inflation Projections

(Percent change, Q4 to Q4)

| Measure | 2009 | 2010 | 2011 | 2012 |
| :---: | ---: | ---: | ---: | ---: |
| PCE chain-weighted price index | 1.5 | 1.2 | 1.3 | 1.0 |
| Previous Tealbook | 1.5 | 1.2 | 1.1 | .9 |
| Food and beverages | -1.6 | 1.3 | 1.7 | 1.1 |
| Previous Tealbook | -1.6 | 1.4 | 1.1 | 1.1 |
| Energy | 2.7 | 6.3 | 6.2 | .1 |
| Previous Tealbook | 2.7 | 5.7 | 3.8 | .0 |
| Excluding food and energy | 1.7 | .8 | 1.0 | 1.0 |
| Previous Tealbook | 1.7 | .9 | .9 | .9 |
| Prices of core goods imports표 | -1.9 | 3.1 | 3.2 | 1.4 |
| Previous Tealbook | -1.9 | 3.0 | 2.5 | 1.4 |

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

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

## Figure: Total PCE Prices

Line chart, 1990 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a blue shaded bar marking the time period late 2010 to late 2012. There are two series, "Current" and "Previous Tealbook." The series begin at about 4 and generally increase together to about 5.5 in early 1991 . They generally decrease together to about 2 in late 1994. They fluctuate but generally increase together to about 4.5 in mid-2008 then generally decrease together to about -1 in late 2009. They generally increase together to about 2.5 in mid- 2010 then generally decrease together ending at about 1.

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

## Figure: PCE Prices ex. Food and Energy

Line chart, 1990 to 2012. 4-quarter percent change. There is a blue shaded bar marking the time period late 2010 to late 2012. There are four series, "Current," "Previous Tealbook," "Market based - Current" and "Market based - Previous Tealbook." Current and Previous Tealbook begin at about 3.75 and generally increase together to about 4.5 in late 1990. They fluctuate but generally decrease together to about 1.25 in mid- 1997 then fluctuate but generally increase together to about 2.5 in mid-2008 then generally decrease together ending at about 1. Market based - Current and Market based - Previous Tealbook begin at about 4.5 and generally increase together to about 4.75 in late 1990. They generally decrease together to about 1 in early 1997 then fluctuate but generally increase together to about 2.5 in early 2009. They generally decrease together ending at about 1.

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

## Figure: Compensation per Hour

Line chart, 1990 to 2012. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a blue shaded bar marking the time period late 2010 to late 2012. There are four series, "Productivity and Costs - Current," "Productivity and Costs - Previous Tealbook," "Employment Cost Index - Current" and "Employment Cost Index - Previous Tealbook." Productivity and Costs -- Current and Productivity and Costs - Previous Tealbook begin at about 4.5 and generally increase together to about 7 in late 1990. They generally decrease together to about 1 in early 1995 then fluctuate but generally increase together to about 9 in early 2000. They generally decrease together to about 2 in early 2002 then fluctuate but generally decrease to about 0 in early 2009 . They generally increase together to about 3.5 in early 2010 then fluctuate but generally decrease together ending at about 2. Employment Cost Index - Current and Employment Cost Index - Previous Tealbook begin at about 5 and generally decrease together to about 2.5 in late 1995 . They generally increase together to about 5 in late 2000 then generally decrease together to about 1 in late 2009. They generally increase together ending at about 2.

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

## Figure: Long-Term Inflation Expectations

Line chart, 1990 to 2012. Unit is percent. The end of the upper series is labeled January (preliminary). The end of the lower series is labeled Q4. There are two series, "Thomson Reuters/Michigan next 5 to 10 years" and "SPF next 10 years." Thomson Reuters/Michigan next 5 to 10 years begins at about 4 and generally increases to about 4.75 in late 1990. It fluctuates but generally decreases to about 2.75 in late 1998 then fluctuates but generally increases to about 3.5 in early 2008 . It fluctuates but generally decreases ending at about 2.75 . SPF next 10 years begins at about 4 and fluctuates but generally decreases to about 2 in late 1998 . It fluctuates but remains about constant to the end of the timeline.

Note: The Survey of Professional Forecasters (SPF) projection is for the CPI.
Source: Thomson Reuters/University of Michigan Surveys of Consumers; The Federal Reserve Bank of Philadelphia.

# [Box:] Pass-Through of Industrial Commodity Prices to Core Inflation 

## Measures of Crude, Intermediate, and Consumer Price Inflation

## Figure: Core Producer Prices

Line chart, 1978 to 2010 . Unit is 12 -month percent change. 0 on the scale is marked by a horizontal line. There are blue shaded bars marking the time periods mid1978 to early 1980, mid-1983 to mid-1984, early 1987 to mid-1989, mid-1992 to mid-1994, late 1999 to late 2000, early 2002 to late 2008 , and late 2009 to late 2010. There are two series, "Crude" and "Intermediate." Crude begins at about 0 and generally increases to about 30 in mid-1979. It fluctuates but generally decreases to about -15 in late 1982 then generally increases to about 18 in early 1984. It generally decreases to about -10 in mid-1985 then generally increases to about 20 in early 1995. It generally decreases to about -15 in mid-1996 then fluctuates but generally increases to about 35 in late 2008 . It generally decreases to about -40 in early 2009 then generally increases to about 50 in mid-2010. It generally decreases ending at about 30 . Intermediate begins at about 5 and generally increases to about 15 in early 1980. It generally fluctuates between about 0 and about 10 until late 2008 then generally decreases to about -10 in late 2009 . It generally increases ending at about 5.

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

## Figure: Core PCE Prices and Core Intermediate Producer Prices

Line chart, 1978 to 2010 . Unit is 12 -month percent change. 0 on the scale is marked by a horizontal line. There are blue shaded bars marking the time periods mid1978 to early 1980, mid-1983 to mid-1984, early 1987 to mid-1989, mid-1992 to mid-1994, late 1999 to late 2000, early 2002 to late 2008 , and late 2009 to late 2010. There are two series, "PCE" and "Intermediate." PCE begins at about 7 and generally increases to about 10 in early 1981. It fluctuates but generally decreases ending at about 1. Intermediate begins at about 7 and generally increases to about 15 in early 1980. It fluctuates but generally decreases to about -1 in mid-1986. It generally increases to about 7 in mid-1988 then generally decreases to about -1 in early 1992. It generally increases to about 8 in late 1994 then fluctuates but generally decreases to about -2 in early 2002. It fluctuates but generally increases to about 13 in late 2008 then generally decreases to about -8 in late 2999 then generally increases to about 6 in early 2010. It generally decreases ending at about 5.

Note: Personal Consumption Expenditure (PCE) prices in December 2010 are staff estimates. Shaded areas indicate periods of significant core crude producer price index (PPI) inflation.
Source: For PCE, U.S. Department of Commerce, Bureau of Economic Analysis; for producer prices, U.S. Department of Labor, Bureau of Labor Statistics.

## The Long-Term Outlook

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

| Item | 2010 | $\mathbf{2 0 1 1}$ | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | 2015 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Real GDP | 2.9 | 3.8 | 4.4 | 4.6 | 4.5 | 3.4 |
| Civilian unemployment rate $^{\mathbf{1}}$ | 9.6 | 8.9 | 7.8 | 7.0 | 6.0 | 5.3 |
| PCE prices, total | 1.2 | 1.3 | 1.0 | 1.2 | 1.5 | 1.6 |
| Core PCE prices | .8 | 1.0 | 1.0 | 1.2 | 1.4 | 1.5 |
| Federal funds rate $^{1}$ | .2 | .1 | .1 | 1.7 | 3.5 | 4.1 |
| 10-year Treasury yield $^{1}$ | 3.0 | 3.8 | 4.4 | 4.7 | 5.0 | 5.1 |

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

Figure: Real GDP

Line chart, 2002 to 2015 . Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There are two series, "Potential GDP" and "Real GDP." Potential GDP begins at about 3.5 and generally decreases to about 2 in early 2005. It generally increases ending at about 3 . Real GDP begins at about 1.5 and generally increases to about 4 in mid-2004. It generally decreases to about -4 in mid-2009 then generally increases to about 4.75 in late 2014 . It generally decreases ending at about 3.25.

## Figure: Unemployment Rate

Line chart, 2002 to 2015 . Unit is percent. The series begins at about 6 and generally increases to about 6.25 in late 2003. It generally decreases to about 4.5 in late 2006 then generally increases to about 10 in late 2009. It generally decreases ending at about 5 . There are two additional series, "NAIRU with EEB adjustment" and "NAIRU." NAIRU with EEB adjustment begins at about 5 and remains about constant until early 2008. It generally increases to about 6.75 in late 2009 then generally decreases ending at about 5. NAIRU begins at about 5 and remains about constant until mid-2008. It generally increases to about 6 in late 2009 then remains about constant until late 2012. It generally decreases ending at about 5 .

## Figure: PCE Prices

Line chart, 2002 to 2015 . Unit is 4-quarter percent change. There are two series, "Total PCE prices" and "PCE prices excluding food and energy." Total PCE prices begins at about 1 and generally increases to about 2.5 in early 2003. It generally decreases to about 3 in late 2003 then generally increases to about 3.25 in late 2005 . It generally decreases to about 2 in early 2007 then generally increases to about 4.5 in mid-2008. It generally decreases to about -1 in mid- 2009 then generally increases to about 2.5 in mid-2010. It generally decreases to about 1.25 in early 2011 then generally increases to about 1.5 in mid-2011. It generally decreases to about 1 in late 2012 then generally increases ending at about 1.75. PCE prices excluding food and energy begins at about 1.5 and generally increases to about 2 in late 2002. It generally decreases to about 1.5 in early 2004 then fluctuates but generally increases to about 2.5 in late 2008 . It generally decreases to about 1.5 in mid2009 then generally increases to about 2 in early 2010. It generally decreases to about 0.75 in 2011 then generally increases ending at about 1.5.

## Figure: Interest Rates

Line chart, 2002 to 2015 . Unit is percent. There are three series, "BBB corporate," "10-year Treasury," and "Federal funds rate." BBB corporate begins at about 7.75 and generally decreases to about 5.5 in early 2004. It fluctuates but generally increases to about 9.5 in early 2009 then generally decreases to about 5 in late 2010 . It generally increases ending at about 6.75 . 10-year Treasury begins at about 5.5 and generally decreases to about 3.75 in mid-2003. It fluctuates but generally increases to about 5 in early 2006 then fluctuates but generally decreases to about 3 in mid-2010. It generally increases ending at about 5 . Federal funds rate begins at about 1.75 and generally decreases to about 1 in mid-2003. It remains about constant until mid-2004 then generally increases to about 5.25 in early 2006 . It remains about constant until mid-2007 then generally decreases to about 0 in early 2009. It remains about constant until late 2012 then generally increases ending at about 4.

Note: In each panel, shading represents the projection period (beginning in 2010:Q4).

## Evolution of the Staff Forecast

## Figure: Change in Real GDP

Line chart, Tealbook publication dates January 22, 2009 through December 7, 2011. Unit is percent, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 2.75 and generally decreases to about 1.5 on March 12, 2009. It generally increases to about 3.5 on September 16, 2009 then fluctuates between about 3 and 3.5 until April 21, 2010. It generally decreases to about 2.5 on September 15, 2010 then generally increases ending at about 3 on January 19, 2011. 2011 begins at about 4.5 on September 16, 2009 and generally increases to about 4.75 on January 20, 2010. It generally decreases to about 3.25 on September 15 , 2010 then generally increases ending at about 3.75 on January 19, 2011. 2012 begins at about 4.5 on September 15, 2010 then generally increases to about 4.75 on October 27, 2010. It generally decreases to about 4.5 on December 8, 2010 and remains about constant ending on January $19,2011$.

## Figure: Unemployment Rate

Line chart, Tealbook publication dates January 22, 2009 through December 7, 2011. Unit is percent, fourth quarter. There are three series, "2010," "2011," and "2012." 2010 begins at about 8.0 and generally increases to about 9.5 on March 12, 2009. It generally decreases to about 9.0 on April 22 , 2009 then generally fluctuates between about 9.5 and 9.0 until August 4, 2010. It remains about constant at 9.5 until it ends on January 19, 2011. 2011 begins at about 8.0 on September 16 , 2009 and generally increases to about 9.25 on September 15, 2010. It generally decreases to about 9 on December 8,2010 and remains about constant ending on January 19, 2011. 2012 begins at about 8.1 on September 15,2010 and generally decreases to about 7.8 on October 27, 2010. It generally increases to about 8.0 on December 8, 2010 and generally decreases ending at about 7.75 on January 19, 2011.

## Figure: Change in PCE Prices excluding Food and Energy

Line chart, Tealbook publication dates January 22, 2009 through December 7, 2011. Unit is percent, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 0.75 and generally decreases to about 0.5 on March 12, 2009. It generally increases to about 1.0 on January 20,2011 then generally decreases to about 0.75 on June 16, 2010. It generally increases to about 1.25 on August 4, 2010 then remains about constant until October 27, 2010. It generally decreases ending at about 0.75 on January 19, 2011. 3022 begins at about 0.9 on September 16, 2009 then generally increases to about 1.1 on December 9 , 2009 . It remains about constant until January 20, 2010 then generally decreases to about 0.75 on June 16, 2010. It generally increases to about 1.0 on October 27,2010 then generally decreases to about 0.75 on December 8, 2010. It generally increases ending at about 1.0 on January 19, 2011. 2012 begins at about 0.75 on September 15 , 2010 then generally increases to about 1.0 on October 27, 2010. It generally decreases to about 0.75 on December 8,2010 then generally increases ending at about 1.0 on January 19, 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.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## January 2011 Tealbook A Tables and Charts ${ }^{\ddagger}$

## International Economic Developments and Outlook

## Recent Foreign Indicators

## Figure: Nominal Exports

Line chart, 2006 to 2011. Unit is an index, January $2006=100.100$ on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE," and "EME (excludes Venezuela)." Foreign begins at about 100 and generally increases to about 150 in late 2008. It generally decreases to about 100 in early 2009 then generally increases ending at about 140. AFE begins at about 100 and generally increases to about 145 in mid- 2008 . It generally decreases to about 90 in early 2009 then generally increases ending at about 130. EME begins at about 100 and generally increases to about 160 in mid-2008. It generally decreases to about 105 in early 2009 then generally increases ending at about 155 .

## Figure: Industrial Production

Line chart, 2006 to 2011. Unit is an index, January $2006=100.100$ on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE (excludes Australia and Switzerland)," and "EME (excludes Hong Kong and Venezuela)." Foreign begins at about 100 and generally increases to about 105 in early 2008 . It generally decreases to about 90 in early 2009 then generally increase to about 105 in early 2010. It remains about constant to the end of the timeline. AFE begins at about 100 and remains about constant until late 2006. It generally increases to about 1.25 in late 2007 then generally decreases to about 85 in early 2009 . It generally increases ending at about 90 . EME begins at about 100 and generally increases to about 115 in early 2008. It generally decreases to about 100 in early 2009 then generally increases to about 122 in early 2010. It generally decreases ending at about 120.

## Figure: Retail Sales

Line chart, 2006 to 2011. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE (excludes Australia and Switzerland)," and "EME (Includes Brazil, China, Israel, Korea, Singapore, and Taiwan)." Foreign begins at about 2.5 and fluctuates but generally increases to about 5 in early 2008. It generally decreases to about -2.5 in early 2009 then generally increases to about 5 in early 2010 . It generally decreases ending at about 2.5 .

## Figure: Employment

Line chart, 2006 to 2011. Unit is 4-month percent change. 0 on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE," and "EME." Foreign begins at about 2 and fluctuates but remains about constant until late 2007. It generally increases to about 2.5 in early 2008 then generally decreases to about -1 in early 2009. It generally increases to about 1.5 and remains constant to the end of the timeline. AFE begins at about 1.5 and generally increases to about 2 in early 2008. It generally decreases to about -2 in mid- 2009 then generally increases ending at about 1 . EME begins at about 2.75 and generally decreases to about 2 in late 2007. It generally increases to about 2.5 in mid-2010 then generally decreases ending at about 2 .

## Figure: Consumer Prices: Advanced foreign economies

Line chart, 2006 to 2011. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are two series, "Headline" and "Core (excludes all food and energy; staff calculation)." Headline begins at about 2 and fluctuates but generally decreases to about 1 in late 2006. It fluctuates but generally increases to about 3.5 in late 2008 then generally decreases to about -1 in mid-2009. It generally increases ending at about 1.75 . Core begins at about 1 and generally increases to about 1.5 in early 2008. It fluctuates but generally decreases to about 0.5 in late 2009 then generally increases ending at about 1.

Note: Excludes Australia, Sweden, and Switzerland.
Source: Haver Analytics and CEIC.
Figure: Consumer Prices: Emerging Market Economies

Line chart, 2006 to 2011. Unit is 12 -month percent change. 0 on the scale is marked by a horizontal line. There are three series, "Headline," "Ex. Food -- East Asia (excludes India)," and "Ex. Food -- Latin America." Headline begins at about 3 and generally increases to about 7 in late 2008. It generally decreases to about 1 in mid2009 then generally increases ending at about 4.5. Ex. Food -- East Asia begins at about 2 and generally increases to about 4 in mid-2008. It generally decreases to about -2 in mid-2009 then then generally increases ending at about 2. Ex. Food -- Latin America begins at about 4 and generally decreases to about 3.5 in early 2007 . It generally increases to about 5.5 in late 2008 then generally decreases to about 4 in late 2009. It generally increases to about 4.5 in late 2010 and remains about constant to the end of the timeline.

## The Foreign Outlook

(Percent change, annual rate)


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

## Figure: Real GDP [Total Foreign]

Line chart, 2007 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Current" and "Previous Tealbook." Both series begin at about 5 and generally decrease together to about -10 in early 2009. They generally increase together to about 5 in early 2010 then generally decrease together to about 2.5 in mid-2010. They generally increase together to about 4 in late 2010 and remain about constant to the end of the timeline.

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

Line chart, 2007 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are four series, "Emerging Market Economies -Current," "Emerging Market Economies -- Previous Tealbook," "Advanced Foreign Economies -- Current," and "Advanced Foreign Economies -- Previous Tealbook." Emerging Market Economies -- Current and Emerging Market Economies -- Previous Tealbook begin at about 7.5 and generally decrease together to about -10 in early 2009. They generally increase together to about 10 in mid-2009 then generally decrease together to about 2.5 in mid-2010. They generally increase together to about 5 in late 2010 and remain about constant to the end of the timeline. Advanced Foreign Economies -- Current and Advance Foreign Economies -- Previous Tealbook begin at about 4 and generally decrease together to about -10 in late 2008 . They generally increase together to about 2.5 in early 2010 then generally decrease together to about 3 in late 2010. They remain about constant to the end of the timeline.

## Figure: Consumer Prices [Total Foreign]

Line chart, 2007 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Current" and "Previous Tealbook." Both series begin at about 4 and generally increase together to about 5 in early 2008 . They generally decrease together to about -1 in late 2008 then generally increase together to about 4 in early 2010. They generally decrease together to about 1.5 in mid-2010. Current generally increases to about 5.5 in late 2010 then generally decreases to about 2 in mid-2011. It remains about constant to the end of the timeline. Previous Tealbook increases to about 4 in late 2010 then generally decreases to about 2 in mid-2011. It remains about constant to the end of the timeline.

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

Line chart, 2007 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are four series, "Emerging Market Economies -Current," "Emerging Market Economies -- Previous Tealbook," "Advanced Foreign Economies -- Current," and "Advanced Foreign Economies -- Previous Tealbook." Emerging Market Economies -- Current and Emerging Market Economies -- Previous Tealbook begin at about 4 and generally increase together to about 8 in early 2008. They generally decrease together to about 0 in early 2009 then generally increase together to about 5 in early 2010. They generally decrease together to about 2.5 in mid-2010. Emerging Market Economies -- Current generally increases to about 6.5 in late 2010 then generally decreases to about 3.5 in early 2011 . It remains about constant to the end of the timeline. Emerging Market Economies -- Previous Tealbook generally increases to about 4.5 in late 2010 then generally decreases to about 3.5 in early 2011. It remains about constant to the end of the timeline.
[Box:] The Cost of Deflation: The Japanese Experience
Figure: Actual and Expected Inflation

Line chart, 1991 to 2009. Unit is year-over-year percent change. 0 on the scale is marked by a horizontal line. There are three series, "Wage Inflation (scheduled cash earnings per employee)," " 5 -year ahead CPI inflation," and "CPI Inflation (consumer price index (CPI) adjusted by staff to exclude the 1997 value-added tax hike)." Wage inflation begins at about 4.5 and generally decreases to about -0.5 in 1999 then generally increases to about 0.5 in 2000 . It generally decreases to about -2 in 2002 then generally increases to about 0.25 in 2005. It fluctuates but generally decreases ending at about -1 . $5-Y$ ear ahead CPI inflation begins at about 2.5 and fluctuates but generally decreases to about 0.5 in 2003. It generally increases to about 2 in 2006 then generally decreases ending at about 1. CPI inflation begins at about 3.25 and generally decreases to about 0 in 1995. It generally increases to about 0.5 in 1997 then generally decreases to about -1 in 2002 . It generally increases to about 0 in 2004 then generally decreases to about -0.75 in 2005. It generally increases to about 1.5 in 2008 then generally decreases ending at about -1.25 .

Source: Haver Analytics and Consensus Economics

Figure: Policy Rate

Line chart, 1990 to 2010. Unit is percent. 0 on the scale is marked by a horizontal line. There are two series, "Actual" and "Counterfactual (no zero lower bound)." Actual begins at about 6.5 and generally increases to about 8 in 1991. It generally decreases to about 0 in 1999 and remains about constant to the end of the timeline. Counterfactual begins at about 3 in 1994 and generally decreases to about -1 in 1998 . It generally increases to about 1.5 in 2000 then generally decreases to about -0.5 in 2002. It generally increases to about .25 in 2003 then generally decreases to about -2 in 2009. It generally increases ending at about -0.5 .

Source: Haver Analytics and staff estimates.

Figure: GDP

Line chart, 1990 to 2010. Unit is trillions of chained 2002 Yen. There are two series, "Actual" and "Counterfactual (no zero lower bound)." Actual begins at about 430 and generally increases to about 500 in 1996. It generally decreases to about 480 in 1998 then generally increases to about 570 in 2007 . It generally decreases to about 500 in 2009 then generally increases ending at about 540 . Counterfactual begins at about 470 in 1994 and generally increases to about 570 in 2007 . It generally decreases to about 520 in 2009 then generally increases ending at about 570 .

Source: Haver Analytics and staff estimates.

## Evolution of Staff's International Forecast

Figure: Total Foreign GDP

Line chart, Tealbook publication dates 1/22/2009 to 12/7/2011. Unit is percent change, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 3 and generally decreases to about 2.25 on $3 / 12 / 2009$. It generally increases ending at about 4 on 1/19/2011. 2011 begins at about on $9 / 16 / 2009$ and generally decreases to about 3 on 12/8/2011. It generally increases ending at about 3.5 on 1/19/2011. 2012 begins at about 3.5 on $9 / 15 / 2010$ and fluctuates but remains about constant ending on 1/19/2011.

## Figure: Total Foreign CPI

Line chart, Tealbook publication dates 1/22/2009 to 12/7/2011. Unit is percent change, Q4/Q4. There are three series, "2010," "2011," and "2012." 2010 begins at about 2.0 and generally decreases to about 1.5 on $3 / 12 / 2009$. It generally increases to about 2.75 on $4 / 21 / 2010$ then generally decreases to about 2.25 on $8 / 4 / 2010$. It generally increases ending at about 3.0 on $1 / 19 / 2011$. 2010 begins at about 1.75 on $9 / 16 / 2009$ and generally increases ending at about 2.75 on $1 / 19 / 2011$. 2012 begins at about 2.25 on 9/15/2011 and remains about constant ending on 1/19/2011.

## Figure: U.S. Current Account Balance

Line chart, Tealbook publication dates $1 / 22 / 2009$ to $12 / 7 / 2011$. Unit is percent of GDP. There are three series, " 2010, " "2011," and "2012." 2010 begins at about -3.5 and generally decreases to about -4 on $3 / 12 / 2009$. It generally increases to about -3 on 10/29/2009then fluctuates but remains about constant until $9 / 15 / 2010$. It generally decreases ending at about -3.5 on $1 / 19 / 2011$. 2011 begins at about -3 on $9 / 16 / 2009$ and generally decreases to about -3.25 on $6 / 16 / 2010$. It generally increases to about -3 on $8 / 4 / 2010$ then generally decreases to about -3.25 on $12 / 8 / 2010$. It generally increases ending at about -3 on $1 / 19 / 2011$. 2012 begins at about -2.75 on $9 / 15 / 2010$ and generally decreases to about -3 on 12/8/2010. It generally increases ending at about -2.5 on 1/19/2011.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## Last update: February 3, 2017

## January 2011 Tealbook A Tables and Charts ${ }^{\ddagger}$

## Financial Developments

Policy Expectations and Treasury Yields

Figure: Selected Interest Rates

Line chart, December 13 through January 17. Unit is percent. There are two series, "June 2012 Eurodollar (right scale)" and "10-year Treasury Yield (left scale)." June 2012 Eurodollar begins at about 1.35 and generally decreases 1.2 around December 13. It generally increases to about 1.5 on December 16 then generally decreases to about 1.25 around December 19. It fluctuates but generally increases to about 1.4 around December 23 then remains about constant until around December 24 . It generally increases to about 1.45 around December 25 then generally decreases to about 1.35 around December 27 . It generally increases to about 1.45 around December 28 then fluctuates but generally decreases to about 1 around January 4 . It generally increases to about 1.45 around January 6 then fluctuates but generally decreases to about 0 on January 13. It generally increases to about 1.2 around January 14 then generally decreases to about 1 around January 15. It remains about constant until about January 15 then generally increases to about 1.25 around January 16. It generally decreases ending at about 1.2. 10-year Treasury yield begins at about 3.4 then generally decreases to about 3.25 around December 13. It generally increases to about 3.55 around December 16. It generally decreases to about 3.25 around December 20 then generally increases to about 3.4 around December 28 . It fluctuates but generally decreases to about 3.3 around January 1 then generally increases to about 3.4 around January 2. It generally decreases to about 3.3 around January 4 . It generally increases to about 3.5 around January 5 then generally decreases to about 3.25 around January 8 . It generally increases to about 3.4 around January 12 then generally decreases to about 3.25 around January 13 . It fluctuates but generally increases to about 3.4 around January 15 then generally decreases ending at about 3.35 .

Note: 5-minute intervals. 8:00 to 4:00pm. No adjustment for term premiums.
Source: Bloomberg.

## Figure: Inflation Compensation

Line chart, 2007 to 2011. Unit is percent. Data are daily. The end of the timeline is labelled January 18. There are two series, " 5 to 10 years ahead" and "Next 5 years (adjusted for the indexation-lag (carry) effect)". 5 to 10 years ahead begins at about 2.5 and generally increases to about 3.5 in 2008:Q4. It generally decreases to about 2 in 2009:Q1 then generally increases to about 3.5 around 1009:Q4. It generally decreases to about 2 in 2010:Q3 then generally increases ending at about 3. Next 5 years begins at about 2.25 and fluctuates but remains about constant until 2008:Q3. It generally decreases to about -2 in $2008: Q 4$. It generally increases to about 2 in 2009:Q4 then generally decreases to about 1 in 2010:Q3. It generally increases ending at about 2 .

Note: Estimates based on smoothed nominal and inflation-indexed Treasury yield curves.
Source: Barclays PLC and staff estimates.

## Figure: Market-Based Measures of Uncertainty

Line chart, January 2010 to January 2011. Unit for left scale is Basis Points. Unit for right scale is Percent. There are two series, "10-Year Treasury (right scale)" and "1-year Eurodollar futures (left scale)." 10-Year treasury begins at about 7 and generally decreases to about 5 in March 2010. It generally increases to about 8 in May 2010 then generally decreases to about 6 in August 2010. It generally increases to about 7.5 in September 2010 then generally decreases to about 6 in November 2010. It generally increases to about 9 in December 2010. It generally decreases ending at about 8.

Source: Bloomberg; CME Group; staff analysis.

## Figure: Implied Federal Funds Rate

Line chart, 2011 and 2012. Unit is percent. There are four series, "Mean: January 18, 2011," "Mean: December 13, 2010," "Mode: January 18, 2011," and "Mode: December 13, 2010." Mean: January 18, 2011 and Mean: December 13, 2010 begin at about 0.25 and remain about constant until 2011:Q2. They generally increase together ending at about 1.1. Mode: January 18, 2011 and Mode: December 13, 2010 begin at about 0 and remain about constant until 2011:Q4. They generally increase together ending at about 0.5 .

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

Source: Bloomberg and CME Group.
Figure: Distribution of the Quarter of First Rate Increase from the Desk's Dealer Survey

Bar chart, 2011:Q1 to 2013:Q1 or later. Unit is percent. There are two series, "Recent: 18 respondents" and "December FOMC: 18 respondents" which is represented as a line chart. Recent: 18 respondents begins at about 0 and generally increases to about 15 in 2012:Q1. It generally decreases to about 12 in 2012:Q2 then generally increases ending at about 25 . December FOMC: 18 respondents begins at about 0 and generally increases to about 15 in $2012: Q 1$. It generally decreases to about 12 in 2012:Q2 then generally increases to about 20 in 2012:Q4. It then decreases to end at about 0 .

## Asset Market Developments

## Figure: Equity Prices

Line chart, 2008 to 2011. Unit is an index, December 13, $2010=100$. Data are daily. The end of the timeline is labeled January 18. There are two series, "S\&P 500 Bank Index" and "S\&P 500." S\&P 500 Bank Index begins at about 120 and generally decreases to about 85 in 2008:Q2. It generally increases to about 160 in $2008: Q 4$ then generally decreases to about 40 in 2009:Q1. It fluctuates but generally increases to about 120 in 2010:Q2 then generally decreases to about 80 in 2010 :Q3. It generally increases ending at about 110 . S\&P 500 begins at about 100 and generally decreases to about 50 in $2009: Q 1$. It generally increases to about 100 in 2010:Q1 then generally decreases to about 80 in 2010:Q3. It generally increases ending at about 110 .

Source: Bloomberg.

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

Line chart, 2007 to 2011. Unit is percent, log scale. Data are daily. The end of the timeline is labeled January 18. The series begins at about 0 and fluctuates but generally increases to about 35 in 2008:Q2. It generally decreases to about 14 in 2008:Q2 then generally increases to about 80 in 2008:Q4. It generally decreases to about 15 in 2010:Q2 then generally increases to about 50 in 2010:Q2. It generally decreases ending at about 15 .

Source: Chicago Board Options Exchange.

## Figure: Equity Risk Premium

Line chart, 1990 to 2011. Unit is percent. Data are monthly. The end of the timeline is labeled January 18. There are two series, "Expected 10-year real equity return" and "Expected real yield on 10-Year Treasury (off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation)." Expected 10-year real equity return begins at about 8 and generally increases to about 10 in 1991. It generally decreases to about 7.5 in 1992 then generally increases to about 8.25 in 1995 . It generally decreases to about 2 in 2000 then fluctuates but generally increases to about 12 in 2008 . It generally decreases to about 8 in 2009 then generally increases ending at about 9. Expected real yield on 10-year Treasury begins at about 4 and generally decreases to about 2 in 1993. It generally increases to about 4.25 in 1995 then generally decreases to about 2 in 1998. It generally increases to about 4 in 1999 then fluctuates but generally decreases ending at about 1 . The end of both series are marked by $a+$ which denotes the latest observation using daily interest rates and stock prices and latest earning data from I/B/E/S.

Source: Thomson Financial.

## Figure: Corporate Bond Spreads

Line chart, 2007 to 2011. Unit is basis points. Data are daily. The end of the timeline is labeled January 18. There are two series, "10-year high-yield (right scale)" and "10-year BBB (left scale)." 10-year high-yield begins at about 250 and fluctuates but generally increases to about 1750 in 2008:Q4. It fluctuates but generally decreases ending at about 350. 10-year BBB begins at about 100 and generally increases to about 1250 in 2008:Q4. It fluctuates but generally decreases ending at about 250.

Note: Measured relative to a smoothed nominal off-the-run Treasury yield curve.
Source: Merrill Lynch and staff estimates.

## Figure: Libor over OIS Spreads

Line chart, 2009 to 2011. Unit is basis points. Data are daily. The end of the timeline is labeled January 19. There are three series, "1-month," "3-month," and "6month." 1-month begins at about 10 and fluctuates but generally decreases to about 5 in 2010:Q2. It generally increases to about 15 in $2010: Q 3$ then generally decreases to about 5 in 2010:Q3. It generally increases ending at about 10. 3-month begins at about 45 and generally decreases to about 5 in 2010:Q1. It generally increases to about 30 in 2010:Q3 then generally decreases ending at about 15. 6-month begins at about 100 and generally decreases to about 20 in 2010 :Q1. It generally increases to about 55 in 2010:Q3 then generally decreases ending at about 30 .

Source: British Bankers' Association and Prebon.
Figure: Spread on 30-Day Commercial Paper

Line chart, March 2009 to January 2011. Unit is basis points. Data are 5-day moving average. The end of the timeline is labeled January 18. There are two series, "A2/P2" and "ABCP." A2/P2 begins at about 100 and generally decreases to about 0 in January 2010. It generally increases 25 in July 2010 . It fluctuates but remains about constant to the end of the timeline. ABCP begins at about 40 and generally decreases to about 0 in April 2010 . It generally increases to about 25 in June 2010 . It generally decreases to about 0 in October 2010 then generally increases ending at about 25 .

Note: $A B C P$ spread is the $A A A B C P$ rate minus the $A A$ nonfinancial rate. The $A 2 / P 2$ spread is the $A 2 / P 2$ nonfinancial rate minus the $A A$ nonfinancial rate.
Source: Depository Trust \& Clearing Corporation.

| Federal Reserve Balance Sheet Billions of dollars |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Change since last FOMC | $\begin{aligned} & \text { Current } \\ & (01 / 18 / 11) \end{aligned}$ | Maximum level | Date of maximum leve |
| Total assets | 30 | 2,426 | 2,472 | 01/13/11 |
| Selected assets: |  |  |  |  |
| Liquidity programs for financial firms | +0 | +0 | 677 | 11/06/08 |
| Primary, secondary, and seasonal credit | -0 | +0 | 114 | 10/28/08 |
| Foreign central bank liquidity swaps | +0 | +0 | 586 | 12/04/08 |
| Term Asset-Backed Securities Loan Facility (TALF) | -1 | 24 | 49 | 03/11/10 |
| Support for specific institutions | -48 | 65 | 121 | 05/05/10 |
| Credit extended to AIG, net | -20 | 0 | 91 | 10/27/08 |
| Preferred interests in AIA Aurora LLC and ALICO Holdings LLC | -26 | 0 | 26 | 01/13/11 |
| Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC | -2 | 65 | 75 | 12/30/08 |
| Securities held outright* | 73 | 2,204 | 2,209 | 01/14/11 |
| U.S. Treasury securities | 118 | 1,078 | 1,078 | 01/18/11 |
| Agency debt securities | -2 | 146 | 169 | 03/11/10 |
| Agency mortgage-backed securities | -42 | 980 | 1,129 | 06/14/10 |
| Total liabilities | 35 | 2,373 | 2,419 | 01/13/11 |
| Selected liabilities: |  |  |  |  |
| Federal Reserve notes in circulation | 1 | 938 | 944 | 12/29/10 |
| Reverse repurchase agreements | 10 | 59 | 110 | 10/14/08 |
| Foreign official and international accounts | 10 | 59 | 92 | 12/22/08 |
| Others | -0 | 0 | 26 | 09/26/08 |
| Reserve balances of depository institutions** | -6 | 1,058 | 1,249 | 02/24/10 |
| Term deposits held by depository institutions | -5 | 0 | 5 | 11/03/10 |
| U.S. Treasury, general account | 69 | 92 | 187 | 12/31/09 |
| U.S. Treasury, supplementary financing account | +0 | 200 | 559 | 10/22/08 |
| Funds from AIG asset dispositions, held as agent | -27 | 0 | 27 | 01/13/11 |
| Other deposits | -11 | +0 | 81 | 03/12/10 |
| Total capital | -5 | 53 | 60 | 08/03/10 |

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

* Par value. Return to table
** Includes required clearing balances and overdrafts. Excludes as-of adjustments. Return to table


## Figure: Federal Reserve Lending to AIG

Line chart 2008:Q3 to 2011:Q2 (Daily). Unit is billions of dollars. Data are January 14, 2011 AIG recapitalization. There are four series, "Credit extended to AIG, net," "Preferred interests in AIA Aurora LLC and ALICO Holdings LLC," "Balance of loan (principal and accrued interest) to Maiden Lane III LLC," and "Balance of loan (principal and accrued interest) to Maiden Lane II LLC." Credit extended to AIG, net begins at a range of about [0, 90] and generally decreases ending at about [0, 80]. Preferred interests in AIA Aurora LLC and ALICO Holdings LLC begins at a range of about [0,80] and generally decreases ending at about [0,50]. Balance of loan (principal and accrued interest) to Maiden Lane III LLC begins at a range [ 0,70 ] and generally decreases ending at about [0,60]. Balance of loan (principal and accrued interest) to Maiden Lane II LLC begins at a range of about [0, 80] and generally decreases ending at about [20, 80].

Source: Federal Reserve Board (2011), Statistical Release H.4.1, "Factors Affecting Reserve Balances" (January 13) and internal data.

Stacked bar chart, 2006 to 2010. Unit is billions of dollars. Data are monthly rate. There are three series, "Commercial paper (seasonally adjusted, period-end basis)," "C\&l loans (seasonally adjusted, period-end basis)," and Bonds. There is a fourth series, presented as a line chart that shows the total. Approximate values are: 2006: Bonds: 19, C\&l loans: 10, Commercial paper: 1, Total: 30; 2007: Bonds: 25, C\&I Loans: 20, Commercial paper: 0, Total: 45; 2008: Bonds: 15, C\&I Loans: 10,
Commercial Paper: 5, Total: 30; 2009: Bonds: 35, C\&I Loans: -25, Commercial Paper: -10, Total: 0; 2010:H1: Bonds: 30, C\&I Loans: -15 , Commercial Paper: 5, Total: 20; 2010:Q3: Bonds: 40, C\&I Loans: -1, Commercial Paper: 2, Total: 40; 2010:Q4: Bonds: 40 C\&I Loans: 5, Commercial Paper: -5 , Total: 40.

Source: Depository Trust \& Clearing Corporation; Thomson Financial; Federal Reserve Board.
Figure: Syndicated Loan Issuance by Institutional Investors

Stacked bar chart, 1998 to 2010. Unit is billions of dollars. Data are annual rate. There are two series, "New Money" and "Refinancings." Approximate values are: 1998: Refinancings: 50, New Money: 0; 1999: Refinancings: 51, New Money: 0; 2000: Refinancings: 50, New Money: 0; 2001: Refinancings: 40, New Money: 0; 2002: Refinancings: 52, New Money: 48; 2003: Refinancings: 52, New Money: 50; 2004: Refinancings: 125, New Money: 115; 2005: Refinancings: 100, New Money: 140; 2006: Refinancings: 90, New Money: 270; 2007: Refinancings: 100, New Money: 325; 2008: Refinancings: 10, New Money: 50; 2009: Refinancings: 40, New Money: 20; 2010:Q1: Refinancings: 100, New Money: 50; 2010:Q2: Refinancings: 100, New Money: 100; 2010:Q3: Refinancings: 75, New Money: 125; 2010:Q4: Refinancings: 110, New Money: 150.

Source: Reuters LPC.

## Figure: Selected Components of Net Equity Issuance, Nonfinancial Firms

Stacked bar chart, 2006 to 2010. Unit is billions of dollars. Data are monthly rate. There are four series, "Public Issuance," "Private issuance," "Repurchases," and "Cash Mergers." There is a fifth series presented as a line chart that shows the total. Approximate values are as follows. 2006: Public Issuance: 4, Private Issuance: 20, Repurchases: -20, Cash Mergers: -20; Total: -36; 2007: Public Issuance: 4, Private Issuance: 24, Repurchases: -45, Cash Mergers: -40, Total: -57; 2008: Public Issuance: 2, Private Issuance: 25, Repurchases: -35, Cash Mergers: -17, Total: -25; 2009:H1: Public Issuance: 4, Private Issuance: 20, Repurchases: -8, Cash Mergers: -2, Total: 14; 2009:H2: Public Issuance: 4, Private Issuance: 5, Repurchases: -15, Cash Mergers: -16, Total: -22; 2010:Q1: Public Issuance: 4, Private Issuance: 5, Repurchases: -24, Cash Mergers: -10, Total: -25; 2010:Q2: Public Issuance: 4, Private Issuance: 5, Repurchases: -25 , Cash Mergers: -9 , Total: -25 ; 2010:Q3 (preliminary): Public Issuance: 4, Private Issuance: 5, Repurchases: -26, Cash Mergers: -8, Total: -25.

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

## Figure: S\&P 500 Earnings Per Share

Line chart, 2000 to 2010 . Unit is dollars per share. Data are quarterly. The end of the timeline is labeled Q3. The series begins at about 14 and generally decreases to about 10 in 2002:Q1. It generally increases to about 24 in 2007:Q1 then generally decreases to about 16 in 2007:Q4. It generally increases to about 19 in 2008:Q1 then generally decreases to about 6 in 2008:Q4. It generally increases ending at about 22.

Note: Data are seasonally adjusted by staff.
Source: Thomson Financial.

## Figure: Bond Ratings Changes of Nonfinancial Firms

Stacked bar chart, 1990 to 2010. There are two series, "Upgrades" and "Downgrades." Approximate values are as follows: 1990: Upgrades: 10, Downgrades: 35; 1991: Upgrades: 15, Downgrades: 35; 1992: Upgrades: 9, Downgrades: 45; 1993: Upgrades: 10, Downgrades: 19; 1994: Upgrades: 9, Downgrades: 10; 1995: Upgrades: 20, Downgrades: 9; 1996: Upgrades: 16, Downgrades: 10; 1997: Upgrades: 10, Downgrades: 10; 1998: Upgrades: 15, Downgrades: 10; 1999: Upgrades: 10, Downgrades: 18; 2000: Upgrades: 10, Downgrades: 21; 2001: Upgrades: 7, Downgrades: 30; 2002: Upgrades: 5, Downgrades: 35; 2003: Upgrades: 6, Downgrades: 19; 2004: Upgrades: 5, Downgrades: 5; 2005: Upgrades: 6, Downgrades: 10; 2006: Upgrades: 5, Downgrades: 11; 2007: Upgrades: 10, Downgrades: 10; 2008: Upgrades: 5, Downgrades: 18; 2009: Upgrades: 8, Downgrades: 20; 2010:H1: Upgrades: 18, Downgrades: 5; 2010:Q3: Upgrades: 10, Downgrades: 5; 2010:Q4: Upgrades: 18, Downgrades: 5.

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

## Figure: CMBS Issuance

Bar chart, 2000 to 2011. Unit is billions of dollars. Data are annual rate. Approximate values are: 2000: 40, 2001: 70, 2002: 50, 2003: 80, 2004: 90, 2005: 160; 2006: 200; 2007: 230; 2008: 10; 2009: 0; 2010:H1: 10; 2010:Q3: 20; 2010:Q4: 30; 2011:Q1 (estimate from deals in 2011:Q1 pipeline): 50.

Source: Commercial Mortgage Alert.

## Household Finance

## Figure: Mortgage Rate and MBS Yield

Line chart, 2007 to 2011. Unit is percent. Data are weekly. The end of the upper series is labeled January 12. The end of the lower series is labeled January 18. There
are two series, "30-year conforming fixed mortgage rate" and "MBS Yield." 30-year conforming fixed mortgage rate begins at about 5.8 and generally increases to about 6.6 in 2007:Q3. It generally decreases to about 5.5 in 2008:Q1 then generally increases to about 6.5 in 2008:Q3. It fluctuates but generally decreases to about 4.5 in 2009:Q1. It generally increases to about 5.5 in 2009:Q2 then generally decreases to about 4.5 in 2009:Q4. It generally decreases to about 3.7 in 2010 :Q4 then generally increases ending at about 4.6. MBS yield begins at about 5.5 and generally increases to about 6.5 in 2007:Q2. It generally decreases to about 4.5 in 2008:Q1 then fluctuates but generally increases to about 6.4 in 2008:Q4. It generally decreases to about 3.5 in 2009:Q1 then generally increases to about 5 in 2009:Q2, It generally decreases to about 3.5 in 2009:Q4 then generally increases to about 4.5 in 2010:Q1. It generally decreases to about 3.4 in $2010: Q 4$. It generally increases ending at about 4.5.

Note: For MBS Yield, Fannie Mae 30-year current coupon rate.
Source: For mortgage rate, Freddie Mac; for MBS yield, Bloomberg.

## Figure: Purchase and Refinance Activity

Line chart, 2002 to 2011. Unit is an index, March 16, $1990=100$. Unit is weekly. The end of the timeline is labeled January 14. There are two series, "Purchase Index (left scale)" and "Refi Index (right scale)." Purchase Index begins at about 6,000 and generally increases to about 10,000 in early 2006. It generally decreases to about 7,000 in mid-2006 then generally increases to about 9,000 in late 2007. It generally decreases ending at about 4,000. Refi index begins at about 100 then generally increases to be about 500 in mid-2003. It generally decreases to about 100 in early 2004 then generally increases to about 200 in early 2004 . It generally decreases to about 100 in mid-2004 then generally increases to about 150 in mid-2005. It generally decreases to about 100 in early 2006 then generally increases to about 200 in early 2008. It generally decreases to about 100 in late 2008 then generally increases to about 300 in early 2009. It fluctuates but generally decreases to about 100 in early 2009. It generally increases to about 275 in late 2010 then generally decreases ending at about 100.

Note: Seasonally adjusted by FRB staff.
Source: Mortgage Bankers Association.

## Figure: Prices of Existing Homes

Line chart, 2005 to 2010. Unit is index peaks normalized to 100. Data are monthly. There are three series, "FHFA," "CoreLogic," and "20-city S\&P/Case-Shiller." FHFA begins at about 90 then generally increases to about 100 in early 2007. It generally decreases ending at about 85 in October 2010. CoreLogic begins at about 85 and generally increases to about 100 in early 2006. It generally decreases to about 70 in early 2009 then generally increases to about 72 in early 2010 . It generally decreases ending at about 65 in November 2010. 20-city S\&P/Case-Shiller begins at about 85 then generally increases to about 100 . It generally decreases to about 67 in early 2009 then generally increases ending at about 70 in November 2010.

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

## Figure: Growth of Household Sector Debt

Line chart, 1992 to 2010. Unit is percent. Data are quarterly, s.a.a.r. The end of the upper series is labeled Q3. The end of the lower series is labeled Q4 (estimate). There are two series, "Home Mortgage" and "Consumer Credit." Home Mortgage begins at about 8 and fluctuates but generally increases to about 16 in 2003 . It fluctuates but generally decreases ending at about -4 . Consumer Credit begins at about -1 and generally increases to about 16 and fluctuates but generally decreases to about 4 in 1998. It fluctuates but generally increases to about 16 in 2000 then fluctuates but generally decreases to about -6 in 2010 . It generally increases ending at about 1.

Source: Federal Reserve Board.

## Figure: Delinquency Rates

Line chart, 2002 to 2010. Unit is percent of loans. Data are monthly. The end of the timeline is labeled November. There are three series, "Credit card loans in securitized pools," "Auto loans at captive finance companies," and "Prime mortgages." Credit card loans in securitized pools begins at about 5 and generally decreases to about 3.25 in late 2005. It generally increases to about 6 in early 2009 then generally decreases ending at about 4.25 . Auto loans at captive finance companies begins at about 2 and fluctuates but generally increases to about 3.25 . It generally decreases ending at about 3 . Prime mortgages begins at about 1.5 and generally increases to about 7 in early 2010. It generally decreases ending at about 6.

Note: For mortgage delinquency rate, percent of loans 90 or more days past due or in foreclosure.
Source: For mortgage rate, LPS Applied Analytics; for credit card, Moody's; for auto loans, Federal Reserve Board.

## Figure: Gross Consumer ABS Issuance

Stacked bar chart, 2006 to 2007. Unit is billions of dollars. Data are monthly rate. There are three series, "Student Loan," "Credit Card," and "Auto." Approximate values are: 2006: Student loan: 6, Credit card: 6, Auto: 7; 2007: Student loan: 4, credit card: 9, auto: 6; 2008:H1: Student loan: 3, Credit card: 8, Auto: 5; 2008:H2: Student loan: 1, Credit card: 1.5, Auto: .5; 2009:H1: Student loan: 3, Credit card: 9, auto: 6; 2009:H2: Student loan: 3, Credit card: 4, auto: 10; 2010:H1: Student Loan: 2, credit card: 1, auto: 5; 2010:Q3: Student Loan: 2, credit card: 1, auto: 5; October 2010: Student Loan: 1, credit card: 0, auto: 3; November 2010: Student loan: 2, credit card: 0, auto: 6; December 2010: Student loan: 3, credit card: 0, auto: 2.

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

Foreign Developments

## Figure: Nominal Trade-Weighted Dollar Indexes

Line chart, 2008 to 2011. Unit is an index, January 1, 2008 = 100. Data are daily. The end of the timeline is labeled January 18. There are three series, "Broad," "Major," and "OITP." Broad begins at about 100 then generally decreases to about 95 in 2008:Q3. It fluctuates but generally increases to about 115 in 2008:Q4 then generally decreases to about 105 in 2008:Q4. It generally increases to about 115 in 2009:Q1 then generally decreases to about 100 in 2009:Q4. It generally increases to about 107 in 2010:Q2. It generally decreases to about 97 in 2010:Q4 then generally increases ending at about 100. Major begins at about 100 then generally decreases to about 95 in 2008:Q3. It fluctuates but generally increases to about 115 in 2008:Q4 then generally decreases to about 105 in 2008:Q4. It generally increases to about 115 in 2009:Q1 then generally decreases to about 95 in 2009:Q4. It generally increases to about 110 in 2010:Q2 then generally decreases to about 95 in 2010:Q4. It generally increases to about 103 in 2010:Q4 then generally decreases ending at about 100. OITP begins at about 100 and generally decreases to about 95 in 2008:Q3. It fluctuates but generally increases to about 115 in 2009:Q1. It fluctuates but generally decreases to about 102 in 2010:Q2 then generally increases to about 106 in 2010:Q2. It generally decreases ending at about 100.

Source: Federal Reserve Board and Bloomberg.

## Figure: Bilateral Exchange Rates (foreign currency/\$)

Line chart, 2008-2011. Unit is an index, January 1, 2008 = 100. Data are daily. The end of the timeline is labeled January 18. There are four series, "Euro," "Yen," "Chilean peso," and "Korean won." Euro begins at about 100 and generally decreases to about 90 in 2008:Q3. It generally increases to about 115 in $2008: Q 4$ then generally decreases to about 95 in 2009:Q4. It generally increases to about 120 in 2010:Q3 then generally decreases to about 100 in 2010:Q4. It generally increases ending at about 115. Yen begins at about 100 and generally decreases to about 85 in 2008:Q1. It generally increases to about 100 in 2008:Q3 then generally decreases to about 80 in 2009:Q1. It generally increases to about 82 in 2009:Q2 then generally decreases ending at about 75 . Chilean peso begins at about 100 and generally decreases to about 85 in 2008:Q1. It generally increases to about 140 in 2008:Q4. It generally decreases to about 100 in 2009:Q4. It generally increases to about 110 in 2010:Q2. It generally decreases ending at about 95 . Korean won begins at about 100 and generally increases to about 160 in $2008:$ Q4. It generally decreases to about 140 in 2008:Q4. It generally increases to about 170 in 2009:Q1 then generally decreases to about 120 in 2010:Q2. It generally increases to about 135 in 2010:Q2 then generally decreases ending at about 120.

Source: Federal Reserve Bank of New York

## Figure: Euro-Area 10-Year Government Bond Spreads

Line chart, 2007 to 2011 . Unit is percentage points. Data are daily. There are four series, "Greece," "Portugal," "Spain," and "Ireland." Greece begins at about 0 and generally increases to about 3 in 2009:Q1. It generally decreases to about 1 in 2009:Q3 then generally increases to about 10 in 2010:Q2. It generally decreases to about 4 in 2010:Q2 then generally increases to about 10 in 2010:Q3. It generally decreases to about 6.5 in 2010:Q4 then generally increases to about 10 in 2011:Q1. It generally decreases ending at about 8. Portugal begins at about 0 and generally increases to about 2 in 2009:Q2. It generally decreases to about 0.5 in 2009:Q3 then fluctuates but generally increases ending at about 4 . Spain begins at about 0 and generally increases to about 1 in 2009:Q1. It generally decreases to about 0.5 in 2009:Q4. It generally increases ending at about 2.5. Ireland begins at about 0 and generally increases to about 3 in 2009:Q1. It generally decreases to about 1 in 2010:Q2 then generally increases to about 7 in 2010:Q4 then generally decreases ending at about 5 .

Note: Spread over German bunds.
Source: Bloomberg.

## Figure: Nominal 10-Year Government Bond Yields

Line chart, 2008 to 2011. Unit is percent. Data are daily. The end of the timeline is labeled January 18. There are three series, "Germany," "United Kingdom," and "Japan." Germany begins at about 4 and generally decreases to about 3.75 in 2008:Q2. It generally increases to about 5 in 2008 :Q3 then generally decreases to about 3 in 2008:Q4. It generally increases to about 4 in 2009:Q2 then generally decreases to about 2 at 2010:Q3. It generally increases ending at about 3 . United Kingdom begins at about 4.5 then generally increases to about 5.25 in 2008:Q2. It fluctuates but generally decreases to about 3 in 2009:Q1. It fluctuates but generally increases to about 4.25 in 2010:Q1. It generally decreases to about 3 in 2010:Q3 then generally increases ending at about 3.75 . Japan begins at about 1.5 and generally increases to about 2 at 2008:Q2. It generally decreases to about 1 in 2010:Q4 then generally increases ending at about 1.25 .

Source: Bloomberg.

## Figure: Stock Price Indexes

Line chart, 2008 to 2011. Unit is an index, January 1, 2008 = 100. Data are daily. The end of the timeline is labeled January 18. There are four series, "DJ Euro," "Topix," "FTSE," and "MSCI Emerging Markets." DJ Euro begins at about 90 and generally decreases to about 80 in 2008:Q2. It generally increases to about 90 in 2008:Q2. It generally decreases to about 40 in 2009:Q1. It fluctuates but generally increases ending at about 70 . Topix begins at about 100 and decreases to about 80 in 2008:Q2. It generally increases to about 100 in 2008:Q3 then generally decreases to about 40 in 2009:Q1. It fluctuates but generally increases to about 70 in 2010:Q1 then generally decreases to about 55 in 2010:Q4. It generally increases ending at about 60 . FTSE begins at about 100 and generally decreases to about 80 in 2008:Q2. It generally increases to about 100 in 2008:Q3 then generally decreases to about 60 in 2009:Q1. It generally increases to about 95 in 2010:Q1 then generally decreases to about 80 in 2010:Q2. It generally increases ending at about $95 . \mathrm{MSCl}$ emerging markets begins at about 100 and generally decreases to about 80 in 2008:Q2. It generally increases to about 100 in 2008:Q2 then generally decreases to about 40 in 2008:Q4. It fluctuates but generally increases ending at about 95.

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

Source: Treasury International Capital Data adjusted for staff

## [Box:] Debt Subject to Limit

Figure: Debt Subject to Limit

Line chart, October to July 2011. Unit is trillions of dollars. Data are daily. The Statutory Debt Limit is marked at $\$ 14.294$ trillion. The series begins at about 13.6 and generally increases meeting the debt ceiling in April where the Treasury invokes toolkit (note: assumes $\$ 178$ billion available in the Treasury toolkit). It remains about constant until the toolkit is drained in late June. It generally increases to about 14.35 and remains about constant to the end of the timeline.

| Estimated Treasury Toolkit |
| :--- |
| (Billions of dollars) |
| Total |
| Government Securities Investment Fund (G Fund) |
| Civil Service Retirement and Disability Fund (CSRDF) |
| Exchange Stabilization Fund (ESF) |
| Federal Financing Bank (FFB) | | 125 |
| ---: | ---: |

## Commercial Banking and Money

## Figure: Bank Credit

Line chart, 2007 to 2010. Unit is an index, January 2008 = 100. Data are monthly average. The end of the timeline is labeled December. There are two series, "Securities" and "Total Loans." Securities begins at about 95 and fluctuates but generally increases ending at about 115. Total loans begins at about 90 and generally increases to about 105 in November 2008. It generally decreases ending at about 85.

[^0]
## Figure: Changes in Standards and Demand for Bank Loans

Line chart, 1990 to 2011. Unit is net percent. Data are quarterly. The end of the timeline is marked January. There are two series, "Standards" and "Demand." Standards begins at about 25 and generally decreases to -25 in 1993. It fluctuates but generally increases to about 50 in 2000 then generally decreases to -25 in 2006. It generally increases to about 90 in 2008 then generally decreases ending at about 15. Demand begins at about -25 and generally increases to about 35 in 1994 . It generally decreases to about -10 in 1994 then fluctuates but generally increases to about 45 in 1997. It generally decreases to about -50 in 2000 then generally increases to about 25 in 2005. It generally decreases to about -60 in 2008 then generally increases ending at about 0 .
 tighter lending standards or stronger loan demand over the past 3 months.

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

## Figure: Changes in Spreads on C\&I Loans

Line chart, 1990 to 2011. Unit is net percent. Data are quarterly. The end of the timeline is labeled January. There are two series, "Large/middle-market firms" and "Small firms." Large/middle-market firms begins at about 12 and generally increases to about 60 in 1991. It generally decreases to about -60 in 1993 then fluctuates but generally increases to about 50 in 2002. It generally decreases to about -75 in 2005 then generally increases to about 100 in 2008 . It generally decreases ending at about -50 . Small firms begins at about 10 and generally increases to about 40 in 1991 . It fluctuates but generally decreases to about -40 in 1997 then fluctuates but generally increases to about 50 in 2002. It generally decreases to about -50 in 2005 then generally increases to about 100 in 2008 . It generally decreases ending at about - 25 .

Note: Net percent of respondents that widened spreads over the past three months.
Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.

## Figure: Expected Year-Ahead Changes in Credit Quality

Line chart, 2006 to 2011. Unit is net percent. Data are annual. There are five series, "Credit cards," "Other consumer loans," "Residential mortgages," "CRE loans," and "C\&I loans." Credit cards begins at about -40 and generally decreases to about -100 in mid-2009. It generally increases ending at about 75 . Other consumer loans begins at about 30 and decreases to about -75 in mid-2009. It generally increases to about 60 in early 2010 then remains about constant to the end of the timeline.

Residential mortgages begins at about 12 and generally decreases to about -100 in mid-2009. It generally increases ending at about 55 . CRE Loans begins at about -25 and generally decreases to about -75 and generally increases ending at about 100. C\&I Loans begins at about -25 and generally decreases to about -85 . It generally increases ending at about 100.

Note. Results shown are the net fraction of banks reporting that credit quality is expected to improve and are weighted at the bank level by outstanding loans in each category.
Source: Federal Reserve Board, Senior Loan Officer Opinion Survey on Bank Lending Practices.
Growth of M2 and Its Components
Percent, s.a.a.r.

|  | M2 | Liquid deposits | Small time deposits | RMMF | Curr. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2008 | 8.5 | 6.9 | 12.3 | 13.6 | 5.8 |
| 2009 |  |  |  |  |  |
| H1 | 8.0 | 17.1 | -6.4 | -15.0 | 11.0 |
| H2 | 2.0 | 15.7 | -25.8 | -31.4 | 2.7 |
| 2010 |  |  |  |  |  |
| H1 | 1.3 | 9.6 | -22.4 | -22.9 | 4.5 |
| Q3 | 4.5 | 10.6 | -21.3 | -7.5 | 5.9 |
| Oct. | 5.5 | 12.7 | -27.8 | -13.2 | 8.9 |
| Nov. | 5.1 | 12.3 | -27.8 | -16.1 | 8.6 |
| Dec. (p) | 4.2 | 10.7 | -24.5 | -13.7 | 3.8 |

RMMF Retail money market mutual funds. Return to table
p Preliminary. Return to table
Source: Federal Reserve Board.

## Figure: Interest Rates on Selected Components of M2

Line chart, 2008 to 2010. Unit is percent. Data are monthly. The end of the timeline is labeled December (preliminary). There are three series, "Retail money market mutual funds," " 6 -month small time deposits," and "Liquid deposits." Retail money market mutual funds begins at about 3.5 and generally decreases to about 0.2 in February 2009. It remains about constant to the end of the timeline. 6-month small time deposits begins at about 3 and generally decreases ending at about 0.25 . Liquid deposits begins at about 2.25 and generally decreases ending at about 0.5.

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

## Appendix: Senior Loan Officer Opinion Survey on Bank Lending Practices

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

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

Line chart, 1990 to 2011. Unit is percent. The October survey is marked the end of 2010. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Loans to large and medium-sized firms begins at about 60 and generally decrease to about -20 in 1993:Q3. It generally increases to about 60 in 2001:Q1 then generally decreases to about -20 in 2004:Q1. It generally increases to about 80 in 2008:Q4 then generally decreases ending at -10 . Loans to small firms begins at about 50 and generally decreases to -10 in 1993:Q2. It generally increases to about 45 in 2000:Q4 then generally decreases to about -20 in 2005:Q2. It generally increases to about 80 in 2009:Q1 then generally decreases ending at about 0 .

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

Line chart, 1990 to 2011. Unit is percent. The October survey is marked at the end of 2010. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Loans to large and medium-sized firms begins at about 10 and generally increases to about 60 in 1991:Q2. It generally decreases to about -60 in 1994:Q2 then fluctuates but generally increases 60 in 2002:Q2. It generally decreases to about -70 in 2005:Q2 then generally increases to about 100 in 2009:Q1. It generally decreases ending at about -50 . Loans to small firms begins at about 5 and generally increases to about 40 in 1991:Q1. It fluctuates but generally decreases to about -40 n 1997:Q4. It generally increases to about 40 in 2002:Q1 then generally decreases to about -60 in 2005:Q2. It generally increases to about 95 in 2008:Q4. It generally decreases ending at about -20.

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

Line chart, 1990 to 2011. Unit is percent. The October survey is marked at the end of 2010. There are two series, "Loans to large and medium-sized firms" and "Loans to small firms." Loans to large and medium-sized firms begins at about -30 and generally increases to about 40 in 1994:Q2. It fluctuates but generally decreases to about -75 in 2001:Q4. It generally increases to about 40 in 2005:Q1 then generally decreases to about -60 in 2009:Q1. It generally increases ending at about 30 . Loans to small firms begins at about -25 and fluctuates but generally increases to about 40 in 1994:Q2. It generally decreases to about -50 in 2002:Q4 then generally increases t about 40 in 2004:Q1. It generally decreases -60 in 2009:Q2 then generally increases ending at about 10.

## Measures of Supply and Demand for Commercial Real Estate Loans

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

Line chart, 1991 to 2011. Unit is percent. The October Survey is marked at the end of 2010. The series begins at about 70 and generally decreases to about -5 in 1994:Q2. It generally increases to about 10 in 1996:Q1 then generally decreases to about -10 in 1997:Q3. It generally increases to about 45 in 1991:Q1 then generally decreases to about 10 in 1999:Q2. It generally increases to about 55 in 2002:Q3 then generally decreases to about -20 in 2005:Q1. It generally increases to about 90 in 2009:Q1 then generally decreases ending at about 0 .

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

Line chart, 1991 to 2011. Unit is percent. The October Survey is marked at the end of 2010. The series begins at about 15 in 1995:Q1 then generally increases to about 25 in 1995:Q4. It generally decreases to about 0 in 1996:Q1 then generally increases to about 45 in 1998:Q3. It fluctuates but generally decreases to -55 in 2001:Q4. It generally increases to about 20 in 2005:Q4. It generally decreases to about -60 in 2009:Q2 then generally increases ending at about 18 .

## Measures of Supply and Demand for Residential Mortgage Loans

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

Line chart, 1990 to 2006. Unit is percent. There is one series, "All residential." The series begins at about 10 and generally increases to about 35 in 1995:Q1. It generally decreases to about -19 in 1992:Q4. It fluctuates but generally increases to about 15 in 2002:Q4. It fluctuates but generally decreases to about -10 in 2006:Q3. It generally increases ending at about 18.

There is a second panel showing 2007 to 2011. Unit is percent. There are three series, "Prime," "Nontraditional," and "Subprime." Prime begins at about18 and generally increases to about 75 in 2008:Q3. It generally decreases to about -4 in 2010:Q3 then generally increases to about 10 in 2010:Q4. It generally decreases ending at about 0 . Nontraditional begins at about 40 and generally increases to about 90 in 2008:Q4. It generally decreases to about 5 in 2010:Q1. It generally increases to about 18. Subprime begins at about 58 and generally increases to about 100 in 2008:Q4. It generally decreases to about -5 then generally increases to about 15. It generally decreases ending at about 0 .

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

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

Line chart, 1990 to 2006. Unit is percent. There is one series, "All residential." The series begins at about -50 and generally decreases to about-60 in 1991:Q2. It generally increases to about 60 in 1991:Q4 then generally decreases to about 5 in 1992:Q2. It fluctuates but generally increases to about 45 in 1993:Q4 then generally decreases to about -80 in 1995:Q1. It generally increases to about 55 in 1996:Q1 then fluctuates but generally decreases to about -20 in 1996:Q3. It fluctuates but generally increases to about 60 in 1998:Q3 then generally decreases to about -60 in 2000:Q1. It generally increases to about 45 in 2001:Q3then generally decreases to about 0 in 2001:Q4. It fluctuates but generally increases to about 50 in 2003:Q4 then generally decreases to about -40 in 2004:Q1. It generally increases to about 20 in 2005:Q3 then generally decreases to about -60 in 2006:Q4. It generally increases ending at about -40.

There is a second panel showing 2007 to 2011. Unit is percent. There are three series, "Prime," "Nontraditional," and "Subprime." Prime begins at about -20 and generally increases to about -10 in 2007:Q4. It generally decreases to about -60 in 2008:Q1 then generally increases to about -20 in $2008: Q 2$. It generally decreases to about -55 in 2008:Q4 then generally increases to about 40 in 2009:Q2. It generally decreases to about -15 in 2010:Q2 then generally increases to about 15 in 2010:Q3. It generally decreases ending at about -25 . Nontraditional begins at about -20 and generally decreases to about -70 in 2008:Q1. It generally increases to about -30 in 2008: Q2 then generally decreases to about -80 in 2008:Q4. It generally increases to about -5 in 2010:Q1 then generally decreases to about -40 in 2010:Q2. It generally increases to about 0 in 2010:Q3 then generally decreases ending at about -15 . Subprime begins at about -20 and generally decrease to about -70 in 2008:Q1. It generally increases to about -25 in 2008:Q3 then generally decreases to about -100 in 208:Q4. It generally increases ending at about -50 in 2009:Q1.

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

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

Line chart, 1990 to 2011. Unit is percent. The October survey is marked by a vertical line in 2010:Q4. 0 on the scale is marked by a horizontal line. There are two series, "Credit card loans" and "Other consumer loans." Credit card loans begins at about 20 in 1996:Q1 then generally increases to about 50 in 1996:Q2. It generally decreases to about 0 in 2000:Q4 then generally increases to about 20 in 2002:Q1. It generally decreases to about -10 in 2005:Q2 then generally increases to about 70 in 2008:Q1. It generally decreases ending at about -10. Other consumer loans begins at about 20 in 1996:Q1 then generally decreases to about 10 in 1996:Q2. It generally increases to about 20 in 1996:Q3 then generally decreases to about 0 in 1999:Q1. It generally increases to about 20 in 2002:Q1 then generally decreases to about -10 in 2005:Q2. It generally increases to about 80 in 2008:Q1 then generally decreases to about -20 in $2010: Q 3$. It generally increases ending at about -5 .

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

Line chart, 1990 to 2011. Unit is percent. The October survey is marked by a vertical line in 2010:Q4. 0 on the scale is marked by a horizontal line. The series begins at about 10 and generally decreases to about -15 in 1991:Q1. It generally increases to about 25 in 1994:Q2 then generally decreases to about -5 in 1996:Q1. It generally increases to about 10 in 1999:Q1 then generally decreases to about -10 in 2001:Q4. It fluctuates but generally increases to about 20 in 2005:Q3 then generally decreases to about -60 in 2008:Q4. It generally increases ending at about 20

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

Line chart, 1990 to 2011. Unit is percent. The October survey is marked by a vertical line in 2010:Q4. 0 on the scale is marked by a horizontal line. The series begins at about -35 in 1991:Q4 then generally increases to about 20 in 1992:Q2. It generally decreases to about 0 in 1993:Q1 then generally increases to about 40 in 1994: Q3. It generally decreases to about -5 in 1995:Q2 then generally increases to about 20 in 1995:Q3. It fluctuates but generally decreases to about -20 in $1997: Q 1$ then generally increases to about 10 in 1998:Q1. It generally decreases to about 019 in 1998:Q4 then generally increases to about 20 in 1999:Q2. It generally decreases to about -40 in 2001:Q1 then fluctuates but generally increases to about 40 in 2003:Q3. It fluctuates but generally decreases to about -60 in 2008:Q4 then generally increases ending at about 5.

## Special Questions

## Figure: Factors affecting Recent Growth in Banks' Closed-End Residential Real Estate Loan Holdings

Bar chart, 0 to 100. Unit is percent citing factor as somewhat or very important. Approximate data are: Originated more nonconforming loans, 40; Securitization costlier, 15; Desire to increase share of these loans in total assets, 50; Desire to grow balance sheet with these loans, 75; Capacity constraints in securitization, 20; Repurchases from securitization pools, 10; Decrease in demand from government-sponsored enterprises, 5; Fewer charge-offs/paydowns, 20.

Figure: Outlook for Asset Quality in 2011

Bar chart. Unit is net percent expecting improvement. Approximate data are: Business lending: Commercial and Industrial (large firms), 85; Commercial and Industrial (small firms), 75; Commercial real estate, 55; Household lending: Prime residential real estate, 45; nontraditional residential real estate, 20; Home equity lines of credit, 35 ; credit card, 55; Other consumer, 50.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## January 2011 Tealbook A Tables and Charts ${ }^{\ddagger}$

## Risks and Uncertainty

## Alternative Scenarios

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

| 2010 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measure and scenario |  | 2011 | 2012 | 2013 | 2014-15 |
| Real GDP |  |  |  |  |  |
| Extended Tealbook baseline | 3.2 | 3.8 | 4.4 | 4.6 | 3.9 |
| Stronger expansion | 3.2 | 4.5 | 5.4 | 4.8 | 3.0 |
| Higher inflation | 3.2 | 4.7 | 5.9 | 4.8 | 2.6 |
| Intensified real estate slump | 3.2 | 3.4 | 3.5 | 4.0 | 4.1 |
| With spillovers | 3.2 | 2.4 | 2.8 | 3.9 | 5.0 |
| Further disinflation | 3.2 | 3.6 | 3.9 | 4.2 | 4.6 |
| Severe European recession | 3.2 | 2.6 | 3.4 | 4.8 | 4.3 |
| Foreign boom with higher oil prices | 3.2 | 4.3 | 4.7 | 4.2 | 3.5 |
| Unemployment rate ${ }^{1}$ |  |  |  |  |  |
| Extended Tealbook baseline | 9.6 | 8.9 | 7.8 | 7.0 | 5.3 |
| Stronger expansion | 9.6 | 8.7 | 7.0 | 6.0 | 5.1 |
| Higher inflation | 9.6 | 8.5 | 6.7 | 5.5 | 5.0 |
| Intensified real estate slump | 9.6 | 9.0 | 8.3 | 7.9 | 6.0 |
| With spillovers | 9.6 | 9.4 | 9.1 | 8.9 | 6.3 |
| Further disinflation | 9.6 | 8.9 | 8.0 | 7.4 | 5.1 |
| Severe European recession | 9.6 | 9.3 | 8.7 | 7.9 | 5.9 |
| Foreign boom with higher oil prices | 9.6 | 8.8 | 7.4 | 6.7 | 5.3 |
| Core PCE inflation |  |  |  |  |  |
| Extended Tealbook baseline | . 5 | 1.0 | 1.0 | 1.2 | 1.4 |
| Stronger expansion | . 5 | 1.0 | 1.0 | 1.4 | 1.8 |
| Higher inflation | . 5 | 1.4 | 2.1 | 2.7 | 2.9 |
| Intensified real estate slump | . 5 | 1.0 | . 9 | 1.0 | 1.1 |
| With spillovers | . 5 | 1.0 | . 8 | . 7 | . 7 |
| Further disinflation | . 5 | . 5 | . 1 | -. 1 | -. 3 |
| Severe European recession | . 5 | . 4 | . 4 | 1.0 | 1.4 |
| Foreign boom with higher oil prices | . 5 | 1.3 | 1.3 | 1.2 | 1.3 |
| Federal funds rate ${ }^{1}$ |  |  |  |  |  |
| Extended Tealbook baseline | . 2 | . 1 | . 1 | 1.7 | 4.1 |
| Stronger expansion | . 2 | . 7 | 1.5 | 3.2 | 4.1 |
| Higher inflation | . 2 | 1.2 | 3.4 | 5.8 | 5.7 |
| Intensified real estate slump | . 2 | . 1 | . 1 | . 3 | 2.7 |
| With spillovers | . 2 | . 1 | . 1 | . 1 | 2.2 |
| Further disinflation | . 2 | . 1 | . 1 | . 1 | 1.9 |
| Severe European recession | . 2 | . 1 | . 1 | . 9 | 3.6 |
| Foreign boom with higher oil prices | . 2 | . 1 | . 4 | 1.9 | 4.0 |

# Forecast Confidence Intervals and Alternative Scenarios 

Confidence Intervals Based on FRB/US Stochastic Simulations

## Figure: Real GDP

Line chart, 2008 to 2015 . Unit is 4 -quarter percent change. 0 on the scale is marked by a horizontal line. There are eight series, "Extended Tealbook baseline," "Stronger Expansion," "Higher inflation," "Intensified real estate slump," "with spillovers," "Further disinflation," "Severe European recession," and "Foreign boom with higher oil prices." Extended Tealbook baseline begins at about 2 and generally decreases to about -4 in 2009:Q2. It generally increases to about 4.5 in 2014:Q4 then generally decreases ending at about 3.5. Stronger expansion begins at about 3 and generally increases to about 5.5 in 2012:Q4. It generally decreases ending at about 2.25. Higher inflation begins at about 3 and generally increases to about 6 in 2012:Q4. It generally decreases ending at about 2 . Intensified real estate slump begins at about 3 and generally increases to about 4.75 in 2014:Q4. It generally decreases ending at about 3.75 . With spillovers begins at about 3 and generally decreases to about 2 in 2012:Q1. It generally increases to about 5.25 in 2014:Q1 then generally decreases ending at about 4.75 . Further disinflation begins at about 4 and generally increases to about 5 in 2014:Q4. It generally decreases ending at about 4.25 . Severe European recession begins at about 3 and generally decreases to about 2.5 in 2012:Q1. It generally increases to about 5 in 2014:Q4 then generally decreases ending at about 4. Foreign boom with higher oil prices begins at about 3 and generally increases to about 5 in 2012:Q1. It generally decreases ending at about 3.70 percent interval is presented as a dark gray range that begins at about 3 and generally increases to a range of about [1.5, 7]. It generally decreases ending at about [1.5,5.5]. 90 percent interval is presented as a light gray range that begins at about 3 then generally increases to a range of about [1, 7]. It generally decreases to about [.5, 7] then generally increases to about [1, 8]. It generally decreases ending at about $[0,7]$.

## Figure: Unemployment Rate

Line chart, 2008 to 2015. Unit is percent. There are eight series, "Extended Tealbook baseline," "Stronger Expansion," "Higher inflation," "Intensified real estate slump," "with spillovers," "Further disinflation," "Severe European recession," and "Foreign boom with higher oil prices." Extended Tealbook baseline begins at about 5.0 and generally increases to about 10.0 in 2009:Q4. It generally decreases ending at about 5.5 . Stronger expansion begins at about 9.5 and generally decreases ending at about 5.0. Higher inflation begins at about 9.5 and generally decreases to about 4.5 in 2015:Q1. It generally increases ending at about 5.0. Intensified real estate slump begins at about 9.5 and generally decreases ending at about 6.0. With spillovers begins at about 9.5 and generally decreases ending at about 6.5 . Further disinflation begins at about 9.5 and generally decreases ending at about 5.0. Severe European recession begins at about 9.5 and generally decreases ending at about 6.0. Foreign boom with higher oil prices begins at about 9.5 and generally decreases ending at about 5.25 . 70-percent interval is presented as a dark gray range that begins at about 9.5 and generally decreases ending at a range of about [4.5,6.5]. 90-percent interval is presented as a light gray range that begins at about 9.5 and generally decreases ending at a range of about [3.5, 7.25].

## Figure: PCE Prices excluding Food and Energy

Line chart, 2008 to 2015 . Unit is 4 -quarter percent change. 0 on the scale is marked by a horizontal line. There are eight series, "Extended Tealbook baseline," "Stronger Expansion," "Higher inflation," "Intensified real estate slump," "with spillovers," "Further disinflation," "Severe European recession," and "Foreign boom with higher oil prices." Extended Tealbook baseline begins at about 2.5 and generally decreases to about 1.25 in 2009:Q3. It generally increases to about 1.75 in 2009 :Q4 then generally decreases to about 0.5 in 2010:Q4. It generally increases ending at about 1.5. Stronger Expansion begins at about 0.75 and generally increases ending at about 2.0. Higher inflation begins at about 0.75 and generally increases to about 3.0 in 2014:Q2. It generally decreases ending at about 2.75 . Intensified real estate slump begins at about 0.75 and generally increases ending at about 1.25 . With spillovers begins at about 0.75 and generally decreases to about 0.5 in $2014: Q 1$. It generally increases ending at about 0.75 . Further disinflation begins at about 0.75 and generally decreases ending at about -0.25 . Severe European Recession begins at about 0.75 and generally decreases to about 0.25 in 2012:Q1. It generally increases ending at about 1.5. Foreign boom with higher oil prices begins at about 0.75 and generally increases to about 1.5 in 2011:Q4. It generally decreases to about 1.0 in 2013:Q3 then generally increases ending at about 1.5. 70-percent interval is presented as a dark gray range that begins at about 0.75 and generally increases ending at about [0.5, 2.5]. 90-percent interval is presented as a light gray range that begins at about 0.75 and generally increases ending at about [0.0, 3.25].

## Figure: Federal Funds Rate

Line chart, 2008 to 2015. Unit is percent. There are eight series, "Extended Tealbook baseline," "Stronger Expansion," "Higher inflation," "Intensified real estate slump," "with spillovers," "Further disinflation," "Severe European recession," and "Foreign boom with higher oil prices." Extended Tealbook baseline begins at about 3 and generally decreases to about 0 in 2009:Q1. It remains about constant until 2012:Q4 then generally increases ending at about 4. Stronger Expansion begins at about 0 and generally increases to about 4.25 in 2014:Q1. It generally decreases ending at about 4 . Higher inflation begins at about 0 and generally increases to about 7 in 2014:Q1. It generally decreases ending at about 5.75. Intensified Real Estate slump begins at about 0 and remains about constant until 2013:Q3. It generally increases ending at about 3. With spill overs begins at about 0 and remains about constant until 2014:Q1. It generally increases ending at about 2. Further disinflation begins at about 0 and remains about constant until 2014:Q1. It generally increases ending at about 2 . Severe European recession begins at about 0 and remains about constant until 2013:Q1. It generally increases ending at about 3.5. Foreign boom with high oil prices begins at about 0 and generally increases ending at about 4. 70-percent interval is presented as a dark gray range that begins at about 0 and generally increases ending at about [2, 6]. 90 percent interval is presented as a light gray range that begins at about 0 and increases ending at about [1, 7.25].

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

| Measure | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP (percent change, Q4 to Q4) |  |  |  |  |  |
| Projection | 3.8 | 4.4 | 4.6 | 4.5 | 3.4 |
| Confidence interval |  |  |  |  |  |
| Tealbook forecast errors | 2.3-5.4 | 2.8-6.1 | … | ... | ... |
| FRB/US stochastic simulations | 2.7-5.2 | 2.6-6.2 | 2.2-6.1 | 2.4-6.7 | 1.5-5.7 |
| Civilian unemployment rate (percent, Q4) |  |  |  |  |  |
| Projection | 8.9 | 7.8 | 7.0 | 6.0 | 5.3 |
| Confidence interval |  |  |  |  |  |
| Tealbook forecast errors | 8.3-9.5 | 6.8-8.8 | ... | $\ldots$ | ... |
| FRB/US stochastic simulations | 8.4-9.4 | 6.8-8.8 | 6.0-8.2 | 5.0-7.3 | 4.3-6.5 |
| PCE prices, total (percent change, Q4 to Q4) |  |  |  |  |  |
| Projection | 1.3 | 1.0 | 1.2 | 1.5 | 1.6 |
| Confidence interval |  |  |  |  |  |
| Tealbook forecast errors | .3-2.3 | -.1-2.1 | ... | ... | ... |
| FRB/US stochastic simulations | .6-2.2 | -.1-2.2 | .1-2.5 | .2-2.7 | .4-3.0 |
| PCE prices excluding food and energy (percent change, Q4 to Q4) |  |  |  |  |  |
| Projection | 1.0 | 1.0 | 1.2 | 1.4 | 1.5 |
| Confidence interval |  |  |  |  |  |
| Tealbook forecast errors | .4-1.5 | .2-1.8 | ... | ... | ... |
| FRB/US stochastic simulations | .5-1.5 | .3-1.9 | .3-2.1 | .4-2.3 | .6-2.6 |
| Federal funds rate (percent, Q4) |  |  |  |  |  |
| Projection | . 1 | . 1 | 1.7 | 3.5 | 4.1 |
| Confidence interval |  |  |  |  |  |
| FRB/US stochastic simulations | .1-. 7 | .1-2.4 | .2-3.7 | 1.4-5.5 | 2.1-6.2 |

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 January 10, 2011)

## Figure: Real GDP

Line chart, 2008 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Blue chip consensus" and "Staff forecast." Staff forecast begins at about -1 and generally increases to about 1 in 2008:Q2. It generally decreases to about -7 in 2008:Q4 then generally increases to about 7.5 in 2009:Q3. It generally decreases to about 2 in 2010:Q2 then generally increases ending at about 4.5. Blue chip consensus begins at about 2 in 2010:Q1 then generally increases to about 4 in 2011:Q4. It generally decreases to about 3 in 2011:Q4 then generally increases ending at about 3.5 . There is a red shaded range that begins at about 3 in 2010:Q3 and generally increases to about [2.5, 4.5]. It generally decreases ending at about [2.5, 4].

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

## Figure: Real PCE

Line chart, 2008 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Blue chip consensus" and "Staff forecast." Staff forecast begins at about -1 and generally increases to about 0 in 2008:Q3. It generally decreases to about -4 in 2008:Q3 then fluctuates but generally increases to about 4 in 2010:Q3. It generally decreases to about 3 in 2011:Q1 then generally increases ending at about 4.25 . Blue chip consensus begins at about 2 in 2010:Q3 and generally increases to about 4 in 2010:Q4. It fluctuates but generally decreases ending at about 3 . There is a red shaded range that begins at about 2 in

## Figure: Unemployment Rate

Line chart, 2008 to 2012. Unit is percent. There are two series, "Blue chip consensus" and "Staff forecast." Staff forecast begins at about 5 and generally increases to about 10 in 2009:Q4. It generally decreases ending at about 8. Blue chip consensus begins at about 8 in 2010:Q4 hen generally decreases ending at about 8.25. There is a red shaded range that begins at about 9 in 2010:Q4 and generally decreases ending at about [7.75, 9].

## Figure: Consumer Price Index

Line chart, 2008 to 2012. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Blue chip consensus" and "Staff forecast." Staff forecast begins at about 4.5 and generally increases to about 6.5 in 2008:Q3. It generally decreases to about -10 in $2008: Q 4$ then generally increases to about 4 in 2009:Q3. It generally decreases to about -1 in 2010:Q2 then generally increases to about 3 in 2011:Q1. It generally decreases to about 1 in 2011:Q2 then remains about constant to the end of the timeline. Blue chip consensus begins at about 3 in 2010:Q3 then generally decreases to about 2 in 2011:Q1. It remains about constant to the end of the timeline. There is a red shaded range that begins at about 3 and generally decreases to about [0, 2] in 2011:Q1. It generally increases ending at about [1, 3.5].

## Figure: Treasury Bill Rate

Line chart, 2008 to 2012 . Unit is percent. 0 on the scale is marked by a horizontal line. There are two series, "Blue chip consensus" and "Staff forecast." Staff forecast begins at about 2 and generally decreases to about 0 in $2009: Q 1$. It fluctuates but remains about constant to the end of the timeline. Blue chip consensus begins at about 0 in 2010:Q4 then generally increases ending at about 2. There is a red shaded range that begins at about 0 in 2010:Q4 and generally increases ending at about [0.75, 3].

## Figure: 10-Year Treasury Yield

Line chart, 2008 to 2012. Unit is percent. There are two series, "Blue chip consensus" and "Staff forecast." Staff forecast begins at about 3.5 and generally increases to about 4 in 2008:Q3. It generally decreases to about 2.5 in 2009:Q1 then generally increases to about 3.75 in $2010: Q 1$. It generally decreases to about 2.75 in 2010:Q3 then generally increases ending at about 4.25. Blue chip consensus begins at about 2.5 in 2010:Q3 and generally increases ending at about 4.5. There is a red shaded range that begins at about 2.5 in 2010:Q3 and generally increases ending at about [4.0, 5.0].

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

Last update: February 3, 2017

## Accessible Material

January 2011 Tealbook A Tables and Charts

## Greensheets

Changes in GDP, Prices, and Unemployment
(Percent, annual rate except as noted)


| Quarterly |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010: Q1 | 4.8 | 4.8 | 3.7 | 3.7 | 2.1 | 2.1 | 1.2 | 1.2 | 9.7 | 9.7 |
| Q2 | 3.7 | 3.7 | 1.7 | 1.7 | . 0 | . 0 | 1.0 | 1.0 | 9.7 | 9.6 |
| Q3 | 5.0 | 4.6 | 2.7 | 2.6 | 1.0 | . 8 | . 8 | . 5 | 9.6 | 9.6 |
| Q4 | 2.8 | 3.8 | 2.5 | 3.8 | 1.8 | 1.9 | . 6 | . 6 | 9.7 | 9.6 |
| 2011: Q1 | 4.6 | 5.7 | 3.4 | 3.6 | 1.6 | 2.0 | 1.0 | . 9 | 9.5 | 9.5 |
| Q2 | 4.5 | 4.7 | 3.5 | 3.7 | 1.0 | 1.1 | . 9 | 1.0 | 9.4 | 9.3 |
| Q3 | 4.6 | 4.9 | 3.7 | 3.8 | . 9 | 1.2 | . 9 | 1.0 | 9.1 | 9.1 |
| Q4 | 5.1 | 5.1 | 4.3 | 4.2 | . 7 | 1.0 | . 8 | . 9 | 8.9 | 8.9 |
| 2012: Q1 | 5.5 | 5.5 | 4.3 | 4.3 | . 9 | 1.0 | . 9 | 1.0 | 8.8 | 8.7 |
| Q2 | 5.6 | 5.6 | 4.4 | 4.4 | . 9 | 1.0 | . 9 | 1.0 | 8.6 | 8.4 |
| Q3 | 5.6 | 5.6 | 4.5 | 4.5 | . 9 | 1.0 | . 9 | 1.0 | 8.3 | 8.1 |
| Q4 | 5.6 | 5.7 | 4.5 | 4.6 | . 9 | 1.0 | . 9 | 1.0 | 8.0 | 7.8 |
| Two-quarter ${ }^{\text {² }}$ |  |  |  |  |  |  |  |  |  |  |
| 2010: Q2 | 4.3 | 4.3 | 2.7 | 2.7 | 1.0 | 1.0 | 1.1 | 1.1 | -. 3 | -. 4 |
| Q4 | 3.9 | 4.2 | 2.6 | 3.2 | 1.4 | 1.3 | . 7 | . 5 | . 0 | . 0 |
| 2011: Q2 | 4.5 | 5.2 | 3.5 | 3.7 | 1.3 | 1.6 | 1.0 | 1.0 | -. 3 | -. 3 |
| Q4 | 4.9 | 5.0 | 4.0 | 4.0 | . 8 | 1.1 | . 8 | 1.0 | -. 5 | -. 4 |
| 2012: Q2 | 5.6 | 5.6 | 4.4 | 4.4 | . 9 | 1.0 | . 9 | 1.0 | -. 3 | -. 5 |
| Q4 | 5.6 | 5.7 | 4.5 | 4.5 | . 9 | 1.0 | . 9 | 1.0 | -. 6 | -. 6 |
| Four-quarter ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |
| 2009:Q4 | . 6 | . 6 | . 2 | . 2 | 1.5 | 1.5 | 1.7 | 1.7 | 3.1 | 3.1 |
| 2010:Q4 | 4.1 | 4.3 | 2.7 | 2.9 | 1.2 | 1.2 | . 9 | . 8 | -. 3 | -. 4 |
| 2011:Q4 | 4.7 | 5.1 | 3.7 | 3.8 | 1.1 | 1.3 | . 9 | 1.0 | -. 8 | -. 7 |
| 2012:Q4 | 5.6 | 5.6 | 4.4 | 4.4 | . 9 | 1.0 | . 9 | 1.0 | -. 9 | -1.1 |
| Annual |  |  |  |  |  |  |  |  |  |  |
| 2009 | -1.7 | -1.7 | -2.6 | -2.6 | . 2 | . 2 | 1.5 | 1.5 | 9.3 | 9.3 |
| 2010 | 3.8 | 3.9 | 2.8 | 2.9 | 1.7 | 1.7 | 1.4 | 1.3 | 9.7 | 9.6 |
| 2011 | 4.3 | 4.8 | 3.2 | 3.5 | 1.2 | 1.4 | . 9 | . 8 | 9.2 | 9.2 |
| 2012 | 5.3 | 5.4 | 4.3 | 4.3 | . 9 | 1.0 | . 9 | 1.0 | 8.4 | 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

| Item | 2010 |  |  |  | 2011 |  |  |  | 2012 |  |  |  | $2010{ }^{1}$ | $2011{ }^{1}$ | $2012{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| Real GDP | 3.7 | 1.7 | 2.6 | 3.8 | 3.6 | 3.7 | 3.8 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 2.9 | 3.8 | 4.4 |
| Previous Tealbook | 3.7 | 1.7 | 2.7 | 2.5 | 3.4 | 3.5 | 3.7 | 4.3 | 4.3 | 4.4 | 4.5 | 4.5 | 2.7 | 3.7 | 4.4 |
| Final sales | 1.1 | . 9 | . 9 | 7.0 | 3.1 | 3.4 | 3.7 | 5.1 | 4.0 | 4.1 | 4.0 | 4.6 | 2.4 | 3.8 | 4.1 |
| Previous Tealbook | 1.1 | . 9 | 1.2 | 4.2 | 3.3 | 3.8 | 4.0 | 4.4 | 3.9 | 4.0 | 4.0 | 4.5 | 1.8 | 3.9 | 4.1 |
| Priv. dom. final purch. | 2.1 | 4.4 | 2.3 | 4.0 | 3.9 | 4.3 | 4.7 | 4.7 | 4.2 | 4.5 | 4.7 | 5.0 | 3.2 | 4.4 | 4.6 |
| Previous Tealbook | 2.1 | 4.4 | 2.6 | 2.7 | 3.5 | 4.1 | 4.5 | 5.0 | 4.2 | 4.5 | 4.8 | 5.0 | 3.0 | 4.3 | 4.7 |
| Personal cons. expend. | 1.9 | 2.2 | 2.4 | 4.1 | 3.1 | 3.5 | 3.6 | 3.7 | 3.5 | 3.7 | 3.9 | 4.2 | 2.6 | 3.5 | 3.8 |
| Previous Tealbook | 1.9 | 2.2 | 2.8 | 2.7 | 3.2 | 3.3 | 3.5 | 4.0 | 3.7 | 3.9 | 4.2 | 4.2 | 2.4 | 3.5 | 4.0 |
| Durables | 8.8 | 6.8 | 7.6 | 22.2 | 4.9 | 6.8 | 8.6 | 8.6 | 9.5 | 11.3 | 11.0 | 9.8 | 11.2 | 7.2 | 10.4 |
| Nondurables | 4.2 | 1.9 | 2.5 | 4.3 | 4.3 | 3.5 | 3.3 | 2.8 | 2.8 | 2.8 | 3.2 | 3.6 | 3.2 | 3.5 | 3.1 |
| Services | . 1 | 1.6 | 1.6 | 1.4 | 2.5 | 3.0 | 3.0 | 3.2 | 2.8 | 2.8 | 3.0 | 3.5 | 1.2 | 2.9 | 3.0 |
| Residential investment | -12.3 | 25.7 | -27.3 | . 7 | 3.2 | 9.2 | 12.5 | 11.9 | 13.0 | 13.9 | 13.5 | 13.5 | -5.2 | 9.1 | 13.5 |
| Previous Tealbook | -12.3 | 25.7 | -27.8 | -3.8 | 2.9 | 8.0 | 14.0 | 15.6 | 13.5 | 13.6 | 13.5 | 13.7 | -6.5 | 10.0 | 13.6 |
| Business fixed invest. | 7.8 | 17.2 | 10.0 | 3.7 | 9.4 | 9.5 | 10.4 | 10.1 | 6.8 | 7.9 | 8.1 | 8.9 | 9.6 | 9.8 | 7.9 |
| Previous Tealbook | 7.8 | 17.2 | 10.1 | 4.0 | 5.9 | 9.1 | 9.1 | 9.8 | 5.9 | 7.2 | 7.3 | 8.1 | 9.7 | 8.5 | 7.1 |
| Equipment \& software | 20.4 | 24.8 | 15.4 | 3.7 | 13.3 | 13.0 | 14.3 | 13.8 | 9.2 | 10.5 | 10.8 | 11.8 | 15.8 | 13.6 | 10.6 |
| Previous Tealbook | 20.4 | 24.8 | 16.1 | 5.8 | 9.4 | 12.7 | 12.6 | 13.3 | 8.5 | 10.0 | 9.8 | 10.6 | 16.6 | 12.0 | 9.7 |
| Nonres. structures | -17.8 | -. 5 | -3.5 | 3.7 | -. 8 | . 0 | -. 3 | -. 4 | -. 3 | . 0 | . 0 | . 2 | -4.9 | -. 4 | . 0 |
| Previous Tealbook | -17.8 | -. 5 | -4.9 | -. 9 | -3.5 | -. 7 | -. 7 | -. 5 | -1.8 | -1.3 | -. 4 | . 4 | -6.3 | -1.4 | -. 8 |
| Net exports ${ }^{2}$ | -338 | -449 | -505 | -389 | -395 | -402 | -408 | -373 | -360 | -353 | -355 | -346 | -420 | -394 | -354 |
| Previous Tealbook ${ }^{2}$ | -338 | -449 | -506 | -450 | -441 | -432 | -426 | -422 | -413 | -411 | -418 | -412 | -436 | -430 | -413 |
| Exports | 11.4 | 9.1 | 6.8 | 8.9 | 10.1 | 9.1 | 8.7 | 8.8 | 8.9 | 8.6 | 8.4 | 8.5 | 9.0 | 9.2 | 8.6 |
| Imports | 11.2 | 33.5 | 16.8 | -13.8 | 9.3 | 8.8 | 8.3 | . 8 | 5.0 | 5.8 | 7.5 | 5.6 | 10.6 | 6.7 | 6.0 |
| Gov't. cons. \& invest. | -1.6 | 3.9 | 3.9 | -. 1 | . 8 | . 5 | . 5 | . 6 | . 5 | . 6 | . 7 | . 9 | 1.5 | . 6 | . 7 |
| Previous Tealbook | -1.6 | 3.9 | 4.0 | . 9 | . 5 | . 6 | . 8 | . 8 | . 7 | . 8 | . 9 | 1.0 | 1.8 | . 7 | . 8 |
| Federal | 1.8 | 9.1 | 8.8 | 1.1 | 2.1 | . 9 | . 6 | . 4 | . 0 | . 0 | -. 1 | . 0 | 5.2 | 1.0 | . 0 |
| Defense | . 4 | 7.4 | 8.5 | 1.0 | 1.2 | . 0 | . 0 | . 1 | . 0 | . 0 | -. 1 | . 1 | 4.2 | . 3 | . 0 |
| Nondefense | 5.0 | 12.8 | 9.5 | 1.4 | 4.0 | 3.0 | 2.0 | 1.0 | . 1 | . 0 | . 0 | . 0 | 7.1 | 2.5 | . 0 |
| State \& local | -3.8 | . 6 | . 7 | -. 9 | -. 1 | . 2 | . 4 | . 7 | . 9 | 1.0 | 1.3 | 1.5 | -. 8 | . 3 | 1.2 |
| Change in bus. inventories ${ }^{2}$ | 44 | 69 | 121 | 26 | 42 | 53 | 57 | 28 | 41 | 54 | 70 | 69 | 65 | 45 | 59 |
| Previous Tealbook ${ }^{2}$ | 44 | 69 | 116 | 66 | 69 | 62 | 53 | 50 | 65 | 81 | 98 | 99 | 74 | 58 | 86 |
| Nonfarm ${ }^{2}$ | 37 | 61 | 117 | 22 | 39 | 49 | 54 | 24 | 37 | 50 | 67 | 66 | 59 | 41 | 55 |
| Farm ${ }^{2}$ | 8 | 8 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 6 | 4 | 4 |

1. Change from fourth quarter of previous year to fourth quarter of year indicated. Return to table
2. Billions of chained (2005) dollars. Return to table

## Changes in Real Gross Domestic Product and Related Items

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

| Item | $\mathbf{2 0 0 4}$ | $\mathbf{2 0 0 5}$ |  | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ |  | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Real GDP | 3.1 | 2.7 | 2.4 | 2.3 | -2.8 | .2 | 2.9 | 3.8 | 4.4 |
| Previous Tealbook | 3.1 | 2.7 | 2.4 | 2.3 | -2.8 | .2 | 2.7 | 3.7 | 4.4 |
| Final sales | 2.8 | 2.7 | 2.8 | 2.5 | -1.9 | -.3 | 2.4 | 3.8 | 4.1 |
| Previous Tealbook | 2.8 | 2.7 | 2.8 | 2.5 | -1.9 | -.3 | 1.8 | 3.9 | 4.1 |
| Priv. dom. final purch. | 4.2 | 3.1 | 2.5 | 1.3 | -3.8 | -2.0 | 3.2 | 4.4 | 4.6 |


| Previous Tealbook | 4.2 | 3.1 | 2.5 | 1.3 | -3.8 | -2.0 | 3.0 | 4.3 | 4.7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Personal cons. expend. | 3.5 | 2.7 | 3.3 | 1.7 | -1.9 | . 2 | 2.6 | 3.5 | 3.8 |
| Previous Tealbook | 3.5 | 2.7 | 3.3 | 1.7 | -1.9 | . 2 | 2.4 | 3.5 | 4.0 |
| Durables | 5.5 | 2.1 | 6.3 | 3.9 | -12.3 | 4.8 | 11.2 | 7.2 | 10.4 |
| Nondurables | 3.0 | 3.3 | 3.2 | . 8 | -2.9 | 1.1 | 3.2 | 3.5 | 3.1 |
| Services | 3.4 | 2.6 | 2.8 | 1.7 | . 3 | -. 8 | 1.2 | 2.9 | 3.0 |
| Residential investment | 6.6 | 5.3 | -15.7 | -20.7 | -24.6 | -13.4 | -5.2 | 9.1 | 13.5 |
| Previous Tealbook | 6.6 | 5.3 | -15.7 | -20.7 | -24.6 | -13.4 | -6.5 | 10.0 | 13.6 |
| Business fixed invest. | 7.0 | 4.4 | 7.8 | 8.2 | -8.3 | -12.7 | 9.6 | 9.8 | 7.9 |
| Previous Tealbook | 7.0 | 4.4 | 7.8 | 8.2 | -8.3 | -12.7 | 9.7 | 8.5 | 7.1 |
| Equipment \& software | 8.8 | 6.1 | 6.0 | 4.3 | -11.8 | -4.9 | 15.8 | 13.6 | 10.6 |
| Previous Tealbook | 8.8 | 6.1 | 6.0 | 4.3 | -11.8 | -4.9 | 16.6 | 12.0 | 9.7 |
| Nonres. structures | 1.7 | -. 1 | 13.0 | 17.3 | -1.5 | -26.5 | -4.9 | -. 4 | . 0 |
| Previous Tealbook | 1.7 | -. 1 | 13.0 | 17.3 | -1.5 | -26.5 | -6.3 | -1.4 | -. 8 |
| Net exports ${ }^{1}$ | -688 | -723 | -729 | -655 | -504 | -363 | -420 | -394 | -354 |
| Previous Tealbook ${ }^{1}$ | -688 | -723 | -729 | -655 | -504 | -363 | -436 | -430 | -413 |
| Exports | 7.1 | 6.7 | 10.2 | 10.1 | -2.9 | -. 1 | 9.0 | 9.2 | 8.6 |
| Imports | 10.9 | 5.2 | 4.1 | . 7 | -6.0 | -7.2 | 10.6 | 6.7 | 6.0 |
| Gov't. cons. \& invest. | . 6 | . 7 | 1.5 | 1.9 | 3.1 | . 8 | 1.5 | . 6 | . 7 |
| Previous Tealbook | . 6 | . 7 | 1.5 | 1.9 | 3.1 | . 8 | 1.8 | . 7 | . 8 |
| Federal | 2.3 | 1.2 | 2.2 | 3.1 | 9.2 | 3.6 | 5.2 | 1.0 | . 0 |
| Defense | 2.4 | . 4 | 4.4 | 2.6 | 9.5 | 3.3 | 4.2 | . 3 | . 0 |
| Nondefense | 2.3 | 2.6 | -2.3 | 4.2 | 8.5 | 4.5 | 7.1 | 2.5 | . 0 |
| State \& local | -. 4 | . 4 | 1.2 | 1.2 | -. 4 | -1.0 | -. 8 | . 3 | 1.2 |
| Change in bus. inventories ${ }^{1}$ | 66 | 50 | 59 | 28 | -38 | -113 | 65 | 45 | 59 |
| Previous Tealbook ${ }^{1}$ | 66 | 50 | 59 | 28 | -38 | -113 | 74 | 58 | 86 |
| Nonfarm ${ }^{1}$ | 58 | 50 | 63 | 29 | -39 | -117 | 59 | 41 | 55 |
| Farm ${ }^{1}$ | 8 | 0 | -4 | -1 | 1 | 3 | 6 | 4 | 4 |

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

Contributions to Changes in Real Gross Domestic Product
(Percentage points, annual rate except as noted)

| Item | 2010 |  |  |  | 2011 |  |  |  | 2012 |  |  |  | $2010{ }^{1}$ | $011{ }^{1}$ | $2012{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| Real GDP | 3.7 | 1.7 | 2.6 | 3.8 | 3.6 | 3.7 | 3.8 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 2.9 | 3.8 | 4.4 |
| Previous Tealbook | 3.7 | 1.7 | 2.7 | 2.5 | 3.4 | 3.5 | 3.7 | 4.3 | 4.3 | 4.4 | 4.5 | 4.5 | 2.7 | 3.7 | 4.4 |
| Final sales | 1.1 | . 9 | . 9 | 6.8 | 3.2 | 3.4 | 3.7 | 5.0 | 4.0 | 4.1 | 4.0 | 4.6 | 2.4 | 3.8 | 4.1 |
| Previous Tealbook | 1.1 | . 9 | 1.2 | 4.1 | 3.3 | 3.7 | 4.0 | 4.4 | 3.9 | 4.0 | 4.0 | 4.5 | 1.8 | 3.9 | 4.1 |
| Priv. dom. final purch. | 1.7 | 3.6 | 1.9 | 3.3 | 3.2 | 3.6 | 3.8 | 3.9 | 3.5 | 3.7 | 3.9 | 4.2 | 2.6 | 3.6 | 3.8 |
| Previous Tealbook | 1.7 | 3.6 | 2.2 | 2.2 | 2.9 | 3.4 | 3.7 | 4.1 | 3.5 | 3.8 | 4.0 | 4.1 | 2.4 | 3.5 | 3.9 |
| Personal cons. expend. | 1.3 | 1.5 | 1.7 | 2.9 | 2.2 | 2.5 | 2.6 | 2.6 | 2.5 | 2.6 | 2.8 | 2.9 | 1.9 | 2.5 | 2.7 |
| Previous Tealbook | 1.3 | 1.5 | 2.0 | 1.9 | 2.3 | 2.3 | 2.5 | 2.8 | 2.6 | 2.7 | 3.0 | 3.0 | 1.7 | 2.5 | 2.8 |
| Durables | . 6 | . 5 | . 5 | 1.5 | . 4 | . 5 | . 6 | . 6 | . 7 | . 8 | . 8 | . 7 | . 8 | . 5 | . 8 |
| Nondurables | . 7 | . 3 | . 4 | . 7 | . 7 | . 6 | . 5 | . 5 | . 5 | . 5 | . 5 | . 6 | . 5 | . 6 | . 5 |
| Services | . 0 | . 8 | . 7 | . 7 | 1.2 | 1.4 | 1.4 | 1.5 | 1.3 | 1.3 | 1.4 | 1.6 | . 6 | 1.4 | 1.4 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Residential investment | -. 3 | . 6 | -. 8 | . 0 | . 1 | . 2 | . 3 | . 3 | . 3 | . 3 | . 3 | . 3 | -. 1 | . 2 | . 3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous Tealbook | -. 3 | . 6 | -. 8 | -. 1 | . 1 | . 2 | . 3 | . 3 | . 3 | . 3 | . 3 | . 3 | -. 2 | . 2 | . 3 |
| Business fixed invest. | . 7 | 1.5 | . 9 | . 4 | . 9 | . 9 | 1.0 | 1.0 | . 7 | . 8 | . 8 | . 9 | . 9 | 1.0 | . 8 |
| Previous Tealbook | . 7 | 1.5 | . 9 | . 4 | . 6 | . 9 | . 9 | 1.0 | . 6 | . 7 | . 7 | . 8 | . 9 | . 8 | . 7 |
| Equipment \& software | 1.2 | 1.5 | 1.0 | . 3 | . 9 | . 9 | 1.0 | 1.0 | . 7 | . 8 | . 8 | . 9 | 1.0 | 1.0 | . 8 |
| Previous Tealbook | 1.2 | 1.5 | 1.1 | . 4 | . 7 | . 9 | . 9 | 1.0 | . 6 | . 8 | . 7 | . 8 | 1.1 | . 9 | . 7 |
| Nonres. structures | -. 5 | . 0 | -. 1 | . 1 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | -. 1 | . 0 | . 0 |
| Previous Tealbook | -. 5 | . 0 | -. 1 | . 0 | -. 1 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | -. 2 | . 0 | . 0 |
| Net exports | -. 3 | -3.5 | -1.7 | 3.5 | -. 2 | -. 3 | -. 2 | 1.0 | . 4 | . 2 | -. 1 | . 2 | -. 5 | . 1 | . 2 |
| Previous Tealbook | -. 3 | -3.5 | -1.7 | 1.7 | . 3 | . 2 | . 1 | . 1 | . 3 | . 0 | -. 2 | . 1 | -1.0 | . 2 | . 0 |
| Exports | 1.3 | 1.1 | . 8 | 1.1 | 1.3 | 1.2 | 1.1 | 1.2 | 1.2 | 1.2 | 1.2 | 1.2 | 1.1 | 1.2 | 1.2 |
| Imports | -1.6 | -4.6 | -2.5 | 2.4 | -1.5 | -1.4 | -1.4 | -. 1 | -. 8 | -1.0 | -1.3 | -1.0 | -1.6 | -1.1 | -1.0 |
| Gov't. cons. \& invest. | -. 3 | . 8 | . 8 | . 0 | . 2 | . 1 | . 1 | . 1 | . 1 | . 1 | . 2 | . 2 | . 3 | . 1 | . 1 |
| Previous Tealbook | -. 3 | . 8 | . 8 | . 2 | . 1 | . 1 | . 2 | . 2 | . 1 | . 2 | . 2 | . 2 | . 4 | . 1 | . 2 |
| Federal | . 2 | . 7 | . 7 | . 1 | . 2 | . 1 | . 1 | . 0 | . 0 | . 0 | . 0 | . 0 | . 4 | . 1 | . 0 |
| Defense | . 0 | . 4 | . 5 | . 1 | . 1 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 2 | . 0 | . 0 |
| Nondefense | . 1 | . 3 | . 3 | . 0 | . 1 | . 1 | . 1 | . 0 | . 0 | . 0 | . 0 | . 0 | . 2 | . 1 | . 0 |
| State \& local | -. 5 | . 1 | . 1 | -. 1 | . 0 | . 0 | . 0 | . 1 | . 1 | . 1 | . 2 | . 2 | -. 1 | . 0 | . 1 |
| Change in bus. inventories | 2.6 | . 8 | 1.6 | -3.0 | . 5 | . 3 | . 1 | -. 9 | . 4 | . 4 | . 5 | . 0 | . 5 | . 0 | . 3 |
| Previous Tealbook | 2.6 | . 8 | 1.5 | -1.6 | . 1 | -. 2 | -. 3 | -. 1 | . 4 | . 5 | . 5 | . 0 | . 8 | -. 1 | . 4 |
| Nonfarm | 2.6 | . 8 | 1.7 | -2.9 | . 5 | . 3 | . 1 | -. 9 | . 4 | . 4 | . 5 | . 0 | . 5 | . 0 | . 3 |
| Farm | . 1 | . 0 | -. 1 | -. 1 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 |

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

Changes in Prices and Costs
(Percent, annual rate except as noted)

| Item | 2010 |  |  | 2011 |  |  |  |  |  | 2012 |  |  | $2010{ }^{1}$ | $011{ }^{1}$ | $2012{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| GDP chain-wt. price index | 1.0 | 1.9 | 2.1 | . 0 | 2.0 | 1.0 | 1.0 | . 9 | 1.1 | 1.1 | 1.1 | 1.1 | 1.3 | 1.2 | 1.1 |
| Previous Tealbook | 1.0 | 1.9 | 2.3 | . 2 | 1.2 | . 9 | . 8 | . 8 | 1.1 | 1.1 | 1.1 | 1.1 | 1.4 | . 9 | 1.1 |
| PCE chain-wt. price index | 2.1 | . 0 | . 8 | 1.9 | 2.0 | 1.1 | 1.2 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.2 | 1.3 | 1.0 |
| Previous Tealbook | 2.1 | . 0 | 1.0 | 1.8 | 1.6 | 1.0 | . 9 | . 7 | . 9 | . 9 | . 9 | . 9 | 1.2 | 1.1 | . 9 |
| Energy | 16.4 | -17.5 | 5.4 | 25.9 | 20.5 | 1.7 | 2.8 | 1.0 | . 4 | . 0 | -. 1 | -. 1 | 6.3 | 6.2 | . 1 |
| Previous Tealbook | 16.4 | -17.5 | 5.6 | 23.0 | 11.7 | 2.5 | 1.2 | . 4 | . 1 | -. 3 | . 0 | . 3 | 5.7 | 3.8 | . 0 |
| Food | 1.8 | 1.6 | . 3 | 1.5 | 2.1 | 2.1 | 1.6 | 1.1 | 1.0 | 1.1 | 1.2 | 1.2 | 1.3 | 1.7 | 1.1 |
| Previous Tealbook | 1.8 | 1.6 | . 3 | 1.8 | 1.6 | 1.2 | . 9 | . 8 | 1.0 | 1.1 | 1.2 | 1.2 | 1.4 | 1.1 | 1.1 |
| Ex. food \& energy | 1.2 | 1.0 | . 5 | . 6 | . 9 | 1.0 | 1.0 | . 9 | 1.0 | 1.0 | 1.0 | 1.0 | . 8 | 1.0 | 1.0 |
| Previous Tealbook | 1.2 | 1.0 | . 8 | . 6 | 1.0 | . 9 | . 9 | . 8 | . 9 | . 9 | . 9 | . 9 | . 9 | . 9 | . 9 |
| Ex. food \& energy, market based | . 7 | 1.0 | 1.1 | . 3 | . 8 | . 9 | . 9 | . 7 | . 9 | . 9 | . 9 | . 9 | . 8 | . 8 | . 9 |
| Previous Tealbook | . 7 | 1.0 | 1.1 | . 1 | . 9 | . 8 | . 8 | . 4 | . 8 | . 8 | . 8 | . 8 | . 7 | . 7 | . 8 |
| CPI | 1.5 | -. 7 | 1.5 | 2.6 | 2.7 | 1.1 | 1.2 | 1.0 | . 9 | . 9 | 1.0 | 1.0 | 1.2 | 1.5 | . 9 |
| Previous Tealbook | 1.5 | -. 7 | 1.5 | 2.2 | 1.8 | 1.1 | 1.0 | . 9 | . 9 | . 9 | . 9 | 1.0 | 1.1 | 1.2 | . 9 |
| Ex. food \& energy | . 0 | . 9 | 1.2 | . 4 | 1.0 | 1.0 | 1.0 | . 9 | 1.0 | 1.0 | 1.1 | 1.1 | . 6 | 1.0 | 1.0 |
| Previous Tealbook | . 0 | . 9 | 1.2 | . 3 | . 9 | . 9 | . 9 | . 9 | . 9 | 1.0 | 1.0 | 1.1 | . 6 | . 9 | 1.0 |
| ECI, hourly compensation $\underline{2}^{\text {² }}$ | 2.6 | 1.8 | 1.8 | 2.0 | 2.3 | 2.1 | 2.1 | 2.1 | 2.6 | 2.4 | 2.4 | 2.4 | 2.0 | 2.1 | 2.4 |
| Previous Tealbook ${ }^{2}$ | 2.6 | 1.8 | 1.8 | 2.0 | 2.3 | 2.1 | 2.0 | 2.1 | 2.5 | 2.2 | 2.2 | 2.2 | 2.0 | 2.1 | 2.3 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Output per hour | 3.9 | -1.8 | 2.3 | 2.6 | 1.8 | 1.4 | 1.3 | 1.6 | 1.8 | 2.0 | 1.9 | 2.0 | 1.7 | 1.5 | 1.9 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous Tealbook | 3.9 | -1.8 | 2.5 | . 9 | 2.0 | 1.2 | 1.3 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 1.3 | 1.7 | 2.1 |
| Compensation per hour | -. 9 | 2.9 | 2.1 | 2.1 | 2.4 | 1.8 | 1.8 | 1.8 | 2.5 | 2.2 | 2.2 | 2.3 | 1.5 | 1.9 | 2.3 |
| Previous Tealbook | -. 9 | 2.9 | 2.2 | 2.1 | 2.4 | 1.8 | 1.7 | 1.7 | 2.3 | 2.0 | 2.0 | 2.1 | 1.6 | 1.9 | 2.1 |
| Unit labor costs | -4.6 | 4.9 | -. 2 | -. 4 | . 6 | . 4 | . 5 | . 1 | . 7 | . 2 | . 3 | . 3 | -. 2 | . 4 | . 4 |
| Previous Tealbook | -4.6 | 4.9 | -. 3 | 1.2 | . 4 | . 6 | . 4 | -. 4 | . 2 | -. 1 | -. 1 | . 0 | . 2 | . 2 | . 0 |
| Core goods imports chain-wt. price index ${ }^{3}$ | 4.2 | 3.1 | -. 8 | 6.2 | 5.5 | 3.6 | 2.2 | 1.5 | 1.3 | 1.4 | 1.4 | 1.4 | 3.1 | 3.2 | 1.4 |
| Previous Tealbook ${ }^{3}$ | 4.2 | 3.1 | -. 4 | 5.2 | 4.7 | 2.2 | 1.8 | 1.2 | 1.3 | 1.4 | 1.4 | 1.4 | 3.0 | 2.5 | 1.4 |

1. Change from fourth quarter of previous year to fourth quarter of year indicated. Return to table
2. Private-industry workers. Return to table
3. Core goods imports exclude computers, semiconductors, oil, and natural gas. Return to table

Changes in Prices and Costs
(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

| Item | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| GDP chain-wt. price index | 3.2 | 3.5 | 2.9 | 2.6 | 2.1 | . 5 | 1.3 | 1.2 | 1.1 |
| Previous Tealbook | 3.2 | 3.5 | 2.9 | 2.6 | 2.1 | . 5 | 1.4 | . 9 | 1.1 |
| PCE chain-wt. price index | 3.0 | 3.3 | 1.9 | 3.5 | 1.7 | 1.5 | 1.2 | 1.3 | 1.0 |
| Previous Tealbook | 3.0 | 3.3 | 1.9 | 3.5 | 1.7 | 1.5 | 1.2 | 1.1 | . 9 |
| Energy | 18.6 | 21.5 | -3.7 | 19.4 | -9.0 | 2.7 | 6.3 | 6.2 | . 1 |
| Previous Tealbook | 18.6 | 21.5 | -3.7 | 19.4 | -9.0 | 2.7 | 5.7 | 3.8 | . 0 |
| Food | 2.7 | 1.5 | 1.7 | 4.8 | 6.9 | -1.6 | 1.3 | 1.7 | 1.1 |
| Previous Tealbook | 2.7 | 1.5 | 1.7 | 4.8 | 6.9 | -1.6 | 1.4 | 1.1 | 1.1 |
| Ex. food \& energy | 2.2 | 2.3 | 2.3 | 2.4 | 2.0 | 1.7 | . 8 | 1.0 | 1.0 |
| Previous Tealbook | 2.2 | 2.3 | 2.3 | 2.4 | 2.0 | 1.7 | . 9 | . 9 | . 9 |
| Ex. food \& energy, market based | 1.9 | 2.1 | 2.2 | 2.2 | 2.2 | 1.7 | . 8 | . 8 | . 9 |
| Previous Tealbook | 1.9 | 2.1 | 2.2 | 2.2 | 2.2 | 1.7 | . 7 | . 7 | . 8 |
| CPI | 3.4 | 3.7 | 1.9 | 4.0 | 1.6 | 1.5 | 1.2 | 1.5 | . 9 |
| Previous Tealbook | 3.4 | 3.7 | 1.9 | 4.0 | 1.6 | 1.5 | 1.1 | 1.2 | . 9 |
| Ex. food \& energy | 2.2 | 2.1 | 2.7 | 2.3 | 2.0 | 1.7 | . 6 | 1.0 | 1.0 |
| Previous Tealbook | 2.2 | 2.1 | 2.7 | 2.3 | 2.0 | 1.7 | . 6 | . 9 | 1.0 |
| ECI, hourly compensation ${ }^{1}$ | 3.8 | 2.9 | 3.2 | 3.0 | 2.4 | 1.2 | 2.0 | 2.1 | 2.4 |
| Previous Tealbook ${ }^{1}$ | 3.8 | 2.9 | 3.2 | 3.0 | 2.4 | 1.2 | 2.0 | 2.1 | 2.3 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |
| Output per hour | 1.5 | 1.4 | . 9 | 2.6 | -. 4 | 6.2 | 1.7 | 1.5 | 1.9 |
| Previous Tealbook | 1.5 | 1.4 | . 9 | 2.6 | -. 4 | 6.2 | 1.3 | 1.7 | 2.1 |
| Compensation per hour | 3.3 | 3.5 | 4.5 | 3.6 | 2.3 | 2.5 | 1.5 | 1.9 | 2.3 |
| Previous Tealbook | 3.3 | 3.5 | 4.5 | 3.6 | 2.3 | 2.5 | 1.6 | 1.9 | 2.1 |
| Unit labor costs | 1.9 | 2.0 | 3.5 | . 9 | 2.7 | -3.5 | -. 2 | . 4 | . 4 |
| Previous Tealbook | 1.9 | 2.0 | 3.5 | . 9 | 2.7 | -3.5 | . 2 | . 2 | . 0 |
| Core goods imports chain-wt. price index ${ }^{2}$ | 3.6 | 2.2 | 2.5 | 2.9 | 3.5 | -1.9 | 3.1 | 3.2 | 1.4 |
| Previous Tealbook ${ }^{2}$ | 3.6 | 2.2 | 2.5 | 2.9 | 3.5 | -1.9 | 3.0 | 2.5 | 1.4 |

1. Private-industry workers. Return to table
2. Core goods imports exclude computers, semiconductors, oil, and natural gas. Return to table

Other Macroeconomic Indicators

| Item | 2010 |  |  |  | 2011 |  |  |  | 2012 |  |  |  | $2010{ }^{1}$ | $2011{ }^{1}$ | $2012{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| Employment and production |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nonfarm payroll employment ${ }^{\underline{\text { ²}}}$ | . 1 | . 7 | . 0 | . 3 | . 4 | . 6 | . 7 | . 8 | . 9 | . 9 | . 9 | . 9 | 1.0 | 2.6 | 3.7 |
| Unemployment rate 3 | 9.7 | 9.6 | 9.6 | 9.6 | 9.5 | 9.3 | 9.1 | 8.9 | 8.7 | 8.4 | 8.1 | 7.8 | 9.6 | 8.9 | 7.8 |
| Previous Tealbook ${ }^{3}$ | 9.7 | 9.7 | 9.6 | 9.7 | 9.5 | 9.4 | 9.1 | 8.9 | 8.8 | 8.6 | 8.3 | 8.0 | 9.7 | 8.9 | 8.0 |
| NAIRU ${ }^{3}$ | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| Previous Tealbook ${ }^{3}$ | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |
| GDP gap ${ }^{4}$ | -6.4 | -6.6 | -6.6 | -6.3 | -6.0 | -5.8 | -5.4 | -5.1 | -4.7 | -4.2 | -3.8 | -3.3 | -6.3 | -5.1 | -3.3 |
| Previous Tealbook ${ }^{4}$ | -6.4 | -6.6 | -6.6 | -6.6 | -6.4 | -6.1 | -5.9 | -5.5 | -5.1 | -4.6 | -4.2 | -3.7 | -6.6 | -5.5 | -3.7 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Industrial production ${ }^{5}$ | 7.1 | 7.2 | 6.5 | 2.4 | 6.7 | 3.2 | 4.3 | 3.6 | 4.1 | 5.3 | 5.2 | 4.3 | 5.8 | 4.4 | 4.7 |
| Previous Tealbook ${ }^{5}$ | 7.1 | 7.1 | 5.2 | 1.8 | 5.9 | 3.5 | 3.7 | 3.5 | 3.8 | 4.8 | 4.8 | 4.2 | 5.3 | 4.1 | 4.4 |
| Manufacturing industr. prod. ${ }^{5}$ | 6.2 | 9.4 | 4.5 | 3.3 | 6.9 | 4.7 | 4.8 | 4.3 | 5.0 | 6.2 | 5.9 | 5.1 | 5.8 | 5.2 | 5.5 |
| Previous Tealbook ${ }^{5}$ | 6.2 | 9.3 | 3.7 | 3.8 | 5.4 | 3.7 | 4.2 | 4.3 | 4.4 | 5.7 | 5.5 | 4.7 | 5.7 | 4.4 | 5.1 |
| Capacity utilization rate - mfg. ${ }^{3}$ | 70.0 | 71.6 | 72.4 | 73.0 | 74.0 | 74.7 | 75.4 | 76.1 | 76.7 | 77.5 | 78.4 | 79.0 | 73.0 | 76.1 | 79.0 |
| Previous Tealbook ${ }^{3}$ | 70.0 | 71.6 | 72.3 | 72.9 | 73.7 | 74.2 | 74.8 | 75.5 | 76.0 | 76.8 | 77.6 | 78.2 | 72.9 | 75.5 | 78.2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Housing starts $\underline{6}$ | . 6 | . 6 | . 6 | . 5 | . 6 | . 6 | . 7 | . 7 | . 8 | . 8 | . 9 | 1.0 | . 6 | . 6 | . 9 |
| Light motor vehicle sales ${ }^{6}$ | 11.0 | 11.3 | 11.6 | 12.3 | 12.3 | 12.6 | 13.0 | 13.5 | 13.9 | 14.7 | 15.2 | 15.7 | 11.5 | 12.9 | 14.9 |
| Income and saving |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GDP5 | 4.8 | 3.7 | 4.6 | 3.8 | 5.7 | 4.7 | 4.9 | 5.1 | 5.5 | 5.6 | 5.6 | 5.7 | 4.3 | 5.1 | 5.6 |
| Real disposable pers. income ${ }^{5}$ | 1.3 | 5.6 | . 9 | 1.3 | 5.3 | 3.4 | 3.6 | 4.1 | . 1 | 3.9 | 4.1 | 4.3 | 2.3 | 4.1 | 3.1 |
| Previous Tealbook ${ }^{5}$ | 1.3 | 5.6 | . 9 | 1.5 | 5.2 | 3.3 | 3.7 | 4.1 | . 1 | 4.3 | 3.9 | 4.3 | 2.3 | 4.1 | 3.1 |
| Personal saving rate ${ }^{3}$ | 5.5 | 6.2 | 5.9 | 5.4 | 5.9 | 5.9 | 5.9 | 6.0 | 5.2 | 5.2 | 5.2 | 5.2 | 5.4 | 6.0 | 5.2 |
| Previous Tealbook ${ }^{3}$ | 5.5 | 6.2 | 5.8 | 5.6 | 6.1 | 6.1 | 6.2 | 6.2 | 5.4 | 5.4 | 5.3 | 5.3 | 5.6 | 6.2 | 5.3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Corporate profits ${ }^{7}$ | 48.9 | 12.7 | 6.6 | 20.9 | 9.8 | 2.8 | 5.4 | 5.5 | 4.1 | 5.9 | 6.0 | 7.3 | 21.3 | 5.9 | 5.8 |
| Profit share of GNP3 | 10.7 | 10.9 | 11.0 | 11.4 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.5 | 11.4 | 11.5 | 11.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net federal saving ${ }^{8}$ | -1,314 | -1,337 | -1,344 | -1,333 | -1,409 | $-1,375$ | -1,357 | $-1,336$ | -1,170 | -1,124 | -1,100 | -1,071 | -1,332 | -1,369 | -1,116 |
| Net state \& local saving ${ }^{8}$ | 29 | 16 | 48 | 69 | 33 | 40 | 34 | 30 | 36 | 44 | 54 | 59 | 40 | 34 | 48 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gross national saving rate ${ }^{3}$ | 11.1 | 11.7 | 11.6 | 11.7 | 11.8 | 12.1 | 12.3 | 12.5 | 12.7 | 13.1 | 13.4 | 13.7 | 11.7 | 12.5 | 13.7 |
| Net national saving rate ${ }^{3}$ | -1.8 | -1.1 | -1.1 | -. 7 | -. 5 | -. 2 | . 0 | . 3 | . 5 | 1.0 | 1.3 | 1.7 | -. 7 | . 3 | 1.7 |
| 1. Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise indicated. Return to table |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Change, millions. Return to table |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Percent; annual values are for the fourth quarter of the year indicated. Return to table |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Annual values are for the fourth quarter of the yea indicated. Return to table |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Percent change, annual rate. Return to table |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. Level, millions; annual values are annual averages. Return to table |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. Percent change, annual rate, with inventory valuation and capital consumption adjustments. Return to table |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## Other Macroeconomic Indicators

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

| Item | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Employment and production

| Nonfarm payroll employment ${ }^{\underline{1}}$ | 2.0 | 2.4 | 2.1 | 1.2 | -2.8 | -5.4 | 1.0 | 2.6 | 3.7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unemployment rate ${ }^{\text {² }}$ | 5.4 | 5.0 | 4.5 | 4.8 | 6.9 | 10.0 | 9.6 | 8.9 | 7.8 |
| Previous Tealbook ${ }^{2}$ | 5.4 | 5.0 | 4.5 | 4.8 | 6.9 | 10.0 | 9.7 | 8.9 | 8.0 |
| NAIRU ${ }^{2}$ | 5.0 | 5.0 | 5.0 | 5.0 | 5.3 | 6.0 | 6.0 | 6.0 | 6.0 |
| Previous Tealbook ${ }^{2}$ | 5.0 | 5.0 | 5.0 | 5.0 | 5.3 | 6.0 | 6.0 | 6.0 | 6.0 |
| GDP gap ${ }^{\text {² }}$ | -. 4 | . 0 | . 0 | . 0 | -4.9 | -6.7 | -6.3 | -5.1 | -3.3 |
| Previous Tealbook ${ }^{3}$ | -. 5 | . 0 | . 0 | . 0 | -4.9 | -6.7 | -6.6 | -5.5 | -3.7 |
| Industrial production ${ }^{4}$ | 2.9 | 2.3 | 2.5 | 2.3 | -7.6 | -3.8 | 5.8 | 4.4 | 4.7 |
| Previous Tealbook ${ }^{4}$ | 2.9 | 2.3 | 2.5 | 2.3 | -7.6 | -3.8 | 5.3 | 4.1 | 4.4 |
| Manufacturing industr. prod. ${ }^{4}$ | 3.5 | 3.5 | 2.0 | 2.6 | -10.0 | -4.1 | 5.8 | 5.2 | 5.5 |
| Previous Tealbook ${ }^{4}$ | 3.5 | 3.5 | 2.0 | 2.6 | -10.0 | -4.1 | 5.7 | 4.4 | 5.1 |
| Capacity utilization rate - mfg. ${ }^{2}$ | 77.4 | 78.8 | 79.0 | 79.1 | 70.9 | 68.8 | 73.0 | 76.1 | 79.0 |
| Previous Tealbook ${ }^{2}$ | 77.4 | 78.8 | 79.0 | 79.1 | 70.9 | 68.8 | 72.9 | 75.5 | 78.2 |
| Housing starts ${ }^{5}$ | 2.0 | 2.1 | 1.8 | 1.4 | . 9 | . 6 | . 6 | . 6 | . 9 |
| Light motor vehicle sales ${ }^{5}$ | 16.8 | 16.9 | 16.5 | 16.1 | 13.1 | 10.3 | 11.5 | 12.9 | 14.9 |
| Income and saving |  |  |  |  |  |  |  |  |  |
| Nominal GDP4 | 6.4 | 6.3 | 5.4 | 5.0 | -. 7 | . 6 | 4.3 | 5.1 | 5.6 |
| Real disposable pers. income ${ }^{4}$ | 3.5 | . 6 | 4.6 | 1.5 | 1.0 | . 4 | 2.3 | 4.1 | 3.1 |
| Previous Tealbook ${ }^{4}$ | 3.5 | . 6 | 4.6 | 1.5 | 1.0 | . 4 | 2.3 | 4.1 | 3.1 |
| Personal saving rate ${ }^{2}$ | 3.6 | 1.5 | 2.5 | 2.1 | 5.2 | 5.5 | 5.4 | 6.0 | 5.2 |
| Previous Tealbook ${ }^{2}$ | 3.6 | 1.5 | 2.5 | 2.1 | 5.2 | 5.5 | 5.6 | 6.2 | 5.3 |
|  |  |  |  |  |  |  |  |  |  |
| Corporate profits ${ }^{\text {}}$ | 21.9 | 19.6 | 3.7 | -8.1 | -31.9 | 42.5 | 21.3 | 5.9 | 5.8 |
| Profit share of GNP ${ }^{2}$ | 10.5 | 11.8 | 11.6 | 10.1 | 6.9 | 9.8 | 11.4 | 11.5 | 11.5 |
|  |  |  |  |  |  |  |  |  |  |
| Net federal saving? | -379 | -283 | -204 | -245 | -616 | -1252 | -1332 | -1369 | -1116 |
| Net state \& local saving ${ }^{7}$ | -8 | 26 | 51 | 12 | -47 | -20 | 40 | 34 | 48 |
|  |  |  |  |  |  |  |  |  |  |
| Gross national saving rate ${ }^{2}$ | 14.3 | 15.5 | 16.3 | 13.6 | 11.8 | 10.8 | 11.7 | 12.5 | 13.7 |
| Net national saving rate ${ }^{2}$ | 2.7 | 3.5 | 4.2 | 1.3 | -1.4 | -2.3 | -. 7 | . 3 | 1.7 |

1. Change, millions. Return to table
2. Percent; values are for the fourth quarter of the year indicated. Return to table
3. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Values are for the fourth quarter of the year indicated. Return to table
4. Percent change. Return to table
5. Level, millions; values are annual averages. Return to table
6. Percent change, with inventory valuation and capital consumption adjustments. Return to table
7. Billions of dollars; values are annual averages. Return to table

Staff Projections of Federal Sector Accounts and Related Items
(Billions of dollars except as noted)

| Item | Fiscal year |  |  |  | 2010 |  |  |  | 2011 |  |  |  | 2012 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 ${ }^{\text {a }}$ | $2010^{\text {a }}$ | 2011 | 2012 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 ${ }^{\text {a }}$ | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget |  |  |  |  | Not seasonally adjusted |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{\underline{1}}$ | 2104 | 2162 | 2274 | 2576 | 466 | 643 | 565 | 532 | 476 | 674 | 593 | 559 | 561 | 786 | 671 | 642 |
| Outlays ${ }^{1}$ | 3520 | 3456 | 3668 | 3681 | 795 | 930 | 855 | 903 | 935 | 923 | 908 | 929 | 969 | 916 | 867 | 968 |
| Surplus/deficit ${ }^{1}$ | -1416 | -1294 | -1394 | -1105 | -329 | -287 | -290 | -371 | -459 | -249 | -315 | -370 | -408 | -129 | -197 | -325 |


| Previous Tealbook | -1416 | -1294 | -1389 | -1074 | -329 | -287 | -290 | -384 | -451 | -236 | -318 | -368 | -403 | -114 | -188 | -317 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| On-budget | -1553 | -1371 | -1398 | -1183 | -359 | -351 | -267 | -392 | -434 | -289 | -282 | -395 | -406 | -198 | -184 | -377 |
| Off-budget | 137 | 77 | 4 | 79 | 30 | 64 | -23 | 21 | -25 | 40 | -33 | 25 | -2 | 69 | -13 | 52 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 1743 | 1474 | 1375 | 1185 | 478 | 344 | 390 | 368 | 253 | 234 | 520 | 375 | 413 | 169 | 227 | 330 |
| Cash decrease | 96 | -35 | 60 | 0 | -25 | -71 | -20 | -33 | 268 | 9 | -185 | 15 | 15 | -20 | -10 | 15 |
| Other ${ }^{2}$ | -424 | -145 | -41 | -80 | -124 | 14 | -80 | 36 | -62 | 5 | -20 | -20 | -20 | -20 | -20 | -20 |
| Cash operating balance, end of period | 275 | 310 | 250 | 250 | 219 | 290 | 310 | 343 | 75 | 65 | 250 | 235 | 220 | 240 | 250 | 235 |
| NIPA federal sector |  |  |  |  | Seasonally adjusted annual rates |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 2261 | 2334 | 2448 | 2708 | 2323 | 2365 | 2416 | 2457 | 2407 | 2444 | 2484 | 2524 | 2724 | 2769 | 2815 | 2863 |
| Expenditures | 3355 | 3660 | 3817 | 3890 | 3637 | 3701 | 3761 | 3791 | 3816 | 3819 | 3841 | 3860 | 3894 | 3892 | 3915 | 3934 |
| Consumption expenditures | 977 | 1030 | 1089 | 1118 | 1017 | 1038 | 1062 | 1070 | 1087 | 1095 | 1102 | 1107 | 1117 | 1121 | 1125 | 1130 |
| Defense | 659 | 691 | 726 | 743 | 684 | 695 | 711 | 717 | 727 | 730 | 733 | 735 | 742 | 745 | 748 | 751 |
| Nondefense | 318 | 339 | 362 | 375 | 333 | 343 | 350 | 353 | 361 | 365 | 369 | 371 | 375 | 376 | 377 | 379 |
| Other spending | 2378 | 2630 | 2728 | 2773 | 2620 | 2663 | 2699 | 2721 | 2729 | 2723 | 2739 | 2753 | 2777 | 2771 | 2790 | 2805 |
| Current account surplus | -1094 | -1326 | -1368 | -1182 | -1314 | -1337 | -1344 | -1333 | -1409 | -1375 | -1357 | -1336 | -1170 | -1124 | -1100 | -1071 |
| Gross investment | 151 | 165 | 174 | 175 | 161 | 168 | 172 | 173 | 174 | 175 | 175 | 175 | 175 | 175 | 175 | 175 |
| Gross saving less gross investment ${ }^{\underline{3}}$ | -1122 | -1363 | -1409 | -1217 | -1348 | -1376 | -1386 | -1375 | -1450 | -1415 | -1395 | -1373 | -1205 | -1158 | -1132 | -1103 |
| Fiscal indicators ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| High-employment (HEB) surplus/deficit | -839 | -1019 | -1091 | -960 | -1011 | -1032 | -1041 | -1031 | -1127 | -1104 | -1100 | -1095 | -931 | -907 | -907 | -904 |
| Change in HEB, percent of potential GDP | 2.2 | 1.0 | . 2 | -1.0 | . 1 | . 1 | . 0 | -. 1 | . 5 | -. 2 | -. 1 | -. 1 | -1.0 | -. 2 | -. 1 | -. 1 |
| Fiscal impetus (FI), percent of GDP | 1.1 | 1.0 | . 3 | -. 7 | . 3 | . 3 | . 2 | . 0 | . 1 | . 0 | . 0 | . 0 | -. 4 | -. 2 | -. 2 | -. 2 |
| Previous Tealbook | 1.1 | 1.1 | . 2 | -. 6 | . 3 | . 3 | . 2 | . 0 | . 0 | . 0 | . 0 | . 0 | -. 3 | -. 1 | -. 3 | -. 2 |

1. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law. Return to table
2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities. Return to table
3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises. Return to table
4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2005) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus. Return to table
a Actual. Return to table

Change in Debt of the Domestic Nonfinancial Sectors
(Percent)

| Period ${ }^{1}$ | Total | Total | Households <br> Home mortgages | Consumer credit | Business | State and local governments | Federal government | Memo: Nominal GDP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  |  |  |  |  |  |  |  |
| 2005 | 9.5 | 11.1 | 13.3 | 4.5 | 8.6 | 10.2 | 7.0 | 6.3 |
| 2006 | 9.0 | 10.1 | 11.2 | 4.1 | 10.5 | 8.3 | 3.9 | 5.4 |
| 2007 | 8.6 | 6.8 | 6.8 | 5.8 | 13.1 | 9.5 | 4.9 | 5.0 |
| 2008 | 6.0 | . 3 | -. 4 | 1.5 | 5.5 | 2.3 | 24.2 | -. 7 |
| 2009 | 3.0 | -1.7 | -1.5 | -4.4 | -2.6 | 4.9 | 22.7 | . 6 |
| 2010 | 4.5 | -2.0 | -3.1 | -2.0 | 1.3 | 5.2 | 20.2 | 4.3 |
| 2011 | 5.0 | . 2 | -1.5 | 3.5 | 2.7 | 4.3 | 14.7 | 5.1 |
| 2012 | 5.3 | 2.2 | -. 1 | 7.9 | 4.1 | 4.8 | 10.6 | 5.6 |
| Quarter |  |  |  |  |  |  |  |  |
| 2009: 1 | 4.7 | -. 8 | -. 2 | -3.7 | . 1 | 5.6 | 24.4 | -3.9 |


| 2 | 4.4 | -1.9 | -1.9 | -4.8 | -2.6 | 4.3 | 28.9 | -. 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 2.1 | -2.2 | -2.6 | -3.9 | -4.3 | 5.8 | 19.0 | 2.3 |
| 4 | . 9 | -2.0 | -1.5 | -5.6 | -3.7 | 3.8 | 11.9 | 4.7 |
| 2010: 1 | 4.3 | -2.1 | -4.4 | -3.9 | . 4 | 5.6 | 20.5 | 4.8 |
| 2 | 4.7 | -2.2 | -2.3 | -3.3 | -. 1 | -1.5 | 24.4 | 3.7 |
| 3 | 4.1 | -1.8 | -2.5 | -1.7 | 1.7 | 5.4 | 16.0 | 4.6 |
| 4 | 4.6 | -1.9 | -3.6 | . 9 | 3.1 | 11.0 | 14.6 | 3.8 |
| 2011: 1 | 2.7 | -. 7 | -2.2 | 1.5 | 2.6 | 3.9 | 7.5 | 5.7 |
| 2 | 5.3 | . 1 | -1.4 | 2.9 | 2.4 | 4.2 | 16.3 | 4.7 |
| 3 | 6.5 | . 6 | -1.2 | 4.2 | 2.6 | 4.3 | 19.2 | 4.9 |
| 4 | 5.1 | . 9 | -1.1 | 5.3 | 3.1 | 4.6 | 12.9 | 5.1 |
| 2012: 1 | 5.5 | 1.6 | -. 4 | 6.4 | 3.6 | 4.8 | 12.5 | 5.5 |
| 2 | 5.5 | 2.0 | -. 2 | 7.4 | 3.9 | 4.8 | 11.7 | 5.6 |
| 3 | 4.3 | 2.4 | . 1 | 8.2 | 4.2 | 4.7 | 6.5 | 5.6 |
| 4 | 5.5 | 2.6 | . 2 | 8.7 | 4.4 | 4.7 | 10.1 | 5.7 |

Note: Quarterly data are at seasonally adjusted annual rates.

1. Data after 2010: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 | 2009 | 2010 | 2011 | 2012 | 2010 |  | 2011 |  |  |  | 2012 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Domestic nonfinancial sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net funds raised |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 958.6 | 1302.8 | 1569.7 | 1770.0 | 1120.7 | 1359.3 | 767.4 | 1731.0 | 2119.7 | 1660.6 | 1850.7 | 1887.2 | 1433.6 | 1908.5 |
| Net equity issuance | -64.6 | -267.3 | -244.0 | -248.0 | -348.3 | -305.6 | -220.0 | -220.0 | -268.0 | -268.0 | -248.0 | -248.0 | -248.0 | -248.0 |
| Net debt issuance | 1023.2 | 1570.1 | 1813.7 | 2018.0 | 1468.9 | 1664.9 | 987.4 | 1951.0 | 2387.7 | 1928.6 | 2098.7 | 2135.2 | 1681.6 | 2156.5 |
| Borrowing indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt (percent of GDP) ${ }^{\underline{1}}$ | 241.7 | 241.8 | 242.0 | 241.5 | 241.9 | 242.3 | 241.2 | 240.8 | 241.5 | 242.0 | 241.9 | 241.9 | 241.5 | 241.1 |
| Borrowing (percent of GDP) | 7.2 | 10.7 | 11.8 | 12.5 | 10.0 | 11.2 | 6.5 | 12.8 | 15.5 | 12.3 | 13.2 | 13.3 | 10.3 | 13.1 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing ${ }^{\text {² }}$ | -240.0 | -270.0 | 27.3 | 289.2 | -236.9 | -257.1 | -98.6 | 19.4 | 73.7 | 114.8 | 216.2 | 265.1 | 323.3 | 352.3 |
| Home mortgages | -161.2 | -325.1 | -146.9 | -7.4 | -255.8 | -363.7 | -220.2 | -139.4 | -119.0 | -108.8 | -39.5 | -19.7 | 9.8 | 19.7 |
| Consumer credit | -115.3 | -49.3 | 85.7 | 198.9 | -41.9 | 21.6 | 37.2 | 71.4 | 102.9 | 131.2 | 161.4 | 188.5 | 214.2 | 231.8 |
| Debt/DPI (percent) ${ }^{\underline{3}}$ | 124.4 | 118.5 | 112.2 | 109.2 | 117.9 | 116.4 | 114.0 | 112.6 | 111.4 | 110.2 | 110.3 | 109.4 | 108.7 | 107.9 |
| Business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Financing gap ${ }^{4}$ | -44.7 | 45.3 | -13.8 | 120.0 | 156.6 | -39.2 | -55.1 | -16.5 | 10.8 | 5.7 | 67.3 | 103.2 | 144.3 | 165.2 |
| Net equity issuance | -64.6 | -267.3 | -244.0 | -248.0 | -348.3 | -305.6 | -220.0 | -220.0 | -268.0 | -268.0 | -248.0 | -248.0 | -248.0 | -248.0 |
| Credit market borrowing | -292.0 | 136.6 | 296.1 | 463.6 | 181.3 | 335.7 | 283.0 | 264.3 | 290.1 | 347.0 | 411.6 | 443.1 | 489.9 | 509.9 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 111.3 | 123.4 | 107.6 | 125.6 | 128.6 | 266.9 | 97.6 | 105.6 | 109.6 | 117.6 | 125.6 | 125.6 | 125.6 | 125.6 |
| Current surplus ${ }^{5}$ | 248.2 | 298.3 | 264.9 | 285.7 | 327.4 | 296.4 | 261.2 | 270.1 | 265.4 | 263.1 | 270.4 | 280.3 | 292.6 | 299.5 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 1443.9 | 1580.2 | 1382.7 | 1139.6 | 1395.9 | 1319.5 | 705.4 | 1561.8 | 1914.4 | 1349.3 | 1345.3 | 1301.4 | 742.8 | 1168.9 |
| Net borrowing (n.s.a.) | 1443.9 | 1580.2 | 1382.7 | 1139.6 | 390.1 | 367.9 | 253.4 | 234.4 | 519.6 | 375.3 | 413.3 | 169.3 | 226.7 | 330.2 |
| Unified deficit (n.s.a.) | 1471.3 | 1277.0 | 1393.6 | 1059.6 | 290.2 | 370.8 | 459.5 | 248.8 | 315.0 | 370.3 | 408.3 | 129.3 | 196.7 | 325.2 |


| Depository institutions <br> Funds supplied$\quad-639.9$ | -135.8 |
| :--- | :--- |

Note: Data after 2010: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 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  |  |  | 2011 |  |  |  | 2012 |  |  |  |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q |

## Real GDP ${ }^{1}$

| Total foreign | 5.4 | 5.5 | 2.1 | 3.1 | 3.2 | 3.4 | 3.4 | 3.5 | 3.5 | 3.6 | 3.6 | 3.7 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Previous Tealbook | 5.5 | 5.4 | 2.1 | 2.7 | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 | 3.4 | 3.5 | 3.6 |
| Advanced foreign economies | 3.9 | 3.3 | 1.7 | 1.7 | 2.0 | 2.1 | 2.1 | 2.2 | 2.3 | 2.4 | 2.5 | 2.6 |
| Canada | 5.6 | 2.3 | 1.0 | 2.7 | 2.7 | 2.8 | 2.8 | 2.8 | 2.7 | 2.7 | 2.6 | 2.6 |
| Japan | 6.8 | 3.0 | 4.5 | -1.6 | 1.5 | 1.6 | 1.7 | 1.8 | 1.8 | 1.9 | 2.0 | 2.1 |
| United Kingdom | 1.2 | 4.6 | 2.9 | 1.9 | 1.3 | 2.1 | 2.3 | 2.4 | 2.5 | 2.5 | 2.5 | 2.6 |
| Euro area | 1.5 | 4.1 | 1.4 | 1.5 | 1.3 | 1.2 | 1.2 | 1.4 | 1.7 | 2.0 | 2.3 | 2.7 |
| Germany | 2.3 | 9.5 | 2.8 | 2.5 | 2.1 | 1.9 | 1.8 | 1.8 | 2.1 | 2.4 | 2.7 | 3.0 |
| Emerging market economies | 7.4 | 8.4 | 2.5 | 4.9 | 4.8 | 5.0 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 | 5.1 |
| Asia | 14.4 | 8.0 | 2.1 | 6.1 | 5.8 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.1 |
| Korea | 8.8 | 5.8 | 3.0 | 3.4 | 3.8 | 4.2 | 4.3 | 4.4 | 4.4 | 4.4 | 4.5 | 4.6 |
| China | 10.1 | 6.8 | 9.8 | 9.1 | 8.7 | 8.7 | 8.6 | 8.6 | 8.5 | 8.5 | 8.5 | 8.5 |
| Latin America | 1.4 | 9.3 | 2.8 | 3.1 | 3.9 | 4.2 | 4.3 | 4.2 | 4.2 | 4.2 | 4.1 | 4.1 |
| Mexico | -.2 | 9.5 | 3.0 | 3.2 | 3.7 | 4.0 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 | 4.3 |
| Brazil | 9.4 | 7.2 | 2.1 | 3.8 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |


| Consumer prices ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total foreign | 3.4 | 1.3 | 2.2 | 4.9 | 3.7 | 2.6 | 2.3 | 2.2 | 2.3 | 2.3 | 2.3 | 2.4 |
| Previous Tealbook | 3.4 | 1.4 | 2.2 | 3.9 | 3.0 | 2.5 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.4 |
| Advanced foreign economies | 2.0 | -. 0 | 1.0 | 3.4 | 2.3 | 1.3 | 1.2 | 1.2 | 1.4 | 1.3 | 1.4 | 1.5 |
| Canada | 2.3 | -. 9 | 2.4 | 3.5 | 2.3 | 1.8 | 1.9 | 2.0 | 2.3 | 2.1 | 2.1 | 2.1 |
| Japan | . 0 | -1.9 | -1.9 | 2.9 | -. 8 | -. 8 | -. 8 | -. 7 | -. 7 | -. 6 | -. 5 | -. 4 |
| United Kingdom | 5.4 | 2.4 | 1.3 | 4.5 | 8.1 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 2.0 | 3.4 |
| Euro Area | 1.9 | 1.5 | 1.2 | 3.5 | 3.0 | 1.8 | 1.3 | 1.3 | 1.4 | 1.4 | 1.5 | 1.6 |
| Germany | 1.5 | . 8 | . 9 | 3.2 | 1.9 | 1.7 | 1.3 | 1.2 | 1.3 | 1.4 | 1.4 | 1.6 |
| Emerging market economies | 4.7 | 2.6 | 3.3 | 6.4 | 5.1 | 3.7 | 3.3 | 3.2 | 3.2 | 3.2 | 3.2 | 3.1 |
| Asia | 3.6 | 2.1 | 3.6 | 7.0 | 4.7 | 3.3 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 |
| Korea | 3.3 | 1.9 | 3.4 | 6.0 | 4.4 | 2.9 | 2.6 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| China | 3.0 | 2.6 | 4.3 | 8.4 | 4.6 | 3.1 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| Latin America | 7.8 | 3.6 | 2.3 | 4.8 | 6.1 | 4.9 | 4.3 | 4.3 | 4.2 | 4.1 | 4.1 | 4.1 |
| Mexico | 7.9 | 2.7 | 2.1 | 4.3 | 5.6 | 4.4 | 3.9 | 3.9 | 3.7 | 3.7 | 3.7 | 3.7 |
| Brazil | 7.4 | 5.9 | 1.1 | 7.4 | 7.8 | 6.6 | 5.3 | 4.9 | 4.9 | 4.9 | 4.9 | 4.9 |

Foreign Real GDP and Consumer Prices: Selected Countries
(Percent change, Q4 to Q4)

| Measure and country | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | Projected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 2010 | 2011 | 2012 |
| Real GDP ${ }^{1}$ |  |  |  |  |  |  |  |  |  |
| Total foreign | 3.9 | 4.0 | 4.0 | 4.2 | -. 8 | . 5 | 4.0 | 3.4 | 3.6 |
| Previous Tealbook | 3.9 | 4.1 | 4.0 | 4.2 | -. 8 | . 5 | 3.9 | 3.2 | 3.5 |
| Advanced foreign economies | 2.6 | 2.8 | 2.6 | 2.4 | -1.8 | -1.5 | 2.6 | 2.1 | 2.4 |
| Canada | 3.7 | 3.1 | 1.9 | 2.5 | -. 9 | -1.1 | 2.9 | 2.8 | 2.7 |
| Japan | 1.1 | 2.9 | 2.1 | 1.8 | -4.7 | -1.8 | 3.1 | 1.7 | 2.0 |
| United Kingdom | 2.4 | 2.4 | 2.7 | 2.4 | -2.7 | -2.8 | 2.7 | 2.0 | 2.5 |
| Euro area | 1.7 | 2.1 | 3.6 | 2.2 | -2.1 | -2.0 | 2.1 | 1.2 | 2.2 |
| Germany | . 2 | 1.6 | 4.5 | 1.8 | -2.0 | -2.0 | 4.2 | 1.9 | 2.5 |
| Emerging market economies | 5.6 | 5.8 | 6.0 | 6.5 | . 4 | 2.9 | 5.8 | 5.0 | 5.1 |
| Asia | 6.1 | 7.8 | 7.2 | 8.4 | . 7 | 7.2 | 7.6 | 6.0 | 6.0 |
| Korea | 2.7 | 5.2 | 4.6 | 5.7 | -3.2 | 6.1 | 5.2 | 4.2 | 4.5 |
| China | 10.0 | 10.5 | 11.0 | 12.6 | 7.2 | 11.5 | 8.9 | 8.6 | 8.5 |
| Latin America | 5.2 | 3.9 | 4.8 | 4.5 | -. 2 | -. 8 | 4.1 | 4.2 | 4.2 |
| Mexico | 4.6 | 3.6 | 4.1 | 3.7 | -. 9 | -2.2 | 3.8 | 4.0 | 4.3 |
| Brazil | 6.1 | 2.2 | 4.8 | 6.6 | . 7 | 4.9 | 5.6 | 4.0 | 4.0 |

Consumer prices ${ }^{2}$ 릉

| Total foreign | 2.8 | 2.3 | 2.1 | 3.7 | 3.3 | 1.2 | 2.9 | 2.7 | 2.3 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Previous Tealbook | 2.8 | 2.3 | 2.1 | 3.7 | 3.4 | 1.2 | 2.7 | 2.5 | 2.3 |
| Advanced foreign economies | 1.8 | 1.6 | 1.4 | 2.2 | 2.0 | .2 | 1.6 | 1.5 | 1.4 |
| Canada | 2.3 | 2.3 | 1.4 | 2.5 | 1.9 | .8 | 1.8 | 2.0 | 2.1 |
| Japan | .5 | -1.0 | .3 | .6 | .8 | -1.8 | -.2 | -.8 | -.5 |
| United Kingdom | 1.4 | 2.1 | 2.7 | 2.1 | 3.9 | 2.1 | 3.4 | 3.3 | 2.2 |
| Euro Area | 2.3 | 2.3 | 1.8 | 2.9 | 2.3 | .4 | 2.0 | 1.9 | 1.5 |
| Germany | 2.1 | 2.2 | 1.3 | 3.1 | 1.7 | .3 | 1.6 | 1.5 | 1.4 |
| Emerging market economies | 3.9 | 3.0 | 2.9 | 5.1 | 4.6 | 2.2 | 4.2 | 3.8 | 3.2 |
| Asia | 3.1 | 2.6 | 2.4 | 5.5 | 3.7 | 1.3 | 4.1 | 3.4 | 2.8 |
| Korea | 3.4 | 2.5 | 2.1 | 3.4 | 4.5 | 2.4 | 3.6 | 3.1 | 2.4 |
| China | 3.2 | 1.4 | 2.1 | 6.6 | 2.6 | .6 | 4.5 | 3.3 | 2.7 |
| Latin America | 5.6 | 3.7 | 4.1 | 4.2 | 6.6 | 4.0 | 4.6 | 4.9 | 4.1 |
| Mexico | 5.3 | 3.1 | 4.1 | 3.8 | 6.2 | 4.0 | 4.2 | 4.4 | 3.7 |
| Brazil | 7.2 | 6.1 | 3.2 | 4.3 | 6.2 | 4.2 | 5.4 | 6.2 | 4.9 |

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

## U.S. Current Account

Quarterly Data

|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |
| U.S. current account balance | -436.6 | -492.9 | -508.9 | -461.6 | -503.6 | -508.2 | -525.6 | -486.0 | -483.6 | -461.6 | -465.9 | -448.2 |
| Previous Tealbook | -436.6 | -493.1 | -514.9 | -506.3 | -544.2 | -531.2 | -531.6 | -530.2 | -535.5 | -523.0 | -535.2 | -522.7 |
| Current account as percent of GDP | -3.0 | -3.4 | -3.5 | -3.1 | -3.3 | -3.3 | -3.4 | -3.1 | -3.1 | -2.9 | -2.9 | -2.7 |
| Previous Tealbook | -3.0 | -3.4 | -3.5 | -3.4 | -3.6 | -3.5 | -3.5 | -3.4 | -3.4 | -3.3 | -3.3 | -3.2 |
| Net goods \& services | -457.8 | -532.3 | -537.6 | -489.4 | -505.3 | -524.8 | -541.6 | -507.5 | -497.2 | -490.0 | -495.6 | -489.4 |
| Investment income, net | 168.8 | 180.4 | 172.6 | 148.5 | 135.3 | 134.2 | 135.1 | 136.3 | 142.1 | 142.8 | 147.8 | 155.9 |
| Direct, net | 275.9 | 286.6 | 276.0 | 265.5 | 254.9 | 259.7 | 263.9 | 271.2 | 281.5 | 290.9 | 300.0 | 313.5 |
| Portfolio, net | -107.1 | -106.2 | -103.4 | -117.0 | -119.5 | -125.5 | -128.8 | -134.9 | -139.3 | -148.0 | -152.2 | -157.6 |
| Other income and transfers, net | -147.6 | -141.0 | -143.9 | -120.7 | -133.6 | -117.5 | -119.1 | -114.7 | -128.6 | -114.5 | $-118.1$ | -114.7 |

Annual Data

|  | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | Projected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 2010 | 2011 | 2012 |
|  | Billions of dollars |  |  |  |  |  |  |  |  |
| U.S. current account balance | -630.5 | -747.6 | -802.6 | -718.1 | -668.9 | -378.4 | -475.0 | -505.8 | -464.8 |
| Previous Tealbook | -630.5 | -747.6 | -802.6 | -718.1 | -668.9 | -378.4 | -487.7 | -534.3 | -529.1 |
| Current account as percent of GDP | -5.3 | -5.9 | -6.0 | -5.1 | -4.7 | -2.7 | -3.2 | -3.3 | -2.9 |
| Previous Tealbook | -5.3 | -5.9 | -6.0 | -5.1 | -4.7 | -2.7 | -3.3 | -3.5 | -3.3 |
| Net goods \& services | -609.3 | -714.2 | -759.2 | -702.1 | -698.8 | -374.9 | -504.3 | -519.8 | -493.0 |
| Investment income, net | 73.4 | 78.8 | 54.7 | 106.6 | 159.3 | 129.2 | 167.6 | 135.2 | 147.2 |
| Direct, net | 150.9 | 173.2 | 174.0 | 241.6 | 287.7 | 252.1 | 276.0 | 262.4 | 296.5 |
| Portfolio, net | -77.5 | -94.4 | -119.4 | -134.9 | -128.4 | -122.8 | -108.4 | -127.2 | -149.3 |
| Other income and transfers, net | -94.5 | -112.2 | -98.1 | -122.6 | -129.3 | -132.8 | -138.3 | -121.2 | -119.0 |

Last update: February 3, 2017

## January 2011 Tealbook B Tables and Charts ${ }^{\ddagger}$

## Monetary Policy Strategies

Equilibrium Real Federal Funds Rate

## Figure: Short-Run Estimates with Confidence Intervals

Line chart, by percent, 1990 to 2011. There are five series, "The actual real funds rate based on lagged core inflation", "Tealbook-consistent measure (FRB/US)", "Range of four model-based estimates", " 70 Percent confidence interval", and " 90 Percent confidence interval". The actual real funds rate series starts at about 4.5 in 1990 , decreases to about 0 by 1992, generally increases to about 4.8 by 2000, generally decreases to about -1 by 2004, generally increases to about 3 by 2007, generally decreases to about -2 by late 2008 and generally increases to about -0.7 by 2011:Q1. Tealbook-consistent measure starts at about 4 in 1997. It generally increases to about 5.5 by 2000, generally decreases to about 0 by 2003, generally increases to about 3 by 2007, decreases to about -4 by 2009 , and generally increases to about -1.5 by 2011:Q1. The other 3 series closely track each other throughout the chart, with the 70 percent confidence interval being about 1 percent both lesser and greater than the Range of model-based estimates, and the 90 Percent confidence interval being about 2 percent both lesser and greater than the Range of model-based estimates at any given point. The Range of model-based estimates begins at a range of about [1.5, 4] in 1990, decreases to about [-1.3, 2] by 1991, generally increases to about [2, 4.5] by 2000, generally decreases to about [ $-0.5,1.5$ ] by 2003 , increases to about [ $0.5,2.25$ ] by 2006, decreases to about [-7, $-1.3]$ by 2009 and then increases to about [-2, 0.3] by 2011.

Short-Run and Medium-Run Measures (Percent)

|  | Current Tealbook | Current Quarter Estimate as of Previous Tealbook | Previous Tealbook |
| :---: | :---: | :---: | :---: |
| Short-Run Measures |  |  |  |
| Single-equation model | -1.6 | -1.9 | -2.0 |
| Small structural model | -1.5 | -2.1 | -2.4 |
| EDO model | 0.2 | 0.2 | -0.1 |
| FRB/US model | -2.1 | -2.4 | -2.5 |
| Confidence intervals for four model-based estimates |  |  |  |
| 70 percent confidence interval | -2.9 to 0.5 |  |  |
| 90 percent confidence interval | -3.9 to 1.6 |  |  |
| Tealbook-consistent measures |  |  |  |
| EDO model | -1.4 | -1.9 | -2.8 |
| FRB/US model | -1.5 | -1.6 | -2.0 |
| Medium-Run Measures |  |  |  |
| Single-equation model | 1.1 | 1.1 | 1.1 |
| Small structural model | 1.4 | 1.4 | 1.3 |
| Confidence intervals for two model-based estimates |  |  |  |
| 70 percent confidence interval | 0.3 to 2.2 |  |  |
| 90 percent confidence interval | -0.4 to 2.7 |  |  |
| TIPS-based factor model | 2.0 |  | 2.0 |
| Memo |  |  |  |
| Actual real federal funds rate | -0.7 |  | -0.8 |



 table includes a third column labeled "Current Quarter Estimate as of Previous Tealbook."

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

Figure: Nominal Federal Funds Rate

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 0.25 and remains relatively constant here until 2013:Q4. It then generally increases to about 3.9 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about 0.25 and decreases to about -2.6 by $2012: Q 1$. It then increases to about 4.4 by 2015:Q4. Previous Tealbook: Unconstrained begins in 2010:Q2 at about 0.25 and decreases to about -3.0 by 2012:Q1. It then increases to about 4.4 by $2015: Q 4$.

Figure: Real Federal Funds Rate

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about -1.3 and generally increases to about -0.7 by 2011:Q1. It then generally decreases to about -1.4 by 2013:Q4 and then generally increases to about 1.8 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about -1.3 and increases to about -0.9 by 2010:Q4. It then decreases to about -4.0 by 2012:Q1 and then increases to about 2.5 by 2015:Q4. Previous Tealbook: Unconstrained begins in 2010:Q2 at about -1.3 and decreases to about -4.4 by 2012:Q2. It then increases to about 2.4 by 2015:Q4.

## Figure: Civilian Unemployment Rate

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 9.7 and generally decreases to about 4.4 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about 9.7 and generally decreases to about 4.6 by 2015:Q4. Previous Tealbook: Unconstrained begins in 2010:Q2 at about 9.75 and decreases to about 4.55 by 2015:Q4.

## Figure: Core PCE Inflation (Four-quarter average)

Line chart, by percent, 2010 to 2015. There are three series, "Current Tealbook: Constrained", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2010:Q2 at about 1.47 and decreases to about 0.8 by 2010 :Q4. It then generally increases to about 2.15 by 2015:Q4. Current Tealbook: Unconstrained begins in 2010:Q2 at about 1.47 and decreases to about 0.8 by 2010:Q4. It then increases to about 2.13 by $2015: Q 4$. Previous Tealbook: Unconstrained begins in 2010:Q2 at about 1.47 and generally decreases to about 0.9 by 2010:Q4. It then generally increases to about 1.35 by 2011:Q4 and then generally decreases to about 1.3 by 2012:Q1. By 2015:Q4 it has generally increased to about 2.13.

Note: As discussed in the text note, the lines "Previous Tealbook" depict optimal control paths based on the previous Tealbook's staff outlook, but using the respecified model under the new expectational assumptions.

## The Policy Outlook in an Uncertain Environment

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

Line chart, by percent, 2011 to 2014. There are four series, "Current Tealbook", "Previous Tealbook", "70 percent confidence interval" and " 90 percent confidence interval". The Current Tealbook begins at about 0.1 in 2011:Q1 and remains stable here until 2012:Q2. It then increases to about 3.3 by 2014:Q4. The Previous Tealbook begins at about 0.1 in 2011:Q1 and remains constant here until 2012:Q3. It then increases to about 3.25 by 2014:Q4. The other 2 series closely track the Current Tealbook series throughout the chart, with the 70 percent confidence interval being about $2 \%$ both lesser and greater than the Current Tealbook series, and the 90 Percent confidence interval being about $3 \%$ both lesser and greater than the Current Tealbook series at any given point.

Note: In both panels, the dark and light shading represent the 70 and 90 percent confidence intervals respectively. As in the December Tealbook, the staff baseline projection for the federal funds rate is based on the outcome-based policy rule. Accordingly, this panel does not report a separate series for the staff's projected funds rate. Financial market quotes are as of January 19 .

## Figure: Information from Financial Markets

Line chart, by percent, 2011 to 2014. There are six series, "Current Tealbook", "Previous Tealbook", "Current 70 percent confidence interval", "Current 90 percent confidence interval", "Previous 70 percent confidence interval" and "Previous 90 percent confidence interval". The Current Tealbook begins at about 0.1 in 2011:Q1 and then generally increases to about 2.6 by 2014:Q4. The Previous Tealbook begins at about 0.1 in 2011:Q1 and then increases to about 2.05 by 2014:Q4. The other 2 Current series closely track the Current Tealbook series throughout the chart. The Current 70 percent confidence interval begins at a range of about [0.05, 0.15$]$ in 2011:Q1 and then increases to about [1.3, 3.9] by 2014:Q4. The Current 90 percent confidence interval begins at a range of about [0.05, 0.2] in 2011:Q1 and then increases to about [0.9, 5.2] by 2014:Q4. The other 2 Previous series closely track the Previous Tealbook series throughout the chart. The Previous 70 percent confidence interval begins at a range of about [0, 0.2] in 2011:Q1 and then increases to about [0.95, 3.15] by 2014:Q4. The Previous 90 percent confidence interval begins at a range of about [0, 0.2] in 2011:Q1 and then increases to about [0.7, 4.3] by 2014:Q4.
 rate is based on the outcome-based policy rule. Financial market quotes are as of January 19

## Near-Term Prescriptions of Simple Policy Rules

|  | $\mathbf{2 0 1 1 Q 1}$ | $\mathbf{2 0 1 1 Q 2}$ | $\mathbf{2 0 1 1 Q 1}$ | 2011Q2 |
| :---: | :---: | :---: | :---: | :---: |
| Taylor (1993) rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 9 1}$ | $\mathbf{- 0 . 7 7}$ |
| Previous Tealbook | 0.13 | 0.13 | -0.90 | -0.81 |
| Taylor (1999) rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 3 . 9 3}$ | $\mathbf{- 3 . 6 4}$ |
| Previous Tealbook | 0.13 | 0.13 | -4.09 | -3.89 |
| Estimated outcome-based rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 3 2}$ | $\mathbf{- 0 . 8 8}$ |
| Previous Tealbook | 0.13 | 0.13 | -0.42 | -1.05 |
| Estimated forecast-based rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 2 6}$ | $\mathbf{- 0 . 6 9}$ |
| Previous Tealbook | 0.13 | 0.13 | -0.42 | -0.98 |
| First-difference rule | $\mathbf{0 . 2 9}$ | $\mathbf{0 . 4 8}$ | $\mathbf{0 . 2 9}$ | $\mathbf{0 . 4 8}$ |
| Previous Tealbook | 0.16 | 0.26 | 0.16 | 0.26 |
|  |  |  |  |  |

Memo

|  | 2011Q1 | 2011Q2 |
| :--- | :---: | :---: |
| Staff assumption | 0.13 | 0.13 |
| Fed funds futures | 0.15 | 0.12 |
| Median expectation of primary dealers | 0.13 | 0.13 |
| Blue Chip forecast (January 1, 2011) | 0.18 | 0.18 |

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

## [Box:] Possible Implications of Misestimating the NAIRU

Figure: Alternative NAIRU Paths

Line chart, by percent, 2007 to 2018. There are three series, Tealbook projection, Higher effective NAIRU, and Policymakers' estimate of the effective NAIRU. Tealbook projection begins in 2007 at about 5.0 and remains constant here until 2008. It then increases to about 6.75 by 2010 and then generally decreases to about 5.25 by 2015. It remains constant here at 5.25 until 2018. Higher effective NAIRU begins in 2007 at about 5.0 and remains constant here until 2008 . It then increases to about 6.75 by 2010 and remains constant here until 2018. Policymakers' estimate of the effective NAIRU begins in 2007 at about 5.0 and remains constant here until 2008. It then increases to about 6.75 by 2010 and then generally decreases to about 5.7 by 2014. By 2018 it has generally increased to about 6.75 .
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## January 2011 Tealbook B Tables and Charts ${ }^{ \pm}$

## Monetary Policy Alternatives

Table 1: Overview of Alternatives for the January 26 FOMC Statement

| Key Components | December <br> Statement | January Alternatives |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C | D |
| Economic Activity |  |  |  |  |  |
| Recent Developments | economic recovery is continuing, though insufficient to bring down unemployment | economic recovery is continuing, though insufficient to bring about significant improvement in labor market conditions |  |  | economic recovery is continuing |
| Household Spending | increasing at a moderate pace | increasing at a moderate pace but remains constrained by ... | growth picked up late last year but remains constrained by , , , | growth has picked up |  |
| Labor <br> Market | employers remain reluctant to add to payrolls; unemployment rate is elevated | employers remain reluctant to add to payrolls; unemployment rate is elevated |  |  | n.a. |
| Outlook | progress toward objectives has been disappointingly slow | progress toward objectives remains disappointingly slow and there are still significant downside risks | progress toward objectives has been disappointingly slow | progress toward objectives has been slow; but some indications that the economic recovery is strengthening | n.a. |
| Inflation |  |  |  |  |  |
| Recent Developments | expectations have remained stable, but underlying inflation have continued to trend downward; measures are somewhat low | expectations have remained stable, but underlying inflation have been trending downward; measures are low | although comm expectations ha underlying infla downward; mea | dity prices have risen, ve remained stable and tion has been trending sures are somewhat low | underlying inflation has trended lower and expectations have remained stable, but commodity prices have risen noticeably |
| Outlook | same as "Economic Activity" outlook above |  |  |  |  |
| Target Federal Funds Rate |  |  |  |  |  |
| Intermeeting Period | 0 to $1 / 4$ percent | 0 to $1 / 4$ percent |  |  |  |
| Forward Guidance | exceptionally low levels for an extended period | exceptionally low levels at least through mid-2012 | exceptionally low levels for an extended period |  | low levels for some time |
| SOMA Portfolio Policy |  |  |  |  |  |
| Approach | $\$ 600$ billion of Treasuries by end of 2011:Q2, \$75 billion per month | $\$ 800$ billion of Treasuries (\$200b more than Nov.), $\$ 75$ billion per month, through 2011:Q3 | $\$ 600$ billion of Treasuries by end of 2011:Q2, \$75 billion per month | $\$ 400$ billion of Treasuries (\$200b less than Nov.), $\$ 50$ billion per month, through 2011:Q2 | discontinue program announced in November |
|  | maintain reinvestment policy | maintain reinvestment policy |  |  | maintain existing reinvestment policy for the time being |
| Future Policy Action |  |  |  |  |  |
| Approach | will regularly review and will adjust program as needed; will employ policy tools as necessary to support the recovery and to help ensure that | will regularly review and will adjust program as needed; will | continued practice of reviewing and remains prepared to adjust program as needed; will | will adjust program as needed; will employ policy tools as necessary to support the recovery and to help ensure that inflation, over time, is at levels [of 2 | will employ policy tools as necessary to promote maximum |


| inflation, over time, is at | employ policy tools | employ policy tools | percent or a bit less, which <br> it judges to be] consistent | employment and <br> levels consistent with its <br> mandate |
| :--- | :---: | :---: | :---: | :---: |

[Note: In the January 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.]

## January FOMC Statement--Alternative A

1. Information received since the Federal Open Market Committee met in November December confirms that the economic recovery is continuing, though at a rate that has been insufficient to bring dememployment about a significant improvement in labor market conditions. Household spending is increasing at a moderate pace, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising, though less rapidly than earlier in the year in recent quarters, while investment in nonresidential structures continues to be weak. Employers remain reluctant to add to payrolls. The housing sector continues to be depressed. Longer-term inflation expectations have remained stable, but measures of underlying inflation have continued to been trending downward.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate is elevated, and measures of underlying inflation are somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. Although the Committee anticipates a gradual return to higher levels of resource utilization in a context of price stability, progress toward its objectives has been remains disappointingly slow and there are still significant downside risks to the economic outlook.
3. To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities. as announced in November. Moreover, in light of incoming information, the Committee now intends to increase its holdings of securities by a total of $\$ 800$ billion-- $\$ 200$ billion more than announced in November--by purchasing longer-term Treasury securities at a pace of about $\$ 75$ billion per month through the third quarter of 2011. In addition, the Committee will maintain its existing policy of reinvesting principal payments from its securities holdings. In addition, the Committee intends to purchase $\$ 600$ billion of longer term Treasury securities by the end of the second quarter of 2011, a pace of about $\$ 75$ billion per month. The Committee will regularly review the pace of its securities purchases and the overall size of the asset-purchase program inlight of incoming information and will adjust the program as needed to best foster maximum employment and price stability.
4. The Committee will maintain the target range for the federal funds rate at 0 to $1 / 4$ percent and eontinueste currently anticipates that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for an extended period at least through mid-2012.
5. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate.

## January FOMC Statement--Alternative B

1. Information received since the Federal Open Market Committee met in November December confirms that the economic recovery is continuing, though at a rate that has been insufficient to bring dinemployment about a significant improvement in labor market conditions. Growth in household spending is inereasing at a moderate pace picked up late last year, but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising, though less rapidly than earlier in the year, while investment in nonresidential structures eontinues to be is still weak. Employers remain reluctant to add to payrolls. The housing sector continues to be depressed. Although commodity prices have risen, longer-term inflation expectations have remained stable,but and measures of underlying inflation have been trending downward.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate is elevated, and measures of underlying inflation are somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. Although the Committee anticipates a gradual return to higher levels of resource utilization in the context of price stability, progress toward its objectives has been disappointingly slow.
3. To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities as announced in November. In particular, the Committee is maintaining its existing policy of reinvesting principal payments from its securities holdings-In addition, the Committee and intends to purchase $\$ 600$ billion of longer-term Treasury securities by the end of the second quarter of 2011, a pace of about $\$ 75$ billion per month. The Committee continued its practice of regularly reviewing the pace of its securities purchases and the overall size of the asset-purchase program in light of incoming information, and it remains prepared to adjust the program as needed to best foster maximum employment and price stability.
4. The Committee will maintain the target range for the federal funds rate at 0 to $1 / 4$ percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for an extended period.
5. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate.

## January FOMC Statement--Alternative C

1. Information received since the Federal Open Market Committee met in November December confirms that the economic recovery is continuing, though at a rate that has been insufficient to bring unemployment about a significant improvement in labor market conditions. Growth in household spending is inereasing at a moderate pace has picked up but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight eredit. Business spending on equipment and software is rising, though less rapidly than earlier in the year, while investment in nonresidential structures continues to be weak. and business investment is rising. However, employers remain reluctant to add to payrolls and the housing sector continues to be depressed. Although commodity prices have risen, longer-term inflation expectations have remained stable, but and measures of underlying inflation have been trending downward.
2. Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. Currently, the unemployment rate is elevated, and measures of underlying inflation are somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. Altheugh
the Committee anticipates a gradual return to higher levels of resource utilization in a context of price-stability, Progress toward the Committee's objectives has been disappointingly slow, but there are some indications that the economic recovery is strengthening.
3. To promote a stronger pace of economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee decided today to continue expanding its holdings of securities. as announced in November. However, in light of incoming information, the Committee now intends to increase its holdings of securities by a total of $\$ 400$ billion-- $\$ 200$ billion less than announced in November--by purchasing longer-term Treasury securities at a pace of about $\$ 50$ billion per month through the second quarter of 2011. The Committee will maintain its existing policy of reinvesting principal payments from its securities holdings. In addition, the Committee intends to purchase $\$ 600$ billion of longer-term Treasury securities by the end of the second quarter of 2011 , a pace of about $\$ 75$ billion per month. The Committee will regularly review the pace of its securities purchases and the overall size of the asset-purchase program in light of incoming information and will adjust the program as needed to best foster maximum employment and price stability.
4. The Committee will maintain the target range for the federal funds rate at 0 to $1 / 4$ percent and continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels for the federal funds rate for an extended period.
5. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the economic recovery and to help ensure that inflation, over time, is at levels [of 2 percent or a bit less, which the Committee judges to be] consistent with its mandate.

## January FOMC Statement--Alternative D

1. Information received since the Federal Open Market Committee met in November December confirms that the economic recovery is continuing. though at a rate that has been insufficient to bring down unemployment. Growth in household spending is increasing at a moderate pace has picked up but remains constrained by high unemployment, modest income growth, lower housing wealth, and tight credit. Business spending on equipment and software is rising, though less rapidly than earlier in the year, while investment in nonresidential structures continues to be weak. Employers remain reluctant to add to payrolls. The housing sector continues to be depressed. and business investment is rising. Measures of underlying inflation have trended lower in recent quarters and longer-term inflation expectations have remained stable, but measures of underlying inflation have continued to trend downard. commodity prices have risen noticeably.
2. Gonsistent with its statutory mandate, the-Committee-seeks to foster maximum employment and price-stability. Curfently, the unemployment rate is elevated, and measures of underlying inflation are somewhat low, relative to levels that the Committee judges to be consistent, over the longer run, with its dual mandate. Although the Committee anticipates a gradual return to higher levels of resource utilization in a context of price-stability, progress toward its objectives has been disappointingly stow.
3. To promete a stronger pace of support the economic recovery and to help ensure that inflation, over time, is at levels consistent with its mandate, the Committee will maintain the target range for the federal funds rate at 0 to $1 / 4$ percent and anticipates that economic conditions are likely to warrant low levels for the federal funds rate for some time. However, the Committee judges that a further expansion of its securities holdings is not necessary to support a gradual return to higher levels of resource utilization in a context of price stability. Accordingly, the Committee decided today to eontinue expanding discontinue the asset purchase program it its holdings of securities as-announced in November. For the time being, the Committee will maintain its existing policy of reinvesting principal payments from its securities holdings. In addition, the Committee intends to purchase $\$ 600$ billion of longer term Treasury securities by the end of the second quarter of 2011 , a pace of about $\$ 75$ billion per month. The Committee will regularly review the pace of its securities purchases and the overall size of the asset purchase program in light of incoming information and will adjust the program as needed to best foster maximum employment and price stability.
4. The Committee will maintain the target range for the federal funds rate at 0 to $1 / 4$ percent and continues to anticipate that economic conditions, ineluding low rates of resource utilization, subdued inflation trends, and-stable inflation expectations, are likely to warrant exeeptionally low levels for the federal funds rate for an extended period.
5. The Committee will continue to monitor the economic outlook and financial developments and will employ its policy tools as necessary to support the econemie recovery and to help ensure that inflation, over time, is at levels consistent with its mandate promote maximum employment and price stability.

## Long-Run Projections of the Balance Sheet and Monetary Base

## Figure: Total Assets

Line chart, by billions of dollars, 2006 to 2020 . Data are monthly. There are five series, Alt A, Alt B, Alt C, Alt D, and December Alt B. Alt A begins in 2006 at about 800 and generally increases slowly to about 950 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1850 by December 2008. By 2011 it has generally increased to about 3100 and by September 2016 it has generally decreased to about 1500 . It then increases to about 1800 by the end of 2020. Alt B begins in 2006 at about 800 and generally increases slowly to about 950 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1850 by December 2008. By 2011 it has generally increased to about 2850 and by June 2016 it has generally decreased to about 1475. It then increases to about 1800 by the end of 2020. Alt C begins in 2006 at about 800 and generally increases slowly to about 950 by August 2008 . It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1850 by December 2008. By 2011 it has generally increased to about 2650 and by March 2016 it has generally decreased to about 1450. It then increases to about 1800 by the end of 2020 . Alt D begins in 2006 at about 800 and generally increases slowly to about 950 by August 2008. It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1850 by December 2008. By December 2010 it has generally increased to about 2400 and by October 2015 it has generally decreased to about 1425 . It then increases to about 1800 by the end of 2020. November Alt B begins in 2006 at about 800 and generally increases slowly to about 950 by August 2008 . It then steeply inclines to about 2250 by November 2008 and then generally decreases to about 1850 by December 2008. By 2011 it has generally increased to about 2845 and by March 2016 it has generally decreased to about 1475. It then increases to about 1810 by the end of 2020.

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

Growth Rates for the Monetary Base

| Percent, annual rate |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Monthly |  |  |  |  |  |
| Apr-10 | -37.6 | -37.6 | -37.6 | -37.6 | -37.6 |
| May-10 | -2.0 | -2.0 | -2.0 | -2.0 | -2.0 |
| Jun-10 | -5.8 | -5.8 | -5.8 | -5.8 | -5.8 |
| Jul-10 | -2.2 | -2.2 | -2.2 | -2.2 | -2.2 |
| Aug-10 | -2.4 | -2.4 | -2.4 | -2.4 | -2.4 |
| Sep-10 | -10.1 | -10.1 | -10.1 | -10.1 | -10.1 |
| Oct-10 | -9.8 | -9.8 | -9.8 | -9.8 | -9.8 |
| Nov-10 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| Dec-10 | 18.7 | 18.7 | 18.7 | 18.7 | 14.0 |
| Jan-11 | 28.6 | 28.9 | 28.4 | 28.1 | 23.8 |
| Feb-11 | 98.9 | 97.8 | 86.6 | 74.0 | 66.1 |
| Mar-11 | 123.2 | 120.9 | 102.0 | 79.8 | 57.3 |
| Quarterly |  |  |  |  |  |
| 2010 Q2 | -10.4 | -10.4 | -10.4 | -10.4 | -10.4 |
| 2010 Q3 | -3.9 | -3.9 | -3.9 | -3.9 | -3.9 |
| 2010 Q4 | -3.0 | -3.0 | -3.0 | -3.0 | -3.1 |
| 2011 Q1 | 52.2 | 51.8 | 46.5 | 40.7 | 33.5 |
| 2011 Q2 | 75.9 | 73.7 | 55.7 | 34.6 | 44.9 |
| Annual - Q4 to Q4 |  |  |  |  |  |
| 2009 | 41.5 | 41.5 | 41.5 | 41.5 | 41.5 |
| 2010 | -0.9 | -0.9 | -0.9 | -0.9 | -1.1 |
| 2011 | 33.6 | 44.2 | 22.9 | 12.1 | 30.3 |
| 2012 | -0.9 | -0.9 | -1.0 | -1.0 | -1.2 |
| 2013 | -10.0 | -10.2 | -9.9 | -9.9 | -10.9 |
| 2014 | -19.3 | -19.1 | -19.6 | -19.9 | -19.4 |
| 2015 | -25.4 | -24.9 | -25.6 | -20.3 | -25.4 |

Note: Not seasonally adjusted

## Growth Rates of M2

(Percent, seasonally adjusted annual rate)

| Tealbook Forecast * |  |
| ---: | ---: |
| Monthly Growth Rates |  |
| Jun-10 | 4.3 |
| Jul-10 | 2.3 |
| Aug-10 | 6.3 |
| Sep-10 | 6.6 |
| Oct-10 | 5.5 |
| Nov-10 | 5.1 |
| Dec-10 | 4.2 |
| Jan-11 | 2.7 |
| Feb-11 | 1.5 |
| Mar-11 | 1.0 |
| Apr-11 | 1.0 |
| May-11 | 1.0 |
| Jun-11 | 1.2 |
| Quarterly Growth Rates |  |
| 2010 Q3 | 4.5 |


| 2010 Q4 | 5.6 |
| ---: | ---: |
| 2011 Q1 | 2.8 |
| 2011 Q2 | 1.1 |
| Annual Growth Rates |  |
| 2009 | 5.0 |
| 2010 | 3.2 |
| 2011 | 1.8 |
| 2012 | 5.1 |

* This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through December 2010; projections thereafter. Return to table
[Note: In the January 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.]


## January 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 $1 / 4$ percent. The Committee directs the Desk to execute purchases of longer-term Treasury securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately $\$ 2.6 \$ 2.8$ trillion by the end of June September 2011. The Committee also directs the Desk to reinvest principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

## January 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 $1 / 4$ percent. The Committee directs the Desk to execute purchases of longer-term Treasury securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately $\$ 2.6$ trillion by the end of June 2011. The Committee also directs the Desk to reinvest principal payments from agency debt and agency mortgagebacked securities in longer-term Treasury securities. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

## January 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 $1 / 4$ percent. The Committee directs the Desk to execute purchases of longer-term Treasury securities in order to increase the total face value of domestic securities held in the System Open Market Account to approximately $\$ 2.6 \$ 2.4$ trillion by the end of June 2011. The Committee also directs the Desk to reinvest principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.

## January 2011 FOMC Directive -- Alternative D

The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to $1 / 4$ percent. The Committee directs the Desk to execute purchases of longer term Treasury-securities in order to increase maintain the total face value of domestic securities held in the System Open Market Account to at approximately $\$ 2.6 \$ 2.2$ trillion by the end of June 2011. The Committee also directs the Desk to by reinvesting principal payments from agency debt and agency mortgage-backed securities in longer-term Treasury securities. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## January 2011 Tealbook B Tables and Charts

## Explanatory Notes

## A. Measures of the Equilibrium Real Rate

| Measure | Description |
| :---: | :--- |
| Single- <br> equation <br> 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 <br> output gap and its lagged values as well as the lagged values of the real federal funds rate. |
| Small <br> Structural <br> 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 <br> output, the real bond yield, and the real federal funds rate. |
| EDO <br> 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 <br> spending categories, price and wages, and the federal funds rate as well as the model's structure and estimate of the output gap. |
| FRB/US <br> 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 <br> factors, some of which take the form of projected values of the model's exogenous variables. |
| Tealbook- <br> 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 <br> the value of the real federal funds rate that closes the output gap conditional on the extended baseline. |
| TIPS- <br> based <br> Factor <br> 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 <br> 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 <br> 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, <br> nominal yields, and inflation. |


| Proxy used for <br> expected inflation | Actual real <br> federal funds rate <br> (current value) | Tealbook-consistent <br> FRB/US-based <br> measure of the <br> equilibrium real funds <br> rate (current value) | Average actual <br> real funds rate <br> (twelve-quarter <br> average) |
| :--- | :---: | :---: | :---: |
| Lagged core inflation | -0.7 | -1.5 | -0.5 |
| Lagged headline inflation | -1.0 | -1.7 | -0.7 |
| Projected headline inflation | -0.9 | -1.7 | -0.7 |

## 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 $\left(\pi_{t}\right)$, inflation two and three quarters ahead $\left(\pi_{t+2 \mid t}\right.$ and $\left.\pi_{t+3 \mid t}\right)$, the output gap in the current period and one quarter ahead ( $y_{t}-y_{t}$ and $y_{t+1 \mid t}-y_{t+1 \mid t}$ ), and the three-quarter-ahead forecast of annual average GDP growth relative to potential ( $\left.\Delta^{4} y_{t+3 \mid t}-\Delta^{4} y_{t+3 \mid t}\right)$, and $\pi$ denotes an assumed value of policymakers' long-run Processing math: $100 \%$ putcome-based and forecast-based rules were estimated using real-time data over the sample 1988:1-2006:4; each specification was chosen usाry ul vuy 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 | $i_{t}=1.20 i_{t-1}-0.39 i_{t-2}+0.19\left[1.17+1.73 \pi_{t}+3.66\left(y_{t}-y_{t}\right)-2.72\left(y_{t-1}-y_{t-1}\right)\right]$ |
| Forecast-based rule | $i_{t}=1.18 i_{t-1}-0.38 i_{t-2}+0.20\left[0.98+1.72 \pi_{t+2 \mid t}+2.29\left(y_{t+1 \mid t}-y_{t+1 \mid t}\right)-1.37\left(y_{t-1}-y_{t-1}\right)\right]$ |
| Taylor (1993) rule | $i_{t}=2+\pi_{t}+0.5\left(\pi_{t}-\pi\right)+0.5\left(y_{t}-y_{t}\right)$ |
| Taylor (1999) rule | $i_{t}=2+\pi_{t}+0.5\left(\pi_{t}-\pi\right)+\left(y_{t}-y_{t}\right)$ |
|  | $\boldsymbol{l}$ |

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

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

|  | Dec 31, 2010 | End-of-Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2012 | 2014 | 2016 | 2018 | 2020 |
|  | \$ Billions |  |  |  |  |  |
| Total assets | 2,428 | 2,858 | 2,079 | 1,430 | 1,592 | 1,779 |
| Selected assets: |  |  |  |  |  |  |
| Liquidity programs for financial firms | 0 | 0 | 0 | 0 | 0 | 0 |
| Primary, secondary, and seasonal credit | 0 | 0 | 0 | 0 | 0 | 0 |
| Central bank liquidity swaps | 0 | 0 | 0 | 0 | 0 | 0 |
| Lending through other credit facilities | 25 | 9 | 1 | 0 | 0 | 0 |
| Term Asset-Backed Securities Loan Facility (TALF) | 25 | 9 | 1 | 0 | 0 | 0 |
| Support for specific institutions | 113 | 47 | 35 | 23 | 10 | 7 |
| Credit extended to AIG | 46 | 0 | 0 | 0 | 0 | 0 |
| Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III | 66 | 47 | 35 | 23 | 10 | 7 |
| Securities held outright | 2,161 | 2,651 | 1,920 | 1,303 | 1,488 | 1,683 |
| U.S. Treasury securities | 1,021 | 1,830 | 1,358 | 1,043 | 1,488 | 1,683 |
| Agency debt securities | 147 | 77 | 39 | 16 | 0 | 0 |
| Agency mortgage-backed securities | 992 | 743 | 523 | 244 | 0 | 0 |
| Special drawing rights certificate account | 5 | 7 | 7 | 7 | 7 | 7 |
| Net portfolio holdings of TALF LLC | 1 | 1 | 1 | 0 | 0 | 0 |
| Total other assets | 124 | 143 | 115 | 96 | 87 | 82 |
| Total liabilities | 2,375 | 2,788 | 1,986 | 1,307 | 1,430 | 1,565 |
| Selected liabilities: |  |  |  |  |  |  |
| Federal Reserve notes in circulation | 942 | 993 | 1,080 | 1,200 | 1,323 | 1,457 |
| Reverse repurchase agreements | 63 | 59 | 59 | 59 | 59 | 59 |
| Deposits with Federal Reserve Banks | 1,323 | 1,720 | 831 | 33 | 33 | 33 |
| Reserve balances held by depository institutions | 977 | 1,512 | 623 | 25 | 25 | 25 |
| U.S. Treasury, general account | 141 | 5 | 5 | 5 | 5 | 5 |
| U.S. Treasury, supplementary financing account | 200 | 200 | 200 | 0 | 0 | 0 |
| Other balances | 3 | 3 | 3 | 3 | 3 | 3 |
| Total capital | 53 | 70 | 93 | 123 | 162 | 215 |

Source: Federal Reserve H.4.1 statistical release and staff calculations.
Note: Components may not sum to totals due to rounding.

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

|  | Dec 31, 2010 | End-of-Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2012 | 2014 | 2016 | 2018 | 2020 |
|  | \$ Billions |  |  |  |  |  |
| Total assets | 2,428 | 3,066 | 2,231 | 1,430 | 1,592 | 1,779 |
| Selected assets: |  |  |  |  |  |  |
| Liquidity programs for financial firms | 0 | 0 | 0 | 0 | 0 | 0 |
| Primary, secondary, and seasonal credit | 0 | 0 | 0 | 0 | 0 | 0 |
| Central bank liquidity swaps | 0 | 0 | 0 | 0 | 0 | 0 |
| Lending through other credit facilities | 25 | 9 | 1 | 0 | 0 | 0 |


| Term Asset-Backed Securities Loan Facility (TALF) | 25 | 9 | 1 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Support for specific institutions | 113 | 47 | 35 | 23 | 10 | 7 |
| Credit extended to AIG | 46 | 0 | 0 | 0 | 0 | 0 |
| Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III | 66 | 47 | 35 | 23 | 10 | 7 |
| Securities held outright | 2,161 | 2,851 | 2,068 | 1,302 | 1,487 | 1,683 |
| U.S. Treasury securities | 1,021 | 2,030 | 1,506 | 1,041 | 1,487 | 1,683 |
| Agency debt securities | 147 | 77 | 39 | 16 | 0 | 0 |
| Agency mortgage-backed securities | 992 | 743 | 523 | 244 | 0 | 0 |
| Special drawing rights certificate account | 5 | 7 | 7 | 7 | 7 | 7 |
| Net portfolio holdings of TALF LLC | 1 | 1 | 1 | 0 | 0 | 0 |
| Total other assets | 124 | 152 | 120 | 98 | 88 | 82 |
| Total liabilities | 2,375 | 2,996 | 2,139 | 1,307 | 1,430 | 1,565 |
| Selected liabilities: |  |  |  |  |  |  |
| Federal Reserve notes in circulation | 942 | 993 | 1,080 | 1,200 | 1,323 | 1,457 |
| Reverse repurchase agreements | 63 | 59 | 59 | 59 | 59 | 59 |
| Deposits with Federal Reserve Banks | 1,323 | 1,928 | 984 | 33 | 33 | 33 |
| Reserve balances held by depository institutions | 977 | 1,720 | 776 | 25 | 25 | 25 |
| U.S. Treasury, general account | 141 | 5 | 5 | 5 | 5 | 5 |
| U.S. Treasury, supplementary financing account | 200 | 200 | 200 | 0 | 0 | 0 |
| Other balances | 3 | 3 | 3 | 3 | 3 | 3 |
| Total capital | 53 | 70 | 93 | 123 | 162 | 215 |

Source: Federal Reserve H.4.1 statistical release and staff calculations.
Note: Components may not sum to totals due to rounding.

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

|  | Dec 31, 2010 | End-of-Year |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 2012 | 2014 | 2016 | 2018 | 2020 |
|  | \$ Billions |  |  |  |  |  |
| Total assets | 2,428 | 2,649 | 1,922 | 1,430 | 1,592 | 1,779 |
| Selected assets: |  |  |  |  |  |  |
| Liquidity programs for financial firms | 0 | 0 | 0 | 0 | 0 | 0 |
| Primary, secondary, and seasonal credit | 0 | 0 | 0 | 0 | 0 | 0 |
| Central bank liquidity swaps | 0 | 0 | 0 | 0 | 0 | 0 |
| Lending through other credit facilities | 25 | 9 | 1 | 0 | 0 | 0 |
| Term Asset-Backed Securities Loan Facility (TALF) | 25 | 9 | 1 | 0 | 0 | 0 |
| Support for specific institutions | 113 | 47 | 35 | 23 | 10 | 7 |
| Credit extended to AIG | 46 | 0 | 0 | 0 | 0 | 0 |
| Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III | 66 | 47 | 35 | 23 | 10 | 7 |
| Securities held outright | 2,161 | 2,451 | 1,768 | 1,305 | 1,489 | 1,683 |
| U.S. Treasury securities | 1,021 | 1,630 | 1,206 | 1,045 | 1,489 | 1,683 |
| Agency debt securities | 147 | 77 | 39 | 16 | 0 | 0 |
| Agency mortgage-backed securities | 992 | 743 | 523 | 244 | 0 | 0 |
| Special drawing rights certificate account | 5 | 7 | 7 | 7 | 7 | 7 |
| Net portfolio holdings of TALF LLC | 1 | 1 | 1 | 0 | 0 | 0 |
| Total other assets | 124 | 134 | 110 | 94 | 87 | 82 |
| Total liabilities | 2,375 | 2,578 | 1,829 | 1,307 | 1,430 | 1,565 |
| Selected liabilities: |  |  |  |  |  |  |
| Federal Reserve notes in circulation | 942 | 993 | 1,080 | 1,200 | 1,323 | 1,457 |


| Reverse repurchase agreements | 63 | 59 | 59 | 59 | 59 | 59 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Deposits with Federal Reserve Banks | 1,323 | 1,511 | 674 | 33 | 33 | 33 |
| Reserve balances held by depository institutions | 977 | 1,302 | 466 | 25 | 25 | 25 |
| U.S. Treasury, general account | 141 | 5 | 5 | 5 | 5 | 5 |
| U.S. Treasury, supplementary financing account | 200 | 200 | 200 | 0 | 0 | 0 |
| Other balances | 3 | 3 | 3 | 3 | 3 | 3 |
| Total capital | 53 | 70 | 93 | 123 | 162 | 215 |

Source: Federal Reserve H.4.1 statistical release and staff calculations.
Note: Components may not sum to totals due to rounding.

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


Source: Federal Reserve H.4.1 statistical release and staff calculations.
Note: Components may not sum to totals due to rounding.

Last update: February 3, 2017


[^0]:     nonbank structure activity of $\$ 5$ billion or more.

    Source: Federal Reserve Board.

