

# Report to the FOMC on Economic Conditions and Monetary Policy



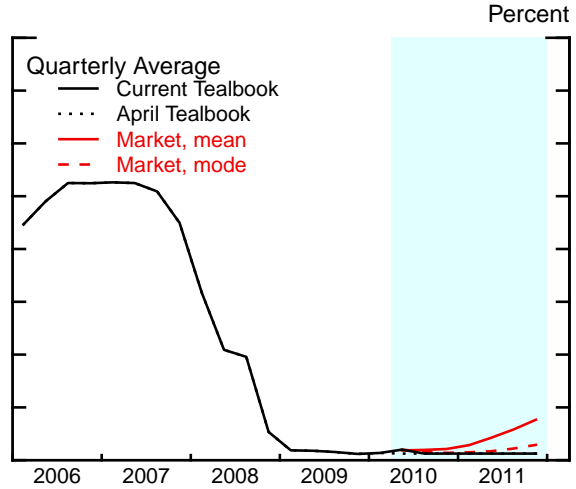
## Book A

### Economic and Financial Conditions: Current Situation and Outlook

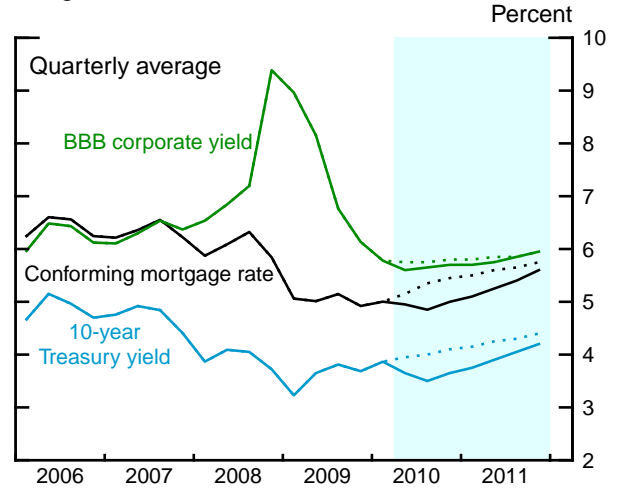
June 16, 2010

## Key Background Factors Underlying the Baseline Staff Projection

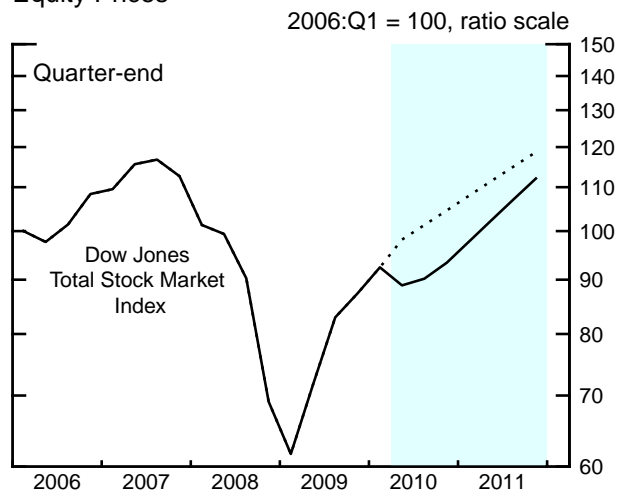
Federal Funds Rate



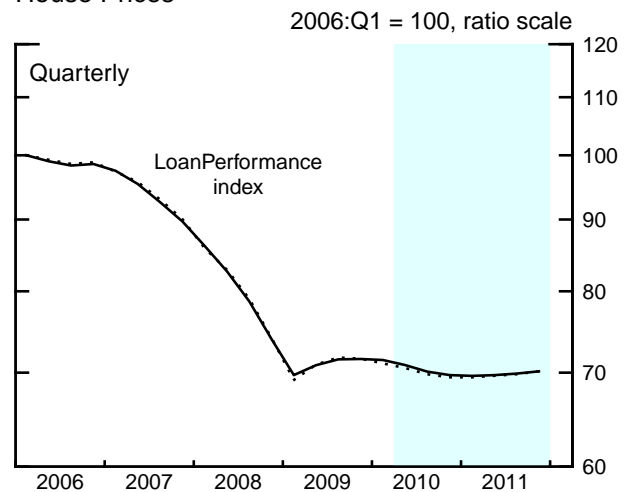
Long-Term Interest Rates



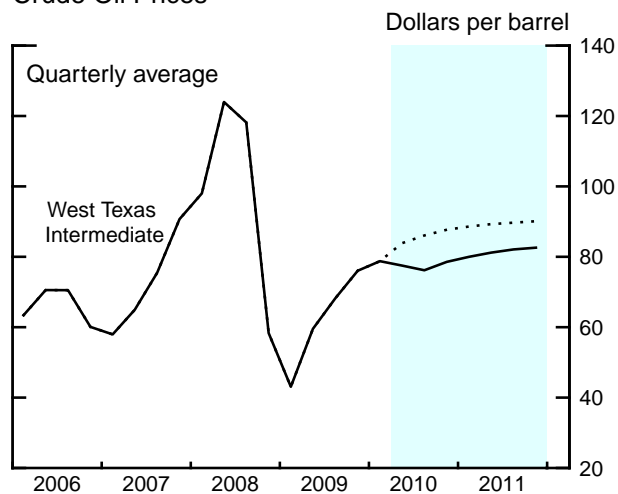
Equity Prices



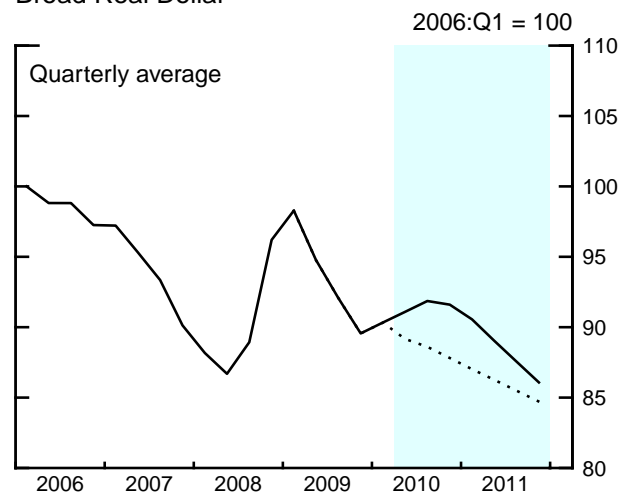
House Prices



Crude Oil Prices



Broad Real Dollar



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

## Staff Forecast of Residential House Prices

House prices have declined somewhat in recent months, reversing some of the modest increases that occurred in the spring of 2009. These declines have been widespread, with more than 40 percent of metro areas reporting that prices in April were lower than a year earlier. The recent weakness in house prices has been in line with our expectations.

As can be seen in the lower left figure, we expect house prices to fall a bit further over the rest of the year, as the support to demand provided by improving economic conditions and housing market stimulus packages is outweighed by the effects of high unemployment, large inventories of foreclosed properties, tight credit, and expectations by prospective buyers of only modest capital gains over the longer run. In all, we expect house prices to fall 2.6 percent during 2010 before holding about flat during 2011 (see table). These anticipated house price movements are small compared with the 30 percent drop seen from 2006:Q1 to 2009:Q1.

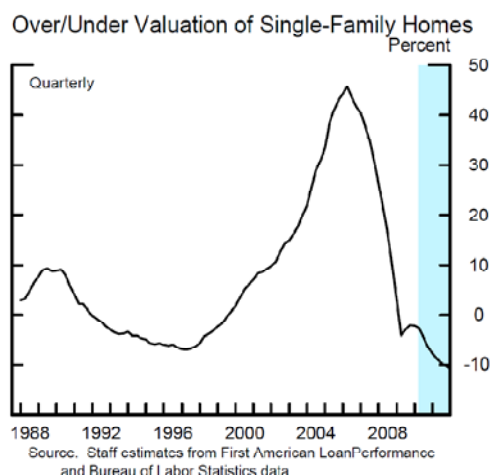
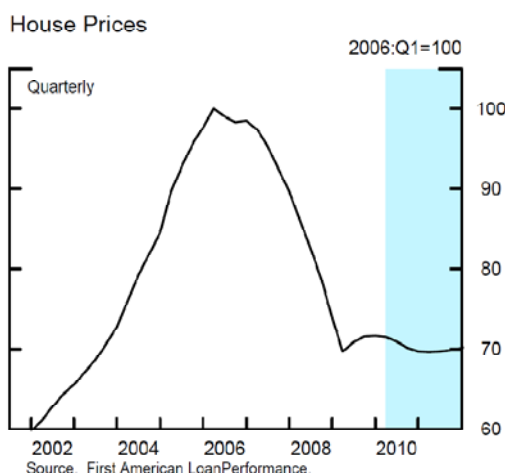
An important factor affecting our outlook is whether housing is expensive or cheap relative to historical norms. As a rough gauge of this relationship, we use the detrended ratio of prices

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.

to rents (see lower right figure). As of the first quarter of 2010, prices were about in line with historical norms according to this measure, compared with an estimate of a greater than 40 percent overvaluation in early 2006. By this metric, house prices in our projection will be undervalued relative to rents by about 10 percent at the end of 2011, reflecting the factors mentioned previously that are weighing on house prices.

Regarding foreclosures, we continue to expect that foreclosure mitigation efforts will have successfully prevented around 1 million foreclosures through the end of 2011. In the absence of these programs, our forecast for the level of house prices at the end of the next year would be about 4 percent below our baseline projection.

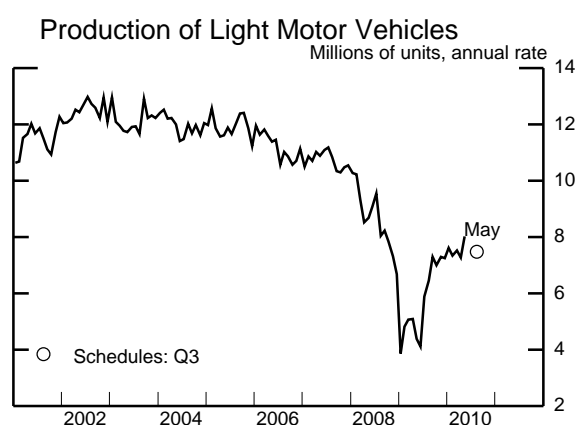
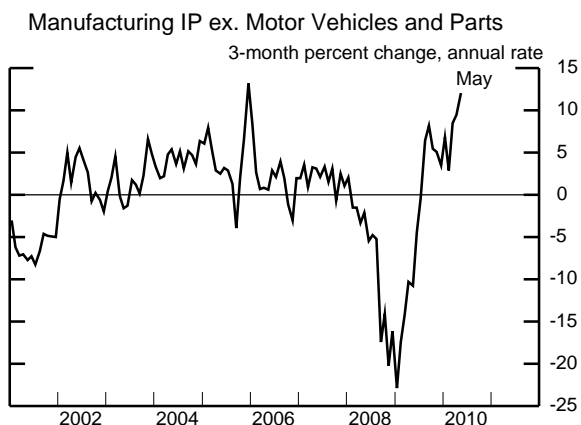
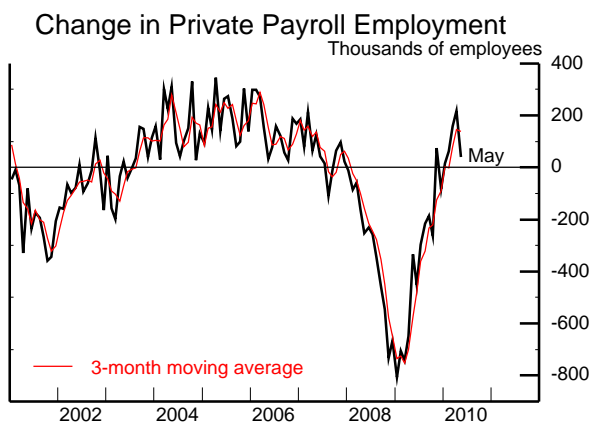


### Summary of the Near-Term Outlook

(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

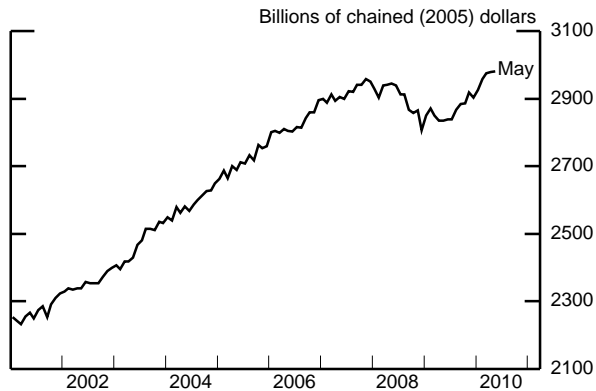
### Recent Nonfinancial Developments (1)



Note: Schedules data are from Ward's Communications.

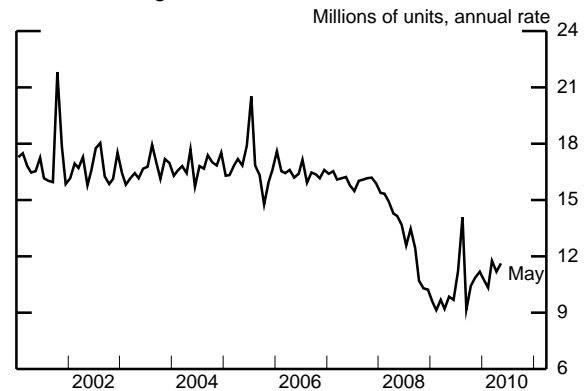
## Recent Nonfinancial Developments (2)

Real PCE Goods ex. Motor Vehicles

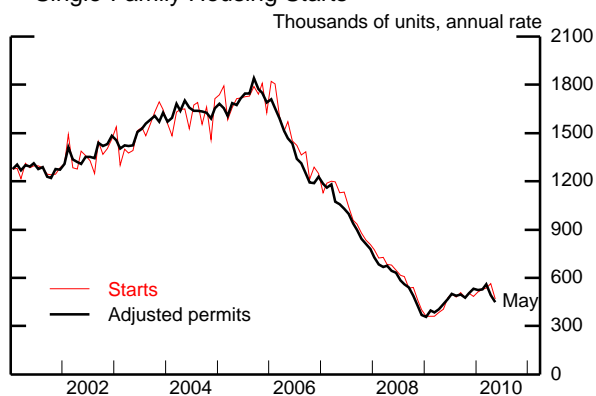


Note: Figures for March, April, and May are staff estimates based on available source data.

Sales of Light Motor Vehicles

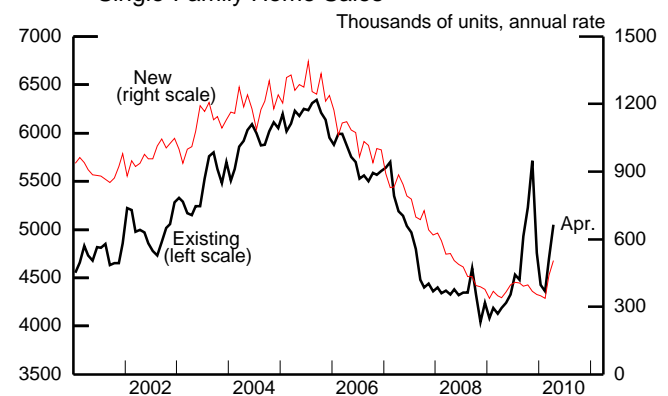


Single-Family Housing Starts

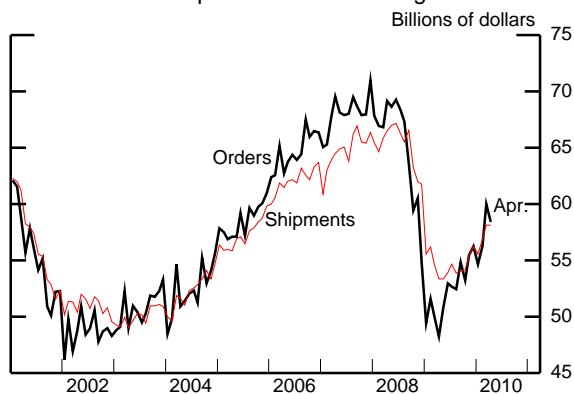


Note: Adjusted permits equal permits plus starts outside of permit-issuing areas.

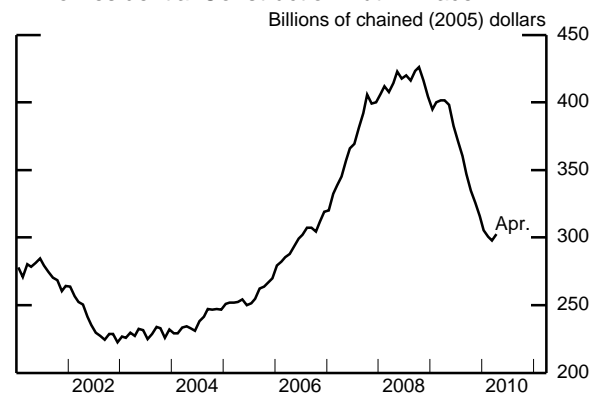
Single-Family Home Sales



Nondefense Capital Goods Excluding Aircraft

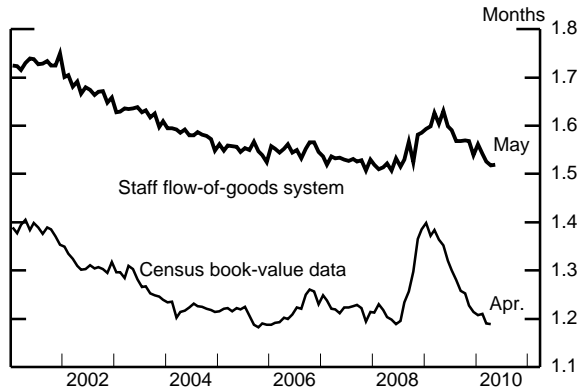


Nonresidential Construction Put in Place



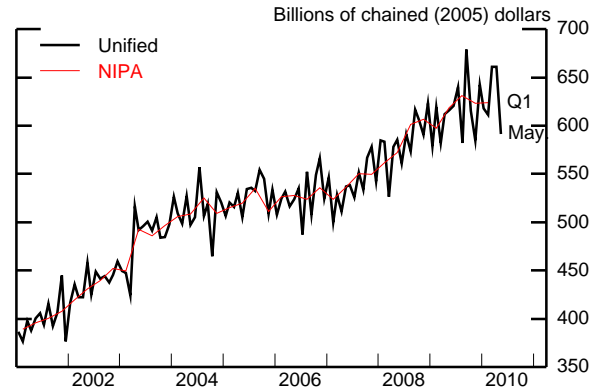
## Recent Nonfinancial Developments (3)

Inventory Ratios ex. Motor Vehicles



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.

Defense Spending

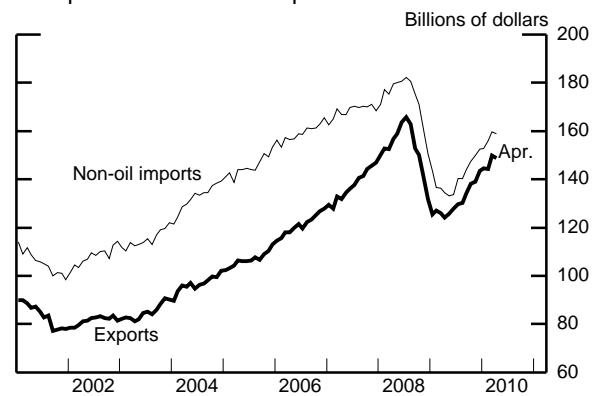


Note: The unified series is seasonally adjusted and deflated by BEA prices. The NIPA series excludes the consumption of fixed capital.

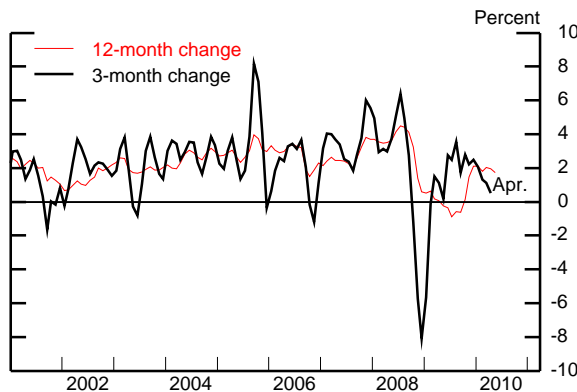
Trade Balance



Exports and Non-Oil Imports

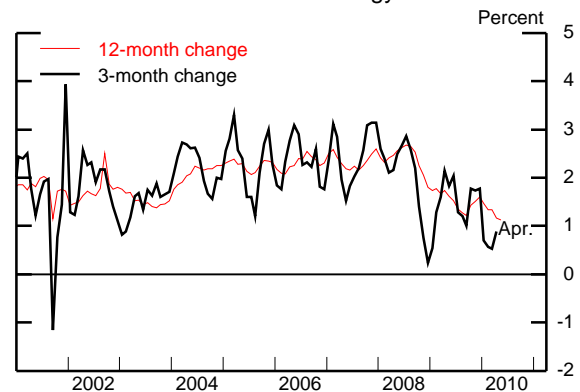


Total PCE Prices



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

PCE Prices ex. Food and Energy



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

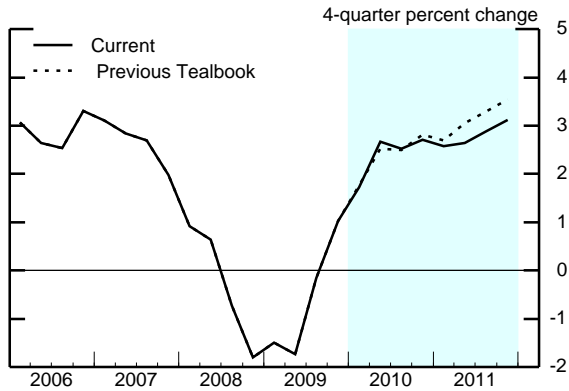
Real GDP



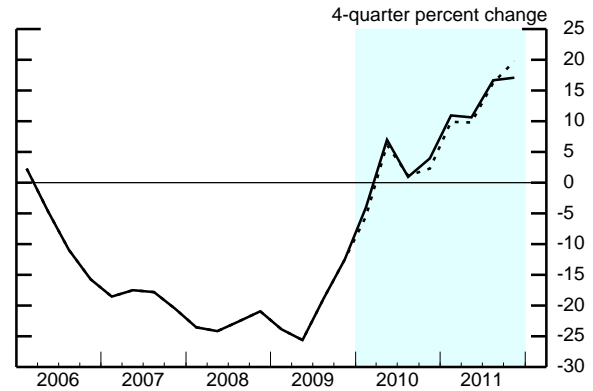
Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical line represents the last business cycle peak as defined by the NBER.

## Components of Final Demand

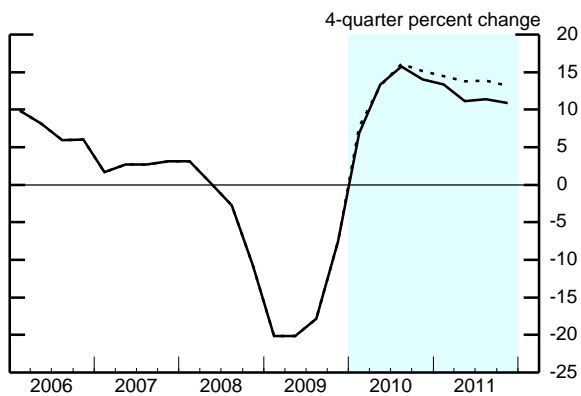
### Personal Consumption Expenditures



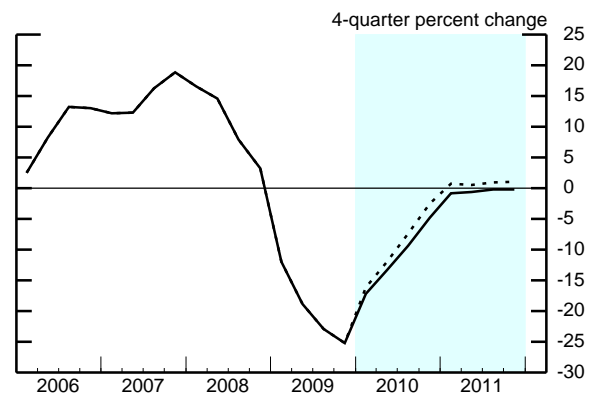
### Residential Investment



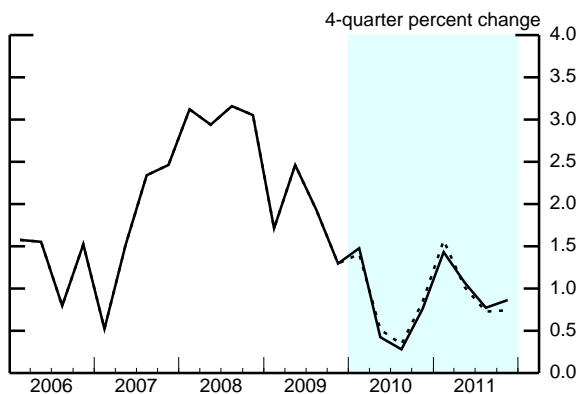
### Equipment and Software



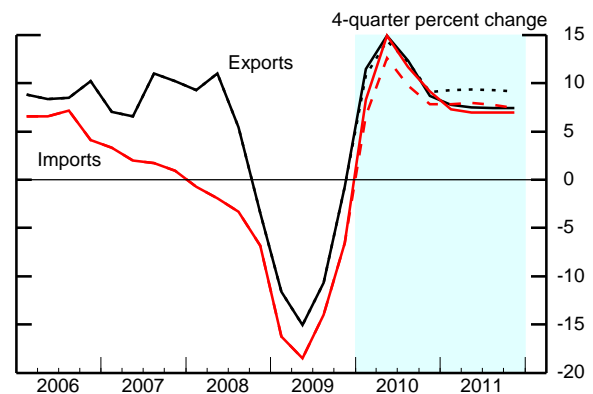
### Nonresidential Structures



### Government Consumption & Investment



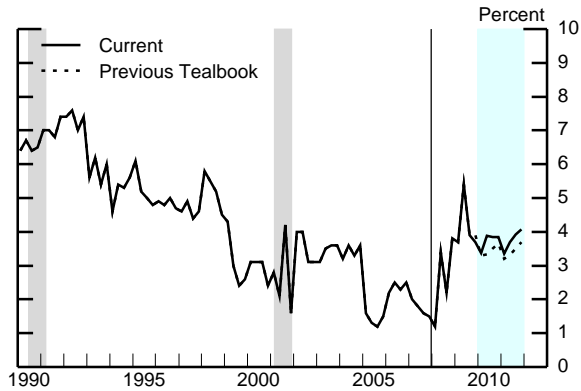
### Exports and Imports



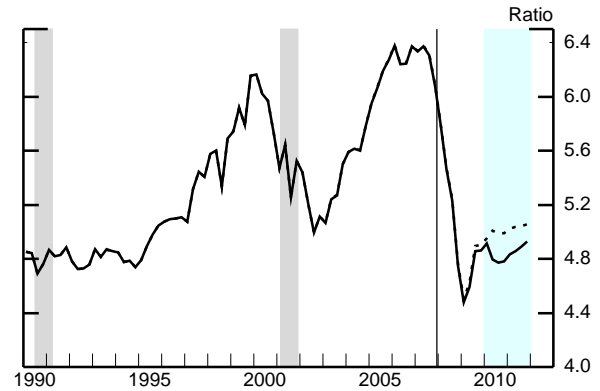


## Aspects of the Medium-Term Projection

Personal Saving Rate

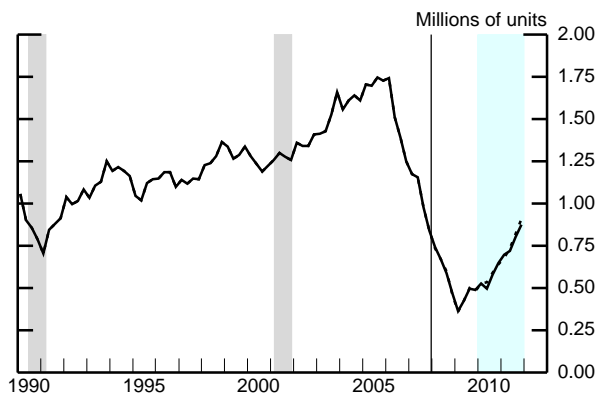


Wealth-to-Income Ratio

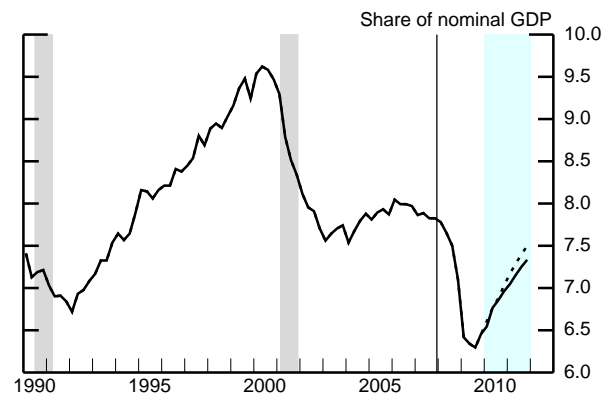


Note: Household net worth as a ratio to disposable personal income.

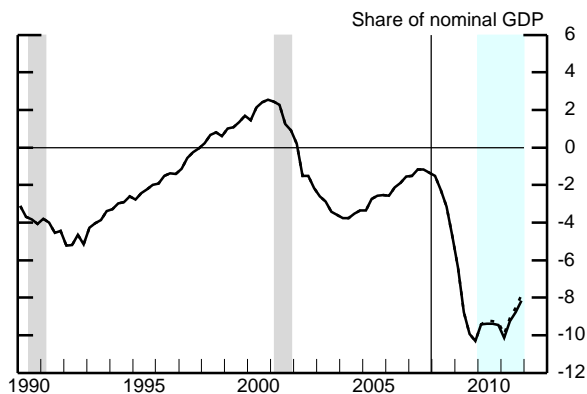
Single-Family Housing Starts



Equipment and Software Spending

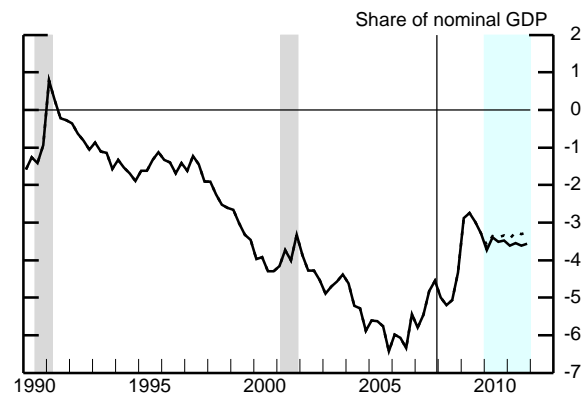


Federal Surplus/Deficit



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

Current Account Surplus/Deficit



Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical lines represent the last business cycle peak as defined by the NBER.

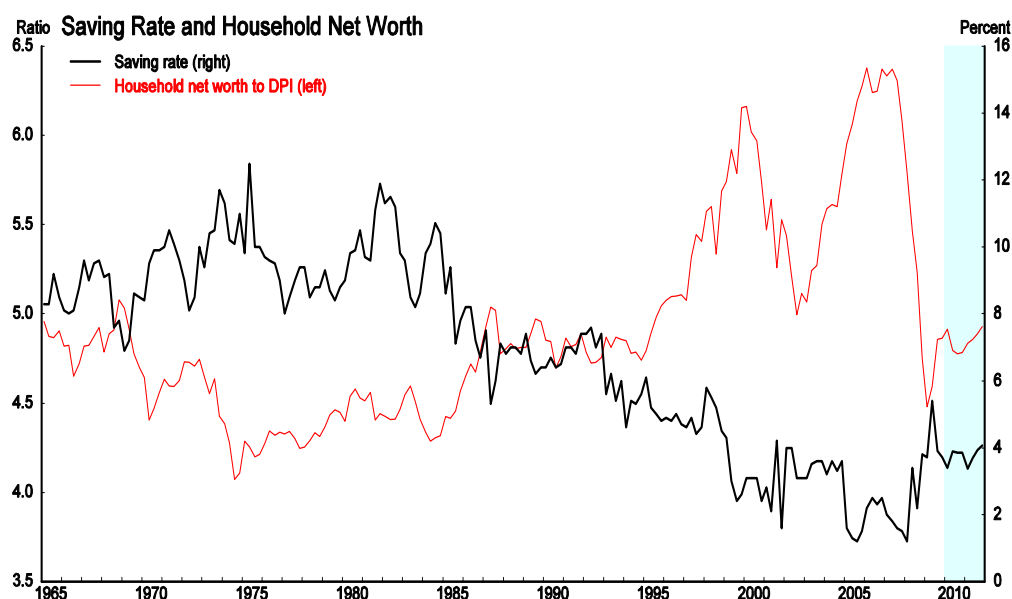
## The Saving Rate in the Staff Projection

In our medium-term projection we expect the personal saving rate to edge up from 3½ percent in the first quarter of this year to 4 percent by the end of 2011. Several factors contribute to this relatively flat contour for the personal saving rate.

As shown in the figure below, the personal saving rate has been negatively correlated with the ratio of household wealth to disposable income over the past several decades. Because wealth provides resources to fund household consumption, increases in wealth—holding income constant—tend to increase consumption and decrease the saving rate. The recent financial crisis and recession have drastically reduced household wealth, pushing the wealth-income ratio down from a post-WWII peak in 2007 to a reading that is currently close to its post war average, a level that we expect to be maintained throughout the medium term. All else being

equal, the adjustment of household spending to this lower wealth-income ratio would be consistent with a considerable rise in the saving rate from here forward.

However, other important factors have also changed. In particular, as shown in the bottom left figure on the following page, transfer income as a share of disposable income is now well above levels prevailing prior to the financial crisis, and the staff projects the transfer share to remain near this higher level throughout the medium term. Because transfer income is often provided as a guaranteed annuity—such as Social Security benefits to retired or disabled persons—or is contingent on a household's income being temporarily low—such as unemployment benefits—households are likely to consume a relatively high fraction of this type of income. Indeed, historically, the ratio of



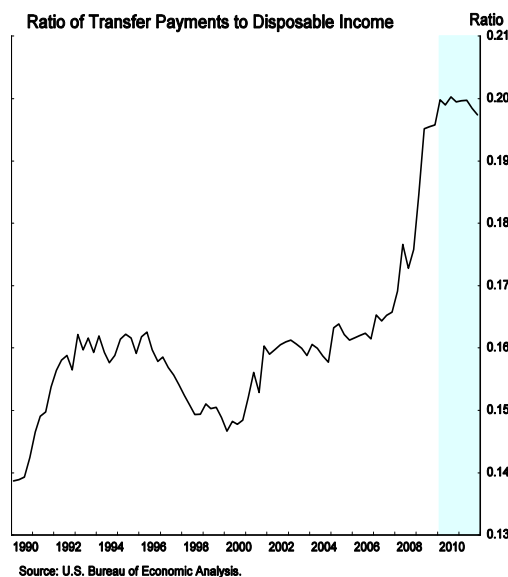
Source: U.S. Bureau of Economic Analysis for saving rate and DPI; Federal Reserve Board for household net worth.

transfer income to total disposable income is negatively correlated with the saving rate after conditioning on the wealth-income ratio. Therefore, we expect the higher transfer share to restrain the rise in the saving rate over the medium term.

Other factors are also likely to push down the saving rate over the projection period. Specifically, as the economic recovery proceeds, uncertainty about the economic outlook should diminish and reduce households' desire to save for precautionary reasons. Indeed, the stabilization in economic activity in the middle of last year led to a noticeable move up in consumer sentiment—shown in the figure in the bottom right—that coincided with a reduction in the

saving rate. As the recovery proceeds, we expect household confidence to increase further. In addition, we expect consumer credit conditions to ease over the projection period, which should also put some downward pressure on household saving.

Although there is considerable uncertainty about the magnitude of each of these influences on household saving, in our judgment the downward pull from larger transfer income, reduced precautionary saving and greater credit availability should largely offset the upward impetus from lower wealth. As a result, the projected rise in the saving rate over the medium term is small and gradual.



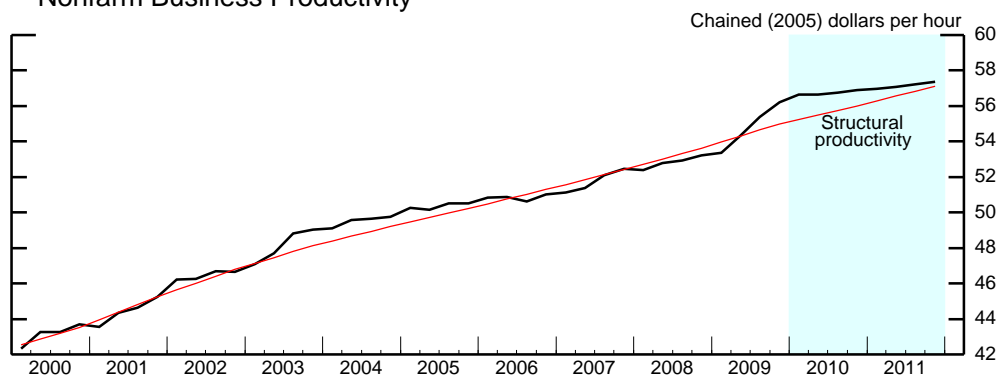
**Decomposition of Potential GDP**  
(Percent change, Q4 to Q4, except as noted)

Measure	1974-1995	1996-2000	2001-2007	2008	2009	2010	2011
Potential GDP	3.0	3.4	2.7	2.7	2.7	2.3	2.4
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

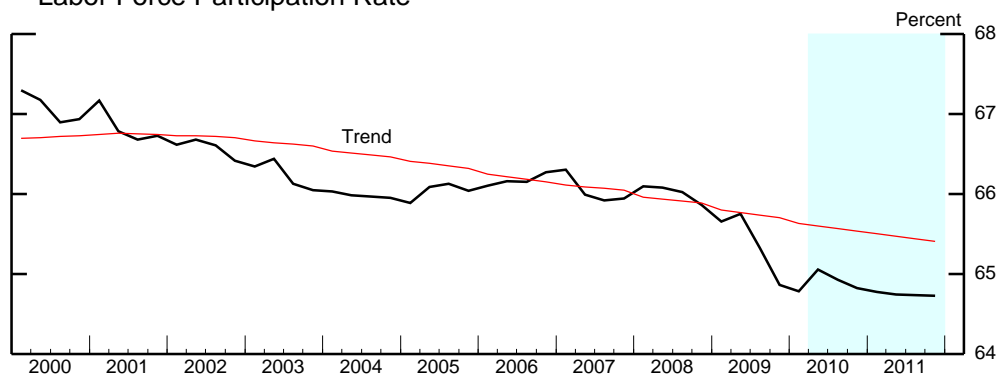
Note: Components may not sum to totals because of rounding. For multiyear periods, the percent change is the annual average from Q4 of the year preceding the first year shown to Q4 of the last year shown.

1. Percentage points.

**Nonfarm Business Productivity**



**Labor Force Participation Rate**



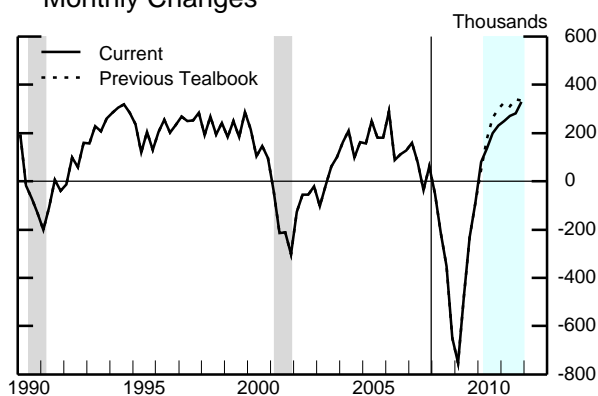
## The Outlook for the Labor Market

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

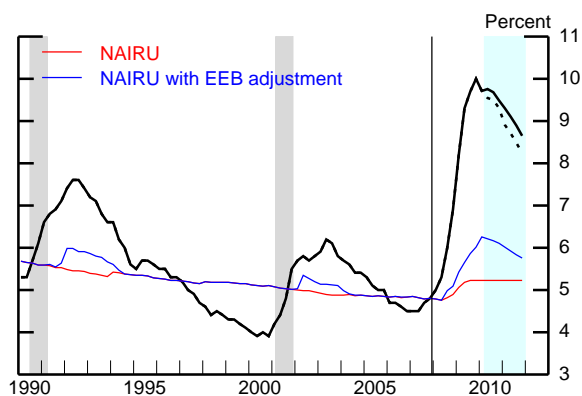
Measure	2008	2009	2010	2011
Output per hour, nonfarm business	1.4	5.6	1.2	.9
Previous Tealbook	1.4	5.6	1.3	.8
Nonfarm private employment	-2.7	-4.7	1.6	3.0
Previous Tealbook	-2.7	-4.7	1.9	3.6
Labor force participation rate <sup>1</sup>	65.9	64.9	64.8	64.7
Previous Tealbook	65.9	64.9	64.7	64.7
Civilian 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.  
 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.

Private Payroll Employment, Average Monthly Changes

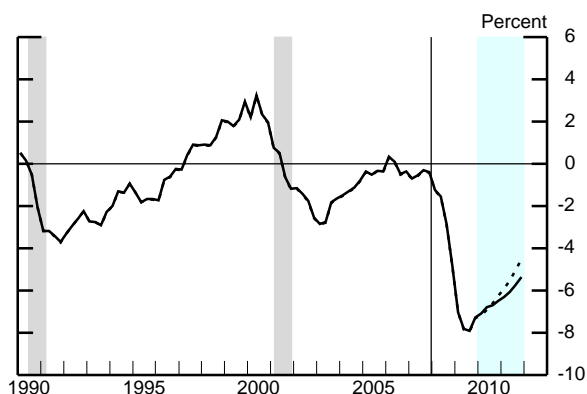


Unemployment Rate



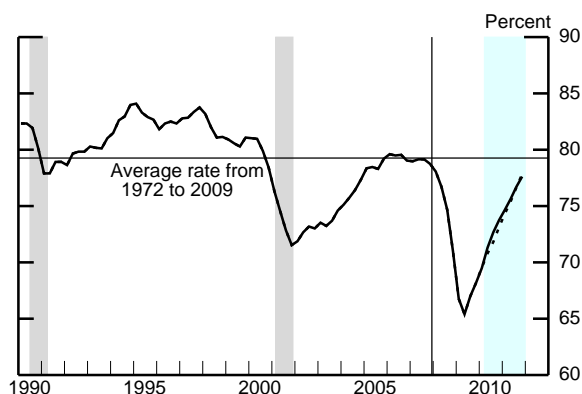
Note: The EEB adjustment is the staff estimate of the effect of extended and emergency unemployment compensation programs on the NAIRU.

GDP Gap



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

Manufacturing Capacity Utilization Rate

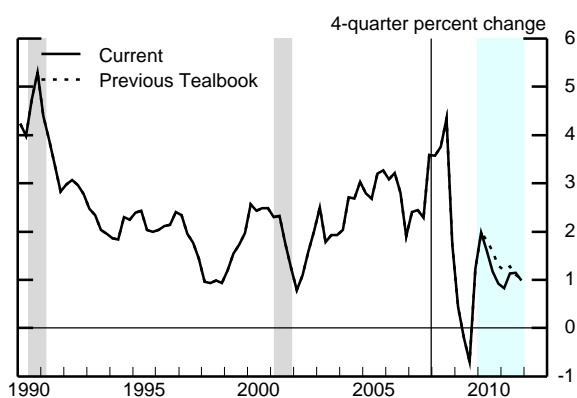


# **Inflation Projections** (Percent change, Q4 to Q4)

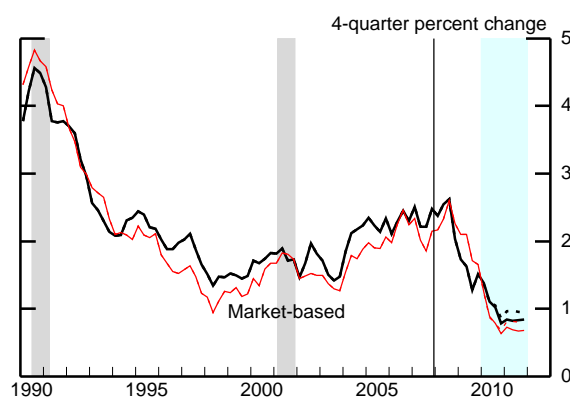
Measure	2008	2009	2010	2011
PCE chain-weighted price index	1.7	1.2	.9	1.0
Previous Tealbook	1.7	1.2	1.3	1.0
Food and beverages	6.8	-1.7	1.5	.7
Previous Tealbook	6.8	-1.7	1.7	.7
Energy	-9.1	1.1	2.3	3.9
Previous Tealbook	-9.1	1.1	7.6	2.4
Excluding food and energy	2.0	1.5	.8	.8
Previous Tealbook	2.0	1.5	.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.

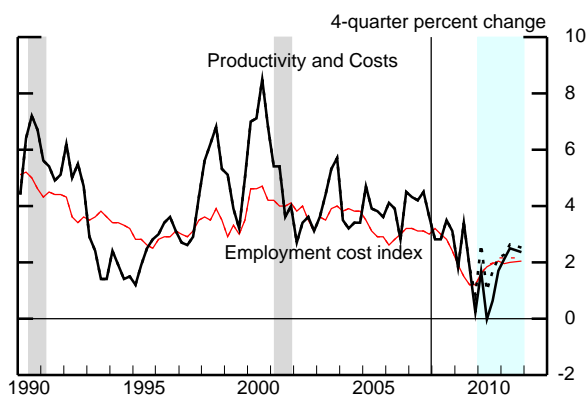
Total PCE Prices



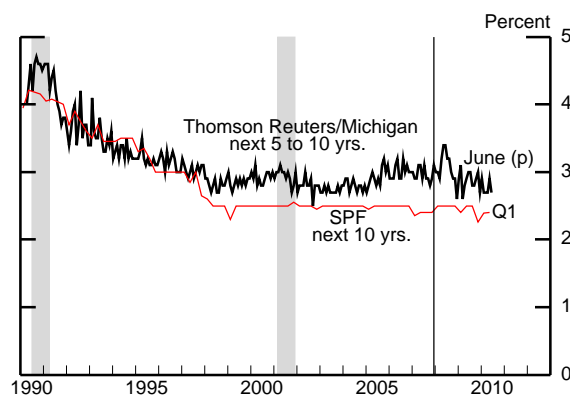
PCE Prices ex. Food and Energy



Compensation per Hour



Long-Term Inflation Expectations



Note: The SPF projection is for the CPI.  
p Preliminary.

Note: The shaded bars indicate a period of business recession as defined by the National Bureau of Economic Research (NBER). The vertical lines represent the last business cycle peak as defined by the NBER.

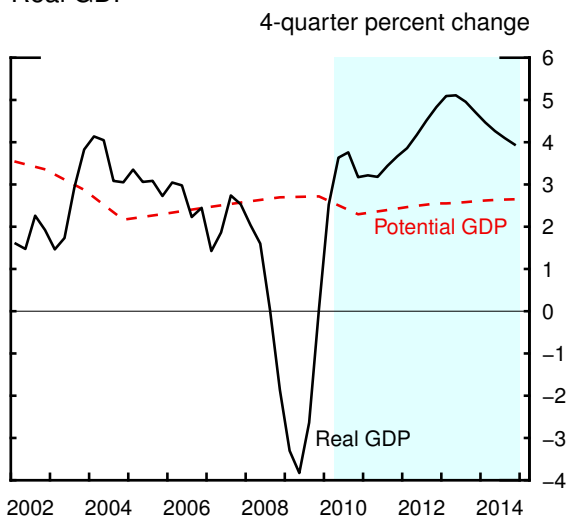
## The Long-Term Outlook

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

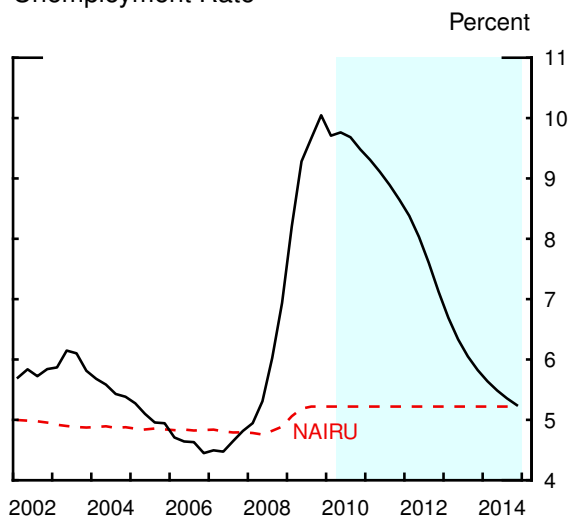
	2010	2011	2012	2013	2014
Real GDP	3.2	3.7	4.8	4.7	3.9
Civilian unemployment rate <sup>1</sup>	9.5	8.6	7.1	5.8	5.2
PCE prices, total	.9	1.0	1.0	1.2	1.5
Core PCE prices	.8	.8	1.0	1.2	1.4
Federal funds rate <sup>1</sup>	.1	.1	.8	2.5	3.5

1. Percent, average for the final quarter of the period.

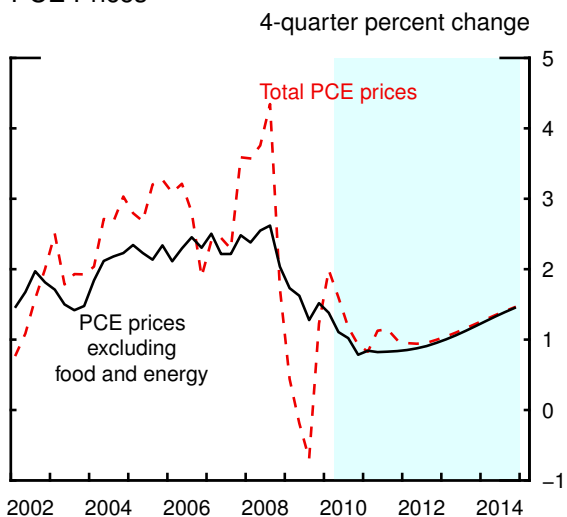
Real GDP



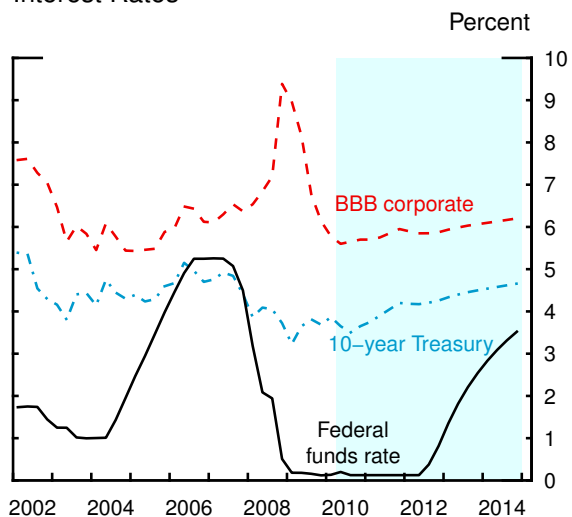
Unemployment Rate



PCE Prices



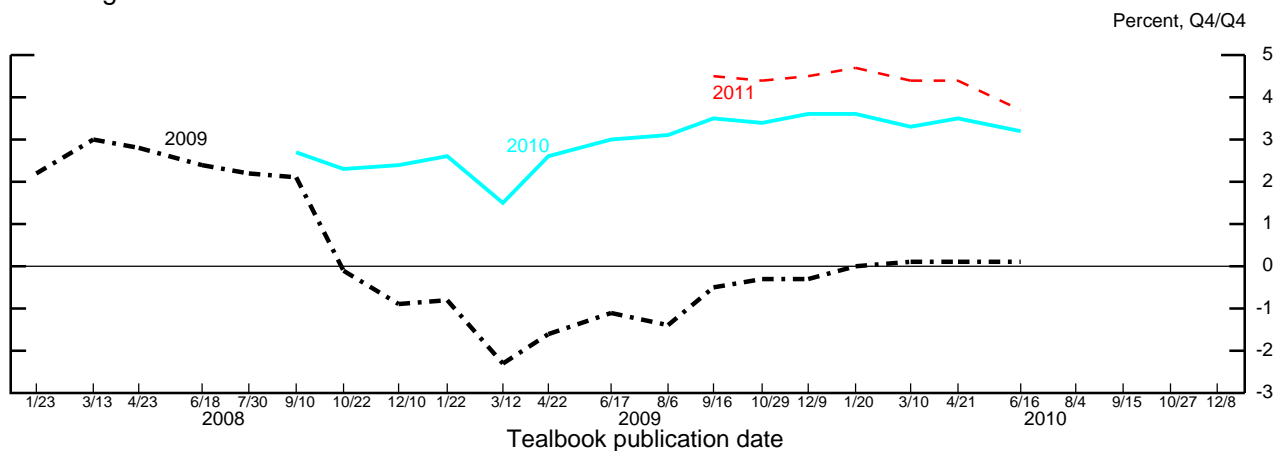
Interest Rates



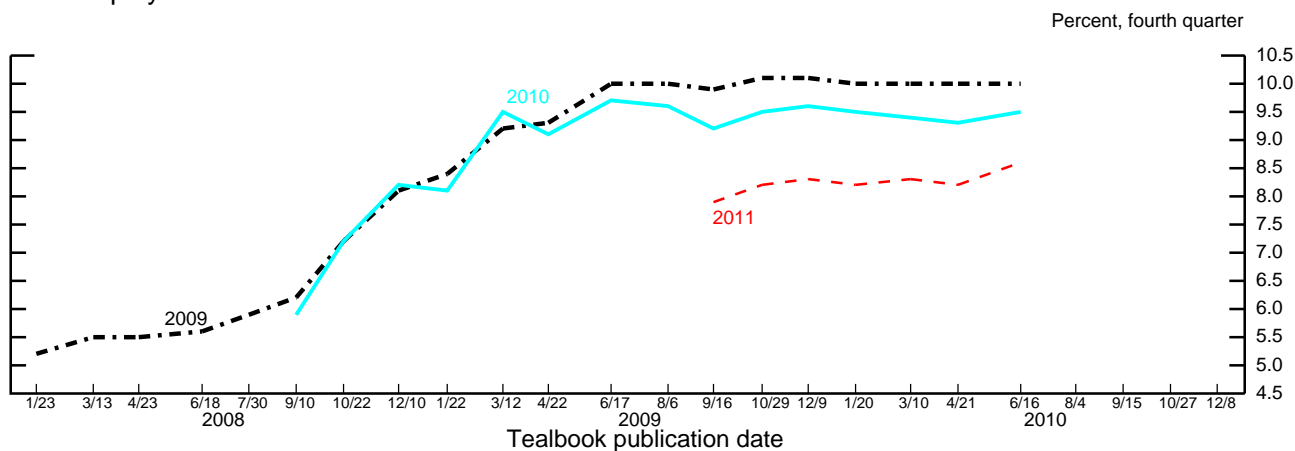
Note: In each panel, shading represents the projection period.

## Evolution of the Staff Forecast

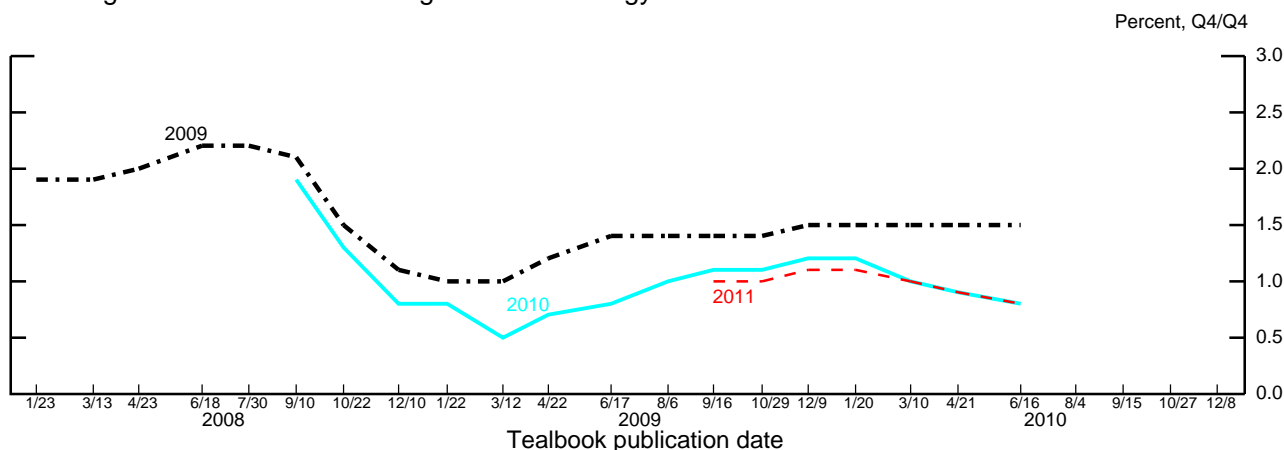
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy\*



\*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.



## International Economic Developments and Outlook

Although incoming data on economic activity abroad have generally surprised on the upside, we expect the recent deepening of global financial stresses associated with the debt crisis in Europe to hold down activity in Europe and in much of the rest of the world as well. Accordingly, we have marked down our forecast for growth abroad starting in the second half of this year.

Growth in the first quarter turned out to be significantly higher than we were anticipating at the time of the April forecast in Canada, Japan, Brazil, and a number of emerging Asian economies. Although Mexican GDP reportedly contracted, we are inclined to discount that outcome as other Mexican data were more upbeat. Foreign indicators for the second quarter—such as industrial production, retail sales, and exports—point to continued momentum for the global economy. All told, we have marked up our estimate for aggregate foreign growth by  $\frac{1}{2}$  percentage point for the first half of this year, to  $4\frac{1}{2}$  percent.

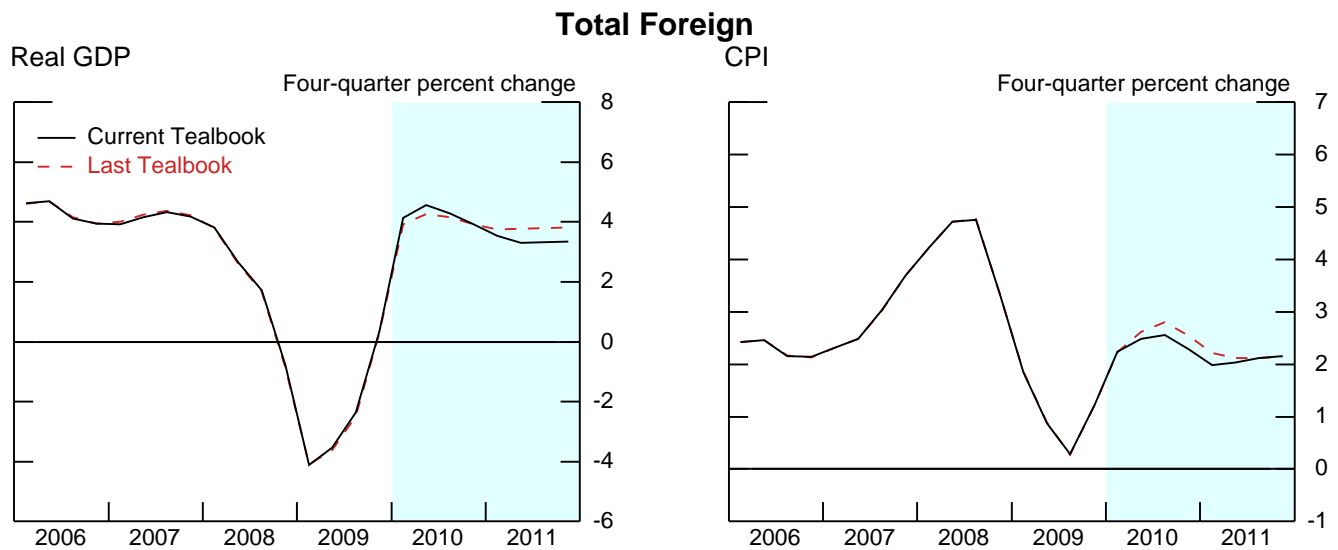
### Summary of Staff Projections

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

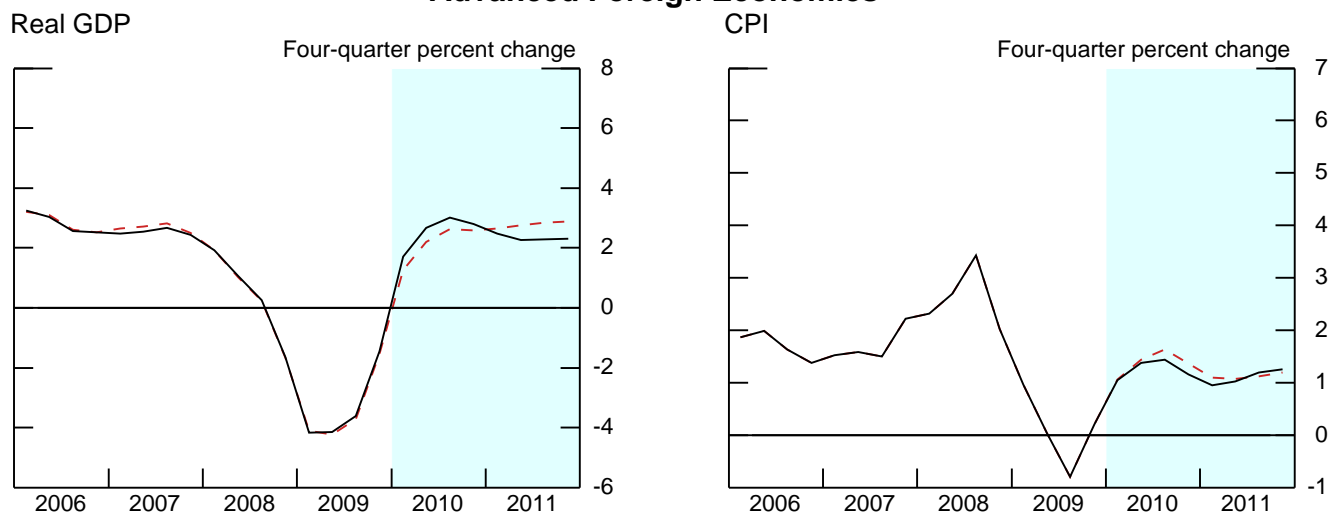
Indicator	2009	2010	Projection		
		Q1	2010		2011
			Q2	H2	
Foreign output	0.4	4.9	4.3	3.3	3.3
April TB	0.3	4.5	3.7	3.8	3.8
Foreign CPI	1.2	3.4	2.0	1.9	2.2
April TB	1.2	3.4	2.5	2.1	2.1

Going forward, our outlook for activity abroad is shaped by our sense of how the sovereign debt crisis in Europe is likely to evolve. Obviously, the future trajectory of this crisis is clouded by considerable uncertainty, but we believe the following working assumptions are plausible. First, official support should prove sufficient for Greece to avoid restructuring of its sovereign debt through 2011, although fiscal sustainability concerns will remain. Second, some progress toward fiscal consolidation will be made in Greece and other vulnerable European economies, although this progress may well fall short of announced plans. Third, markets should increasingly differentiate countries

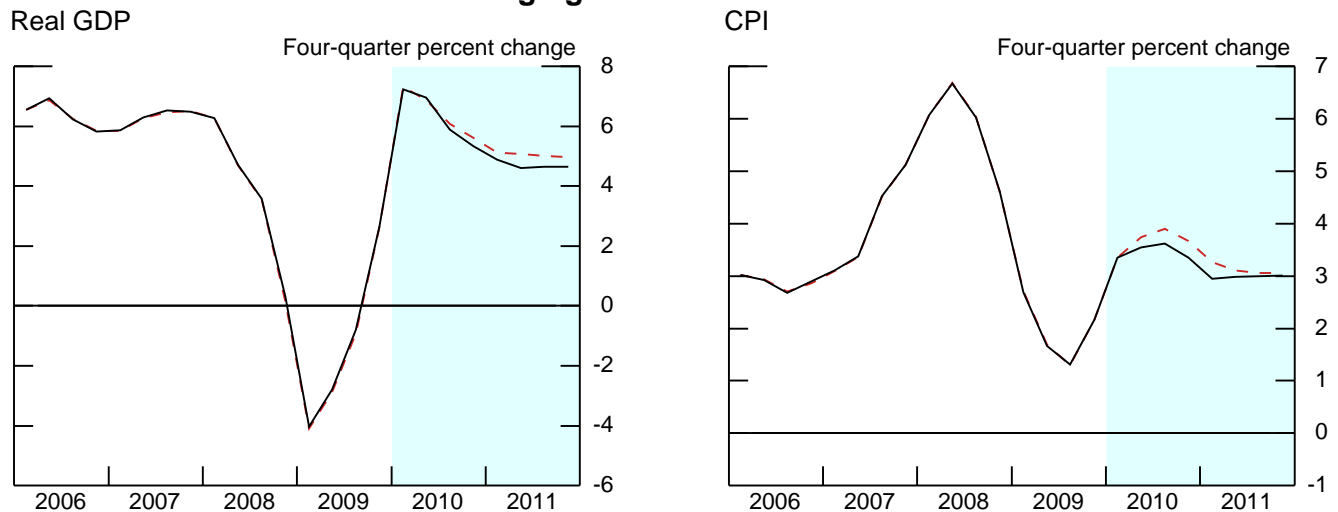
## The Foreign Outlook



## Advanced Foreign Economies

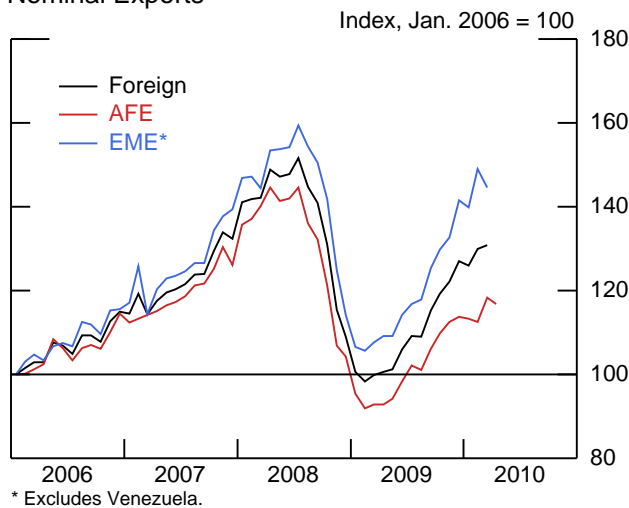


## Emerging Market Economies

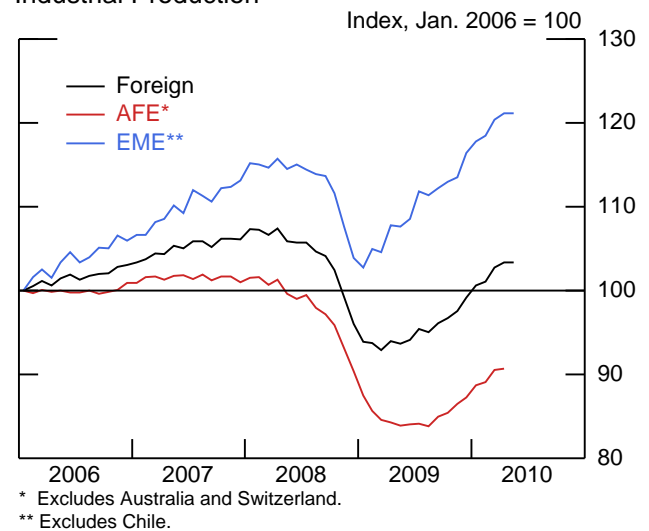


## Recent Foreign Indicators

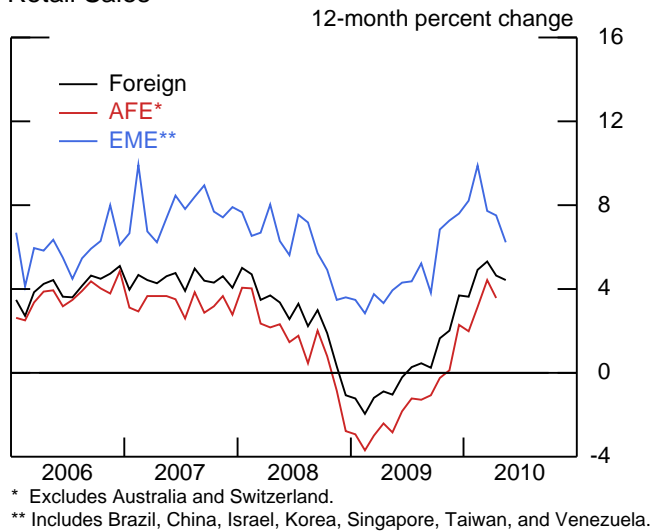
Nominal Exports



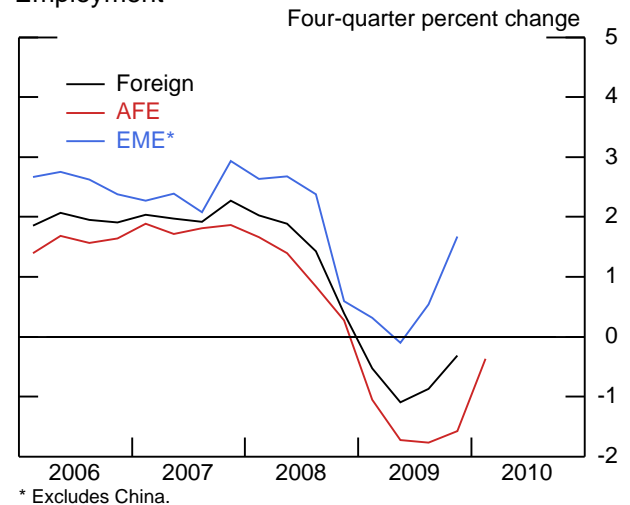
Industrial Production



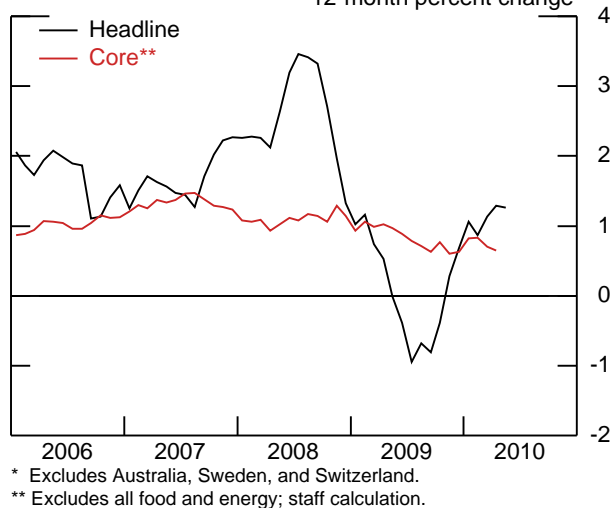
Retail Sales



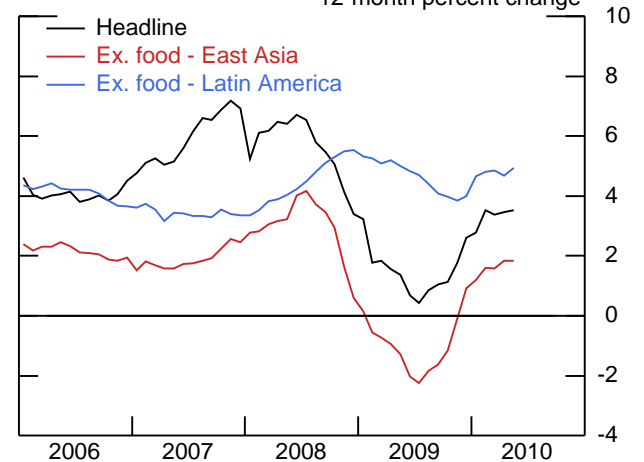
Employment



Consumer Prices - Advanced Foreign Economies\*



Consumer Prices - Emerging Market Economies



## ADVANCED FOREIGN ECONOMIES

We now estimate that real GDP in the advanced foreign economies (AFEs) grew 3½ percent in the first quarter, 1 percentage point higher than estimated in the last forecast, largely driven by upward surprises in Canadian private demand and Japanese exports. Monthly indicators point to still solid growth of over 3 percent in the second quarter. However, we project that growth will move down to 2¼ percent in the second half of this year and remain at that pace in 2011, as the fiscal crisis in Europe and attendant global financial spillovers weigh on these economies. Core inflation rates in the AFEs are projected to remain subdued, as substantial economic slack persists over the forecast period.

**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

## Euro Area

In spite of the ongoing stresses related to Greece, indicators of euro-area economic activity have come in fairly strong in recent months, and we estimate that real GDP growth in the second quarter picked up to nearly 2 percent. In April, industrial production expanded 0.8 percent, and German manufacturing orders rose almost 3 percent from the previous month. After reaching its highest level since August 2007, the composite PMI edged down in May but remained solidly in the range indicating expansion. Going forward, however, we expect that the financial stresses in Europe will finally show through to economic activity as consumer and business confidence decline, equity prices remain depressed, bank lending conditions tighten, and governments implement their fiscal consolidation plans. (We expect fiscal policy to subtract about ¼ percentage point from euro-area GDP growth in 2010 and a more substantial 1¼ percentage points in 2011.) In consequence, real GDP growth is projected to slow to

**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

## China

In China, economic activity remained robust in the second quarter. China's recovery has been broad based, with industrial production, fixed asset investment, exports, and domestic demand all posting sizable gains. In addition, with imports growing faster than exports, the trade surplus narrowed significantly in the first quarter, but an especially strong export reading in May points to a wider trade surplus in the current quarter.

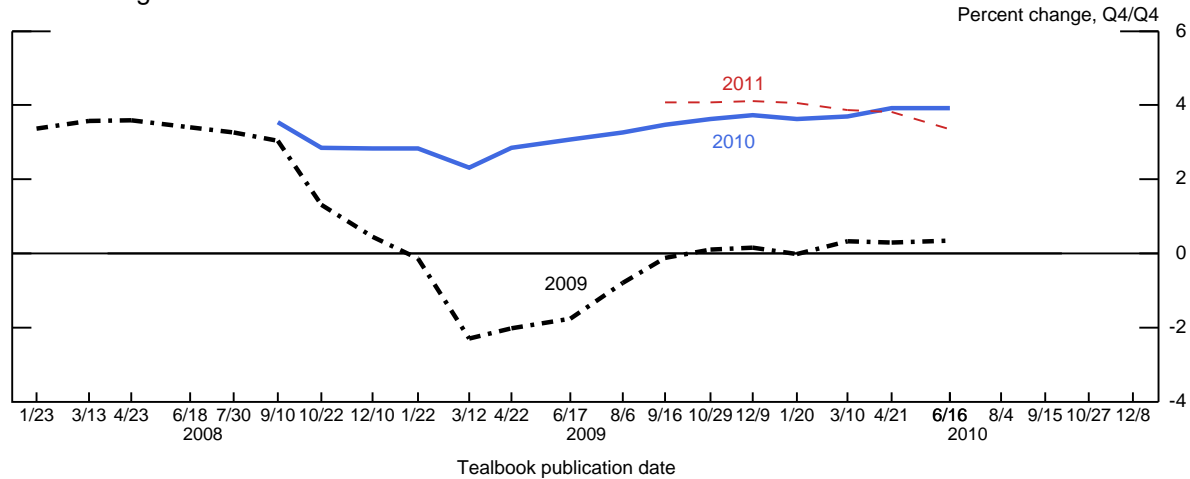
We expect Chinese real GDP growth to average around 9 percent through the remainder of the forecast period, down from the double-digit pace of the past four quarters, as fiscal stimulus wanes and monetary tightening continues, in part to address rising property prices. We have marked down Chinese growth only a touch, as Chinese authorities have the scope to reintroduce stimulus measures should activity slow more than is consistent with their objectives.

Chinese authorities raised banks' reserve requirement 50 basis points in May, bringing the cumulative increase for the year to 150 basis points. Concerns about global growth stemming from the European fiscal crisis may restrain the extent of policy tightening going forward. We continue to assume that the Chinese authorities will allow the renminbi to start appreciating against the U.S. dollar later this year. However, the unsettled global outlook, along with the recent appreciation of the renminbi on a trade-weighted basis as it has followed the dollar upward, have led us to scale back the projected pace of renminbi appreciation against the dollar this year.

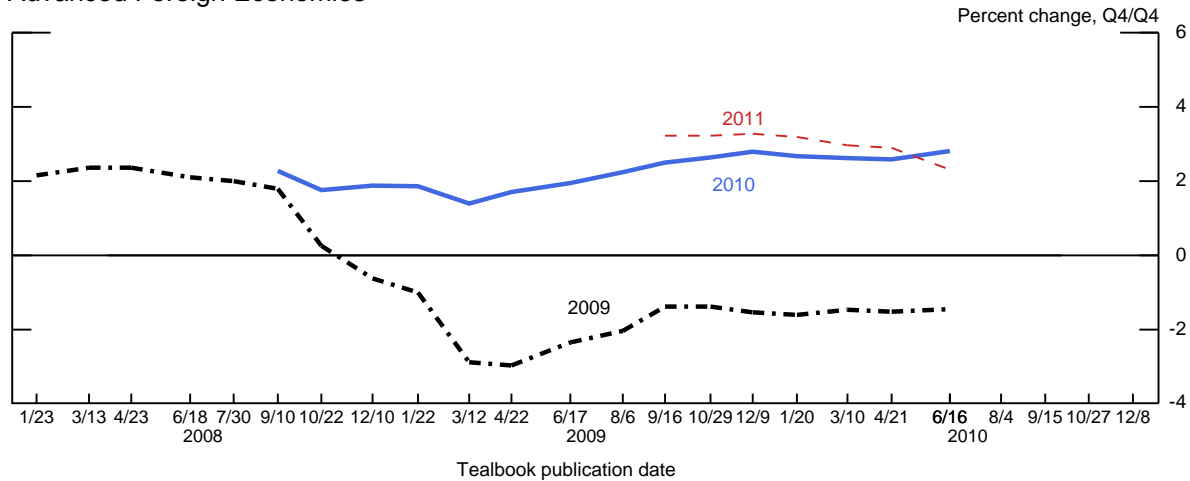
Inflation pressures in China appear to be waning as food prices have retreated, although there was an uptick in monthly inflation in May. Recent labor unrest at some

## Evolution of Staff Forecast for Foreign Real GDP

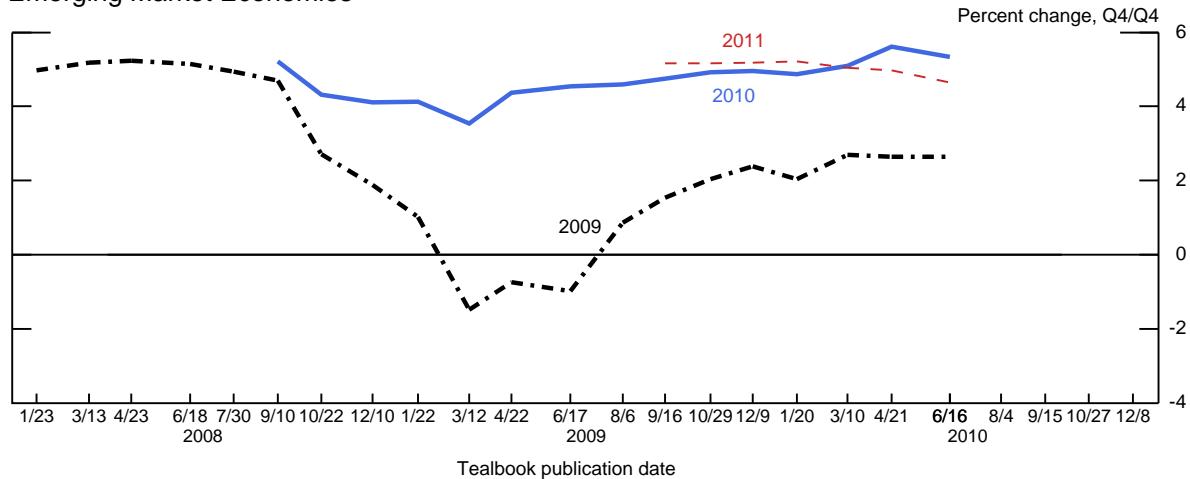
### Total Foreign



### Advanced Foreign Economies

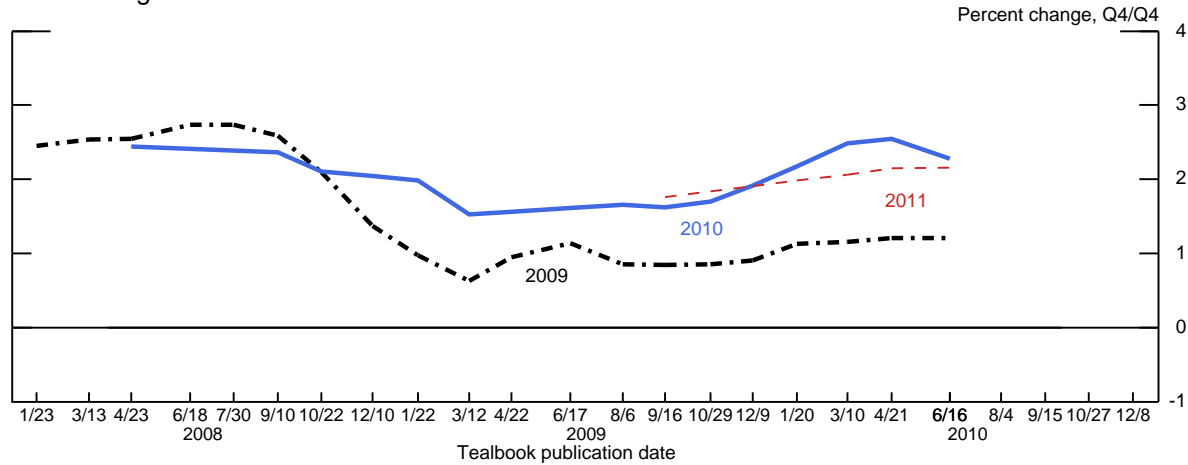


### Emerging Market Economies

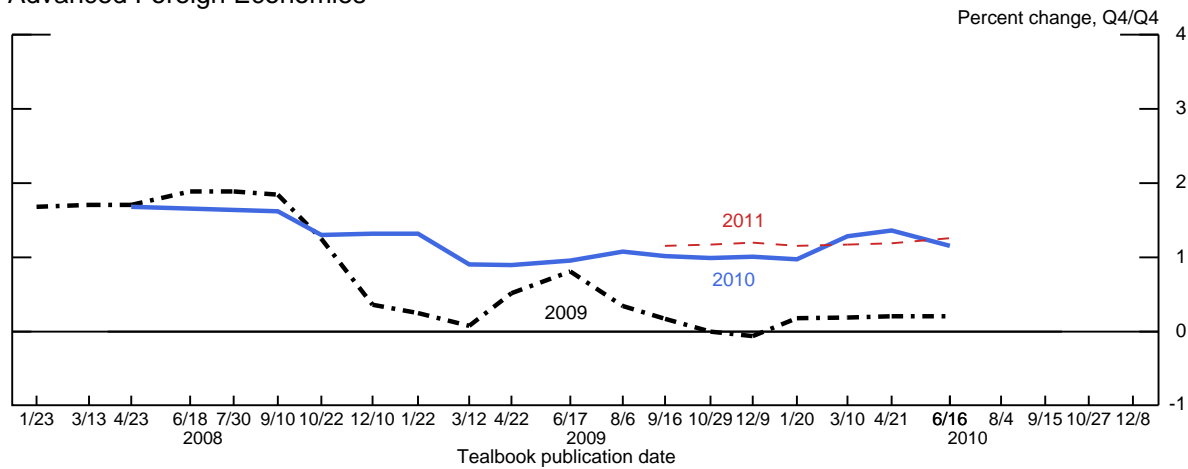


## Evolution of Staff Forecast for Foreign CPI Inflation

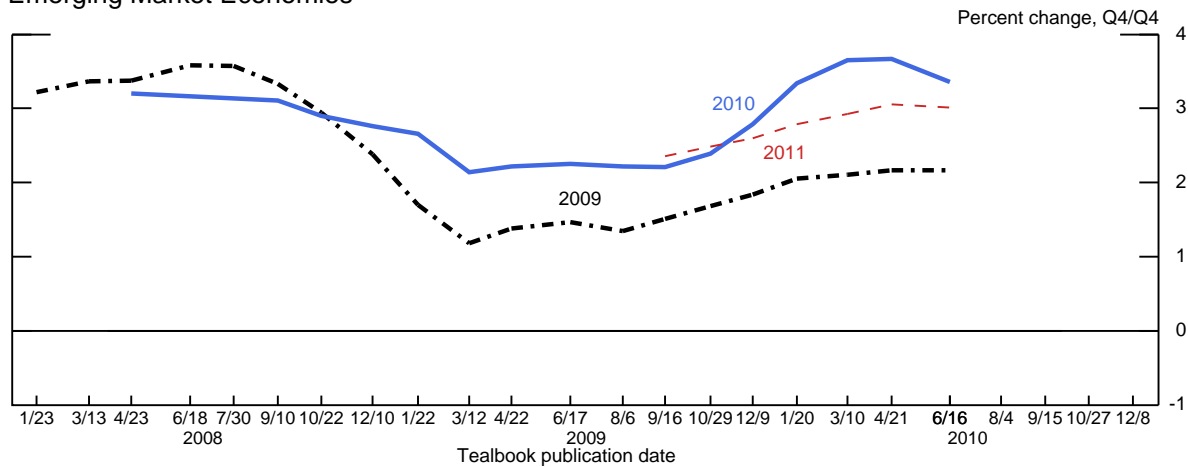
### Total Foreign



### Advanced Foreign Economies

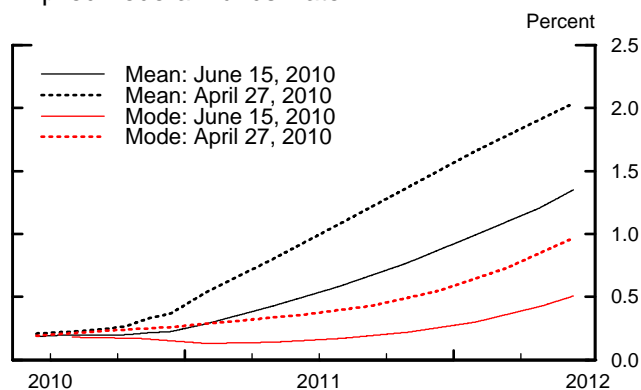


### Emerging Market Economies



## Policy Expectations and Treasury Yields

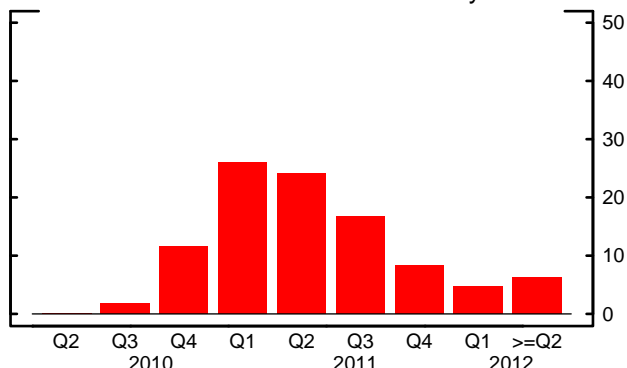
### Implied Federal Funds Rate



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

Source: Bloomberg and CME Group.

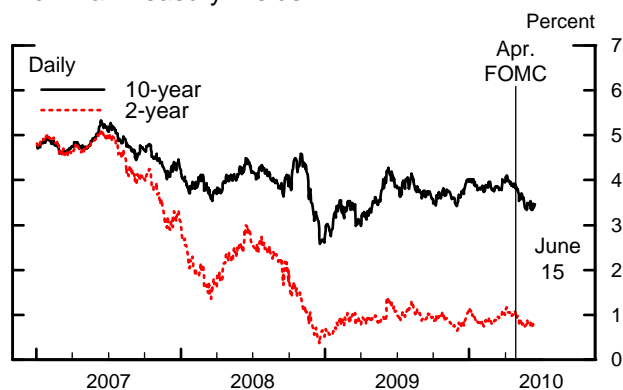
### Distribution of Expected Quarter of First Rate Increase from the Desk's Dealer Survey



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

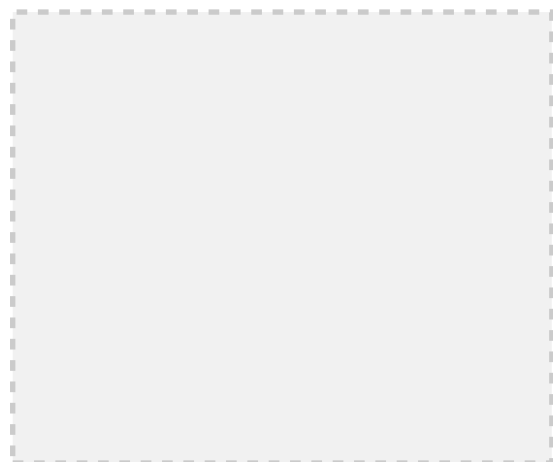
Source: Federal Reserve Bank of New York.

### Nominal Treasury Yields



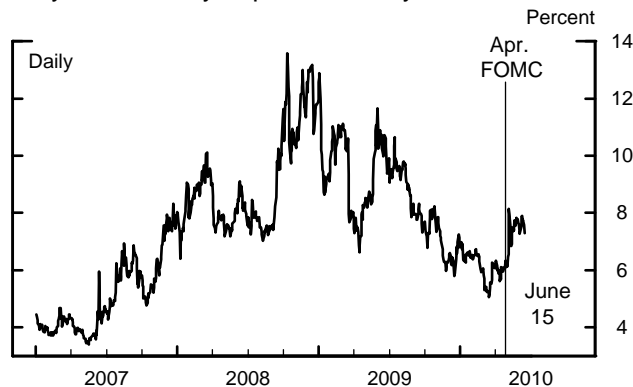
Note: Par yields from a smoothed nominal off-the-run Treasury yield curve.

Source: Staff estimates.



Content redacted.

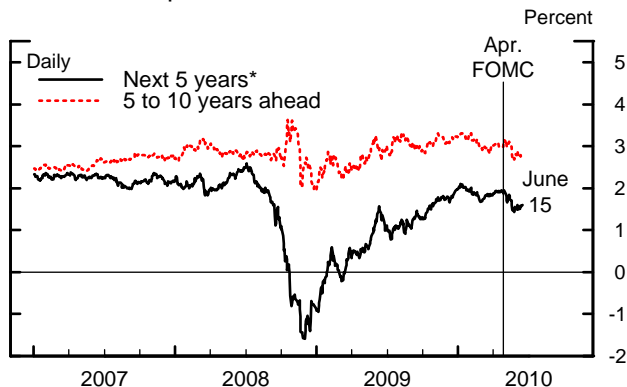
### 10-year Treasury Implied Volatility



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

Source: Bloomberg.

### Inflation Compensation



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

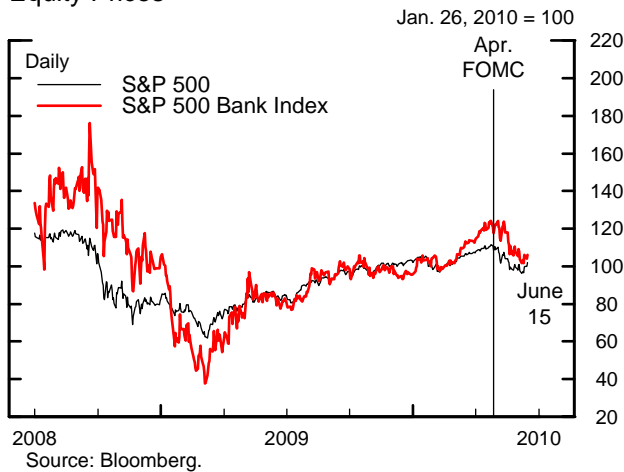
\*Adjusted for the indexation-lag (carry) effect.

Source: Barclays PLC and staff estimates.

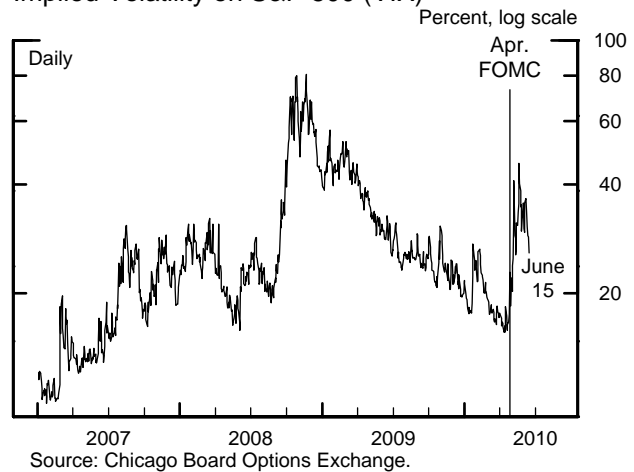


## Asset Market Developments

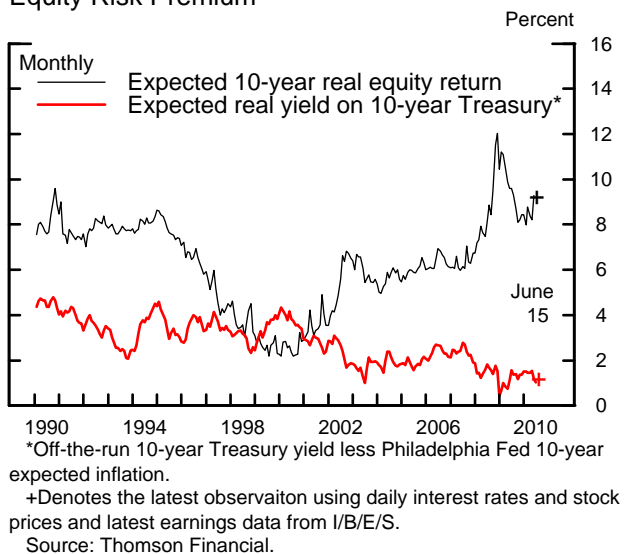
### Equity Prices



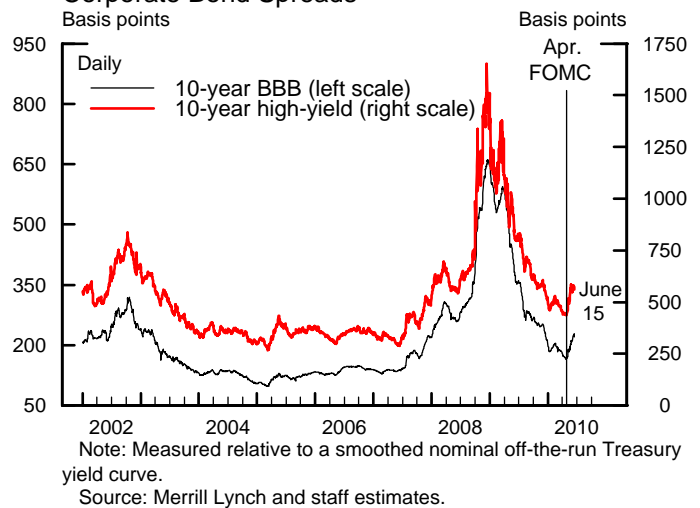
### Implied Volatility on S&P 500 (VIX)



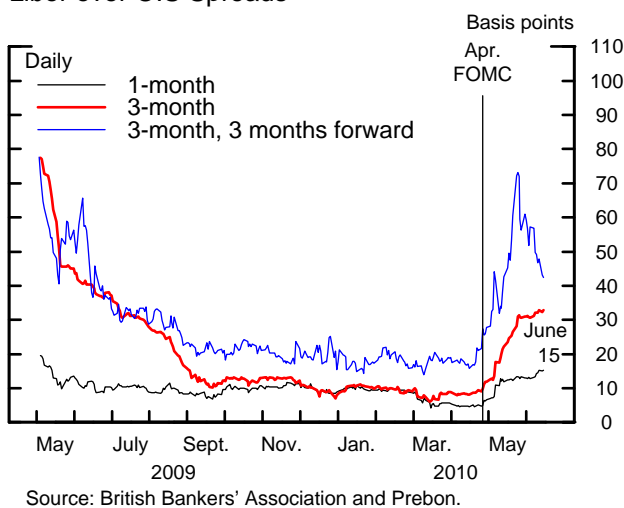
### Equity Risk Premium



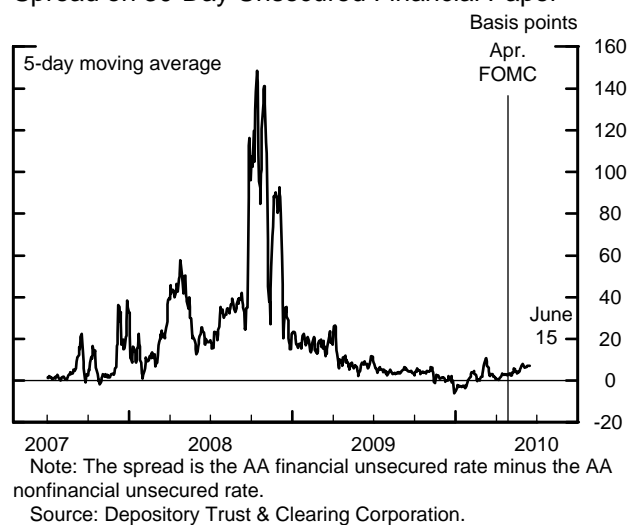
### Corporate Bond Spreads



### Libor over OIS Spreads

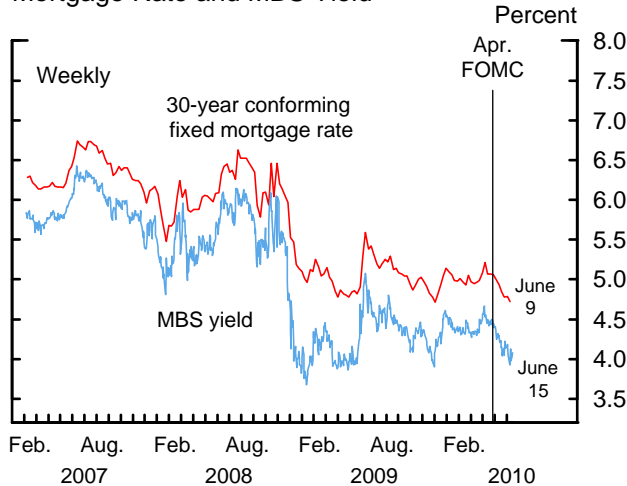


### Spread on 30-Day Unsecured Financial Paper



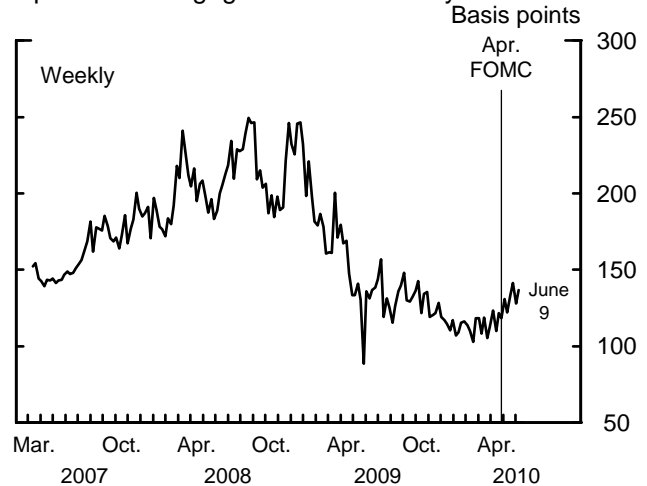
## Household Finance

Mortgage Rate and MBS Yield



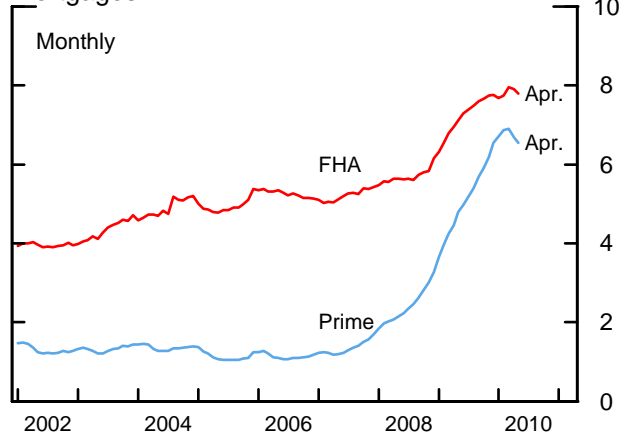
Note: For MBS yield, Fannie Mae 30-year current coupon rate.  
Source: For mortgage rate, Freddie Mac; for MBS yield, Bloomberg.

Spread of Mortgage Rate to Treasury Yield



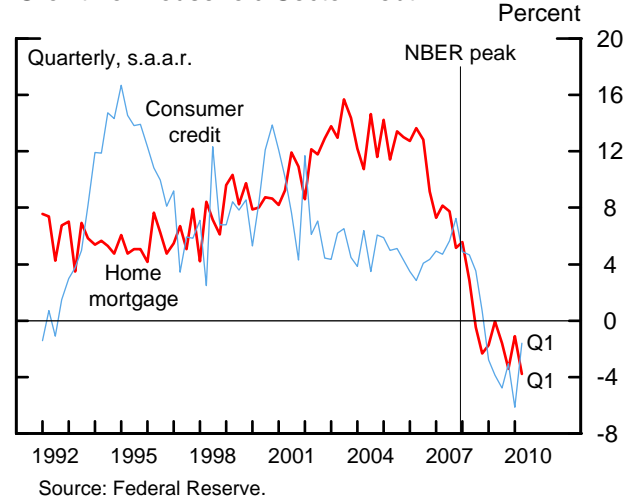
Note: Spread of 30-year conforming fixed mortgage rate relative to 10-year off-the-run Treasury yield.  
Source: Bloomberg; Freddie Mac.

Delinquencies on Prime and FHA-Backed Mortgages



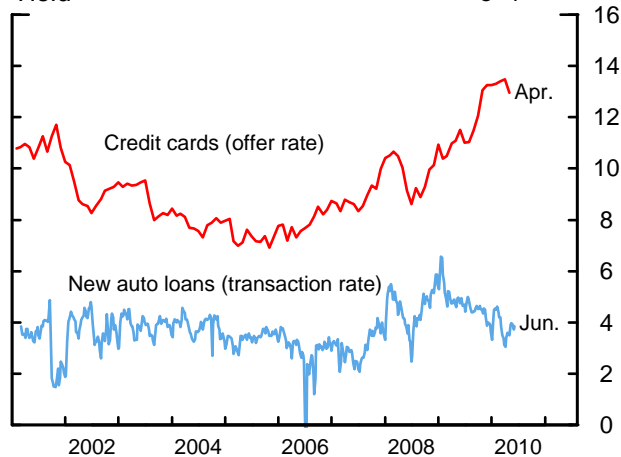
Note: Percent of loans 90 or more days past due or in foreclosure. Prime includes near-prime mortgages.  
Source: McDash.

Growth of Household Sector Debt



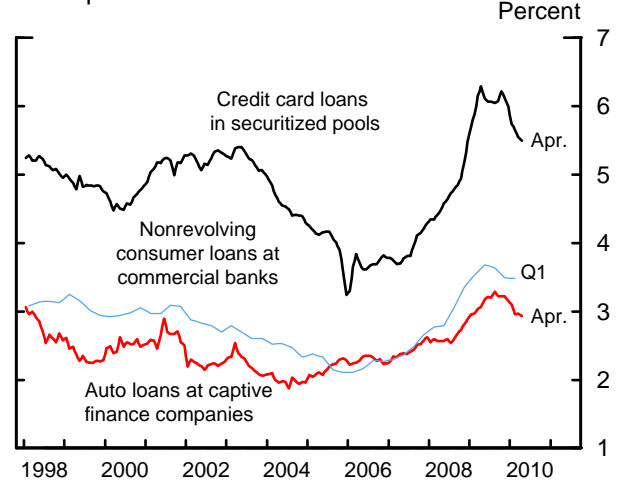
Source: Federal Reserve.

Spread of Consumer Interest Rates to Treasury Yield



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.

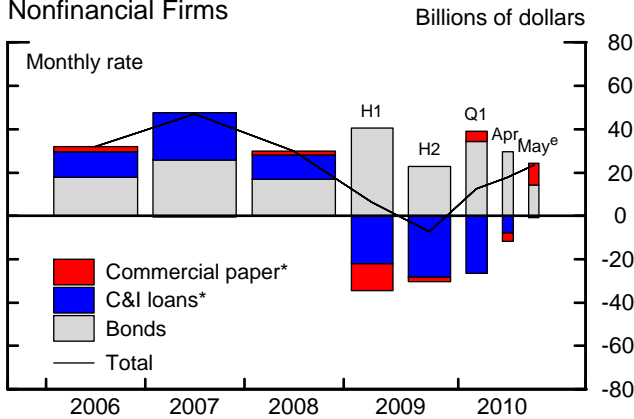
Delinquencies on Consumer Loans



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

## Business Finance

Selected Components of Net Debt Financing,  
Nonfinancial Firms

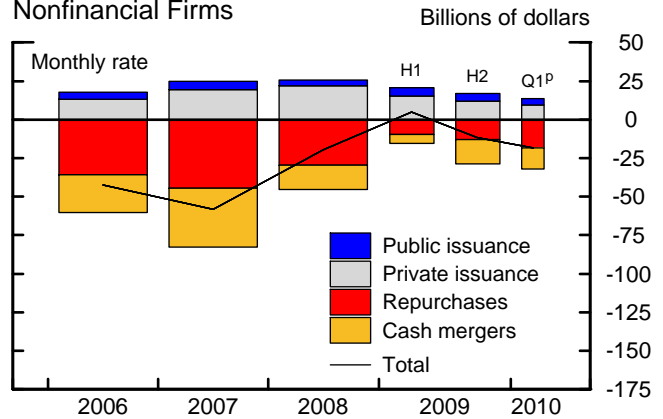


\* Seasonally adjusted, period-end basis.

<sup>e</sup> Estimate.

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

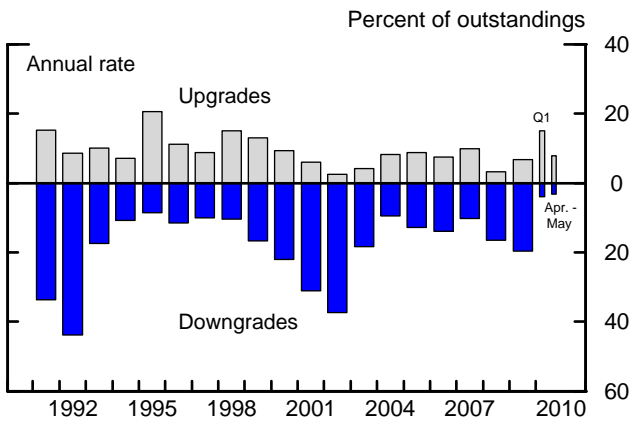
Selected Components of Net Equity Issuance,  
Nonfinancial Firms



<sup>p</sup> Preliminary.

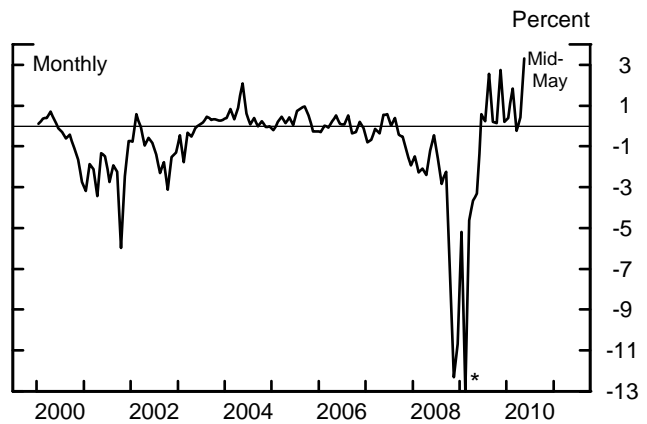
Source: Thomson Financial, Investment Benchmark Report; Money Tree Report by PricewaterhouseCoopers, National Venture Capital Association, and Venture Economics.

Bond Ratings Changes of Nonfinancial Firms



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

Revisions to Expected S&P 500 Earnings

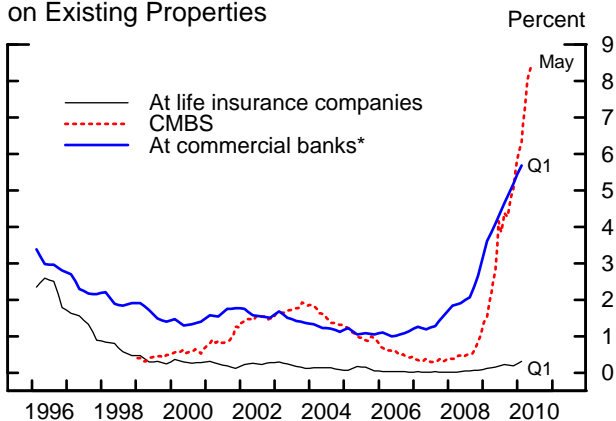


Note: Index is a weighted average of the percent change in the consensus forecasts of current-year and following-year earnings per share for a fixed sample.

\* Revision in Feb. 2009 was -17.2%.

Source: Thomson Financial.

Delinquency Rates on Commercial Mortgages  
on Existing Properties

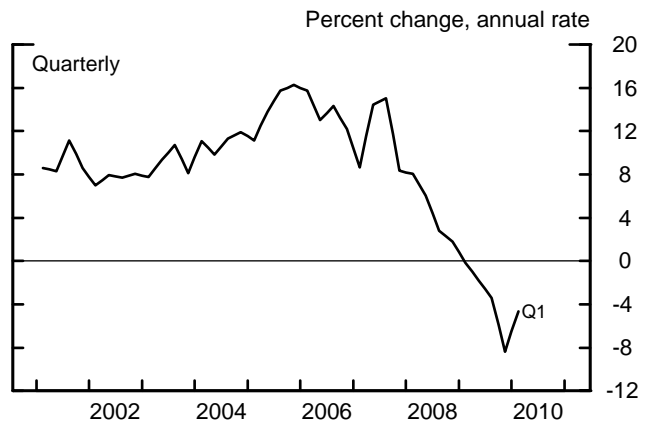


Note: CMBS are commercial mortgage-backed securities.

\* Excluding farmland.

Source: Citigroup; Call Report data; ACLI.

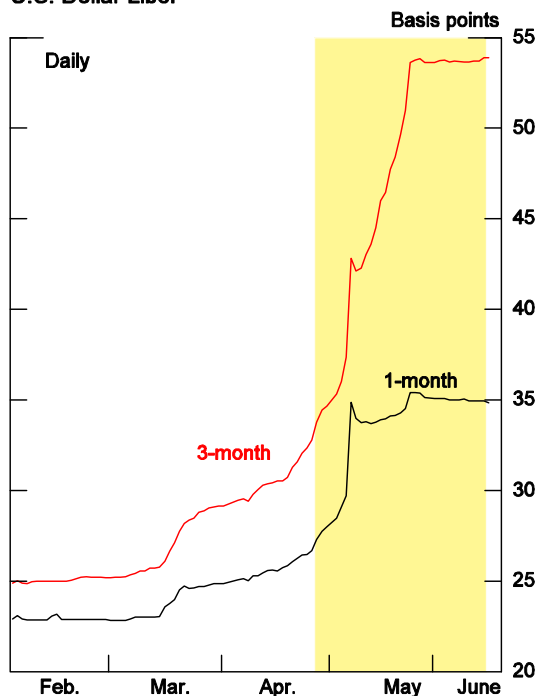
Commercial Mortgage Debt



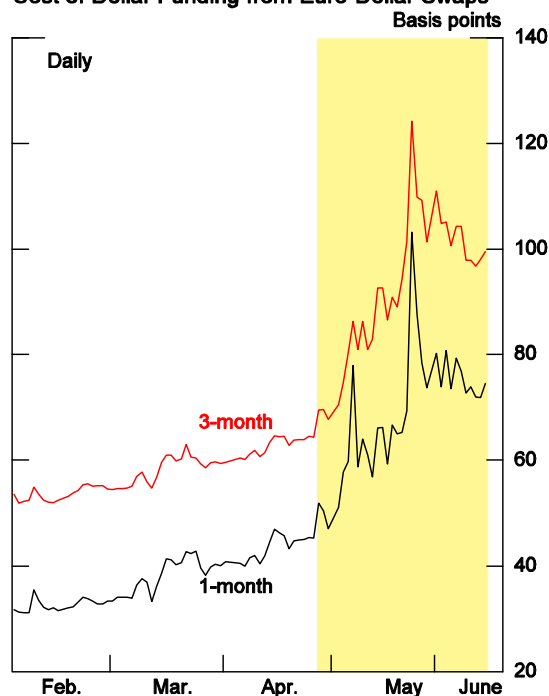
Source: Federal Reserve.

## U.S. Dollar Funding Pressures

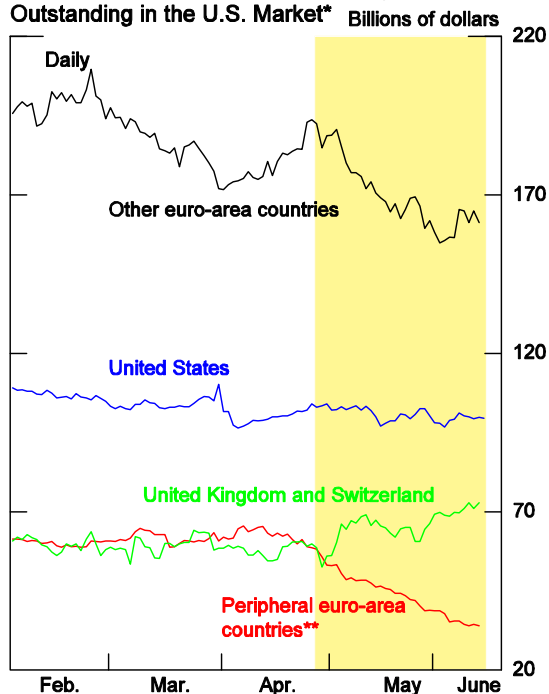
U.S. Dollar Libor



Cost of Dollar Funding from Euro-Dollar Swaps\*



Source: Bloomberg.  
Unsecured Financial Commercial Paper  
Outstanding in the U.S. Market\*



\*By nationality of issuer.  
\*\*Portugal, Ireland, Greece, Italy and Spain.  
Source: DTCC.

U.S. Dollar Liquidity Provided under Reestablished  
Swap Facilities

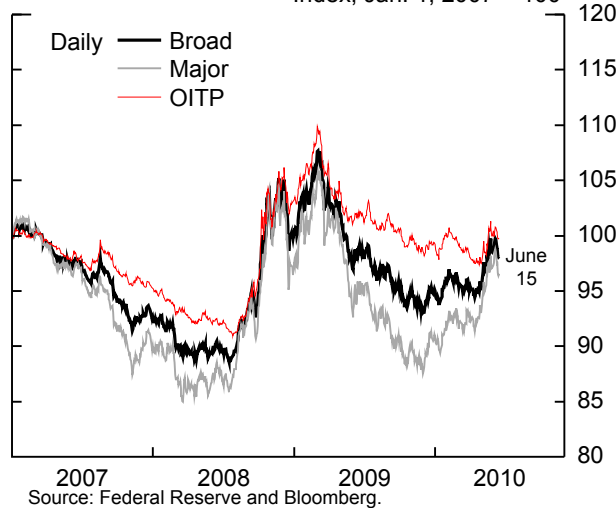
Central Bank	Date Liquidity Provided	Interest Rate (Percent)	Amount (\$ billions)
<b>One-Week Operations:</b>			
ECB	May 12	1.22	9.2
	May 20	1.22	0
	May 27	1.23	5.4
	June 3	1.21	0
	June 10	1.20	0
<b>Three-Month Operations:</b>			
ECB	May 20	1.24	1.0
BOJ	May 20	1.24	.2
<b>Memo:</b>			
Amount outstanding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

Source: ECB, BOJ.

## Foreign Developments

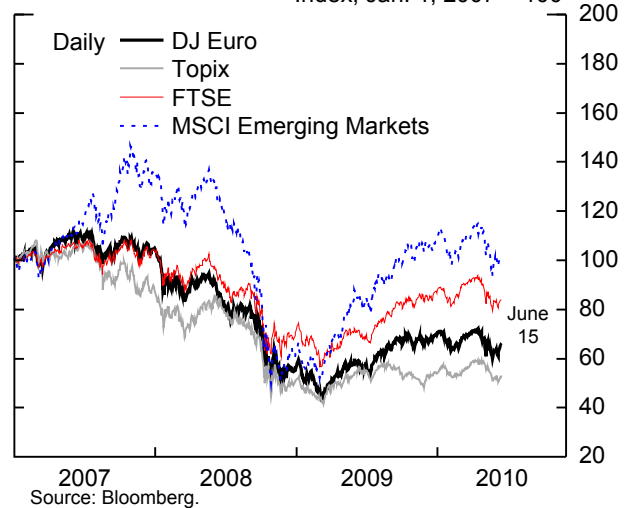
### Nominal Trade-Weighted Dollar Indexes

Index, Jan. 1, 2007 = 100



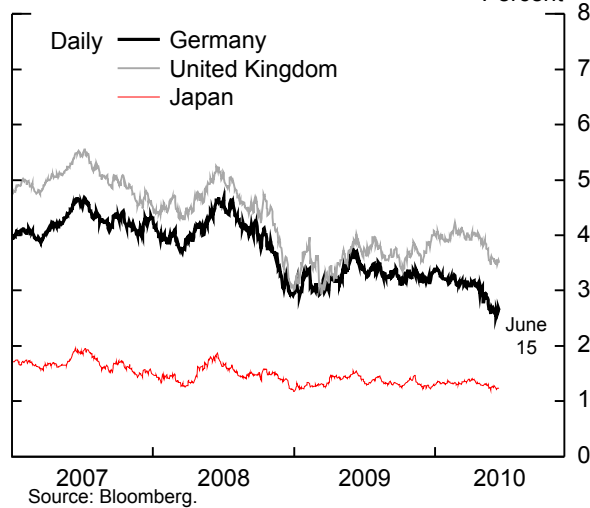
### Stock Price Indexes

Index, Jan. 1, 2007 = 100



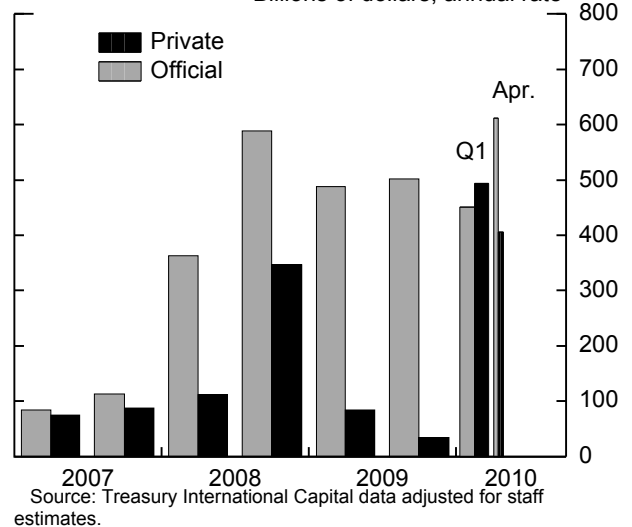
### Nominal 10-Year Government Bond Yields

Percent



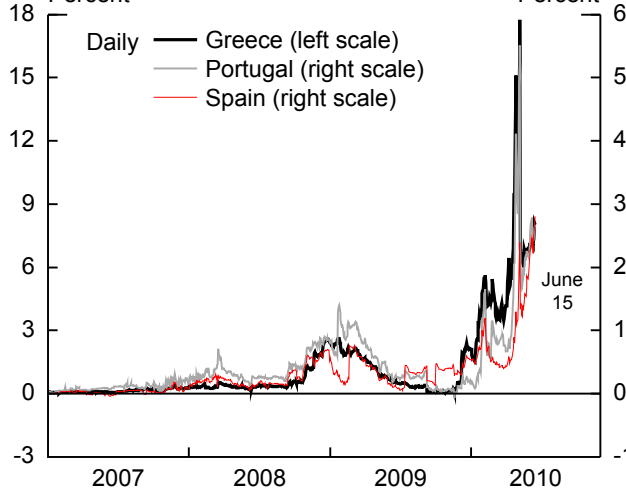
### Foreign Net Purchases of U.S. Treasury Securities

Billions of dollars, annual rate



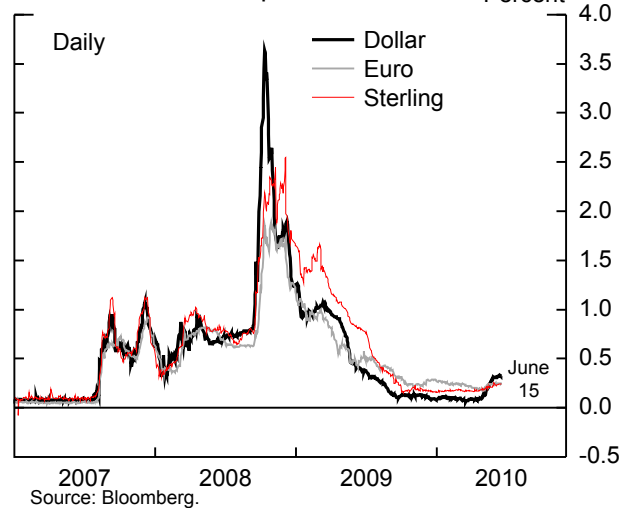
### Euro-Area 2-Year Government Bond Spreads\*

Percent



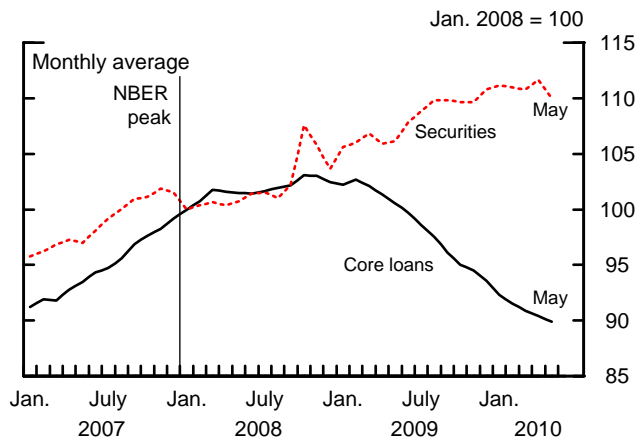
### 3-Month Libor-OIS Spreads

Percent



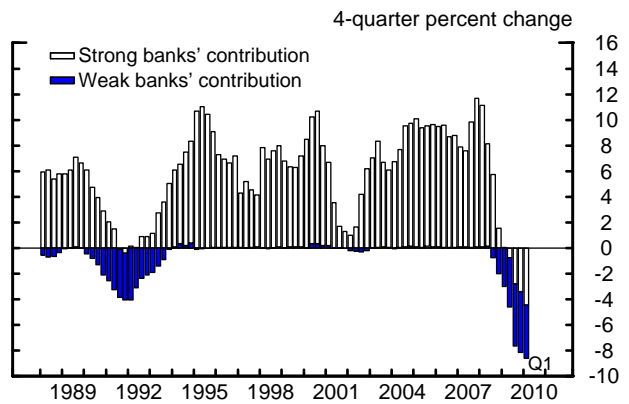
## Commercial Banking and Money

### Bank Credit



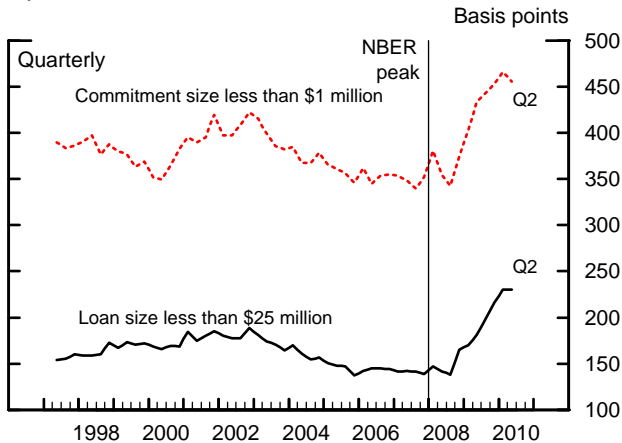
Note: The data have been adjusted to remove the effects of consolidations of assets under FAS 166 and FAS 167. Core loans consist of commercial and industrial, real estate, and consumer loans.  
Source: Federal Reserve.

### Growth in Loans at Domestic Banks



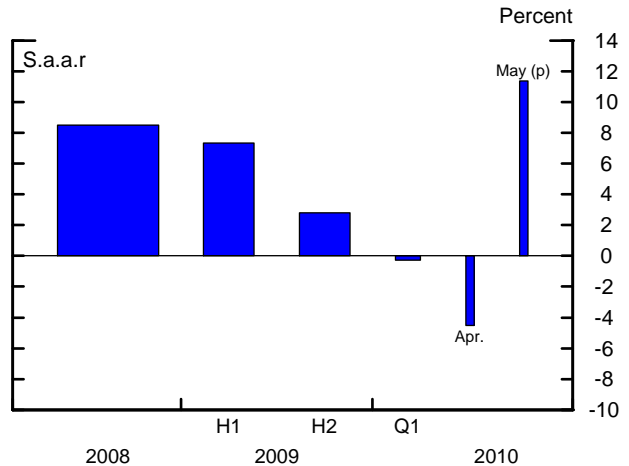
Note: Strong banks are banks that have CAMELS ratings of 1 or 2. Weak banks are banks that have CAMELS ratings of 3, 4, or 5.  
Source: For growth in loans, Call Report; for CAMELS ratings, FFIEC.

### Spread on C&I Loans



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.  
Source: Survey of Terms of Business Lending.

### Growth of M2



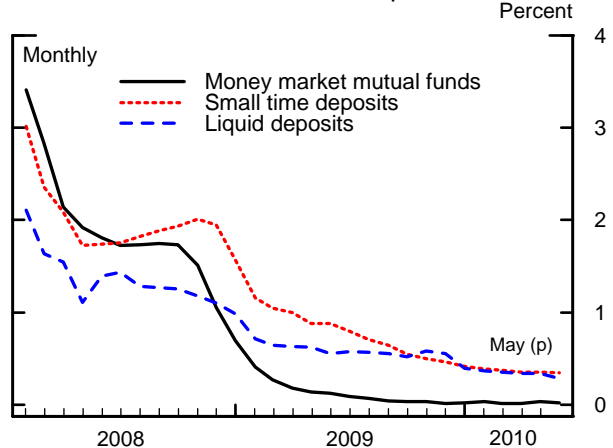
p Preliminary.  
Source: Federal Reserve.

### 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.  
Source: Federal Reserve.

### Interest Rates on Selected Components of M2

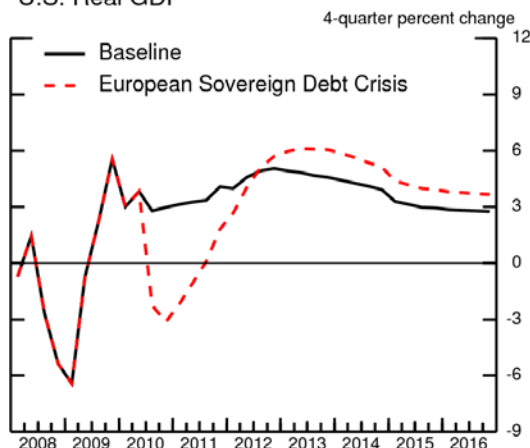


p Preliminary.  
Source: Federal Reserve; Call Report; Bank Rate Monitor.

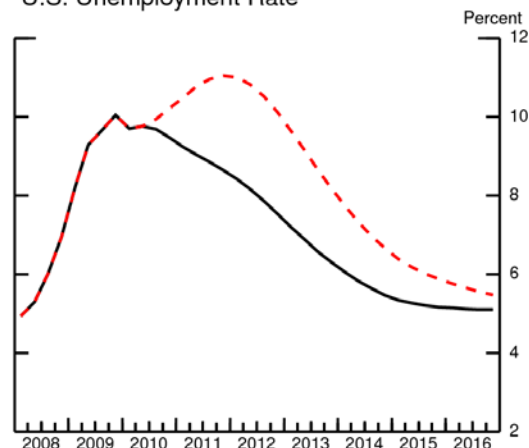
resource utilization, and the expectation of this greater slack, when coupled with the effects of dollar appreciation and lower import prices, temporarily leads to deflation. Beyond 2011, the U.S. economy recovers as the crisis abates and as the federal funds rate, following the prescriptions of a simple policy rule, remains at extremely low levels relative to baseline until the middle of the decade. This sluggish, accommodative policy response implies that output will be above its potential over the second half of the decade. As a result, near-term inflation expectations are temporarily elevated in the middle of the decade, pushing actual inflation above 2 percent for a time.

Outside of Europe and the United States, the consequences of a debt crisis would likely be less severe due to greater scope for monetary policy action. Thus, policy rates in the rest of the world are assumed to fall sharply on average for several years, making the decline in real output in those countries only half as great as it is in the United States. Much of this monetary buffering of real activity occurs through exchange rate effects—the currencies of these countries depreciate 10 percent against the dollar—that are partially at the expense of real activity in the United States and Europe.

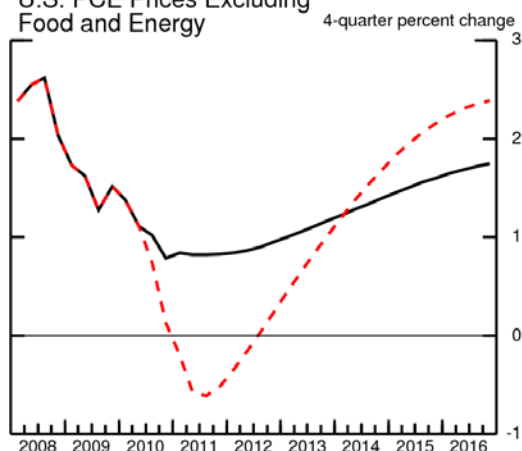
U.S. Real GDP



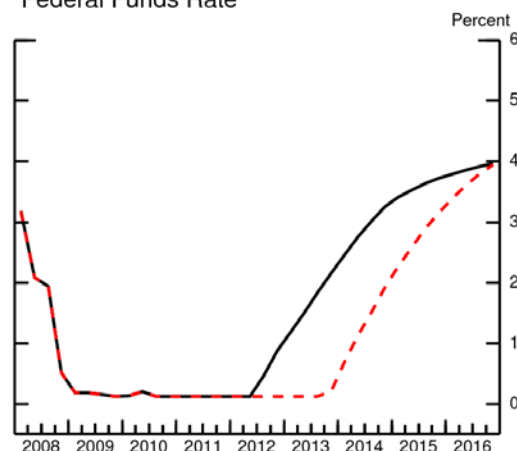
U.S. Unemployment Rate



U.S. PCE Prices Excluding Food and Energy



Federal Funds Rate



**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.

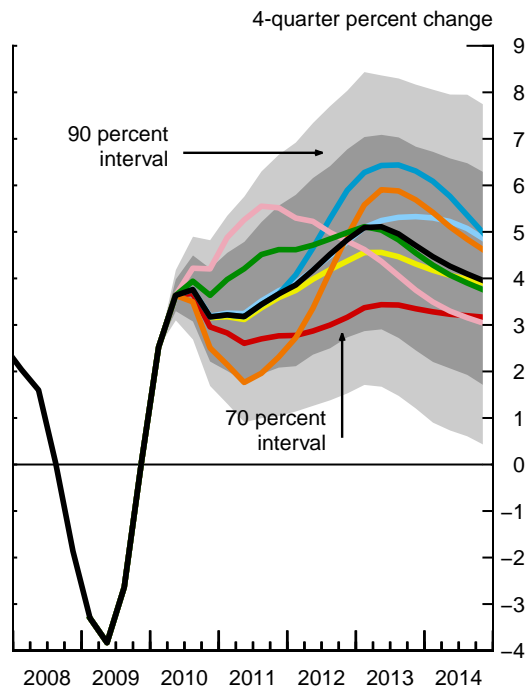


## Forecast Confidence Intervals and Alternative Scenarios

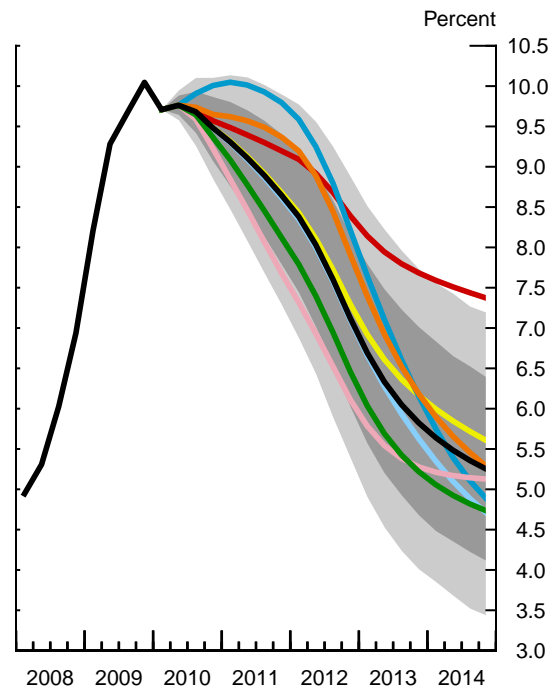
Confidence Intervals Based on FRB/US Stochastic Simulations

- |                            |                    |                      |
|----------------------------|--------------------|----------------------|
| Extended Tealbook baseline | Weaker consumption | Greater disinflation |
| Normalization in Europe    | Jobless recovery   | Higher inflation     |
| Stronger recovery          | Lower potential    |                      |

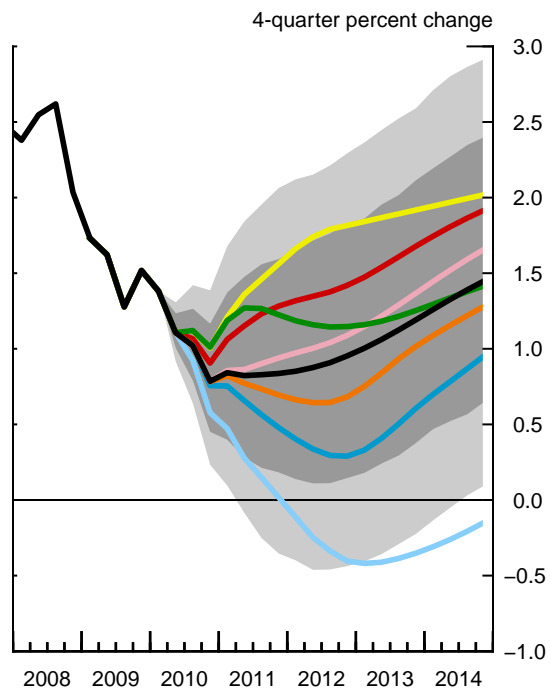
Real GDP



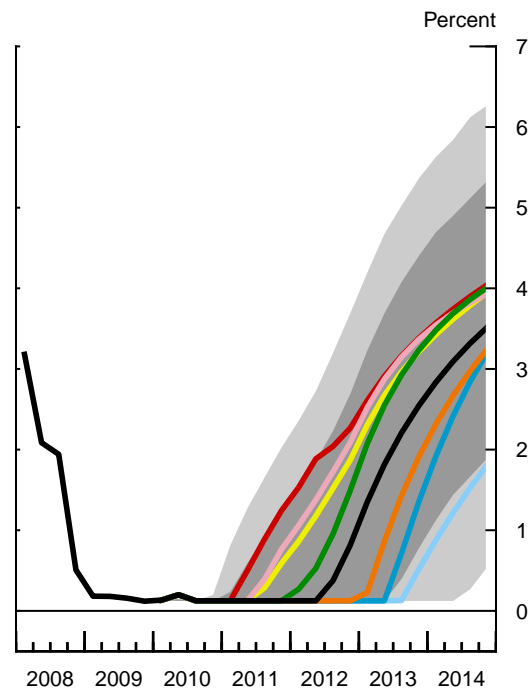
Unemployment Rate



PCE Prices excluding Food and Energy



Federal Funds Rate



**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</i> (percent change, Q4 to Q4)					
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</i> (percent, Q4)					
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</i> (percent change, Q4 to Q4)					
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</i> (percent change, Q4 to Q4)					
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</i> (percent, Q4)					
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

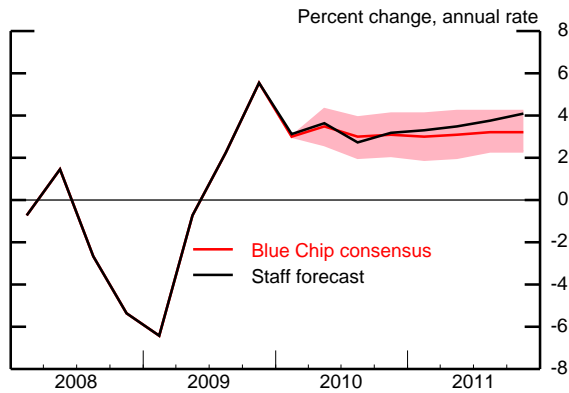
Note: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969-2009 set of model equation residuals.

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

... Not applicable. The Tealbook forecast horizon has typically extended about two years.

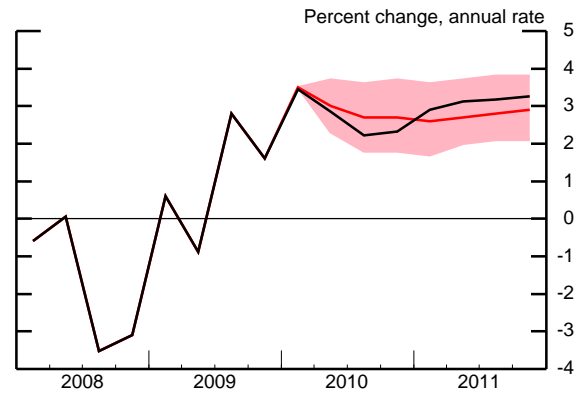
## Tealbook Forecast Compared with Blue Chip (Blue Chip survey released June 10, 2010)

Real GDP

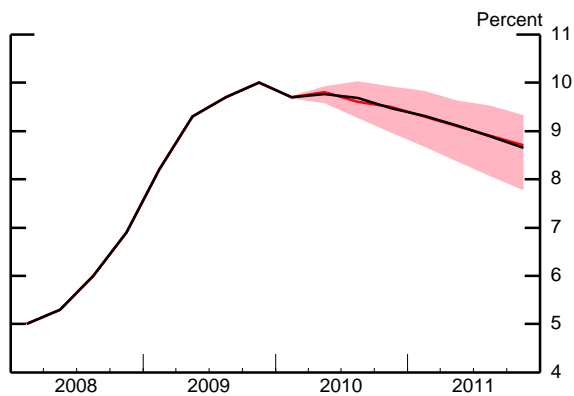


Note: The shaded area represents the area between the Blue Chip top ten and bottom ten averages.

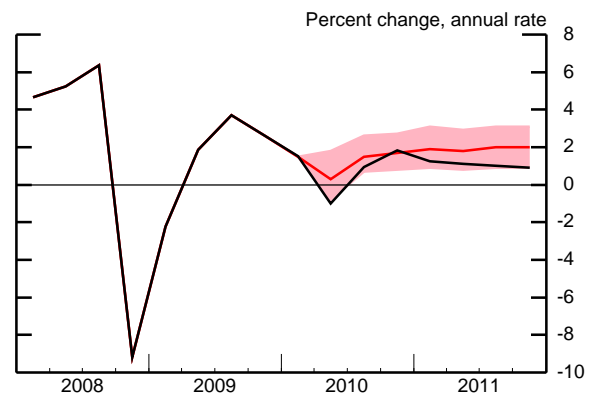
Real PCE



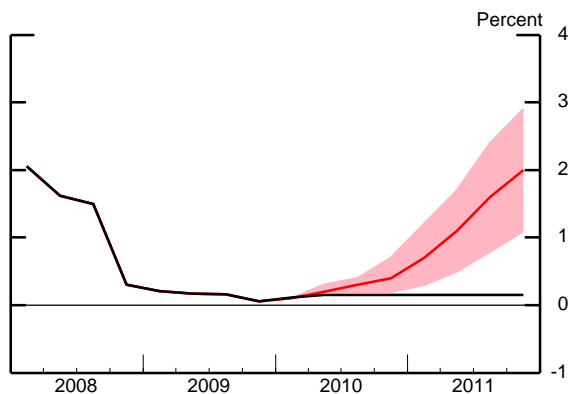
Unemployment Rate



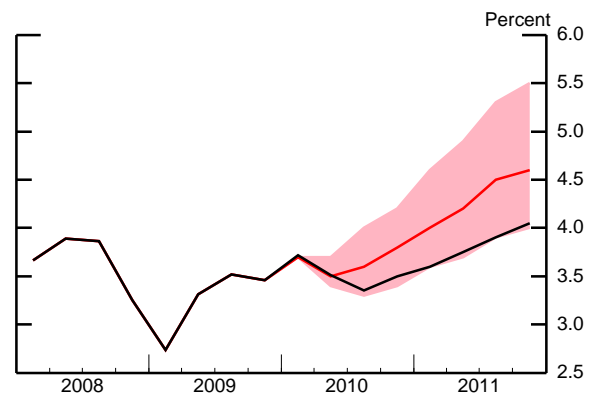
Consumer Price Index



Treasury Bill Rate



10-Year Treasury Yield



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.

**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.

2. Percent change from two quarters earlier; for unemployment rate, change is in percentage points.

3. Percent change from four quarters earlier; for unemployment rate, change is in percentage points.

**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 <i>Previous Tealbook</i>	-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
Final sales <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
Priv. dom. final purch. <i>Previous Tealbook</i>	-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
	-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
	-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
	-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. <i>Previous Tealbook</i>	.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
Durables	.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
Nondurables	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
Services	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
	-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 <i>Previous Tealbook</i>	-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
	-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. <i>Previous Tealbook</i>	-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
Equipment & software <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
	-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
	-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 <i>Previous Tealbook</i>	-43.6	-17.3	-18.4	-18.0	-15.2	-8	-2.2	-2	-1	-2	-3	-2	-25.3	-4.8	-2
	-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> <i>Previous Tealbook</i> <sup>2</sup>	-386	-330	-357	-348	-374	-380	-390	-387	-393	-399	-409	-407	-356	-383	-402
Exports	-386	-330	-357	-348	-352	-348	-356	-355	-356	-353	-357	-353	-356	-353	-355
Imports	-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
	-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. <i>Previous Tealbook</i>	-2.6	6.7	2.6	-1.3	-1.9	2.4	2.1	.6	.7	.9	.9	.9	1.3	.8	.9
Federal	-2.6	6.7	2.6	-1.3	-2.2	3.0	1.9	.7	.7	.8	.8	.7	1.3	.8	.7
Defense	-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
Nondefense	-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
State & local	-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
	-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> <i>Previous Tealbook</i> <sup>2</sup>	-114	-160	-139	-20	41	31	48	54	61	65	81	94	-108	43	75
Nonfarm <sup>2</sup> Farm <sup>2</sup>	-114	-160	-139	-20	2	-4	22	37	50	55	74	82	-108	14	65
	-115	-163	-141	-14	44	30	45	51	58	62	78	91	-108	43	72
	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.

2. Billions of chained (2005) dollars.

**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
<b>Real GDP</b> <i>Previous Tealbook</i>	3.8 3.8	3.1 3.1	2.7 2.7	2.4 2.4	2.5 2.5	-1.9 -1.9	.1 .1	3.2 3.5	3.7 4.4
<b>Final sales</b> <i>Previous Tealbook</i>	3.8	2.8	2.7	2.8	2.7	-1.4	-1	2.6	3.4
Priv. dom. final purch. <i>Previous Tealbook</i>	3.8 4.2 4.2	2.8 4.2 4.2	2.7 3.1 3.1	2.8 2.5 2.5	2.7 1.4 1.4	-1.4 -3.2 -3.2	-1 -1.5 -1.5	3.0 3.3 3.5	4.1 4.1 4.8
Personal cons. expend. <i>Previous Tealbook</i>	3.4 3.4	3.5 3.5	2.7 2.7	3.3 3.3	2.0 2.0	-1.8 -1.8	1.0 1.0	2.7 2.8	3.1 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 <i>Previous Tealbook</i>	11.5 11.5	6.6 6.6	5.3 5.3	-15.7 -15.7	-20.5 -20.5	-21.0 -21.0	-12.5 -12.5	3.9 2.3	17.1 19.8
Business fixed invest. <i>Previous Tealbook</i>	5.9 5.9	7.0 7.0	4.4 4.4	7.8 7.8	7.9 7.9	-6.0 -6.0	-14.1 -14.1	8.0 9.5	7.7 9.7
Equipment & software <i>Previous Tealbook</i>	7.5 7.5	8.8 8.8	6.1 6.1	6.0 6.0	3.2 3.2	-10.7 -10.7	-7.5 -7.5	14.0 15.2	10.8 13.2
Nonres. structures <i>Previous Tealbook</i>	1.3 1.3	1.7 1.7	-1 -1	13.0 13.0	18.9 18.9	3.2 3.2	-25.3 -25.3	-4.8 -2.5	-2 1.1
Net exports <sup>1</sup> <i>Previous Tealbook</i> <sup>1</sup>	-604 -604	-688 -688	-723 -723	-729 -729	-648 -648	-494 -494	-356 -356	-383 -353	-402 -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. <i>Previous Tealbook</i>	1.6 1.6	.6 .6	.7 .7	1.5 1.5	2.5 2.5	3.0 3.0	1.3 1.3	.8 .8	.9 .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> <i>Previous Tealbook</i> <sup>1</sup>	17 17	66 66	50 50	59 59	19 19	-26 -26	-108 -108	43 14	75 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.

**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 <i>Previous Tealbook</i>	-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
Final sales <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
Priv. dom. final purch. <i>Previous Tealbook</i>	-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
Personal cons. expend. <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
Durables	-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
Nondurables	-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
Services	.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
Residential investment <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
Business fixed invest. <i>Previous Tealbook</i>	.3	-4	1.4	.0	.8	1.1	.5	.5	.6	.8	.8	.9	.3	.7	.8
Equipment & software <i>Previous Tealbook</i>	.3	-3	.2	.6	.6	.3	.3	.3	.5	.5	.5	.5	.2	.4	.5
Nonres. structures <i>Previous Tealbook</i>	-.1	.1	.4	.5	1.0	.7	.8	.8	.9	.9	.9	.9	.2	.8	.9
Residential investment <i>Previous Tealbook</i>	-1.3	-7	.4	.1	-.3	.4	-.1	.4	.4	.4	.4	.5	-.4	.1	.4
Business fixed invest. <i>Previous Tealbook</i>	-1.3	-7	.4	.1	-.4	.5	-.1	.2	.3	.5	.6	.6	-.4	.1	.5
Equipment & software <i>Previous Tealbook</i>	-5.3	-1.0	-.6	.5	.3	1.2	.6	.8	.7	.8	.8	.7	-1.6	.7	.7
Nonres. structures <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
Net exports <i>Previous Tealbook</i>	-3.0	-3	.1	1.1	.8	1.2	.7	.8	.7	.8	.8	.7	-.5	.9	.7
Exports	-3.0	-3	.1	1.1	1.0	1.0	.8	1.0	1.0	.9	.9	.9	-.5	1.0	.9
Imports	-2.3	-7	-.7	-.6	-.5	.0	-.1	.0	.0	.0	.0	.0	-1.1	-.1	.0
Gov't. cons. & invest. <i>Previous Tealbook</i>	-2.3	-7	-.7	-.6	-.3	.0	.0	.0	.1	.0	.0	.0	-1.1	-.1	.0
Federal	2.6	1.7	-.8	.3	-.9	-.2	-.3	.1	-.2	-.2	-.3	.1	1.0	-.3	-.2
Defense	2.6	1.7	-.8	.3	-.2	.1	-.3	.0	-.1	.1	-.2	.1	1.0	-.1	.0
Nondefense	-4.0	-5	1.8	2.4	1.3	1.0	.9	.9	.9	.9	.9	.9	-.1	1.0	.9
State & local	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
Change in bus. inventories <i>Previous Tealbook</i>	-.5	1.3	.6	-.3	-.4	.5	.4	.1	.2	.2	.2	.2	.3	.2	.2
Nonfarm	-.5	1.3	.6	-.3	-.4	.6	.4	.1	.1	.2	.2	.2	.3	.2	.1
Farm	-.3	.9	.6	.0	.1	.6	.4	.1	.1	.1	.1	.1	.3	.3	.1
State & local	-.3	.7	.5	-.2	.1	.3	.4	.1	.0	.0	.0	.0	.2	.2	.0
Change in bus. inventories <i>Previous Tealbook</i>	-1.1	.2	.2	.2	.0	.2	.0	.0	.1	.1	.1	.1	.1	.1	.1
Nonfarm	-2	.5	-.1	-.3	-.5	-.1	.0	.1	.1	.1	.1	.1	.0	-.1	.1
Farm	-2.4	-1.4	.7	3.8	1.9	-.3	.6	.2	.2	.1	.5	.4	.1	.6	.3
Nonfarm	-2.4	-1.4	.7	3.8	.7	-.2	.8	.5	.4	.2	.6	.3	.1	.5	.3
Farm	-2.4	-1.5	.7	4.0	1.8	-.5	.5	.2	.2	.1	.5	.4	.2	.5	.3
	.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.

**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 <i>Previous Tealbook</i>	1.9	.0	.4	.5	1.0	1.1	.6	1.0	.9	.8	.8	.7	.7	1.0	.8
PCE chain-wt. price index <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
Energy <i>Previous Tealbook</i>	-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
Food <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
Ex. food & energy <i>Previous Tealbook</i>	-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
CPI <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
Ex. food & energy <i>Previous Tealbook</i>	-1.1	-3.6	-2.1	-1.1	1.9	1.9	1.3	1.1	.7	.7	.7	.7	-1.7	1.5	.7
CPI <i>Previous Tealbook</i>	-1.1	-3.6	-2.1	-1.1	1.9	2.0	1.7	1.1	.7	.7	.7	.7	-1.7	1.7	.7
Ex. food & energy <i>Previous Tealbook</i>	1.1	2.0	1.2	1.8	.6	.9	.8	.8	.8	.8	.8	.8	1.5	.8	.8
CPI <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
Ex. food & energy <i>Previous Tealbook</i>	-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
ECI, hourly compensation <sup>2</sup> <i>Previous Tealbook</i> <sup>2</sup>	-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
Nonfarm business sector Output per hour <i>Previous Tealbook</i>	1.6	2.3	1.5	1.5	.0	.6	.7	.7	.8	.8	.8	.8	1.7	.5	.8
Compensation per hour <i>Previous Tealbook</i>	1.6	2.3	1.5	1.5	.0	.6	.9	.9	.9	.9	.9	.9	1.7	.6	.9
Unit labor costs <i>Previous Tealbook</i>	.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
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Tealbook</i> <sup>3</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 <i>Previous Tealbook</i>	.9	7.6	7.8	6.3	2.9	.1	.7	.9	.7	.7	1.0	1.0	5.6	1.2	.9
Compensation per hour <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
Unit labor costs <i>Previous Tealbook</i>	-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
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Tealbook</i> <sup>3</sup>	-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 <i>Previous Tealbook</i>	-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
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Tealbook</i> <sup>3</sup>	-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>3</sup> <i>Previous Tealbook</i> <sup>3</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
Core goods imports chain-wt. price index <sup>3</sup> <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.

2. Private-industry workers.

3. Core goods imports exclude computers, semiconductors, oil, and natural gas.



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

1. Private-industry workers.

2. Core goods imports exclude computers, semiconductors, oil and natural gas.

## Other Macroeconomic Indicators

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			
<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<sup>3</sup></i>	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<sup>3</sup></i>	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<sup>4</sup></i>	-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
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<sup>5</sup></i>	-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<sup>5</sup></i>	-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<sup>3</sup></i>	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
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<sup>5</sup></i>	.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<sup>3</sup></i>	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
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
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
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.

2. Change, millions.

3. Percent, annual values are for the fourth quarter of the year indicated.

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.

5. Percent change, annual rate.

6. Level, millions, annual values are annual averages.

7. Percent change, annual rate, with inventory valuation and capital consumption adjustments.

8. Billions of dollars, annual values are annual averages.

**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>									
Nonfarm payroll employment <sup>1</sup>	-1	2.0	2.4	2.1	1.2	-2.8	-5.4	1.6	3.4
Unemployment rate <sup>2</sup>	5.8	5.4	5.0	4.5	4.8	6.9	10.0	9.5	8.6
<i>Previous Tealbook<sup>2</sup></i>	5.8	5.4	5.0	4.5	4.8	6.9	10.0	9.3	8.2
NAIRU <sup>2</sup>	4.9	4.9	4.8	4.8	4.8	4.9	5.2	5.2	5.2
<i>Previous Tealbook<sup>2</sup></i>	4.9	4.9	4.8	4.8	4.8	4.9	5.2	5.2	5.2
GDP gap <sup>3</sup>	-1.6	-8	-4	-4	-4	-4.8	-7.3	-6.5	-5.4
<i>Previous Tealbook<sup>3</sup></i>	-1.7	-8	-4	-4	-4	-4.9	-7.3	-6.3	-4.5
Industrial production <sup>4</sup>	1.6	3.0	2.6	1.8	1.8	-6.7	-4.7	6.4	4.8
<i>Previous Tealbook<sup>4</sup></i>	1.6	3.0	2.6	1.8	1.8	-6.7	-4.7	5.9	5.7
Manufacturing industr. prod. <sup>4</sup>	1.8	3.6	3.8	1.2	1.9	-8.7	-5.0	7.1	5.3
<i>Previous Tealbook<sup>4</sup></i>	1.8	3.6	3.8	1.2	1.9	-8.7	-5.0	6.1	6.6
Capacity utilization rate - mfg. <sup>2</sup>	74.6	77.3	79.2	79.0	78.7	70.9	68.2	73.7	77.6
<i>Previous Tealbook<sup>2</sup></i>	74.6	77.3	79.2	79.0	78.7	70.9	68.2	73.1	77.8
Housing starts <sup>5</sup>	1.8	2.0	2.1	1.8	1.4	.9	.6	.7	1.0
Light motor vehicle sales <sup>5</sup>	16.6	16.8	16.9	16.5	16.1	13.1	10.3	11.7	13.6
<i>Income and saving</i>									
Nominal GDP <sup>4</sup>	6.0	6.4	6.3	5.4	5.3	.1	.7	4.2	4.5
Real disposable pers. income <sup>4</sup>	3.9	3.5	.6	4.6	1.0	.3	.7	2.7	3.3
<i>Previous Tealbook<sup>4</sup></i>	3.9	3.5	.6	4.6	1.0	.3	.9	2.4	3.6
Personal saving rate <sup>2</sup>	3.6	3.6	1.5	2.5	1.5	3.8	3.7	3.8	4.1
<i>Previous Tealbook<sup>2</sup></i>	3.6	3.6	1.5	2.5	1.5	3.8	3.9	3.7	3.7
Corporate profits <sup>6</sup>	12.2	21.9	19.6	3.7	-5.7	-25.1	30.6	7.4	2.7
Profit share of GNP <sup>2</sup>	9.1	10.5	11.8	11.6	10.3	7.8	10.1	10.4	10.2
Net federal saving <sup>7</sup>	-376	-379	-283	-204	-236	-643	-1226	-1378	-1309
Net state & local saving <sup>7</sup>	-39	-8	26	51	22	-40	-19	39	43
Gross national saving rate <sup>2</sup>	14.3	14.3	15.5	16.3	13.8	12.2	10.1	10.7	11.8
Net national saving rate <sup>2</sup>	2.5	2.7	3.5	4.2	1.6	-.7	-3.0	-2.1	-1.2

1. Change, millions.

2. Percent, values are for the fourth quarter of the year indicated.

3. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. Values are for the fourth quarter of the year indicated.

4. Percent change.

5. Level, millions, values are annual averages.

6. Percent change, with inventory valuation and capital consumption adjustments.

7. Billions of dollars, values are annual averages.

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

Item	Fiscal year				2009				2010				2011				
	2008 <sup>a</sup>	2009 <sup>a</sup>	2010	2011	Q1 <sup>a</sup>	Q2 <sup>a</sup>	Q3 <sup>a</sup>	Q4 <sup>a</sup>	Q1 <sup>a</sup>	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
Unified budget	Not seasonally adjusted																
	Receipts <sup>1</sup>	2524	2104	2114	2389	442	599	516	488	466	612	548	523	508	730	627	595
	Outlays <sup>1</sup>	2983	3520	3495	3730	891	904	845	876	795	931	893	933	954	928	915	924
	Surplus/deficit <sup>1</sup>	-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	
NIPA federal sector	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	
Fiscal indicators <sup>4</sup>																	
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.

2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.

3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.

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.

a--Actual

**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
<i>Quarter</i>								
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.

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	Q1	Q2
<i>Domestic nonfinancial sectors</i>																
Net funds raised																
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	1800.7	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	-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	1980.7	1980.7
Borrowing indicators																
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	242.6	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	12.6	12.6
Households																
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	364.6	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	101.5	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	201.6	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	115.1	115.1
Business																
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	37.6	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	-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	334.8	334.8
State and local governments																
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	93.7	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	240.7	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	1187.5	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	318.9	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	328.9	328.9
<i>Depository institutions</i>																
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	242.8	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.

2. Includes change in liabilities not shown in home mortgages and consumer credit.

3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.

4. For corporations, excess of capital expenditures over U.S. internal funds.

5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.

n.s.a. Not seasonally adjusted.

2.6.4 FOF

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

Measure and Country	2009				2010				Projected-----			
									2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Real GDP</b> <sup>1</sup>												
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</b> <sup>2</sup>												
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

<sup>1</sup> Foreign GDP aggregates calculated using shares of U.S. exports.

<sup>2</sup> Foreign CPI aggregates calculated using shares of U.S. non-oil imports.

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

Measure and Country	2003	2004	2005	2006	2007	2008	2009	Projected-----	2010	2011
<b>Real GDP</b> <sup>1</sup>										
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</b> <sup>2</sup>										
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	

<sup>1</sup> Foreign GDP aggregates calculated using shares of U.S. exports.

<sup>2</sup> Foreign CPI aggregates calculated using shares of U.S. non-oil imports.



## U.S. Current Account

## Quarterly Data

	2009				2010				Projected-----2011			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Billions of Dollars, s.a.a.r.											
<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>	<i>-416.7</i>	<i>-391.0</i>	<i>-409.4</i>	<i>-462.4</i>	<i>-503.6</i>	<i>-476.5</i>	<i>-488.9</i>	<i>-487.3</i>	<i>-505.4</i>	<i>-486.5</i>	<i>-499.5</i>	<i>-500.8</i>
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>	<i>-2.9</i>	<i>-2.8</i>	<i>-2.9</i>	<i>-3.2</i>	<i>-3.5</i>	<i>-3.2</i>	<i>-3.3</i>	<i>-3.2</i>	<i>-3.3</i>	<i>-3.1</i>	<i>-3.2</i>	<i>-3.1</i>
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

	-----Projected-----									
	2003	2004	2005	2006	2007	2008	2009	2010	2011	
	Billions of Dollars									
<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>	<i>-521.5</i>	<i>-631.1</i>	<i>-748.7</i>	<i>-803.5</i>	<i>-726.6</i>	<i>-706.1</i>	<i>-419.9</i>	<i>-489.1</i>	<i>-498.1</i>	
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>	<i>-4.7</i>	<i>-5.3</i>	<i>-5.9</i>	<i>-6.0</i>	<i>-5.2</i>	<i>-4.9</i>	<i>-2.9</i>	<i>-3.3</i>	<i>-3.2</i>	
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	

# Report to the FOMC on Economic Conditions and Monetary Policy



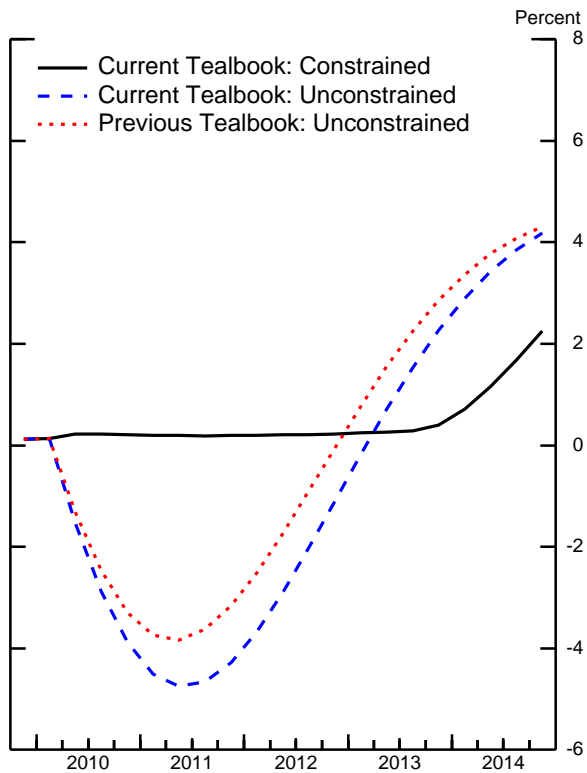
## Book B

### Monetary Policy: Strategies and Alternatives

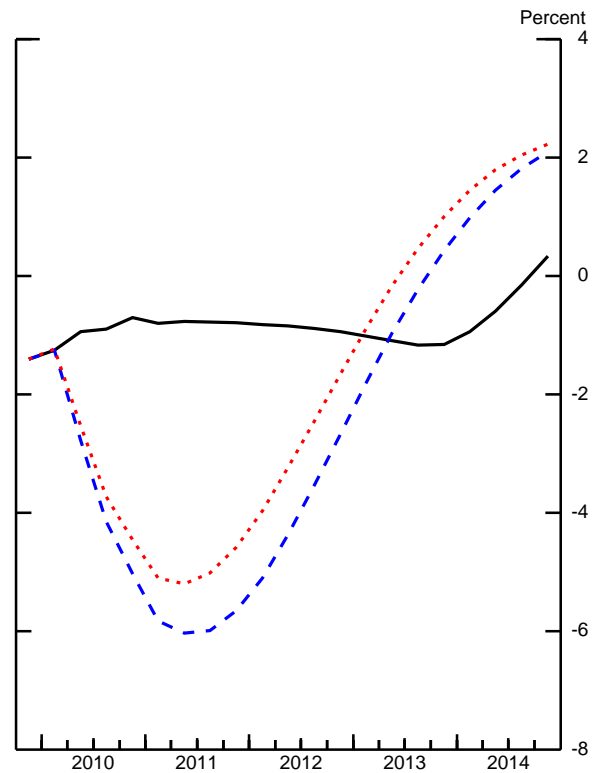
June 17, 2010

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

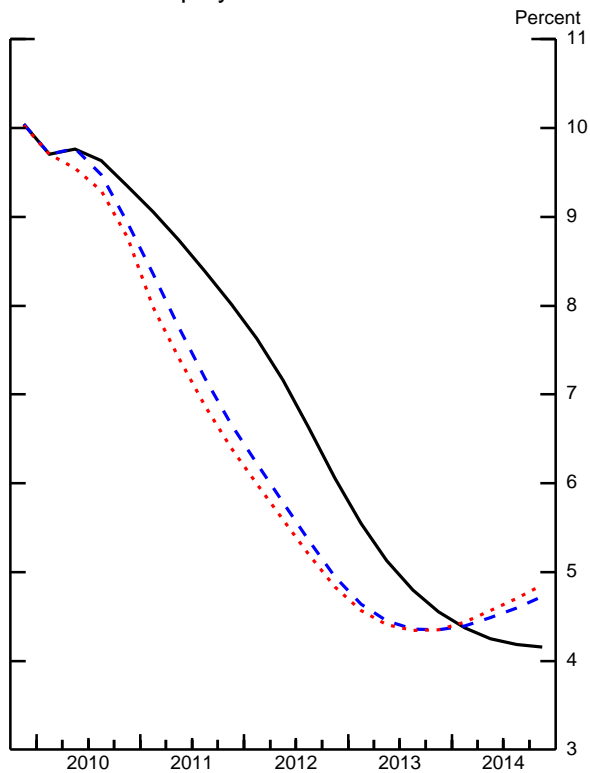
### Nominal Federal Funds Rate



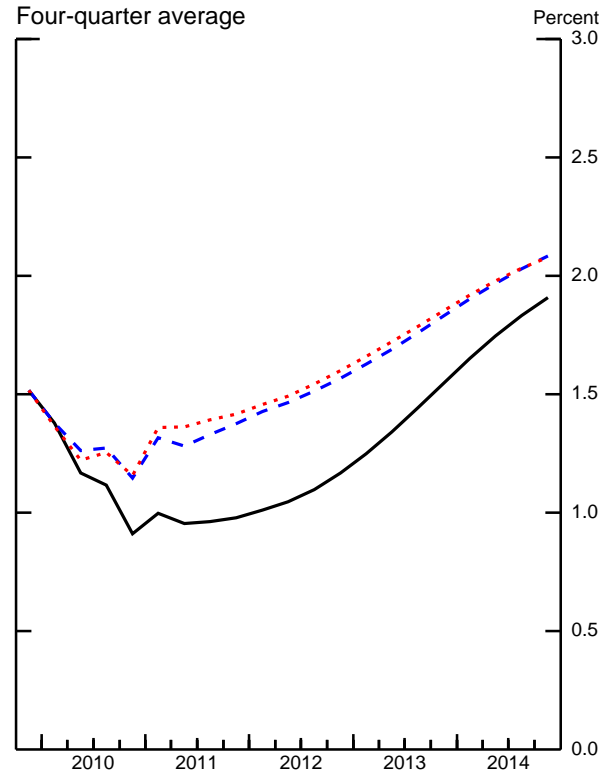
### Real Federal Funds Rate



### Civilian Unemployment Rate

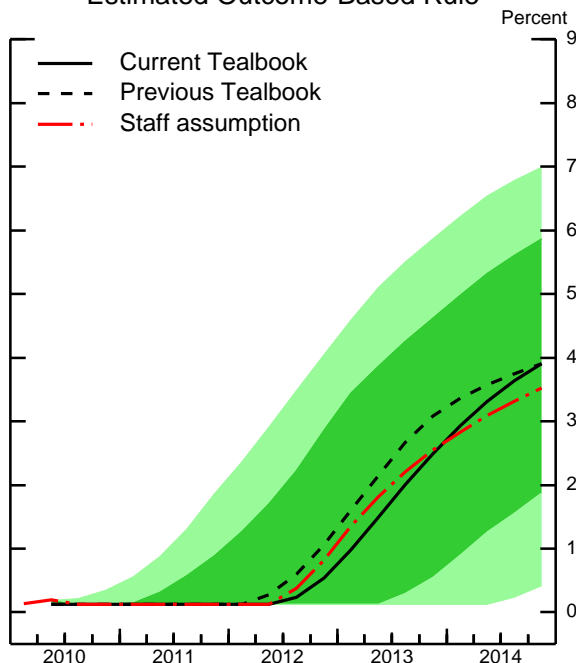


### Core PCE Inflation Four-quarter average

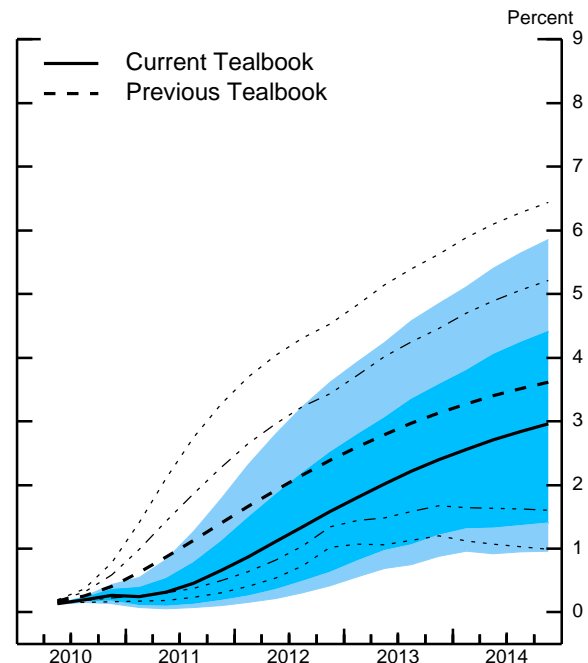


## The Policy Outlook in an Uncertain Environment

FRB/US Model Simulations of  
Estimated Outcome-Based Rule



Information from Financial Markets



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	<b>0.13</b>	<b>0.13</b>	<b>-0.80</b>	<b>-1.07</b>
Previous Tealbook	0.13	0.13	-0.71	-0.83
Taylor (1999) rule	<b>0.13</b>	<b>0.13</b>	<b>-4.16</b>	<b>-4.32</b>
Previous Tealbook	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>
Previous Tealbook	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>
Previous Tealbook	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>
Previous Tealbook	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.

<b>Balance Sheet Projections Summary</b>			
	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

Under the baseline scenario, the balance sheet peaks at \$2.34 trillion in June 2010. The balance sheet then contracts as securities obtained through large-scale asset purchases mature, prepay, or are sold, and credit extensions are repaid. From March 2015 onwards, after reserve balances hit the assumed \$25 billion floor and the supplementary financing account has been drained, the balance sheet begins to expand again in line with growth in Federal Reserve notes in circulation and capital, as purchases of Treasury securities match the growth in these two items. In Alternatives A and C, the size of the balance sheet peaks in June 2010 at \$2.34 trillion, as well. By the end of 2020, the size of the balance sheet under all scenarios is roughly \$1.86 trillion.<sup>7</sup>

Reflecting the declines in the level of reserve balances, the monetary base is projected to contract from 2010 through 2013 on an annual basis. Because the monetary base is derived from the balance sheet projections of Federal Reserve notes in circulation

<sup>7</sup> The composition of Federal Reserve assets in these projections differs notably at times from historical patterns. Prior to August 2007, U.S. Treasury securities were about 90 percent of assets, and the Federal Reserve did not hold any agency debt or MBS. By contrast, under the baseline scenario, Treasury securities are projected to account for only around 35 percent of total assets at the end of 2010. However, by the end of 2020, Treasury securities in the SOMA portfolio account for 96 percent of total assets.

and reserve balances, and because notes in circulation are projected to follow a fairly gradual upward trajectory, the path of the monetary base in each scenario largely mirrors the path of reserve balances. In each scenario, the monetary base peaks at essentially the same time as reserve balances in February 2010. As reserve balances subsequently decline, the monetary base contracts. When reserve balances are assumed to have stabilized at \$25 billion, the level of the monetary base moves more in line with changes in Federal Reserve notes in circulation.

<b>Federal Reserve Balance Sheet</b>							
<b>End-of-Year Projections -- Baseline Scenario</b>							
	May 31, 2010	2010	2012	2014	2016	2018	2020
		End-of-Year					
		\$ 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>	56	59	78	103	136	180	239

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)

Monthly Growth Rates	Tealbook Forecast *
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
Quarterly Growth Rates	
2010 Q1	-0.2
2010 Q2	1.6
2010 Q3	4.2
2010 Q4	2.0
Annual Growth Rates	
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.



Measure	Description
<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.

The actual real federal funds rate is constructed as the difference between the nominal rate and realized inflation, where the nominal rate is measured as the quarterly average of the observed federal funds rate, and realized inflation is given by the log difference between the core PCE price index and its lagged value four quarters earlier. If the upcoming FOMC meeting falls early in the quarter, the lagged inflation measure ends in the last quarter. For the current quarter, the nominal rate is specified as the target federal funds rate on the Tealbook publication date.

Estimates of the real federal funds rate depend on the proxies for expected inflation used. The table below shows estimated real federal funds rates based on lagged core PCE inflation, the definition used in the Equilibrium Real Federal Funds Rate chart; lagged four-quarter headline PCE inflation; and projected four-quarter headline PCE inflation beginning with the next quarter. For each estimate of the real rate, the table also provides the Tealbook-consistent FRB/US-based measure of the short-run equilibrium real rate and the average actual real federal funds rate over the next twelve quarters.

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)
<b>Lagged core inflation</b>	-1.0	-1.8	-0.5
<b>Lagged headline inflation</b>	-1.5	-1.9	-0.6
<b>Projected headline inflation</b>	-1.0	-1.9	-0.7

## B. Analysis of Policy Paths and Confidence Intervals

### RULE SPECIFICATIONS

For the following rules,  $i_t$  denotes the federal funds rate for quarter  $t$ , while the explanatory variables include the staff's projection of trailing four-quarter core PCE inflation ( $\pi_t$ ), inflation two and three quarters ahead ( $\pi_{t+2|t}$  and  $\pi_{t+3|t}$ ), the output gap in the current period and one quarter ahead ( $y_t - y_t^*$  and  $y_{t+1|t} - y_{t+1|t}^*$ ), and the three-quarter-ahead forecast of annual average GDP growth relative to potential ( $\Delta^4 y_{t+3|t} - \Delta^4 y_{t+3|t}^*$ ), and denotes an assumed value of policymakers' long-run inflation objective. The outcome-based and forecast-based rules were estimated using real-time data over the sample 1988:1-2006:4; each specification was chosen using the Bayesian information criterion. Each rule incorporates a 75 basis point shift in the intercept, specified as a sequence of 25 basis point increments during the first three quarters of 1998. The first two simple rules were proposed by Taylor (1993, 1999). The prescriptions of the first-difference rule do not depend on assumptions regarding  $r^*$  or the level of the output gap; see Orphanides (2003).

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

### FRB/US MODEL SIMULATIONS

Prescriptions from the two empirical rules are computed using dynamic simulations of the FRB/US model, implemented as though the rule were followed starting at this FOMC meeting. The dotted line labeled "Previous Tealbook" is based on the current specification of the policy rule, applied to the previous Tealbook projection. Confidence intervals are based on stochastic simulations of the FRB/US model with shocks drawn from the estimated residuals over 1969-2008.

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## INFORMATION FROM FINANCIAL MARKETS

The expected funds rate path is based on Eurodollar quotes and implied three-month forward rates from swaps, and the confidence intervals for this path are constructed using prices of interest rate caps.

## NEAR-TERM PRESCRIPTIONS OF SIMPLE POLICY RULES

These prescriptions are calculated using Tealbook projections for inflation and the output gap. Because the first-difference rule involves the lagged funds rate, the value labeled “Previous Tealbook” for the current quarter is computed using the actual value of the lagged funds rate, and the one-quarter-ahead prescriptions are based on this rule’s prescription for the current quarter.

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——— (1999). “A Historical Analysis of Monetary Policy Rules,” in John B. Taylor, ed., *Monetary Policy Rules*. The University of Chicago Press, pp. 319-341.

Orphanides, Athanasios (2003). “Historical Monetary Policy Analysis and the Taylor Rule,” *Journal of Monetary Economics*, vol. 50 (July), pp. 983-1022.

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

This appendix presents the assumptions underlying the projections provided in the section entitled “Long-Run Projections of the Balance Sheet and Monetary Base.”

### GENERAL ASSUMPTIONS

The balance sheet projections are constructed on a monthly frequency from June 2010 to December 2020. The few balance sheet items that are not discussed below are assumed to be constant over the projection period at the level observed on May 31, 2010. The projections for all major asset and liability categories are summarized in the table that follows the bullet points.

The Tealbook projection assumes that the federal funds rate begins to increase in the third quarter of 2012. The balance sheet projections assume that no use of short-term draining tools is necessary to achieve the projected path for the federal funds rate.

### ASSETS

#### *Treasury securities, agency MBS, and agency debt*

- The baseline scenario, corresponding to Alternative B.
  - The Federal Reserve will begin to sell agency MBS and agency debt securities six months after the FOMC begins to increase the federal funds rate. Commencing in the first quarter of 2013, the sales of these securities will be executed over a five-year period at a constant rate until the Federal Reserve’s agency MBS and agency debt holdings fall to zero.
  - Prepayments of MBS and maturing agency debt are not reinvested.<sup>1</sup>
  - Due to expected settlement lags and prepayments, agency MBS holdings peak at \$1.1 trillion in June 2010, a somewhat lower level than the amount purchased. For agency MBS, the rate of prepayment is based on estimates from one of the program’s investment managers. The historically low coupon on these securities implies a relatively slow prepayment rate.
  - Holdings of agency debt securities peaked at \$169 billion in March 2010 and decline slowly thereafter as holdings continue to mature.
  - The maturity distribution of the Treasury securities is calculated based on the actual holdings of Treasury securities. The current weighted average maturity is

<sup>1</sup> Prepayments include regular payments of principal and repayments of mortgages.

about seven years. Treasury securities held in the SOMA portfolio are reinvested as they mature.

- Under Alternative A, the Committee reinvests the proceeds of maturing and prepaying Treasury securities and agency MBS to maintain the current level of these securities until the target federal funds rate increases in the third quarter of 2012. At this point, MBS holdings are allowed to decline as these assets mature or prepay. As in the baseline scenario, sales of agency MBS and debt commence in the first quarter of 2013, and these securities are sold at a constant rate for five years until the holdings fall to zero. Holdings of agency debt securities are redeemed.
- Under Alternative C, the Committee allows Treasury securities, agency debt securities, and agency MBS to prepay or to redeem as they mature. As in the baseline scenario, sales of agency MBS and debt commence in the first quarter of 2013, and these securities are sold at a constant rate for five years until the holdings fall to zero.
- In all three alternatives, a minimum level of \$25 billion is set for reserve balances. To ensure that reserve balances do not fall below this minimum level, first the U.S. Treasury's supplementary financing account (SFA) is reduced. After the SFA declines to zero, Treasury bills are purchased. Purchases of bills continue until these securities comprise one-third of the Federal Reserve's total Treasury holdings. Once this threshold is met, the Federal Reserve buys notes and bonds in addition to bills in order to keep bills at one-third of total Treasury holdings.
- By the end of the projection period in all three alternatives, the expansion of Federal Reserve notes in circulation and capital, combined with a runoff of assets, necessitates the reduction of the SFA to zero and results in a level of reserve balances of \$25 billion. After the SFA reaches zero, purchases of Treasury securities are resumed to maintain reserve balances at a level of \$25 billion.

## Liquidity Programs and Credit Facilities

- Loans through the Term Asset-Backed Securities Loan Facility (TALF) peaked at \$48 billion in December 2009. Credit extended through this facility declines to zero in the first quarter of 2015, reflecting loan maturities and prepayments.
- The assets held by TALF LLC increase to \$1 billion by June 2010 and remain at that level through June 2015, before dropping down to zero thereafter. Assets held by TALF LLC consist of investments of commitment fees collected by the LLC and the U.S. Treasury's initial funding. In this projection, the LLC does not purchase any asset-backed securities received by the Federal Reserve Bank of New York in connection with a decision of a borrower not to repay a TALF loan.
- Central bank liquidity swap lines, which were re-established on May 9, 2010, are projected to rise to \$15 billion by July 2010. Swap lines return to zero by the end of 2011.

- Credit extended to AIG, the sum of the Federal Reserve Bank of New York's extension of revolving credit and its preferred interests in AIA Aurora LLC and ALICO Holdings LLC, drops to \$28 billion by December 2010 and then declines to zero by the end of 2013.
- The assets held by Maiden Lane LLC, Maiden Lane II LLC, and Maiden Lane III LLC are sold over time and reach either zero or a nominal level by the end of 2016.

## LIABILITIES AND CAPITAL

- Federal Reserve notes in circulation grow in line with the staff forecast for money stock currency through the end of 2011. From 2011 to the end of the projection period, Federal Reserve notes in circulation grow at the same rate as nominal GDP, as projected in the extended Tealbook forecast.
- The U.S. Treasury's general account (TGA) follows the staff forecast for end-of-month U.S. Treasury operating cash balances through September 2010.<sup>2</sup> Thereafter, the TGA drops back to its historical target level of \$5 billion by the end of 2010 as it is assumed that the Treasury will have implemented a new cash management system that allows it to invest funds in excess of \$5 billion. The TGA remains constant at \$5 billion over the remainder of the forecast period.
- Balances in the SFA remain at their current level until the SFA is reduced to ensure reserve balance levels do not fall below \$25 billion.
- Federal Reserve capital grows 15 percent per year, in line with the average rate of the past ten years.
- In general, increases in the level of assets of the Federal Reserve generate higher levels of reserve balances. Increases in the levels of other liability items, such as Federal Reserve notes in circulation or the Treasury's general account, like increases in the level of Reserve Bank capital, drain reserve balances. When increases in these liability or capital items would otherwise cause reserve balances to fall below \$25 billion, purchases of Treasury securities are assumed in order to maintain that level of reserve balances.

<sup>2</sup> The staff forecast for end-of-month U.S. Treasury operating cash balances includes forecasts of both the TGA and balances associated with the U.S. Treasury's Tax and Loan program. Because balances associated with the Tax and Loan program are \$2 billion, for the time being, this forecast is a good proxy for the level of TGA balances.

**Federal Reserve Balance Sheet**  
**End-of-Year Projections -- Baseline Scenario**

	May 31, 2010	End-of-Year					
		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:							
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>	56	59	78	103	136	180	239

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