

# Accessible Material

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## June 2010 Tealbook Tables and Charts

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### Table of Contents

Document Section	Accessible Material
<b>Book A</b>	
Domestic Economic Developments and Outlook	<a href="#">FOMC20100623tealbooka20100616_1.htm</a>
International Economic Developments and Outlook	<a href="#">FOMC20100623tealbooka20100616_2.htm</a>
Financial Developments	<a href="#">FOMC20100623tealbooka20100616_3.htm</a>
Risks and Uncertainty	<a href="#">FOMC20100623tealbooka20100616_4.htm</a>
Greensheets	<a href="#">FOMC20100623tealbooka20100616_5.htm</a>
<b>Book B</b>	
Monetary Policy Strategies	<a href="#">FOMC20100623tealbookb20100617_1.htm</a>
Monetary Policy Alternatives	<a href="#">FOMC20100623tealbookb20100617_2.htm</a>
Appendix A. Measures of the Equilibrium Real Rate	<a href="#">FOMC20100623tealbookb20100617_3.htm</a>
Appendix C. Long-run Projections of the Balance Sheet and Monetary Base	<a href="#">FOMC20100623tealbookb20100617_4.htm</a>

**Last update: January 29, 2016**

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### June 2010 Tealbook Book A Tables and Charts<sup>‡</sup>

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#### Domestic Economic Developments and Outlook

##### Key Background Factors Underlying the Baseline Staff Projection

###### *Figure: Federal Funds Rate*

Line chart, 2006 to 2011. Unit is percent. Data are quarterly average. The projection period is marked by a vertical blue bar from 2010:Q2 to the end of the timeline. There are four series, "Current Tealbook," "April Tealbook," "Market, mean," and "Market, mode." The series begin at about 4.5 and generally increase together to about 5.25 in late 2006. They remain about constant until late 2007 then generally decrease together to about 0 in 2009. Market, mode, Current Tealbook, and April Tealbook remain about constant to the end of the timeline. Market, mean generally increases ending at about 1.

###### *Figure: Long-Term Interest Rates*

Line chart, 2006 to 2011. Unit is percent. Data are quarterly average. The projection period is marked by a vertical blue bar from 2010:Q2 to the end of the timeline. There are six series, "BBB corporate yield -- Current," "BBB corporate yield -- Previous Tealbook," "Confirming mortgage rate -- Current," "Confirming mortgage rate -- Previous Tealbook," "10-year treasury yield -- Current" and "10-year treasury yield -- Previous Tealbook." BBB corporate yield -- Current and BBB Corporate Yield -- Previous Tealbook begin at about 6 and generally increase together to about 10 in mid-2008. They generally decrease together to about 6 in mid-2010 and remain about constant to the end of the timeline. Confirming mortgage rate -- Current and Confirming Mortgage Rate -- Previous Tealbook begin at about 6 and fluctuate but remain about constant until late 2008. They generally decrease together to about 5 in late 2010 then generally increase together ending at about 6. 10-year treasury yield -- Current and 10-year Treasury Yield -- Previous Tealbook begin at about 5 and generally decrease together to about 3 in early 2009. They generally increase together to about 4 in early 2010 then generally decrease together to about 3.5 in mid-2010. They generally increase together ending at about 4.5.

###### *Figure: Equity Prices*

Line chart, 2006 to 2011. Unit is 2006:Q1 = 100, ratio scale. Data are quarter end. The projection period is marked by a vertical blue bar from 2010:Q2 to the end of the timeline. There are two series, "Dow Jones Total Stock Market Index -- Current," and "Dow Jones Total Stock Market Index -- Previous Tealbook." They begin at about 100 and generally increase together to about 120 in mid-2007. They generally decrease together to about 60 in early 2009 then generally increase together ending at about 115.

###### *Figure: House Prices*

Line chart, 2006 to 2011. Unit is 2006:Q1 = 100, ratio scale. Data are quarterly. The projection period is marked by a vertical blue bar from 2010:Q2 to the end of the timeline. There are two series, "Loan Performance Index -- Current," and "Loan Performance Index -- Previous Tealbook." The series begin at about 100 and generally decrease together to about 70 in early 2009. They remain about constant to the end of the timeline.

###### *Figure: Crude Oil Prices*

Line chart, 2006 to 2011. Unit is dollars per barrel. Data are quarterly average. The projection period is marked by a vertical blue bar from 2010:Q2 to the end of the timeline. There are series, "West Texas Intermediate -- Current," and "West Texas Intermediate -- Previous Tealbook." They begin at about 60 and generally increase together to about 120 in early 2008. They generally decrease together to about 40 in early 2009 then West Texas Intermediate -- Current generally increases ending at about 80. West Texas Intermediate -- Previous Tealbook generally increases ending at about 90.

###### *Figure: Broad Real Dollar*

Line chart, 2006 to 2011. Unit is 2006:Q1=100. Data are quarterly average. The projection period is marked by a vertical blue bar from 2010:Q2 to the end of the timeline. There are two series, "Current" and "Previous Tealbook." The series begin at about 100 and generally decrease together to about 85 in early 2008. They generally increase together to about 98 in early 2009 then generally decrease together to about 90 in late 2009. They generally increase together to about 93 in late 2010. Current generally increases to about 93 in late 2010 then generally decreases ending at about 85. Tealbook generally decreases ending at about 85.

Note: In each panel, shading represents the projection period, which begins in 2010:Q2.

### Figure: House Prices

Line chart, 2002 to 2010. Unit is 2006:Q1=100. Data are quarterly. There is a vertical blue bar from early 2010 to the end of the timeline. The series begins at about 60 and generally increases to about 100 in early 2006. It generally decreases to about 70 in early 2009 and remains about constant to the end of the timeline.

Source: First American LoanPerformance.

#### House Prices (Percent change, Q4/Q4)

	2008	2009	2010	2011
Current	-17.6	-3.2	-2.6	.6
Previous	-17.7	-3.3	-3.0	1.0

Source: First American LoanPerformance.

### Figure: Over/Under Valuation of Single-Family Homes

Line chart, 1988 to 2010. Unit is percent. Data are quarterly. There is a vertical blue bar from early 2010 to the end of the timeline. The series begins at about 0 and generally increases to about 10 in early 1999. It generally decreases to about -10 in early 1997 then generally increases to about 45 in early 2006. It generally decreases ending at about -10.

Source: Staff estimates from First American LoanPerformance and Bureau of Labor Statistics data.

## Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

Measure	2010:Q1		2010:Q2	
	Previous Tealbook	Current Tealbook	Previous Tealbook	Current Tealbook
<b>Real GDP</b>	<b>2.9</b>	<b>3.1</b>	<b>3.5</b>	<b>3.6</b>
Private domestic final purchases	3.4	3.0	3.6	4.5
Personal consumption expenditures	3.6	3.4	2.1	2.9
Residential investment	-15.7	-10.6	22.3	18.7
Nonres. structures	-10.6	-15.2	.4	-.8
Equipment and software	17.0	13.5	15.8	20.3
Federal purchases	.9	1.2	8.4	6.9
State and local purchases	-4.2	-3.9	-.5	-.6
	Contribution to change in real GDP (percentage points)			
Inventory investment	.7	1.9	-.2	-.3
Net exports	-.2	-.9	.1	-.2

## Recent Nonfinancial Developments (1)

### Figure: Changes in Private Payroll Employment

Line chart, 2001 to 2011. Unit is thousands of employees. 0 on the scale is marked by a horizontal black line. The end of the series is labeled May. The series begins at about -50 and fluctuates but generally increases to about 300 in early 2004. It fluctuates but remains about constant until early 2008. It generally decreases to about -800 in early 2009 then fluctuates but generally increases to about 250 in late 2009. It generally decreases ending at about 0. 3-month moving average is shown as a solid red line the runs about concurrently with the series.

### Figure: Unemployment rate

Line chart, 2001 to 2011. Unit is percent. The end of the series is labeled May. The series begins at about 4 and fluctuates but generally increases to about 6.25 in late

2003. It fluctuates but generally decreases to about 4 in early 2007 then generally increases to about 10 in late 2009. It generally decreases ending at about 9.5.

### *Figure: Manufacturing IP excluding Motor Vehicles and Parts*

Line chart, 2001 to 2011. Unit is 3-month percent change, annual rate. 0 on the scale is marked by a horizontal black line. The end of the series is labeled May. The series begins at about -5 and generally decreases to about -10 in late 2001. It fluctuates but generally increases to about 12 in early 2006 then fluctuates but generally decreases to about -25 in early 2009. It fluctuates but generally increases ending at about 12.

### *Figure: Production of Light Motor Vehicles*

Line chart, 2001 to 2011. Unit is millions of units, annual rate. The end of the series is labeled May. 2010:Q3 schedules are represented by a circle at the end of the series. The series begins at about 11 and fluctuates but generally increases to about 13 in early 2003. It fluctuates but remains about constant until late 2005. It fluctuates but generally decreases to about 4 in early 2009. It generally increases ending at about 8.

Note: Schedules data are from Ward's Communications.

## Recent Nonfinancial Developments (2)

### *Figure: Real PCE Goods excluding Motor Vehicles*

Line chart, 2001 to 2010. Unit is billions of chained (2005) dollars. The end of the series is labeled May. The series begins at about 2300 and fluctuates but generally increases to about 2900 in late 2007. It generally decreases to about 2800 in early 2008 then generally increases ending at about 3,000.

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

### *Figure: Sales of Light Motor Vehicles*

Line chart, 2001 to 2010. Unit is millions of units, annual rate. The end of the series is labeled May. The series begins at about 18 and generally increases to about 22 in late 2001. It generally decreases to about 15 in early 2002 then fluctuates but remains about constant until mid-2005. It generally increases to about 21 then generally decreases to about 9 in early 2009. It generally increases to about 15 in mid-2009 then generally increases ending at about 12.

### *Figure: Single-Family Housing Starts*

Line chart, 2001 to 2010. Unit is thousands of units, annual rate. The end of the series is labeled May. There are two series, "Starts" and "Adjusted Permits." Both series begin at about 1200 and generally increase together to about 1800 in mid-2005. They generally decrease together to about 300 in late 2008. They generally increase together to about 600 in early 2010 then generally decrease together ending at about 450.

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

### *Figure: Single-Family Home Sales*

Line chart, 2001 to 2010. Unit is thousands of units, annual rate. The end of the series is labeled April. There are two series, "New (right scale)" and "Existing (left scale)." New begins at about 900 and fluctuates but generally increases to about 1400 in mid-2005. It generally decreases to about 300 in early 2008 then generally increases ending at about 500. Existing begins at about 4500 and generally increases to about 6400 in late 2005. It generally decreases to about 4000 in late 2008 then generally increases to about 5600 in late 2009. It generally decreases to about 4400 in early 2010 then generally increases ending at about 5200.

### *Figure: Nondefense Capital Goods Excluding aircraft*

Line chart, 2001 to 2010. Unit is billions of dollars. The end of the series is labeled April. There are two series, "Orders" and "Shipments." Orders begins at about 63 and fluctuates but generally decreases to about 45 in early 2002. It fluctuates but generally increases to about 72 in late 2007 then generally decreases to about 47 in early 2009. It fluctuates but generally increases ending at about 60. Shipments begins at about 63 and fluctuates but generally decreases to about 50 in early 2003. It fluctuates but generally increases to about 67 in late 2008 then generally decreases to about 53 in early 2009. It fluctuates but generally increases ending at about 60.

### *Figure: Nonresidential Construction Put in Place*

Line chart, 2001 to 2010. Unit is billions of chained (2005) dollars. The end of the series is labeled April. The series begins at about 275 and generally decreases to about 225 in late 2002. It generally increases to about 425 in late 2008 then generally decreases ending at about 300.

## Recent Nonfinancial Developments (3)

### Figure: Inventory Ratios excluding Motor Vehicles

Line chart, 2001 to 2010. Unit is months. The end of the upper series is labeled May. The end of the lower series is labeled April. There are two series, "Staff flow-of-goods system" and "Census book-value data." Staff flow-of-goods system begins at about 1.7 and fluctuates but generally decreases to about 1.5 in mid-2008. It generally increases to about 1.6 in early 2009 then generally decreases ending at about 1.5. Census book-value data begins at about 1.4 and generally decreases to about 1.2 in late 2005. It generally increases to about 1.4 in late 2008 then generally decreases ending at about 1.2.

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

### Figure: Defense Spending

Line chart, 2001 to 2010. Unit is billions of chained (2005) dollars. The end of the first series is labeled May. The end of the second series is labeled Q1. There are two series, "Unified" and "NIPA." unified begins at about 375 and fluctuates but generally increases to about 700 in late 2009. It fluctuates but generally decreases ending at about 600. NIPA begins at about 375 and fluctuates but generally increases ending at about 625.

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

### Figure: Trade Balance

Line chart, 2001-2010. Unit is billions of dollars. The end of the series is labeled April. The series begins at about -35 and fluctuates but generally decreases to about -70 in early 2006. It fluctuates but generally increases to about -65 in mid-2006 then generally decreases to about -70 in mid-2008. It generally increases to about -20 in early 2009 then generally decreases ending at about -40.

### Figure: Exports and Non-Oil Imports

Line chart, 2001 to 2010. Unit is billions of dollars. The end of the series is labeled April. There are two series, "Non-Oil Imports" and "Exports." Non-Oil Imports begins at about 115 and generally increases to about 180 in mid-2008. It generally decreases to about 130 in early 2009 then generally increases ending at about 160. Exports begins at about 90 and generally increases to about 160 in early 2008. It generally decreases to about 120 in early 2009 then generally increases ending at about 150.

### Figure: Total PCE Prices

Line chart, 2001 to 2010. Unit is percent. 0 on the scale is marked by a horizontal line. The end of the series is labeled April. There are two series, "12-month change" and "3-month change." 3-month changes are at an annual rate. 12-month change begins at about 3 and fluctuates but gradually increases to about 4 in early 2008. It generally decreases to about -1 in early 2009 then generally increases ending at about 2. 3-month change begins at about 3 and fluctuates but remains about constant until mid-2005. It increases to about 8 then decreases to about -1 in late 2005. It fluctuates but generally increases to about 7 in early 2008 then decreases to about -10 in late 2008. It generally increases to about 4 in mid-2009 then generally decreases ending at about 1.

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

### Figure: PCE Prices excluding Food and Energy

Line chart, 2001 to 2010. Unit is percent. 0 on the scale is marked by a horizontal line. The end of the series is labeled April. There are two series, "12-month change" and "3-month change." 3-month changes are at an annual rate. 12-month change begins at about 2 and fluctuates but gradually increases to about 2.5 in early 2008. It generally decreases ending at about 1. 3-month change begins at about 2.5 and generally decreases to about -1 in late 2001. It generally increases to about 4 in early 2002 then generally decreases to about 1 in late 2002. It generally fluctuates between about 1 and about 3 until late 2008 when it generally decreases to about 0. It generally increases to about 2 in late 2009 then generally decreases ending at about 1.

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

## Projections of Real GDP and Related Components

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

Measure	2008	2009	2010		2011
			H1	H2	
<b>Real GDP</b>	<b>-1.9</b>	<b>.1</b>	<b>3.4</b>	<b>3.0</b>	<b>3.7</b>
Previous Tealbook	-1.9	.1	3.2	3.7	4.4
Final sales	-1.4	-.1	2.6	2.6	3.4
Previous Tealbook	-1.4	-.1	3.0	3.1	4.1
Personal consumption expenditures	-1.8	1.0	3.1	2.3	3.1
Previous Tealbook	-1.8	1.0	2.8	2.8	3.5

Residential investment	-21.0	-12.5	3.0	4.9	17.1
Previous Tealbook	-21.0	-12.5	1.5	3.1	19.8
Nonresidential structures	3.2	-25.3	-8.3	-1.2	-.2
Previous Tealbook	3.2	-25.3	-5.3	.3	1.1
Equipment and software	-10.7	-7.5	16.8	11.3	10.8
Previous Tealbook	-10.7	-7.5	16.4	13.9	13.2
Federal purchases	8.9	3.6	4.0	3.0	1.4
Previous Tealbook	8.9	3.6	4.6	2.7	.8
State and local purchases	-.3	-.1	-2.3	.2	.5
Previous Tealbook	-.3	-.1	-2.4	.4	.7
Exports	-3.4	-.7	9.7	7.7	7.4
Previous Tealbook	-3.4	-.7	8.7	9.4	9.1
Imports	-6.8	-6.6	11.5	6.9	6.9
Previous Tealbook	-6.8	-6.6	7.0	8.5	7.4
	Contributions to change in real GDP (percentage points)				
Inventory change	-.5	.1	.8	.4	.3
Previous Tealbook	-.5	.1	.3	.7	.3
Net exports	.7	1.0	-.5	-.1	-.2
Previous Tealbook	.7	1.0	.0	-.2	.0

*Figure: Real GDP*

Line chart, 1980 to 2011. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue shaded bar marking the period of 2010 to 2011. The series begins at about 1.5 and decreases to about -2 in late 1980. It generally increases to about 4.5 in late 1981 then generally decreases to about -3 in mid-1982. It generally increases to about 8.5 in early 1984 then fluctuates but generally decreases to about -1 in late 1990. It fluctuates but generally increases to about 7 in early 2000. It generally decreases to about .5 in late 2001 then generally increases to about 4 in early 2004. It fluctuates but generally decreases to about -4 in early 2009 then generally increases ending at about 4.

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): January 1980-July 1980, July 1981-November 1982, July 1990-March 1991, and March 2001-November 2001. The vertical line represents the last business cycle peak as defined by the NBER (December 2007).

## Components of Final Demand

*Figure: Personal Consumption Expenditures*

Line chart, 2006 to 2011. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue bar marking the period 2010 to 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about 3 and generally decrease together to about 2.5 in mid-2006. They generally increase together to about 3.5 in late 2006 then generally decrease together to about -2 in mid-2009. They generally increase together to about 2 in early 2010, then Current generally increases ending at about 3 and Previous Tealbook generally increases to about 3.5.

*Figure: Residential Investment*

Line chart, 2006 to 2011. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue bar marking the period 2010 to 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about 2.5 then generally decrease together to about -25 in mid-2009. They generally increase together to about 5 in early 2010 then generally decrease together to about 0 in mid-2010. Current generally increases ending at about 17 and Previous Tealbook generally increases ending at about 20.

*Figure: Equipment and Software*

Line chart, 2006 to 2011. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue bar marking the period 2010 to 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about 10 and generally decrease together to about -20 in early 2009. They generally increase together to about 15 in early 2010 then Current generally decreases ending at about 10 and Previous Tealbook generally decreases ending at about 12.

*Figure: Nonresidential Structures*

Line chart, 2006 to 2011. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue bar marking the period 2010 to 2011.

There are two series, "Current" and "Previous Tealbook." Both series begin at about 2.5 and generally increase together to about 20 in late 2007. They generally decrease together to about -25 in late 2009 then generally increase together to about 0 in late 2010. They remain about constant to the end of the timeline.

### *Figure: Government Consumption & Investment*

Line chart, 2006 to 2011. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue bar marking the period 2010 to 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about 1.5 and generally decrease together to about 0.75 in mid-2006. They generally increase together to about 1.5 in late 2006 then generally decrease together to about 0.5 in early 2007. They generally increase together to about 3.0 in late 2008 then generally decrease together to about 0.25 in mid-2010. They generally increase together to about 1.5 in early 2011 then generally decrease together ending at about 1.

### *Figure: Exports and Imports*

Line chart, 2006 to 2011. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue bar marking the period 2010 to 2011. There are four series, "Exports -- Current," "Exports -- Previous Tealbook," "Imports -- Current," and "Imports -- Previous Tealbook." Exports -- Current and Exports -- Previous Tealbook begin at about 9 and generally increase together to about 10 in early 2007. They generally decrease together to about 6 in mid-2007 then generally increase together to about 10 in late 2007. They fluctuate but remain about constant until mid-2008 then generally decrease together to about -15 in mid-2009. They generally increase together to about 15 in early 2010 then Exports -- Current generally decreases ending at about 7 and Exports -- Previous Tealbook generally decreases ending at about 10. Imports -- Current and Imports -- Previous Tealbook begin at about 6 and generally decrease together to about -20 in mid-2009. Imports -- Current then generally increases to about 15 in early 2010 and Imports -- Previous Tealbook generally increases to about 12 in early 2010. Both series generally decrease ending at about 7.

## Aspects of the Medium-Term Projection

### *Figure: Personal Saving Rate*

Line chart, 1990 to 2012. Unit is percent. There is a vertical blue bar marking the period 2010 to 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about 6.5 and fluctuate but generally increase together to about 7.5 in late 1992. They fluctuate but generally decrease together to about 4.5 in late 1997 then generally increase together to about 6 in early 1998. They generally decrease together to about 2 in early 2001 then generally increase together to about 4 in mid-2001. They fluctuate but remain about constant until late 2004. They generally decrease together to about 1 in late 2005 then generally increase together to about 2 in late 2006. They generally decrease together to about 1 in early 2008 then generally increase together to about 6 in early 2009 then generally decrease together ending at about 4.

### *Figure: Wealth-to-Income Ratio*

Line chart, 1990 to 2012. Unit is a ratio. There is a vertical blue bar marking the period 2010 to 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about 4.8 and generally increase together to about 6.3 in early 2000. They generally decrease together to about 5.0 in early 2002 then generally increase together to about 6.4 in early 2007. They generally decrease together to about 4.4 in early 2009 then Current generally increases to about 4.8 and Previous Tealbook generally increases ending at about 5.1.

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

### *Figure: Single-Family Housing Starts*

Line chart, 1990 to 2012. Unit is millions of Units. There is a vertical blue bar marking the period 2010 to 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about 1.00 and generally decrease together to about 0.75 in early 1991. They generally increase together to about 1.75 in late 2005 then generally decrease together to about 0.3 in late 2008. They generally increase ending at about 0.85.

### *Figure: Equipment and Software Spending*

Line chart, 1990 to 2012. Unit is share of nominal GDP. There is a vertical blue bar marking the period 2010 to 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about 7.5 and generally decrease to about 6.75 in early 1992. They fluctuate but generally increase together to about 9.5 in early 2000 then generally decrease together to about 7.5 in late 2003. They generally increase together to about 8.0 in early 2005 then generally decrease together to about 6.25 in late 2009. They generally increase together ending at about 7.5.

### *Figure: Federal Surplus/Deficit*

Line chart, 1990 to 2012. Unit is share of nominal GDP. 0 on the scale is marked by a horizontal line. There is a vertical blue bar marking the period 2010 to 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about -4 and generally decrease together to about -5 in late 1992. They generally increase together to about 2 in mid-2000 then generally decrease together to about -4 in early 2004. They generally increase together to about -2 in early 2007 then generally decrease to about -10 in late 2009. They generally increase together ending at about -8.

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

### Figure: Current Account Surplus/Deficit

Line chart, 1990 to 2012. Unit is share of nominal GDP. 0 on the scale is marked by a horizontal line. There is a vertical blue bar marking the period 2010 to 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about -1.5 and generally increase to about 1 in early 1991. They generally decrease together to about -7 in late 2005 then generally increase together to about -3 in early 2009. Current generally decreases ending at about -3.5 and Previous Tealbook generally decreases ending at about -3.

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. The vertical lines represent the last business cycle peak as defined by the NBER (December 2007).

### [Box:] The Saving Rate in the Staff Projection

#### Figure: Saving Rate and Household Net Worth

Line chart, 1965 to 2011. Unit is percent. There is a vertical blue bar marking the period 2010 to 2011. There are two series, "Saving rate (right)" and "Household net worth to DPI (left)." Saving rate begins at about 8 and fluctuates but generally increases to about 12.5 in early 1975. It fluctuates but generally decreases to about 8 in early 1977. It fluctuates but generally increases to about 12 in late 1981 then fluctuates but generally decreases to about 1 in early 2008. It generally increases to about 5.5 in early 2009 then generally decreases ending at about 4. Household net worth to DPI begins at about 5 and generally decreases to about 4.25 in early 1966. It generally increases to about 5 in late 1968 then generally decreases to about 4 in early 1974. It fluctuates but generally increases to about 6.25 in early 2000 then generally decreases to about 5 in late 2002. It generally increases to about 6.5 in early 2007 then generally decreases to about 4.5 in early 2009. It generally increases ending at about 5.

Source: U.S. Bureau of Economic Analysis for saving rate and DPI; Federal Reserve Board for household net worth.

#### Figure: Ratio of Transfer Payments to Disposable Income

Line chart, 1990 to 2011. Unit is a ratio. There is a vertical blue bar marking the period 2010 to 2011. The series begins at about 0.14 and generally increases to about 0.16 in early 1993. It fluctuates but remains about constant until mid-1996. It generally decreases to about 0.145 in late 1999 then generally increases to about 0.20 in early 2010. It generally decreases ending at just below 0.20.

Source: U.S. Bureau of Economic Analysis.

#### Figure: Consumer Sentiment

Line chart, 2000 to 2010. Unit is an index. The end of the series is labeled June (p). The series begins at about 110 and generally decreases to about 80 in mid-2001. It generally increases to about 95 in mid-2002 then generally decreases to about 75 in early 2006. It generally increases to about 105 in late 2003 then generally decreases to about 75 in late 2005. It generally increases to about 95 in early 2007 then generally decreases to about 55 in early 2008. It increases to about 70 in early 2008 then decreases to about 55 in late 2008. It generally increases ending at about 75.

Source: Thomson Reuters/University of Michigan Survey of Consumers.

## Decomposition of Potential GDP

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

Measure	1974-1995	1996-2000	2001-2007	2008	2009	2010	2011
<b>Potential GDP</b>	<b>3.0</b>	<b>3.4</b>	<b>2.7</b>	<b>2.7</b>	<b>2.7</b>	<b>2.3</b>	<b>2.4</b>
Previous Tealbook	3.0	3.4	2.7	2.7	2.7	2.3	2.5
<i>Selected contributions<sup>1</sup></i>							
Structural labor productivity	1.5	2.5	2.6	2.3	2.6	1.8	2.0
Previous Tealbook	1.5	2.5	2.6	2.3	2.6	1.8	2.1
Capital deepening	.7	1.5	.7	.5	.0	.2	.5
Previous Tealbook	.7	1.5	.7	.5	.0	.2	.6
Multifactor productivity	.5	.7	1.6	1.6	2.4	1.5	1.4
Previous Tealbook	.5	.7	1.6	1.6	2.4	1.5	1.4
Trend hours	1.7	1.1	.9	.8	.5	.8	.8
Previous Tealbook	1.7	1.1	.9	.8	.5	.8	.8
Labor force participation	.5	.0	-.2	-.2	-.2	-.2	-.2



Previous Tealbook	.5	.0	-.2	-.2	-.2	-.2	-.2
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Note: Components may not sum to totals because of rounding. For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.

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

### Figure: Nonfarm Business Productivity

Line chart, 2000 to 2011. Unit is chained (2005) dollars per hour. There is a vertical blue shaded bar that marks the period 2010 to 2011. There is one series, "Structural productivity." It begins at about 42 and gently fluctuates but generally increases ending at about 58. A red line shows the upward trend of the series, also beginning at about 42 and steadily increasing to about 58.

### Figure: Labor Force Participation Rate

Line chart, 2000 to 2011. Unit is percent. There is a vertical blue shaded bar that marks the period 2010 to 2011. There is one series, "Trend." It begins at about 67 and gently fluctuates but generally decreases to about 66 in early 2005. It generally increases to about 66 in early 2007 then generally decreases ending at about 64.5. There is also a red line that starts at about 67 and generally decreases ending at about 65.5.

## The Outlook for the Labor Market

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

Measure	2008	2009	2010	2011
Output per hour, nonfarm business	1.4	5.6	1.2	.9
Previous Tealbook	1.4	5.6	1.3	.8
Nonfarm private employment	-2.7	-4.7	1.6	3.0
Previous Tealbook	-2.7	-4.7	1.9	3.6
Labor force participation rate <sup>1</sup>	65.9	64.9	64.8	64.7
Previous Tealbook	65.9	64.9	64.7	64.7
Civilian unemployment rate <sup>1</sup>	6.9	10.0	9.5	8.6
Previous Tealbook	6.9	10.0	9.3	8.2
MEMO				
GDP gap <sup>2</sup>	-4.8	-7.3	-6.5	-5.4
Previous Tealbook	-4.9	-7.3	-6.3	-4.5

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. A negative number indicates that the economy is operating below potential. [Return to table](#)

### Figure: Private Payroll Employment, Average Monthly Changes

Line chart, 1990 to 2011. Unit is thousands. 0 on the scale is marked by a horizontal line. There is a vertical blue shaded bar marking the period of about 2010:Q2 to the end of 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about 200 and generally decrease together to about -200 in late 1990. They generally increase together to about 300 in early 1994 then fluctuate but remain about constant until early 1999. They generally decrease together to about -400 in late 2001 then generally increase together to about 300 in early 2006. They generally decrease together to about -800 in early 2009 then generally increase together ending at about 300.

### Figure: Unemployment Rate

Line chart, 1990 to 2011. Unit is percent. 0 on the scale is marked by a horizontal line. There is a vertical blue shaded bar marking the period of about 2010:Q2 to the end of 2011. There are four series, "Current," "Previous Tealbook," "NAIRU," and "NAIRU with EEB Adjustment." Current and Previous Tealbook begin at about 5.25 and generally increase together to about 7.5 in mid-1992. They generally decrease together to about 4 in late 2000 then generally increase together to about 6 in mid-2003. They generally decrease together to about 4.25 in early 2007 then generally increase together to about 10 in late 2009. They generally decrease together ending at about 8.5.

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

### Figure: GDP Gap

Line chart, 1990 to 2011. Unit is percent. 0 on the scale is marked by a horizontal line. There is a vertical blue shaded bar marking the period of about 2010:Q2 to the end of 2011. There are two series, "Current" and "Previous Tealbook." Current and Previous Tealbook begin together at about 0 and generally decrease together to

about -4 in late 1991. They generally increase together to about 3.5 in early 2000 then generally decrease together to about -3 in early 2003. They generally increase together to about 0 in early 2006 then generally decrease together to about -8 in late 2009. Current generally increases ending at about -5 and Previous Tealbook generally increases ending at about -4.

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

### Figure: Manufacturing Capacity Utilization Rate

Line chart, 1990 to 2011. Unit is percent. 0 on the scale is marked by a horizontal line. There is a vertical blue shaded bar marking the period of about 2010:Q2 to the end of 2011. The Average Rate from 1972 to 2009 is marked as a horizontal line at about 79 percent. The series begins at about 83 and generally decreases to about 77 in late 1990. It generally increases to about 85 in early 1995 then fluctuates but generally decreases to about 70 in late 2001. It generally increases to about 80 in mid-2007 then generally decreases to about 65 in early 2009. It generally increases ending at about 76.

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. The vertical lines represent the last business cycle peak as defined by the NBER (December 2007).

## Inflation Projections

(Percent change, Q4 to Q4)

Measure	2008	2009	2010	2011
PCE chain-weighted price index	1.7	1.2	.9	1.0
Previous Tealbook	1.7	1.2	1.3	1.0
Food and beverages	6.8	-1.7	1.5	.7
Previous Tealbook	6.8	-1.7	1.7	.7
Energy	-9.1	1.1	2.3	3.9
Previous Tealbook	-9.1	1.1	7.6	2.4
Excluding food and energy	2.0	1.5	.8	.8
Previous Tealbook	2.0	1.5	.9	.9
Prices of core goods imports <sup>1</sup>	3.8	-1.6	1.7	1.5
Previous Tealbook	3.8	-1.6	2.7	1.2

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

### Figure: Total PCE Prices

Line chart, 1990 to 2011. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue shaded bar marking the period of about 2010:Q2 to the end of 2011. There are two series, "Current" and "Previous Tealbook." Both series begin at about 4 and generally increase together to about 5.5 in late 1990. They fluctuate slightly but generally decrease together to about 1 in late 1998. They generally increase to about 2.5 in 1999 then generally decrease to about 1 in early 2002. The fluctuate slightly but generally increase together to about 4.5 in late 2008 then generally decrease together to about -1 in mid-2009. They generally increase together to about 2 in early 2010 then generally decrease together ending at about 1.

### Figure: PCE Prices excluding Food and Energy

Line chart, 1990 to 2011. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue shaded bar marking the period of about 2010:Q2 to the end of 2011. There are four series, "Current," "Previous Tealbook," "Current: Market-Based," and "Previous Tealbook: Market-Based." Current and Previous Tealbook begin at about 4 and generally increase together to about 4.5 in late 1990 then fluctuate slightly but generally decrease together to about 1.25 in early 1998. They fluctuate slightly but generally increase together to about 2.5 in early 2008 then generally decrease together ending at about 1. Current: Market-Based and Previous Tealbook: Market-Based begin at about 4.5 and generally increase together to about 4.75 in late 1990. They fluctuate slightly but generally decrease together to about 1 in early 1998. They fluctuate slightly but generally increase together to about 2.5 in early 2008 then generally decrease together ending at about 0.75.

### Figure: Compensation per Hour

Line chart, 1990 to 2011. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue shaded bar marking the period of about 2010:Q2 to the end of 2011. There are four series, "Current: Productivity and Costs," "Previous Tealbook: Productivity and Costs," "Current: Employment Cost Index," and "Previous Tealbook: Employment Cost Index." Current: Productivity and Costs and previous Tealbook: Productivity and Costs begin at about 5 and generally increase together to about 7 in late 1990 then fluctuate but generally decrease together to about 1 in early 1995. They fluctuate but generally increase together to about 9 in early 2000 then fluctuate but generally decrease together to about 0 in early 2010. Current: Productivity and Costs generally increases to about 2 in early 2010 then generally decreases to about 0 in mid-2010. It generally increases ending at about 2. Previous Tealbook: Productivity and Costs generally increases to about 2.5 in early 2010 then generally decreases to about 1 in mid-2010. It generally increases ending at about 2.5. Current: Employment Cost Index and Previous Tealbook: Employment Cost Index begin at about 5 and generally decrease together to about 2.5 in late 1995. They generally increase together to about 4.5

in mid-2000 then fluctuate slightly but generally decrease together to about 1 in late 2009. They generally increase together ending at about 2.

### Figure: Long-Term Inflation Expectations

Line chart, 1990 to 2011. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue shaded bar marking the period of about 2010:Q2 to the end of 2011. The end of the top series is labeled June (preliminary). The end of the bottom series is labeled Q1. There are two series, "Thomson Reuters/Michigan next 5 to 10 years (top)," and "SPF next 10 years (bottom)." Thomson Reuters/Michigan next 5 to 10 years begins at about 4 and fluctuates but generally increases to about 4.5 in late 1990. It fluctuates but generally decreases to about 2.5 in mid-2001. It fluctuates but generally increases to about 3.5 in late 2008 then generally decreases ending at about 2.5. SPF next 10 years begins at about 4 and generally decreases to about 2.5 in early 1999. It remains about constant until the end of the timeline.

Note: The SPF projection is for the CPI.

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER): July 1990-March 1991, and March 2001-November 2001. The vertical lines represent the last business cycle peak as defined by the NBER (December 2007).

## The Long-Term Outlook

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

	2010	2011	2012	2013	2014
Real GDP	3.2	3.7	4.8	4.7	3.9
Civilian unemployment rate <sup>1</sup>	9.5	8.6	7.1	5.8	5.2
PCE prices, total	.9	1.0	1.0	1.2	1.5
Core PCE prices	.8	.8	1.0	1.2	1.4
Federal funds rate <sup>1</sup>	.1	.1	.8	2.5	3.5

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

### Figure: Real GDP

Line chart, 2002 to 2014. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There is a vertical blue shaded bar marking from about 2010:Q2 to the end of 2014. There are two series, "Potential GDP" and "Real GDP." Potential GDP begins at about 3.5 and generally decreases to about 2.25 in early 2005. It generally increases to about 2.75 in late 2009 then generally decreases to about 2.5 in early 2010. It generally increases ending at about 2.75. Real GDP begins at about 1.5 and fluctuates but generally increases to about 4 in early 2004. It fluctuates slightly but generally decreases to about -4 in mid-2009. It generally increases to about 5 in early 2013 then generally decreases ending at about 4.

### Figure: Unemployment Rate

Line chart, 2002 to 2014. Unit is percent. There is a vertical blue shaded bar from about 2010:Q2 to the end of 2014. The series begins at about 5.75 and generally increases to about 6.25 in early 2003. It generally decreases to about 4.5 in early 2007 then generally increases to about 10 in mid-2009. It generally decreases ending at about 5.25. Also present is a series representing NAIRU. It begins at about 5 and gradually decreases to about 4.75 in mid-2008. It generally increases to about 5 in late 2009 and remains about constant to the end of the timeline.

### Figure: PCE Prices

Line chart, 2002 to 2014. Unit is 4-quarter percent change. There is a vertical blue shaded bar marking from about 2010:Q2 to the end of 2014. There are two series, "Total PCE Prices" and "PCE Prices excluding Food and Energy." Total PCE Prices begins at about 1 and fluctuates but generally increases to about 3 in early 2006. It generally decreases to about 2 in late 2006 then generally increases to about 4.5 in late 2008. It generally decreases to about -0.75 in mid-2009 then generally increases to about 2 in early 2010. It generally decreases to about 1 in late 2010 then generally increases ending at about 1.5. PCE prices excluding food and energy begins at about 1.5 and fluctuates slightly but generally increases to about 2.5 in mid-2008. It generally decreases to about 1 in late 2010 then generally increases ending at about 1.5.

### Figure: Interest Rates

Line chart, 2002 to 2014. Unit is percent. There is a vertical blue shaded bar from about 2010:Q2 to the end of 2014. There are three series, "BBB Corporate," "10-Year Treasury," and "Federal Funds Rate." BBB Corporate begins at about 7.5 then generally decreases to about 5.5 in early 2004. It generally increases to about 9.5 in late 2008 then generally decreases to about 5.5 in early 2010. It generally increases ending at about 6. 10-year treasury begins at about 5.5 and generally decreases to about 3.75 in early 2003. It generally increases to about 5 in early 2006 then generally decreases to about 3.25 in early 2009. It generally increases ending at about 4.75. Federal Funds Rate begins at about 1.75 and generally decreases to about 1 in early 2004. It generally increases to about 5 in early 2006 and remains about constant until mid-2007. It generally decreases to about 0 in early 2009 and remains about constant until early 2012. It generally increases ending at about 3.5.

Note: In each panel, shading represents the projection period.

## Evolution of the Staff Forecast

### *Figure: Change in Real GDP*

Line chart, Tealbook Publication Date 1/23/2008 to 12/8/2010. Unit is percent, Q4/Q4. 0 on the scale is marked by a horizontal line. There are three series, "2009," "2010," and "2011." 2009 begins at about 2 and generally increases to about 3 on 3/13/2008. It generally decreases to about -2 on 3/12/2009 then generally increases to about 0 on 1/20/2010. It remains about constant until it ends on 6/16/2010. 2010 begins at about 3 on 9/10/2008 and generally decreases to about 2.5 on 10/22/2008. It generally increases to about 3 on 1/22/2009 then decreases to about 1.5 on 3/12/2009. It generally increases ending at about 3 on 6/16/2010. 2011 begins at about 4.5 on 9/16/2009 and generally increases to about 4.75 on 1/20/2010. It generally decreases ending at about 3.75 on 6/16/2010.

### *Figure: Unemployment Rate*

Line chart, Tealbook Publication Date 1/23/2008 to 12/8/2010. Unit is percent, fourth quarter. There are three series, "2009," "2010," and "2011." 2009 begins at about 5.25 and generally increases to about 10 on 6/17/2009. It remains about constant until it ends on 6/16/2010. 2010 begins at about 6 on 9/10/2008 and generally increases to about 9.5 on 3/12/2009. It generally decreases to about 9.25 on 4/22/2009 then generally increases to about 9.75 on 6/17/2009. It generally decreases to about 9.25 on 9/16/2009 then generally increases ending at about 9.5 on 6/16/2010. 2011 begins at about 8 on 9/16/2009 and generally increases ending at about 8.5 on 6/16/2010.

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

Line chart, Tealbook Publication Date 1/23/2008 to 12/8/2010. Unit is percent, Q4/Q4. There are three series, "2009," "2010," and "2011." 2009 begins at about 1.9 and generally increases to about 2.25 on 6/18/2008. It generally decreases to about 1.0 on 1/22/2009 then generally increases to about 1.25 on 6/17/2009. It remains about constant until 10/29/2009 then generally increases to about 1.5 on 12/9/2009 and remains about constant until it ends on 6/16/2010. 2010 begins at about 2.0 on 9/10/2008 then generally decreases to about 0.5 on 3/12/2009. It generally increases to about 1.0 on 1/20/2010 then generally decreases ending at about 0.75 on 6/16/2010. 2011 begins at about 1.0 on 9/16/2010 and generally increases to about 1.25 on 12/9/2009. It remains about constant until 1/20/2009 then generally decreases ending at about 0.75 on 6/16/2010.

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

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

**Last update: January 29, 2016**

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### International Economic Developments and Outlook

#### Summary of Staff Projections

(Percent change from end of previous period, annual rate)

Indicator	2010		Projection		2011
	2009	Q1	2010		
			Q2	H2	
Foreign output	0.4	4.9	4.3	3.3	3.3
April TB	0.3	4.5	3.7	3.8	3.8
Foreign CPI	1.2	3.4	2.0	1.9	2.2
April TB	1.2	3.4	2.5	2.1	2.1

#### The Foreign Outlook

##### *Total Foreign*

##### **Figure: Real GDP**

Line chart, 2006 to 2011. Unit is four-quarter percent change. There is a vertical blue shaded bar marking the period 2010 to 2011. There are two series, "Current" and "Last Tealbook." Both series begin at about 4.5 and generally decrease together to about -4 in early 2009. Current generally increases to about 4.25 in early 2010 then generally decreases to about 3.75. Last Tealbook generally increases to about 4 and remains about constant to the end of the timeline.

##### **Figure: CPI**

Line chart, 2006 to 2011. Unit is four-quarter percent change. There is a vertical blue shaded bar marking the period 2010 to 2011. There are two series, "Current" and "Last Tealbook." Both series begin at about 2.5 and generally increase together to about 4.75 in late 2008. They generally decrease together to about 0.5 in mid-2009 then Current generally increases to about 2.5 in late 2010. It generally decreases ending at about 2.25. Last Tealbook generally increases to about 2.75 in late 2010 and generally decreases ending at about 2.25.

##### *Advanced Foreign Economies*

##### **Figure: Real GDP**

Line chart, 2006 to 2011. Unit is four-quarter percent change. There is a vertical blue shaded bar marking the period 2010 to 2011. There are two series, "Current" and "Last Tealbook." Both series begin at about 3 and generally decrease to about -4 in early 2009. Current generally increases to about 3 then generally decreases ending at about 2.25. Last Tealbook generally increases to about 3 and remains about constant to the end of the timeline.

##### **Figure: CPI**

Line chart, 2006 to 2011. Unit is four-quarter percent change. There is a vertical blue shaded bar marking the period 2010 to 2011. There are two series, "Current" and "Last Tealbook." Both series begin at about 2 and generally decrease together to about 1.5 in late 2006. They generally increase together to about 3 in mid-2008. They generally decrease together to about -1 in mid-2009. Current generally increases to about 1.25 in late 2010 then decreases to about 1 in early 2011. It generally increases ending at about 1.25. Last Tealbook generally increases to about 1.5 then generally decreases ending at about 1.25.

##### *Emerging Market Economies*

## Figure: Real GDP

Line chart, 2006 to 2011. Unit is four-quarter percent change. There is a vertical blue shaded bar marking the period 2010 to 2011. There are two series, "Current" and "Last Tealbook." Both series begin at about 7 and generally decrease together to about -4 in early 2009. They generally increase together to about 7 in early 2010 then generally decrease together ending at about 5.

## Figure: CPI

Line chart, 2006 to 2011. Unit is four-quarter percent change. There is a vertical blue shaded bar marking the period 2010 to 2011. There are two series, "Current" and "Last Tealbook." Both series begin at about 3 and generally increase together to about 6.75 in mid-2008. They generally decrease together to about 1 in late 2009. Current increases to about 3.5 in mid-2010 then generally decreases to about 3 in late 2010 and remains about constant to the end of the timeline. Last Tealbook generally increases to about 4 in mid-2010 then generally decreases ending at about 3.

## Recent Foreign Indicators

### *Figure: Nominal Exports*

Line chart, 2006 to 2010. Unit is an index, January 2006 equals 100. 100 on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE," and "EME" (excludes Venezuela). Foreign begins at about 100 and generally increases to about 150 mid-2008. It generally decreases to about 100 in early 2009. It generally increases ending at about 150. AFE begins at about 100 and generally increases to about 140 in early 2008. It generally decreases to about 90 in early 2009 then generally increases ending at about 120. EME begins at about 100 and generally increases to about 160 in mid-2008. It generally decreases to about 110 in early 2009 then generally increases ending at about 150.

### *Figure: Industrial Production*

Line chart, 2006 to 2010. Unit is an index, January 2006 equals 100. 100 on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE" (excludes Australia and Switzerland), and "EME" (excludes Chile). Foreign begins at 100 and generally increases to about 105 in mid-2008. It generally decreases to about 90 in early 2009 then generally increases ending at about 105. AFE begins at 100 and remains about constant until late 2006. It generally increases to about 102 and remains about constant until early 2008. It generally decreases to about 85 in mid-2009 then generally increases ending at about 90. EME begins at 100 and generally increases to about 115 in early 2008. It generally decreases to about 105 in early 2009 then generally increases ending at about 120.

### *Figure: Retail Sales*

Line chart, 2006 to 2010. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE" (excludes Australia and Switzerland), and "EME" (includes Brazil, China, Israel, Korea, Singapore, Taiwan, and Venezuela). Foreign begins at 4 and fluctuates but remains about constant until mid-2008. It generally decreases to about -2 in early 2009 then generally increases ending at about 4. AFE begins at about 3 and fluctuates but remains about constant until late 2008. It generally decreases to about -4 in early 2009 then generally increases ending at about 4. EME begins at about 7 and decreases to about 4 in early 2006. It generally increases to about 10 in early 2007 then decreases to about 6 in mid-2007. It generally increases to about 8 in late 2007 then generally decreases to about 3 in 2009. It generally increases to about 10 in early 2010 then generally decreases ending at about 6.

### *Figure: Employment*

Line chart, 2006 to 2010. Unit is four-quarter percent change. 0 on the scale is marked by a horizontal line. There are three series, "Foreign," "AFE," and "EME" (excludes China). Foreign begins at about 2 and remains about constant until late 2007. It generally decreases to about -1 in early 2009 then generally increase ending at about -0.5. AFE begins at about 1.5 and remains about constant until late 2007. It generally decreases to about -2 in mid-2009 then generally increases ending at about -0.5. EME begins at about 2.75 and generally decreases to about 2 in mid-2007. It generally increases to about 3 in late 2007 then generally decreases to about 0 in mid-2009. It generally increases ending at about 1.5.

### *Figure: Consumer Prices -- Advanced Foreign Economies*

Line chart, 2006 to 2010. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are two series, "Headline" and "Core." Core excludes all food and energy; staff calculation. Headline begins at about 2 and fluctuates but generally decreases to about 1 in late 2006. It generally increases to about 3.5 in mid-2008 then generally decreases to about -1 in mid-2009. It generally increases ending at about 1.25.

Note: Excludes Australia, Sweden, and Switzerland.

### *Figure: Consumer Prices -- Emerging Market Economies*

Line chart, 2006 to 2010. Unit is 12-month percent change. 0 on the scale is marked by a horizontal line. There are three series, "Headline," "Excluding Food -- East Asia," and "Excluding Food -- Latin America." Headline begins at about 4.5 and generally increases to about 7 in late 2007. It generally decreases to about 5 in early 2008 then generally increases to about 6 in late 2008. It generally decreases to about 1 in mid-2009 then generally increases ending at about 3.5. Excluding Food --

East Asia begins at about 2 and generally increases to about 4 in mid-2008. It generally decreases to about -2 in mid-2009 then generally increases ending at about 2. Excluding food -- Latin America begins at about 4 and fluctuates but remains about constant until early 2008. It generally increases to about 5 in late 2008 then generally decreases to about 4 in late 2009. It generally increases ending at about 5.

## Staff Projections for Advanced Foreign Economies

(Percent change from end of previous period, annual rate)

Indicator	2009	2010		Projection	
		Q1	2010		2011
			Q2	H2	
Real GDP	-1.5	3.6	3.1	2.3	2.3
April TB	-1.5	2.6	2.5	2.7	2.9
CPI	0.2	2.1	1.1	0.8	1.3
April TB	0.2	2.1	1.3	1.1	1.2

## Staff Projections for Emerging Market Economies

(Percent change from end of previous period, annual rate)

Indicator	2009	2010		Projection	
		Q1	2010		2011
			Q2	H2	
Real GDP	2.7	6.5	5.7	4.6	4.6
April TB	2.6	6.9	5.1	5.3	5.0
CPI	2.2	4.6	2.9	3.0	3.0
April TB	2.2	4.7	3.7	3.2	3.1

## Evolution of Staff Forecast for Foreign Real GDP

*Figure: Total Foreign*

Line chart, Tealbook publication dates 1/23/2008 to 12/8/2010. Unit is percent change, Q4/Q4. 0 on the scale is marked by a horizontal line. There are three series, "2009," "2010," and "2011." 2009 begins at about 3.5 and generally decreases to about -2 on 3/12/2009. It generally increases to about 0 on 9/16/2009 and remains about constant to the end of the timeline on 6/16/2010. 2010 begins at about 3.5 on 9/10/2008 and generally decreases to about 2.5 on 3/12/2009. It generally increases ending at about 4 at the end of the timeline on 6/16/2010. 2011 begins at about 4 on 9/16/2009 and remains about constant until 4/21/2010. It generally decreases ending at about 3 on 6/16/2010.

*Figure: Advanced Foreign Economies*

Line chart, Tealbook publication dates 1/23/2008 to 12/8/2010. Unit is percent change, Q4/Q4. 0 on the scale is marked by a horizontal line. There are three series, "2009," "2010," and "2011." 2009 begins at about 2 and remains about constant until 9/10/2008. It generally decreases to about -3 on 3/12/2009 then generally increases to about -2 on 9/16/2009. It remains about constant to the end of the timeline on 6/16/2010. 2010 begins at about 2.5 on 9/10/2008 and generally increases ending at about 3 on 6/16/2010. 2011 begins at about 3 on 8/6/2009 and remains about constant until 12/9/2009. It generally decreases ending at about 2.

*Figure: Emerging Market Economies*

Line chart, Tealbook publication dates 1/23/2008 to 12/8/2010. Unit is percent change, Q4/Q4. 0 on the scale is marked by a horizontal line. There are three series, "2009," "2010," and "2011." 2009 begins at about 5 and generally decreases to about -2 on 3/12/2009. It generally increases ending at about 2 on 6/16/2010. 2010 begins at about 5 on 9/10/2008 and generally decreases to about 3 on 3/12/2009. It generally increases ending at about 5 on 6/16/2010. 2011 begins at about 5 on 8/6/2009 and generally decreases ending at about 4 on 6/16/2010.

## Evolution of Staff Forecast for Foreign CPI Inflation

### *Figure: Total Foreign*

Line chart, Tealbook publication dates 1/23/2008 to 12/8/2010. Unit is percent change, Q4/Q4. 0 on the scale is marked by a horizontal line. There are three series, "2009," "2010," and "2011." 2009 begins at about 2.5 and remains about constant until 7/30/2008. It generally decreases to about .5 on 3/12/2009 then generally increases to about 1 on 6/17/2009. It generally decreases to about .75 on 8/6/2009 and remains about constant until 12/9/2009. It generally increases to about 1 on 1/20/2010 and remains about constant to the ending on 6/16/2010. 2010 begins at about 2.5 on 4/23/2008 and generally decreases to about 1.5 on 3/12/2009. It remains about constant until 9/6/2009 then generally increases to about 2.5 on 4/21/2010. It generally decreases ending at about 2 on 6/16/2010. 2011 begins at about 1.75 on 9/16/2009 and generally increases to about 2 on 4/21/2010. It remains about constant ending on 6/16/2010.

### *Figure: Advanced Foreign Economies*

Line chart, Tealbook publication dates 1/23/2008 to 12/8/2010. Unit is percent change, Q4/Q4. 0 on the scale is marked by a horizontal line. There are three series, "2009," "2010," and "2011." 2009 begins at about 1.5 and remains about constant until 4/23/2008. It generally increases to about 2 on 6/18/2008 and remains about constant until 9/10/2008. It generally decreases to about 0 on 3/12/2009 then generally increases to about .75 on 6/17/2009 then generally decreases to about 0 on 12/9/2009. It generally increases to about .25 on 1/20/2010 and remains about constant ending on 6/16/2010. 2010 begins at about 1.5 on 3/13/2008 and remains about constant until 9/10/2008. It generally decreases to about 1.25 on 10/22/2008 and remains about constant until 1/22/2009. It generally decreases to about 1 on 3/12/2009 and remains about constant until 1/20/2010. It generally increases to about 1.25 on 4/21/2010 then generally decreases ending at about 1 on 6/16/2010. 2011 begins at about 2 on 9/16/2009 and fluctuates but remains about constant ending on 6/16/2010.

### *Figure: Emerging Market Economies*

Line chart, Tealbook publication dates 1/23/2008 to 12/8/2010. Unit is percent change, Q4/Q4. 0 on the scale is marked by a horizontal line. There are three series, "2009," "2010," and "2011." 2009 begins at about 3 and generally increases to about 3.5 on 6/18/2008. It generally decreases to about 1 on 3/12/2009 then generally increases ending at about 2 on 6/16/2010. 2010 begins at about 3.25 on 3/13/2008 then generally decreases to about 2 on 3/12/2009. It generally increases to about 3.5 on 4/21/2010 then generally decreases ending at about 3 on 6/16/2010. 2011 begins at about 2.25 on 8/6/2009 and generally increases to about 3 on 4/21/2010. It remains about constant ending on 6/16/2010.

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

**Last update: January 29, 2016**

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### Financial Developments

#### Policy Expectations and Treasury Yields

##### *Figure: Implied Federal Funds Rate*

Line chart, 2010 to 2012. Unit is percent. There are four series, "Mean: June 15, 2010," "Mean: April 27, 2010," "Mode: June 15, 2010," and "Mode: April 27, 2010." Mean: June 15, 2010 begins at about 0.25 and remains about constant to the end of 2010. It generally increases ending at about 1.5. Mean: April 27, 2010 begins at about 0.25 and remains about constant until late 2010. It generally increases ending at about 2. Mode: June 15, 2010 begins at about 0.5 and remains about constant until late 2011. It generally increases ending at about 1. Mode: April 27, 2010 begins at about 0.25 and remains about constant until early 2011. It generally increases ending at about 1.

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

Source: Bloomberg and CME group.

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

Bar chart, 2010:Q2 through 2012:Q2 or later. Unit is percent. The series begins at about 0 in 2010:Q2 and increases to about 25 in 2011:Q1. It decreases to about 5 in 2012:Q1 then increases ending at about 8.

Note: Distribution is derived from the responses of 18 primary dealers to the Desk's Dealer Survey.

Source: Federal Reserve Bank of New York.

##### *Figure: Nominal Treasury Yields*

Line chart, 2007 to 2010. Unit is percent. Data are daily. The April 2010 FOMC meeting is marked by a vertical line. The end of the series is marked June 15. There are two series, "10-year" and "2-year." 10-year begins at about 5 and generally increases to about 5.5 in mid-2007. It fluctuates but generally decreases to about 3.5 in early 2008. It generally increases to about 4.5 in late 2008 then generally decreases to about 2.5 in early 2009. It fluctuates but generally increases to about 4 in mid-2009 then fluctuates between about 3.5 and 4 until early 2010. It generally decreases ending at about 3.5. 2-year begins at about 5 then fluctuates but generally decreases to about 1.5 in early 2008. It generally increases to about 3 in mid-2008 then generally decreases to about 0 in late 2008. It generally fluctuates between about .5 and 1.5 to the end of the timeline.

Note: Par yields from a smoothed nominal off-the-run Treasury yield curve.

Source: Staff estimates.

[Content redacted.]

##### *Figure: 10-year Treasury Implied Volatility*

Line chart, 2007 to 2010. Unit is percent. Data are daily. The April 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled June 15. The series begins at about 4 and fluctuates but generally increases to about 10.5 in early 2008. It generally decreases to about 7 in mid-2008 then fluctuates but generally increases to about 13.5 in late 2008. It fluctuates but generally decreases to about 6 in early 2009 then generally increases to about 12 in mid-2009. It generally decreases to about 5 in early 2010 then generally increases ending at about 7.

Note: 10-year Treasury note implied volatility derived from options on futures contracts.

Source: Bloomberg.

##### *Figure: Inflation Compensation*

Line chart, 2007 to 2010. Unit is percent. Data are daily. The April 2010 FOMC meeting is marked by a vertical line. 0 on the scale is marked by a horizontal line. The end of the timeline is labeled June 15. There are two series, "Next 5 years" (adjusted for the indexation-lag (carry) effect), and "5 to 10 years ahead." Next 5 years begins at about 2.5 and fluctuates but remains about constant until mid-2008. It generally decreases to about -1.5 in late 2008 then generally increases to about 2 in late 2009. It generally decreases ending at about 1.5. 5 to 10 years ahead begins at about 2.5 and fluctuates but remains about constant until late 2008. It generally increases to about 4 then generally decreases to about 2 at the end of 2008. It fluctuates but generally increases to about 4 in early 2010 then generally decreases ending at about 2.5.

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

Source: Barclays PLC and staff estimates.

## Asset Market Developments

### *Figure: Equity Prices*

Line chart, 2008 to 2010. Unit is an index, January 26, 2010 = 100. Data are daily. The April 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled June 15. There are two series, "S&P 500" and "S&P 500 Bank Index." S&P 500 begins at about 120 and fluctuates but generally decreases to about 60 in early 2009. It fluctuates slightly but generally increases to about 110 in early 2010. It generally decreases ending at about 100. S&P 500 bank index begins at about 140 and fluctuates but generally increases to about 180 in late 2008. It fluctuates but generally decreases to about 40 in early 2009 then fluctuates slightly but generally increases to about 120 in early 2010. It generally decreases ending at about 100.

Source: Bloomberg.

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

Line chart, 2007 to 2010. Unit is percent, log scale. Data are daily. The April 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled June 15. The series begins at about 5 and fluctuates but generally increases to about 30 in early 2008. It generally decreases to about 15 in mid-2008 then generally increases to about 80 in late 2008. It generally decreases to about 15 in early 2010 then generally increases to about 50. It generally decreases ending at about 25.

Source: Chicago Board Options Exchange.

### *Figure: Equity Risk Premium*

Line chart, 1990 to 2010. Unit is percent. Data are monthly. The end of the timeline is labeled June 15. The end of the series are marked by a plus sign which denotes the latest observation using daily interest rates and stock prices and latest earning data from I/B/E/S. There are two series, "Expected 10-year real equity return," and "Expected real yield on 10-year Treasury" (off-the-run 10-year Treasury yield less Philadelphia Fed 10-year expected inflation). Expected 10-year real equity return begins at about 8 and generally increases to about 10 in late 1990. It generally decreases to about 8 in early 1991 then fluctuates but remains about constant until late 1994. It generally decreases to about 3 in late 1999 then fluctuates but generally increases to about 12 in early 2008. It generally decreases to about 8 in early 2009 then generally increases ending at about 9. Expected real yield on 10-year Treasury begins at about 4.5 and generally decreases to about 2 in late 1993. It generally increases to about 4.5 in late 1994 then generally decreases to about 2.5 in late 1998. It generally increases to about 4 in late 1999 then generally decreases to about 1 in mid-2003. It generally increases to about 2.5 in mid-2007 then generally decreases to about 0 in early 2009. It generally increases ending at about 1.

Source: Thomson Financial.

### *Figure: Corporate Bond Spreads*

Line chart, 2002 to 2010. Unit is basis points. Data are daily. The April 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled June 15. There are two series, "10-year BBB (left scale)" and "10-year high-yield (right scale)." 10-year BBB begins at about 200 and generally increases to about 350 in late 2002. It generally decreases to about 75 in early 2005 then generally increases to about 650 in late 2008. It generally decreases to about 200 in early 2010 then generally increases ending at about 250. 10-year high yield begins at about 500 and generally increases to about 750 in late 2002. It generally decreases to about 250 in mid-2007 then generally increases to about 1750 in late 2008. It generally decreases to about 500 in early 2010 then generally increases ending at about 600.

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, May 2009 to May 2010. Unit is basis points, Data are daily. The April 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled June 15. There are three series, "1-month," "3-month," and "3-month, 3 months forward." 1-month begins at about 20 and generally decreases to about 10 in late June 2009. It fluctuates slightly but remains about constant until late April 2010. It generally increases ending at about 15. 3 month begins at about 80 and generally decreases to about 10 in early September 2009. It fluctuates slightly but remains about constant until late April 2010 then generally increases ending at about 35. 3-month, 3 months forward begins at about 80 and generally decreases to about 40 in mid-May 2009. It generally increases to about 65 in early June 2009 then generally decreases to about 15 in late April 2010. It generally increases to about 75 in early May 2010 then generally decreases ending at about 40.

Source: British Bankers' Association and Prebon.

### *Figure: Spread on 30-Day Unsecured Financial Paper*

Line chart, 2007 to 2010. Unit is basis points. Data are 5-day moving average. The April FOMC meeting is marked by a vertical line. 0 on the scale is marked by a horizontal line. The series begins at about 0 and fluctuates but generally increases to about 140 in late 2008. It generally decreases to about -10 in late 2009 then generally increases ending at about 10.

Note: The spread is the AA financial unsecured rate minus the AA nonfinancial unsecured rate.

Source: Depository Trust & Clearing Corporation.

## Household Finance

### *Figure: Mortgage Rate and MBS Yields*

Line chart, February 2007 to February 2010. Unit is percent. Data are weekly. The April 2010 FOMC meeting is marked by a vertical line. The end of the timeline for the upper series is labeled June 9. The end of the timeline for the lower series is labeled June 15. There are two series, "30-year conforming fixed mortgage rate" and "MBS yield." 30-year conforming fixed mortgage rate begins at about 6.25 and generally increases to about 6.75 in May 2007. It generally decreases to about 5.5 in February 2008. It generally increases to about 6.5 in July 2008 then fluctuates but generally decreases to about 4.75 in April 2009. It generally increases to about 5.5 in June 2009 then fluctuates but generally decreases ending at about 4.75. MBS yield begins at about 5.75 and generally increases to about 6.5 in May 2007. It generally decreases to about 4.5 in January 2008 then generally increases to about 6.0 in March 2008. It generally decreases to about 5 in late March 2008 then generally increases to about 6.0 in July 2008. It fluctuates but generally decreases to about 3.5 in January 2009 then fluctuates but generally increases to about 5.0 in June 2009. It fluctuates but generally decreases ending at about 4.0.

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

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

### *Figure: Spread of Mortgage Rate to Treasury Yield*

Line chart, March 2007 to April 2010. Unit is basis points. Data are weekly. The April 2010 FOMC meeting is marked by a vertical line. The end of the timeline is labeled June 9. The series begins at about 150 and fluctuates but generally increases to about 250 in January 2009. It fluctuates but generally decreases to about 75 in May 2009. It generally increases to about 150 in July 2009 then generally decreases to about 100 in March 2010. It generally increases ending at about 145.

Note: Spread of 30-year conforming fixed mortgage rate relative to 10-year off-the-run Treasury yield.

Source: Bloomberg; Freddie Mac.

### *Figure: Delinquencies on Prime and FHA-Backed Mortgages*

Line chart, 2002 to 2010. Unit is percent of loans. Data are monthly. The end of the timeline is labeled April. There are two series, "FHA" and "Prime." FHA begins at about 4 and fluctuates slightly but generally increases ending at about 8. Prime begins at about 1.5 and fluctuates but remains about constant until early 2007. It generally increases to about 7 in late 2009 then generally decreases ending at about 6.5.

Note: Percent of loans 90 or more days past due or in foreclosure. Prime includes near-prime mortgages.

Source: McDash.

### *Figure: Growth of Household Sector Debt*

Line chart 1992 to 2010. Unit is percent. Data are quarterly, s.a.a.r. 0 on the scale is marked by a horizontal line. A vertical line indicates the NBER Peak in December 2007. The end of the timeline is labeled Q1. There are two series, "Consumer Credit" and "Home Mortgage." Consumer Credit begins at about -1 and generally increases to about 16 in early 1995. It fluctuates but generally decreases to about 2 in mid-1998 then generally increases to about 12 in late 1998. It generally decreases to about 5 in early 2000 then generally increases to about 14 in late 2000. It fluctuates but generally decreases to about 2 in early 2006 then generally increases to about 7 in late 2007. It generally decreases to about -7 in early 2010 then generally increases ending at about -2. Home mortgage begins at about 8 and fluctuates but remains about constant until late 1995. It fluctuates but generally increases to about 16 in mid-2003 then fluctuates but generally decreases ending at about -4.

Source: Federal Reserve.

### *Figure: Spread of Consumer Interest Rates to Treasury Yield*

Line chart, 2001 to 2010. Unit is percentage points. The end of the upper series timeline is labeled April. The end of the lower series timeline is labeled June. There are two series, "Credit cards (offer rate)," and "New auto loans (transaction rate)." Credit cards begins at about 11 and generally increases to about 12 in late 2001. It fluctuates but generally decreases to about 7 in late 2005. It generally increases to about 10 in late 2007 then generally decreases to about 8 in early 2008. It generally increases ending at about 13. New Auto Loans begins at about 4 then generally decreases to about 2 in late 2001. It generally increases to about 4 in 2002 then fluctuates between about 2 and about 4 until mid-2006 where it decreases to about 0. It fluctuates but generally increases to about 5 in early 2008 then generally decreases to about 2 in mid-2008. It generally increases to about 6 in late 2008 then generally decreases ending at about 4.

Note: Spreads are relative to 2-year Treasury yield. For credit cards, monthly; for auto loans, weekly.

Source: For credit cards, Mintel; for auto loans, PIN.

### *Figure: Delinquencies on Consumer Loans*

Line chart, 1998 to 2010. Unit is percent. The end of the upper and lower series are marked April. The end of the middle series is labeled Q1. 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 at about 5.25 and generally decreases to about 4.5 in early 2000. It generally increases to about 5.5 in mid-2003 then generally decreases to about 3 in late 2005. It generally increases to about 6.25 in late 2008 then generally decreases ending at about 5.5. Nonrevolving consumer loans at commercial banks begins at about 3 and generally decreases to about 2 in late 2005. It generally increases to about 4.75 in late 2009 then decreases ending at about 4.5. Auto loans at captive finance companies begins at about 3 then generally decreases to about 2.25 in late 1991. It generally increases to about 3 in early 2001 then

generally decreases to about 2.25 in early 2002. It generally increases to about 2.5 in late 2002 then generally decreases to about 2 in mid-2004. It generally increases to about 3.75 in early 2009 then decreases ending at about 3.5.

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

## Business Finance

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

Bar chart, 2006 to 2010. Unit is billions of dollars. Data are monthly rate. There are three series, "Commercial Paper," "C&I Loans," and "Bonds." Commercial paper and C&I Loans are seasonally adjusted, period-end basis. Approximate values are: Commercial Paper: 2006, 5; 2007, 0; 2008, 5; 2009, -15; 2009:H2, -5; 2010:Q1, 5; 2010 April, -5; 2010 May (estimate), 10. C&I loans: 2006, 12; 2007, 25; 2008, 10; 2009:H1, -25; 2009:H2, -25; 2010:Q1, -25; 2009 April, -10; 2010 May (estimate), -1. Bonds: 2006, 18; 2007, 25; 2008, 18; 2009:H1: 40; 2009:H2: 20; 2010:Q1: 35; 2010 April, 30; 2010 May (estimate), 15. There is a superimposed line chart for total. Approximate values are: 2006, 35; 2007, 50; 2008, 33, 2009:H1, 0; 2009:H2, -10; 2010:Q1, 15; 2010 April, 15, 2010 May (estimate), 24.

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

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

Bar chart, 2006 to 2010. Unit is billions of dollars. Data are monthly rate. There are four series, "Public Issuance," "Private issuance," "Repurchases," and "Cash mergers." Approximate values are: Public Issuance: 2006, 5; 2007, 7; 2008, 4; 2009:H1, 5; 2009:H2, 5; 2010:Q1 (Preliminary), 5. Private Issuance: 2006, 15; 2007, 18; 2008, 21; 2009:H1, 15; 2009:H2, 12; 2010:Q1 (Preliminary), 10. Repurchases: 2006, -35; 2007, -50; 2008, -30; 2009:H1, -10; 2009:H2, -15; 2010:Q1 (Preliminary), -20. Cash Mergers: 2006, -25; 2007, -40; 2008, -10; 2009:H1, -5; 2009:H2, -15; 2010, -10. There is also a line chart labeled total which sums the other series. Approximate values are: 2007, -40; 2007, -65; 2008, -15; 2009:H1, 15; 2009:H2, -13; 2010:Q1, -30.

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

### *Figure: Bond Ratings Changes of Nonfinancial Firms*

Bar chart, 1990 to 2010. Unit is percent of outstandings. Data are annual rate. There are two series, "Upgrades" and "Downgrades." Upgrades begins at about 18 and decreases generally to about 10 in 1994. It generally increases to about 20 in 1995 then generally decreases to about 10 in 1997. It increases to about 18 in 1998 then decreases to about 3 in 2002. It increases to about 10 in 2005 then decreases to about 3 in 2008. It increases to about 18 in 2010:Q1 then decreases ending at about 10 in April-May 2010. Downgrades begins at about -35 and decreases to about -42 in 1992. It generally increases to about -10 in 1995. It decreases to about -15 in 1996 then generally increases to about -10 in 1998. It generally decreases to about -40 in 2002 then generally increase to about -10 in 2004. It generally decreases to about -15 in 2007 then generally decreases to about -20 in 2009. It generally increases ending at about -5.

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

### *Figure: Revisions to Expected S&P Earnings*

Line chart, 2000 to 2010. Unit is percent. Data are monthly. 0 on the scale is marked by a horizontal line. The end of the timeline is labeled Mid-May. The series begins at about 0 and generally decreases to about -6 in late 2001. It generally increases to about .5 in early 2002 then generally decreases to about minus 3 in late 2002. It generally increases to about 2 in mid-2004 then generally decreases to about minus 3 in mid-2008. It generally increases to about -1 in mid-2008 then generally decreases to about -13 in late 2008. It generally increases to about -5 in early 2009 then decreases again with a note that the revision in February 2009 was -17.2%. It generally increases to about 2 in mid-2009 and fluctuates between about 1 and about 3 in late 2009. It generally decreases to about -.25 in early 2010 then generally increases ending at about 3.

Note: Index is a weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share for a fixed sample.

Source: Thomson Financial.

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

Line chart, 1996 to 2010. Unit is percent. The end of the top and bottom series timelines are labeled Q1. The end of the middle series timeline is labeled May. There are three series, "At life insurance companies," "CMBS," and "At commercial banks" (excluding farmland). At life insurance companies begins at about 2.5 and generally decreases to about 0 in early 2006. It remains about constant until the end of the timeline. CMBS begins at about 0.5 in late 1998 then generally increases to about 2 in late 2003. It generally decreases to about 0.25 in mid-2007 then generally increases ending at about 8.5. At commercial banks begins at about 3.5 and generally decreases to about 1.25 in early 2000 then generally increases to about 1.75 in early 2003. It generally decreases to about 1 in early 2006 then generally increases ending at about 5.75.

Note: CMBS are commercial mortgage-backed securities.

Source: Citigroup; Call Report data; ACLI.

### *Figure: Commercial Mortgage Debt*

Line chart, 2001 to 2010. Unit is percent change, annual rate. Data are quarterly. 0 on the scale is marked by a horizontal line. The end of the timeline is labeled Q1. The series begins at about 8 and increases to about 11 in late 2001. It generally decreases to about 7 in early 2002 then generally increases to about 16 in late 2005.

It generally decreases to about 8 in early 2007 then generally increases to about 14 in late 2007. It generally decreases to about -8 in late 2009 then generally increases ending at about -4.

Source: Federal Reserve.

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

### *U.S. Dollar Funding Pressures*

#### Figure: U.S. Dollar Libor

Line chart: February to June. Unit is basis points. Data are daily. There is a vertical yellow shaded bar marking the period from late April onward. There are two series, "3-month" and "1 month." 3-month begins at about 25 and generally increases to about 54 in late May. It remains about constant to the end of the timeline. 1-month begins at about 23 and remains about constant until mid-march. It generally increases to about 35 in early May then decreases to about 33 in mid-May. It generally increases to about 35 in late May and remains about constant to the end of the timeline.

Source: Bloomberg.

#### Figure: Cost of Dollar Funding from Euro-Dollar Swaps

Line chart: February to June. Unit is basis points. Data are daily. There is a vertical yellow shaded bar marking the period from late April onward. There are two series, "3-month" and "1 month." 3-month begins at about 55 and generally increases to about 125 in late May. It generally decreases ending at about 100. 1-month begins at about 30 and generally increases to about 80 in early May. It generally decreases to about 55 in mid-May then generally increases to about 105 in late May. It generally decreases ending at about 75.

Note: Cost of funding implied from euro-dollar FX swaps assuming banks pay euro Libor to obtain funding.

Source: Bloomberg, FRBNY.

#### Figure: Unsecured Financial Commercial Paper Outstanding in the U.S. Market

Line chart: February to June. Unit is billions of dollars. Data are daily. There is a vertical yellow shaded bar marking the period from late April onward. There are four series, "Other euro-area countries," "United States," "United Kingdom and Switzerland," and "Peripheral euro-area countries" (Portugal, Ireland, Greece, Italy, and Spain). Other euro-area countries begins at about 195 and generally increases to about 200 in late February. It generally decreases to about 170 in late March then generally increases to about 185 in late April. It generally decreases ending at about 160. United States begins at about 110 and generally decreases to about 105 in early March. It increases to about 115 in late March then generally decreases to about 110 in early April. It fluctuates but remains about constant to the end of the timeline. United Kingdom and Switzerland begins at about 65 and remains about constant until late April. It generally increases to about 70 in early May then generally decreases to about 60 in late May. It generally increases ending at about 70. Peripheral euro-area countries begins at about 65 and remains about constant until early April. It generally decreases ending at about 30.

Note: By nationality of issuer.

Source: DTCC.

#### U.S. Dollar Liquidity Provided under Reestablished Swap Facilities

Central Bank	Date Liquidity Provided	Interest Rate (Percent)	Amount (\$ billions)
<b>One-Week Operations:</b>			
ECB	May 12	1.22	9.2
	May 20	1.22	0
	May 27	1.23	5.4
	June 3	1.21	0
	June 10	1.20	0
<b>Three-Month Operations:</b>			
ECB	May 20	1.24	1.0
BOJ	May 20	1.24	.2
<b>Memo:</b>			
Amount outstanding as of June 16:			1.2

## Foreign Developments

### *Figure: Nominal Trade-Weighted Dollar Indexes*

Line chart, 2007 to 2010. Unit is an index, January 1, 2007 = 100. Data are daily. The end of the timeline is labeled June 15. There are three series, "Broad," "Major," and "OITP." Broad begins at about 100 and generally decreases to about 90 in early 2008. It fluctuates but remains about constant until mid-2008 then generally increases to about 106 in early 2009. It generally decreases to about 93 in late 2009 then generally increases ending at about 100. Major begins at about 100 and generally decreases to about 87 in late 2007. It generally increases to about 93 in late 2007 then generally decreases to about 85 in mid-2008. It generally increases to about 105 in late 2008 then generally decreases to about 95 in late 2008 then generally decreases to about 95 in late 2008. It generally increases to about 106 in early 2009 then generally decreases to about 87 in late 2009. It generally decreases ending at about 97. OITP begins at about 100 and generally decreases to about 90 in late 2008. It generally increases to about 110 in early 2009 then generally decreases to about 97 in early 2010. It generally increases ending at about 100.

Source: Federal Reserve and Bloomberg.

### *Figure: Stock Price Indexes*

Line chart, 2007 to 2010. Unit is an index, January 1, 2007 = 100. Data are daily. The end of the timeline is labeled June 15. There are four series, "DJ Euro," "Topix," "FTSE," and MSCI Emerging Markets. DJ Euro begins at about 100 and generally increases to about 110 in late 2007. It fluctuates but generally decreases to about 40 in early 2009 then generally increases to about 65 in late 2009. It fluctuates but remains about constant to the end of the timeline. Topix begins at about 100 and generally decreases to about 65 in early 2008. It generally increases to about 80 in mid-2008 then generally decreases to about 40 in early 2009. It fluctuates but generally increases to about 60 in early 2010 then generally decreases ending at about 50. FTSE begins at about 100 and generally increases to about 110 in late 2007. It generally decreases to about 85 in early 2008 then generally increases to about 100 in mid-2008. It fluctuates but generally decreases to about 55 in early 2009 then fluctuates but generally increases to about 90 in early 2010. It generally decreases ending at about 80. MSCI Emerging Markets begins at about 100 and generally increases to about 150 in late 2007. It fluctuates but generally decreases to about 110 in early 2008 then increases to about 140 in mid-2008. It fluctuates but generally decreases to about 50 in late 2008 then fluctuates but generally increases to about 115 in early 2010. It generally decreases ending at about 90.

Source: Bloomberg.

### *Figure: Nominal 10-Year Government Bond Yields*

Line chart, 2007 to 2010. Unit is percent. Data are daily. The end of the timeline is labeled June 15. There are three series, "Germany," "United Kingdom," and "Japan." Germany begins at about 4 and generally increases to about 4.75 in late 2007. It generally decreases to about 3.5 in early 2008 then generally increases to about 4.75 in mid-2008. It generally decreases to about 3 in late 2008 then generally increases to about 3.5 in mid-2009. It generally decreases ending at about 2.5. United Kingdom begins at about 5 and generally increases to about 5.5 in mid-2007. It generally decreases to about 4.25 in early 2008 then generally increases to about 5.25 in mid-2008. It generally decreases to about 3 in early 2009 then generally increases to about 4 in early 2010. It generally decreases ending at about 3.5. Japan begins at about 1.75 and generally increases to about 2 in mid-2007. It generally decreases to about 1.25 in early 2008 then generally increases to about 1.75 in mid-2008. It generally decreases to about 1 in early 2009 and fluctuates but remains about constant to the end of the timeline.

Source: Bloomberg.

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

Bar chart, 2007 to 2010. Unit is billions of dollars, annual rate. There are two series, "Private" and "Official." Private begins at about 80 and increases to about 85 in late 2007. It increases to about 100 in early 2008 then increases to about 325 in late 2008. It decreases to about 85 in early 2009 then decreases to about 25 in late 2009. It increases to about 500 in 2010:Q1 then decreases to about 400 in April 2010. Official begins at about 85 and increases to about 100 in late 2007. It increases to about 350 in early 2008 and again to about 575 in late 2008. It decreases to about 475 in early 2009 then increases to about 500 in late 2009. It decreases to about 450 in 2010:Q1 and increases to about 600 in April 2010.

Source: Treasury International Capital data adjusted for staff estimates.

### *Figure: Euro-Area 2-year Government Bond Spreads*

Line chart, 2007 to 2010. Unit is percent. 0 on the scale is marked by a horizontal line. The end of the timeline is labeled June 15. There are three series, "Greece (left scale)," "Portugal (right scale)," and "Spain (right scale)." Greece begins at about 0 and remains about constant until late 2007. It generally increases to about 3 in early 2009 then generally decreases to about 0 in late 2009. It fluctuates but generally increases to about 18 in mid-2010 then generally decreases ending at about 8. Portugal begins at about 0 and fluctuates but generally increases to about 1.5 in early 2009. It generally decreases to about 0 in late 2009 then fluctuates but generally increases to about 5.5 in early 2010. It generally decreases ending at about 2.75. Spain begins at about 0 and remains about constant until late 2007. It generally increases to about 1.5 in late 2008 then generally decreases to about .25 in early 2009. It generally increases to about .75 in early 2009 then generally decreases to about 0 in mid-2009. It fluctuates but generally increases to about 2 in early 2010 then generally decreases to about .25 in early 2010. It generally increases to about 2.5 in mid-2010 then almost immediately decreases to about 2. It generally increases ending at about 2.75.

Note: Spread over German bunds.

Source: Bloomberg.

### *Figure: 3-Month Libor-OIS Spreads*



Line chart, 2007 to 2010. Unit is percent. Data are daily. 0.0 on the scale is marked by a horizontal line. There are three series, "Dollar," "Euro," and "Sterling." Dollar begins at about 0.0 and remains about constant until mid-2007. It fluctuates but generally increases to about 1.0 in late 2007 then generally decreases to about 0.25 in early 2008. It generally increases to about 3.75 in late 2008 then generally decreases to about 0.0 in late 2009. It remains about constant until mid-2010 then generally increases ending at about 0.25. Euro begins at about 0.0 and remains about constant until mid-2007. It fluctuates but generally increases to about 0.75 in late 2007 then generally decreases to about 0.5 in early 2008. It generally increases to about 1.75 in late 2008 then generally decreases to about 0.25 in early 2010. It remains about constant until the end of the timeline. Sterling begins at about 0.0 and remains about constant until mid-2007. It fluctuates but generally increases to about 1.0 in late 2007 then generally decreases to about 0.25 in early 2008. It fluctuates but generally increases to about 2.5 in early 2009 then generally decreases to about 0.25 in late 2009. It remains about constant to the end of the timeline.

Source: Bloomberg.

## Commercial Banking and Money

### Figure: Bank Credit

Line chart, January 2007 to May 2010. Unit is an index, January 2008 = 100. Data are monthly averages. The end of the timeline is labeled May. There are two series, "Securities" and "Core Loans." Securities begins at about 95 and generally increases to about 107 in October 2008. It generally decreases to about 104 in January 2009 then generally increases ending at about 110. Core loans begins at about 90 and generally increases to about 103 in February 2009. It generally decreases ending at about 90.

Note: The data have been adjusted to remove the effects of consolidations of assets under FAS 166 and FAS 167. Core loans consist of commercial and industrial, real estate, and consumer loans. A vertical line indicates the NBER Peak in December 2007.

Source: Federal Reserve.

### Figure: Growth in Loans at Domestic Banks

Stacked bar chart, 1989 to 2010. Unit is 4-quarter percent change. The end of the timeline is labeled Q1. There are two series, "Strong banks' contribution" and "Weak banks' contribution." Strong banks' contribution begins at about 6 and remains about constant until late 1989. It generally increases to about 7 in late 1989 then generally decreases to about 0 in early 1991. It generally increases to about 11 in mid-1995 then generally decreases to about 4 in early 1998. It generally increases to about 10 in late 2000. It generally decreases to about 1 in early 2002 then generally increases to about 10 in mid-2005. It generally decreases to about 7 in early 2007 then generally increases to about 11 in late 2007. It generally decreases ending at about -5. Weak banks' contributions begins at about -1 and remains about constant until late 1989. It generally increases to -4 in early 1992 then generally increases to about 0 in early 1994. It remains about constant until late 2008 then generally increases ending at about -9.

Note: Strong banks are banks that have CAMELS ratings of 1 or 2. Weak banks are banks that have CAMELS ratings of 3, 4, or 5.

Source: For growth in loans, Call Report; for CAMELS ratings, FFIEC.

### Figure: Spread on C&I loans

Line chart, 1997 to 2010. Unit is basis points. Data are quarterly. The end of the timeline is labeled Q2. There are two series, "Commitment size less than \$1 million," and "Loan size less than \$25 million." Commitment size less than \$1 million begins at about 390 and generally decreases to about 350 in mid-2000. It generally increases to about 425 in early 2003 then generally decreases to about 340 in mid-2007. It generally increases ending at about 450. Loan size less than \$25 million begins at about 150 and generally increases to about 175 in late 2002. It generally decreases to about 125 in late 2008 then generally increases ending at about 225.

Note: The spread on C&I loans over a market interest rate on an instrument of comparable maturity, adjusted for changes in nonprice loan characteristics. A vertical line indicates the NBER Peak in December 2007.

Source: Survey of Terms of Business Lending.

### Figure: Growth of M2

Bar chart, 2008 to 2010. Unit is percent. Data are s.a.a.r. Approximate values are: 2008: 8.5. 2009:H1: 7. 2009:H2: 3. 2010:Q1: -0.5. 2010 April: -5. 2010 May (preliminary): 11.

Source: Federal Reserve.

#### Growth of M2 and Its Components

Percent, s.a.a.r.

	M2	Liquid deposits	Small time deposits	RMMF	Curr.
2008	8.5	6.9	12.3	13.4	5.8
2009					
H1	7.4	16.0	-6.0	-15.7	10.8
H2	2.8	17.0	-26.5	-29.9	2.9

2010					
Q1	-.2	9.1	-25.3	-29.2	2.1
Apr.	-4.5	.7	-20.0	-36.0	7.4
May (p)	11.3	19.0	-18.8	3.1	5.3

p Preliminary. [Return to table](#)

Source: Federal Reserve.

### Figure: Interest Rates on Selected Components of M2

Line chart, 2008 to 2010. Unit is percent. Data are monthly. The end of the timeline is labeled May (preliminary). There are three series, "Money Market mutual funds," "Small time deposits," and "Liquid deposits." Money Market mutual funds begins at about 3.5 and generally decreases to about 1.75 in mid-2008. It remains about constant until late 2008 then generally decreases to about 0.25 in mid-2009. It remains about constant to the end of the timeline. Small time deposits begins at about 3 and generally decreases to about 1.75 in early 2008. It generally increases to about 2 in late 2008 then generally decreases ending at about 0.5.

Source: Federal Reserve; Call Report; Bank Rate Monitor.

### [Box:] Balance Sheet Developments over the Intermeeting Period

#### Federal Reserve Balance Sheet

Billions of dollars

	Change since last FOMC	Current (06/14/2010)	Maximum level	Date of maximum level
<b>Total assets</b>	<b>20</b>	<b>2,351</b>	<b>2,364</b>	<b>05/13/10</b>
Selected assets:				
Liquidity programs for financial firms	-4	2	1,247	11/06/08
Primary, secondary, and seasonal credit	-6	±0	114	10/28/08
Term auction credit (TAF)	0	0	493	03/11/09
Foreign central bank liquidity swaps	1	1	586	12/04/08
Primary dealer credit facility (PDCF)	0	0	156	09/29/08
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	0	0	152	10/01/08
Lending through other credit facilities	-7	43	351	01/23/09
Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF)	-5	+0	351	01/23/09
Term Asset-Backed Securities Loan Facility (TALF)	-2	43	49	03/11/10
Support for specific institutions	2	119	121	05/05/10
Credit extended to AIG, net	-1	26	91	10/27/08
Preferred interests in AIA Aurora LLC and ALICO Holdings LLC	0	25	25	06/14/10
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	2	67	75	12/30/08
Securities held outright*	31	2,073	2,073	06/14/10
U.S. Treasury securities	+0	777	791	08/14/07
Agency debt securities	-2	167	169	03/11/10
Agency mortgage-backed securities**	33	1,129	1,129	06/14/10
Memo: Term securities lending facility (TSLF)	0	0	236	10/01/08
<b>Total liabilities</b>	<b>18</b>	<b>2,294</b>	<b>2,309</b>	<b>05/13/10</b>
Selected liabilities:				
Federal Reserve notes in circulation	5	899	904	06/02/10
Reserve balances of depository institutions	45	1,081	1,249	02/24/10
U.S. Treasury, general account	-56	13	187	12/31/09



U.S. Treasury, supplementary financing account	+0	200	559	10/22/08
Other deposits	15	16	81	03/12/10
<b>Total capital</b>	<b>2</b>	<b>57</b>	<b>57</b>	<b>06/14/10</b>

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

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

\*\* Includes only mortgage-backed securities that have already settled. Although agency MBS purchases were completed at the end of March 2010, settlements will continue for the next couple of months. Total MBS purchases are about \$1.25 trillion. [Return to table](#)

## [Box:] The First Small-Value Term Deposit Facility Auction

**Table 1: DIs Registered for TDF Participation as of June 14, 2010**

Entity type	Number of registered DIs	Reserve balances held by registered DIs*	
		(\$ in billions)	
Large banks**	16	425	
Foreign institutions	15	94	
Small institutions***	326	45	
<b>Total</b>	<b>357</b>	<b>563</b>	

\* Average balances held during maintenance period ended June 2, 2010. Total average reserve balances for the same period were \$1,079 billion. [Return to table](#)

\*\* Includes large money center banks and other large commercial banks. [Return to table](#)

\*\*\* Includes small commercial banks and thrifts. [Return to table](#)

**Table 2: Bids and Awards for June 14, 2010, TDF Auction**

	Submitted	Awarded
<b>Competitive</b>		
Volume (\$ in millions)	6,138	1,000
Number of bids	156	18
Number of institutions	71	13
<b>Noncompetitive</b>		
Volume (\$ in millions)	152	152
Number of bids	38	38
<b>Total</b>		
Volume (\$ in millions)	6,291	1,152
Number of bids	194	56
Number of institutions	109	51

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

**Last update: January 29, 2016**

### Risks and Uncertainty

#### [Box:] Consequences of a Severe European Sovereign Debt Crisis

*Figure: U.S. Real GDP*

Line chart, 2008 to 2016. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There are two series, "Baseline" and "European Sovereign Debt Crisis." Baseline begins at about -1 and generally increases to about 1 in mid-2008. It generally decreases to about -6 in early 2009 then generally increases to about 6 in late 2009. It generally decreases to about 3 in mid-2010 then generally increases to about 4 in mid-2012. It generally decreases ending at about 3. European Sovereign Debt Crisis begins at about -1 and generally increases to about 1 in mid-2008. It generally decreases to about -6 in early 2009 then generally increases to about 6 in late 2009. It generally decreases to about -3 in late 2010 then generally increases to about 6 in early 2013. It generally decreases ending at about 3.5.

*Figure: U.S. Unemployment Rate*

Line chart, 2008 to 2016. Unit is percent. There are two series, "Baseline" and "European Sovereign Debt Crisis." Baseline begins at about 5 and generally increases to about 10 in late 2009. It generally decreases to about 5 in mid-2014 then remains about constant to the end of the timeline. European Sovereign Debt Crisis begins at about 5 and generally increases to about 11 in early 2012. It generally decreases ending at about 5.5.

*Figure: U.S. PCE Prices Excluding Food and Energy*

Line chart, 2008 to 2016. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There are two series, "Baseline" and "European Sovereign Debt Crisis." Baseline begins at about 2.5 and generally decreases to about -5 in mid-2011. It generally increases ending at about 2.5. European Sovereign Debt Crisis begins at about 2.5 and generally decreases to about 1 in mid-2010. It generally increases ending at about 1.8.

*Figure: Federal Funds Rate*

Line chart, 2008 to 2016. Unit is percent. There are two series, "Baseline" and "European Sovereign Debt Crisis." Baseline begins at about 3 and generally decreases to about 0 in early 2009. It remains about constant until early 2012 then generally increases ending at about 4. European Sovereign Debt Crisis begins at about 3 and generally decreases to about 0 in early 2009. It remains about constant until late 2013 then generally increases ending at about 4.

### Alternative Scenarios

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

Measure and scenario	2010		2011	2012	2013-14
	H1	H2			
<i>Real GDP</i>					
Extended Tealbook baseline	3.4	3.0	3.7	4.8	4.3
Normalization in Europe	3.4	3.9	4.7	5.0	4.1
Stronger recovery	3.4	5.1	5.6	4.8	3.4
Weaker consumption	3.4	1.7	2.3	4.9	5.1
Jobless recovery	3.4	3.0	3.7	5.9	5.6
Lower potential	3.4	2.6	2.8	3.1	3.2
Greater disinflation	3.4	3.0	3.8	4.8	5.1
Higher inflation	3.4	3.0	3.6	4.3	4.1
<i>Unemployment rate<sup>1</sup></i>					
Extended Tealbook baseline	9.8	9.5	8.6	7.1	5.2
Normalization in Europe	9.8	9.4	8.1	6.4	4.7

Stronger recovery	9.8	9.2	7.6	6.1	5.1
Weaker consumption	9.8	9.7	9.3	7.9	5.2
Jobless recovery	9.8	10.0	9.7	8.2	4.8
Lower potential	9.8	9.6	9.1	8.4	7.3
Greater disinflation	9.8	9.5	8.6	7.1	4.7
Higher inflation	9.8	9.5	8.6	7.3	5.6
<i>Core PCE inflation</i>					
Extended Tealbook baseline	.8	.8	.8	1.0	1.3
Normalization in Europe	.8	1.3	1.2	1.2	1.3
Stronger recovery	.8	.8	.9	1.1	1.5
Weaker consumption	.8	.8	.7	.7	1.1
Jobless recovery	.8	.7	.4	.3	.8
Lower potential	.8	1.0	1.2	1.5	1.8
Greater disinflation	.8	.4	.0	-.4	-.3
Higher inflation	.8	1.2	1.5	1.9	1.9
<i>Federal funds rate<sup>1</sup></i>					
Extended Tealbook baseline	.2	.1	.1	.8	3.5
Normalization in Europe	.2	.1	.1	1.5	4.0
Stronger recovery	.2	.1	.8	2.1	3.9
Weaker consumption	.2	.1	.1	.1	3.3
Jobless recovery	.2	.1	.1	.1	3.2
Lower potential	.2	.1	1.2	2.3	4.0
Greater disinflation	.2	.1	.1	.1	1.8
Higher inflation	.2	.1	.6	1.9	3.9

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

## Forecast Confidence Intervals and Alternative Scenarios

### *Confidence Intervals Based on FRB/US Stochastic Simulations*

#### **Figure: Real GDP**

Line chart, 2008 to 2014. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There are eight series, "Extended Tealbook baseline," "Normalization in Europe," "Stronger recovery," "Weaker Consumption," "Jobless Recovery," "Lower Potential," "Greater disinflation," and "Higher Inflation." Extended Tealbook baseline begins at about 2 and generally decreases to about -4 in early 2009. It generally increases to about 3.5 in mid-2010 then generally decreases to about 3 in early 2011. It generally increases to about 5 in late 2012, then generally decreases ending at about 4. Normalization in Europe begins at about 3.5 and generally increases to about 5 in early 2013. It generally decreases ending at about 3.75. Stronger recovery generally begins at about 3.5 and increases to about 5.5 in early 2011. It generally decreases ending at about 3. Weaker consumption begins at about 3.5 and generally decreases to about 1.5 in early 2011. It generally increases to about 6 in early 2013, then generally decreases ending at about 4.5. Jobless recovery begins at about 3.5 and generally increases to about 6.5 in early 2013. It generally decreases ending at about 5. Lower potential begins at about 3.5 and generally decreases to about 2.5. It generally increases to about 3.5 in late 2012, then generally decreases ending at about 3. Greater disinflation begins at about 3.5 and generally decreases to about 3 in early 2011. It generally increases to about 5.25 in early 2013 then generally decreases ending at about 5. Higher inflation begins at about 3.5 and generally decreases to about 3 in late 2010. It generally increases to about 4.5 in early 2013, then generally decreases ending at about 4. 70 percent interval is presented as a dark gray shaded range that begins at about [2.5, .5] in mid-2009 and generally increases to about [1.8, 6.1]. 90 percent interval is presented as a light gray shaded range beginning at about [2, 3] in mid-2009 and generally increases to about [.5, 8].

#### **Figure: Unemployment rate**

Line chart, 2008 to 2014. Unit is percent. There are eight series, "Extended Tealbook baseline," "Normalization in Europe," "Stronger recovery," "Weaker Consumption," "Jobless Recovery," "Lower Potential," "Greater disinflation," and "Higher Inflation." Extended Tealbook baseline begins at about 4.75 and generally increases to about 10.0 in late 2009. It generally decreases ending at about 5.25. Normalization in Europe begins at about 9.5 in late 2009 and generally decreases ending at about 4.75. Stronger recovery begins at about 9.5 and generally decreases to about 5.25 in early 2013. It remains about constant to the end of the timeline. Weaker consumption begins at about 9.5 in late 2009 then generally decreases ending at about 5.25. Jobless recovery begins at about 9.5 in late 2009 then generally increases to about 10.0 in early 2011. It generally decreases ending at about 5.0. Lower potential begins at about 9.5 in late 2009 then generally decreases ending at about 7.5. Greater disinflation begins at about 9.5 and generally decreases ending at about 4.75. Higher inflation begins at about 9.5 in late 2009 then generally

decreases ending at about 5.5. 70 percent interval is presented as a dark gray shaded range. It begins at about 9.5 in early 2010 then generally increases to a range of about [4.25, 6.5]. 90 percent interval is presented as a light gray shaded range. It begins at about 9.5 in early 2010 then generally increases to a range of about [3.5, 7.25].

### Figure: PCE Prices excluding Food and Energy

Line chart, 2008 to 2014. Unit is 4-quarter percent change. 0 on the scale is marked by a horizontal line. There are eight series, "Extended Tealbook baseline," "Normalization in Europe," "Stronger recovery," "Weaker Consumption," "Jobless Recovery," "Lower Potential," "Greater disinflation," and "Higher Inflation." Extended Tealbook baseline begins at about 2.5 and generally increases to about 2.6 in late 2008. It generally decreases to about 1.25 in mid-2009 then generally increases to about 1.5 in late 2009. It generally decreases to about 0.75 in late 2010 then generally increases ending at about 1.5. Normalization in Europe begins at about 1.15 in late 2009 then generally decreases to about 1.0 in mid-2010. It generally increases to about 1.25 in early 2011 then generally decreases to about 1.25 in late 2012. It generally increases ending at about 1.5. Stronger recovery begins at about 1.15 in late 2009 then generally decreases to about 0.75 in late 2010. It generally increases ending at about 1.75. Weaker consumption begins at about 1.15 in late 2009 then generally decreases to about 0.75 in late 2010. It generally increases ending at about 1.25. Jobless recovery begins at about 1.25 in late 2009 then generally decreases to about 0.25 in late 2012. It generally increases ending at about 1.0. Lower potential begins at about 1.15 in late 2010 then generally decreases to about 1.0 in late 2010. It generally increases ending at about 2.0. Greater disinflation begins at about 1.15 in late 2009 then generally decreases to about -0.5 in late 2012. It generally increases ending at about negative 0.15. Higher inflation begins at about 1.14 in late 2009 then generally decreases to about 1.0 in late 2010. It generally increases ending at about 2.0. 70 percent interval is presented as a dark gray shaded area. It begins at about 1.25 in early 2010 then increases to a range of about [0.25, 1.75] in mid-2012. It generally decreases ending at about [0.5, 2.4]. 90 percent interval is presented as a light gray shaded area. It begins at about 1.4 and generally increases to a range of about [-0.5, 2.25] in mid-2012. It generally decreases ending at about [0.0, 2.9].

### Figure: Federal Funds Rate

Line chart, 2008 to 2014. Unit is percent. There are eight series, "Extended Tealbook baseline," "Normalization in Europe," "Stronger recovery," "Weaker Consumption," "Jobless Recovery," "Lower Potential," "Greater disinflation," and "Higher Inflation." Extended Tealbook baseline begins at about 3 and generally decreases to about 0 in early 2009. It remains about constant until mid-2012 then generally increases ending at about 3.5. Normalization in Europe begins at about late 2011 then generally increases ending at about 4. Stronger recovery begins at about 0 in early 2011 then generally increases ending at about 4. Weaker consumption begins at about 0 in mid-2012 and remains about constant until late 2012. It generally increases ending at about 3.1. Jobless recovery begins at about 0 in late 2012 and remains about constant until mid-2013. It generally increases ending at about 3.1. Lower potential begins at about 0 in early 2011. It generally increases ending at about 4.0. Greater disinflation begins at about 0 in early 2013 and remains about constant until mid-2013. It generally increases ending at about 2. Higher inflation begins at about 0 in early 2011 and generally increases ending at about 4. 70 percent interval is presented as a dark gray shaded range. It begins at about 0 from late 2010 to early 2013 and generally increases ending at a range of about [2, 5.25]. 90 percent interval is presented as a light gray shaded range. It begins at about 0 from late 2010 to mid-2014 and generally increases ending at about [0.5, 6.25].

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

Measure	2010	2011	2012	2013	2014
<i>Real GDP (percent change, Q4 to Q4)</i>					
Projection	3.2	3.7	4.8	4.7	3.9
Confidence interval					
Tealbook forecast errors	1.9-4.5	1.8-5.5	...	...	...
FRB/US stochastic simulations	2.2-4.2	2.1-5.6	2.7-6.8	2.5-6.8	1.7-6.3
<i>Civilian unemployment rate (percent, Q4)</i>					
Projection	9.5	8.6	7.1	5.8	5.2
Confidence interval					
Tealbook forecast errors	9.0-10.0	7.9-9.4	...	...	...
FRB/US stochastic simulations	9.1-9.9	7.8-9.4	6.0-8.2	4.7-7.0	4.1-6.4
<i>PCE prices, total (percent change, Q4 to Q4)</i>					
Projection	.9	1.0	1.0	1.2	1.5
Confidence interval					
Tealbook forecast errors	.2-1.7	-.2-2.2	...	...	...
FRB/US stochastic simulations	.4-1.6	.1-2.1	-.1-2.1	.2-2.4	.4-2.6
<i>PCE prices excluding food and energy (percent change, Q4 to Q4)</i>					
Projection	.8	.8	1.0	1.2	1.4
Confidence interval					

Tealbook forecast errors	.3-1.3	.1-1.6	...	...	...
FRB/US stochastic simulations	.5-1.2	.2-1.6	.1-1.8	.4-2.1	.7-2.4
<i>Federal funds rate (percent, Q4)</i>					
Projection	.1	.1	.8	2.5	3.5
Confidence interval					
FRB/US stochastic simulations	.1-1	.1-1.2	.1-2.7	.8-4.4	1.9-5.3

Notes: 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 two years. [Return to table](#)

## Tealbook Forecast Compared with Blue Chip

(Blue Chip survey released June 10, 2010)

### *Figure: Real GDP*

Line chart, 2008 to 2011. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Blue Chip Consensus" and "Staff Forecast." Both series begin at about -0.5 and generally increase together to about 1.75 in mid-2008. They generally decrease together to about minus 6 in early 2009 then generally increase together to about 6 in late 2009. They generally decrease together to about 3 in early 2010 then generally increase together to about 3.5 in mid-2010. Blue chip consensus generally decreases to about 3 in late 2010 and remains about constant to the end of the timeline. Staff forecast decreases to about 2.5 in mid-2010 then generally increases ending at about 4. There is a shaded area that begins at about 3 in early 2010 and generally increases to a range of about [2, 4] in mid-2010. It remains about constant to the end of the timeline.

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

### *Figure: Real PCE*

Line chart, 2008 to 2011. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Blue Chip Consensus" and "Staff Forecast." Both series begin at about -0.5 then generally increase together to about 0 in 2008:Q2. They generally decrease together to about -0.75 in 2008:Q3 then generally increase together to about 0.5 in 2009:Q1. They generally decrease together to about -1 in 2009:Q2 then generally increase together to about 2.75 in 2009:Q3. They generally decrease together to about 1.25 in 2009:Q4 then generally increase together to about 3 in 2010:Q1. Blue chip consensus generally decreases to about 3 in 2010:Q3 then remains about constant to the end of the timeline. Staff forecast generally decreases to about 2 in 2010:Q2 then generally increases ending at about 3.25. There is a shaded area that begins at about 3.5 then increases to a range of about [1.5, 4] in 2011:Q1. It generally decreases ending at a range of about [2, 4].

### *Figure: Unemployment Rate*

Line chart, 2008 to 2011. Unit is percent. There are two series, "Blue chip consensus" and "Staff Forecast." Both series begin at about 5 in early 2008 then generally increase together to about 10 in late 2009. They generally decrease to 9.5 in early 2010 and remain about constant until mid-2010. They generally decrease together ending at about 8.5. There is a shaded area that begins at about 9.5 in early 2010 then generally decreases ending at a range of about [7.75, 9.5].

### *Figure: Consumer Price Index*

Line chart, 2008 to 2011. Unit is percent change, annual rate. 0 on the scale is marked by a horizontal line. There are two series, "Blue chip consensus" and "Staff forecast." Both series begin at about 4.5 and generally increase together to about 6.5 in 2008:Q3. They generally decrease together to about -10 in 2008:Q4 then generally increase together to about 3.5 in 2009:Q3. They generally decrease together to about 2 in 2010:Q1. Blue chip consensus decreases to about 0 in 2010:Q2 then generally increases ending at about 2. Staff forecast decreases to about -1 in 2010:Q2 then generally increases to about 2 in 2010:Q4. It generally decreases ending at about 1. There is a shaded area begins at about 2 in 2010:Q1 then generally decreases to a range of about [-2, 2] in 2010:Q2 then generally increases ending at about [1, 3].

### *Figure: Treasury Bill Rate*

Line chart, 2008 to 2011. Unit is percent. 0 on the scale is marked by a horizontal line. There are two series, "Blue chip consensus" and "Staff Forecast." Both series begin at about 2 and generally decrease to about 0 in 2009:Q4. Blue chip consensus generally increases ending at about 2. Staff forecasts remains about constant to the end of the timeline. There is a shaded area that begins at about 0 and generally increases ending at a range of about [1, 3].

### *Figure: 10-Year Treasury Yield*

Line chart, 2008 to 2011. Unit is percent. There are two series, "Blue Chip Consensus" and "Staff Forecast." Both series begin at about 3.75 and generally increase to

about 4.0 in 2008:Q2. They generally decrease together to about 2.75 in 2009:Q1 then generally increase together to about 3.75 in 2010:Q1. Blue Chip Consensus decreases to about 3.5 in 2010:Q3 then generally increases ending at about 4.5. Staff forecast generally decreases to about 3.5 in 2010:Q3 then generally increases ending at about 4.0. There is a shaded area that begins at about 3.75 in 2010:Q1 then generally increases ending at a range of about [4.0, 5.5].

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

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

**Last update: January 29, 2016**

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## June 2010 Tealbook Book A Tables and Charts

### Greensheets

### Changes in GDP, Prices, and Unemployment

(Percent, annual rate except as noted)

Interval	Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate <sup>1</sup>	
	04/21/10	06/16/10	04/21/10	06/16/10	04/21/10	06/16/10	04/21/10	06/16/10	04/21/10	06/16/10
<i>Quarterly</i>										
2009: Q1	-4.6	-4.6	-6.4	-6.4	-1.5	-1.5	1.1	1.1	8.2	8.2
Q2	-.8	-.8	-.7	-.7	1.4	1.4	2.0	2.0	9.3	9.3
Q3	2.6	2.6	2.2	2.2	2.6	2.6	1.2	1.2	9.7	9.7
Q4	6.1	6.1	5.6	5.6	2.5	2.5	1.8	1.8	10.0	10.0
2010: Q1	4.0	4.2	2.9	3.1	1.5	1.5	.5	.6	9.7	9.7
Q2	4.6	4.8	3.5	3.6	.7	-.2	.9	.9	9.5	9.8
Q3	5.0	3.4	3.6	2.7	1.7	.9	1.0	.8	9.5	9.7
Q4	4.9	4.3	3.8	3.2	1.3	1.5	1.0	.8	9.3	9.5
2011: Q1	5.1	4.2	4.0	3.3	1.1	1.1	1.0	.8	8.9	9.3
Q2	5.2	4.3	4.3	3.5	1.0	1.0	.9	.8	8.7	9.1
Q3	5.5	4.6	4.6	3.8	1.0	1.0	.9	.8	8.5	8.9
Q4	5.6	4.8	4.7	4.1	1.0	.9	.9	.8	8.2	8.6
<i>Two-quarter<sup>2</sup></i>										
2009: Q2	-2.7	-2.7	-3.6	-3.6	-.1	-.1	1.6	1.6	2.4	2.4
Q4	4.3	4.3	3.9	3.9	2.5	2.5	1.5	1.5	.7	.7
2010: Q2	4.3	4.5	3.2	3.4	1.1	.7	.7	.8	-5	-2
Q4	4.9	3.8	3.7	3.0	1.5	1.2	1.0	.8	-2	-3
2011: Q2	5.1	4.3	4.1	3.4	1.1	1.1	1.0	.8	-6	-4
Q4	5.6	4.7	4.7	3.9	1.0	.9	.9	.8	-5	-5
<i>Four-quarter<sup>3</sup></i>										
2008:Q4	.1	.1	-1.9	-1.9	1.7	1.7	2.0	2.0	2.1	2.1
2009:Q4	.7	.7	.1	.1	1.2	1.2	1.5	1.5	3.1	3.1
2010:Q4	4.6	4.2	3.5	3.2	1.3	.9	.9	.8	-7	-5
2011:Q4	5.3	4.5	4.4	3.7	1.0	1.0	.9	.8	-1.1	-9
<i>Annual</i>										
2008	2.6	2.6	.4	.4	3.3	3.3	2.4	2.4	5.8	5.8
2009	-1.3	-1.3	-2.4	-2.4	.2	.2	1.5	1.5	9.3	9.3
2010	4.2	4.1	3.3	3.3	1.7	1.4	1.1	1.1	9.5	9.7
2011	5.1	4.3	4.1	3.4	1.1	1.0	1.0	.8	8.6	9.0

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

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

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

### Changes in Real Gross Domestic Product and Related Items

(Percent, annual rate except as noted)

Item	2009				2010				2011				2009 <sup>1</sup>	2010 <sup>1</sup>	2011 <sup>1</sup>
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	-6.4	-7	2.2	5.6	3.1	3.6	2.7	3.2	3.3	3.5	3.8	4.1	.1	3.2	3.7
<i>Previous Tealbook</i>	-6.4	-7	2.2	5.6	2.9	3.5	3.6	3.8	4.0	4.3	4.6	4.7	.1	3.5	4.4
Final sales	-4.1	.7	1.5	1.7	1.2	3.9	2.2	3.0	3.1	3.4	3.3	3.7	-1	2.6	3.4
<i>Previous Tealbook</i>	-4.1	.7	1.5	1.7	2.2	3.7	2.8	3.4	3.6	4.1	4.1	4.5	-1	3.0	4.1
Priv. dom. final purch.	-7.2	-2.7	2.2	2.1	3.0	4.5	2.5	3.4	3.8	4.1	4.2	4.2	-1.5	3.3	4.1
<i>Previous Tealbook</i>	-7.2	-2.7	2.2	2.1	3.4	3.6	3.2	3.9	4.3	4.7	4.9	5.1	-1.5	3.5	4.8
Personal cons. expend.	.6	-9	2.8	1.6	3.4	2.9	2.2	2.3	2.9	3.1	3.2	3.3	1.0	2.7	3.1
<i>Previous Tealbook</i>	.6	-9	2.8	1.6	3.6	2.1	2.7	2.8	3.2	3.5	3.7	3.9	1.0	2.8	3.5
Durables	3.9	-5.6	20.4	.4	12.1	15.4	6.8	7.1	8.7	11.1	11.2	11.8	4.4	10.3	10.7
Nondurables	1.9	-1.9	1.5	4.0	3.9	1.7	1.6	2.1	3.1	3.2	3.3	3.5	1.3	2.3	3.3
Services	-3	.2	.8	1.0	2.0	1.4	1.7	1.7	1.9	1.9	1.9	1.9	.4	1.7	1.9
Residential investment	-38.2	-23.3	18.9	3.8	-10.6	18.7	-5.5	16.4	15.9	17.3	17.3	17.8	-12.5	3.9	17.1
<i>Previous Tealbook</i>	-38.2	-23.3	18.9	3.8	-15.7	22.3	-2.1	8.6	12.3	21.6	23.3	22.5	-12.5	2.3	19.8
Business fixed invest.	-39.2	-9.6	-5.9	5.3	3.7	13.5	6.5	8.5	7.6	8.0	7.9	7.3	-14.1	8.0	7.7
<i>Previous Tealbook</i>	-39.2	-9.6	-5.9	5.3	7.6	10.9	8.6	10.9	10.5	9.3	9.6	9.4	-14.1	9.5	9.7
Equipment & software	-36.4	-4.9	1.5	19.0	13.5	20.3	10.4	12.2	10.7	11.3	11.1	10.1	-7.5	14.0	10.8
<i>Previous Tealbook</i>	-36.4	-4.9	1.5	19.0	17.0	15.8	12.5	15.3	14.2	13.3	12.8	12.5	-7.5	15.2	13.2
Nonres. structures	-43.6	-17.3	-18.4	-18.0	-15.2	-.8	-2.2	-.2	-.1	-.2	-.3	-.2	-25.3	-4.8	-.2
<i>Previous Tealbook</i>	-43.6	-17.3	-18.4	-18.0	-10.6	.4	-.2	.8	1.8	-.5	1.5	1.4	-25.3	-2.5	1.1
Net exports <sup>2</sup>	-386	-330	-357	-348	-374	-380	-390	-387	-393	-399	-409	-407	-356	-383	-402
<i>Previous Tealbook<sup>2</sup></i>	-386	-330	-357	-348	-352	-348	-356	-355	-356	-353	-357	-353	-356	-353	-355
Exports	-29.9	-4.1	17.8	22.8	11.2	8.2	7.6	7.7	7.3	7.2	7.4	7.6	-.7	8.7	7.4
Imports	-36.4	-14.7	21.3	15.8	15.0	8.1	8.1	5.7	7.2	6.9	8.1	5.7	-6.6	9.2	6.9
Gov't. cons. & invest.	-2.6	6.7	2.6	-1.3	-1.9	2.4	2.1	.6	.7	.9	.9	.9	1.3	.8	.9
<i>Previous Tealbook</i>	-2.6	6.7	2.6	-1.3	-2.2	3.0	1.9	.7	.7	.8	.8	.7	1.3	.8	.7
Federal	-4.3	11.4	8.0	.0	1.2	6.9	5.2	.8	1.2	1.5	1.3	1.5	3.6	3.5	1.4
Defense	-5.1	14.0	8.4	-3.6	1.1	5.6	7.7	1.1	.2	.5	.4	.7	3.1	3.8	.4
Nondefense	-2.5	6.1	7.0	8.3	1.5	9.8	.1	.1	3.3	3.6	3.5	3.4	4.6	2.8	3.4
State & local	-1.5	3.9	-.6	-2.2	-3.9	-.6	.0	.4	.4	.5	.5	.5	-.1	-1.0	.5
Change in bus. inventories <sup>2</sup>	-114	-160	-139	-20	41	31	48	54	61	65	81	94	-108	43	75
<i>Previous Tealbook<sup>2</sup></i>	-114	-160	-139	-20	2	-4	22	37	50	55	74	82	-108	14	65
Nonfarm <sup>2</sup>	-115	-163	-141	-14	44	30	45	51	58	62	78	91	-108	43	72
Farm <sup>2</sup>	0	2	2	-6	-3	1	3	3	3	3	3	3	-0	1	3

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	2003	2004	2005	2006	2007	2008	2009	2010	2011
Real GDP	3.8	3.1	2.7	2.4	2.5	-1.9	.1	3.2	3.7
<i>Previous Tealbook</i>	3.8	3.1	2.7	2.4	2.5	-1.9	.1	3.5	4.4
Final sales	3.8	2.8	2.7	2.8	2.7	-1.4	-.1	2.6	3.4



<i>Previous Tealbook</i>	3.8	2.8	2.7	2.8	2.7	-1.4	-.1	3.0	4.1
Priv. dom. final purch.	4.2	4.2	3.1	2.5	1.4	-3.2	-1.5	3.3	4.1
<i>Previous Tealbook</i>	4.2	4.2	3.1	2.5	1.4	-3.2	-1.5	3.5	4.8
Personal cons. expend.	3.4	3.5	2.7	3.3	2.0	-1.8	1.0	2.7	3.1
<i>Previous Tealbook</i>	3.4	3.5	2.7	3.3	2.0	-1.8	1.0	2.8	3.5
Durables	8.9	5.5	2.1	6.3	4.6	-11.8	4.4	10.3	10.7
Nondurables	3.9	3.0	3.3	3.2	1.5	-2.9	1.3	2.3	3.3
Services	2.2	3.4	2.6	2.8	1.7	.3	.4	1.7	1.9
Residential investment	11.5	6.6	5.3	-15.7	-20.5	-21.0	-12.5	3.9	17.1
<i>Previous Tealbook</i>	11.5	6.6	5.3	-15.7	-20.5	-21.0	-12.5	2.3	19.8
Business fixed invest.	5.9	7.0	4.4	7.8	7.9	-6.0	-14.1	8.0	7.7
<i>Previous Tealbook</i>	5.9	7.0	4.4	7.8	7.9	-6.0	-14.1	9.5	9.7
Equipment & software	7.5	8.8	6.1	6.0	3.2	-10.7	-7.5	14.0	10.8
<i>Previous Tealbook</i>	7.5	8.8	6.1	6.0	3.2	-10.7	-7.5	15.2	13.2
Nonres. structures	1.3	1.7	-.1	13.0	18.9	3.2	-25.3	-4.8	-.2
<i>Previous Tealbook</i>	1.3	1.7	-.1	13.0	18.9	3.2	-25.3	-2.5	1.1
Net exports <sup>1</sup>	-604	-688	-723	-729	-648	-494	-356	-383	-402
<i>Previous Tealbook<sup>1</sup></i>	-604	-688	-723	-729	-648	-494	-356	-353	-355
Exports	6.2	7.1	6.7	10.2	10.2	-3.4	-.7	8.7	7.4
Imports	5.1	10.9	5.2	4.1	.9	-6.8	-6.6	9.2	6.9
Gov't. cons. & invest.	1.6	.6	.7	1.5	2.5	3.0	1.3	.8	.9
<i>Previous Tealbook</i>	1.6	.6	.7	1.5	2.5	3.0	1.3	.8	.7
Federal	5.7	2.3	1.2	2.2	3.4	8.9	3.6	3.5	1.4
Defense	8.4	2.4	.4	4.4	2.6	9.5	3.1	3.8	.4
Nondefense	.7	2.3	2.6	-2.3	5.2	7.5	4.6	2.8	3.4
State & local	-.5	-.4	.4	1.2	1.9	-.3	-.1	-1.0	.5
Change in bus. inventories <sup>1</sup>	17	66	50	59	19	-26	-108	43	75
<i>Previous Tealbook<sup>1</sup></i>	17	66	50	59	19	-26	-108	14	65
Nonfarm <sup>1</sup>	17	58	50	63	20	-20	-108	43	72
Farm <sup>1</sup>	0	8	0	-4	-1	-5	-0	1	3

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	2009				2010				2011				2009 <sup>1</sup>	2010 <sup>1</sup>	2011 <sup>1</sup>
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP	-6.4	-.7	2.2	5.6	3.1	3.6	2.7	3.2	3.3	3.5	3.8	4.1	.1	3.2	3.7
<i>Previous Tealbook</i>	-6.4	-.7	2.2	5.6	2.9	3.5	3.6	3.8	4.0	4.3	4.6	4.7	.1	3.5	4.4
Final sales	-4.1	.7	1.5	1.8	1.2	3.9	2.2	3.0	3.1	3.4	3.3	3.7	-.1	2.6	3.4
<i>Previous Tealbook</i>	-4.1	.7	1.5	1.8	2.2	3.7	2.8	3.4	3.6	4.1	4.1	4.5	-.1	3.0	4.1
Priv. dom. final purch.	-6.1	-2.3	1.8	1.8	2.5	3.7	2.1	2.8	3.1	3.4	3.4	3.5	-1.3	2.8	3.4
<i>Previous Tealbook</i>	-6.1	-2.3	1.8	1.8	2.8	3.0	2.7	3.2	3.5	3.9	4.1	4.2	-1.3	2.9	3.9
Personal cons. expend.	.4	-.6	2.0	1.2	2.4	2.0	1.6	1.6	2.1	2.2	2.2	2.3	.7	1.9	2.2
<i>Previous Tealbook</i>	.4	-.6	2.0	1.2	2.5	1.5	1.9	2.0	2.2	2.5	2.6	2.7	.7	2.0	2.5
Durables	.3	-.4	1.4	.0	.8	1.1	.5	.5	.6	.8	.8	.9	.3	.7	.8

Nondurables	.3	-.3	.2	.6	.6	.3	.3	.3	.5	.5	.5	.5	.2	.4	.5
Services	-.1	.1	.4	.5	1.0	.7	.8	.8	.9	.9	.9	.9	.2	.8	.9
Residential investment	-1.3	-.7	.4	.1	-.3	.4	-.1	.4	.4	.4	.4	.5	-.4	.1	.4
<i>Previous Tealbook</i>	-1.3	-.7	.4	.1	-.4	.5	-.1	.2	.3	.5	.6	.6	-.4	.1	.5
Business fixed invest.	-5.3	-1.0	-.6	.5	.3	1.2	.6	.8	.7	.8	.8	.7	-1.6	.7	.7
<i>Previous Tealbook</i>	-5.3	-1.0	-.6	.5	.7	1.0	.8	1.0	1.0	.9	.9	.9	-1.6	.9	.9
Equipment & software	-3.0	-.3	.1	1.1	.8	1.2	.7	.8	.7	.8	.8	.7	-.5	.9	.7
<i>Previous Tealbook</i>	-3.0	-.3	.1	1.1	1.0	1.0	.8	1.0	1.0	.9	.9	.9	-.5	1.0	.9
Nonres. structures	-2.3	-.7	-.7	-.6	-.5	.0	-.1	.0	.0	.0	.0	.0	-1.1	-.1	.0
<i>Previous Tealbook</i>	-2.3	-.7	-.7	-.6	-.3	.0	.0	.0	.1	.0	.0	.0	-1.1	-.1	.0
Net exports	2.6	1.7	-.8	.3	-.9	-.2	-.3	.1	-.2	-.2	-.3	.1	1.0	-.3	-.2
<i>Previous Tealbook</i>	2.6	1.7	-.8	.3	-.2	.1	-.3	.0	-.1	.1	-.2	.1	1.0	-.1	.0
Exports	-4.0	-.5	1.8	2.4	1.3	1.0	.9	.9	.9	.9	.9	.9	-.1	1.0	.9
Imports	6.6	2.1	-2.6	-2.1	-2.1	-1.2	-1.2	-.9	-1.1	-1.1	-1.3	-.9	1.0	-1.3	-1.1
Gov't. cons. & invest.	-.5	1.3	.6	-.3	-.4	.5	.4	.1	.2	.2	.2	.2	.3	.2	.2
<i>Previous Tealbook</i>	-.5	1.3	.6	-.3	-.4	.6	.4	.1	.1	.2	.2	.2	.3	.2	.1
Federal	-.3	.9	.6	.0	.1	.6	.4	.1	.1	.1	.1	.1	.3	.3	.1
Defense	-.3	.7	.5	-.2	.1	.3	.4	.1	.0	.0	.0	.0	.2	.2	.0
Nondefense	-.1	.2	.2	.2	.0	.2	.0	.0	.1	.1	.1	.1	.1	.1	.1
State & local	-.2	.5	-.1	-.3	-.5	-.1	.0	.1	.1	.1	.1	.1	.0	-.1	.1
Change in bus. inventories	-2.4	-1.4	.7	3.8	1.9	-.3	.6	.2	.2	.1	.5	.4	.1	.6	.3
<i>Previous Tealbook</i>	-2.4	-1.4	.7	3.8	.7	-.2	.8	.5	.4	.2	.6	.3	.1	.5	.3
Nonfarm	-2.4	-1.5	.7	4.0	1.8	-.5	.5	.2	.2	.1	.5	.4	.2	.5	.3
Farm	.1	.1	.0	-.2	.1	.2	.1	.0	.0	.0	.0	.0	.0	.1	.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	2009				2010				2011				2009 <sup>1</sup>	2010 <sup>1</sup>	2011 <sup>1</sup>
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
GDP chain-wt. price index	1.9	.0	.4	.5	1.0	1.1	.6	1.0	.9	.8	.8	.7	.7	1.0	.8
<i>Previous Tealbook</i>	1.9	.0	.4	.5	1.1	1.0	1.3	1.0	1.0	.9	.9	.8	.7	1.1	.9
PCE chain-wt. price index	-1.5	1.4	2.6	2.5	1.5	-.2	.9	1.5	1.1	1.0	1.0	.9	1.2	.9	1.0
<i>Previous Tealbook</i>	-1.5	1.4	2.6	2.5	1.5	.7	1.7	1.3	1.1	1.0	1.0	1.0	1.2	1.3	1.0
Energy	-36.7	-2.0	40.6	19.9	16.1	-18.6	1.2	14.6	6.3	4.3	3.2	2.1	1.1	2.3	3.9
<i>Previous Tealbook</i>	-36.7	-2.0	40.6	19.9	15.9	-3.7	12.5	6.8	3.5	2.7	1.8	1.7	1.1	7.6	2.4
Food	-1.1	-3.6	-2.1	-.1	1.9	1.9	1.3	1.1	.7	.7	.7	.7	-1.7	1.5	.7
<i>Previous Tealbook</i>	-1.1	-3.6	-2.1	-.1	1.9	2.0	1.7	1.1	.7	.7	.7	.7	-1.7	1.7	.7
Ex. food & energy	1.1	2.0	1.2	1.8	.6	.9	.8	.8	.8	.8	.8	.8	1.5	.8	.8
<i>Previous Tealbook</i>	1.1	2.0	1.2	1.8	.5	.9	1.0	1.0	1.0	.9	.9	.9	1.5	.9	.9
CPI	-2.2	1.9	3.7	2.6	1.5	-1.0	.9	1.8	1.2	1.1	1.0	.9	1.5	.8	1.1
<i>Previous Tealbook</i>	-2.2	1.9	3.7	2.6	1.5	.4	1.9	1.4	1.2	1.1	1.0	1.0	1.5	1.3	1.1
Ex. food & energy	1.6	2.3	1.5	1.5	.0	.6	.7	.7	.8	.8	.8	.8	1.7	.5	.8
<i>Previous Tealbook</i>	1.6	2.3	1.5	1.5	.0	.6	.9	.9	.9	.9	.9	.9	1.7	.6	.9
ECI, hourly compensation <sup>2</sup>	.7	1.1	1.5	1.5	2.6	1.8	1.9	1.9	2.2	2.0	2.0	2.0	1.2	2.0	2.0
<i>Previous Tealbook</i> <sup>2</sup>	.7	.7	1.8	1.5	2.2	2.1	2.1	2.1	2.2	2.1	2.1	2.1	1.2	2.1	2.1

Nonfarm business sector															
Output per hour	.9	7.6	7.8	6.3	2.9	.1	.7	.9	.7	.7	1.0	1.0	5.6	1.2	.9
<i>Previous Tealbook</i>	.9	7.6	7.8	6.3	2.7	1.1	.8	.4	.4	.6	1.1	1.2	5.6	1.3	.8
Compensation per hour	-4.2	7.7	-4	-1.9	1.5	.7	2.3	2.3	3.1	2.2	2.0	2.0	.2	1.7	2.3
<i>Previous Tealbook</i>	-4.2	7.7	-4	.5	2.9	.9	2.4	2.4	3.3	2.4	2.2	2.2	.8	2.2	2.5
Unit labor costs	-5.0	.1	-7.6	-7.7	-1.4	.6	1.5	1.4	2.4	1.5	1.0	1.0	-5.1	.5	1.5
<i>Previous Tealbook</i>	-5.0	.1	-7.6	-5.5	.2	-2	1.6	2.0	2.9	1.7	1.1	1.0	-4.6	.9	1.7
Core goods imports chain-wt. price index <sup>2</sup>	-9.4	-2.3	1.3	4.7	4.1	3.0	-1	.0	1.1	1.4	1.8	1.8	-1.6	1.7	1.5
<i>Previous Tealbook</i> <sup>3</sup>	-9.4	-2.3	1.3	4.7	4.0	2.9	2.3	1.6	1.4	1.2	1.1	1.1	-1.6	2.7	1.2

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	2003	2004	2005	2006	2007	2008	2009	2010	2011
GDP chain-wt. price index	2.1	3.2	3.5	2.9	2.7	1.9	.7	1.0	.8
<i>Previous Tealbook</i>	2.1	3.2	3.5	2.9	2.7	1.9	.7	1.1	.9
PCE chain-wt. price index	1.9	3.0	3.3	1.9	3.6	1.7	1.2	.9	1.0
<i>Previous Tealbook</i>	1.9	3.0	3.3	1.9	3.6	1.7	1.2	1.3	1.0
Energy	8.6	18.6	21.5	-3.7	19.7	-9.1	1.1	2.3	3.9
<i>Previous Tealbook</i>	8.6	18.6	21.5	-3.7	19.7	-9.1	1.1	7.6	2.4
Food	3.2	2.7	1.5	1.7	4.7	6.8	-1.7	1.5	.7
<i>Previous Tealbook</i>	3.2	2.7	1.5	1.7	4.7	6.8	-1.7	1.7	.7
Ex. food & energy	1.5	2.2	2.3	2.3	2.5	2.0	1.5	.8	.8
<i>Previous Tealbook</i>	1.5	2.2	2.3	2.3	2.5	2.0	1.5	.9	.9
CPI	2.0	3.4	3.7	1.9	4.0	1.6	1.5	.8	1.1
<i>Previous Tealbook</i>	2.0	3.4	3.7	1.9	4.0	1.6	1.5	1.3	1.1
Ex. food & energy	1.2	2.2	2.1	2.7	2.3	2.0	1.7	.5	.8
<i>Previous Tealbook</i>	1.2	2.2	2.1	2.7	2.3	2.0	1.7	.6	.9
ECL, hourly compensation <sup>1</sup>	4.0	3.8	2.9	3.2	3.0	2.4	1.2	2.0	2.0
<i>Previous Tealbook</i> <sup>1</sup>	4.0	3.8	2.9	3.2	3.0	2.4	1.2	2.1	2.1
Nonfarm business sector									
Output per hour	5.0	1.5	1.5	1.0	2.9	1.4	5.6	1.2	.9
<i>Previous Tealbook</i>	5.0	1.5	1.5	1.0	2.9	1.4	5.6	1.3	.8
Compensation per hour	5.7	3.4	3.6	4.5	3.6	3.1	.2	1.7	2.3
<i>Previous Tealbook</i>	5.7	3.4	3.6	4.5	3.6	3.1	.8	2.2	2.5
Unit labor costs	.6	1.9	2.0	3.5	.7	1.7	-5.1	.5	1.5
<i>Previous Tealbook</i>	.6	1.9	2.0	3.5	.7	1.7	-4.6	.9	1.7
Core goods imports chain-wt. price index <sup>2</sup>	1.6	3.6	2.2	2.5	3.5	3.8	-1.6	1.7	1.5
<i>Previous Tealbook</i> <sup>2</sup>	1.6	3.6	2.2	2.5	3.5	3.8	-1.6	2.7	1.2

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

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

## Other Macroeconomic Indicators

2009

2010

2011

Item					2009 <sup>1</sup>				2010 <sup>1</sup>				2011 <sup>1</sup>			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<i>Employment and production</i>																
Nonfarm payroll employment <sup>2</sup>	-2.2	-1.7	-1.0	-.4	.1	.7	.3	.6	.8	.8	.9	1.0	-5.4	1.6	3.4	
Unemployment rate <sup>3</sup>	8.2	9.3	9.7	10.0	9.7	9.8	9.7	9.5	9.3	9.1	8.9	8.6	10.0	9.5	8.6	
<i>Previous Tealbook</i> <sup>3</sup>	8.2	9.3	9.7	10.0	9.7	9.5	9.5	9.3	8.9	8.7	8.5	8.2	10.0	9.3	8.2	
NAIRU <sup>3</sup>	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	
<i>Previous Tealbook</i> <sup>3</sup>	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	
GDP gap <sup>4</sup>	-7.0	-7.8	-7.9	-7.3	-7.1	-6.8	-6.7	-6.5	-6.3	-6.1	-5.8	-5.4	-7.3	-6.5	-5.4	
<i>Previous Tealbook</i> <sup>4</sup>	-7.1	-7.8	-8.0	-7.3	-7.2	-6.9	-6.6	-6.3	-5.9	-5.5	-5.0	-4.5	-7.3	-6.3	-4.5	
<i>Industrial production</i>																
Industrial production <sup>5</sup>	-19.0	-10.4	6.4	6.9	7.6	7.5	6.0	4.6	4.8	4.7	5.2	4.4	-4.7	6.4	4.8	
<i>Previous Tealbook</i> <sup>5</sup>	-19.0	-10.4	6.4	6.9	7.8	4.6	5.3	5.9	6.1	5.0	5.9	5.7	-4.7	5.9	5.7	
Manufacturing industr. prod. <sup>5</sup>	-22.0	-8.8	8.4	5.6	6.3	9.9	6.8	5.3	4.9	5.5	5.8	4.9	-5.0	7.1	5.3	
<i>Previous Tealbook</i> <sup>5</sup>	-22.0	-8.8	8.4	5.6	6.6	6.4	4.9	6.6	7.1	6.0	6.8	6.5	-5.0	6.1	6.6	
Capacity utilization rate - mfg. <sup>3</sup>	66.7	65.4	67.0	68.2	69.5	71.3	72.6	73.7	74.6	75.6	76.7	77.6	68.2	73.7	77.6	
<i>Previous Tealbook</i> <sup>3</sup>	66.7	65.4	67.0	68.2	69.5	70.8	71.8	73.1	74.3	75.4	76.6	77.8	68.2	73.1	77.8	
<i>Housing and vehicle sales</i>																
Housing starts <sup>6</sup>	.5	.5	.6	.6	.6	.6	.7	.8	.9	.9	1.0	1.1	.6	.7	1.0	
Light motor vehicle sales <sup>6</sup>	9.5	9.6	11.5	10.8	11.0	11.5	11.9	12.3	12.7	13.4	13.9	14.5	10.3	11.7	13.6	
<i>Income and saving</i>																
Nominal GDP <sup>5</sup>	-4.6	-.8	2.6	6.1	4.2	4.8	3.4	4.3	4.2	4.3	4.6	4.8	.7	4.2	4.5	
Real disposable pers. income <sup>5</sup>	.2	6.2	-3.6	.0	1.9	4.8	1.9	2.2	.8	4.5	4.1	3.9	.7	2.7	3.3	
<i>Previous Tealbook</i> <sup>5</sup>	.2	6.2	-3.6	1.0	.5	2.3	3.3	3.4	1.2	3.9	4.4	4.7	.9	2.4	3.6	
Personal saving rate <sup>3</sup>	3.7	5.4	3.9	3.7	3.4	3.9	3.8	3.8	3.4	3.7	3.9	4.1	3.7	3.8	4.1	
<i>Previous Tealbook</i> <sup>3</sup>	3.7	5.4	3.9	3.9	3.3	3.3	3.5	3.7	3.2	3.3	3.5	3.7	3.9	3.7	3.7	
<i>Corporate profits and profit share</i>																
Corporate profits <sup>7</sup>	22.8	15.6	50.7	36.0	17.5	9.6	.2	3.1	.4	2.7	3.7	4.0	30.6	7.4	2.7	
Profit share of GNP <sup>3</sup>	8.3	8.6	9.5	10.1	10.4	10.5	10.4	10.4	10.3	10.3	10.2	10.2	10.1	10.4	10.2	
<i>Federal and state saving</i>																
Net federal saving <sup>8</sup>	-969	-1,269	-1,354	-1,314	-1,362	-1,358	-1,393	-1,399	-1,337	-1,323	-1,291	-1,283	-1,226	-1,378	-1,309	
Net state & local saving <sup>8</sup>	-37	-25	-15	-1	15	16	59	67	83	58	14	18	-19	39	43	
<i>Gross and net national saving</i>																
Gross national saving rate <sup>3</sup>	11.2	10.7	9.8	10.1	9.8	10.5	10.5	10.7	10.9	11.2	11.5	11.8	10.1	10.7	11.8	
Net national saving rate <sup>3</sup>	-2.5	-2.7	-3.6	-3.0	-3.0	-2.3	-2.3	-2.1	-2.0	-1.7	-1.5	-1.2	-3.0	-2.1	-1.2	

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	2003	2004	2005	2006	2007	2008	2009	2010	2011
<i>Employment and production</i>									



	-458	-1416	-1381	-1341	-449	-305	-329	-388	-329	-318	-346	-410	-446	-198	-287	-329
<i>Previous Tealbook</i>	-458	-1416	-1359	-1314	-449	-305	-329	-388	-329	-292	-349	-412	-439	-182	-280	-323
On-budget	-642	-1553	-1465	-1431	-468	-382	-318	-394	-359	-382	-330	-450	-441	-265	-275	-375
Off-budget	183	137	84	91	19	77	-11	6	30	64	-16	40	-5	67	-12	46
Means of financing																
Borrowing	768	1743	1475	1399	465	338	379	261	478	346	389	482	391	223	302	319
Cash decrease	-296	96	5	20	98	-49	43	82	-25	-61	10	-10	60	-20	-10	15
Other <sup>2</sup>	-13	-424	-100	-78	-114	16	-92	45	-124	33	-54	-63	-5	-5	-5	-5
Cash operating balance, end of period	372	275	270	250	269	318	275	194	219	280	270	280	220	240	250	235
<b>NIPA federal sector</b>																
					Seasonally adjusted annual rates											
Receipts	2534	2281	2303	2495	2251	2237	2189	2223	2291	2338	2359	2383	2500	2532	2568	2604
Expenditures	3074	3348	3660	3833	3220	3506	3542	3537	3654	3696	3752	3782	3837	3855	3859	3887
Consumption expenditures	914	972	1036	1085	954	979	1001	1011	1027	1045	1061	1066	1082	1091	1099	1108
Defense	620	658	699	731	643	663	679	682	692	703	717	722	730	734	737	741
Nondefense	294	314	337	354	311	316	322	329	334	342	343	345	352	357	362	366
Other spending	2160	2375	2624	2748	2266	2527	2541	2526	2627	2650	2692	2716	2754	2764	2760	2779
Current account surplus	-540	-1066	-1357	-1338	-969	-1269	-1354	-1314	-1362	-1358	-1393	-1399	-1337	-1323	-1291	-1283
Gross investment	141	158	162	166	152	159	163	159	160	162	166	167	166	166	166	166
Gross saving less gross investment <sup>3</sup>	-563	-1101	-1385	-1359	-999	-1304	-1391	-1343	-1390	-1385	-1422	-1426	-1360	-1344	-1308	-1296
<b>Fiscal indicators<sup>4</sup></b>																
High-employment (HEB) surplus/deficit	-497	-763	-975	-992	-683	-912	-968	-916	-976	-982	-1027	-1039	-985	-980	-962	-970
Change in HEB, percent of potential GDP	1.9	1.6	1.2	-0.1	1.2	1.5	0.3	-0.4	0.3	-0.0	0.2	0.0	-0.4	-0.1	-0.2	0.0
Fiscal impetus (FI), percent of GDP	0.8	1.0	0.8	-0.1	0.0	0.7	0.3	0.1	0.1	0.2	0.2	0.1	-0.2	-0.0	-0.1	-0.2
<i>Previous Tealbook</i>	0.8	1.0	0.9	-0.0	0.0	0.7	0.3	0.1	0.1	0.3	0.2	0.1	-0.2	-0.0	-0.1	-0.2

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 <sup>1</sup>	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
<i>Year</i>								
2004	8.8	11.0	13.4	5.6	6.2	7.3	9.0	6.4
2005	9.5	11.1	13.3	4.5	8.7	10.2	7.0	6.3
2006	9.0	10.1	11.2	4.1	10.6	8.3	3.9	5.4
2007	8.7	6.7	6.8	5.8	13.1	9.5	4.9	5.3
2008	6.0	.3	-.4	1.5	5.4	2.1	24.2	.1
2009	3.1	-1.7	-1.5	-4.4	-2.5	4.8	22.7	.7
2010	5.3	-1.0	-1.8	-.4	1.4	4.7	21.7	4.2
2011	5.1	1.8	.3	6.2	2.7	4.2	13.0	4.5

Quarter										
2008:	1	5.7	3.3	2.8	4.6	8.0	3.8	8.1	1.0	
	2	3.3	.1	-5	3.5	6.7	1.3	5.9	3.5	
	3	8.3	-5	-2.4	.7	5.6	3.4	39.2	1.4	
	4	6.1	-1.8	-1.8	-2.7	1.1	.0	37.0	-5.4	
2009:	1	3.8	-1.2	-1	-3.9	-7	4.7	22.6	-4.6	
	2	4.3	-1.6	-1.6	-4.8	-2.9	4.0	28.2	-.8	
	3	2.7	-2.5	-3.4	-3.1	-3.0	5.6	20.6	2.6	
	4	1.3	-1.6	-1.1	-6.2	-3.5	4.6	12.6	6.1	
2010:	1	3.5	-2.4	-3.8	-1.6	-.0	4.3	18.5	4.2	
	2	5.7	-1.6	-2.0	-2.4	1.3	4.1	24.1	4.8	
	3	5.1	-.3	-1.0	.4	1.8	5.1	17.6	3.4	
	4	6.3	.4	-.5	2.0	2.3	5.0	20.4	4.3	
2011:	1	4.4	1.0	-.3	4.0	2.3	4.3	11.6	4.2	
	2	5.6	1.4	.0	5.4	2.5	4.2	15.1	4.3	
	3	5.0	2.1	.5	6.8	2.8	4.2	11.6	4.6	
	4	5.2	2.7	1.0	7.8	3.0	3.7	11.4	4.8	

Note. Quarterly data are at seasonally adjusted annual rates.

1. Data after 2009:Q4 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4. [Return to table](#)

2.6.3 FOF

## Flow of Funds Projections: Highlights

(Billions of dollars at seasonally adjusted annual rates except as noted)

Category	2008	2009	2010	2011	2009		2010				2011			
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Domestic nonfinancial sectors</b>														
<b>Net funds raised</b>														
Total	1562.5	966.1	1638.7	1697.4	992.4	141.3	1006.6	1822.6	1629.3	2096.3	1418.3	1872.2	1698.6	1800.7
Net equity issuance	-336.0	-63.3	-186.9	-180.0	65.7	-312.2	-207.6	-180.0	-180.0	-180.0	-180.0	-180.0	-180.0	-180.0
Net debt issuance	1898.5	1029.4	1825.6	1877.4	926.7	453.6	1214.2	2002.6	1809.3	2276.3	1598.3	2052.2	1878.6	1980.7
<b>Borrowing indicators</b>														
Debt (percent of GDP) <sup>1</sup>	226.2	239.4	239.9	242.3	241.7	239.4	238.5	238.6	239.8	240.8	241.4	241.9	242.4	242.6
Borrowing (percent of GDP)	13.1	7.2	12.3	12.1	6.5	3.1	8.3	13.6	12.1	15.1	10.5	13.3	12.1	12.6
<b>Households</b>														
Net borrowing <sup>2</sup>	35.9	-240.9	-130.6	243.6	-349.1	-220.4	-330.0	-210.6	-36.5	54.9	132.0	195.0	282.7	364.6
Home mortgages	-46.6	-162.6	-186.8	31.7	-359.6	-113.5	-389.8	-204.8	-101.9	-50.8	-25.4	0.0	50.7	101.5
Consumer credit	38.8	-115.3	-10.0	151.8	-79.5	-155.4	-39.3	-60.1	10.2	49.1	99.3	135.4	171.0	201.6
Debt/DPI (percent) <sup>3</sup>	127.9	125.7	120.4	116.5	125.3	123.9	122.3	120.5	119.4	118.3	117.9	116.7	115.8	115.1
<b>Business</b>														
Financing gap <sup>4</sup>	232.4	-114.4	-50.0	10.0	-205.3	-59.6	-72.4	-65.6	-33.8	-28.3	-13.4	-3.8	19.8	37.6
Net equity issuance	-336.0	-63.3	-186.9	-180.0	65.7	-312.2	-207.6	-180.0	-180.0	-180.0	-180.0	-180.0	-180.0	-180.0
Credit market borrowing	576.1	-281.9	149.9	295.9	-336.7	-389.3	-2.5	146.2	198.2	257.7	260.2	274.8	313.6	334.8
<b>State and local governments</b>														
Net borrowing	47.3	108.2	110.5	102.7	127.6	107.5	100.7	97.7	121.7	121.7	105.7	105.7	105.7	93.7
Current surplus <sup>5</sup>	212.7	243.8	255.7	264.6	258.0	261.2	223.2	234.5	278.0	287.3	303.7	278.6	235.3	240.7

Federal government														
Net borrowing	1239.2	1443.9	1696.0	1235.3	1484.9	955.8	1446.1	1969.3	1525.9	1841.9	1100.4	1476.7	1176.5	1187.5
Net borrowing (n.s.a.)	1239.2	1443.9	1696.0	1235.3	378.7	261.4	477.7	346.3	389.5	482.5	391.1	223.2	302.1	318.9
Unified deficit (n.s.a.)	680.5	1471.3	1402.6	1259.8	329.4	388.1	328.9	318.3	345.6	409.8	445.6	198.2	287.1	328.9
Depository institutions														
Funds supplied	407.6	-639.9	40.5	234.6	-1001.3	-536.7	-583.1	457.2	133.1	154.7	237.8	196.7	261.1	242.8

Note. Data after 2009:Q4 are staff projections.

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

2.6.4 FOF

## Foreign Real GDP and Consumer Prices: Selected Countries

(Quarterly percent changes at an annual rate)

Measure and Country	Projected											
	2009				2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Real GDP<sup>1</sup></b>												
Total Foreign	-9.6	2.6	4.4	4.8	4.9	4.3	3.3	3.3	3.3	3.3	3.4	3.4
<i>Previous Tealbook</i>	-9.3	2.4	4.2	4.7	4.5	3.7	3.7	3.8	3.8	3.8	3.8	3.8
Advanced Foreign Economies	-8.7	-0.7	0.9	3.1	3.6	3.1	2.3	2.2	2.3	2.3	2.3	2.4
Canada	-7.0	-2.8	0.9	4.9	6.1	4.1	3.3	3.3	3.3	3.3	3.2	3.2
Japan	-15.8	6.9	0.4	4.6	5.0	3.8	1.9	1.9	1.8	1.8	1.7	1.7
United Kingdom	-10.0	-2.7	-1.1	1.8	1.2	2.1	2.0	2.0	2.1	2.2	2.3	2.4
Euro Area	-9.6	-0.4	1.6	0.5	0.8	1.9	1.1	0.9	1.0	1.1	1.2	1.4
Germany	-13.4	1.8	2.9	0.7	0.6	2.9	1.7	1.4	1.5	1.7	1.9	2.0
Emerging Market Economies	-10.6	6.9	8.8	6.9	6.5	5.7	4.5	4.7	4.6	4.6	4.7	4.7
Asia	-2.7	13.7	10.2	7.2	13.5	6.5	4.7	5.8	5.7	5.7	5.8	5.8
Korea	1.0	9.8	13.4	0.7	8.8	4.5	4.1	4.0	4.0	4.1	4.1	4.2
China	7.1	15.5	10.8	10.1	11.3	9.5	9.1	8.8	8.5	8.5	8.5	8.5
Latin America	-18.3	1.6	7.9	7.1	0.4	5.1	4.3	3.7	3.6	3.6	3.6	3.6
Mexico	-24.5	1.2	10.1	7.9	-1.4	5.3	4.2	3.6	3.5	3.5	3.5	3.5
Brazil	-5.9	6.0	9.0	9.3	11.4	6.0	4.8	4.2	4.0	4.0	4.0	4.0
<b>Consumer Prices<sup>2</sup></b>												
Total Foreign	-0.7	1.0	1.5	3.1	3.4	2.0	1.8	2.0	2.1	2.2	2.1	2.1
<i>Previous Tealbook</i>	-0.6	1.0	1.5	3.1	3.4	2.5	2.2	2.1	2.1	2.1	2.2	2.2
Advanced Foreign Economies	-1.3	-0.2	0.2	2.1	2.1	1.1	0.5	1.0	1.3	1.4	1.2	1.2
Canada	-1.0	0.1	0.6	3.7	2.3	1.9	1.4	1.6	1.8	2.1	2.0	2.0
Japan	-3.0	-1.7	-2.1	-1.3	0.7	-1.4	-1.2	-0.9	-0.7	-0.7	-0.6	-0.6
United Kingdom	0.9	1.7	2.9	3.1	5.5	2.6	1.4	1.7	1.7	1.6	1.6	1.7
Euro Area	-1.0	-0.1	0.5	2.3	1.8	1.3	0.1	1.2	1.6	1.6	1.1	1.2
Germany	-0.5	-0.1	0.2	1.8	1.3	1.2	0.5	1.3	1.6	1.7	1.2	1.2
Emerging Market Economies	-0.1	2.1	2.7	4.0	4.6	2.9	3.0	3.0	3.0	3.0	3.0	3.0
Asia	-2.3	0.6	2.3	4.6	3.4	2.5	2.7	2.5	2.5	2.6	2.6	2.6



Korea	2.1	2.3	2.1	3.1	3.3	2.2	2.3	2.4	2.4	2.4	2.4	2.4
China	-3.4	-0.0	1.3	4.6	3.0	3.0	2.6	2.3	2.3	2.4	2.5	2.5
Latin America	4.7	5.5	3.3	2.6	7.8	3.9	3.8	4.0	4.0	4.0	4.1	4.1
Mexico	4.7	5.8	3.3	2.0	7.9	2.9	3.4	3.7	3.7	3.7	3.7	3.7
Brazil	4.9	5.0	3.2	3.6	7.4	6.4	4.2	3.9	4.2	4.3	4.3	4.3

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	2003	2004	2005	2006	2007	2008	Projected		
							2009	2010	2011
<b>Real GDP<sup>1</sup></b>									
Total Foreign	2.9	3.8	4.1	3.9	4.2	-0.8	0.4	3.9	3.3
<i>Previous Tealbook</i>	2.8	3.8	4.1	3.9	4.2	-0.9	0.3	3.9	3.8
Advanced Foreign Economies	1.8	2.6	2.8	2.5	2.4	-1.7	-1.5	2.8	2.3
Canada	1.5	3.7	3.1	1.9	2.5	-0.9	-1.1	4.2	3.2
Japan	2.4	1.1	2.9	2.1	1.8	-4.2	-1.4	3.2	1.7
United Kingdom	3.2	2.4	2.4	2.8	2.4	-2.1	-3.1	1.8	2.2
Euro Area	1.2	1.8	2.1	3.4	2.2	-2.0	-2.1	1.2	1.2
Germany	0.1	0.2	1.6	4.3	1.6	-1.8	-2.2	1.7	1.8
Emerging Market Economies	4.5	5.6	5.9	5.8	6.5	0.3	2.7	5.3	4.6
Asia	7.0	6.0	7.7	7.2	8.3	0.8	6.9	7.6	5.7
Korea	3.6	2.7	5.2	4.6	5.7	-3.2	6.1	5.3	4.1
China	10.3	9.9	10.3	10.9	12.4	7.0	10.8	9.7	8.5
Latin America	1.7	5.1	4.0	4.5	4.6	-0.4	-1.0	3.3	3.6
Mexico	1.2	4.6	3.5	3.8	3.8	-1.2	-2.4	2.9	3.5
Brazil	0.8	5.1	3.5	4.8	6.8	0.9	4.4	6.6	4.0
<b>Consumer Prices<sup>2</sup></b>									
Total Foreign	2.1	2.8	2.3	2.1	3.7	3.4	1.2	2.3	2.2
<i>Previous Tealbook</i>	2.1	2.8	2.3	2.1	3.7	3.4	1.2	2.5	2.1
Advanced Foreign Economies	1.3	1.8	1.6	1.4	2.2	2.0	0.2	1.2	1.3
Canada	1.7	2.3	2.3	1.4	2.5	1.9	0.8	1.8	2.0
Japan	-0.3	0.5	-1.0	0.3	0.6	1.0	-2.0	-0.7	-0.6
United Kingdom	1.3	1.4	2.1	2.7	2.1	3.9	2.1	2.8	1.7
Euro Area	2.0	2.3	2.3	1.8	2.9	2.3	0.4	1.1	1.4
Germany	1.1	2.1	2.2	1.3	3.1	1.7	0.3	1.1	1.4
Emerging Market Economies	3.1	3.9	3.0	2.9	5.1	4.6	2.2	3.4	3.0
Asia	2.3	3.1	2.6	2.4	5.5	3.7	1.3	2.8	2.6
Korea	3.5	3.4	2.5	2.1	3.4	4.5	2.4	2.5	2.4
China	2.7	3.2	1.4	2.1	6.6	2.6	0.6	2.7	2.4
Latin America	4.9	5.6	3.7	4.1	4.2	6.6	4.0	4.9	4.0
Mexico	3.9	5.3	3.1	4.1	3.8	6.2	4.0	4.4	3.7
Brazil	11.5	7.2	6.1	3.2	4.3	6.2	4.2	5.5	4.3

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

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

# U.S. Current Account

## Quarterly Data

	Projected											
	2009				2010				2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	<i>Billions of Dollars, s.a.a.r.</i>											
<b>U.S. Current Account Balance</b>	<b>-409.6</b>	<b>-388.4</b>	<b>-421.1</b>	<b>-445.4</b>	<b>-496.7</b>	<b>-457.0</b>	<b>-476.0</b>	<b>-476.1</b>	<b>-502.4</b>	<b>-497.6</b>	<b>-516.5</b>	<b>-513.8</b>
<i>Previous Tealbook</i>	-416.7	-391.0	-409.4	-462.4	-503.6	-476.5	-488.9	-487.3	-505.4	-486.5	-499.5	-500.8
Current Account as Percent of GDP	-2.9	-2.7	-3.0	-3.1	-3.4	-3.1	-3.2	-3.2	-3.3	-3.2	-3.3	-3.3
<i>Previous Tealbook</i>	-2.9	-2.8	-2.9	-3.2	-3.5	-3.2	-3.3	-3.2	-3.3	-3.1	-3.2	-3.1
Net Goods & Services	-361.8	-321.8	-397.3	-418.8	-461.0	-426.2	-437.5	-440.4	-455.7	-466.6	-484.4	-487.2
Investment Income, Net	80.1	73.4	123.3	107.6	113.7	100.2	95.1	93.4	95.3	95.9	97.5	98.5
Direct, Net	204.5	190.6	227.1	205.1	212.2	203.0	199.8	200.6	205.0	211.4	218.2	225.5
Portfolio, Net	-124.3	-117.2	-103.8	-97.5	-98.5	-102.8	-104.7	-107.2	-109.7	-115.4	-120.7	-127.0
Other Income and Transfers, Net	-128.0	-140.0	-147.2	-134.2	-149.4	-131.0	-133.6	-129.2	-142.1	-127.0	-129.6	-125.2

## Annual Data

	2003	2004	2005	2006	2007	2008	Projected		
							2009	2010	2011
	<i>Billions of Dollars</i>								
<b>U.S. Current Account Balance</b>	<b>-520.7</b>	<b>-630.5</b>	<b>-747.6</b>	<b>-802.4</b>	<b>-727.3</b>	<b>-708.9</b>	<b>-416.1</b>	<b>-476.4</b>	<b>-507.6</b>
<i>Previous Tealbook</i>	-521.5	-631.1	-748.7	-803.5	-726.6	-706.1	-419.9	-489.1	-498.1
Current Account as Percent of GDP	-4.7	-5.3	-5.9	-6.0	-5.2	-4.9	-2.9	-3.2	-3.3
<i>Previous Tealbook</i>	-4.7	-5.3	-5.9	-6.0	-5.2	-4.9	-2.9	-3.3	-3.2
Net Goods & Services	-494.2	-609.3	-714.2	-759.2	-702.1	-698.8	-374.9	-441.3	-473.5
Investment Income, Net	51.0	73.4	78.8	54.7	97.9	125.5	96.1	100.6	96.8
Direct, Net	112.7	150.9	173.2	174.0	236.7	249.9	206.8	203.9	215.0
Portfolio, Net	-61.7	-77.5	-94.4	-119.4	-138.8	-124.3	-110.7	-103.3	-118.2
Other Income and Transfers, Net	-77.5	-94.5	-112.2	-97.9	-123.1	-135.7	-137.3	-135.8	-130.9

Last update: January 29, 2016

### Monetary Policy Strategies

#### Equilibrium Real Federal Funds Rate

*Figure: Short-Run Estimates with Confidence Intervals*

Line chart, by percent, 1990 to 2010. There are five series, "The actual real funds rate based on lagged core inflation", "Tealbook-consistent measure (FRB/US)", "Range of four model-based estimates", "70 Percent confidence interval", and "90 Percent confidence interval". The actual real funds rate series starts at about 4.5 in 1990, decreases to about 0 by 1992, generally increases to about 4.5 by 2001, generally decreases to about -1 by 2004, generally increases to about 3 by 2007, generally decreases to about -1.5 by 2008, and then generally increases to about -1 by 2010. Tealbook-consistent measure starts at about 4 in 1997. It generally increases to about 5 by 2000, generally decreases to about 0 by 2003, generally increases to about 3 by 2007, decreases to about -4.3 by 2009 and generally increases to about -1.7 by 2010. The other three series closely track each other throughout the chart, with the 70 percent confidence interval being about 1 percent both lesser and greater than the Range of model-based estimates at any given point. The Range of model-based estimates starts at between about 1 and 4, decreases to between about -0.5 and 2 by 1991, generally increases to between about 2 and 4.5 by 2000, generally decreases to between about -0.5 and 1 by 2003, increases to between about 1 and 2.25 by 2006, decreases to between about -6 and -2 by 2009 and then increases to about -2.5 and 1 by 2010.

#### Short-Run and Medium-Run Measures

	Current Estimate	Previous Estimate
<b>Short-Run Measures</b>		
Single-equation model	-1.4	-1.5
Small structural model	-0.9	-0.7
EDO model	1.2	1.2
FRB/US model	-2.6	-1.3
Confidence intervals for four model-based estimates		
70 percent confidence interval	-3.0 to 1.2	
90 percent confidence interval	-4.0 to 2.5	
Tealbook-consistent measures		
EDO model	-4.3	-3.1
FRB/US model	-1.8	-1.4
<b>Medium-Run Measures</b>		
Single-equation model	1.2	1.1
Small structural model	1.6	1.8
Confidence intervals for two model-based estimates		
70 percent confidence interval	0.4 to 2.3	
90 percent confidence interval	-0.3 to 2.8	
TIPS-based factor model	2.0	2.0
<b>Memo</b>		
Actual real federal funds rate	-1.0	-1.2

Note: Appendix 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 expectation. For information regarding alternative measures, see Appendix A. Estimates of  $r^*$  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."

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

*Figure: Nominal Federal Funds Rate*

Line chart, by percent, 2009 to 2014. There are three series, "Current Tealbook: Constrained", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2009:Q4 at about 0.1 and increases to about 0.25 by 2010:Q2. It remains constant at 0.25 until 2013:Q4. It then generally increases to about 2.25 by 2014:Q4. Current Tealbook: Unconstrained begins in 2009:Q4 at about 0.1 and decreases to about -4.75 by 2011:Q2. It then increases to about 4.2 by 2014:Q4. Previous Tealbook: Unconstrained begins in 2009:Q4 at about 0.1 and decreases to about -3.8 by 2011:Q2. It then increases to about 4.3 by 2014:Q4.

*Figure: Real Federal Funds Rate*

Line chart, by percent, 2009 to 2014. There are three series, "Current Tealbook: Constrained", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2009:Q4 at about -1.4 and generally increases to about -0.8 by 2010:Q4. It then generally decreases to about -1.2 by 2013:Q4 and then generally increases to about 0.3 by 2014:Q4. Current Tealbook: Unconstrained begins in 2009:Q4 at about -1.4 and increases to about -1.2 by 2010:Q1. It then decreases to about -6 by 2011:Q2 and then increases to about 2 by 2014:Q2. Previous Tealbook: Unconstrained begins in 2009:Q4 at about -1.4 and increases to about -1.2 by 2010:Q1. It then decreases to about -5.1 by 2011:Q2 and then increases to about 2.2 by 2014:Q4.

*Figure: Civilian Unemployment Rate*

Line chart, by percent, 2009 to 2014. There are three series, "Current Tealbook: Constrained", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2009:Q4 at about 10.05 and decreases to about 9.7 by 2010:Q1. It then increases to about 9.75 by 2010:Q2 and then decreases to about 4.2 by 2014:Q4. Current Tealbook: Unconstrained begins in 2009:Q4 at about 10.05 and decreases to about 9.7 by 2010:Q1. It then increases to about 9.75 by 2010:Q2 and then decreases to about 4.35 by 2013:Q4. By 2014:Q4 it has increased to about 4.7. Previous Tealbook: Unconstrained begins in 2009:Q4 at about 10.05 and decreases to about 4.35 by 2013:Q4. It then increases to about 4.8 by 2014:Q4.

*Figure: Core PCE Inflation*

Line chart, by percent (four-quarter average), 2009 to 2014. There are three series, "Current Tealbook: Constrained", "Current Tealbook: Unconstrained", and "Previous Tealbook: Unconstrained". Current Tealbook: Constrained begins in 2009:Q4 at about 1.5 and decreases to about 0.87 by 2010:Q4. It then generally increases to about 1.9 by 2014:Q4. Current Tealbook: Unconstrained begins in 2009:Q4 at about 1.5 and generally decreases to about 1.15 by 2010:Q4. It then generally increases to about 2.1 by 2014:Q4. Previous Tealbook: Unconstrained begins in 2009:Q4 at about 1.52 and generally decreases to about 1.15 by 2010:Q4. It then generally increases to about 2.1 by 2014:Q4.

## The Policy Outlook in an Uncertain Environment

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

Line chart, by percent, 2010 to 2014. There are five series, "Current Tealbook", "Previous Tealbook", "Staff assumption", "70 percent confidence interval" and "90 percent confidence interval". The Current Tealbook begins at about 0 in 2010:Q2 and remains relatively stable there until 2012:Q2. It then increases to about 3.9 by 2014:Q4. The Previous Tealbook begins at about 0 in 2010:Q2 and remains stable there until 2012:Q1. It then increases to about 3.9 by 2014:Q4. The staff assumption begins at about 0 and remains relatively stable there until 2012:Q2. It then generally increases to about 3.5 by 2014:Q4. The other two series closely track the Current Tealbook series throughout the chart, with the 70 percent confidence interval being about 2% both lesser and greater than the Current Tealbook series, and the 90 Percent confidence interval being about 3% both lesser and greater than the Current Tealbook series at any given point.

*Figure: Information from Financial Markets*

Line chart, by percent, 2010 to 2014. There are four series, "Current Tealbook", "Previous Tealbook", "70 percent confidence interval" and "90 percent confidence interval". The Current Tealbook begins at about 0 and then increases to about 3.0 by 2014:Q4. The Previous Tealbook begins at about 0 and then increases to about 3.65 by 2014:Q4. The other two series closely track the Current Tealbook series throughout the chart. The 70 percent confidence interval begins being about 0.1% both lesser and greater than the Current Tealbook series. It then generally increases to about 1.5% both lesser and greater than the Current Tealbook series by the end of 2014. The 90 percent confidence interval begins being about 0.2% both lesser and greater than the Current Tealbook series. It then generally increases to about 2.5% both lesser and greater than the Current Bluebook series by the end of 2014.

Note: In both panels, the dark and light shading represent the 70 and 90 percent confidence intervals respectively. Financial market quotes are as of June 16.

## Near-Term Prescriptions of Simple Policy Rules

	Constrained Policy		Unconstrained Policy	
	2010Q3	2010Q4	2010Q3	2010Q4
Taylor (1993) rule	0.13	0.13	-0.80	-1.07
Previous Tealbook	0.13	0.13	-0.71	-0.83
Taylor (1999) rule	0.13	0.13	-4.16	-4.32

<i>Previous Tealbook</i>	0.13	0.13	-4.01	-3.96
Estimated outcome-based rule	<b>0.13</b>	<b>0.13</b>	<b>-0.47</b>	<b>-1.28</b>
<i>Previous Tealbook</i>	0.13	0.13	-1.13	-1.66
Estimated forecast-based rule	<b>0.13</b>	<b>0.13</b>	<b>-0.46</b>	<b>-1.18</b>
<i>Previous Tealbook</i>	0.13	0.13	-1.04	-1.42
First-difference rule	<b>0.13</b>	<b>0.13</b>	<b>-0.02</b>	<b>-0.13</b>
<i>Previous Tealbook</i>	0.43	0.69	0.43	0.69

#### Memo

	2010Q3	2010Q4
Staff assumption	0.13	0.13
Fed funds futures	0.19	0.21
Median expectation of primary dealers	0.13	0.13
Blue Chip forecast (June 1, 2010)	0.20	0.30

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

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

**Last update: January 29, 2016**

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Monetary Policy Alternatives

Table 1: Overview of Alternatives for the June 23 FOMC Statement

April Statement		June Alternatives		
		A	B	C
<b>Economic Activity</b>				
<i>Recent Developments</i>	has continued to strengthen	has continued to strengthen gradually	has continued to strengthen	
<i>Labor Market</i>	is beginning to improve; high unemployment; employers remain reluctant to add to payrolls	is improving slowly; high unemployment; employers remain reluctant to add to payrolls	is improving gradually; high unemployment; employers remain reluctant to add to payrolls	has continued to improve
<i>Outlook</i>	gradual return to higher levels of resource utilization; recovery likely to be moderate for a time	gradual return to higher levels of resource utilization; near-term outlook has weakened somewhat	gradual return to higher levels of resource utilization; recovery likely to be moderate for a time	sustainable recovery under way; gradual return to higher levels of resource utilization
<b>Financial Conditions</b>				
<i>Recent Developments</i>	bank lending continues to contract, financial market conditions remain supportive of economic growth	financial conditions have become less supportive of economic growth on balance; bank lending continues to contract	financial conditions have become less supportive of economic growth on balance; bank lending has continued to contract in recent months	financial market conditions have become somewhat less supportive of growth on balance
<b>Inflation</b>				
<i>Recent Developments</i>	substantial slack is restraining cost pressures; stable inflation expectations	Prices of energy and other commodities have declined somewhat in recent months; underlying inflation has trended lower; substantial slack is restraining cost pressures; stable inflation expectations		underlying inflation has trended lower; stable inflation expectations
<i>Outlook</i>	likely to be subdued for some time	likely to be quite subdued for some time, remaining below rates consistent with dual mandate	likely to be subdued for some time	subdued rates of inflation anticipated
<b>Federal Funds Rate Target</b>				
<i>Intermeeting Period</i>	0 to ¼ percent	0 to ¼ percent		
<i>Forward Guidance</i>	economic conditions are likely to warrant exceptionally low levels for an extended period	economic conditions will warrant exceptionally low levels for an extended period, until resource utilization and inflation clearly moving toward mandate-consistent levels	economic conditions are likely to warrant exceptionally low levels for an extended period	economic conditions are likely to warrant low levels for some time
<b>Reinvestment of SOMA Assets</b>				
<i>Approach</i>	allow agency debt and MBS to roll off but roll over maturing	roll over agency MBS as well as Treasuries;	allow agency debt and MBS to roll off but roll over maturing	allow Treasuries as well as agency debt

Treasuries (nothing in statement)	allow agency debt to roll off (not in statement)	Treasuries (nothing in statement)	and MBS to roll off
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## Balance Sheet Projections Summary

	Alternative A	Baseline	Alternative C
<b>MBS Securities</b>			
Total held June 2010	\$1,117 billion	\$1,117 billion	\$1,117 billion
Total held Dec. 2012	\$1,076 billion	\$853 billion	\$853 billion
<b>Agency Debt Securities</b>			
Total held June 2010	\$165 billion	\$165 billion	\$165 billion
Total held Dec. 2012	\$77 billion	\$77 billion	\$77 billion
<b>Treasury Securities</b>			
Total held June 2010	\$777 billion	\$777 billion	\$777 billion
Total held Dec. 2012	\$777 billion	\$777 billion	\$513 billion
<b>Total Assets</b>			
Peak month	June 2010	June 2010	June 2010
Peak amount	\$2.34 trillion	\$2.34 trillion	\$2.34 trillion
December 2020	\$1.86 trillion	\$1.86 trillion	\$1.86 trillion
<b>Reserve Balances</b>			
Peak month	February 2010	February 2010	February 2010
Peak amount	\$1.23 trillion	\$1.23 trillion	\$1.23 trillion

## Federal Reserve Balance Sheet: End-of-Year Projections -- Baseline Scenario

	End-of-Year						
	May 31, 2010	2010	2012	2014	2016	2018	2020
	\$ Billions						
<b>Total assets</b>	2,340	2,202	1,846	1,386	1,497	1,661	1,856
Selected assets:							
Liquidity programs for financial firms	7	15	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0
Central bank liquidity swaps	7	15	0	0	0	0	0
Lending through other credit facilities	44	44	12	1	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	44	44	12	1	0	0	0
Support for specific institutions	119	81	40	14	4	0	0
Credit extended to AIG	52	28	9	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	68	53	31	14	4	0	0
Securities held outright	2,057	1,960	1,707	1,294	1,422	1,593	1,791
U.S. Treasury securities	777	777	777	777	1,254	1,593	1,791
Agency debt securities	167	147	77	34	10	0	0
Agency mortgage-backed securities	1,114	1,035	853	484	158	0	0
Special drawing rights certificate account	5	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	0	1	1	1	0	0	0
Total other assets	112	102	86	76	72	69	66
<b>Total liabilities</b>	2,284	2,143	1,768	1,283	1,361	1,481	1,617

Selected liabilities:							
Federal Reserve notes in circulation	902	918	1,008	1,137	1,252	1,373	1,509
Reverse repurchase agreements	59	59	59	59	59	59	59
Deposits with Federal Reserve Banks	1,305	1,147	686	73	35	35	35
Reserve balances of depository institutions	1,083	939	476	25	25	25	25
U.S. Treasury, general account	20	5	5	5	5	5	5
U.S. Treasury, supplementary financing account	200	200	200	38	0	0	0
<b>Total capital</b>	<b>56</b>	<b>59</b>	<b>78</b>	<b>103</b>	<b>136</b>	<b>180</b>	<b>239</b>

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

## Growth Rates for the Monetary Base

Date	Baseline	Alternative A	Alternative C
Percent, annual rate			
Monthly			
Jan-10	-17.8	-17.8	-17.8
Feb-10	72.2	72.2	72.2
Mar-10	-19.7	-19.7	-19.7
Apr-10	-37.7	-37.7	-37.7
May-10	-2.1	-2.1	-2.1
Jun-10	-18.0	-18.0	-17.8
Jul-10	-10.0	-7.2	-9.8
Aug-10	4.2	10.6	-4.6
Sep-10	-20.9	-12.5	-31.0
Oct-10	-16.2	-6.2	-18.7
Nov-10	1.4	11.2	-1.4
Dec-10	-8.8	0.3	-12.5
Quarterly			
Q1 2010	14.0	14.0	14.0
Q2 2010	-11.8	-11.8	-11.8
Q3 2010	-8.9	-5.7	-11.8
Q4 2010	-10.2	-1.2	-15.2
Annual - Q4 to Q4			
2009	41.5	41.5	41.5
2010	-4.3	-1.3	-6.2
2011	-10.8	-4.5	-14.7
2012	-10.1	-6.7	-19.7
2013	-20.0	-18.3	-13.0

Note. Not seasonally adjusted.

## Growth Rates for M2

(Percent, seasonally adjusted annual rate)

Tealbook Forecast *	
Monthly Growth Rates	
Jan-10	-8.2
Feb-10	7.8
Mar-10	-4.1



Apr-10	-4.5
May-10	11.3
Jun-10	5.7
Jul-10	3.0
Aug-10	2.2
Sep-10	2.1
Oct-10	1.8
Nov-10	1.9
Dec-10	2.1
<b>Quarterly Growth Rates</b>	
2010 Q1	-0.2
2010 Q2	1.6
2010 Q3	4.2
2010 Q4	2.0
<b>Annual Growth Rates</b>	
2009	5.1
2010	1.9
2011	3.4

\* This forecast is consistent with nominal GDP and interest rates in the Tealbook forecast. Actual data through May 2010; projections thereafter. [Return to table](#)

**Last update: January 29, 2016**

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### Appendix A. Measures of the Equilibrium Real Rate

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

Proxy used for expected inflation	Actual real federal funds rate (current value)	Tealbook-consistent FRB/US-based measure of the equilibrium real funds rate (current value)	Average actual real funds rate (twelve-quarter average)
Lagged core inflation	-1.0	-1.8	-0.5
Lagged headline inflation	-1.5	-1.9	-0.6
Projected headline inflation	-1.0	-1.9	-0.7

Last update: January 29, 2016

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

#### Federal Reserve Balance Sheet: End-of-Year Projections -- Baseline Scenario

	End-of-Year						
	May 31, 2010	2010	2012	2014	2016	2018	2020
	\$ Billions						
<b>Total assets</b>	2,340	2,202	1,846	1,386	1,497	1,661	1,856
Selected assets:							
Liquidity programs for financial firms	7	15	0	0	0	0	0
Primary, secondary, and seasonal credit	0	0	0	0	0	0	0
Term auction credit (TAF)	0	0	0	0	0	0	0
Central bank liquidity swaps	7	15	0	0	0	0	0
Primary Dealer Credit Facility (PDCF)	0	0	0	0	0	0	0
Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF)	0	0	0	0	0	0	0
Lending through other credit facilities	44	44	12	1	0	0	0
Net portfolio holdings of Commercial Paper Funding Facility LLC (CPFF)	0	0	0	0	0	0	0
Term Asset-Backed Securities Loan Facility (TALF)	44	44	12	1	0	0	0
Support for specific institutions	119	81	40	14	4	0	0
Credit extended to AIG	52	28	9	0	0	0	0
Net portfolio holdings of Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC	68	53	31	14	4	0	0
Securities held outright	2,057	1,960	1,707	1,294	1,422	1,593	1,791
U.S. Treasury securities	777	777	777	777	1,254	1,593	1,791
Agency debt securities	167	147	77	34	10	0	0
Agency mortgage-backed securities	1,114	1,035	853	484	158	0	0
Memo: TSLF	0	0	0	0	0	0	0
Repurchase agreements	0	0	0	0	0	0	0
Special drawing rights certificate account	5	5	7	7	7	7	7
Net portfolio holdings of TALF LLC	0	1	1	1	0	0	0
Total other assets	112	102	86	76	72	69	66
<b>Total liabilities</b>	2,284	2,143	1,768	1,283	1,361	1,481	1,617
Selected liabilities:							
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U.S. Treasury, supplementary financing account	200	200	200	38	0	0	0
<b>Total capital</b>	56	59	78	103	136	180	239

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

