## November 2010 Tealbook Tables and Charts

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## November 2010 Tealbook Book A Tables and Charts ${ }^{\ddagger}$

## Domestic Economic Developments and Outlook

Key Background Factors Underlying the Baseline Staff Projection

Figure: Federal Funds Rate


#### Abstract

Line chart, by percent, 2007 to 2012. Data are quarterly averages. There are four series, Current Tealbook, September Tealbook, Market expected rate, Market modal rate. Current Tealbook begins in 2007:Q1 at about 5.25 and generally decreases to about 0.13 by 2009:Q4. It remains relatively constant here until 2012:Q3. By 2012:Q4 it has increased to about 0.5. September Tealbook follows Current Tealbook almost exactly until 2012:Q4 when it increases to about 0.3. Market expected rate begins in 2010:Q4 at about 0.13 and remains relatively stable here until 2011:Q4. It then generally increases to about 0.48 by 2012:Q4. Market modal rate begins in 2010:Q3 at about 0.15 and remains relatively stable here until 2011:Q3. It then generally increases to about 0.28 by 2012:Q4.


## Figure: Long-Term Interest Rates

Line chart, by percent, 2007 to 2012. Data are quarterly averages. There are six series, "Current Tealbook: BBB corporate yield", "Current Tealbook: Conforming mortgage rate", "Current Tealbook: 10-year Treasury yield", "June Tealbook: BBB corporate yield", "June Tealbook: Conforming mortgage rate", and "June Tealbook: 10 -year Treasury yield". Current Tealbook: BBB corporate yield begins in 2007 at about 6.1 and generally increases to about 9.5 by late 2008 . It then generally decreases to about 4.8 by late 2010 and then generally increases to about 5.9 by late 2012. Current Tealbook: Conforming mortgage rate begins in 2007 at about 6.25 and fluctuates but generally decreases to about 4.25 by late 2010. It then increases to about 5.75 by late 2012. Current Tealbook: 10-year Treasury yield begins in 2007 at about 4.8 and fluctuates but generally decreases to about 3.25 by early 2009 . It then generally increases to about 3.9 by early 2010 and then generally decreases to about 2.6 by late 2010. By late 2012 it has generally increased to about 4.2 . June Tealbook: BBB corporate yield begins in 2007 at about 6.1 and generally increases to about 9.5 by late 2008. It then generally decreases to about 5.2 by 2010 and then generally increases to about 6.0 by late 2012 . June Tealbook: Conforming mortgage rate begins in 2007 at about 6.25 and fluctuates but generally decreases to about 4.5 by 2010 . It then increases to about 5.8 by late 2012. June Tealbook: 10-year Treasury yield begins in 2007 at about 4.8 and fluctuates but generally decreases to about 3.25 by early 2009 . It then generally increases to about 3.9 by early 2010 and then generally decreases to about 2.9 by mid-2010. By late 2012 it has generally increased to about 4.25 .

Figure: Equity Prices

Line chart, 2007 to 2012. Units are indexes, 2007:Q1 = 100, ratio scale. Data are quarter-end. There are two series, Current Tealbook: Dow Jones Total Stock Market Index and June Tealbook: Dow Jones Total Stock Market Index. Current Tealbook: Dow Jones Total Stock Market Index begins in early 2007 at about 100 and generally increases to about 107 by mid-2007. It then generally decreases to about 56 by 2009 and then generally increases to about 85 by early 2010 . By mid- 2010 it has generally decreased to about 74 and by late 2012 it has generally increased to about 1114. June Tealbook: Dow Jones Total Stock Market Index begins in early 2007 at about 100 and generally increases to about 107 by mid-2007. It then generally decreases to about 56 by 2009 and then generally increases to about 85 by early 2010. By mid-2010 it has generally decreased to about 74 and by late 2012 it has generally increased to about 108.

## Figure: House Prices

Line chart, 2007 to 2012. Units are indexes, 2007:Q1 = 100, ratio scale. Data are quarterly. There are two series, Current Tealbook: LoanPerformance index and June Tealbook: LoanPerformance index. Current Tealbook: LoanPerformance index begins in 2007 at about 100 and generally decreases to about 71 by early 2009 . It then generally increases to about 74 by mid- 2010 and then generally decreases to about 71.5 by mid-2011. By late 2012 it has generally increased to about 73 . June Tealbook: LoanPerformance index begins in 2007 at about 100 and generally decreases to about 71 by early 2009. It then generally increases to about 74 by mid2010 and then generally decreases to about 72.5 by mid-2011. By late 2012 it has generally increased to about 73.3.

## Figure: Crude Oil Prices

Line chart, by dollars per barrel, 2007 to 2012. Data are quarterly averages. There are two series, Current Tealbook: West Texas Intermediate and June Tealbook: West Texas Intermediate. Current Tealbook: West Texas Intermediate begins in early 2007 at about 58 and generally increases to about 125 by 2008 . By 2009 it has generally decreased to about 42 and by late 2012 it has generally increased to about 88 . June Tealbook: West Texas Intermediate begins in early 2007 at about 58 and generally increases to about 125 by 2008. By 2009 it has generally decreased to about 42 and by late 2012 it has generally increased to about 86 .

## Figure: Broad Real Dollar

Line chart, 2007 to 2012. Units are indexes, 2007:Q1 = 100. Data are quarterly averages. There are two series, Current Tealbook and June Tealbook. Current Tealbook begins in 2007 at about 100 and generally decreases to about 89 by 2008. It then generally increases to about 101 by early 2009 and then generally decreases to about 92.5 by late 2009. By 2010 it has generally increased to about 94 and by late 2012 it has generally decreased to about 84.5 . June Tealbook begins in 2007 at about 100 and generally decreases to about 89 by 2008. It then generally increases to about 101 by early 2009 and then generally decreases to about 92.5 by late 2009. By 2010 it has generally increased to about 94 and by late 2012 it has generally decreased to about 86.5 .

## [Box:] Alternative SOMA Portfolio Assumptions

## Figure: Alternative SOMA Portfolio Projections

Line chart, by billions of dollars, 2009 to 2020. There are three series, Baseline, No additional expansion and Larger portfolio expansion. Baseline begins in 2009 at about 750 and generally increases to about 2,600 by 2011. It remains here until 2012. It then generally decreases to about 1,300 by 2016 and then generally increases to about 1,750 by 2020. No additional expansion begins in 2010 at about 2,050 and remains relatively stable here until 2012 . It then generally decreases to about 1,250 by 2015 and then generally increases to about 1,750 by 2020. Larger portfolio expansion begins in 2010 at about 2,050 and generally increases to about 3,000 by 2011. It remains here until 2012. It then generally decreases to about 1,400 by 2016 and then generally increases to about 1,750 by 2020 .

Figure: 10-year Treasury Yield

Line chart, by percent, 2010 to 2015. There are three series, Baseline, No additional expansion and Larger portfolio expansion. Baseline begins in early 2010 at about 3.8 and generally decreases to about 2.7 by late 2010. It then generally increases to about 4.75 by 2015 . No additional expansion begins in early 2010 at about 3.8 and generally decreases to about 2.9 by mid-2010. It then generally increases to about 4.7 by 2015. Larger portfolio expansion begins in early 2010 at about 3.8 and generally decreases to about 2.65 by late 2010. It then generally increases to about 4.78 by 2015.

## Macroeconomic Effects of Alternative SOMA Policies

## Figure: Real GDP

Line chart, by 4-quarter percent change, 2010 to 2015. There are three series, Baseline, No additional expansion and Larger portfolio expansion. Baseline begins in early 2010 at about 2.4 and generally increases to about 3 by mid-2010. It then generally decreases to about 2.1 by 2011 and then generally increases to about 4.7 by 2012. It remains relatively stable here until 2014. By 2015 it has generally decreased to about 3.45. No additional expansion begins in mid-2010 at about 3 and generally decreases to about 2.1 by 2011. It then generally increases to about 4.75 by 2014 and then generally decreases to about 3.6 by 2015 . Larger portfolio expansion begins in mid-2010 at about 3 and generally decreases to about 2 by 2011. It then generally increases to about 4.95 by 2012 and then generally decreases to about 3.4 by 2015.

## Unemployment Rate

Line chart, by percent, 2010 to 2015. There are three series, Baseline, No additional expansion and Larger portfolio expansion. Baseline begins in early 2010 at about 9.6 and generally decreases to about 9.5 by mid-2010. It then generally increases to about 9.57 by late 2010 and then generally decreases to about 5.2 by 2015 . No additional expansion begins in early 2010 at about 9.6 and generally decreases to about 9.5 by mid-2010. It then generally increases to about 9.57 by late 2010 and then generally decreases to about 5.3 by 2015. Larger portfolio expansion begins in early 2010 at about 9.6 and generally decreases to about 9.5 by mid-2010. It then generally increases to about 9.57 by late 2010 and then generally decreases to about 5.1 by 2015 .

## Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

| Measure | 2010:Q3 |  | 2010:Q4 |  | 2011:Q1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Previous <br> Tealbook | Current <br> Tealbook | Previous <br> Tealbook | Current <br> Tealbook | Previous <br> Tealbook | Current <br> Tealbook |
| Real GDP | 1.7 | 1.7 | 2.4 | 2.4 | 2.5 | 2.7 |
| Private domestic final purchases | . 9 | 1.9 | 2.1 | 2.1 | 2.8 | 3.0 |
| Personal consumption expenditures | 2.2 | 2.6 | 2.0 | 2.2 | 2.1 | 2.4 |
| Residential investment | -27.2 | -29.9 | 3.5 | -4.7 | 11.0 | 13.5 |
| Nonres. structures | -1.5 | -5.1 | -1.8 | -2.4 | -1.9 | -2.8 |
| Equipment and software | -. 3 | 9.7 | 4.6 | 5.6 | 8.8 | 8.3 |
| Federal purchases | 3.4 | 4.3 | 4.5 | 3.7 | . 9 | 1.0 |
| State and local purchases | -1.0 | -. 6 | -. 1 | -. 7 | . 1 | . 1 |
|  | Contribution to change in real GDP (percentage points) |  |  |  |  |  |
|  |  |  |  |  |  |  |


| Inventory investment | .9 | 1.4 | -.9 | -1.3 | -.1 | -.5 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Net exports | -.1 | -1.5 | 1.1 | 1.6 | .2 | .6 |

## Recent Nonfinancial Developments (1)

Figure: Change in Private Payroll Employment

Line chart, by thousands of employees, 2001 to 2010. There is a horizontal line at zero. There are two series, Change in Private Payroll Employment and 3-month moving average. Change in Private Payroll Employment begins in early 2001 at about -40 and generally decreases to about -360 by late 2001 . It then generally increases to about 150 by late 2002 and then generally decreases to about -210 by early 2003. By early 2005 it has generally increased to about 350 and by early 2009 it has generally decreased to about -820. It then generally increases to about 70 by September 2010. 3-month moving average begins in early 2001 at about 90 and generally decreases to about -320 by late 2001. It then generally increases to about 25 by late 2002 and then generally decreases to about -140 by early 2003. By early 2006 it has generally increased to about 300 and by early 2009 it has generally decreased to about -750 . It then generally increases to about 100 by September 2010.

Source: U.S. Dept. of Labor, Bureau of Labor Statistics.
Figure: Unemployment Rate

Line chart, by percent, 2001 to 2010. The series begins in 2001 at about 4.2 and generally increases to about 6.4 by 2003 . It then generally decreases to about 4.4 by 2007 and then generally increases to about 10.1 by 2009. By September 2010 it has generally decreased to about 9.6.

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

## Figure: Manufacturing IP excluding Motor Vehicles and Parts

Line chart, by 3-month percent change, annual rate, 2001 to 2010. There is a horizontal line at zero. The series begins in early 2001 at about -3 and then generally decreases to about -8 by mid-2001. It then generally increases to about 7 by mid- 2002 and then generally decreases to about -2.5 by late 2002 . By early 2005 it has generally increased to about 8 and by mid-2005 it has generally decreased to about -4 . It then generally increases to about 12 by late 2005 and then generally decreases to about -1 by late 2006. By early 2007 it has generally increased to about 7.5 and by early 2009 it has generally decreased to about -22 . It then generally increases to about 12.5 by early 2010 and then generally decreases to about 2 by September 2010.

Source: Federal Reserve Board, G. 17 Statistical Release, "Industrial Production and Capacity Utilization."
Figure: Production of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2001 to 2010. The series begins in 2001 at about 10.7 and generally increases to about 13.2 by 2003 . It then generally decreases to about 3.6 by the end of 2008 and then generally increases to about 8 by September 2010. There are also two "Schedules" data points on the graph. The first is in 2001:Q4 at about 3.9 and the second is in 2010:Q4 at about 7.8.

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

## Recent Nonfinancial Developments (2)

## Figure: Real PCE Goods ex. Motor Vehicles

Line chart, by billions of chained (2005) dollars, 2001 to 2010. The series begins in 2001 at about 2250 and generally increases to about 2925 by 2007 . It then generally decreases to about 2775 by late 2008 and then generally increases to about 2975 by September 2010.

Note: Figures for July, August, and September are staff estimates based on available source data.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis

Figure: Sales of Light Motor Vehicles

Line chart, by millions of units, annual rate, 2001 to 2010. The series begins in early 2001 at about 17.5 and generally decreases to about 16 by mid-2001. Within a month or so it increases to about 21.7 and then decreases to about 15.7 by late 2001. From late 2001 to early 2005 it fluctuates between about 15.2 and 18.2 . It then generally increases to about 20.5 by mid-2005 and then decreases to about 14.5 by late 2005. By early 2006 it has generally increased to about 18 and by early 2009 it has generally decreased to about 9.1. It then generally increases to about 14 by mid-2009 and within a month or so decreases to about 8.8 . By September 2010 it has generally increased to about 11.8.

Source: Ward's Auto Infobank.

Line chart, thousands of units, annual rate, 2001 to 2010. There are two series, Starts and Adjusted permits. Starts begins in 2001 at about 1300 and generally increases to about 1830 by 2006. It then generally decreases to about 370 by 2009 and then generally increases to about 590 by early 2010 . By September 2010 it has generally decreased to about 455. Adjusted permits begins in 2001 at about 1300 and generally increases to about 1870 by 2005 . It then generally decreases to about 365 by 2009 and then generally increases to about 590 by early 2010. By September 2010 it has generally decreased to 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, by thousands of units, annual rate, 2001 to 2010. There are two series, New and Existing. New begins in 2001 at about 980 and generally increases to about 1400 by 2005. It then generally decreases to about 300 by September 2010. Existing begins in 2001 at about 4550 and generally increases to about 6350 by 2005. It then generally decreases to about 4000 by late 2008 and then generally increases to about 5750 by late 2009. By September 2010 it has generally decreased to about 4000.

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

## Figure: Nondefense Capital Goods Excluding Aircraft

Line chart, by billions of dollars, 2001 to 2010. There are two series, Orders and Shipments. Orders begins in 2001 at about 62.3 and generally decreases to about 46 by early 2002. It then generally increases to about 71.5 by late 2007 and then generally decreases to about 47.7 by 2009 . By September 2010 it has generally increased to about 62.5 . Shipments begins in 2001 at about 62.3 and generally decreases to about 49 by early 2003 . It then generally increases to about 67.5 by mid2008 and then generally decreases to about 53 by 2009. By September 2010 it has generally increased to about 61.

Source: U.S. Census Bureau.

## Figure: Nonresidential Construction Put in Place

Line chart, by billions of chained (2005) dollars, 2001 to 2010. The series begins in 2001 at about 275 and generally decreases to about 220 by late 2002 . It then generally increases to about 410 by late 2007 . From late 2007 to late 2008 it fluctuates between about 400 and 415 . It then generally decreases to about 260 by August 2010.

Source: U.S. Census Bureau.

## Recent Nonfinancial Developments (3)

Figure: Inventory Ratios ex. Motor Vehicles

Line chart, by months, 2001 to 2010. There are two series, Staff flow-of-goods system and Census book-value data. Staff flow-of-goods system begins in 2001 at about 1.68 and generally decreases to about 1.43 by late 2007. It then generally increases to about 1.58 by early 2009 and then generally decreases to about 1.48 by September 2010. Census book-value data begins in 2001 at about 1.39 and generally decreases to about 1.18 by 2005 . It then generally increases to about 1.25 by 2006 and then generally decreases to about 1.19 by 2008. By early 2009 it has generally increased to about 1.4 and by August 2010 it has generally decreased to about 1.21.

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

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

## Figure: Defense Spending

Line chart, by billions of chained (2005) dollars, 2001 to 2010. There are two series, "Unified" in which the data are monthly and "NIPA" in which the data are quarterly. Unified begins in 2001 at about 385 and generally increases to about 555 by 2004 . From 2004 to early 2007 it fluctuates between about 460 and 575 . It then generally increases to about 625 by August 2010. NIPA begins in 2001 at about 390 and generally increases to about 520 by 2004 . From 2004 to early 2007 it fluctuates between about 505 and 540. It then generally increases to about 640 by 2010:Q2.

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

## Figure: Trade Balance

Line chart, by billions of dollars, 2001 to 2010. The series begins in early 2001 at about -35 and generally increases to about -26 by late 2001 . It then generally decreases to about -68 by 2005 and then generally increases to about -56 by 2007. By 2008 it has generally decreased to about -68 and by 2009 it has generally increased to about -24. It then generally decreases to about -46 by August 2010.

Figure: Exports and Non-Oil Imports

Line chart, by billions of dollars, 2001 to 2010. There are two series, Non-oil imports and Exports. Non-oil imports begins in early 2001 at about 115 and generally decreases to about 97 by late 2001. It then generally increases to about 182 by 2008 and then generally decreases to about 132 by 2009 . By August 2010 it has generally increased to about 172. Exports begins in early 2001 at about 89 and generally decreases to about 77 by late 2001. It then generally increases to about 167 by 2008 and then generally decreases to about 123 by 2009. By August 2010 it has generally increased to about 155.

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

Line chart, by percent, 2001 to 2010. There is a horizontal line at zero. There are two series, 12 -month change and 3 -month change. 12-month change begins in 2001 at about 2.5 and generally decreases to about 0.7 by early 2002. It then generally increases to about 4 by 2005 and then generally decreases to about 1.5 by 2006 . By 2008 it has generally increased to about 4.5 and by 2009 it has generally decreased to about -1 . It then generally increases to about 1.5 by September 2010 . $3-$ month change begins in early 2001 at about 2 and generally decreases to about -2.1 by late 2001. It then generally increases to about 4 by early 2002 . From early 2002 to mid-2005 it fluctuates between about -1.2 and 4.1. It then generally increases to about 8.7 within a month or so and then generally decreases to about -1.5 by late 2006. By mid-2008 it has generally increased to about 7 and by late 2008 it has generally decreased to about -9 . It then generally increases to about 4 by 2009 and then generally decreases to about -1 by June 2010. By September 2010 it has generally increased to about 2.1.

Note: 3-month changes are at an annual rate. The September 2010 values are staff estimates.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.
Figure: PCE Prices ex. Food and Energy

Line chart, by percent, 2001 to 2010. There is a horizontal line at zero. There are two series, 12-month change and 3 -month change. 12-month change begins in early 2001 at about 1.8 and generally decreases to about 1 by late 2001. It then generally increases to about 2.7 by 2002 and then generally decreases to about 1.3 by 2003. By early 2008 it has generally increased to about 2.7 and by late 2008 it has generally decreased to about 1.25 . It then generally increases to about 1.75 by early 2010 and then generally decreases to about 1.25 by September 2010. 3-month change begins in early 2001 at about 2.45 and generally decreases to about -1.1 by late 2001. Within a month or so it generally increases to about 4 and then generally decreases to about 0.75 by early 2003 . It then generally increases to about 3.5 by 2005. From 2005 to mid-2008 it fluctuates between about 1 and 3.5. It then generally decreases to about 0.1 by 2008 and then generally increases to about 2.6 by 2009. By September 2010 it has generally decreased to about 0.9.

Note: 3-month changes are at an annual rate. The September 2010 values are staff estimates
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

Projections of Real GDP and Related Components
(Percent change at annual rate from end of preceding period except as noted)

| Measure | 2010 |  |  | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 | H1 | H2 |  |  |
| Real GDP | . 2 | 2.7 | 2.0 | 3.6 | 4.7 |
| Previous Tealbook | . 2 | 2.7 | 2.0 | 3.3 | 4.4 |
| Final sales | -. 3 | 1.0 | 2.0 | 3.8 | 4.6 |
| Previous Tealbook | -. 3 | 1.0 | 2.0 | 3.4 | 4.3 |
| Personal consumption expenditures | . 2 | 2.0 | 2.4 | 3.1 | 4.4 |
| Previous Tealbook | . 2 | 1.9 | 2.1 | 3.0 | 4.2 |
| Residential investment | -13.4 | 5.0 | -18.2 | 21.5 | 17.0 |
| Previous Tealbook | -13.4 | 5.3 | -13.2 | 19.2 | 17.5 |
| Nonresidential structures | -26.5 | -9.5 | -3.8 | -3.0 | . 0 |
| Previous Tealbook | -26.5 | -10.5 | -1.6 | -2.0 | -. 7 |
| Equipment and software | -4.9 | 22.6 | 7.6 | 10.1 | 11.6 |
| Previous Tealbook | -4.9 | 23.4 | 2.1 | 10.5 | 11.0 |
| Federal purchases | 3.6 | 5.4 | 4.0 | 1.0 | . 2 |
| Previous Tealbook | 3.6 | 5.4 | 4.0 | 1.1 | . 2 |
| State and local puchases | -1.0 | -1.6 | -. 6 | . 4 | 1.3 |
| Previous Tealbook | -1.0 | -1.6 | -. 6 | . 4 | 1.3 |


| Exports | -.1 | 10.2 | 7.5 | 8.6 | 8.3 |
| :---: | ---: | ---: | ---: | ---: | ---: |
| Previous Tealbook | -.1 | 10.3 | 9.6 | 7.6 | 7.5 |
| Imports | -7.2 | 21.8 | 5.5 | 4.7 | 6.7 |
| Previous Tealbook | -7.2 | 21.5 | 4.1 | 5.7 | 6.3 |
|  | Contributions to change in real GDP |  |  |  |  |
|  | (percentage points) |  |  |  |  |
| Inventory change | .5 | 1.7 | .1 | -.1 | .2 |
| Previous Tealbook | .5 | 1.7 | .0 | .0 | .1 |
| Net exports | 1.2 | -1.9 | .0 | .3 | .0 |
| Previous Tealbook | 1.2 | -1.9 | .5 | .0 | -.1 |

## Figure: Real GDP

Line chart, by 4-quarter percent change, 1981 to 2012. Light blue shading represents the projection period, which begins in 2010:Q3. There are two series, Current and Previous Tealbook. Current begins in early 1981 at about 1.5 and increases to about 4.6 by 1981. It then generally decreases to about -3 by 1982 . By 1984 it has generally increased to about 8.5 and by 1991 it has generally decreased to about -1.2 . It then generally increases to about 4.5 by late 1992 . From late 1992 to early 2000 it fluctuates between about 2 and 5.5. It then generally decreases to about 0.2 by 2001 and then generally increases to about 4 by 2004 . By 2009 it has generally decreased to about -4.3 and by late 2012 it has generally increased to about 4.7. Previous Tealbook follows the Current series exactly until 2011 and then generally increases to about 4.25 by late 2012.

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

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

## Components of Final Demand

## Figure: Personal Consumption Expenditures

Line chart, by 4-quarter percent change, 2007 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 2.75 and generally decreases to about -2.3 by 2009:Q2. By 2012:Q4 it has generally increased to about 4.4. Previous Tealbook begins in 2007:Q1 at about 2.75 and generally decreases to about -2.3 by 2009:Q2. It then increases to about 4.2 by 2012:Q4.

## Figure: Residential Investment

Line chart, by 4-quarter percent change, 2007 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about -18.5 and generally decreases to about -28 by 2009:Q2. It then generally increases to about 5 by 2010:Q2 and then generally decreases to about -7.5 by 2010:Q4. By 2012:Q1 it has generally increased to about 22.5 and by 2012:Q4 it has generally decreased to about 16.5 . Previous Tealbook begins in 2007:Q1 at about -18.5 and generally decreases to about -28 by 2009:Q2. It then generally increases to about 5 by 2010:Q2 and then generally decreases to about -5.5 by 2010:Q3. By 2012:Q1 it has generally increased to about 21 and by 2012:Q4 it has generally decreased to about 16.7.

## Figure: Equipment and Software

Line chart, by 4-quarter percent change, 2007 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 2007:Q1 at about 3 and generally increases to about 4.8 by 2007:Q4. It then generally decreases to about -20.3 by 2009:Q1. By 2010:Q2 it has generally increased to about 17.5 and by 2011:Q2 it has generally decreased to about 9. It then generally increases to about 11.5 by 2012:Q4. Previous Tealbook begins in 2007:Q1 at about 3 and generally increases to about 4.8 by 2007:Q4 and then generally decreases to about -20.3 by 2009:Q1. By 2010:Q2 it has generally increased to about 15.5 and by 2011:Q2 it has generally decreased to about 5.5. It then generally increases to about 11 by 2012:Q4

## Figure: Nonresidential Structures

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

## Figure: Government Consumption \& Investment

Line chart, by 4-quarter percent change, 2007 to 2012. There are two series, Current and Previous Tealbook. Current begins in $2007: Q 1$ at about 0.4 and generally increases to about 3.1 by 2008:Q4. By 2010:Q3 it has generally decreased to about 0.55 . It then generally increases to about 1.8 by 2011:Q1 and then generally decreases to about 0.6 by 2011:Q4. By 2012:Q4 it has generally increased to about 0.9 . Previous Tealbook begins in 2007:Q1 at about 0.4 and generally increases to about 3.1 by 2008:Q4. By 2010:Q3 it has generally decreased to about 0.4. It then generally increases to about 1.8 by 2011:Q1 and then generally decreases to about

## Figure: Exports and Imports

Line chart, by 4-quarter percent change, 2007 to 2012. There is a horizontal line at zero. There are four series, Exports Current Tealbook, Imports Current Tealbook, Exports Previous Tealbook and Imports Previous Tealbook. Exports Current Tealbook begins in 2007:Q1 at about 8 and generally increases to about 12 by $2008:$ Q2. It then generally decreases to about -15 by 2009:Q2 and then generally increases to about 14 by 2010:Q2. By 2012:Q4 it has generally decreased to about 8 . Exports Previous Tealbook begins in 2007:Q1 at about 8 and generally increases to about 12 by 2008:Q2. It then generally decreases to about -15 by $2009: Q 2$ and then generally increases to about 14 by 2010:Q2. By 2012:Q4 it has generally decreased to about 7.5. Imports Current Tealbook begins in 2007:Q1 at about 3.5 and generally decreases to about -18.5 by 2009:Q2. It then generally increases to about 17.5 by 2010:Q2 and then generally decreases to about 2.5 by 2011:Q3. By 2012:Q4 it has generally increased to about 7. Imports Previous Tealbook begins in 2007:Q1 at about 3.5 and generally decreases to about -18.5 by 2009:Q2. It then generally increases to about 17.5 by 2010:Q2 and then generally decreases to about 4 by 2011:Q3. By 2012:Q4 it has generally increased to about 7 .

Note: Shading represents the projection period, which begins in 2010:Q3.

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

## Aspects of the Medium-Term Projection

## Figure: Personal Saving Rate

Line chart, by percent, 1990 to 2012. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 6.4 and generally increases to about 7.7 by 1992. It then generally decreases to about 1.1 by 2005 and then generally increases to about 7.2 by 2009. By 2012 it has generally decreased to about 5 . Previous Tealbook begins in 1990 at about 6.4 and generally increases to about 7.7 by 1992. It then generally decreases to about 1.1 by 2005 and then generally increases to about 7.2 by 2009. By 2012 it has generally decreased to about 5.2.

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

## Figure: Wealth-to-Income Ratio

Line chart, by ratio, 1990 to 2012. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 4.85 . From 1990 to 1995 it fluctuates between about 4.65 and 4.9. It then generally increases to about 6.15 by 1999 and then generally decreases to about 5.0 by 2002 . By 2005 it has generally increased to about 6.4 and by 2009 it has generally decreased to about 4.45. It then generally increases to about 4.97 by the end of 2012. The Previous Tealbook series follows the Current series almost exactly.

Note: Household net worth as a ratio to disposable personal income.
Source: Flow of Funds Accounts.

## Figure: Single-Family Housing Starts

Line chart, by millions of units, 1990 to 2012. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 1.05 and generally decreases to about 0.7 by 1991. It then generally increases to about 1.75 by 2006 and then generally decreases to about 0.35 by 2009 . By then end of 2012 it has generally increased to about 1.00. Previous Tealbook follows Current almost exactly.

Source: U.S. Census Bureau.

## Figure: Equipment and Software Spending

Line chart, by share of nominal GDP, 1990 to 2012. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 7.4 and generally decreases to about 6.7 by 1992. It then generally increases to about 9.6 by 2000 and then generally decreases to about 7.5 by 2004 . By 2006 it has generally increased to about 8.1 and by 2009 it has generally decreased to about 6.45 . It then generally increases to about 7.85 by the end of 2012 . Previous Tealbook begins in 1990 at about 7.4 and generally decreases to about 6.7 by 1992. It then generally increases to about 9.6 by 2000 and then generally decreases to about 7.5 by 2004. By 2006 it has generally increased to about 8.1 and by 2009 it has generally decreased to about 6.45 . It then generally increases to about 7.6 by the end of 2012

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

## Figure: Federal Surplus/Deficit

Line chart, by share of nominal GDP, 1990 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about -3.1 and generally decreases to about -5.4 by 1992. It then generally increases to about 2.5 by 2000 and then generally decreases to about -3.7 by 2004 . By 2007 it has generally increased to about -1 and by 2009 it has generally decreased to about -10.5 . It has generally increased to about -6.3 by the end of 2012 .
Previous Tealbook follows Current almost exactly.

## Figure: Current Account Surplus/Deficit

Line chart, by share of nominal GDP, 1990 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about -1.6 and generally increases to about 0.8 by 1991. It then generally decreases to about -6.7 by 2005 and then generally increases to about -2.25 by 2009 . By 2011 it has generally decreased to about -3.2 and by the end of 2012 it has generally increased to about -2.75 . Previous Tealbook follows Current almost exactly.

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

Note: Light blue shading represents the projection period, which begins in 2010:Q3. The gray shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research: July 1990-March 1991, March 2001-November 2001, and December 2007-June 2009.

## Decomposition of Potential GDP

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

| Measure | 1974-1995 | 1996-2000 | 2001-2008 | 2009 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Potential GDP | 3.0 | 3.5 | 2.7 | 2.2 | 2.5 | 2.5 | 2.6 |
| Previous Tealbook | 3.0 | 3.5 | 2.7 | 2.2 | 2.5 | 2.5 | 2.5 |
| Selected contributions ${ }^{1}$ |  |  |  |  |  |  |  |
| Structural labor productivity | 1.5 | 2.7 | 2.5 | 2.3 | 2.0 | 2.0 | 2.2 |
| Previous Tealbook | 1.5 | 2.7 | 2.5 | 2.3 | 2.0 | 2.0 | 2.1 |
| Capital deepening | . 7 | 1.5 | . 7 | . 3 | . 4 | . 6 | . 9 |
| Previous Tealbook | . 7 | 1.5 | . 7 | . 3 | . 4 | . 6 | . 8 |
| Multifactor productivity | . 5 | . 9 | 1.6 | 1.9 | 1.5 | 1.3 | 1.2 |
| Previous Tealbook | . 5 | . 9 | 1.4 | 1.9 | 1.5 | 1.3 | 1.2 |
| Trend hours | 1.7 | 1.1 | . 8 | . 0 | . 7 | . 7 | . 7 |
| Previous Tealbook | 1.7 | 1.1 | . 8 | . 1 | . 7 | . 7 | . 7 |
| Labor force participation | . 5 | . 0 | -. 2 | -. 2 | -. 2 | -. 2 | -. 2 |
| Previous Tealbook | . 5 | . 0 | -. 2 | -. 2 | -. 2 | -. 2 | -. 2 |

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

1. Percentage points. Return to table

Source: Staff assumptions.

## Figure: Nonfarm Business Productivity

Line chart, by chained (2005) dollars per hour, 2001 to 2012. There is a shaded bar from 2010:Q3 to 2012:Q4 that represents the forecast period. There are two series, Nonfarm business productivity and Structural productivity. Nonfarm business productivity begins in 2001:Q1 at about 43.7 and generally increases to about 58 by 2012:Q4. Structural productivity begins in 2001:Q1 at about 44 and increases to about 58 by 2012:Q4.

## Figure: Labor Force Participation Rate

Line chart, by percent, 2001 to 2012. There is a shaded bar from 2010:Q4 to 2012:Q4 that represents the forecast period. There are two series, Labor Force Participation Rate and Trend. Labor Force Participation Rate begins in 2001:Q1 at about 67.2 and generally decreases to about 65.95 by 2005:Q1. It then generally increases to about 66.3 by 2007:Q1 and then generally decreases to about 64.6 by 2010:Q3. By 2012:Q4 it has generally increased to about 64.7 . Trend begins in 2001:Q1 at about 66.7 and generally decreases to about 65.3 by 2012:Q4.

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

## The Outlook for the Labor Market

| Measure | 2009 | 2010 | 2011 | 2012 |
| :---: | ---: | ---: | ---: | ---: |
| Output per hour, nonfarm business | 6.2 | 1.5 | 1.5 | 2.0 |
| Previous Tealbook | 6.2 | 1.3 | 1.6 | 2.0 |
| Nonfarm private employment | -4.7 | .9 | 2.3 | 3.1 |
| Previous Tealbook | -4.7 | .9 | 2.1 | 2.9 |
| Labor force participation rate | 64.9 | 64.7 | 64.7 | 64.8 |
| Previous Tealbook | 64.9 | 64.7 | 64.7 | 64.6 |
| Civilian unemployment rate ${ }^{1}$ | 10.0 | 9.7 | 9.0 | 7.9 |
| Previous Tealbook | 10.0 | 9.7 | 9.1 | 8.0 |
| MEMO |  |  |  |  |
| GDP gap² | -6.7 | -6.8 | -5.8 | -3.8 |
| Previous Tealbook | -7.1 | -7.2 | -6.4 | -4.7 |

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, by thousands, 1990 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 200 and generally decreases to about -220 by 1991. It then generally increases to about 320 by 1994. From 1994 to 1999 it fluctuates between about 100 and 320 . It then generally decreases to about -310 by 2001 and then generally increases to about 320 by 2006 . By 2009 it has generally decreased to about -790 and by the end of 2012 it has generally increased to about 320. Previous Tealbook follows Current exactly until 2010 when it begins increasing at a slower pace. It has increased to about 280 by the end of 2012.

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

## Figure: Unemployment Rate

Line chart, by percent, 1990 to 2012. There are six series, Current Tealbook, Previous Tealbook, Current NAIRU, Previous NAIRU, Current NAIRU with EEB adjustment and Previous NAIRU with EEB adjustment. Current Tealbook begins in 1990 at about 5.25 and generally increases to about 7.7 by 1992 . It then generally decreases to about 4 by 2000 and then generally increases to about 6.2 by 2003 . By 2007 it has generally decreased to about 4.5 and by 2009 it has generally increased to about 10. It then generally decreases to about 7.9 by the end of 2012. Previous Tealbook follows Current Tealbook exactly until 2010 when it begins decreasing at a slower pace. By the end of 2012 it has decreased to about 8.1. Current NAIRU begins in 1990 at about 5.7 and generally decreases to about 5.0 by 2008. It then generally increases to about 6 by 2009 and remains constant here until the end of 2012. Previous NAIRU begins in 1990 at about 5.7 and generally decreases to about 4.8 by 2008. It then generally increases to about 5.8 by 2009 and remains constant here until the end of 2012. Current NAIRU with EEB adjustment begins in 1990 at about 5.7. It then generally decreases to about 5 by 2008 and then generally increases to about 6.8 by 2010 . By the end of 2012 it has generally decreased to about 6.05. Previous NAIRU with EEB adjustment begins in 1990 at about 5.7 and generally decreases to about 5.5 by 1991 . It then generally increases to about 6 by 1992 and then generally decreases to about 5 by 2001. By 2002 it increases to about 5.4 and by 2008 it has generally decreased to about 4.8 . It then generally increases to about 6.8 by 2010 and then generally decreases to about 5.95 by the end of 2012 .

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 assumption.
Figure: GDP Gap

Line chart, by percent, 1990 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 0.3 and generally decreases to about -3.8 by 1991. It then generally increases to about 3.8 by 2000 and then generally decreases to about -2.5 by 2003 . By 2006 it has generally increased to about 0.8 and by 2009 it has generally decreased to about -7.2 . It then generally increases to about -3.9 by the end of 2012 . Previous Tealbook begins in 1990 at about 0.3 and generally decreases to about -3.8 by 1991. It then generally increases to about 3.5 by 2000 and then generally decreases to about -2.8 by 2003. By 2006 it has generally increased to about 0.5 and by 2009 it has generally decreased to about -7.4 . It then generally increases to about -4.5 by the end of 2012.

Note: The GDP gap is the percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. The projection period begins in 2010 :Q3.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis; staff assumption.
Figure: Manufacturing Capacity Utilization Rate

Line chart, by percent, 1990 to 2012. There is a horizontal line at about 79 which represents the average rate from 1972 to 2009. There are two series, Current and Previous Tealbook. Current begins in 1990 at about 82.5 and generally decreases to about 77.5 by 1991. It then generally increases to about 84.5 by 1995 and then generally decreases to about 71 by 2001. By 2007 it has generally increased to about 80 and by 2009 it has generally decreased to about 65 . It then generally

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

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

## Inflation Projections

| (Percent change, Q4 to Q4) |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: |
| Measure | 2009 | 2010 | 2011 | 2012 |
| PCE chain-weighted price index | 1.5 | 1.3 | 1.1 | 1.1 |
| Previous Tealbook | 1.5 | 1.2 | 1.1 | 1.0 |
| Food and beverages | -1.6 | 1.3 | 1.0 | 1.1 |
| Previous Tealbook | -1.6 | 1.2 | .7 | .7 |
| Energy | 2.7 | 4.0 | 3.2 | 1.3 |
| Previous Tealbook | 2.7 | 1.4 | 4.4 | 1.8 |
| Excluding food and energy | 1.7 | 1.1 | 1.0 | 1.0 |
| Previous Tealbook | 1.7 | 1.1 | .9 | .9 |
| Prices of core goods imports $\underline{1}$ | -1.9 | 3.5 | 2.1 | 1.3 |
| Previous Tealbook | -1.9 | 2.7 | 1.2 | .9 |

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

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

Line chart, by 4-quarter percent change, 1990 to 2012. There is a horizontal line at zero. There are two series, Current and Previous Tealbook. Current begins in early 1990 at about 4.2 and generally increases to about 5.4 by late 1990. It then generally decreases to about 1 by 1998 and then generally increases to about 2.7 by 2000. By 2002 it has generally decreased to about 0.8 and by 2005 it has generally increased to about 3.3 . It then generally decreases to about 1.8 by 2006 and then generally increases to about 4.5 by 2008. By 2009 it has generally decreased to about -0.9 and by 2010 it has generally increased to about 2.5 . It then generally decreases to about 1.03 by the end of 2012. Previous Tealbook follows Current almost exactly until 2010 when it begins decreasing at a faster rate. By the end of 2012 it has generally decreased to about 0.98.

Note: Light blue shading represents the projection period, which begins in 2010:Q3.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

## Figure: PCE Prices ex. Food and Energy

Line chart, by 4-quarter percent change, 1990 to 2012. There 4 series, Current Tealbook, Previous Tealbook, and Current Market based and Previous Market based. Current Tealbook begins in early 1990 at about 3.8 and generally increases to about 4.6 by mid-1990. It then generally decreases to about 1.3 by 1998 and then generally increases to about 2.6 by 2008. By the end of 2012 it has generally decreased to about 1.01. Previous Tealbook follows Current Tealbook almost exactly until 2010 when it starts decreasing at a different rate. By the end of 2012 it has decreased to about 0.9. Current Market based begins in early 1990 at about 4.4 and generally increases to about 4.8 by mid-1990. It then generally decreases to about 0.9 by 1998 and then generally increases to about 1.9 by 2001 . By 2003 it has generally decreased to about 1.3 and by 2008 it has generally increased to about 2.6. It then generally decreases to about 0.9 by the end of 2012 . Previous Market based follows Current Market based almost exactly until 2010 when it starts declining at a faster rate. By the end of 2012 it has generally decreased to about 0.8.

Note: Light blue shading represents the projection period, which begins in 2010:Q3.
Source: U.S. Dept. of Commerce, Bureau of Economic Analysis.

## Figure: Compensation per Hour

Line chart, by 4-quarter percent change, 1990 to 2012. There is a horizontal line at zero. There are three series, Current Productivity and Costs, Previous Productivity and Costs, and Employment cost index. Current Productivity and Costs begins in early 1990 at about 4.4 and generally increases to about 7.25 by mid-1990. It then generally decreases to about 1 by 1995 and then generally increases to about 7 by 1998. By 1999 it has generally decreased to about 3 and by 2000 it has generally increased to about 8.8. It then generally decreases to about 2.5 by 2002 and then generally increases to about 5.9 by 2003 . By 2009 it has generally decreased to about -0.1 and by early 2010 it has generally increased to about 3.5. It then generally decreases to about 0.4 by mid- 2010 and then generally increases to about 2.05 by the end of 2012. Previous Productivity and Costs follows Current Productivity and Costs almost exactly until the end of 2011 . By the end of 2012 it has generally increased to about 2.00. Employment cost index begins in 1990 at about 5.1 and generally decreases to about 2.5 by 1995 . It then generally increases to about 4.7 by 2000 and then generally decreases to about 1.2 by 2009. By the end of 2012 it has generally increased to about 2.1.

## Figure: Long-Term Inflation Expectations

Line chart, by percent, 1990 to 2010. There are two series, Thomson Reuters/Michigan next 5 to 10 yrs. and SPF next 10 yrs. Thomson Reuters/Michigan begins in early 1990 at about 4 and generally increases to about 4.75 by mid-1990. It then generally decreases to about 2.65 by 1998 . From 1998 to early 2005 it fluctuates between about 2.5 and 3.25. From early 2005 to late 2007 it fluctuates between about 2.9 and 3.3 . It then generally increases to about 3.4 by 2008 and then generally decreases to about 2.7 by October 2010. SPF begins in early 1990 at about 3.99 and generally increases to about 4.2 by mid-1990. It then generally decreases to about 2.3 by early 1999 and then generally increases to about 2.5 by mid-1999. It remains relatively stable here at 2.5 until late 2009 and then generally decreases to about 2.3 by 2010:Q3.

Note: The Survey of Professional Forecasters (SPF) projection is for the CPI. The Thomson Reuters/Michigan October 2010 value is preliminary.
Source: Thomson Reuters/University of Michigan Surveys of Consumers; The Federal Reserve Bank of Philadelphia.

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

## The Long-Term Outlook

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

| Item | 2010 | 2011 | $\mathbf{2 0 1 2}$ | $\mathbf{2 0 1 3}$ | 2014 | 2015 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Real GDP | 2.4 | 3.6 | 4.7 | 4.7 | 4.6 | 3.5 |
| Civilian unemployment rate ${ }^{1}$ | 9.7 | 9.0 | 7.9 | 7.1 | 6.1 | 5.2 |
| PCE prices, total | 1.3 | 1.1 | 1.1 | 1.2 | 1.4 | 1.6 |
| Core PCE prices | 1.1 | 1.0 | 1.0 | 1.2 | 1.3 | 1.5 |
| Federal funds rate $^{1}$ | .1 | .1 | .5 | 1.7 | 2.8 | 3.7 |
| 10-year Treasury yield $^{1}$ | 2.7 | 3.6 | 4.2 | 4.5 | 4.6 | 4.7 |

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

## Figure: Real GDP

Line chart, by 4-quarter percent change, 2002 to 2015. There is a horizontal line at zero. There are two series, Real GDP and Potential GDP. Real GDP begins in 2002 at about 1.6 and generally increases to about 4.1 by 2004. It then generally decreases to about -4.1 by 2009 and then generally increases to about 4.75 by 2014 . By the end of 2015 it has decreased to about 3.5. Potential GDP begins in 2002 at about 3.55 and generally decreases to about 2.1 by late 2004 . It then generally increases to about 2.8 by the end of 2015.

## Figure: Unemployment Rate

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

## Figure: PCE Prices

Line chart, by 4-quarter percent change, 2002 to 2015 . There are two series, PCE prices excluding food and energy and Total PCE prices. PCE prices excluding food and energy begins in early 2002 at about 1.5 and generally increases to about 2 by mid-2002. It then generally decreases to about 1.4 by 2003 and then generally increases to about 2.6 by 2008. By 2009 it has generally decreased to about 1.4 and by 2010 it has generally increased to about 1.75 . It then generally decreases to about 1 by 2012 and generally increases to about 1.5 by the end of 2015 . Total PCE prices begins in 2002 at about 0.8 and generally increases to about 3.25 by 2005. It then generally decreases to about 1.9 by 2006 and then generally increases to about 4.3 by 2008. By 2009 it has generally decreased to about -0.75 and by 2010 it has generally increased to about 2.45 . It then generally decreases to about 1 by 2012 and generally increases to about 1.6 by the end of 2015 .

## Figure: Interest Rates

Line chart, by percent, 2002 to 2015 . There are three series, Federal funds rate, 10-year Treasury and BBB corporate. Federal funds rate begins in 2002 at about 1.75 and generally decreases to about 1 by 2003. It then generally increases to about 5.25 by 2006 and then generally decreases to about 0.13 by late 2009 . It remains relatively stable here until mid-2012. It then generally increases to about 3.7 by the end of 2015. 10-year Treasury begins in 2002 at about 5.4 and generally decreases to about 3.75 by 2003. It then generally increases to about 5.1 by 2006 and then generally decreases to about 2.6 by 2010 . By the end of 2015 it has generally increased to about 4.7. BBB corporate begins in 2002 at about 7.6 and generally decreases to about 5.4 by 2004 . It then generally increases to about 9.5 by

Note: In each panel, shading represents the projection period, which begins in 2010:Q3.

## Evolution of the Staff Forecast

## Figure: Change in Real GDP

Line chart, by percent, 2008 to 2010. Data are Q4 over Q4 and are plotted on the Tealbook publication dates. There is a horizontal line at zero. There are four series 2009, 2010, 2011 and 2012. 2009 begins on January 23, 2008 at about 2.1 and increases to about 3 by March 13, 2008. It then generally decreases to about -2.25 by March 12, 2009 and then generally increases to about 0.2 by October 27, 2010. 2010 begins on September 10, 2008 at about 2.75 and decreases to about 2.25 by October 22, 2008. It then increases to about 2.75 by January 22, 2009 and then decreases to about 1.5 by March 12, 2009. By January 20 , 2010 it has generally increased to about 3.5 and by October 27, 2010 it has generally decreased to about 2.3. 2011 begins on September 16, 2009 at about 4.5 and generally increases to about 4.75 by January 20, 2010. It then generally decreases to about 3.25 by September 15, 2010 and then generally increases to about 3.6 by October 27,2010 . 2012 begins on September 15, 2010 at about 4.25 and increases to about 4.75 by October 27, 2010.

## Figure: Unemployment Rate

Line chart, by percent, 2008 to 2010. Data are from the fourth quarter and are plotted on the Tealbook publication dates. There are four series, $2009,2010,2011$ and 2012. 2009 begins on January 23, 2008 at about 5.2 and generally increases to about 10 by October 29, 2009. It remains relatively stable here until October $27,2010$. 2010 begins on September 10, 2008 at about 5.8 and generally increases to about 9.5 by March 12, 2009. It then decreases to about 9 by April 22 , 2009 and then increases to about 9.7 by June 17, 2009. By September 16, 2009 it has decreased to about 9.2 and by December 9 , 2009 it has increased to about 9.6 . It then decreases to about 9.3 by April 21, 2010 and then increases to about 9.7 by October 27, 2010. 2011 begins on September 16, 2009 at about 7.9 and generally increases to about 9 by October 27, 2010. 2012 begins on September 15, 2010 at about 8.0 and generally decreases to about 7.9 by October $27,2010$.

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

Line chart, by percent 2008 to 2010. Data are Q4 over Q4 and are plotted on the Tealbook publication dates. There are four series, 2009, 2010,2011 and 2012.2009 begins on January 23, 2008 at about 1.9 and generally increases to about 2.2 by June 18, 2008. It then generally decreases to about 1 by March 12,2008 and then generally increases to about 1.4 by June 17, 2009. It remains constant here at 1.4 until October 29, 2009. It then increases to about 1.5 by December 9 , 2009 and remains constant here until June 16, 2010. By August 4, 2010 it has increased to about 1.7 and it remains here until October 27, 2010 . 2010 begins on September 10, 2008 at about 1.9 and generally decreases to about 0.5 by March 12, 2009. It then generally increases to about 1.2 by December 9 , 2009 and then generally decreases to about 0.75 by June 16, 2010. By August 4, 2010 it has generally increased to about 1.1 and it remains here until October 27, 2010. 2011 begins on September 16, 2009 at about 1 and generally increases to about 1.1 by December 9,2009 . It then generally decreases to about 0.75 by June 16,2010 and then increases to about 1 by October 27, 2010. 2012 begins on September 15, 2010 at about 0.9 and increases to about 1.0 by October $27,2010$.
 recent projections.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## November 2010 Tealbook Book A Tables and Charts ${ }^{\ddagger}$

## International Economic Developments and Outlook

## Recent Foreign Indicators

## Figure: Nominal Exports

Line chart, 2006 to 2010. Units are indexes, January $2006=100$. There is a horizontal line at 100 . There are three series, Foreign, AFE, and EME. Foreign begins in early 2006 at about 100 and generally increases to about 152 by mid-2008. It then generally decreases to about 98 by early 2009 and then generally increases to about 134.5 by late 2010. AFE begins in early 2006 at about 100 and generally increases to about 146 by mid-2008. It then generally decreases to about 91 by early 2009 and then generally increases to about 120 by late 2010. EME begins in early 2006 at about 100 and generally increases to about 158.5 by mid-2008. By early 2009 it has generally decreased to about 105.5 and by late 2010 it has generally increased to about 150.5

Note: EME excludes Venezuela.

## Figure: Industrial Production

Line chart, 2006 to 2010 . Units are indexes, January $2006=100$. There is a horizontal line at 100 . There are three series, Foreign, AFE and EME. Foreign begins in early 2006 at about 100 and generally increases to about 107 by early 2008. It then generally decreases to about 92 by early 2009 and then generally increases to about 103 by late 2010. AFE begins in early 2006 at about 100 and generally increases to about 101.5 by mid- 2007 . It then generally decreases to about 83.5 by early 2009 and then generally increases to about 91 by late 2010. EME begins in early 2006 at about 100 and generally increases to about 114 by early 2008 . It then generally decreases to about 100.2 by early 2009 and then generally increases to about 120.1 by late 2010 .

Note: AFE excludes Australia and Switzerland. EME excludes Chile.

## Figure: Retail Sales

Line chart, by 12 -month percent change, 2006 to 2010 . There is a horizontal line at zero. There are three series, Foreign, AFE and EME. Foreign begins in early 2006 at about 3.5 and generally increases to about 5.5 by mid-2007. It then generally decreases to about -2.7 by early 2009 and then generally increases to about 5.4 by early 2010. By late 2010 it has generally decreased to about 3. AFE begins in early 2006 at about 2.8 and generally increases to about 5 by the end of 2006 . It then generally decreases to about -4.5 by early 2009 and then generally increases to about 4.8 by early 2010. By late 2010 it has generally decreased to about 2.5 . EME begins in early 2006 at about 6.8 and generally decreases to about 4 within a month or so. It then generally increases to about 10 by early 2007 and then generally decreases to about 2.5 by early 2009. By early 2010 it has generally increased to about 10 and by late 2010 it has generally decreased to about 5 .

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

## Figure: Employment

Line chart, by 4-quarter percent change, 2006 to 2010. There is a horizontal line at zero. There are three series, Foreign, AFE and EME. Foreign begins in early 2006 at about 1.9. From early 2006 to mid-2007 it fluctuates between about 1.9 and 2.1. It then generally increases to about 2.3 by late 2007 and then generally decreases to about -1.1 by mid-2009. By mid-2010 it has generally increased to about 0.9 . AFE begins in early 2006 at about 1.4 and generally increases to about 1.9 by late 2007. It then generally decreases to about -1.9 by mid-2009 and then generally increases to about 0.55 by mid-2010. EME begins in early 2006 at about 2.7 and generally decreases to about 2.05 by mid-2007. It then generally increases to about 3 by late 2007 and then generally decreases to about -0.1 by mid-2009. By mid2010 it has generally increased to about 1.7.

Figure: Consumer Prices: Advanced Foreign Economies

Line chart, by 12 -month percent change, 2006 to 2010 . There is a horizontal line at zero. There are two series, Headline and Core. Headline begins in early 2006 at about 2.03 and generally decreases to about 1.05 by late 2006. It then generally increases to about 3.5 by mid-2008 and then generally decreases to about -1 by mid2009. By mid-2010 it has generally increased to about 1.25 . Core begins in early 2006 at about 0.92 and generally increases to about 1.5 by mid- 2007 . It then generally decreases to about 0.9 by early 2008 and then generally increases to about 1.3 by late 2008. By mid-2010 it has generally decreased to about 0.75 .

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

Figure: Consumer Prices: Emerging Market Economies

Line chart, by 12-month percent change, 2006 to 2010. There is a horizontal line at zero. There are three series, Headline, Excluding food - East Asia and Excluding food - Latin America. Headline begins in early 2006 at about 3.2 and then generally decreases to about 2.25 by mid-2006. It then generally increases to about 7 by mid-2008 and then generally decreases to about 0.25 by mid-2009. By late 2010 it has generally increased to about 3.25 . Excluding food - East Asia begins in early

2006 at about 2.25 and generally decreases to about 1.5 by early 2007. It then generally increases to about 4.2 by mid- 2008 and then generally decreases to about -2.2 by mid-2009. By late 2010 it has generally increased to about 1.9. Excluding food - Latin America begins in early 2006 at about 4.25 and generally decreases to about 3.2 by early 2007. It then generally increases to about 5.5 by late 2008 and then generally decreases to about 3.9 by late 2009 . By late 2010 it has generally increased to about 4.75.

## 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

Line chart, by percent change, 2007 to 2012. Data are annual rates. There is a horizontal line at zero. The period from 2010:Q3 to 2012:Q4 is shaded to indicate forecast data. There are two series, Total Foreign Current Tealbook and Total Foreign Previous Tealbook. Total Foreign Current Tealbook begins in early 2007 at about 5 and generally decreases to about -10 by early 2009. It then generally increases to about 6 by early 2010 and then generally decreases to about 2.5 by late 2010. By late 2012 it has generally increased to about 4. Total Foreign Previous Tealbook follows Current Tealbook almost exactly.

There is a second line chart, by percent change, 2007 to 2012. Data are annual rates. There is a horizontal line at zero. The period from 2010:Q3 to $2012: Q 4$ is shaded to indicate forecast data. There are four series, Advanced Foreign Economies Current Tealbook, Advanced Foreign Economies Previous Tealbook, Emerging Market Economies Current Tealbook and Emerging Market Economies Previous Tealbook. Advanced Foreign Economies Current Tealbook begins in early 2007 at about 3.5 and generally decreases to about -9 by early 2009. It then generally increases to about 4 by early 2010 and then generally decreases to about 2 by late 2010. By late 2012 it has generally increased to about 2.5. Advanced Foreign Economies Previous Tealbook follows Advanced Foreign Economies Current Tealbook almost exactly. Emerging Market Economies Current Tealbook begins in early 2007 at about 7.5 and generally decreases to about 5 by mid-2007. It then generally increases to about 7 by early 2008 and then generally decreases to about -11 by early 2009. By mid-2009 it has generally increased to about 9 and by early 2010 it has generally decreased to about 6 . It then generally increases to about 10 by mid- 2010 and then generally decreases to about 2.5 within a few months. By late 2012 it has generally increased to about 5. Emerging Market Economies Previous Tealbook follows Emerging Market Economies Current Tealbook almost exactly.

## Figure: Consumer Prices

Line chart, by percent change, 2007 to 2012. Data are annual rates. There is a horizontal line at zero. The period from 2010:Q3 to 2012:Q4 is shaded to indicate forecast data. There are two series, Total Foreign Current Tealbook and Total Foreign Previous Tealbook. Total Foreign Current Tealbook begins in early 2007 at about 3.2 and generally increases to about 5.3 by early 2008. It then generally decreases to about -0.8 by early 2009 and then generally increases to about 3.5 by early 2010. By mid-2010 it has generally decreased to about 1.3 and by late 2010 it has generally increased to about 2.5 . It then generally decreases to about 2.3 by late 2012. Previous Tealbook begins in early 2007 at about 3.2 and generally increases to about 5.3 by early 2008. It then generally decreases to about -0.8 by early 2009 and then generally increases to about 3.5 by early 2010. By mid-2010 it has generally decreased to about 1.3 and by late 2012 it has generally increased to about 2.3.

There is a second line chart, by percent change, 2007 to 2012. Data are annual rates. There is a horizontal line at zero. The period from $2010: Q 3$ to $2012: Q 4$ is shaded to indicate forecast data. There are four series, Advanced Foreign Economies Current Tealbook, Advanced Foreign Economies Previous Tealbook, Emerging Market Economies Current Tealbook and Emerging Market Economies Previous Tealbook. Advanced Foreign Economies Current Tealbook begins in early 2007 at about 2.5 and generally decreases to about 0.6 by mid-2007. It then generally increases to about 3.8 by late 2007 and then generally decreases to about 2.8 by early 2008. By mid-2008 it generally increases to about 3.8 and by late 2008 it generally decreases to about -1.9 . It then generally increases to about 2.2 by late 2009 and
then generally decreases to about 0.1 by mid-2010. By late 2012 it has generally increased to about 1.4. Advanced Foreign Economies Previous Tealbook follows Advanced Foreign Economies Current Tealbook almost exactly. Emerging Market Economies Current Tealbook begins in early 2007 at about 3.8 and generally increases to about 7.8 by early 2008. It then generally decreases to about 0.1 by early 2009 and then generally increases to about 4.7 by early 2010 . By mid- 2010 it has generally decreased to about 2.5 and by late 2010 it has generally increased to about 3.6. It then generally decreases to about 3.1 by late 2012 . Emerging Market Economies Previous Tealbook begins in early 2007 at about 3.8 and generally increases to about 7.8 by early 2008 . It then generally decreases to about 0.1 by early 2009 and then generally increases to about 4.7 by early 2010. By mid-2010 it has generally decreased to about 2.5 and by late 2012 it has generally increased to about 3.1.

## [Box:] Recent Developments in Cross-Border Direct Investment

## Figure: Direct Investment Flows

Line chart, by billions of dollars, 2006 to 2010. Data are annual rates. There are two series, DI outflow and DI inflow. DI outflow begins in 2006:Q1 at about 230 and generally decreases to about 120 by 2006:Q2. It then generally increases to about 410 by 2007:Q1 and then generally decreases to about 290 by 2007:Q3. By 2007:Q4 it has generally increased to about 620 and by 2008:Q3 it has generally decreased to about 220 . It then generally increases to about 450 by $2008: Q 4$ and then generally decreases to about 175 by 2009:Q1. By 2010:Q1 it has generally increased to about 425 and by 2010:Q2 it has generally decreased to about 320 . DI inflow begins in 2006:Q1 at about 180. From 2006:Q1 to 2007:Q1 it generally increases but fluctuates between about 180 and 320 . From 2007:Q1 to 2008:Q4 it generally increases but fluctuates between about 180 and 390. It then generally decreases to about 0 by 2009:Q1 and then generally increases to about 240 by 2009:Q3. By 2010:Q2 it has generally decreased to about 100.
 shaded region between DI inflow and DI outflow when DI inflow is greater than DI outflow.

Source: Bureau of Economic Analysis.

## Figure: Composition of Direct Investment Outflows

Line chart, 2006 to 2010. There is a horizontal line at zero. There are three series, Reinvested earnings measured in billions of dollars (annual rate), Equity measured in billions of dollars (annual rate), and Share of earnings reinvested measured by share. Reinvested earnings is a shaded area that begins in 2006:Q1 between about 30 and 240. It then decreases to between about 0 and 150 by 2006:Q2 and then increases to between about 175 and 410 by 2007:Q2. By 2007:Q4 it has generally decreased to between about 60 and 310 and by 2008:Q1 it has generally increased to between about 370 and 600 . It then generally decreases to between about 0 and 260 by 2008:Q4 and then generally increases to between about 240 and 420 by 2009:Q1. By 2009:Q2 it has generally decreased to between about 0 and 200 and by 2010:Q2 it has generally increased to between about 90 and 410. By the end of 2010:Q2 it has decreased to between about 40 and 320 . Equity is a shaded area that begins in 2006:Q1 between about 0 and 30. It then decreases to between about -70 and 0 by 2006:Q2 and then increases to between about 0 and 175 by 2007:Q2. By 2007:Q4 it has generally decreased to between about 0 and 60 and by 2008:Q1 it has generally increased to between about 0 and 370 . It then generally decreases to between about -40 and 0 by 2008:Q4 and then generally increases to between about 0 and 240 by 2009:Q1. By 2009:Q2 it has generally decreased to between about 0 and 0 and by 2010:Q2 it has generally increased to between about 0 and 90 . By the end of 2010:Q2 it has decreased to between about 0 and 40 . Share of earnings reinvested begins in 2006:Q1 at about 0.66 and generally increases to about 0.72 by 2006:Q4. It then fluctuates but generally decreases to about 0.55 by 2008:Q2 and then fluctuates but generally increases to about 0.79 by early 2010:Q2. By late 2010:Q2 it has generally decreased to about 0.7 .

Note: Equity contains a small amount of intercompany debt flows.
Source: Bureau of Economic Analysis.

## Evolution of Staff's International Forecast

## Figure: Total Foreign GDP

Line chart, by percent change, Q4 over Q4, January 23, 2008 to October 27, 2010. The x-axis is Tealbook publication dates. There is a horizontal line at zero. There are four series, 2009, 2010, 2011 and 2012. 2009 begins on January 23, 2008 at about 3.3 and generally increases to about 3.7 by March 13 , 2008. It then generally decreases to about -2.2 by March 12, 2009 and then generally increases to about 0.4 by October 27, 2010. 2010 begins on September 10, 2008 at about 3.7 and generally decreases to about 2.2 by March 12, 2009. It then generally increases to about 3.9 by October 27, 2010. 2011 begins on September 16 , 2009 at about 4 and remains relatively stable here until January 20, 2010. It then generally decreases to about 3.1 by October 27, 2010. 2012 begins on September 15 , 2010 at about 3.5 and generally increases to about 3.7 by October 27, 2010.

## Figure: Total Foreign CPI

Line chart, by percent change, Q4 over Q4, January 23, 2008 to October 27, 2010. The x-axis is Tealbook publication dates. There is a horizontal line at zero. There are four series, 2009, 2010, 2011 and 2012. 2009 begins on January 23, 2008 at about 2.4 and generally increases to about 2.75 by July 30 , 2008 . It then generally decreases to about 0.6 by March 12, 2009 and then generally increases to about 1.1 by June 17, 2009. By August 6 , 2009 it has generally decreased to about 0.9 and by October 27, 2010 it has generally increased to about 1.15. 2010 begins on September 10, 2008 at about 2.35 and generally decreases to about 1.6 by March 12 , 2009. It then generally increases to about 2.6 by April 21, 2010 and then generally decreases to about 2.1 by August 4, 2010. By October 27, 2010 it has generally increased to about 2.25. 2011 begins on September 16, 2009 at about 1.75 and generally increases to about 2.25 by October 27,2010 . 2012 begins on September 15, 2010 at about 2.2 and remains relatively stable here until October 27, 2010.

Figure: U.S. Current Account Balance

Line chart, by percent of GDP, January 23, 2008 to October 27, 2010. The x-axis is Tealbook publication dates. There are four series, $2009,2010,2011$ and 2012. 2009 begins on January 23, 2008 at about -4.6 and generally increases to about -3.8 by April 23,2008 . It then generally decreases to about -4.3 by June 18 , 2008 and then generally increases to about -3 by December 10, 2008. By March 12, 2009 it has generally decreased to about -3.75 and by September 16,2009 it has generally increased to about -3 . From September 16, 2009 to April 21, 2010 it fluctuates between about -3.25 and -3 . It then generally increases to about -2.8 by October 27, 2010. 2010 begins on September 10, 2008 at about -3.3 and generally decreases to about -4.2 by March 12, 2009. It then generally increases to about -3 by October 29, 2009. From October 29, 2009 to September 15, 2010 it fluctuates between about -3.25 and -3 . It then decreases to about -3.4 by October $27,2010$. 2011 begins on September 16, 2009 at about -3.1 and generally increases to about -2.9 by October 29, 2009. It then generally decreases to about -3.25 by June 16 , 2010 and then generally increases to about -2.9 by August 4, 2010. By October 27, 2010 it has decreased to about -3.1 . 2012 begins on September 15 , 2010 at about -2.9 and decreases to about -3.1 by October 27, 2010.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

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## November 2010 Tealbook Book A Tables and Charts ${ }^{\ddagger}$

## Financial Developments

## Policy Expectations and Treasury Yields

## Figure: Interest Rates

Line chart, by percent, September 20, 2010 to October 26, 2010. There's a label on September 21 representing the September FOMC, on October 1 representing the ISM report, on October 6 representing the ADP report, on October 8 representing the Employment report, on October 12 representing the FOMC minutes and on October 15 representing the Chairman's speech. There are two series, September 2011 Eurodollar and 10-year Treasury yield. September 2011 Eurodollar begins on September 20 at about 0.67 and generally decreases to about 0.59 by September 21 . From September 21 to October 1 it fluctuates between about 0.58 and 0.625 . It then generally decreases to about 0.48 by October 8 . From October 8 to October 26 it fluctuates between about 0.48 and 0.53 . On October 26 it's at about 0.53 . 10year Treasury yield begins on September 20 at about 2.74 and generally decreases to about 2.48 by September 23 . It then generally increases to about 2.61 by September 24 and then generally decreases to about 2.45 by September 28 . By September 30 it has generally increased to about 2.57 and by October 8 it has generally decreased to about 2.325 . It then generally increases to about 2.6 by October 15 and then generally decreases to about 2.46 by October 20 . By October 26 it has generally increased to about 2.65 .

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

## Figure: Implied Federal Funds Rate

Line chart, by percent, 2010:Q4 to 2012:Q4. There are four series, "Mean: October 26, 2010", "Mean: September 20, 2010", "Mode: October 26, 2010" and "Mode: September 20, 2010". "Mean: October 26, 2010" begins in 2010:Q4 at about 0.2 and generally decreases to about 0.1 by $2011: Q 2$. It then generally increases to about 0.45 by 2012:Q4. "Mean: September 20, 2010" begins in 2010:Q4 at about 0.2 and generally decreases to about 0.11 by 2011:Q2. It then generally increases to about 0.7 by 2012:Q4. "Mode: October 26, 2010" begins in 2010:Q4 at about 0.11 and generally decreases to about 0.05 by 2011:Q3. It then generally increases to about 0.14 by 2012:Q4. "Mode: September 20, 2010" begins in 2010:Q4 at about 0.1 and generally decreases to about 0.02 by 2011:Q2. It then generally increases to about 0.45 by 2012:Q4.
 premiums and other adjustments.

Source: Bloomberg and CME Group.

## Figure: Implied Expectation of Quarter of First Rate Increase from the Desk's Dealer Survey

Bar chart, by percent, 2010:Q4 to >=2012:Q4 (2012:Q4 or later). There are two series "Recent: 18 respondents" and "Last FOMC: 18 respondents". "Recent: 18 respondents" begins in 2010:Q4 at about 0 and increases to about 10 by 2011:Q3 and remains here for 2011:Q4. It then increases to about 31 by >=2012:Q4. "Last FOMC: 18 respondents" begins in 2010:Q4 at about 1 and increases to about 18 by 2011:Q3. It then decreases to about 13 by $2012: Q 2$ and then increases to about 25 by 2012:Q3. By >=2012:Q4 it has decreased to 0 .

Note: For the last FOMC, the probability reported in the 2012:Q3 bin corresponds to the probability that the first policy rate hike will occur in 2012:Q3 or later.
Source: Desk Dealer Survey from October 25, 2010.
Figure: Change in Implied One-Year Forward Rates since Day Before September FOMC Meeting

Bar chart, by basis points. The $x$-axis is years ahead and is in increments of 1, 2, 3,5,7 and 10. There is a horizontal line at zero. The series begins at 1 year ahead at -3 and decreases to about -20 by 3 years ahead. It then increases to about 18 by 10 years ahead.

Note: Data run through October 26, 2010.
Source: Federal Reserve Bank of New York.
Figure: Inflation Compensation

Line chart, by percent, 2007 to 2010. Data are daily. There is a label in September 2010 representing the September FOMC. There is also a horizontal line at zero. There are two series, 5 to 10 years ahead and Next 5 years. 5 to 10 years ahead begins in 2007:Q1 at about 2.5 and generally increases to about 3.1 by 2008:Q1. It then generally decreases to about 2.4 by early 2008:Q4 and then generally increases to about 3.7 by mid-2008:Q4. By late 2008:Q4 it has generally decreased to about 2 and by 2010:Q1 it has generally increased to about 3.25. It then generally decreases to about 2.1 by 2010:Q3 and then generally increases to about 3 by October 26, 2010. Next 5 years begins in 2007:Q1 at about 2.3. From 2007:Q1 to 2008:Q1 it fluctuates between about 1.75 and 2.4. It then generally increases to about 2.6 by 2008:Q2 and then generally decreases to about -1.6 by 2008:Q4. By $2010: Q 1$ it has generally increased to about 2.1 and by $2010: Q 3$ it has generally decreased to about 1.1. It then generally increases to about 1.7 by October 26, 2010.

# [Box:] Financial Consequences of the Mortgage Documentation Problems 

| Item <br> Change in <br> equity <br> price <br> since last <br> FOMC <br> (percent) | Change in <br> CDS spread <br> since last <br> FOMC <br> (basis <br> points) | Level of <br> CDS <br> spread <br> as of Oct. <br> 26 (basis <br> points) |
| :---: | ---: | ---: | ---: |
| Mortgage servicers/MBS sponsors |  |  |

N.A. Not available. Return to table

Source: Bloomberg; Markit.

Figure: ABX Home Equity CDS Index Prices - AAA Tranches

Line chart, by percent, 2006 to 2010. There are three series, January 2006, July 2006 and January 2007. January 2006 begins in January 2006 at about 100 and remains relatively stable here until June 2007. It then generally decreases to about 60 by March 2009 and then generally increases to about 88 by October 2010 . July 2006 begins in July 2006 at about 100 and remains relatively stable here until June 2007. It then generally decreases to about 17 by June 2009 and then generally increases to about 59 by October 2010. January 2007 begins in January 2007 at about 100 and remains relatively stable here until June 2007. It then generally decreases to about 5 by April 2009 and then generally increases to about 48 by October 2010.

Note: Indexes correspond to pools securitized in different periods.
Source: JP Morgan.

## Asset Market Developments

## Figure: Equity Prices

Line chart, 2008 to 2010. Units are indexes, September 20, 2010 = 100. Data are daily. There is a label in September 2010 representing the September FOMC. There are two series, S\&P 500 and S\&P 500 Bank Index. S\&P 500 begins in 2008:Q3 at about 116 and generally decreases to about 60 by 2009:Q1. It then generally increases to about 106 by early 2010:Q2 and then decreases to about 90 by late 2010:Q2. By October 26, 2010 it has generally increased to about 104. S\&P 500 Bank Index begins in early 2008:Q3 at about 134 and generally decreases to about 99 within a few weeks. It then generally increases to about 178 by late 2008:Q3 and then generally decreases to about 37 by 2009:Q1. By early 2010:Q2 it has generally increased to about 123 and by October 26,2010 it has generally decreased to about 98 .

Source: Bloomberg.
Figure: Implied Volatility on S\&P 500 (VIX)
at about 7 and generally increases to about 33 by 2008:Q1. It then generally decreases to about 13 by 2008:Q2 and then generally increases to about 80 by $2008: Q 4$. By early 2010:Q2 it has generally decreased to about 13 and by mid-2010:Q2 it has generally increased to about 46 . It then generally decreases to about 20 by October 26, 2010.

Source: Chicago Board Options Exchange.

Figure: Equity Risk Premium

Line chart, by percent, 1990 to 2010. Data are monthly. There are two series, Expected 10-year real equity return and Expected real yield on 10-year Treasury. Expected 10-year real equity begins in early 1990 at about 7.6 and then increases to about 9.6 by late 1990 . It then generally decreases to about 7 by 1992 and then generally increases to about 8.7 by 1995. By 2000 it has generally decreased to about 2.2 and by 2002 it has generally increased to about 6.9 . It then generally decreases to about 5 by 2004 and then generally increases to about 12 by 2008. By 2009 it has generally decreased to about 8 and by October 26 , 2010 it has generally increased to about 9.3. Expected real yield on 10-year Treasury begins in 1990 at about 4.3 and generally decreases to about 2 by 1993 . It then generally increases to about 4.6 by 1995. From 1995 to 1999 it fluctuates between about 2.4 and 4.6 . It then generally decreases to about 0.8 by 2003 and then generally increases to about 2.7 by 2007. By October 26, 2010 it has generally decreased to about 0.2 .

Note: Expected real yield on 10-year Treasury is off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation. October 26, 2010 values are the latest observations using daily interest rates and stock prices and latest earnings data from I/B/E/S.

Source: Thomson Financial.

## Figure: CDS Spreads for Large Bank Holding Companies

Line chart, by basis points, 2009 to 2010. Data are daily. There is a label in September 2010 representing the September FOMC. The series begins in early 2009 :Q1 at about 150 and generally increases to about 370 by late 2009:Q1. It then generally decreases to about 80 by 2009:Q4 and then generally increases to about 150 by 2010:Q1. By early 2010:Q2 it has generally decreased to about 98 and by mid-2010:Q2 it has generally increased to about 203. It then generally decreases to about 125 by October 26, 2010.

Note: Median spreads for Bank of America, Citigroup, Goldman Sachs, JPMorgan Chase, Morgan Stanley, and Wells Fargo.
Source: Markit.

## Figure: Corporate Bond Spreads

Line chart, by basis points, 2002 to 2010. Data are daily. There is a label in September 2010 representing the September FOMC. There are two series, 10-year highyield and 10-year BBB. 10-year high-yield begins in 2002:Q1 at about 540 and generally increases to about 850 by 2002:Q4. It then generally decreases to about 350 by 2004:Q1. From 2004:Q1 to 2007:Q2 it fluctuates between about 250 and 450 . It then generally increases to about 1680 by $2008: Q 4$ and then generally decreases to about 495 by October 26, 2010. 10-year BBB begins in 2002:Q1 at about 200 and generally increases to about 300 by 2002:Q4. It then generally decreases to about 100 by 2005:Q1 and then generally increases to about 1200 by 2008:Q4. By October 26, 2010 it has generally decreased to about 300 .

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

## Figure: Libor over OIS Spreads

Line chart, by basis points, 2009 to 2010. Data are daily. There is a label in September 2010 representing the September FOMC. There are three series, 1-month, 3month and 6-month. 1-month begins in 2009:Q2 at about 13. From 2009:Q2 to 2010:Q1 it fluctuates between about 7 and 13 . It then generally decreases to about 4 by 2010:Q2 and then generally increases to about 15 by 2010:Q3. By October 26, 2010 it has generally decreased to about 7 . 3-month begins in 2009:Q2 at about 44 and generally decreases to about 10 by 2009:Q3. From 2009:Q3 to 2010:Q2 it fluctuates between about 6 and 15 . It then generally increases to about 33 by $2010: Q 3$ and then generally decreases to about 11 by October 26, 2010. 6-month begins in 2009:Q2 at about 99 and generally decreases to about 18 by $2010: Q 1$. It then generally increases to about 55 by 2010:Q2 and then generally decreases to about 29 by October 26, 2010.

Source: British Bankers' Association and Prebon.

## Business Finance

## Figure: Selected Components of Net Debt Financing, Nonfinancial Firms

Bar chart, by billions of dollars, 2006 to 2010. Data are monthly rate. There is a horizontal line at zero. There are three series, Commercial paper, C\&l loans and Bonds. Commercial paper and C\&l loans are seasonally adjusted on a period-end basis, bonds are not. There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2006: Bonds 17, C\&l 13, Commercial paper 3, Total 33. 2007: Bonds 25, C\&l 22, Commercial paper 0, Total 47. 2008: Bonds 17, C\&I 10, Commercial paper 2, Total 29. 2009: Bonds 32, C\&l-25, Commercial paper -7, Total 0. 2010:H1: Bonds 28, C\&l-16, Commercial paper 5, Total 17. 2010:Q3: Bonds 40, C\&I 0, Commercial paper 5, Total 45. October 2010: Bonds 32, C\&I -4, Commercial paper 4, Total 32.

Note: The October 2010 values are estimates
Source: Depository Trust \& Clearing Corporation; Thomson Financial; Federal Reserve Board.

Figure: Syndicated Leveraged Loan Gross Issuance, by Lender Type

Bar chart, by billions of dollars, 1998 to 2010. Data are monthly rate. There are two series, Institutional and Bank. Approximate values are: 1998: Institutional 3, Bank 19. 1999: Institutional 5, Bank 22. 2000: Institutional 4, Bank 22. 2001: Institutional 2, Bank 16. 2002: Institutional 8, Bank 14. 2003: Institutional 10, Bank 17. 2004: Institutional 19, Bank 21. 2005: Institutional 21, Bank 21. 2006: Institutional 31, Bank 20. 2007: Institutional 36, Bank 22. 2008: Institutional 6, Bank 19. 2009: Institutional 4, Bank 16. 2010:H1 Institutional 15, Bank 14. 2010:Q3: Institutional 16, Bank 10.

Source: Thomson Reuters LPC.

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

Bar chart, by billions of dollars, 2006 to 2010. Data are monthly rate. There is a horizontal line at zero. There are four series, Private issuance, Public issuance, Repurchases and Cash mergers. There is also a "Total" series presented as a line chart which sums the total of the other series. Approximate values are: 2006: Private issuance 13, Public issuance 5, Repurchases -37, Cash mergers -25, Total -44. 2007: Private issuance 21, Public issuance 5, Repurchases -46, Cash mergers -39, Total -59. 2008: Private issuance 22, Public issuance 4, Repurchases -34, Cash mergers -14, Total -22. 2009:H1 Private issuance 18, Public issuance 5, Repurchases -8, Cash mergers -6, Total 9. 2009:H2 Private issuance 12, Public issuance 5, Repurchases -12, Cash mergers -16, Total -11. 2010:Q1: Private issuance 9, Public issuance 5, Repurchases -19, Cash mergers -14, Total -19. 2010:Q2: Private issuance 10, Public issuance 5, Repurchases -25, Cash mergers -8, Total -18.

Note: The 2010:Q2 values are estimates.
Source: Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

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

Line chart, dollars per share, 2000 to 2010. Data are quarterly. The series begins in $2000: \mathrm{Q} 1$ at about 14 and generally increases to about 14.3 by $2000: Q 2$. It then generally decreases to about 10.3 by 2001:Q4 and then generally increases to about 23.9 by 2007:Q2. By 2007:Q4 it has generally decreased to about 16 and by 2008:Q1 it has generally increased to about 19.5. It then generally decreases to about 5.6 by 2008:Q4 and then generally increases to about 21.9 by $2010: Q 3$.

Note: 2010:Q3 value is a staff estimate. Data are seasonally adjusted by staff.
Source: Thomson Financial.

## Figure: Commercial Mortgage Debt

Line chart, by percent change, annual rate, 2001 to 2010. Data are quarterly. There is a horizontal line at zero. The series begins in early 2001 at about 8.5 and generally increases to about 11.2 by mid-2001. It then generally decreases to about 6.8 by 2002 and then generally increases to about 16.5 by 2005 . By early 2007 it has generally decreased to about 8.8 and by mid-2007 it has generally increased to about 15 . It then generally decreases to about -8.5 by 2009 and then generally increases to about -6.5 by 2010:Q3.

Note: The 2010:Q3 value is an estimate.
Source: Federal Reserve.

## Figure: Delinquency Rates on Commercial Mortgages on Existing Properties

Line chart, by percent, 1996 to 2010. There are three series, at life insurance companies, CMBS and at commercial banks. At life insurance companies begins in early 1996 at about 2.3 and generally increases to about 2.7 by mid-1996. It then generally decreases to about 0 by 2006 and then generally increases to about 0.25 by 2010:Q2. CMBS begins in 1999 at about 0.4 and generally increases to about 2 by 2003. It then generally decreases to about 0.25 by 2007 and then generally increases to about 9.6 by September 2010. At commercial banks begins in 1996 at about 3.2 and generally decreases to about 1.3 by 2000 . It then generally increases to about 1.9 by 2001 and then generally decreases to about 1 by 2006. By 2010:Q2 it has generally increased to about 5.5 .

Note: CMBS are commercial mortgage-backed securities. At commercial banks is excluding farmland. All series are seasonally adjusted.
Source: Citigroup; Call Report data; ACLI.

## Household Finance

## Figure: Mortgage Rate and MBS Yield

Line chart, by percent, 2007 to 2010. Data are weekly. There is a label in September 2010 representing the September FOMC. There are two series, 30-year conforming fixed mortgage rate and MBS yield. 30-year conforming fixed mortgage rate begins in 2007:Q1 at about 6.3 and generally increases to about 6.75 by 2007:Q2. It then generally decreases to about 5.48 by 2008:Q1 and then generally increases to about 6.6 by 2008:Q3. By early $2009: Q 2$ it has generally decreased to about 4.8 and by late 2009:Q2 it has generally increased to about 5.6. It then generally decreases to about 4.25 by October 20, 2010. MBS yield begins in 2007 :Q1 at about 5.8 and generally increases to about 6.45 by 2007:Q2. It then generally decreases to about 4.7 by 2008:Q1 and then generally increases to about 6.1 by 2008:Q4. By 2009:Q1 it has generally decreased to about 3.75 and by 2009:Q2 it has generally increased to about 5.1 . It then generally decreases to about 3.85 by 2009:Q4 and then generally increases to about 4.6 by 2010:Q2. By October 26, 2010 it has generally decreased to about 3.48 .

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

Line chart, 2002 to 2010. Units are indexes, March 16, 1990=100. Data are weekly. There is a label in September 2010 representing the September FOMC. There are two series, Purchase Index and Refinance Index. Purchase Index begins in 2002 at about 305 and generally increases to about 510 by 2005 . It then generally decreases to about 340 by 2006 and then generally increases to about 460 by 2007. By October 22, 2010 it has generally decreased to about 175 . Refinance Index begins in 2002 to about 1500 and generally increases to about 10,200 by 2003. It then generally decreases to about 1100 by 2006 and then generally increases to about 4000 by early 2008. By late 2008 it has generally decreased to about 1100 and by the end of 2008 it has generally increased to about 6050 . It then generally decreases to about 1900 by early 2010 and then generally increases to about 5200 by October 22, 2010.

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

## Figure: Prices of Existing Homes

Line chart, by index peaks normalized to 100, 2005 to 2010. Data are monthly. There are three series, FHFA, CoreLogic, and 20-city S\&P/Case-Shiller. FHFA begins in 2005 at about 89 and generally increases to about 100 by 2007. It then generally decreases to about 86.5 by August 2010. CoreLogic begins in 2005 at about 86 and generally increases to about 100 by early 2006. It then generally decreases to about 70 by early 2009 and then generally increases to about 71.5 by August 2010 . 20 -city S\&P/Case-Shiller begins in 2005 at about 86 and generally increases to about 100 by early 2006. It then generally decreases to about 98 by late 2006 and then generally increases to about 99 by early 2007. By 2009 it has generally decreased to about 68 and by August 2010 it has generally increased to about 71.5 .

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

## Figure: Delinquencies on Prime Mortgages

Line chart, by percent of loans, 2002 to 2010. Data are monthly. There are two series, Delinquency transition rate and Delinquency rate. Delinquency transition rate begins in 2003 at about 1.1 and generally decreases to about 0.75 by 2005. It then generally increases to about 1.63 by 2008 and then generally decreases to about 1.19 by August 2010. Delinquency rate begins in 2002 at about 1.5. From 2002 to early 2007 it fluctuates between about 1.0 and 1.5 . It then generally increases to about 6.9 by early 2010 and then generally decrease to about 6 by September 2010.
 delinquent each month.

Source: LPS Applied Analytics.

## Figure: Gross Consumer ABS Issuance

Bar chart, by billions of dollars, 2006 to 2010. Data are monthly rate. There are two series, TALF eligible and Non-TALF. Approximate values are: 2006: Non-TALF 19.5. 2007: Non-TALF 19.6. 2008:H1 Non-TALF 18. 2008:H2 Non-TALF 3.7. 2009:H1 Non-TALF 4, TALF eligible 6.2. 2009:Q3 Non-TALF 3, TALF eligible 11.5. 2009:Q4 Non-TALF 4.8, TALF eligible 3.2. 2010:Q1 Non-TALF 4.5, TALF eligible 1.8. 2010:Q2 Non-TALF 6.7. July 2010: Non-TALF 7.2. August 2010 Non-TALF 6.8. September 2010: Non-TALF 8.8.

Note: Credit card, auto, and student loan ABS.
Source: Inside MBS \& ABS; Merrill Lynch; Bloomberg; Federal Reserve Board.

## Figure: Delinquencies on Consumer Loans

Line chart, by percent, 1998 to 2010. There are three series, Credit card loans in securitized pools, Nonrevolving consumer loans at commercial banks and Auto loans at captive finance companies. Credit card loans in securitized pools begins in 1998 at about 5.2 and generally decreases to about 4.4 by 2000 . It then generally increases to about 5.3 by 2003 and then generally decreases to about 3.2 by 2005 . By 2009 it has generally increased to about 6.3 and by August 2010 it has generally decreased to about 4.95. Nonrevolving consumer loans at commercial banks begins in 1998 at about 3.1 and generally decreases to about 2.1 by 2006 . It then generally increases to about 3.7 by 2009 and then generally decreases to about 3.3 by 2010:Q2. Auto loans at captive finance companies begins in 1998 at about 3.1 and generally decreases to about 2.3 by 1999. It then generally increases to about 2.9 by 2001 and then generally decreases to about 1.8 by 2004 . By 2009 it has generally increased to about 3.3 and by August 2010 it has generally decreased to about 2.8.

Source: For credit cards, Moody's Investors Service; for nonrevolving consumer loans, Call Report; for auto loans, Federal Reserve Board.

## [Box:] The Effects of Large-Scale Asset Purchase Announcements by the Federal Reserve on Exchange Rates

Figure 1. Relationship between Exchange Rate Movements and 10-year U.S. Treasury Rate Changes on LSAP Announcement Days

A scatterplot of points along rough vertical lines, with a solid regression line. The $x$-axis is "Change in U.S. 10-year Treasury Rate (basis points)", and the $y$-axis is "Exchange Rate Change (\%)". The plotted points appear to be concentrated in the rectangular region bounded by $[-40,-17]$ basis points on the $x-a x i s$ and $[-5.5,0.5]$ percent on the $y$-axis. The constant term in the regression line is set to zero. Approximately, the line runs between the points $(-50,-2.5)$ and $(50,2.5)$.

Figure 2. Relationship between Exchange Rate Movements and 10-year Treasury Rate Changes on FOMC Dates from January 1994 to December 2008

A scatterplot of points along rough vertical lines, with a solid regression line. The $x$-axis is "Change in U.S. 10-year Treasury Rate (basis points)", and the $y$-axis is "Exchange Rate Change (\%)". The plotted points appear to be concentrated in the rectangular region bounded by [-21, 19] basis points on the $x$-axis and [-3.2, 2.3] percent on the y-axis. The constant term in the regression line is set to zero. Approximately, the line runs between the points $(-50,-0.8)$ and $(50,0.7)$.

Source: Board staff.

Figure 3. Relationship between Exchange Rate Movements and 10-year Treasury Rate Changes on Intermeeting FOMC Dates from January 1994 to December 2008

A scatterplot of points along rough vertical lines, with a solid regression line. The x-axis is "Change in U.S. 10-year Treasury Rate (basis points)", and the y-axis is "Exchange Rate Change (\%)". The plotted points appear to be concentrated in the rectangular region bounded by [-17, 13] basis points on the $x$-axis and [-3.2, 0.9 ] percent on the y-axis. The constant term in the regression line is set to zero. Approximately, the line runs between the points ( $-50,-2.3$ ) and (50, 2.0).

Source: Board staff.

## Foreign Developments

## Figure: Nominal Trade-Weighted Dollar Indexes

Line chart, 2007 to 2010. Units are indexes, January 1, 2007 = 100. Data are daily. There is a label in September 2010 representing the September FOMC. There are three series, Broad, Major, and OITP. Broad begins in early 2007 at about 100 and generally decreases to about 88 by mid- 2008 . It then generally increases to about 108 by early 2009 and then generally decreases to about 92.5 by late 2009. By early 2010 it has generally increased to about 100 and by October 26 , 2010 it has generally decreased to about 91.5. Major begins in early 2007 at about 100 and generally decreases to about 85 by early 2008 . It then generally increases to about 106 by early 2009 and then generally decreases to about 87.5 by late 2009. By early 2010 it has generally increased to about 99 and by October 26 , 2010 it has generally decreased to about 87.5. OITP begins in early 2007 at about 100 and generally decreases to about 90.5 by mid- 2008 . It then generally increases to about 110 by early 2009 and then generally decreases to about 95.5 by October 26, 2010.

Source: Federal Reserve Board and Bloomberg.

## Figure: Bilateral Exchange Rates

Line chart, 2007 to 2010. Units are indexes, foreign currency per dollar, January 1, $2007=100$. Data are daily. There is a label in September 2010 representing the September FOMC. There are four series, Euro, Yen, Swiss Franc and British Pound. Euro begins in 2007:Q1 at about 100 and generally decreases to about 83 by 2008:Q3. It then generally increases to about 106 by 2008:Q4 and then generally decreases to about 86 by 2009:Q4. By 2010:Q2 it has generally increased to about 111 and by October 26, 2010 it has generally decreased to about 95 . Yen begins in 2007:Q1 at about 100 and generally increases to about 105 by 2007 :Q2. It then generally decreases to about 83 by 2008:Q1 and then generally increases to about 93 by 2008:Q3. By 2009:Q1 it has generally decreased to about 72 and by 2009:Q2 it has generally increased to about 85. It then generally decreases to about 67 by October 26, 2010. Swiss franc begins in 2007:Q1 at about 100 and generally decreases to about 80 by 2008:Q1. It then generally increases to about 100 by 2008:Q4 and then generally decreases to about 81 by $2009: Q 4$. By $2010: Q 2$ it has generally increased to about 95 and by October 26, 2010 it has generally decreased to about 80 . British pound begins in $2007: Q 1$ at about 100 and generally decreases to about 95 by 2007:Q4. It then generally increases to about 145 by 2008:Q4 and then generally decreases to about 115 by 2009:Q3. By 2010:Q2 it has generally increased to about 137 and by October 26, 2010 it has generally decreased to about 125 .

Source: Federal Reserve Bank of New York.

## Figure: Nominal 10-year Government Bond Yields

Line chart, by percent, 2007 to 2010. Data are daily. There is a label in September 2010 representing the September FOMC. There are three series, Germany, United Kingdom and Japan. Germany begins in early 2007 at about 3.9 and generally increases to about 4.7 by mid-2007. It then generally decreases to about 3.6 by early 2008 and then generally increases to about 4.8 by mid-2008. By early 2009 it has generally decreased to about 2.8 and by mid- 2009 it has generally increased to about 3.8. It then generally decreases to about 2.6 by October 26, 2010. United Kingdom begins in early 2007 at about 4.75 and generally increases to about 5.5 by mid-2007. It then generally decreases to about 4.25 by early 2008 and then generally increases to about 5.3 by mid-2008. By early 2009 it has generally decreased to about 2.85 and by early 2010 it has generally increased to about 4.3. It then generally decreases to about 3.0 by October 26, 2010. Japan begins in early 2007 at about 1.75 and generally increases to about 2 by mid-2007. It then generally decreases to about 1.25 by early 2008 and then generally increases to about 1.9 by mid2008. By early 2009 it has generally decreased to about 1.2. From early 2009 to early 2010 it fluctuates between about 1.2 and 1.5 . It then generally decreases to about 0.9 by October 26, 2010.

Source: Bloomberg.
Figure: Euro-Area 10-Year Government Bond Spreads

Line chart, by percentage points, 2007 to 2010. Data are daily. There is a label in September 2010 representing the September FOMC. There is a horizontal line at zero. There are three series, Greece, Spain, and Ireland. Greece begins in 2007:Q1 at about 0.2 and remains relatively stable here until 2007:Q3. It then generally increases to about 3.1 by 2009:Q1 and then generally decreases to about 1.1 by 2009:Q3. By early 2010:Q2 it has generally increased to about 9.7 and within a week or so has generally decreased to about 4.3. It then generally increases to about 9.7 by 2010:Q3 and then generally decreases to about 7.1 by October 26,2010 .

Spain begins in 2007:Q1 at about 0 and remains relatively stable here until 2007:Q3. It then generally increases to about 1.25 by 2009 :Q1 and then generally decreases to about 0.4 by 2009:Q3. By 2010:Q2 it has generally increased to about 2.2 and by October 26, 2010 it has generally decreased to about 1.5 . Ireland begins in 2007:Q1 at about 0 and remains relatively stable here until 2007:Q3. It then generally increases to about 3 by 2009:Q1 and then generally decreases to about 1.2 by 2010:Q1. By October 26, 2010 it has generally increased to about 4.

Note: Spread over German bunds.
Source: Bloomberg

## Figure: Stock Price Indexes

Line chart, 2007 to 2010. Units are indexes, January 1, 2007=100. Data are daily. There is a label in September 2010 representing the September FOMC. There are four series, DJ Euro, Topix, FTSE, and MSCI Emerging Markets. DJ Euro begins in early 2007 at about 100 and generally increases to about 111 by mid- 2007 . It then generally decreases to about 43 by early 2009 and then generally increases to about 70 by October 26, 2010. Topix begins in early 2007 at about 100 and generally decreases to about 40 by early 2009. It then generally increases to about 57 by mid-2009. From mid-2009 to mid-2010 it fluctuates between about 45 and 60 . It ends on October 26, 2010 at about 48. FTSE begins in early 2007 at about 100. From early 2007 to late 2007 it fluctuates between about 94 and 110 . It then generally decreases to about 57 by early 2009 and then generally increases to about 95 by October 26, 2010. MSCI Emerging Markets begins in early 2007 at about 100 and generally increases to about 147 by late 2007. It then generally decreases to about 50 by late 2008. By October 26, 2010 it has generally increased to about 122 .

Source: Bloomberg.

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

Bar chart, by billions of dollars, annual rate, 2007 to 2010. There is a horizontal line at zero. There are two series, Official and Private. Official begins in 2007 at about 100 and increases to about 580 by 2009. It then decreases to about 90 by 2010:Q2 and then increases to about 890 by August 2010 . Private begins in 2007 at about 70 and increases to about 175 by 2008. It then decreases to about 10 by 2009 and then increases to about 410 by 2010:Q1. By July 2010 it has decreased to about 260 and by August 2010 it has increased to about 860.

Source: Treasury International Capital data adjusted for staff estimates.

## Commercial Banking and Money

## Figure: Bank Credit

Line chart, January 2007 to July 2010. Units are indexes, January 2008 = 100. Data are the monthly average. There are two series, Total loans and Securities. Total loans begins in January 2007 at about 90 and generally increases to about 103 by October 2008. It then generally decreases to about 86 by September 2010 . Securities begins in January 2007 at about 95.5 and generally increases to about 101.5 by November 2007. It then generally decreases to about 100 by January 2008 and then generally increases to about 108 by October 2008. By December 2008 it has generally decreased to about 104 and by April 2010 it has generally increased to about 112.5. It then generally decreases to about 110 by June 2010 and then generally increase to about 116 by September 2010 .

Note: The data have been adjusted to remove the effects of consolidations of assets under FAS 166 and FAS 167.
Source: Federal Reserve Board.

## Figure: Changes in Standards and Demand for Bank Loans

Line chart, by net percent, 1991 to 2010. Data are quarterly. There is a horizontal line at zero. There are two series, Standards and Demand. Standards begins in 1991 at about 29 and generally decreases to about -24 by 1993. It then generally increases to about 36 by 1998 and then generally decreases to about 4 by 1999 . By 2001 it has generally increased to about 45 and by 2006 it has generally decreased to about -21 . It then generally increases to about 88 by 2008 and then generally decreases to about -3 by October 2010. Demand begins in 1991 at about -15 and generally increases to about 38 by early 1994. It then generally decreases to about -12 by mid-1994 and then generally increases to about 43 by 1998. By 2001 it has generally decreased to about -47 and by 2005 it has generally increased to about 28. It then generally decreases to about -60 by 2008 and then generally increases to about 4 by October 2010.
 tighter lending standards or stronger loan demand over the past 3 months.

Source: Senior Loan Officer Opinion Survey on Bank Lending Practices

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

Line chart, by net percent, 1990 to 2010. Data are quarterly. There is a horizontal line at zero. There are two series, Large/middle-market firms and Small firms. Large/middle-market firms begins in 1990 at about 11 and generally increases to about 60 by 1991. It then generally decreases to about - 61 by 1994 and then generally increases to about 49 by 1998. By 1999 it has generally decreased to about 7 and by 2001 it has generally increased to about 60 . It then generally decreases to about -72 by 2005 and then generally increases to about 100 by 2008. By October 2010 it has generally decreased to about -26 . Small firms begins in 1990 at about 6 and generally increases to about 38 by 1991. It then generally decreases to about -43 by 1997 and then generally increases to about 45 by 2002 . By 2005 it has generally decreased to about -54 and by 2008 it has generally increased to about 95 . It then generally decreases to about -25 by October 2010 .

Note: Net percent of respondents that widened spreads over the past 3 months.

Figure: Lending Standards Remain Tighter Than Average until At Least 2013

Bar chart, $y$-axis is percent of respondents, $x$-axis is categorical. The first bar is C\&l with 30 . Next is CLD (Construction and land development) with 75 . Then Other CRE with 55. After that is prime household with 2 categories, RRE (Residential real estate) at 50 and Cons (Consumer) at 38 . Finally there is Nonprime household with 2 categories, RRE at 67 and Cons at 66 .

Note: Fraction of banks that expect lending standards will return to their longer-run norms sometime after 2012 or will not return to them for the foreseeable future.
Source: Senior Loan Officer Opinion Survey on Bank Lending Practices.
Growth of M2 and Its Components

| Percent, s.a.a.r. |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | M2 | Liquid <br> deposits | Small time <br> deposits | RMMF | Curr. |  |
| 2008 | 8.6 | 6.9 | 12.4 | 13.7 | 5.8 |  |
| 2009 |  |  |  |  |  |  |
| H1 | 7.6 | 16.4 | -6.1 | -15.4 | 10.8 |  |
| H2 | 2.4 | 16.5 | -26.4 | -31.0 | 2.9 |  |
| 2010 |  |  |  |  |  |  |
| Q1 | -.1 | 9.2 | -25.7 | -27.4 | 2.1 |  |
| Q2 | 1.8 | 8.3 | -20.2 | -18.6 | 6.4 |  |
| Q3 | 4.6 | 10.2 | -19.9 | -5.9 | 5.7 |  |
| Oct. (e) | 8.3 | 17.5 | -31.3 | -16.7 | 9.7 |  |

Note: RMMF are retail money market mutual funds.
e Estimate. Return to table
Source: Federal Reserve Board.

## Figure: Interest Rates on Selected Components of M2

Line chart, by percent, 2008 to 2010. Data are monthly. There are three series, Money market mutual funds, Small time deposits and Liquid deposits. Money market mutual funds begins in January 2008 at about 3.4 and generally decreases to about 1.7 by June 2008. It remains relatively stable here until September 2008. It then generally decreases to about 0 by September 2009 and remains relatively stable here until September 2010. Small time deposits begins in January 2008 at about 3 and generally decreases to about 1.7 by March 2008. It then generally increases to about 2.05 by October 2008 and then generally decreases to about 0.25 by September 2010. Liquid deposits begins in January 2008 at about 2.1 and generally decreases to about 1.1 by March 2008. It then generally increases to about 1.4 by June 2008 and then generally decreases to about 0.3 by September 2010 .

Source: Federal Reserve Board.
[Box:] Balance Sheet Developments over the Intermeeting Period

Federal Reserve Balance Sheet
Billions of dollars

|  | Change <br> since last <br> FOMC | Current <br> $(\mathbf{1 0 / 2 5 / 1 0 )}$ | Maximum <br> level | Date of <br> maximum <br> level |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Total assets | $\mathbf{- 1 2}$ | $\mathbf{2 , 2 9 4}$ | $\mathbf{2 , 3 6 4}$ | $\mathbf{0 5 / 1 3 / 1 0}$ |  |
| Selected assets: |  |  |  |  |  |
| Liquidity programs for financial firms | -0 | $\underline{+0}$ | 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) | -4 | 28 | 49 | $03 / 11 / 10$ |  |
| Support for specific institutions | -1 | 112 | 121 | $05 / 05 / 10$ |  |
| Credit extended to AIG, net | -1 | 19 | 91 | $10 / 27 / 08$ |  |
| Preferred interests in AIA Aurora LLC and ALICO |  |  |  |  |  |
| Holdings LLC | +0 | 26 | 26 | $10 / 25 / 10$ |  |
| Net portfolio holdings of Maiden Lane LLC, Maiden |  |  |  |  |  |


| Lane II LLC, and Maiden Lane III LLC | -1 | 66 | 75 | 12/30/08 |
| :---: | :---: | :---: | :---: | :---: |
| Securities held outright ${ }_{-}^{\star}$ | -10 | 2,036 | 2,073 | 06/14/10 |
| U.S. Treasury securities | 35 | 835 | 835 | 10/25/10 |
| Agency debt securities | -4 | 150 | 169 | 03/11/10 |
| Agency mortgage-backed securities | -41 | 1,051 | 1,129 | 06/14/10 |
| Total liabilities | -12 | 2,236 | 2,309 | 05/13/10 |
| Selected liabilities: |  |  |  |  |
| Federal Reserve notes in circulation | 10 | 920 | 923 | 10/13/10 |
| Reverse repurchase agreements | 6 | 57 | 110 | 10/14/08 |
| Foreign official and international accounts | -8 | 55 | 92 | 12/22/08 |
| Others | 2 | 2 | 26 | 09/26/08 |
| Reserve balances of depository institutions | 16 | 991 | 1,249 | 02/24/10 |
| Term deposits held by depository institutions | 3 | 5 | 5 | 10/25/10 |
| U.S. Treasury, general account | -34 | 44 | 187 | 12/31/09 |
| U.S. Treasury, supplementary financing account | +0 | 200 | 559 | 10/22/08 |
| Other deposits | +0 | 1 | 81 | 03/12/10 |
| Total capital | -0 | 58 | 60 | 08/03/10 |

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

# Appendix: Senior Loan Officer Opinion Survey on Bank Lending Practices <br> Measures of Supply and Demand for Commercial and Industrial Loans, by Size of Firm Seeking Loan 

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

Line chart, by percent, 1990 to 2010. There is a label in July 2010 representing the July Survey. There is also a horizontal line at zero. There are two series, Loans to large and medium-sized firms and Loans to small firms. Loans to large and medium-sized firms begins in 1990:Q2 at about 57 and generally decreases to about -20 by 1993:Q3. It then generally increases to about 38 by 1998:Q4 and then generally decreases to about 6 by 1999:Q3. By 2001:Q1 it has generally increased to about 59 and by 2005:Q2 it has generally decreased to about -25. It then generally increases to about 85 by 2008:Q4 and then generally decreases to about -12 by 2010:Q4. Loans to small firms begins in 1990:Q2 at about 53 and generally decreases to about -18 by 1994:Q4. It then generally increases to about 46 by 2001:Q1 and then generally decreases to about -25 by 2005:Q2. By 2008:Q4 it has generally increased to about 75 and by 2010:Q4 it has generally decreased to about -7.

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

Line chart, by percent, 1990 to 2010. There is a label in July 2010 representing the July Survey. There is also a horizontal line at zero. There are two series, Loans to large and medium-sized firms and Loans to small firms. Loans to large and medium-sized firms begins in 1990:Q2 at about 12 and generally increases to about 60 by 1991:Q1. It then generally decreases to about -58 by 1994:Q2 and then generally increases to about 48 by 1998:Q4. By 1999:Q2 it has generally decreased to about 7 and by 2001:Q4 it has generally increased to about 60. It then generally decreases to about -73 by 2005:Q2 and then generally increases to about 99 by $2008: Q 4$. By 2010:Q4 it has generally decreased to about -36. Loans to small firms begins in 1990:Q2 at about 6 and generally increases to about 38 by 1991:Q1. It then generally decreases to about -30 by 1993:Q4. From 1993:Q4 to 1998:Q3 it fluctuates between about -40 and -7. It then generally increases to about 40 by 2001 :Q4 and then generally decreases to about -55 by 2005:Q2. By 2008:Q4 it has generally increased to about 92 and by 2010:Q4 it has generally decreased to about -23 .

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

[^0]
## Figure: Net Percentage of Domestic Respondents Tightening Standards for Commercial Real Estate Loans

Line chart, by percent, 1990 to 2010. There is a label in July 2010 representing the July Survey. There is also a horizontal line at zero. The series begins in 1990:Q3 at about 68 and generally decreases to about -7 by 1994:Q2. It then generally increases to about 13 by 1996:Q1 and then generally decreases to about -12 by 1997:Q3. By 1998:Q4 it has generally increased to about 47 and by 1999:Q2 it has generally decreased to about 5 . It then generally increases to about 46 by $2002: Q 1$ and then generally decreases to about -23 by 2005:Q1. By 2008:Q4 it has generally increased to about 88 and by 2010:Q4 it has generally decreased to about 3 .

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

Line chart, by percent, 1995 to 2010. There is a label in July 2010 representing the July Survey. There is also a horizontal line at zero. The series begins in 1995:Q2 at about 14 and generally increases to about 26 by 1995:Q4. It then generally decreases to about -1.5 by 1996:Q2 and then generally increases to about 48 by 1998:Q2. By 2001:Q4 it has generally decreased to about -54 and by 2004:Q3 it has generally increased to about 25. It then generally decreases to about -67 by 2009 :Q2 and then generally increases to about 1 by 2010:Q4.

## Measures of Supply and Demand for Residential Mortgage Loans

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

Line chart, by percent, 1990 to 2007. There is a horizontal line at zero. There is one series, "All residential". It begins in 1990:Q3 at about 9 and increases to about 32 by 1991:Q1. It then generally decreases to about -16 by 1993:Q4 and then generally increases to about 3 by 1995:Q4. From 1995:Q4 to 2000:Q2 it fluctuates between about -7 and 4. It then generally increases to about 11 by 2003:Q1 and then generally decreases to about -9 by 2004:Q2. From 2004:Q2 to 2006:Q3 it fluctuates between about -10 and 2. It then generally increases to about 17 by 2007:Q1.

There is a second line chart, by percent, from 2007 to 2010. There is a horizontal line at zero. There are three series, "Prime", "Nontraditional" and "Subprime". "Prime" begins in 2007:Q2 at about 15 and generally increases to about 74 by 2008:Q3. It then generally decreases to about -6 by $2010: Q 3$ and generally increases to about 9 by 2010:Q4. "Nontraditional" begins in 2007:Q2 at about 46 and generally decreases to about 40 by 2007:Q3. It then generally increases to about 90 by 2008:Q4 and then generally decreases to about 10 by 2010:Q4. "Subprime" begins in 2007:Q2 at about 56 and remains relatively stable here until 2007:Q4. It then generally increases to about 100 by 2008:Q4 and then generally decreases to about 47 by 2009:Q1.
 3 or fewer.

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

Line chart, by percent, 1990 to 2007:Q1. There is a horizontal line at zero. There is one series, "All residential". It begins in 1990:Q4 at about -47 and generally decreases to about -58 by 1991:Q1. It then generally increases to about 60 by 1991:Q2 and then generally decreases to about 5 by 1991:Q4. From 1991:Q4 to 1994:Q1 it fluctuates between about 4 and 46. It then generally decreases to about -78 by 1995:Q1 and then generally increases to about 52 by 1995:Q3. By 1996:Q3 it has generally decreased to about -23 and by 1998:Q2 it has generally increased to about 64. It then generally decreases to about -62 by 2000 :Q1 and then generally increases to about 47 by 2001:Q2. From 2001:Q2 to 2003:Q3 it fluctuates between about -1 and 47. It then generally decreases to about -39 by 2004:Q1 and then generally increases to about 20 by 2005:Q3. By 2006:Q4 it has generally decreased to about -60 and by 2007:Q1 it has generally increased to about -37 .

[^1] or fewer

## Measures of Supply and Demand for Consumer Loans

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

Line chart, by percent, 1996 to 2010. There is a vertical line at July 2010 representing the July survey. There is also a horizontal line at zero. There are two series, Credit card loans and Other consumer loans. Credit card loans begins in 1996:Q1 at about 26 and generally increases to about 50 by 1996:Q3. It then generally decreases to about -3 by 2000:Q3 and then generally increases to about 20 by 2001:Q2. By 2005:Q2 it has generally decreased to about -9 and by $2006: Q 1$ it has generally increased to about 4. It then generally decreases to about -12 by 2007:Q2 and then generally increases to about 66 by 2008:Q3. By 2010:Q4 it has decreased to about -10 . Other consumer loans begins in 1996:Q1 at about 18 and generally increases to about 25 by 1996:Q3. It then generally decreases to about -1 by 1999:Q1 and then generally increases to about 20 by 2001:Q4. By 2005:Q2 it has generally decreased to about -10 and by $2008: Q 3$ it has generally increased to about 67. It then generally decreases to about -6 by 2010:Q4.

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

Line chart, by percent, 1990 to 2010. There is a vertical line at July 2010 representing the July survey. There is also a horizontal line at zero. The series begins in 1990:Q2 at about 7 and generally decreases to about -15 by 1991:Q1. It then generally increases to about 29 by 1994:Q1 and then generally decreases to about -7 by 1996:Q3. By 1999:Q2 it has generally increased to about 13 and by 2001:Q4 it has generally decreased to about -7 . It then generally increases to about 21 by 2005:Q3 and then generally decreases to about -48 by 2008:Q4. By 2010:Q4 it has generally increased to about 20.

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

Line chart, by percent, 1991 to 2010. There is a vertical line at July 2010 representing the July survey. There is also a horizontal line at zero. The series begins in 1991:Q4 at about -28 and fluctuates but generally increases to about 38 by 1994:Q2. It then fluctuates but generally decreases to about -35 by 2001:Q1 and then fluctuates but generally increases to about 33 by 2003:Q3. By 2008:Q4 it has fluctuated but decreased to about -50 and by 2010:Q4 it has fluctuated but increased to about -7.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## November 2010 Tealbook Book A Tables and Charts ${ }^{\ddagger}$

## Risks and Uncertainty

## Alternative Scenarios

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

| Measure and scenario | $\begin{gathered} 2010 \\ \text { H2 } \end{gathered}$ | 2011 | 2012 | 2013 | $\begin{gathered} 2014 \\ 15 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP |  |  |  |  |  |
| Extended Tealbook baseline | 2.0 | 3.6 | 4.7 | 4.7 | 4.0 |
| Stronger recovery | 2.9 | 5.1 | 5.8 | 4.8 | 3.4 |
| Weaker recovery | 1.8 | 1.9 | 2.9 | 3.9 | 4.6 |
| Lower potential | 1.9 | 2.9 | 3.3 | 3.2 | 3.2 |
| Greater disinflation | 2.0 | 3.6 | 4.5 | 4.9 | 4.6 |
| Higher inflation | 1.9 | 3.0 | 4.4 | 4.5 | 4.1 |
| Dollar depreciation | 2.1 | 4.2 | 4.9 | 4.4 | 3.7 |
| Asian currency appreciation | 2.0 | 4.0 | 4.9 | 4.5 | 3.8 |
| Unemployment rate ${ }^{\underline{1}}$ |  |  |  |  |  |
| Extended Tealbook baseline | 9.7 | 9.0 | 7.9 | 7.1 | 5.2 |
| Stronger recovery | 9.6 | 8.4 | 6.9 | 6.1 | 4.8 |
| Weaker recovery | 9.7 | 9.6 | 9.1 | 8.6 | 6.0 |
| Lower potential | 9.7 | 9.4 | 8.8 | 8.7 | 7.3 |
| Greater disinflation | 9.7 | 9.0 | 8.0 | 7.1 | 4.8 |
| Higher inflation | 9.7 | 9.2 | 8.2 | 7.5 | 5.4 |
| Dollar depreciation | 9.7 | 8.8 | 7.5 | 6.7 | 5.0 |
| Asian currency appreciation | 9.7 | 8.9 | 7.6 | 6.9 | 5.1 |
| Core PCE inflation |  |  |  |  |  |
| Extended Tealbook baseline | 1.0 | 1.0 | 1.0 | 1.2 | 1.4 |
| Stronger recovery | 1.0 | 1.1 | 1.1 | 1.3 | 1.6 |
| Weaker recovery | 1.0 | 1.0 | . 8 | . 9 | 1.1 |
| Lower potential | 1.1 | 1.4 | 1.5 | 1.7 | 1.9 |
| Greater disinflation | 1.0 | . 6 | . 3 | . 2 | . 0 |
| Higher inflation | 1.0 | 1.4 | 1.7 | 2.0 | 2.1 |
| Dollar depreciation | 1.1 | 1.4 | 1.2 | 1.2 | 1.4 |
| Asian currency appreciation | 1.0 | 1.3 | 1.1 | 1.2 | 1.4 |
| Federal funds rate ${ }^{1}$ |  |  |  |  |  |
| Extended Tealbook baseline | . 1 | . 1 | . 5 | 1.7 | 3.7 |
| Stronger recovery | . 1 | . 2 | 1.7 | 3.0 | 4.4 |
| Weaker recovery | . 1 | . 1 | . 1 | . 1 | 2.3 |
| Lower potential | . 1 | . 7 | 2.2 | 2.8 | 4.1 |
| Greater disinflation | . 1 | . 1 | . 1 | . 2 | 2.1 |
| Higher inflation | . 1 | . 1 | 1.1 | 2.4 | 4.4 |
| Dollar depreciation | . 1 | . 1 | . 8 | 2.1 | 3.9 |
| Asian currency appreciation | . 1 | . 1 | . 7 | 2.0 | 3.8 |

# Forecast Confidence Intervals and Alternative Scenarios 

## Confidence Intervals Based on FRB/US Stochastic Simulations

## Figure: Real GDP

Line chart, by 4-quarter percent change, 2008 to 2015. There is a horizontal line at zero. There are ten series, Extending Tealbook baseline, Stronger Recovery, Weaker recovery, Lower potential, Higher inflation, Greater disinflation, Dollar depreciation, Asian currency appreciation, 90 percent interval and 70 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 2 and generally decreases to about -4.2 by 2009:Q2. It then generally increases to about 3.1 by 2010 :Q3 and then generally decreases to about 2.2 by 2011:Q1. By 2012:Q3 it has generally increased to about 5.2 and by 2015 :Q4 it has generally decreased to about 3.6 . Weaker recovery begins in 2010:Q2 at about 3.1 and generally decreases to about 1.7 by 2011:Q1. It then generally increases to about 5 by 2014:Q4 and then generally decreases to about 4.3 by 2015:Q4. Stronger recovery begins in 2010:Q2 at about 3.1 and generally decreases to about 2.9 by $2010: Q 4$. It then generally increases to about 5.9 by 2012:Q3 and then generally decreases to about 2.8 by 2015:Q4. Lower potential begins in 2010:Q2 at about 3.1 and generally decreases to about 2.1 by 2011:Q1. It then generally increases to about 3.5 by 2012:Q2 and then generally decreases to about 3.1 by 2013:Q2. By 2014:Q3 it generally increases to about 3.7 and by 2015:Q4 it has generally decreased to about 3. Higher inflation begins in 2010:Q2 at about 3.1 and generally decreases to about 2 by 2011:Q1. It then generally increases to about 4.6 by 2014:Q4 and then generally decreases to about 3.8 by 2015:Q4. Greater disinflation begins in $2010: Q 2$ at about 3.1 and generally decreases to about 2.2 by 2011:Q1. It then generally increases to about 5.2 by 2014:Q3 and then generally decreases to about 4.1 by $2015: Q 4$. Dollar depreciation begins in 2010:Q2 at about 3.1 and generally decreases to about 2.3 by 2011:Q1. It then generally increases to about 5.1 by $2012: Q 2$ and then generally decreases to about 3.2 by 2015:Q4. Asian currency appreciation begins in 2010:Q2 at about 3.1 and generally decreases to about 2.3 by 2011:Q1. It then generally increases to about 4.9 by 2012:Q2 and then generally decreases to about 3.4 by 2015:Q4. The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in 2010:Q3 at about 0.25 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 2.5 percent both lesser and greater than the Extended Tealbook baseline. The 90 percent interval begins in 2010:Q3 at about 0.4 percent both lesser and greater than the Extended Tealbook baseline and widens out to about 4 percent both lesser and greater than the Extended Tealbook baseline.

## Figure: Unemployment Rate

Line chart, by percent, 2008 to 2015. There are ten series, Extending Tealbook baseline, Stronger recovery, Weaker recovery, Lower potential, Higher inflation, Greater disinflation, Dollar depreciation, Asian currency appreciation, 90 percent interval and 70 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 4.9 and generally increases to about 10.1 by 2009:Q4. It then generally decreases to about 5.3 by 2015:Q4. Stronger recovery begins in 2010:Q2 at about 9.7 and generally decreases to about 4.9 by 2015:Q4. Weaker recovery begins in 2010:Q2 at about 9.7 and generally decreases to about 6.1 by 2015 :Q4. Lower potential begins in 2010:Q2 at about 9.7 and generally decreases to about 7.35 by 2015:Q4. Higher inflation begins in 2010:Q2 at about 9.7 and generally decreases to about 5.5 by 2015:Q4. Greater disinflation begins in 2010:Q2 at about 9.7 and generally decreases to about 4.9 by 2015:Q4. Dollar depreciation begins in 2010:Q2 at about 9.7 and generally decreases to about 5.1 by 2015:Q4. Asian currency appreciation begins in 2010:Q2 at about 9.7 and generally decreases to about 5.13 by $2015: Q 4$. The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in 2010:Q3 at about 0.1 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 1 percent both lesser and greater than the Extended Tealbook baseline. The 90 percent interval begins in 2010:Q3 at about 0.2 percent both lesser and greater than the Extended Tealbook baseline and widens out to about 2 percent both lesser and greater than the Extended Tealbook baseline.

## Figure: PCE Prices excluding Food and Energy

Line chart, by 4-quarter percent change, 2008 to 2015. There is a horizontal line at zero. There are ten series, Extending Tealbook baseline, Stronger recovery, Weaker recovery, Lower potential, Higher inflation, Greater disinflation, Dollar depreciation, Asian currency appreciation, 90 percent interval and 70 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 2.3 and generally increases to about 2.55 by 2008:Q2. It then generally decreases to about 1.3 by $2009: Q 3$ and then generally increase to about 1.75 by 2010:Q1. By 2012:Q1 it has generally decreased to about 1.05 and by 2015:Q4 it has generally increased to about 1.5 . Stronger recovery begins in 2010:Q3 at about 1.3 and generally decreases to about 1.1 by 2011:Q1. It then generally increases to about 1.27 by $2015: Q 4$. Weaker recovery begins in 2010:Q3 at about 1.3 and generally decreases to about 0.85 by 2013:Q1. It then generally increases to about 1.15 by $2015: Q 4$. Lower potential begins in 2010:Q3 at about 1.3 and generally decreases to about 1.15 by 2010:Q4. It then generally increases to about 1.97 by 2015 :Q4. Higher inflation begins in 2010:Q3 at about 1.3 and generally decreases to about 1.15 by 2010:Q4. It then generally increases to about 2.23 by $2015: Q 4$. Greater disinflation begins in $2010: Q 3$ at about 1.3 and generally decreases to about 0.03 by 2014:Q4. It then generally increases to about 0.1 by 2015:Q4. Dollar depreciation begins in 2010:Q3 at about 1.3 and generally decreases to about 1.15 by 2010:Q4. It then generally increases to about 1.5 by 2011:Q4 and then generally decreases to about 1.2 by $2013: Q 2$. By 2015:Q4 it has generally increased to about 1.5. Asian currency appreciation begins in 2010:Q3 at about 1.3 and generally decreases to about 1.15 by 2010:Q4. It then generally increases to about 1.3 by 2011:Q4 and then generally decreases to about 1.2 by 2013:Q1. By 2015:Q4 it has generally increased to about 1.5 . The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in 2010:Q4 at about 0.1 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 1 percent both lesser and greater than the Extended Tealbook baseline. The 90 percent interval begins in 2010:Q3 at about 0.15 percent both lesser and greater than the Extended Tealbook baseline and widens out to about 1.5 percent both lesser and greater than the Extended Tealbook baseline.

## Figure: Federal Funds Rate

Line chart, by percent, 2008 to 2015. There are ten series, Extending Tealbook baseline, Stronger recovery, Weaker recovery, Lower potential, Higher inflation, Greater disinflation, Dollar depreciation, Asian currency appreciation, 90 percent interval and 70 percent interval. Extending Tealbook baseline begins in 2008:Q1 at about 3.2 and generally decreases to about 0.13 by 2010:Q1. It remains relatively stable here until 2012:Q3. It then generally increases to about 3.6 by $2015: Q 4$.

Stronger recovery begins in 2010:Q4 at about 0.13 and remains stable here until 2011:Q3. It then generally increases to about 4.4 by 2015:Q4. Weaker recovery begins in 2010:Q4 at about 0.13 and remains stable here until 2014:Q1. It then generally increases to about 2.2 by 2015:Q4. Lower potential begins in 2010:Q4 at about 0.13 and remains stable here until 2011:Q2. It then generally increases to about 4.1 by 2015:Q4. Higher inflation begins in 2010:Q4 at about 0.13 and remains stable here until 2012:Q1. It then generally increases to about 4.35 by 2014:Q4. Greater disinflation begins in 2010:Q4 at about 0.13 and remains stable here until 2013:Q3. It then generally increases to about 2.0 by 2015:Q4. Dollar depreciation begins in 2010:Q4 at about 0.13 and remains stable here until 2012:Q2. It then generally increases to about 3.8 by 2015:Q4. Asian currency appreciation begins in 2010:Q4 at about 0.13 and remains stable here until 2012:Q3. It then generally increases to about 3.9 by 2015:Q4. The other 2 series track each other closely throughout the chart with the 70 percent interval beginning in $2012: Q 3$ at about 1 percent both lesser and greater than the Extended Tealbook baseline and widening out to about 2 percent both lesser and greater than the Extended Tealbook baseline. The 90 percent interval begins in 2012:Q3 at about 1.75 percent both lesser and greater than the Extended Tealbook baseline and widens out to about 3 percent both lesser and greater than the Extended Tealbook baseline.

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

| Measure | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP (percent change, Q4 to Q4) |  |  |  |  |  |  |
| Projection | 2.4 | 3.6 | 4.7 | 4.7 | 4.6 | 3.5 |
| Confidence interval |  |  |  |  |  |  |
| Tealbook forecast errors | 1.9-2.9 | 1.9-5.4 | 2.9-6.5 | … | ... | ... |
| FRB/US stochastic simulations | 1.7-3.0 | 2.1-5.5 | 2.6-6.6 | 2.3-6.6 | 2.2-7.1 | 1.2-6.1 |
| Civilian unemployment rate (percent, Q4) |  |  |  |  |  |  |
| Projection | 9.7 | 9.0 | 7.9 | 7.1 | 6.1 | 5.2 |
| Confidence interval |  |  |  |  |  |  |
| Tealbook forecast errors | 9.6-9.8 | 8.3-9.7 | 6.8-9.0 | ... | ... | ... |
| FRB/US stochastic simulations | 9.5-9.9 | 8.3-9.7 | 6.9-8.9 | 6.0-8.3 | 4.9-7.4 | 4.0-6.5 |
| PCE prices, total (percent change, Q4 to Q4) |  |  |  |  |  |  |
| Projection | 1.3 | 1.1 | 1.1 | 1.2 | 1.4 | 1.6 |
| Confidence interval |  |  |  |  |  |  |
| Tealbook forecast errors | 1.0-1.5 | -.1-2.4 | -.2-2.3 | ... | ... | $\ldots$ |
| FRB/US stochastic simulations | .9-1.6 | .2-2.2 | .0-2.2 | .1-2.4 | .3-2.6 | .5-2.8 |
| PCE prices excluding food and energy (percent change, Q4 to Q4) |  |  |  |  |  |  |
| Projection | 1.1 | 1.0 | 1.0 | 1.2 | 1.3 | 1.5 |
| Confidence interval |  |  |  |  |  |  |
| Tealbook forecast errors | .9-1.3 | .4-1.7 | .2-1.9 | ... | .. | ... |
| FRB/US stochastic simulations | .9-1.3 | .4-1.8 | .2-1.9 | .3-2.1 | .5-2.3 | .7-2.5 |
| Federal funds rate (percent, Q4) |  |  |  |  |  |  |
| Projection | . 1 | . 1 | . 5 | 1.7 | 2.8 | 3.7 |
| Confidence interval |  |  |  |  |  |  |
| FRB/US stochastic simulations | .1-. 1 | .1-1.0 | .1-2.3 | .1-3.6 | 1.0-4.6 | 1.9-5.6 |

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 October 10, 2010)

## Figure: Real GDP

Line chart, by percent change, 2008 to 2011. Data are annual rates. There is a horizontal line at zero. There are two series, Blue Chip consensus and Staff forecast.

Blue Chip consensus begins in 2008:Q1 at about -0.8 and generally increases to about 0.7 by 2008:Q2. It then generally decreases to about -6.9 by $2008: Q 4$ and then generally increases to about 5 by 2009:Q4. By 2010:Q2 it has generally decreased to about 1.9 and by 2011:Q4 it has generally increased to about 3.1. Staff forecast follows Blue Chip consensus almost exactly until 2010:Q3 when it decreases to about 1.8. It then generally increases to about 4.5 by 2011:Q4.

Note: There is a shaded area on the chart that represents the area between the Blue Chip top ten and bottom ten averages. This area begins in 2010:Q3 at 2 and increases to end at a range of about [2.1, 4.1] by 2011:Q4.

## Figure: Real PCE

Line chart, by percent change, 2008 to 2011. Data are annual rates. There is a horizontal line at zero. There are two series, Blue Chip consensus and Staff forecast. Blue Chip consensus begins in 2008:Q1 at about -0.8 and generally increases to about 0.1 by 2008:Q2. It then generally decreases to about -3.5 by $2008: Q 3$ and then generally increases to about 2.1 by 2009:Q3. By 2009:Q4 it has generally decreased to about 1 and by 2011:Q4 it has generally increased to about 2.75 . Staff forecast follows Blue Chip consensus almost exactly until 2010:Q2 when it begins increasing at a faster rate. By 2011:Q4 it has generally increased to about 4.05.
 range of about [1.8, 3.8] by 2011:Q4.

## Figure: Unemployment Rate

Line chart, by percent, 2008 to 2011. There are two series, Blue Chip consensus and Staff forecast. Blue Chip consensus begins in 2008:Q1 at about 5 and generally increases to about 10 by 2009:Q4. It then generally decreases to about 9.1 by 2011:Q4. Staff forecast follows Blue Chip consensus almost exactly until 2010:Q3 when it begins decreasing at a different rate. By 2011:Q4 it has generally decreased to about 9.0.
 range of about [8.3, 9.75] by 2011:Q4.

Figure: Consumer Price Index

Line chart, by percent change, 2008 to 2011. Data are annual rates. There is a horizontal line at zero. There are two series, Blue Chip consensus and Staff forecast. Blue Chip consensus begins in 2008:Q1 at about 4.5 and generally increases to about 6.4 by 2008:Q3. It then generally decreases to about -9.7 by $2008: Q 4$ and then generally increases to about 3.8 by 2009:Q3. By 2010:Q2 it has generally decreased to about -0.9 and by 2011:Q4 it has generally increased to about 1.95. Staff forecast follows Blue Chip consensus almost exactly until 2010:Q4 when it generally increases to about 2.2. It then generally decreases to about 1.1 by 2011:Q4.
 range of about [1.0, 2.9] by 2011:Q4

Figure: Treasury Bill Rate

Line chart, by percent, 2008 to 2011. There is a horizontal line at zero. There are two series, Blue Chip consensus and Staff forecast. Blue Chip consensus begins in 2008:Q1 at about 2.1 and generally decreases to about 0.1 by 2009:Q4. It then generally increases to about 0.7 by 2011:Q4. Staff forecast follows Blue Chip consensus almost exactly until 2009:Q4. It generally increases to about 0.2 by 2010:Q2 and remains constant here until 2011:Q4.

Note: There is a shaded area on the chart that represents the area between the Blue Chip top ten and bottom ten averages. This area begins in 2010:Q3 at 0.2 and generally increases to end at a range of about [0.2, 1.5] by 2011: Q4.

Figure: 10-Year Treasury Yield

Line chart, by percent, 2008 to 2011. There are two series, Blue Chip consensus and Staff forecast. Blue Chip consensus begins in 2008:Q1 at about 3.65 and generally increases to about 3.9 by 2008:Q2. It then generally decreases to about 2.7 by 2009:Q1 and then generally increases to about 3.78 by 2010 :Q1. By 2010:Q4 it has generally decreased to about 2.7 and by 2011:Q4 it has generally increased to about 3.6. Staff forecast follows Blue Chip consensus almost exactly until 2010:Q3 when it begins decreasing at a steeper rate. By 2010:Q4 it has decreased to about 2.55 and by 2011:Q4 it has generally increased to about 3.49.

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. There is a shaded area on the chart that represents the area between the Blue Chip top ten and bottom ten averages. This area begins in 2010:Q3 at 2.8 and generally increases to end at a range of about [2.9, 4.4] by 2011:Q4.
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text

## Last update: January 29, 2016

November 2010 Tealbook Book A Tables and Charts

## Greensheets

## Changes in GDP, Prices, and Unemployment

(Percent, annual rate except as noted)

| $*$ | Nominal GDP | Real GDP | PCE price index | Core PCE price index | Unemployment rate ${ }^{\mathbf{1}}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Interval | $09 / 15 / 10$ | $10 / 27 / 10$ | $09 / 15 / 10$ | $10 / 27 / 10$ | $09 / 15 / 10$ | $10 / 27 / 10$ | $09 / 15 / 10$ | $10 / 27 / 10$ | $09 / 15 / 10$ |
|  | $10 / 27 / 10$ |  |  |  |  |  |  |  |  |

## 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 | 1.1 | 1.0 | 9.7 | 9.7 |
|  | Q3 | 3.6 | 3.8 | 1.7 | 1.7 | 1.2 | 1.2 | 1.1 | 1.0 | 9.6 | 9.6 |
|  | Q4 | 2.7 | 2.8 | 2.4 | 2.4 | 1.4 | 1.9 | 1.1 | 1.1 | 9.7 | 9.7 |
| 2011: | Q1 | 3.8 | 4.0 | 2.5 | 2.7 | 1.3 | 1.3 | 1.0 | 1.1 | 9.6 | 9.5 |
| Q2 | 4.1 | 4.5 | 3.1 | 3.4 | 1.1 | 1.1 | .9 | 1.0 | 9.5 | 9.5 |  |
|  | Q3 | 4.6 | 5.0 | 3.6 | 4.0 | 1.0 | 1.1 | .9 | 1.0 | 9.3 | 9.2 |
| Q4 | 5.1 | 5.5 | 4.1 | 4.4 | .9 | 1.0 | .9 | 1.0 | 9.1 | 9.0 |  |
| $2012:$ | Q1 | 5.6 | 6.0 | 4.3 | 4.6 | 1.0 | 1.1 | .9 | 1.0 | 8.9 | 8.8 |
| Q2 | 5.6 | 6.0 | 4.4 | 4.7 | 1.0 | 1.1 | .9 | 1.0 | 8.7 | 8.6 |  |
| Q3 | 5.6 | 6.0 | 4.4 | 4.8 | 1.0 | 1.1 | .9 | 1.0 | 8.3 | 8.2 |  |
| Q4 | 5.6 | 6.0 | 4.5 | 4.8 | 1.0 | 1.1 | .9 | 1.0 | 8.0 | 7.9 |  |

Two-quarter²

| 2010: | Q2 | 4.2 | 4.3 | 2.7 | 2.7 | 1.0 | 1.0 | 1.1 | 1.1 | -.3 | -.3 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Q4 | 3.2 | 3.3 | 2.0 | 2.0 | 1.3 | 1.5 | 1.1 | 1.0 | .0 | .0 |
| 2011: | Q2 | 4.0 | 4.2 | 2.8 | 3.1 | 1.2 | 1.2 | .9 | 1.1 | -.2 | -.2 |
|  | Q4 | 4.8 | 5.2 | 3.9 | 4.2 | 1.0 | 1.1 | .9 | 1.0 | -.4 | -.5 |
| 2012: | Q2 | 5.6 | 6.0 | 4.4 | 4.6 | 1.0 | 1.1 | .9 | 1.0 | -.4 | -.4 |
|  | Q4 | 5.6 | 6.0 | 4.5 | 4.8 | 1.0 | 1.1 | .9 | 1.0 | -.7 | -.7 |

Four-quarter ${ }^{3}$

| 2009:Q4 | .6 | .6 | .2 | .2 | 1.5 | 1.5 | 1.7 | 1.7 | 3.1 | 3.1 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2010:Q4 | 3.7 | 3.8 | 2.4 | 2.4 | 1.2 | 1.3 | 1.1 | 1.1 | -.3 | -.3 |
| 2011:Q4 | 4.4 | 4.7 | 3.3 | 3.6 | 1.1 | 1.1 | .9 | 1.0 | -.6 | -.7 |
| 2012:Q4 | 5.6 | 6.0 | 4.4 | 4.7 | 1.0 | 1.1 | .9 | 1.0 | -1.1 | -1.1 |


| Annual |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 2009 | -1.7 | -1.7 | -2.6 | -2.6 | .2 | .2 | 1.5 | 1.5 | 9.3 | 9.3 |
| 2010 | 3.7 | 3.7 | 2.7 | 2.7 | 1.7 | 1.8 | 1.4 | 1.4 | 9.7 | 9.7 |
| 2011 | 3.8 | 4.0 | 2.7 | 2.9 | 1.1 | 1.2 | 1.0 | 1.1 | 9.4 | 9.3 |
| 2012 | 5.3 | 5.7 | 4.2 | 4.5 | 1.0 | 1.1 | .9 | 1.0 | 8.5 | 8.4 |

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 |  |  |  | $2010{ }^{\underline{1}} 2011{ }^{1}$ |  | $2012{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| Real GDP | 3.7 | 1.7 | 1.7 | 2.4 | 2.7 | 3.4 | 4.0 | 4.4 | 4.6 | 4.7 | 4.8 | 4.8 | 2.4 | 3.6 | 4.7 |
| Previous Tealbook | 3.7 | 1.7 | 1.7 | 2.4 | 2.5 | 3.1 | 3.6 | 4.1 | 4.3 | 4.4 | 4.4 | 4.5 | 2.4 | 3.3 | 4.4 |
| Final sales | 1.1 | . 9 | . 3 | 3.7 | 3.2 | 3.7 | 3.8 | 4.4 | 4.5 | 4.6 | 4.3 | 4.9 | 1.5 | 3.8 | 4.6 |
| Previous Tealbook | 1.1 | . 9 | . 8 | 3.3 | 2.6 | 3.3 | 3.6 | 4.1 | 4.2 | 4.2 | 4.2 | 4.7 | 1.5 | 3.4 | 4.3 |
| Priv. dom. final purch. | 2.1 | 4.4 | 1.9 | 2.1 | 3.0 | 3.9 | 4.2 | 5.0 | 5.0 | 5.3 | 5.3 | 5.6 | 2.6 | 4.0 | 5.3 |
| Previous Tealbook | 2.1 | 4.3 | . 9 | 2.1 | 2.8 | 3.8 | 4.3 | 4.7 | 4.9 | 5.0 | 5.3 | 5.2 | 2.4 | 3.9 | 5.1 |
| Personal cons. expend. | 1.9 | 2.2 | 2.6 | 2.2 | 2.4 | 2.8 | 3.3 | 4.0 | 4.1 | 4.3 | 4.5 | 4.8 | 2.2 | 3.1 | 4.4 |
| Previous Tealbook | 1.9 | 2.0 | 2.2 | 2.0 | 2.1 | 2.8 | 3.3 | 3.7 | 3.9 | 4.1 | 4.3 | 4.4 | 2.0 | 3.0 | 4.2 |
| Durables | 8.8 | 6.8 | 8.0 | 9.5 | 6.8 | 7.7 | 8.9 | 9.5 | 11.6 | 12.3 | 11.9 | 10.9 | 8.3 | 8.2 | 11.7 |
| Nondurables | 4.2 | 1.9 | 2.5 | 3.6 | 2.7 | 2.7 | 2.9 | 3.1 | 3.2 | 3.4 | 3.8 | 4.1 | 3.1 | 2.9 | 3.6 |
| Services | . 1 | 1.6 | 1.9 | . 6 | 1.6 | 2.0 | 2.5 | 3.5 | 3.2 | 3.3 | 3.5 | 4.0 | 1.0 | 2.4 | 3.5 |
| Residential investment | -12.3 | 25.7 | -29.9 | -4.7 | 13.5 | 27.2 | 22.3 | 23.3 | 18.4 | 17.5 | 16.0 | 16.1 | -7.3 | 21.5 | 17.0 |
| Previous Tealbook | -12.3 | 26.3 | -27.2 | 3.5 | 11.0 | 21.8 | 21.8 | 22.7 | 18.8 | 18.0 | 17.0 | 16.3 | -4.4 | 19.2 | 17.5 |
| Business fixed invest. | 7.8 | 17.2 | 5.5 | 3.4 | 5.3 | 6.8 | 7.0 | 7.4 | 8.3 | 9.3 | 8.6 | 8.6 | 8.4 | 6.6 | 8.7 |
| Previous Tealbook | 7.8 | 17.6 | -. 7 | 2.8 | 5.9 | 7.2 | 7.5 | 7.8 | 7.9 | 7.9 | 8.9 | 7.5 | 6.7 | 7.1 | 8.1 |
| Equipment \& software | 20.4 | 24.8 | 9.7 | 5.6 | 8.3 | 10.4 | 10.6 | 11.1 | 11.6 | 12.6 | 11.3 | 10.9 | 14.9 | 10.1 | 11.6 |
| Previous Tealbook | 20.4 | 26.4 | -. 3 | 4.6 | 8.8 | 10.6 | 11.0 | 11.5 | 11.4 | 11.0 | 12.0 | 9.8 | 12.2 | 10.5 | 11.0 |
| Nonres. structures | -17.8 | -. 5 | -5.1 | -2.4 | -2.8 | -2.9 | -3.1 | -3.1 | -1.1 | -. 6 | . 4 | 1.2 | -6.7 | -3.0 | . 0 |
| Previous Tealbook | -17.8 | -2.7 | -1.5 | -1.8 | -1.9 | -1.8 | -2.1 | -2.2 | -1.8 | -1.3 | -. 3 | . 6 | -6.2 | -2.0 | -. 7 |
| Net exports ${ }^{\underline{2}}$ | -338 | -449 | -499 | -445 | -425 | -412 | -405 | -401 | -393 | -391 | -400 | -398 | -433 | -411 | -395 |
| Previous Tealbook ${ }^{2}$ | -338 | -446 | -449 | -411 | -403 | -399 | -401 | -402 | -400 | -403 | -414 | -406 | -411 | -401 | -406 |
| Exports | 11.4 | 9.1 | 5.7 | 9.4 | 8.7 | 8.8 | 8.4 | 8.4 | 8.5 | 8.3 | 8.2 | 8.1 | 8.9 | 8.6 | 8.3 |
| Imports | 11.2 | 33.5 | 14.7 | -3.0 | 3.0 | 4.5 | 5.5 | 6.0 | 5.5 | 6.6 | 8.4 | 6.3 | 13.4 | 4.7 | 6.7 |
| Gov't. cons. \& invest. | -1.6 | 3.9 | 1.3 | 1.1 | . 4 | . 5 | . 8 | . 9 | . 8 | . 8 | . 8 | 1.0 | 1.2 | . 6 | . 9 |
| Previous Tealbook | -1.6 | 3.9 | . 8 | 1.7 | . 4 | . 6 | . 8 | . 9 | . 8 | . 8 | . 8 | 1.0 | 1.2 | . 7 | . 9 |
| Federal | 1.8 | 9.1 | 4.3 | 3.7 | 1.0 | . 9 | 1.2 | 1.1 | . 4 | . 3 | -. 1 | . 2 | 4.7 | 1.0 | . 2 |
| Defense | . 4 | 7.4 | 6.5 | 5.5 | . 0 | -. 1 | . 3 | . 1 | . 3 | . 2 | -. 5 | . 0 | 4.9 | . 1 | . 0 |
| Nondefense | 5.0 | 12.8 | -. 3 | -. 2 | 3.0 | 3.1 | 3.1 | 3.1 | . 6 | . 6 | . 6 | . 6 | 4.2 | 3.1 | . 6 |
| State \& local | -3.8 | . 6 | -. 6 | -. 7 | . 1 | . 2 | . 5 | . 8 | 1.1 | 1.2 | 1.5 | 1.6 | -1.1 | . 4 | 1.3 |
| Change in bus. inventories ${ }^{2}$ | 44 | 69 | 114 | 75 | 60 | 52 | 58 | 59 | 62 | 68 | 84 | 81 | 76 | 57 | 74 |
| Previous Tealbook ${ }^{2}$ | 44 | 70 | 99 | 71 | 69 | 62 | 64 | 66 | 70 | 78 | 87 | 80 | 71 | 65 | 79 |
| Nonfarm ${ }^{2}$ | 37 | 61 | 110 | 71 | 56 | 48 | 54 | 56 | 59 | 64 | 81 | 78 | 70 | 54 | 70 |
| Farm ${ }^{2}$ | 8 | 8 | 4 | 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 | 2004 | $\mathbf{2 0 0 5}$ | $\mathbf{2 0 0 6}$ | $\mathbf{2 0 0 7}$ | $\mathbf{2 0 0 8}$ | $\mathbf{2 0 0 9}$ | $\mathbf{2 0 1 0}$ | 2011 | 2012 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Real GDP | 3.1 | 2.7 | 2.4 | 2.3 | -2.8 | .2 | 2.4 | 3.6 | 4.7 |
| Previous Tealbook | 3.1 | 2.7 | 2.4 | 2.3 | -2.8 | .2 | 2.4 | 3.3 | 4.4 |
| Final sales | 2.8 | 2.7 | 2.8 | 2.5 | -1.9 | -.3 | 1.5 | 3.8 | 4.6 |
|  |  |  |  |  |  |  |  |  |  |


| Previous Tealbook | 2.8 | 2.7 | 2.8 | 2.5 | -1.9 | -. 3 | 1.5 | 3.4 | 4.3 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Priv. dom. final purch. | 4.2 | 3.1 | 2.5 | 1.3 | -3.8 | -2.0 | 2.6 | 4.0 | 5.3 |
| Previous Tealbook | 4.2 | 3.1 | 2.5 | 1.3 | -3.8 | -2.0 | 2.4 | 3.9 | 5.1 |
| Personal cons. expend. | 3.5 | 2.7 | 3.3 | 1.7 | -1.9 | . 2 | 2.2 | 3.1 | 4.4 |
| Previous Tealbook | 3.5 | 2.7 | 3.3 | 1.7 | -1.9 | . 2 | 2.0 | 3.0 | 4.2 |
| Durables | 5.5 | 2.1 | 6.3 | 3.9 | -12.3 | 4.8 | 8.3 | 8.2 | 11.7 |
| Nondurables | 3.0 | 3.3 | 3.2 | . 8 | -2.9 | 1.1 | 3.1 | 2.9 | 3.6 |
| Services | 3.4 | 2.6 | 2.8 | 1.7 | . 3 | -. 8 | 1.0 | 2.4 | 3.5 |
| Residential investment | 6.6 | 5.3 | -15.7 | -20.7 | -24.6 | -13.4 | -7.3 | 21.5 | 17.0 |
| Previous Tealbook | 6.6 | 5.3 | -15.7 | -20.7 | -24.6 | -13.4 | -4.4 | 19.2 | 17.5 |
| Business fixed invest. | 7.0 | 4.4 | 7.8 | 8.2 | -8.3 | -12.7 | 8.4 | 6.6 | 8.7 |
| Previous Tealbook | 7.0 | 4.4 | 7.8 | 8.2 | -8.3 | -12.7 | 6.7 | 7.1 | 8.1 |
| Equipment \& software | 8.8 | 6.1 | 6.0 | 4.3 | -11.8 | -4.9 | 14.9 | 10.1 | 11.6 |
| Previous Tealbook | 8.8 | 6.1 | 6.0 | 4.3 | -11.8 | -4.9 | 12.2 | 10.5 | 11.0 |
| Nonres. structures | 1.7 | -. 1 | 13.0 | 17.3 | -1.5 | -26.5 | -6.7 | -3.0 | . 0 |
| Previous Tealbook | 1.7 | -. 1 | 13.0 | 17.3 | -1.5 | -26.5 | -6.2 | -2.0 | -. 7 |
| Net exports ${ }^{1}$ | -688 | -723 | -729 | -655 | -504 | -363 | -433 | -411 | -395 |
| Previous Tealbook ${ }^{1}$ | -688 | -723 | -729 | -655 | -504 | -363 | -411 | -401 | -406 |
| Exports | 7.1 | 6.7 | 10.2 | 10.1 | -2.9 | -. 1 | 8.9 | 8.6 | 8.3 |
| Imports | 10.9 | 5.2 | 4.1 | . 7 | -6.0 | -7.2 | 13.4 | 4.7 | 6.7 |
| Gov't. cons. \& invest. | . 6 | . 7 | 1.5 | 1.9 | 3.1 | . 8 | 1.2 | . 6 | . 9 |
| Previous Tealbook | . 6 | . 7 | 1.5 | 1.9 | 3.1 | . 8 | 1.2 | . 7 | . 9 |
| Federal | 2.3 | 1.2 | 2.2 | 3.1 | 9.2 | 3.6 | 4.7 | 1.0 | . 2 |
| Defense | 2.4 | . 4 | 4.4 | 2.6 | 9.5 | 3.3 | 4.9 | . 1 | . 0 |
| Nondefense | 2.3 | 2.6 | -2.3 | 4.2 | 8.5 | 4.5 | 4.2 | 3.1 | . 6 |
| State \& local | -. 4 | . 4 | 1.2 | 1.2 | -. 4 | -1.0 | -1.1 | . 4 | 1.3 |
| Change in bus. inventories ${ }^{1}$ | 66 | 50 | 59 | 28 | -38 | -113 | 76 | 57 | 74 |
| Previous Tealbook ${ }^{1}$ | 66 | 50 | 59 | 28 | -38 | -113 | 71 | 65 | 79 |
| Nonfarm ${ }^{1}$ | 58 | 50 | 63 | 29 | -39 | -117 | 70 | 54 | 70 |
| 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 |  |  |  | $2010{ }^{\underline{1}}$ | $011{ }^{1}$ | $012{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| Real GDP | 3.7 | 1.7 | 1.7 | 2.4 | 2.7 | 3.4 | 4.0 | 4.4 | 4.6 | 4.7 | 4.8 | 4.8 | 2.4 | 3.6 | 4.7 |
| Previous Tealbook | 3.7 | 1.7 | 1.7 | 2.4 | 2.5 | 3.1 | 3.6 | 4.1 | 4.3 | 4.4 | 4.4 | 4.5 | 2.4 | 3.3 | 4.4 |
| Final sales | 1.1 | . 9 | . 3 | 3.6 | 3.2 | 3.7 | 3.8 | 4.4 | 4.5 | 4.5 | 4.3 | 4.9 | 1.5 | 3.8 | 4.5 |
| Previous Tealbook | 1.1 | . 9 | . 8 | 3.3 | 2.6 | 3.3 | 3.6 | 4.1 | 4.2 | 4.1 | 4.2 | 4.7 | 1.5 | 3.4 | 4.3 |
| Priv. dom. final purch. | 1.7 | 3.6 | 1.5 | 1.8 | 2.5 | 3.2 | 3.5 | 4.1 | 4.1 | 4.3 | 4.4 | 4.6 | 2.2 | 3.3 | 4.4 |
| Previous Tealbook | 1.7 | 3.5 | . 8 | 1.8 | 2.3 | 3.1 | 3.5 | 3.9 | 4.0 | 4.1 | 4.3 | 4.3 | 1.9 | 3.2 | 4.2 |
| Personal cons. expend. | 1.3 | 1.5 | 1.8 | 1.5 | 1.7 | 2.0 | 2.3 | 2.9 | 2.9 | 3.0 | 3.1 | 3.3 | 1.6 | 2.2 | 3.1 |
| Previous Tealbook | 1.3 | 1.4 | 1.6 | 1.4 | 1.5 | 2.0 | 2.3 | 2.6 | 2.8 | 2.9 | 3.0 | 3.1 | 1.4 | 2.1 | 2.9 |
| Durables | . 6 | . 5 | . 6 | . 7 | . 5 | . 6 | . 7 | . 7 | . 9 | . 9 | . 9 | . 8 | . 6 | . 6 | . 9 |


| Nondurables | . 7 | . 3 | . 4 | . 6 | . 4 | . 4 | . 5 | . 5 | . 5 | . 5 | . 6 | . 7 | . 5 | . 5 | . 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Services | . 0 | . 8 | . 9 | . 3 | . 8 | 1.0 | 1.2 | 1.7 | 1.5 | 1.6 | 1.7 | 1.9 | . 5 | 1.1 | 1.6 |
| Residential investment | -. 3 | . 6 | -. 8 | -. 1 | . 3 | . 6 | . 5 | . 5 | . 4 | . 4 | . 4 | . 4 | -. 2 | . 5 | . 4 |
| Previous Tealbook | -. 3 | . 6 | -. 7 | . 1 | . 2 | . 5 | . 5 | . 5 | . 5 | . 5 | . 4 | . 4 | -. 1 | . 4 | . 5 |
| Business fixed invest. | . 7 | 1.5 | . 5 | . 3 | . 5 | . 6 | . 7 | . 7 | . 8 | . 9 | . 8 | . 8 | . 8 | . 6 | . 9 |
| Previous Tealbook | . 7 | 1.5 | -. 1 | . 3 | . 6 | . 7 | . 7 | . 7 | . 8 | . 8 | . 9 | . 7 | . 6 | . 7 | . 8 |
| Equipment \& software | 1.2 | 1.5 | . 7 | . 4 | . 6 | . 7 | . 8 | . 8 | . 8 | . 9 | . 8 | . 8 | 1.0 | . 7 | . 9 |
| Previous Tealbook | 1.2 | 1.6 | . 0 | . 3 | . 6 | . 7 | . 8 | . 8 | . 8 | . 8 | . 9 | . 7 | . 8 | . 7 | . 8 |
| Nonres. structures | -. 5 | . 0 | -. 1 | -. 1 | -. 1 | -. 1 | -. 1 | -. 1 | . 0 | . 0 | . 0 | . 0 | -. 2 | -. 1 | . 0 |
| Previous Tealbook | -. 5 | -. 1 | . 0 | . 0 | . 0 | . 0 | -. 1 | -. 1 | . 0 | . 0 | . 0 | . 0 | -. 2 | -. 1 | . 0 |
| Net exports | -. 3 | -3.5 | -1.5 | 1.6 | . 6 | . 4 | . 2 | . 1 | . 2 | . 0 | -. 3 | . 0 | -. 9 | . 3 | . 0 |
| Previous Tealbook | -. 3 | -3.5 | -. 1 | 1.1 | . 2 | . 1 | -. 1 | . 0 | . 0 | -. 1 | -. 3 | . 2 | -. 7 | . 0 | -. 1 |
| Exports | 1.3 | 1.1 | . 7 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| Imports | -1.6 | -4.6 | -2.3 | . 5 | -. 5 | -. 7 | -. 9 | $-1.0$ | -. 9 | $-1.1$ | -1.4 | $-1.1$ | -2.0 | -. 8 | -1.1 |
| Gov't. cons. \& invest. | -. 3 | . 8 | . 3 | . 2 | . 1 | . 1 | . 2 | . 2 | . 2 | . 2 | . 2 | . 2 | . 2 | . 1 | . 2 |
| Previous Tealbook | -. 3 | . 8 | . 2 | . 4 | . 1 | . 1 | . 2 | . 2 | . 2 | . 2 | . 2 | . 2 | . 2 | . 1 | . 2 |
| Federal | . 2 | . 7 | . 3 | . 3 | . 1 | . 1 | . 1 | . 1 | . 0 | . 0 | . 0 | . 0 | . 4 | . 1 | . 0 |
| Defense | . 0 | . 4 | . 4 | . 3 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 0 | . 3 | . 0 | . 0 |
| Nondefense | . 1 | . 3 | . 0 | . 0 | . 1 | . 1 | . 1 | . 1 | . 0 | . 0 | . 0 | . 0 | . 1 | . 1 | . 0 |
| State \& local | -. 5 | . 1 | -. 1 | -. 1 | . 0 | . 0 | . 1 | . 1 | . 1 | . 1 | . 2 | . 2 | -. 1 | . 0 | . 2 |
| Change in bus. inventories | 2.6 | . 8 | 1.4 | -1.3 | -. 5 | -. 2 | . 2 | . 0 | . 1 | . 2 | . 5 | -. 1 | . 9 | -. 1 | . 2 |
| Previous Tealbook | 2.6 | . 8 | . 9 | -. 9 | -. 1 | -. 2 | . 0 | . 1 | . 1 | . 2 | . 3 | -. 2 | . 9 | . 0 | . 1 |
| Nonfarm | 2.6 | . 8 | 1.5 | -1.2 | -. 5 | -. 2 | . 2 | . 0 | . 1 | . 2 | . 5 | -. 1 | . 9 | -. 1 | . 2 |
| 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 | . 4 | 1.2 | 1.1 | 1.0 | 1.0 | 1.3 | 1.2 | 1.2 | 1.2 | 1.3 | 1.1 | 1.2 |
| Previous Tealbook | 1.0 | 1.9 | 1.9 | . 4 | 1.2 | 1.0 | . 9 | . 9 | 1.2 | 1.2 | 1.1 | 1.1 | 1.3 | 1.0 | 1.2 |
| PCE chain-wt. price index | 2.1 | . 0 | 1.2 | 1.9 | 1.3 | 1.1 | 1.1 | 1.0 | 1.1 | 1.1 | 1.1 | 1.1 | 1.3 | 1.1 | 1.1 |
| Previous Tealbook | 2.1 | . 0 | 1.2 | 1.4 | 1.3 | 1.1 | 1.0 | . 9 | 1.0 | 1.0 | 1.0 | 1.0 | 1.2 | 1.1 | 1.0 |
| Energy | 16.4 | -17.5 | 5.2 | 15.6 | 5.2 | 3.6 | 2.2 | 1.8 | 1.8 | 1.2 | 1.1 | 1.1 | 4.0 | 3.2 | 1.3 |
| Previous Tealbook | 16.4 | -17.5 | 4.5 | 5.3 | 7.3 | 5.1 | 2.9 | 2.2 | 2.2 | 1.6 | 1.6 | 1.6 | 1.4 | 4.4 | 1.8 |
| Food | 1.8 | 1.6 | . 2 | 1.7 | 1.1 | . 9 | . 9 | . 9 | 1.0 | 1.1 | 1.2 | 1.3 | 1.3 | 1.0 | 1.1 |
| Previous Tealbook | 1.8 | 1.6 | . 3 | 1.3 | . 8 | . 7 | . 7 | . 7 | . 7 | . 7 | . 7 | . 7 | 1.2 | . 7 | . 7 |
| Ex. food \& energy | 1.2 | 1.0 | 1.0 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.0 | 1.0 |
| Previous Tealbook | 1.2 | 1.1 | 1.1 | 1.1 | 1.0 | . 9 | . 9 | . 9 | . 9 | . 9 | . 9 | . 9 | 1.1 | . 9 | . 9 |
| CPI | 1.5 | -. 7 | 1.5 | 2.1 | 1.4 | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.2 | 1.1 | 1.2 | 1.1 |
| Previous Tealbook | 1.5 | -. 7 | 1.6 | 1.5 | 1.5 | 1.3 | 1.0 | 1.0 | 1.1 | 1.0 | 1.1 | 1.1 | 1.0 | 1.2 | 1.1 |
| Ex. food \& energy | . 0 | . 9 | 1.2 | . 9 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.1 | 1.2 | . 7 | 1.0 | 1.1 |
| Previous Tealbook | . 0 | . 9 | 1.6 | 1.3 | 1.0 | . 9 | . 9 | . 9 | 1.0 | 1.0 | 1.0 | 1.0 | . 9 | . 9 | 1.0 |
| ECI, hourly compensation² | 2.6 | 1.8 | 1.8 | 1.8 | 2.2 | 2.0 | 2.0 | 2.0 | 2.4 | 2.2 | 2.1 | 2.1 | 2.0 | 2.1 | 2.2 |
| Previous Tealbook ${ }^{2}$ | 2.6 | 1.8 | 1.8 | 1.8 | 2.2 | 1.8 | 1.8 | 1.8 | 2.2 | 2.0 | 2.0 | 2.0 | 2.0 | 1.9 | 2.0 |

Nonfarm business sector

| Output per hour | 3.9 | -1.9 | 2.0 | 2.0 | 1.2 | 1.2 | 1.6 | 1.9 | 2.1 | 2.0 | 2.0 | 1.9 | 1.5 | 1.5 | 2.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Previous Tealbook | 3.9 | -1.7 | 1.5 | 1.8 | 1.1 | 1.5 | 1.8 | 2.0 | 2.3 | 2.1 | 1.9 | 1.8 | 1.3 | 1.6 | 2.0 |
| Compensation per hour | -. 9 | -. 6 | 2.1 | 1.8 | 2.4 | 1.8 | 1.7 | 1.7 | 2.3 | 2.0 | 2.0 | 2.1 | . 6 | 1.9 | 2.1 |
| Previous Tealbook | -. 9 | -. 7 | 2.0 | 1.8 | 2.4 | 1.6 | 1.6 | 1.6 | 2.1 | 1.7 | 1.9 | 2.0 | . 5 | 1.8 | 1.9 |
| Unit labor costs | -4.6 | 1.3 | . 1 | -. 2 | 1.2 | . 6 | . 1 | -. 2 | . 2 | . 0 | . 0 | . 2 | -. 9 | . 4 | . 1 |
| Previous Tealbook | -4.6 | 1.0 | . 5 | . 0 | 1.3 | . 1 | -. 2 | -. 4 | -. 2 | -. 4 | . 0 | . 2 | -. 8 | . 2 | -. 1 |
| Core goods imports chain-wt. price index ${ }^{3}$ | 4.2 | 3.1 | 2.1 | 4.8 | 4.0 | 1.9 | 1.6 | 1.1 | 1.2 | 1.3 | 1.3 | 1.3 | 3.5 | 2.1 | 1.3 |
| Previous Tealbook ${ }^{3}$ | 4.2 | 3.1 | 1.3 | 2.2 | 1.7 | 1.1 | 1.0 | . 8 | . 8 | . 9 | . 9 | . 9 | 2.7 | 1.2 | . 9 |

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 | 1.1 | 1.2 |
| Previous Tealbook | 3.2 | 3.5 | 2.9 | 2.6 | 2.1 | . 5 | 1.3 | 1.0 | 1.2 |
| PCE chain-wt. price index | 3.0 | 3.3 | 1.9 | 3.5 | 1.7 | 1.5 | 1.3 | 1.1 | 1.1 |
| Previous Tealbook | 3.0 | 3.3 | 1.9 | 3.5 | 1.7 | 1.5 | 1.2 | 1.1 | 1.0 |
| Energy | 18.6 | 21.5 | -3.7 | 19.4 | -9.0 | 2.7 | 4.0 | 3.2 | 1.3 |
| Previous Tealbook | 18.6 | 21.5 | -3.7 | 19.4 | -9.0 | 2.7 | 1.4 | 4.4 | 1.8 |
| Food | 2.7 | 1.5 | 1.7 | 4.8 | 6.9 | -1.6 | 1.3 | 1.0 | 1.1 |
| Previous Tealbook | 2.7 | 1.5 | 1.7 | 4.8 | 6.9 | -1.6 | 1.2 | . 7 | . 7 |
| Ex. food \& energy | 2.2 | 2.3 | 2.3 | 2.4 | 2.0 | 1.7 | 1.1 | 1.0 | 1.0 |
| Previous Tealbook | 2.2 | 2.3 | 2.3 | 2.4 | 2.0 | 1.7 | 1.1 | . 9 | . 9 |
| CPI | 3.4 | 3.7 | 1.9 | 4.0 | 1.6 | 1.5 | 1.1 | 1.2 | 1.1 |
| Previous Tealbook | 3.4 | 3.7 | 1.9 | 4.0 | 1.6 | 1.5 | 1.0 | 1.2 | 1.1 |
| Ex. food \& energy | 2.2 | 2.1 | 2.7 | 2.3 | 2.0 | 1.7 | . 7 | 1.0 | 1.1 |
| Previous Tealbook | 2.2 | 2.1 | 2.7 | 2.3 | 2.0 | 1.7 | . 9 | . 9 | 1.0 |
| ECI, hourly compensation ${ }^{1}$ | 3.8 | 2.9 | 3.2 | 3.0 | 2.4 | 1.2 | 2.0 | 2.1 | 2.2 |
| Previous Tealbook ${ }^{1}$ | 3.8 | 2.9 | 3.2 | 3.0 | 2.4 | 1.2 | 2.0 | 1.9 | 2.0 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |
| Output per hour | 1.5 | 1.4 | . 9 | 2.6 | -. 4 | 6.2 | 1.5 | 1.5 | 2.0 |
| Previous Tealbook | 1.5 | 1.4 | . 9 | 2.6 | -. 4 | 6.2 | 1.3 | 1.6 | 2.0 |
| Compensation per hour | 3.3 | 3.5 | 4.5 | 3.6 | 2.3 | 2.5 | . 6 | 1.9 | 2.1 |
| Previous Tealbook | 3.3 | 3.5 | 4.5 | 3.6 | 2.3 | 2.5 | . 5 | 1.8 | 1.9 |
| Unit labor costs | 1.9 | 2.0 | 3.5 | . 9 | 2.7 | -3.5 | -. 9 | . 4 | . 1 |
| Previous Tealbook | 1.9 | 2.0 | 3.5 | . 9 | 2.7 | -3.5 | -. 8 | . 2 | -. 1 |
| Core goods imports chain-wt. price index ${ }^{\underline{2}}$ | 3.6 | 2.2 | 2.5 | 2.9 | 3.5 | -1.9 | 3.5 | 2.1 | 1.3 |
| Previous Tealbook ${ }^{2}$ | 3.6 | 2.2 | 2.5 | 2.9 | 3.5 | -1.9 | 2.7 | 1.2 | . 9 |

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 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | 2010 ㅍ | $2011{ }^{1}$ | $2012{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment and production |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nonfarm payroll employment ${ }^{\underline{1}}$ | . 1 | . 7 | -. 1 | . 1 | . 4 | . 6 | . 7 | . 8 | . 9 | . 9 | 1.0 | 1.0 | . 7 | 2.6 | 3.7 |
| Unemployment rate ${ }^{3}$ | 9.7 | 9.7 | 9.6 | 9.7 | 9.5 | 9.5 | 9.2 | 9.0 | 8.8 | 8.6 | 8.2 | 7.9 | 9.7 | 9.0 | 7.9 |
| Previous Tealbook ${ }^{3}$ | 9.7 | 9.7 | 9.6 | 9.7 | 9.6 | 9.5 | 9.3 | 9.1 | 8.9 | 8.7 | 8.3 | 8.0 | 9.7 | 9.1 | 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 ${ }^{3}$ | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 | 5.8 |
| GDP gap ${ }^{4}$ | -6.4 | -6.6 | -6.8 | -6.8 | -6.8 | -6.6 | -6.2 | -5.8 | -5.3 | -4.8 | -4.3 | -3.8 | -6.8 | -5.8 | -3.8 |
| Previous Tealbook ${ }^{4}$ | -6.8 | -7.0 | -7.2 | -7.2 | -7.2 | -7.0 | -6.8 | -6.4 | -6.0 | -5.6 | -5.1 | -4.7 | -7.2 | -6.4 | -4.7 |
| Industrial production ${ }^{5}$ | 7.1 | 7.0 | 4.8 | -1.5 | 3.5 | 4.0 | 4.7 | 4.5 | 5.0 | 5.6 | 5.5 | 4.8 | 4.3 | 4.2 | 5.2 |
| Previous Tealbook ${ }^{5}$ | 7.1 | 6.5 | 4.3 | . 8 | 2.1 | 3.6 | 4.0 | 4.5 | 4.2 | 4.5 | 5.1 | 3.9 | 4.7 | 3.5 | 4.4 |
| Manufacturing industr. prod. ${ }^{5}$ | 6.2 | 9.1 | 3.6 | -. 7 | 2.8 | 4.9 | 5.8 | 5.5 | 6.0 | 6.6 | 6.4 | 5.6 | 4.5 | 4.7 | 6.1 |
| Previous Tealbook ${ }^{5}$ | 6.2 | 8.5 | 3.9 | . 6 | 1.9 | 4.7 | 5.1 | 5.7 | 5.1 | 5.3 | 6.0 | 4.4 | 4.7 | 4.3 | 5.2 |
| Capacity utilization rate - mfg. ${ }^{3}$ | 70.0 | 71.6 | 72.2 | 72.0 | 72.5 | 73.3 | 74.3 | 75.3 | 76.2 | 77.2 | 78.2 | 79.1 | 72.0 | 75.3 | 79.1 |
| Previous Tealbook ${ }^{3}$ | 70.0 | 71.5 | 72.1 | 72.2 | 72.5 | 73.4 | 74.3 | 75.3 | 76.1 | 76.9 | 77.9 | 78.6 | 72.2 | 75.3 | 78.6 |
| Housing starts ${ }^{6}$ | . 6 | . 6 | . 6 | . 6 | . 7 | . 8 | . 9 | 1.0 | 1.0 | 1.1 | 1.2 | 1.3 | . 6 | . 8 | 1.1 |
| Light motor vehicle sales ${ }^{6}$ | 11.0 | 11.3 | 11.6 | 11.8 | 12.1 | 12.5 | 13.0 | 13.5 | 14.2 | 15.0 | 15.6 | 16.1 | 11.4 | 12.8 | 15.2 |
| Income and saving |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GDP5 | 4.8 | 3.7 | 3.8 | 2.8 | 4.0 | 4.5 | 5.0 | 5.5 | 6.0 | 6.0 | 6.0 | 6.0 | 3.8 | 4.7 | 6.0 |
| Real disposable pers. income ${ }^{5}$ | 1.3 | 4.4 | 1.0 | . 6 | 1.9 | 3.1 | 3.2 | 3.9 | 3.7 | 4.3 | 4.0 | 4.4 | 1.8 | 3.0 | 4.1 |
| Previous Tealbook ${ }^{5}$ | 1.3 | 4.4 | . 7 | . 9 | 1.1 | 3.0 | 3.2 | 3.7 | 3.7 | 4.1 | 4.0 | 4.4 | 1.8 | 2.8 | 4.0 |
| Personal saving rate ${ }^{3}$ | 5.5 | 5.9 | 5.7 | 5.4 | 5.3 | 5.3 | 5.3 | 5.3 | 5.2 | 5.2 | 5.1 | 5.0 | 5.4 | 5.3 | 5.0 |
| Previous Tealbook ${ }^{3}$ | 5.5 | 6.1 | 5.9 | 5.6 | 5.4 | 5.5 | 5.5 | 5.5 | 5.4 | 5.4 | 5.3 | 5.3 | 5.6 | 5.5 | 5.3 |
| Corporate profits ${ }^{\text {}}$ | 48.9 | 12.7 | 7.3 | 2.9 | 3.3 | 5.0 | 6.5 | 6.8 | 5.3 | 7.1 | 7.6 | 7.4 | 16.7 | 5.4 | 6.8 |
| Profit share of GNP ${ }^{3}$ | 10.7 | 10.9 | 11.0 | 11.0 | 11.0 | 11.0 | 11.1 | 11.1 | 11.1 | 11.1 | 11.2 | 11.2 | 11.0 | 11.1 | 11.2 |
| Net federal saving ${ }^{8}$ | -1,314 | -1,355 | -1,346 | -1,334 | -1,287 | -1,246 | -1,221 | -1,203 | -1,153 | -1,140 | -1,107 | -1,087 | -1,337 | -1,239 | -1,122 |
| Net state \& local saving ${ }^{8}$ | 29 | 16 | 28 | 42 | 45 | 34 | 23 | 20 | 14 | 28 | 35 | 43 | 28 | 31 | 30 |
| Gross national saving rate ${ }^{3}$ | 11.1 | 11.3 | 11.2 | 11.2 | 11.4 | 11.8 | 11.9 | 12.1 | 12.3 | 12.5 | 12.8 | 12.9 | 11.2 | 12.1 | 12.9 |
| Net national saving rate ${ }^{3}$ | -1.8 | -1.4 | -1.3 | -1.3 | -1.1 | -. 7 | -. 5 | -. 3 | . 0 | . 3 | . 5 | . 8 | -1.3 | -. 3 | . 8 |

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

## Other Macroeconomic Indicators

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

| Item | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment and production |  |  |  |  |  |  |  |  |  |
| Nonfarm payroll employment ${ }^{\underline{1}}$ | 2.0 | 2.4 | 2.1 | 1.2 | -2.8 | -5.4 | . 7 | 2.6 | 3.7 |
| Unemployment rate ${ }^{\text {² }}$ | 5.4 | 5.0 | 4.5 | 4.8 | 6.9 | 10.0 | 9.7 | 9.0 | 7.9 |
| 2 |  |  |  |  |  |  |  |  |  |


| Previous Tealbook | 5.4 | 5.0 | 4.5 | 4.8 | 6.9 | 10.0 | 9.7 | 9.1 | 8.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NAIRU ${ }^{2}$ | 5.0 | 5.0 | 5.0 | 5.0 | 5.3 | 6.0 | 6.0 | 6.0 | 6.0 |
| Previous Tealbook ${ }^{2}$ | 4.9 | 4.8 | 4.8 | 4.8 | 5.1 | 5.8 | 5.8 | 5.8 | 5.8 |
| GDP gap ${ }^{3}$ | -. 4 | . 1 | . 1 | . 0 | -4.9 | -6.7 | -6.8 | -5.8 | -3.8 |
| Previous Tealbook ${ }^{3}$ | -. 7 | -. 3 | -. 3 | -. 4 | -5.3 | -7.1 | -7.2 | -6.4 | -4.7 |
| Industrial production ${ }^{4}$ | 2.9 | 2.3 | 2.5 | 2.3 | -7.6 | -3.8 | 4.3 | 4.2 | 5.2 |
| Previous Tealbook ${ }^{4}$ | 2.9 | 2.3 | 2.5 | 2.3 | -7.6 | -3.8 | 4.7 | 3.5 | 4.4 |
| Manufacturing industr. prod. ${ }^{4}$ | 3.5 | 3.5 | 2.0 | 2.6 | -10.0 | -4.1 | 4.5 | 4.7 | 6.1 |
| Previous Tealbook ${ }^{4}$ | 3.5 | 3.5 | 2.0 | 2.6 | -10.0 | -4.1 | 4.7 | 4.3 | 5.2 |
| Capacity utilization rate - mfg. ${ }^{2}$ | 77.4 | 78.8 | 79.0 | 79.1 | 70.9 | 68.8 | 72.0 | 75.3 | 79.1 |
| Previous Tealbook ${ }^{2}$ | 77.4 | 78.8 | 79.0 | 79.1 | 70.9 | 68.8 | 72.2 | 75.3 | 78.6 |
| Housing starts ${ }^{-1}$ | 2.0 | 2.1 | 1.8 | 1.4 | . 9 | . 6 | . 6 | . 8 | 1.1 |
| Light motor vehicle sales ${ }^{5}$ | 16.8 | 16.9 | 16.5 | 16.1 | 13.1 | 10.3 | 11.4 | 12.8 | 15.2 |
| Income and saving |  |  |  |  |  |  |  |  |  |
| Nominal GDP4 | 6.4 | 6.3 | 5.4 | 5.0 | -. 7 | . 6 | 3.8 | 4.7 | 6.0 |
| Real disposable pers. income ${ }^{4}$ | 3.5 | . 6 | 4.6 | 1.5 | 1.0 | . 4 | 1.8 | 3.0 | 4.1 |
| Previous Tealbook ${ }^{4}$ | 3.5 | . 6 | 4.6 | 1.5 | 1.0 | . 4 | 1.8 | 2.8 | 4.0 |
| Personal saving rate ${ }^{2}$ | 3.6 | 1.5 | 2.5 | 2.1 | 5.2 | 5.5 | 5.4 | 5.3 | 5.0 |
| Previous Tealbook ${ }^{2}$ | 3.6 | 1.5 | 2.5 | 2.1 | 5.2 | 5.5 | 5.6 | 5.5 | 5.3 |
| Corporate profits ${ }^{6}$ | 21.9 | 19.6 | 3.7 | -8.1 | -31.9 | 42.5 | 16.7 | 5.4 | 6.8 |
| Profit share of GNP ${ }^{2}$ | 10.5 | 11.8 | 11.6 | 10.1 | 6.9 | 9.8 | 11.0 | 11.1 | 11.2 |
| Net federal saving ${ }^{\text {? }}$ | -379 | -283 | -204 | -245 | -616 | -1252 | -1337 | -1239 | -1122 |
| Net state \& local saving ${ }^{7}$ | -8 | 26 | 51 | 12 | -47 | -20 | 28 | 31 | 30 |
|  |  |  |  |  |  |  |  |  |  |
| Gross national saving rate ${ }^{2}$ | 14.3 | 15.5 | 16.3 | 13.6 | 11.8 | 10.8 | 11.2 | 12.1 | 12.9 |
| Net national saving rate ${ }^{2}$ | 2.7 | 3.5 | 4.2 | 1.3 | -1.4 | -2.3 | -1.3 | -. 3 | . 8 |

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)

|  | Fiscal year |  |  |  | 2010 |  |  |  | 2011 |  |  |  | 2012 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2009 ${ }^{\text {a }}$ | 2010 | 2011 | 2012 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget |  |  |  |  | Not seasonally adjusted |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{1}$ | 2104 | 2162 | 2377 | 2636 | 466 | 643 | 565 | 529 | 486 | 724 | 638 | 604 | 559 | 798 | 675 | 646 |
| Outlays ${ }^{1}$ | 3520 | 3456 | 3714 | 3662 | 795 | 930 | 855 | 942 | 956 | 910 | 907 | 923 | 961 | 913 | 864 | 965 |
| Surplus/deficit ${ }^{1}$ | -1416 | -1294 | -1337 | -1026 | -329 | -287 | -290 | -412 | -470 | -186 | -269 | -319 | -403 | -115 | -189 | -319 |
| Previous Tealbook | -1416 | -1299 | -1306 | $-1045$ | -329 | -287 | -295 | -397 | -449 | -186 | -274 | -322 | -405 | -117 | -202 | -330 |
| On-budget | -1553 | -1371 | -1422 | -1126 | -359 | -351 | -267 | -452 | -465 | -248 | -257 | -365 | -401 | -184 | -177 | -372 |


| Off-budget | 137 | 77 | 85 | 100 | 30 | 64 | -23 | 40 | -5 | 62 | -12 | 46 | -2 | 69 | -13 | 53 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 1743 | 1474 | 1311 | 1046 | 478 | 344 | 390 | 363 | 498 | 166 | 284 | 309 | 393 | 140 | 204 | 309 |
| Cash decrease | 96 | -35 | 60 | 0 | -25 | -71 | -20 | 40 | 5 | 25 | -10 | 15 | 15 | -20 | -10 | 15 |
| Other ${ }^{2}$ | -424 | -145 | -34 | -20 | -124 | 14 | -80 | 9 | -33 | -5 | -5 | -5 | -5 | -5 | -5 | -5 |
| Cash operating balance, end of period | 275 | 310 | 250 | 250 | 219 | 290 | 310 | 270 | 265 | 240 | 250 | 235 | 220 | 240 | 250 | 235 |
| NIPA federal sector |  |  |  |  | Seasonally adjusted annual rates |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 2261 | 2323 | 2512 | 2709 | 2323 | 2347 | 2390 | 2414 | 2508 | 2544 | 2583 | 2622 | 2691 | 2737 | 2785 | 2834 |
| Expenditures | 3355 | 3654 | 3784 | 3860 | 3637 | 3701 | 3736 | 3748 | 3795 | 3790 | 3804 | 3825 | 3844 | 3877 | 3893 | 3921 |
| Consumption expenditures | 977 | 1027 | 1080 | 1115 | 1017 | 1038 | 1050 | 1063 | 1078 | 1086 | 1093 | 1101 | 1115 | 1120 | 1124 | 1129 |
| Defense | 659 | 690 | 725 | 742 | 684 | 695 | 706 | 717 | 725 | 728 | 731 | 734 | 742 | 745 | 747 | 750 |
| Nondefense | 318 | 337 | 355 | 373 | 333 | 343 | 344 | 346 | 353 | 358 | 363 | 367 | 373 | 375 | 377 | 379 |
| Other spending | 2378 | 2627 | 2704 | 2745 | 2620 | 2663 | 2686 | 2686 | 2716 | 2704 | 2710 | 2725 | 2730 | 2757 | 2769 | 2793 |
| Current account surplus | -1094 | -1331 | -1272 | -1151 | -1314 | -1355 | -1346 | -1334 | -1287 | -1246 | -1221 | -1203 | -1153 | -1140 | -1107 | -1087 |
| Gross investment | 151 | 165 | 175 | 175 | 161 | 168 | 171 | 175 | 174 | 175 | 175 | 175 | 175 | 175 | 175 | 176 |
| Gross saving less gross investment $\underline{\underline{3}}$ - $^{\underline{\prime}}$ | -1122 | -1368 | -1313 | -1186 | -1348 | -1394 | -1388 | -1377 | -1329 | -1286 | -1260 | -1240 | -1189 | -1175 | -1141 | $-1120$ |
| Fiscal indicators ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| High-employment (HEB) surplus/deficit | -839 | -1023 | -961 | -892 | -1010 | -1050 | -1038 | -1019 | -971 | -933 | -920 | -919 | -879 | -889 | -883 | -891 |
| Change in HEB, percent of potential GDP | 2.2 | 1.0 | -. 6 | -. 6 | . 1 | . 2 | -. 2 | -. 2 | -. 4 | -. 3 | -. 1 | -. 1 | -. 3 | . 0 | -. 1 | . 0 |
| Fiscal impetus (FI), percent of GDP | 1.1 | 1.0 | -. 1 | -. 5 | . 3 | . 3 | . 1 | . 1 | -. 2 | -. 1 | . 0 | -. 1 | -. 1 | -. 1 | -. 3 | -. 2 |
| Previous Tealbook | 1.1 | 1.0 | -. 1 | -. 5 | . 3 | . 3 | . 1 | . 1 | -. 1 | -. 1 | . 0 | -. 1 | -. 1 | -. 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 ${ }^{\underline{1}}$ | Total | Total | Households <br> Home mortgages | Consumer credit | Business | State and local governments | Federal government | Memo: <br> 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 | -1.6 | -4.4 | -2.7 | 4.9 | 22.7 | . 6 |
| 2010 | 4.5 | -2.0 | -3.2 | -1.6 | 1.4 | 3.6 | 20.2 | 3.8 |
| 2011 | 4.8 | 1.2 | -. 4 | 4.5 | 1.9 | 5.3 | 13.4 | 4.7 |
| 2012 | 5.2 | 3.1 | 1.0 | 9.0 | 3.5 | 4.9 | 9.8 | 6.0 |
| Quarter |  |  |  |  |  |  |  |  |
| 2009: 1 | 4.6 | -. 9 | -. 3 | -3.7 | -. 0 | 5.6 | 24.4 | -3.9 |
|  |  |  |  |  |  |  |  |  |


|  | 2 | 4.4 | -1.9 | -1.8 | -4.8 | -2.6 | 4.3 | 28.9 | -. 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 3 | 2.1 | -2.2 | -2.6 | -3.9 | -4.4 | 5.8 | 19.0 | 2.3 |
|  | 4 | . 9 | -2.0 | -1.5 | -5.6 | -3.8 | 3.8 | 11.9 | 4.7 |
| 2010: | 1 | 4.5 | -1.7 | -4.3 | -1.9 | . 5 | 5.6 | 20.5 | 4.8 |
|  | 2 | 4.8 | -2.3 | -2.3 | -2.6 | . 1 | -1.5 | 24.4 | 3.7 |
|  | 3 | 4.2 | -2.8 | -4.0 | -2.0 | 3.3 | 4.4 | 16.0 | 3.8 |
|  | 4 | 4.1 | -1.3 | -2.5 | . 0 | 1.7 | 5.9 | 14.4 | 2.8 |
| 2011: | 1 | 5.5 | . 2 | -1.1 | 2.6 | 1.1 | 5.5 | 17.9 | 4.0 |
|  | 2 | 4.7 | 1.1 | -. 3 | 3.8 | 1.6 | 5.4 | 13.1 | 4.5 |
|  | 3 | 4.2 | 1.5 | -. 1 | 5.2 | 2.2 | 5.0 | 9.6 | 5.0 |
|  | 4 | 4.6 | 1.8 | . 0 | 6.2 | 2.6 | 4.8 | 10.5 | 5.5 |
| 2012: | 1 | 5.5 | 2.6 | . 7 | 7.5 | 3.0 | 4.9 | 11.9 | 6.0 |
|  | 2 | 5.4 | 3.0 | . 9 | 8.5 | 3.3 | 4.8 | 10.8 | 6.0 |
|  | 3 | 4.3 | 3.4 | 1.2 | 9.3 | 3.7 | 4.8 | 5.8 | 6.0 |
|  | 4 | 5.4 | 3.5 | 1.2 | 9.7 | 3.9 | 4.7 | 9.5 | 6.0 |

Note: Quarterly data are at seasonally adjusted annual rates.

1. Data after 2010:Q2 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 | 950.3 | 1309.8 | 1541.1 | 1782.4 | 1201.4 | 1193.4 | 1773.2 | 1541.9 | 1330.5 | 1518.8 | 1868.5 | 1875.7 | 1457.7 | 1927.5 |
| Net equity issuance | -64.7 | -236.0 | -210.0 | -208.0 | -292.4 | -268.0 | -200.0 | -200.0 | -220.0 | -220.0 | -208.0 | -208.0 | -208.0 | -208.0 |
| Net debt issuance | 1015.0 | 1545.8 | 1751.1 | 1990.4 | 1493.8 | 1461.4 | 1973.2 | 1741.9 | 1550.5 | 1738.8 | 2076.5 | 2083.7 | 1665.7 | 2135.5 |
| Borrowing indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt (percent of GDP) ${ }^{\underline{1}}$ | 241.7 | 241.9 | 243.4 | 242.0 | 242.2 | 243.0 | 243.6 | 244.0 | 243.7 | 243.1 | 242.6 | 242.4 | 241.8 | 241.2 |
| Borrowing (percent of GDP) | 7.2 | 10.6 | 11.5 | 12.4 | 10.2 | 9.9 | 13.2 | 11.5 | 10.1 | 11.2 | 13.2 | 13.0 | 10.3 | 13.0 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing ${ }^{\underline{2}}$ | -241.8 | -271.2 | 156.4 | 421.8 | -373.0 | -171.3 | 32.7 | 146.5 | 203.2 | 243.3 | 349.3 | 401.1 | 459.1 | 477.7 |
| Home mortgages | -163.1 | -332.9 | -37.4 | 99.7 | -405.3 | -250.8 | -109.6 | -29.8 | -9.9 | 0.0 | 69.5 | 89.5 | 119.6 | 120.0 |
| Consumer credit | -115.3 | -39.7 | 110.3 | 229.7 | -48.3 | 0.0 | 62.9 | 93.8 | 128.2 | 156.3 | 190.8 | 220.6 | 245.4 | 262.2 |
| Debt/DPI (percent) ${ }^{\underline{3}}$ | 124.4 | 118.5 | 114.0 | 111.0 | 117.6 | 116.3 | 115.2 | 114.2 | 113.4 | 112.5 | 111.8 | 111.1 | 110.6 | 110.0 |
| Business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Financing gap 4 | -44.7 | 34.4 | 32.6 | 100.1 | 50.5 | 22.1 | 23.9 | 23.9 | 37.8 | 44.9 | 67.3 | 85.6 | 118.1 | 129.3 |
| Net equity issuance | -64.7 | -236.0 | -210.0 | -208.0 | -292.4 | -268.0 | -200.0 | -200.0 | -220.0 | -220.0 | -208.0 | -208.0 | -208.0 | -208.0 |
| Credit market borrowing | -298.2 | 155.4 | 208.9 | 397.1 | 364.3 | 190.1 | 124.2 | 173.0 | 248.9 | 289.6 | 339.0 | 374.1 | 427.1 | 448.2 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 111.2 | 86.0 | 128.6 | 125.6 | 106.1 | 141.6 | 133.6 | 133.6 | 125.6 | 121.6 | 125.6 | 125.6 | 125.6 | 125.6 |
| Current surplus ${ }^{-5}$ | 248.2 | 273.0 | 261.5 | 267.8 | 253.6 | 268.9 | 274.1 | 264.3 | 254.4 | 253.2 | 249.1 | 264.6 | 274.1 | 283.4 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 1443.9 | 1575.6 | 1257.1 | 1045.9 | 1396.4 | 1301.0 | 1682.7 | 1288.8 | 972.8 | 1084.3 | 1262.6 | 1182.9 | 653.9 | 1084.0 |
| Net borrowing (n.s.a.) | 1443.9 | 1575.6 | 1257.1 | 1045.9 | 390.1 | 363.2 | 497.7 | 166.2 | 284.2 | 309.1 | 392.6 | 139.7 | 204.5 | 309.0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Funds supplied | -639.9 | -215.1 | 133.6 | 250.8 | 105.4 | 21.5 | 73.1 | 103.7 | 165.4 | 192.2 | 232.2 | 257.7 | 282.9 | 230.4 |

Note: Data after 2010:Q2 are staff projections.

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

Foreign Real GDP and Consumer Prices: Selected Countries
(Quarterly percent changes at an annual rate)

| Measure and country | Projected |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  |  |  | 2011 |  |  |  | 2012 |  |  |  |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Real GDP ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Total foreign | 4.9 | 5.9 | 2.3 | 2.6 | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 | 3.6 | 3.7 | 3.8 |
| Previous Tealbook | 4.9 | 5.9 | 2.5 | 2.9 | 3.0 | 3.1 | 3.2 | 3.3 | 3.4 | 3.4 | 3.5 | 3.6 |
| Advanced foreign economies | 3.8 | 2.9 | 2.0 | 1.9 | 1.8 | 1.9 | 2.1 | 2.2 | 2.3 | 2.5 | 2.6 | 2.8 |
| Canada | 5.8 | 2.0 | 1.8 | 2.5 | 2.5 | 2.5 | 2.7 | 2.8 | 2.8 | 2.9 | 2.9 | 2.9 |
| Japan | 5.0 | 1.5 | 1.6 | . 9 | 1.5 | 1.6 | 1.7 | 1.7 | 1.8 | 1.8 | 1.9 | 2.0 |
| United Kingdom | 1.8 | 4.7 | 3.2 | 1.3 | 1.1 | 2.1 | 2.4 | 2.5 | 2.5 | 2.5 | 2.6 | 2.6 |
| Euro area | 1.4 | 3.9 | 2.0 | 1.4 | 1.0 | 1.0 | 1.1 | 1.3 | 1.6 | 2.1 | 2.5 | 2.8 |
| Germany | 1.9 | 9.0 | 3.0 | 2.1 | 1.5 | 1.5 | 1.6 | 1.7 | 2.0 | 2.4 | 2.8 | 3.2 |
| Emerging market economies | 6.3 | 9.7 | 2.6 | 3.6 | 4.5 | 4.7 | 4.7 | 4.8 | 4.9 | 5.0 | 5.0 | 5.0 |
| Asia | 13.7 | 8.4 | 2.3 | 5.0 | 5.6 | 5.7 | 5.8 | 5.9 | 5.9 | 5.9 | 6.0 | 6.0 |
| Korea | 8.8 | 5.8 | 3.3 | 3.6 | 3.9 | 4.1 | 4.2 | 4.3 | 4.4 | 4.5 | 4.6 | 4.7 |
| China | 9.9 | 6.9 | 9.8 | 8.4 | 8.4 | 8.4 | 8.5 | 8.5 | 8.5 | 8.5 | 8.6 | 8.6 |
| Latin America | -. 2 | 11.8 | 2.9 | 2.1 | 3.4 | 3.7 | 3.7 | 3.7 | 3.8 | 4.2 | 4.2 | 4.2 |
| Mexico | -2.5 | 13.5 | 2.5 | 1.5 | 3.5 | 3.8 | 3.8 | 3.8 | 4.0 | 4.3 | 4.3 | 4.3 |
| Brazil | 11.3 | 5.1 | 3.5 | 3.5 | 3.5 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |

## Consumer prices ${ }^{2}$

| Total foreign | 3.4 | 1.4 | 2.1 | 2.5 | 2.4 | 2.3 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 | 2.3 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Previous Tealbook | 3.4 | 1.3 | 1.9 | 2.1 | 2.2 | 2.2 | 2.1 | 2.2 | 2.2 | 2.2 | 2.3 | 2.3 |
| Advanced foreign economies | 2.1 | .1 | 1.0 | 1.2 | 1.4 | 1.2 | 1.1 | 1.2 | 1.3 | 1.4 | 1.4 | 1.5 |
| Canada | 2.3 | -.9 | 2.3 | 1.5 | 1.6 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.2 | 2.2 |
| Japan | .7 | -.9 | -1.5 | -1.3 | -1.0 | -.9 | -.8 | -.8 | -.7 | -.6 | -.5 | -.5 |
| United Kingdom | 5.5 | 2.4 | 1.2 | 2.1 | 5.1 | 1.5 | 1.4 | 1.5 | 1.6 | 1.7 | 1.7 | 1.8 |
| Euro Area | 1.8 | 1.4 | 1.2 | 2.1 | 1.7 | 1.4 | 1.1 | 1.2 | 1.3 | 1.5 | 1.6 | 1.6 |
| Germany | 1.4 | .7 | .9 | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.2 | 1.4 | 1.5 | 1.6 |
| Emerging market economies | 4.7 | 2.6 | 3.2 | 3.6 | 3.4 | 3.4 | 3.2 | 3.2 | 3.2 | 3.1 | 3.1 | 3.1 |
| Asia | 3.6 | 2.1 | 3.5 | 3.5 | 3.1 | 2.9 | 2.8 | 2.7 | 2.7 | 2.7 | 2.7 | 2.7 |
| Korea | 3.3 | 1.9 | 3.4 | 2.9 | 2.7 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| China | 3.0 | 2.6 | 4.3 | 3.9 | 2.9 | 2.8 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 | 2.6 |
| Latin America | 7.8 | 3.6 | 2.3 | 3.6 | 4.4 | 4.4 | 4.3 | 4.3 | 4.2 | 4.1 | 4.1 | 4.1 |
| Mexico | 7.9 | 2.7 | 2.1 | 3.2 | 3.8 | 3.9 | 3.9 | 3.9 | 3.7 | 3.7 | 3.7 | 3.7 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

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

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

| Measure and country | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | Projected |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 2010 | 2011 | 2012 |
| Real GDP $\underline{1}^{1}$ |  |  |  |  |  |  |  |  |  |
| Total foreign | 3.9 | 4.1 | 4.0 | 4.2 | -. 8 | . 4 | 3.9 | 3.2 | 3.6 |
| Previous Tealbook | 3.9 | 4.1 | 4.0 | 4.2 | -. 8 | . 4 | 4.1 | 3.2 | 3.5 |
| Advanced foreign economies | 2.6 | 2.8 | 2.5 | 2.4 | -1.8 | -1.4 | 2.7 | 2.0 | 2.6 |
| Canada | 3.7 | 3.1 | 1.9 | 2.5 | -. 9 | -1.1 | 3.0 | 2.6 | 2.9 |
| Japan | 1.1 | 2.9 | 2.1 | 1.8 | -4.3 | -1.4 | 2.2 | 1.6 | 1.9 |
| United Kingdom | 2.4 | 2.4 | 2.7 | 2.4 | -2.7 | -3.0 | 2.8 | 2.0 | 2.5 |
| Euro area | 1.7 | 2.1 | 3.6 | 2.2 | -2.1 | -2.0 | 2.1 | 1.1 | 2.3 |
| Germany | . 2 | 1.6 | 4.5 | 1.8 | -2.0 | -2.0 | 4.0 | 1.6 | 2.6 |
| Emerging market economies | 5.6 | 5.8 | 5.9 | 6.6 | . 3 | 2.8 | 5.5 | 4.7 | 5.0 |
| Asia | 6.0 | 7.8 | 7.2 | 8.4 | . 9 | 7.1 | 7.3 | 5.8 | 5.9 |
| Korea | 2.7 | 5.2 | 4.6 | 5.7 | -3.2 | 6.1 | 5.4 | 4.1 | 4.5 |
| China | 10.0 | 10.5 | 11.0 | 12.6 | 7.2 | 11.5 | 8.7 | 8.4 | 8.5 |
| Latin America | 5.1 | 3.9 | 4.6 | 4.7 | -. 4 | -. 9 | 4.1 | 3.6 | 4.1 |
| Mexico | 4.6 | 3.5 | 3.9 | 3.9 | -1.1 | -2.3 | 3.6 | 3.7 | 4.2 |
| Brazil | 5.1 | 3.5 | 4.8 | 6.8 | 1.0 | 4.4 | 5.8 | 3.9 | 4.0 |

## Consumer prices ${ }^{2}$

| Total foreign | 2.8 | 2.3 | 2.1 | 3.7 | 3.4 | 1.2 | 2.3 | 2.3 | 2.3 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Previous Tealbook | 2.8 | 2.3 | 2.1 | 3.7 | 3.4 | 1.2 | 2.2 | 2.2 | 2.2 |
| Advanced foreign economies | 1.8 | 1.6 | 1.4 | 2.2 | 2.0 | .2 | 1.1 | 1.2 | 1.4 |
| Canada | 2.3 | 2.3 | 1.4 | 2.5 | 1.9 | .8 | 1.3 | 2.0 | 2.2 |
| Japan | .5 | -1.0 | .3 | .6 | 1.0 | -2.0 | -.8 | -.9 | -.6 |
| United Kingdom | 1.4 | 2.1 | 2.7 | 2.1 | 3.9 | 2.1 | 2.8 | 2.4 | 1.7 |
| Euro Area | 2.3 | 2.3 | 1.8 | 2.9 | 2.3 | .4 | 1.6 | 1.3 | 1.5 |
| Germany | 2.1 | 2.2 | 1.3 | 3.1 | 1.7 | .3 | 1.1 | 1.1 | 1.4 |
| Emerging market economies | 3.9 | 3.0 | 2.9 | 5.1 | 4.6 | 2.2 | 3.5 | 3.3 | 3.1 |
| Asia | 3.1 | 2.6 | 2.4 | 5.5 | 3.7 | 1.3 | 3.2 | 2.9 | 2.7 |
| Korea | 3.4 | 2.5 | 2.1 | 3.4 | 4.5 | 2.4 | 2.9 | 2.5 | 2.4 |
| China | 3.2 | 1.4 | 2.1 | 6.6 | 2.6 | .6 | 3.4 | 2.7 | 2.6 |
| Latin America | 5.6 | 3.7 | 4.1 | 4.2 | 6.6 | 4.0 | 4.3 | 4.3 | 4.1 |
| Mexico | 5.3 | 3.1 | 4.1 | 3.8 | 6.2 | 4.0 | 4.0 | 3.9 | 3.7 |
| Brazil | 7.2 | 6.1 | 3.2 | 4.3 | 6.2 | 4.2 | 4.9 | 5.5 | 4.9 |

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

## U.S. Current Account

|  |  |  |  |  |  |  | Pro | ted |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 20 |  |  |  |  | 11 |  |  | 20 |  |  |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
|  |  |  |  |  | Billio | ns of do | llars, s.a | a.r. |  |  |  |  |
| U.S. current account balance | -436.6 | -493.1 | -505.6 | -503.8 | -507.0 | -487.4 | -492.2 | -489.3 | -487.5 | -490.8 | -505.0 | -506.8 |
| Previous Tealbook | -432.8 | -502.9 | -458.2 | -435.8 | -454.6 | -446.7 | -459.1 | -462.4 | -464.6 | -471.2 | -482.1 | -470.6 |
| Current account as percent of GDP | -3.0 | -3.4 | -3.4 | -3.4 | -3.4 | -3.2 | -3.2 | -3.2 | -3.1 | -3.1 | -3.1 | -3.1 |
| Previous Tealbook | -3.0 | -3.4 | -3.1 | -2.9 | -3.0 | -3.0 | -3.0 | -3.0 | -3.0 | -3.0 | -3.0 | -2.9 |
| Net goods \& services | -457.8 | -526.4 | -536.0 | -537.4 | -529.6 | -521.4 | -520.9 | -522.0 | -519.0 | -520.0 | -534.7 | $-537.3$ |
| Investment income, net | 168.8 | 173.1 | 151.4 | 150.2 | 152.2 | 148.5 | 145.8 | 145.4 | 144.1 | 141.8 | 142.4 | 143.2 |
| Direct, net | 275.9 | 283.8 | 267.8 | 268.5 | 268.2 | 267.2 | 268.0 | 274.2 | 279.4 | 285.7 | 291.9 | 299.8 |
| Portfolio, net | -107.1 | -110.7 | -116.4 | -118.3 | -116.1 | -118.7 | -122.2 | -128.8 | -135.3 | -143.9 | -149.5 | -156.6 |
| Other income and transfers, net | -147.6 | -139.8 | -121.0 | -116.6 | -129.5 | -114.4 | -117.0 | -112.6 | -112.6 | -112.6 | -112.6 | -112.6 |

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 | -484.8 | -494.0 | -497.5 |
| Previous Tealbook | -630.5 | -747.6 | -802.6 | -718.1 | -668.9 | -378.4 | -457.4 | -455.7 | -472.1 |
| Current account as percent of GDP | -5.3 | -5.9 | -6.0 | -5.1 | -4.7 | -2.7 | -3.3 | -3.2 | -3.1 |
| Previous Tealbook | -5.3 | -5.9 | -6.0 | -5.1 | -4.7 | -2.7 | -3.1 | -3.0 | -3.0 |
| Net goods \& services | -609.3 | -714.2 | -759.2 | -702.1 | -698.8 | -374.9 | -514.4 | -523.5 | -527.7 |
| Investment income, net | 73.4 | 78.8 | 54.7 | 106.6 | 159.3 | 129.2 | 160.9 | 147.9 | 142.9 |
| Direct, net | 150.9 | 173.2 | 174.0 | 241.6 | 287.7 | 252.1 | 274.0 | 269.4 | 289.2 |
| Portfolio, net | -77.5 | -94.4 | -119.4 | -134.9 | -128.4 | -122.8 | -113.1 | -121.5 | -146.3 |
| Other income and transfers, net | -94.5 | -112.2 | -98.1 | -122.6 | -129.3 | -132.8 | -131.3 | -118.4 | -112.6 |

## November 2010 Tealbook Book B Tables and Charts ${ }^{\ddagger}$

## Monetary Policy Strategies

Equilibrium Real Federal Funds Rate

## Figure: Short-Run Estimates with Confidence Intervals

Line chart, 1990 to 2010. Unit is percent. There are five series "The actual real funds rate based on lagged core inflation," "Range of four model-based estimates," "70 percent confidence interval," "90 percent confidence interval," and "Tealbook-consistent measure." The actual real funds rate based on lagged core inflation begins at about 4 and generally decreases to about 0 in 1992:Q3. It generally increases to about 5 in 2000:Q3 then generally decreases to about -1 in 2004:Q2. It generally increases to about 3 in 2006:Q3 then remains about constant until 2007:Q4. It generally decreases to about -2 in 2008:Q4 then generally increases ending at about -1 . Range of four model-based estimates begins as a range of about [1.5, 3.5] then generally decreases to about [-1, 2] in 1991:Q1. It generally increases to about $[1.5,5]$ in 2000:Q1 then generally decreases to about $[-7,-1]$ in 2009:Q2. It generally increases ending at about [-3, 0]. 70 Percent confidence interval begins at a range between about 0 and about 4. It generally decreases to a range of about [-1.5, 2.5] in 1991:Q2. It generally increases to about [1, 4.5] in 2000:Q1 then generally decreases to about [-1.5, 2] in 2003:Q1. It generally increases to about [0, 2] in 2004:Q1 and remains about constant until 2008:Q1. It generally decreases to about $[-7,-2]$ in 2009:Q2 then generally increases ending at about [-4, 0]. 90 Percent confidence interval begins at a range of about [-.5,5] and generally decreases to about [-3, 3] in 1991:Q1. It generally increases to about [.5, 6] in 2000:Q1 then generally decreases to about [-2, 3] in 2003:Q3. It generally increases to about [-2, 3.5] in 2008:Q1 then generally decreases to about [-8, 0] in 2009:Q2. It generally increases ending at about [-4.5, 1.5]. Tealbook-consistent measure begins at about 4 in 1997:Q3 then generally increases to about 6 in 2000:Q3. It generally decreases to about 0 in 2002:Q4 then generally increases to about 3 in 2007:Q3. It generally decreases to about -4 in 2009:Q1 then generally increases ending at about -2 .

Short-Run and Medium-Run Measures

|  | Current Tealbook | Current Quarter Estimate as of Previous Tealbook | revious Tealbook |
| :---: | :---: | :---: | :---: |
| Short-Run Measures |  |  |  |
| Single-equation model | -2.4 | -2.7 | -2.4 |
| Small structural model | -2.7 | -3.1 | -2.8 |
| EDO model | 0.1 | 0.1 | 0.6 |
| FRB/US model | -3.1 | -3.1 | -3.3 |
| Confidence intervals for four model-based estimates |  |  |  |
| 70 percent confidence interval | -3.9 to 0.0 |  |  |
| 90 percent confidence interval | -4.9 to 1.3 |  |  |
| Tealbook-consistent measures |  |  |  |
| EDO model | -2.3 | -2.8 | -3.7 |
| FRB/US model | -1.9 | -2.2 | -2.4 |
| Medium-Run Measures |  |  |  |
| Single-equation model | 1.2 | 1.1 | 1.1 |
| Small structural model | 1.2 | 1.2 | 1.2 |
| Confidence intervals for two model-based estimates |  |  |  |
| 70 percent confidence interval | 0.3 to 2.1 |  |  |
| 90 percent confidence interval | -0.3 to 2.8 |  |  |
| TIPS-based factor model | 2.0 |  | 2.0 |
| Memo |  |  |  |
| Actual real federal funds rate | -1.2 |  | -1.2 |

Note: Explanatory Note A provides background information regarding the construction of these measures and confidence intervals. The actual real federal funds rate shown is based on lagged core inflation as a proxy for inflation expectations. For information regarding alternative measures, see Explanatory Note A . Estimates of $\mathrm{r}^{\star}$ may change at the beginning of a quarter even when there is no shift in the staff outlook because the twelve quarter horizon covered by the calculation has rolled forward one quarter. Therefore, whenever the Tealbook is published early in the quarter, this table includes a third column labeled "Current Quarter Estimate as of Previous Tealbook."

Line chart, 2010 to 2015. Unit is percent. There are three series, "Current Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Previous Tealbook: Unconstrained." Current Tealbook: Constrained begins at about 0 and remains about constant until 2014:Q2. It generally increases ending at about 3. Current Tealbook: Unconstrained begins at about 0 and generally decreases to about -3.5 in 2011:Q4. It generally increases ending at about 4. Previous Tealbook: Unconstrained begins at about 0 and generally decreases to about -4 in 2011:Q4. It generally increases ending at about 4.

## Figure: Real Federal Funds Rate

Line chart, 2010 to 2015. Unit is percent. There are three series, "Current Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Previous Tealbook: Unconstrained." Current Tealbook: Constrained begins at about -1 and remains about constant until 2014:Q2. It generally increases ending at about 1. Current Tealbook: Unconstrained and Previous Tealbook: Unconstrained begin at about -1 and generally decrease together to about -5 in 2012:Q1. The generally increases together ending at about 2.

## Figure: Civilian Unemployment Rate

Line chart, 2010 to 2015. Unit is percent. There are three series, "Current Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Previous Tealbook: Unconstrained." Current Tealbook: Constrained begins at about 9.5 and generally decreases ending at about 4.5. Current Tealbook: Unconstrained begins at about 9.5 and generally decreases ending at about 5. Previous Tealbook: Unconstrained begins at about 9.5 and generally decreases to about 5 in 2014:Q1. It generally increases ending at about 5.5.

## Figure: Core PCE Inflation

Line chart, 2010 to 2015. Unit is percent, four-quarter averages. There are three series, "Current Tealbook: Constrained," "Current Tealbook: Unconstrained," and "Previous Tealbook: Unconstrained." Current Tealbook: Constrained begins at about 1.5 and generally decreases to about 1.25 in 2010:Q3. It fluctuates but remains about constant until 2012:Q4 then generally increases ending at about 2.0. Current Tealbook: Unconstrained and Previous Tealbook: Unconstrained begin at about 1.5 and generally decrease together to about 1.25 in 2010:Q3. They generally increase together ending at about 2.0.

## The Policy Outlook in an Uncertain Environment

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

Line chart, 2010 to 2014. Unit is percent. There are three series, "Current Tealbook," "Previous Tealbook," and "Staff Assumption." Current Tealbook begins at about 0 and remains about constant until 2012:Q4. It generally increases ending at about 3.5. Previous Tealbook begins at about 0 and remains about constant until 2013 :Q1. It generally increases ending at about 3.5 . Staff assumption begins at about 0 and remains about constant until 2010:Q3. It generally increases ending at about 3. There is a dark shaded region that begins at about 0 and generally increases ending at a range of about [1,5.5]. There is a light shaded region that begins at about 0 and increases ending at a range of about [ 0,7 ].

## Figure: Information from Financial Markets

Line chart, 2010 to 2014. Unit is percent. There are two series, "Current Tealbook" and "Previous Tealbook." Current Tealbook begins at about 0 and remains about constant until 2012:Q1. It generally increases ending at about 1.75. Previous Tealbook begins at about 0 and remains about constant until 2011:Q4. It generally increases ending at about 2.

Note: In both panels, the dark and light shading represent the 70 and 90 percent confidence intervals respectively. Financial market quotes are as of October 27 .

## Near-Term Prescriptions of Simple Policy Rules

|  | Constrained Policy |  |  | Unconstrained Policy |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{2 0 1 0 Q 4}$ | $\mathbf{2 0 1 1 Q 1}$ | $\mathbf{2 0 1 0 Q 4}$ | 2011Q1 |  |
| Taylor (1993) rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 8 1}$ | $\mathbf{- 0 . 8 2}$ |  |
| Previous Tealbook | 0.13 | 0.13 | -0.92 | -1.00 |  |
| Taylor (1999) rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 4 . 2 3}$ | $\mathbf{- 4 . 2 1}$ |  |
| Previous Tealbook | 0.13 | 0.13 | -4.51 | -4.59 |  |
| Estimated outcome-based rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 5 1}$ | $\mathbf{- 1 . 3 1}$ |  |
| Previous Tealbook | 0.13 | 0.13 | -0.70 | $\mathbf{- 1 . 6 4}$ |  |
| Estimated forecast-based rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 3}$ | $\mathbf{- 0 . 5 4}$ | $\mathbf{- 1 . 2 8}$ |  |


| Previous Tealbook | 0.13 | 0.13 | -0.71 | -1.60 |
| :---: | :---: | :---: | :---: | :---: |
| First-difference rule | $\mathbf{0 . 1 3}$ | $\mathbf{0 . 1 7}$ | $\mathbf{0 . 0 1}$ | $\mathbf{0 . 0 5}$ |
| Previous Tealbook | 0.13 | 0.13 | -0.19 | -0.34 |

Memo

|  | 2010Q4 | 2011Q1 |
| :--- | :---: | :---: |
| Staff assumption | 0.13 | 0.13 |
| Fed funds futures | 0.17 | 0.13 |
| Median expectation of primary dealers | 0.13 | 0.13 |
| Blue Chip forecast (October 1, 2010) | 0.20 | 0.20 |

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

## November 2010 Tealbook Book B Tables and Charts ${ }^{\ddagger}$

## Monetary Policy Alternatives

Table 1: Overview of Alternatives for the November 3 FOMC Statement

| Key Components | September Statement | November Alternatives |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C | D |
| Economic Activity |  |  |  |  |  |
| Recent Developments | pace of recovery has slowed in recent months | pace of recovery continues to be slow |  | pace of recovery continues to be slow | economic recovery is proceeding |
| Labor Market | pace of recovery in employment has slowed; high unemployment; employers remain reluctant to add to payrolls | pace of recovery continues to be slow; high unemployment; employers remain reluctant to add to payrolls; the unemployment rate is elevated |  | pace of recovery continues to be slow; high unemployment; employers remain reluctant to add to payrolls | n.a. |
| Outlook | gradual return to higher resource utilization w/ price stability; pace of recovery likely to be modest in near term | Committee anticipates a gradual return to higher resource utilization w/price stability |  | gradual return to higher resource utilization w/ price stability; pace of recovery likely to remain modest in near term | the Committee anticipates a gradual return to higher resource utilization w/price stability |
| Financial Conditions |  |  |  |  |  |
| Recent Developments | bank lending has continued to contract, but at a reduced rate | n.a. |  | bank lending has continued to contract, but at a reduced rate | The contraction in bank lending has slowed |
| Inflation |  |  |  |  |  |
| Recent Developments | underlying inflation currently below levels consistent with dual mandate | longer-term expectations stable, but underlying inflation has trended lower; underlying inflation low relative to rates consistent with dual mandate |  | underlying inflation currently below levels consistent with dual mandate | n.a. |
|  | substantial slack; stable inflation expectations | longer-term expectations stable |  | substantial slack; stable inflation expectations | n.a. |
| Outlook | subdued for some time before rising to mandate consistent levels | Committee anticipates a gradual return to higher resource utilization w/price stability...but progress toward its objectives has been unacceptably slow |  | subdued for some time before rising toward mandate consistent levels | gradual return to higher resource utilization in a context of price stability |
| 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 | at least until mid2012, so long as: unemployment is elevated; inflation is expected to remain consistent with mandate; and inflation expectations anchored | exceptionally low levels for an extended period | exceptionally low levels for an extended period | Iow levels for some time |
| SOMA Portfolio Policy |  |  |  |  |  |
|  |  |  |  |  |  |


| Approach | keep constant: reinvest principal payments in Treasuries | increase: maintain reinvestment policy; purchase additional \$1 trillion of Treasuries through the end of 2011 | increase: <br> maintain <br> reinvestment <br> policy; purchase <br> additional \$600 <br> billion of <br> Treasuries through the 2011 Q2; regularly review program | keep constant: maintain existing reinvestment policy | keep constant: for the time being, maintain existing reinvestment policy |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Future Policy Action |  |  |  |  |  |
| Approach | provide additional accommodation, if needed | provide additional accommodation, as needed | employ tools as necessary | provide additional accommodation, if needed | gradually remove accommodation |

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

Figure: Total Assets

Line chart, 2000 to 2020. Unit is billions of dollars. Data are monthly. There are five series, "Alt A," "Baseline (Alt B)," "Alt C," "Alt D," and "Baseline (September Tealbook)." All 5 series begin at about 500 and generally increase together to about 900 . They generally increase together to about 2250 in late 2008 then generally decrease together to about 1900 in early 2009. The generally increase together to about 2250 in mid-2010. Alt A generally increases to about 3250 in early 2012 then generally decreases to about 1500 in late 2010. It generally increases ending at about 1900. Baseline (Alt B) generally increases to about 2750 in early 2011 and remains about constant until early 2013. It generally decreases to about 1400 in early 2010 then generally increases ending at about 1900. Alt C and Alt D generally decrease together to about 1400 in early 2010 then generally increase together ending at about 1900. Baseline (September Tealbook) generally decreases to about 1450 in late 2010 then generally increases ending at about 1900.

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

## Growth Rates for the Monetary Base

| Date | Baseline | Alternative A | Alternative C | Alternative D |
| :---: | :---: | :---: | :---: | :---: |
|  | Percent, annual rate |  |  |  |
| Monthly |  |  |  |  |
| Jan-10 | -17.8 | -17.8 | -17.8 | -17.8 |
| Feb-10 | 72.2 | 72.2 | 72.2 | 72.2 |
| Mar-10 | -19.7 | -19.7 | -19.7 | -19.7 |
| Apr-10 | -37.6 | -37.6 | -37.6 | -37.6 |
| May-10 | -2.0 | -2.0 | -2.0 | -2.0 |
| Jun-10 | -5.8 | -5.8 | -5.8 | -5.8 |
| Jul-10 | -2.2 | -2.2 | -2.2 | -2.2 |
| Aug-10 | -2.4 | -2.4 | -2.4 | -2.4 |
| Sep-10 | -10.2 | -10.2 | -10.2 | -10.2 |
| Oct-10 | 14.6 | 14.6 | 13.7 | 12.5 |
| Nov-10 | 32.6 | 31.6 | 6.5 | 5.9 |
| Dec-10 | 27.3 | 25.2 | -24.4 | -23.2 |
| Quarterly |  |  |  |  |
| 2010 Q1 | 14.0 | 14.0 | 14.0 | 14.0 |
| 2010 Q2 | -10.4 | -10.4 | -10.4 | -10.4 |
| 2010 Q3 | -3.9 | -3.9 | -3.9 | -3.9 |
| 2010 Q4 | 12.7 | 12.3 | 0.7 | 0.3 |
| Annual - Q4 to Q4 |  |  |  |  |
| 2009 | 41.5 | 41.5 | 41.5 | 41.5 |
| 2010 | 3.0 | 2.9 | 0.0 | -0.1 |
| 2011 | 28.7 | 43.1 | -1.7 | -1.7 |
|  |  |  |  |  |


| 2012 | -2.3 | 1.6 | -2.9 | -4.8 |
| ---: | ---: | ---: | ---: | ---: |
| 2013 | -16.7 | -15.0 | -15.3 | -15.6 |
| 2014 | -15.8 | -16.2 | -18.1 | -18.2 |
| 2015 | -22.2 | -20.8 | -0.5 | 2.1 |

Note: Not seasonally adjusted.

## Growth Rates for M2

(Percent, seasonally adjusted annual rate)

## Monthly Growth Rates Tealbook Forecast *

| Jan-10 | -8.0 |
| ---: | ---: |
| Feb-10 | 8.4 |
| Mar-10 | -3.6 |
| Apr-10 | -4.1 |
| May-10 | 11.6 |
| Jun-10 | 4.4 |
| Jul-10 | -0.2 |
| Aug-10 | 6.4 |
| Sep-10 | 8.3 |
| Oct-10 | 8.3 |
| Nov-10 | 3.2 |
| Dec-10 | 1.3 |

Quarterly Growth Rates

| 2010 Q1 | -0.1 |
| ---: | ---: |
| 2010 Q2 | 1.8 |
| 2010 Q3 | 4.6 |
| 2010 Q4 | 6.2 |

## Annual Growth Rates

| 2009 | 5.1 |
| ---: | ---: |
| 2010 | 3.2 |
| 2011 | 1.4 |
| 2012 | 4.3 |

* This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through October 2010; projections thereafter. Return to table
$\dagger$ Note: Data values for figures are rounded and may not sum to totals. Return to text


## Last update: January 29, 2016

## November 2010 Tealbook Book 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 dynamicstochastic-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 | 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> model <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-yearahead 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 | -1.2 | -1.9 | -0.7 |
| Lagged headline inflation | -1.3 | -2.0 | -0.8 |
| Projected headline inflation | -1.0 | -1.9 | -0.7 |

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

Federal Reserve Balance Sheet: End-of-Year Projections -- Baseline Scenario (Alternative B)

|  | End-of-Year |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sep 30, 2010 | 2010 | 2012 | 2014 | 2016 | 2018 | 2020 |
|  | \$ Billions |  |  |  |  |  |  |
| Total assets | 2,311 | 2,424 | 2,767 | 1,930 | 1,475 | 1,635 | 1,825 |
| Selected assets: |  |  |  |  |  |  |  |
| Liquidity programs for financial firms | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Primary, secondary, and seasonal credit | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Central bank liquidity swaps | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lending through other credit facilities | 30 | 29 | 9 | 0 | 0 | 0 | 0 |
| Term Asset-Backed Securities Loan Facility (TALF) | 30 | 29 | 9 | 0 | 0 | 0 | 0 |
| Support for specific institutions | 112 | 84 | 29 | 9 | 2 | 0 | 0 |
| Credit extended to AIG | 45 | 31 | 0 | 0 | 0 | 0 | 0 |
| Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III | 67 | 53 | 29 | 9 | 2 | 0 | 0 |
|  |  |  |  |  |  |  |  |


| Securities held outright | 2,054 | 2,180 | 2,561 | 1,799 | 1,384 | 1,559 | 1,756 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| U.S. Treasury securities | 822 | 1,040 | 1,934 | 1,415 | 1,235 | 1,559 | 1,756 |
| Agency debt securities | 154 | 147 | 77 | 39 | 16 | 0 | 0 |
| Agency mortgage-backed securities | 1,079 | 992 | 550 | 345 | 133 | 0 | 0 |
| Special drawing rights certificate account | 5 | 5 | 7 | 7 | 7 | 7 | 7 |
| Net portfolio holdings of TALF LLC | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Total other assets | 108 | 126 | 161 | 113 | 82 | 69 | 62 |
| Total liabilities | 2,254 | 2,365 | 2,689 | 1,827 | 1,339 | 1,455 | 1,587 |
| Selected liabilities: |  |  |  |  |  |  |  |
| Federal Reserve notes in circulation | 914 | 920 | 981 | 1,113 | 1,231 | 1,347 | 1,479 |
| Reverse repurchase agreements | 65 | 64 | 59 | 59 | 59 | 59 | 59 |
| Deposits with Federal Reserve Banks | 1,252 | 1,363 | 1,634 | 641 | 35 | 35 | 35 |
| Reserve balances held by depository institutions | 942 | 1,091 | 1,424 | 431 | 25 | 25 | 25 |
| U.S. Treasury, general account | 108 | 70 | 5 | 5 | 5 | 5 | 5 |
| U.S. Treasury, supplementary financing account | 200 | 200 | 200 | 200 | 0 | 0 | 0 |
| Other balances | 2 | 2 | 5 | 5 | 5 | 5 | 5 |
| Total capital | 57 | 59 | 78 | 103 | 136 | 180 | 239 |

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


| U.S. Treasury, supplementary financing account | 200 | 200 | 200 | 200 | 0 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Other balances | 2 | 5 | 5 | 5 | 5 | 5 | 5 |
| Total capital | 57 | 59 | 78 | 103 | 136 | 180 | 239 |

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

|  | Sep 30, 2010 | 2010 | 2012 | $\begin{aligned} & \text { End-o } \\ & 2014 \end{aligned}$ | $\begin{array}{r} \text { f-Year } \\ 2016 \end{array}$ | 2018 | 2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ Billions |  |  |  |  |  |  |
| Total assets | 2,311 | 2,246 | 2,092 | 1,440 | 1,475 | 1,635 | 1,825 |
| Selected assets: |  |  |  |  |  |  |  |
| Liquidity programs for financial firms | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Primary, secondary, and seasonal credit | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Central bank liquidity swaps | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lending through other credit facilities | 30 | 29 | 9 | 0 | 0 | 0 | 0 |
| Term Asset-Backed Securities Loan Facility (TALF) | 30 | 29 | 9 | 0 | 0 | 0 | 0 |
| Support for specific institutions | 112 | 84 | 29 | 9 | 2 | 0 | 0 |
| Credit extended to AIG | 45 | 31 | 0 | 0 | 0 | 0 | 0 |
| Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III | 67 | 53 | 29 | 9 | 2 | 0 | 0 |
| Securities held outright | 2,054 | 2,030 | 1,964 | 1,351 | 1,400 | 1,566 | 1,759 |
| U.S. Treasury securities | 822 | 890 | 1,338 | 967 | 1,251 | 1,566 | 1,759 |
| Agency debt securities | 154 | 147 | 77 | 39 | 16 | 0 | 0 |
| Agency mortgage-backed securities | 1,079 | 992 | 550 | 345 | 133 | 0 | 0 |
| Special drawing rights certificate account | 5 | 5 | 7 | 7 | 7 | 7 | 7 |
| Net portfolio holdings of TALF LLC | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Total other assets | 108 | 98 | 82 | 71 | 66 | 63 | 59 |
| Total liabilities | 2,254 | 2,187 | 2,014 | 1,337 | 1,339 | 1,455 | 1,587 |
| Selected liabilities: |  |  |  |  |  |  |  |
| Federal Reserve notes in circulation | 914 | 920 | 981 | 1,113 | 1,231 | 1,347 | 1,479 |
| Reverse repurchase agreements with foreign official and international accounts | 65 | 64 | 59 | 59 | 59 | 59 | 59 |
| Deposits with Federal Reserve Banks | 1,252 | 1,187 | 959 | 151 | 35 | 35 | 35 |
| Reserve balances held by depository institutions | 942 | 913 | 749 | 25 | 25 | 25 | 25 |
| U.S. Treasury, general account | 108 | 70 | 5 | 5 | 5 | 5 | 5 |
| U.S. Treasury, supplementary financing account | 200 | 200 | 200 | 116 | 0 | 0 | 0 |
| Other balances | 2 | 5 | 5 | 5 | 5 | 5 | 5 |
| Total capital | 57 | 59 | 78 | 103 | 136 | 180 | 239 |

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

|  | Sep 30, 2010 | 2010 | 2012 | End-o 2014 | $\begin{aligned} & \text { f-Year } \\ & 2016 \end{aligned}$ | 2018 | 2020 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ Billions |  |  |  |  |  |  |
| Total assets | 2,311 | 2,246 | 2,052 | 1,409 | 1,475 | 1,635 | 1,825 |
| Selected assets: |  |  |  |  |  |  |  |
| Liquidity programs for financial firms | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  |  |  |  |  |  |


| Primary, secondary, and seasonal credit | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Central bank liquidity swaps | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Lending through other credit facilities | 30 | 29 | 9 | 0 | 0 | 0 | 0 |
| Term Asset-Backed Securities Loan Facility (TALF) | 30 | 29 | 9 | 0 | 0 | 0 | 0 |
| Support for specific institutions | 112 | 84 | 29 | 9 | 2 | 0 | 0 |
| Credit extended to AIG | 45 | 31 | 0 | 0 | 0 | 0 | 0 |
| Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III | 67 | 53 | 29 | 9 | 2 | 0 | 0 |
| Securities held outright | 2,054 | 2,030 | 1,925 | 1,320 | 1,400 | 1,566 | 1,759 |
| U.S. Treasury securities | 822 | 890 | 1,298 | 936 | 1,251 | 1,566 | 1,759 |
| Agency debt securities | 154 | 147 | 77 | 39 | 16 | 0 | 0 |
| Agency mortgage-backed securities | 1,079 | 992 | 550 | 345 | 133 | 0 | 0 |
| Special drawing rights certificate account | 5 | 5 | 7 | 7 | 7 | 7 | 7 |
| Net portfolio holdings of TALF LLC | 1 | 1 | 1 | 1 | 0 | 0 | 0 |
| Total other assets | 108 | 98 | 82 | 71 | 66 | 63 | 59 |
| Total liabilities | 2,254 | 2,187 | 1,974 | 1,305 | 1,339 | 1,455 | 1,587 |
| Selected liabilities: |  |  |  |  |  |  |  |
| Federal Reserve notes in circulation | 914 | 920 | 981 | 1,113 | 1,231 | 1,347 | 1,479 |
| Reverse repurchase agreements with foreign official and international accounts | 65 | 64 | 59 | 59 | 59 | 59 | 59 |
| Deposits with Federal Reserve Banks | 1,252 | 1,185 | 919 | 120 | 35 | 35 | 35 |
| Reserve balances held by depository institutions | 942 | 913 | 709 | 25 | 25 | 25 | 25 |
| U.S. Treasury, general account | 108 | 70 | 5 | 5 | 5 | 5 | 5 |
| U.S. Treasury, supplementary financing account | 200 | 200 | 200 | 85 | 0 | 0 | 0 |
| Other balances | 2 | 2 | 5 | 5 | 5 | 5 | 5 |
| Total capital | 57 | 59 | 78 | 103 | 136 | 180 | 239 |

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


[^0]:    Line chart, by percent, 1991 to 2010. There is a label in July 2010 representing the July Survey. There is also a horizontal line at zero. There are two series, Loans to large and medium-sized firms and Loans to small firms. Loans to large and medium-sized firms begins in 1991:Q4 at about -32 and generally increases to about 39 by 1994:Q2. It then generally decreases to about -4 by 1996:Q1 and then generally increases to about 28 by 1998:Q2. By 2001:Q4 it has generally decreased to about -72 and by 2005:Q1 it has generally increased to about 45. It then generally decreases to about -22 by 2007:Q2 and then generally increases to about 0 by $2008: Q 2$. By 2009:Q1 it has generally decreased to about -60 and by 2010:Q4 it has generally increased to about -9. Loans to small firms begins in 1991:Q4 at about -27 and generally increases to about 40 by 1994:Q2. It then generally decreases to about -50 by 2001:Q4 and then generally increases to about 39 by 2004:Q3. By 2009:Q2 it has generally decreased to about -64 and by 2010:Q4 it has generally increased to about -23 .

[^1]:    There is a second line chart, by percent, from 2007:Q2 to 2010. There is a horizontal line at zero. There are three series, "Prime", "Nontraditional" and "Subprime". "Prime" begins in 2007:Q2 at about -20 and generally decreases to about -60 by 2008:Q1. It then generally increases to about -24 by $2008: Q 2$ and then generally decreases to about -53 by 2008:Q4. By 2009:Q2 it has generally increased to about 38 and by 2010:Q2 it has generally decreased to about -14. It then generally increases to about 9 by 2010:Q3 and then generally decreases to about -12 by 2010:Q4. "Nontraditional" begins in 2007:Q2 at about -16 and generally decreases to about -68 by 2008:Q1. It then generally increases to about -30 by 2008:Q2 and then generally decreases to about -72 by $2008: Q 4$. By 2009:Q4 it has generally increased to about -5 and by 2010:Q1 it has generally decreased to about -35 . It then generally increases to about 0 by $2010: Q 3$ and then generally decreases to about -15 by 2010:Q4. "Subprime" begins in 2007:Q2 at about -20 and generally decreases to about -72 by 2008:Q1. It then generally increases to about -28 by 2008:Q3 and then generally decreases to about -100 by 2008:Q4. By 2009:Q1 it has increased to about -50.

