

## **Prefatory Note**

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## **Part 1**

June 17, 2009

# CURRENT ECONOMIC AND FINANCIAL CONDITIONS

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## **Summary and Outlook**

Class II FOMC - Restricted (FR)

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June 17, 2009

## **Summary and Outlook**

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Prepared for the Federal Open Market Committee  
by the staff of the Board of Governors of the Federal Reserve System

## **Domestic Developments**

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The information received during the intermeeting period suggests that the downturn in economic activity is abating much along the lines that we expected in the April Greenbook. Consumer spending appears to have stabilized since the start of the year, sales and starts of new homes are flattening out, and the recent declines in capital spending do not look as severe as those that occurred around the turn of the year. Moreover, the recent monthly declines in payroll employment and industrial production, while still sizable, have been smaller than those registered earlier this year. As a consequence, we are projecting that real GDP will decline at an annual rate of 1 percent in the current quarter after having fallen at a 5½ percent pace in the first quarter.

The key factors conditioning our forecast have become more supportive of economic activity, on balance, since the time of the April Greenbook. Household wealth is higher, corporate bond rates have fallen, the value of the dollar is lower, the outlook for foreign activity is better, and financial stress appears to have eased somewhat more than we had anticipated. The boost to aggregate demand from these factors more than offsets the negative effects of higher oil prices and mortgage rates. But the further sharp increase in the unemployment rate and persistently high levels of unemployment insurance claims give us pause about the extent of firming in real GDP, and we have accordingly tempered our reaction to the positive news a bit, especially in the near term.

All told, we now project real GDP to increase at an annual rate of about 1 percent in the second half of this year and 3 percent in 2010, about ¼ percentage point and ½ percentage point faster, respectively, than in the April Greenbook. With changes in output below the rate of potential this year, the unemployment rate rises further, reaching 10 percent in the fourth quarter. As output begins to rise faster than its potential rate next year, the unemployment rate edges down, falling to 9¾ percent by the end of 2010. This path runs noticeably above that in the last Greenbook, reflecting our reaction to increases in the unemployment rate that have consistently surprised us to the upside given the trajectory of real GDP (see the box entitled “Explanations for the Rapid Rise in the Unemployment Rate”).

Meanwhile, we have marked up our forecast of inflation. Recent readings on core consumer prices have come in a bit higher than we had expected, boosting our near-term estimate of core PCE inflation. In addition, the rise in energy prices, less-favorable import prices, and the lack of any downward movement in inflation expectations have led

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Note: A list of abbreviations is available at the end of Part 1.

## Explanations for the Rapid Rise in the Unemployment Rate

Since the onset of the current recession, the unemployment rate has increased considerably more than we would have expected given the cumulative decline in real GDP. This tension is even greater in the current projection, with the unemployment rate in May 0.4 percentage point above our projection in the April Greenbook despite an upward revision to our forecast of real GDP in the first half of this year. We see a few potential explanations for the steeper-than-expected rise in the unemployment rate.

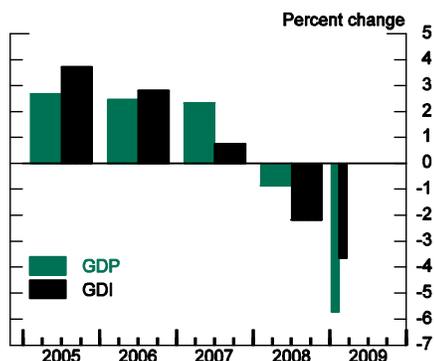
First, the BEA's estimates of real GDP may understate the contraction in real economic activity. The rise in the unemployment rate seems more consistent with the behavior of real gross domestic income (GDI), which, as illustrated in the lower-left figure, fell nearly 1½ percentage points more than real GDP last year. Although real GDP fell by less than real GDI in the first quarter of this year, that difference reversed only a small portion of the sharp rise in the statistical discrepancy since early 2007 (shown in the figure in the lower right). If the GDI data better represent aggregate activity, the change in the output gap since early 2007

could have been as much as 2½ percentage points larger than we have estimated.

A second factor is the emergency unemployment compensation (EUC) program, which has kept eligible job losers in the labor force longer than otherwise. We estimate that, since its inception last July, the EUC program has contributed about ½ percentage point to the rise in the unemployment rate, an upward revision from previous Greenbooks.

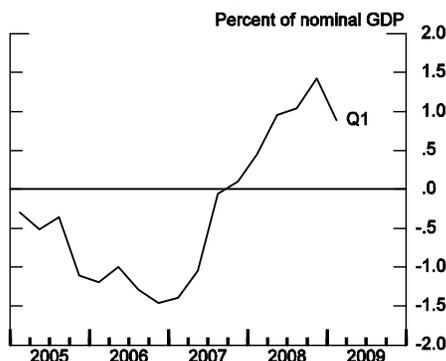
Anecdotal reports point to other potential explanations, including the possibility that some older workers have reacted to the deterioration in household wealth by delaying retirement, that stresses on household balance sheets have induced secondary workers to enter the labor force to look for work, and that the job losses in this recession have been more concentrated than usual among individuals with strong labor force attachments. Although these explanations are more speculative, they, along with the EUC program, could also help to explain the puzzling resiliency of the participation rate, which has changed little, on net, since the beginning of the recession.

**Real GDP and GDI**



Note: Annual data are Q4/Q4 percent changes; quarterly data are percent changes at an annual rate.

**Statistical Discrepancy**



us to raise our medium-term inflation outlook. Nonetheless, we still expect the low level of resource utilization over the projection period to result in an appreciable deceleration in consumer prices this year and next; we expect core PCE prices to increase 1.4 percent this year and 0.8 percent next year, up 0.2 percentage point and 0.1 percentage point, respectively, from the April forecast.

### **Key Background Factors**

We continue to assume that the FOMC will hold the target federal funds rate in the current range of 0 to  $\frac{1}{4}$  percent through the end of the forecast period. In contrast, the path of the federal funds rate that is implied by futures quotes begins to slope upward at the end of this year, and the expected tightening in 2010 appears to be somewhat greater than at the time of the last Greenbook. However, the amount and timing of tightening anticipated by market participants remain difficult to gauge because term premiums in these markets likely have been higher than usual for a while and may have increased further of late.

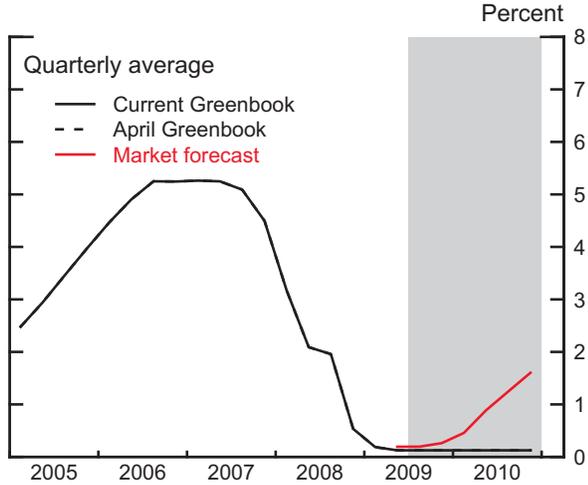
Our expectation for nontraditional policy action is unchanged from the April Greenbook: We still assume that the Federal Reserve will purchase \$1.25 trillion of agency mortgage-backed securities (MBS), \$200 billion of agency debt, and \$300 billion of Treasury securities, and that these holdings will begin to run off passively in 2010. As best we can judge, this assumption does not appear to be far from market expectations. In particular, the median response to the latest survey of primary dealers indicated no expected change in the purchase program for agency debt and agency MBS and only a small expansion of Treasury purchases beyond the already announced \$300 billion ceiling.

The 10-year Treasury yield has increased  $\frac{3}{4}$  percentage point, on net, since the time of the April Greenbook. We assume that, over the forecast period, market participants will revise down their expected path for the federal funds rates toward the one incorporated in our baseline forecast, putting downward pressure on long-term yields. This influence, however, is more than offset by the effect of moving through the period of very low short-term rates anticipated for the next few years. On balance, we read these influences as pointing to a slight increase in the 10-year Treasury yield over the forecast period.

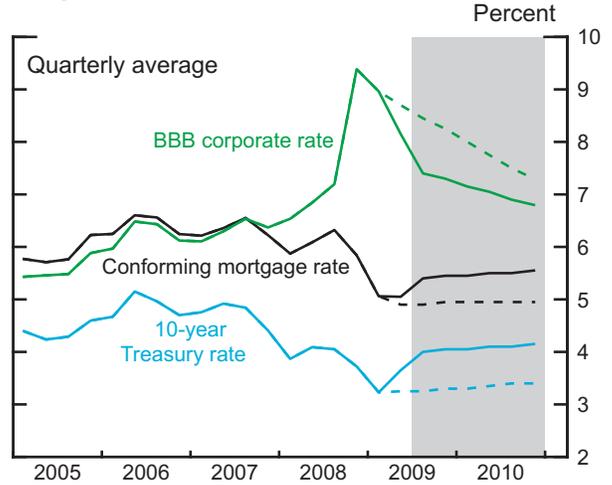
The conforming 30-year fixed mortgage rate has moved up almost as much as the 10-year Treasury yield and now stands at about  $5\frac{1}{2}$  percent,  $\frac{1}{2}$  percentage point above the level we assumed in the April Greenbook. With the spread between this rate and the 10-year Treasury yield already relatively narrow, we do not anticipate any further tightening over

### Key Background Factors Underlying the Baseline Staff Projection

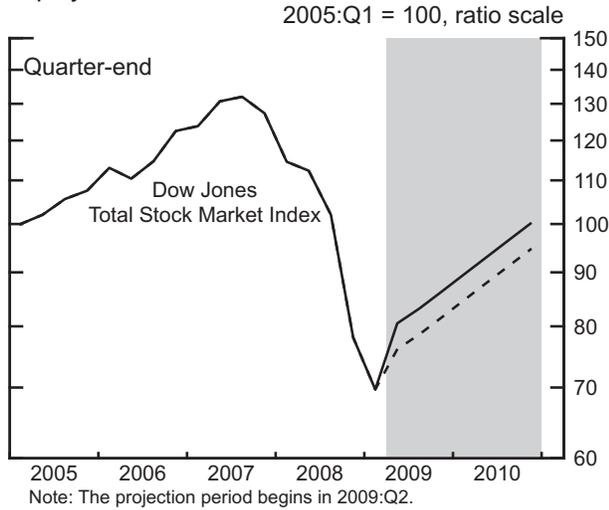
Federal Funds Rate



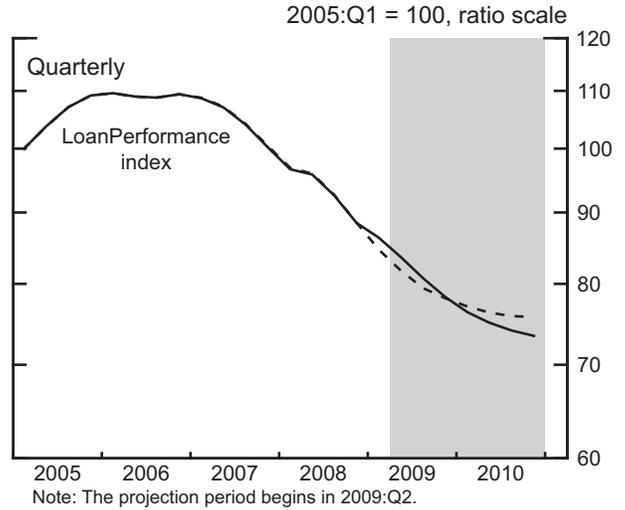
Long-Term Interest Rates



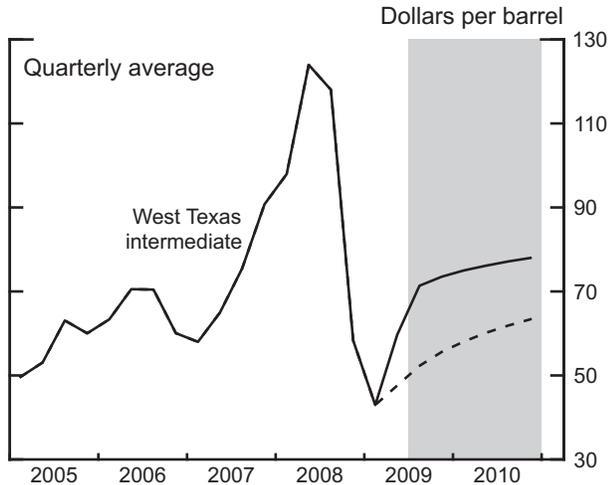
Equity Prices



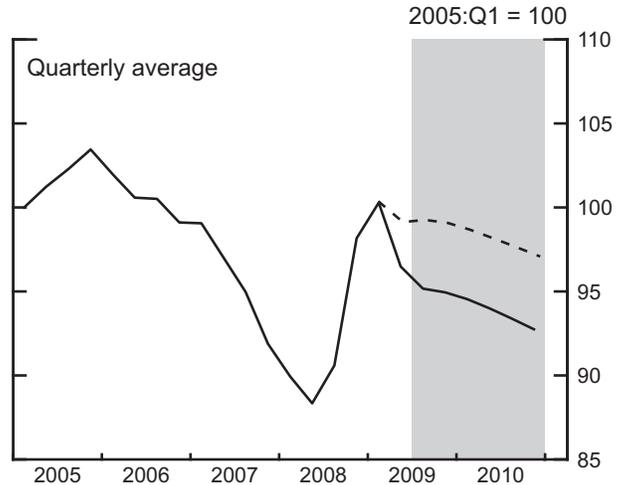
House Prices



Crude Oil Prices



Broad Real Dollar



Note: In each panel, shading represents the projection period, which begins in 2009:Q3, except as noted. Q2 quarterly average data are actual through June 16. In the upper-left panel that reports the federal funds rate, the dashed line is not apparent because the paths of the federal funds rate in the April and current Greenbooks are the same.

the forecast period. As a result, we expect the mortgage rate to edge up in line with the 10-year Treasury rate through 2010.

Yields on BBB-rated corporate bonds have fallen more than 100 basis points since the close of the April Greenbook, resulting in considerably narrower spreads relative to long-term Treasury yields than we had projected. Nonetheless, corporate bond spreads remain at or above the peaks reached after the last recession, and we expect them to continue to decrease over the remainder of this year and in 2010. The assumed tightening of spreads going forward, combined with the projected updrift in the 10-year Treasury yield, implies a further decline of roughly  $\frac{3}{4}$  percentage point in the 10-year BBB corporate bond yield over the forecast period.

Broad indexes of equity prices currently stand 6 percent above the level assumed in the April Greenbook, and we have raised the projected path for stock prices by a similar amount throughout the forecast period. As in prior forecasts, we assume that the equity risk premium, which remains very high by historical standards, will moderate gradually, and that stock prices will rise at an average annual rate of about 15 percent through the end of 2010.

Recent declines in house prices have been smaller than we had anticipated, which has led us to boost the starting level for our house price forecast. However, the pace of foreclosure starts in the first quarter was well above our expectation, and we have revised up our forecast of foreclosures through the end of 2010 by a substantial amount. The increased pace of foreclosures, together with the increased mortgage rates and the higher path for the unemployment rate in this forecast, puts house prices on a steeper downward trajectory than in the April Greenbook. We now expect house prices to fall at an annual rate of about 12 percent over the second half of this year and an additional 6 percent next year, leaving the level of house prices at the end of 2010 roughly 3 percent below that in the April forecast.

Regarding fiscal policy, incoming data suggest that the pace of stimulus spending and tax withholding changes has been about in line with our expectations, and we have not changed our estimates that the package will boost the change in real GDP by 1 percentage point in 2009 and  $\frac{3}{4}$  percentage point in 2010. We continue to expect large deficits in the unified federal budget over the next two years. We project the deficit to reach \$1.4 trillion in fiscal 2009 and to remain at that level in fiscal 2010. Adjusted for a

change in the accounting for outlays associated with the TARP, the projection of the deficit in both fiscal 2009 and 2010 is virtually unchanged from the April Greenbook.<sup>1</sup>

In the foreign exchange markets, the broad real dollar has fallen 4 percent since the time of the April Greenbook, and we project it to depreciate about 2 percent annually over the next year and a half. The outlook for foreign activity has improved since our previous forecast. We project that foreign real GDP will fall at an annual rate of 1½ percent in the current quarter before rising at a 1¾ percent annual rate in the second half of 2009; both of these projections are about 1 percentage point faster than in the April Greenbook. Real foreign GDP is projected to rise about 3 percent in 2010, roughly ¼ percentage point faster than in the last projection.

The spot price of West Texas intermediate (WTI) has moved up to about \$70 per barrel, about \$25 per barrel above its level at the time of the April Greenbook. This surge in oil prices likely reflects continued OPEC supply restraint as well as an improved outlook for global demand. Futures prices have increased a bit less, and we have raised our forecast of the price of WTI about \$14 per barrel to \$78 per barrel by the end of 2010.

### **Recent Developments and the Near-Term Outlook**

Much as we had expected in the April forecast, the decline in economic activity appears to be moderating. After having fallen at an annual rate of 5½ percent in the first quarter of the year, real GDP is projected to decrease 1 percent at an annual rate in the second quarter. Furthermore, the lessening of the contraction in spending and activity appears to be relatively broad based.

After declining an average of almost 700,000 jobs per month in the first quarter, private payroll employment fell about 600,000 in April and 340,000 in May, a bit less than we had expected in the April Greenbook. We project that private employment will fall an additional 400,000 in June and that job losses will taper off in the third quarter. Other labor market indicators, however, have been weaker than we had expected. The unemployment rate has continued to increase rapidly, reaching 9.4 percent in May, and initial and continuing claims remain high. Overall, we see some tension between the

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<sup>1</sup> As noted in Part 2, the Administration recently switched from accounting for equity purchases under the TARP on a cash basis to accounting for them on a net present value basis, taking into account market risk. We have adopted this new accounting methodology, which lowered our forecast of the federal budget deficit by \$212 billion in fiscal 2009 and \$50 billion in fiscal 2010. This change in accounting has no effect on federal borrowing.

<b>Summary of the Near-Term Outlook</b> (Percent change at annual rate except as noted)				
Measure	2009:Q1		2009:Q2	
	April Greenbook	June Greenbook	April Greenbook	June Greenbook
<b>Real GDP</b>	<b>-6.3</b>	<b>-5.5</b>	<b>-1.5</b>	<b>-1.0</b>
Private domestic final purchases	-5.0	-5.8	-4.0	-2.3
Personal consumption expenditures	1.1	1.6	-.5	-.4
Residential investment	-38.2	-38.0	-27.4	-22.1
Business fixed investment	-30.1	-37.3	-20.8	-10.3
Government outlays for consumption and investment	-5.3	-3.0	6.7	3.7
	Contribution to growth (percentage points)			
Inventory investment	-2.2	-2.4	-.1	-.9
Net exports	1.0	2.1	.6	1.1

recent labor market data and the recent spending data. This tension is highlighted by the path of productivity, which has been higher than might be expected at this stage of a recession.

Manufacturing production, after tumbling at an annual rate of 22 percent in the first quarter, is projected to fall at a 10 percent rate this quarter. While some of this slower rate of decline reflects a flattening of light vehicle production, the contraction in other industries has also moderated. Still, manufacturing IP continues to fall more rapidly than the output of goods as measured in the GDP accounts, and the factory utilization rate fell to a new postwar low of 65 percent in May, even with capacity contracting.

Incoming data indicate that household spending has stabilized. After declining at an annual rate of about 4 percent in the second half of 2008, real PCE is projected to rise at an annual rate of about ½ percent in the first half of this year; the boost to income from this year's fiscal stimulus package supports spending in the second quarter. We expect the pace of consumer spending to be sluggish in the near term, held down by previous losses in household wealth, still-weak consumer sentiment, and high rates of unemployment.

The decline in activity in the housing sector appears to be moderating. Recent data on sales suggest that housing demand has leveled out. Meanwhile, single-family housing

starts, after having fallen for 12 consecutive quarters, appear on track to post a small increase in the current quarter to a pace of 400,000 units. Despite the slight pickup in starts this quarter, real residential investment is projected to contract about 20 percent at an annual rate, reflecting, in part, the usual lags between starts and overall building activity.

In the business sector, real investment in equipment and software (E&S) continues to drop, though the rate of decrease appears to have lessened. In addition to an apparent flattening of business purchases of autos and trucks, data through April on orders and shipments of nondefense capital goods excluding aircraft, on balance, point to a smaller decline in capital spending so far this quarter—a change that appears consistent with recent readings on business sentiment, which were less negative than earlier in the year. After posting a 34 percent annual rate of decline in the first quarter, real E&S spending is projected to fall at an annual rate of 13 percent this quarter.

Data received since the April Greenbook have caused us to sharply revise our projection of nonresidential construction in the second quarter, from an annual rate of decline of 32 percent in the April Greenbook to a decline of less than 6 percent in the current forecast. The upward surprise was concentrated in the power sector and in the refining subcomponent of the manufacturing sector; industry reports suggest that the rise in spending in the refining subcomponent of manufacturing will lessen in coming months. Outside of these categories, incoming data and fundamentals point to continued large declines in building construction of office and commercial buildings. In addition, activity in drilling and mining plunged over the first half of this year, in response to the sharp decline in energy prices since last summer.

Nonfarm inventories were drawn down at an annual rate of about \$100 billion in the first quarter, and we estimate that firms will shed inventories at a pace of about \$135 billion this quarter, \$35 billion more than we expected in the April Greenbook. The motor vehicle sector accounts for this downward revision and reflects the consequences of the recent plant shutdowns at GM and Chrysler. Outside of motor vehicles, stocks remain elevated relative to sales, and firms are expected to make further cuts to inventories. All told, real nonfarm inventory investment is now estimated to have subtracted about 1¾ percentage points from the change in real GDP in the first half of this year, about ½ percentage point more than in the April Greenbook.

In the government sector, real federal purchases fell at an annual rate of 4¼ percent in the first quarter. With information in hand on defense spending in both April and May from the Monthly Treasury Statements, we expect real federal purchases to increase almost 10 percent in the current quarter. Meanwhile, after having fallen over the last two quarters, real purchases by state and local governments are expected to flatten out this quarter, as the fiscal stimulus package helps states and localities maintain their spending in the face of very weak revenues. However, our projection of the pace of spending in the current quarter is significantly slower than in the April forecast, as we have downgraded our assessment of the fiscal health of the sector.

Recent data on international trade suggest that the contribution of net exports to the change in real GDP over the first half of this year has been much stronger than we had projected in the April Greenbook. We now project that net exports added about 2 percentage points to the annual rate of change in real GDP in the first quarter and about 1 percentage point in the current quarter, about 1 percentage point and ½ percentage point higher, respectively, than in the April Greenbook. Weaker real imports rather than stronger real exports account for most of this upward revision.

Incoming price data point to a step-up in core PCE inflation from 1½ percent at an annual rate in the first quarter to 2¼ percent this quarter. However, this pickup largely reflects a sharp rise in prices of tobacco products related to an increase in federal excise taxes, and we expect core PCE inflation to fall back to 1 percent in the third quarter. On a quarterly-average basis, energy prices are projected to decline this quarter, holding total PCE inflation to 1½ percent at an annual rate. But the recent run-up in energy prices is expected to show through next quarter, boosting our projection of total PCE inflation to 3½ percent.

### **The Medium-Term Outlook**

The basic contour of our forecast is little changed from the April Greenbook. We continue to expect a sluggish upturn in activity in the second half of this year and then a more noticeable pickup in 2010. However, changes in the key factors conditioning our forecast have led us to project somewhat stronger growth in real output throughout the forecast period. Our projection calls for real GDP to rise at an annual rate of about 1 percent in the second half of this year and 3 percent in 2010, about ¼ percentage point and ½ percentage point higher, respectively, than in the April Greenbook.

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

Measure	2009		2010
	H1	H2	
<b>Real GDP</b>	<b>-3.3</b>	<b>1.1</b>	<b>3.0</b>
Previous Greenbook	-3.9	.8	2.6
Final sales	-1.6	-.6	2.6
Previous Greenbook	-2.8	-.6	2.4
Personal consumption expenditures	.6	1.1	2.8
Previous Greenbook	.3	.8	2.7
Residential investment	-30.5	-12.2	10.7
Previous Greenbook	-33.0	-.9	11.0
Business fixed investment	-25.0	-12.2	3.0
Previous Greenbook	-25.6	-15.5	3.4
Government purchases	.3	3.1	1.9
Previous Greenbook	.5	4.9	1.9
Exports	-19.0	3.0	4.0
Previous Greenbook	-18.6	-.7	2.3
Imports	-25.3	6.7	5.4
Previous Greenbook	-20.1	4.1	5.1
	Contribution to growth (percentage points)		
Inventory change	-1.6	1.8	.4
Previous Greenbook	-1.1	1.4	.3
Net exports	1.8	-.6	-.3
Previous Greenbook	.9	-.6	-.5

**Household sector.** Our projection for consumer spending is a bit stronger than in the April forecast, as the effects of the boost to household wealth more than offset the increases in job and income uncertainty associated with the much higher path for the unemployment rate. We expect real PCE to rise at a pace subdued over the remainder of this year, as households continue to respond to the ongoing effects of prior wealth declines and the continued deterioration in the labor market. In 2010, spending accelerates noticeably as the job market improves, consumer credit becomes more readily available, and the drag from sizable wealth losses experienced over the past few years

starts to wane. Nonetheless, we expect that households will continue to repair their balance sheets, and thus the saving rate is expected to drift down only slightly, from an average of about 5 percent in 2009 to about 4½ percent next year.

After holding steady over the first half of this year, housing activity in our forecast begins to turn up in the second half and strengthens further in 2010. Housing demand firms in response to improvements in household income as well as the boost to housing affordability from still-low mortgage rates, lower house prices, and the first-time homebuyer tax credit. However, relative to the April Greenbook forecast, the recovery in housing demand and single-family starts is more muted in the second half of this year, reflecting the recent rise in mortgage rates and unemployment. We now expect real residential investment spending to subtract about ⅓ percentage point from the rise in real GDP in the second half of this year, whereas it had been a roughly neutral factor in the April Greenbook. In 2010, housing investment adds ¼ percentage point to the increase in real GDP, the same as in the last forecast.

**Business investment.** Our projection for business investment is very similar to that in the April Greenbook. We expect real E&S spending to decline more slowly over the second half of this year and then to turn up gradually next year, as credit conditions improve, overall demand strengthens, and investment that had been deferred resumes. In all, we project real expenditures for E&S to decline at an annual rate of about 6 percent in the second half of this year before climbing 8 percent in 2010.

We project that real investment in nonresidential structures, excluding drilling and mining, will fall at an annual rate of about 20 percent in the second half of this year and 11 percent in 2010. The dismal outlook reflects high vacancy rates in the office, industrial, and retail sectors; falling prices of commercial real estate; and still-tight credit conditions. And although last summer's drop in energy prices resulted in massive declines in investment in drilling and mining over the first half of this year, the recent step-up in energy prices should lead to some rebound in spending, particularly next year.

Firms appear to be making progress in shedding their unwanted inventories, and we expect inventory liquidation to slow significantly in the second half of this year as stocks are brought into better alignment with sales. In 2010, inventory liquidation comes to an end. As a result, inventory investment makes an important contribution to the upturn in real GDP in the second half of this year and provides a boost next year as well.

**Government spending.** We have marked down our forecast of state and local spending in response to a much weaker outlook for revenues and numerous reports of large budget imbalances at both the state and local levels. Even given the sizable grants in the fiscal stimulus package, purchases in this sector are expected to rise very slowly. Our projection calls for real state and local spending to rise at an annual rate of 1 percent in the second half of this year and 1¼ percent next year, down from about 2¼ percent and 2 percent, respectively, in the April Greenbook. At the federal level, we continue to expect real purchases to decelerate over the forecast horizon, led by a slowdown in rates of increase of defense outlays.

**Net exports.** The downward revision to the path of the dollar along with higher projected growth of foreign activity have led us to slightly increase our projection for the contribution of net exports to the growth of domestic output. Real net exports are projected to subtract about ½ percentage point from the change in real GDP in the second half of this year and ¼ percentage point in 2010. (*The International Developments section provides more detail on the outlook for the external sector.*)

### **Aggregate Supply, the Labor Market, and Inflation**

We have made no material changes to our estimates of structural productivity and potential GDP over the forecast period. Structural productivity is still assumed to grow 1.6 percent per year in 2009 and 2010, while potential GDP is assumed to grow 2 percent per year. With actual GDP projected to increase more slowly than potential over the remainder of this year but then to exceed the growth of potential in 2010, the GDP gap widens to negative 6½ percent of potential GDP by the end of this year before narrowing gradually to about negative 5½ percent by the end of 2010. We have raised our estimate of the NAIRU in this forecast from 4¾ percent to 5 percent. This change reflects the accumulation of evidence that the high rates of permanent job losses in this recession will raise the level of frictional unemployment for a time.

Relative to last Greenbook, the GDP gap is about ¼ percentage point narrower in the current quarter and about ¾ percentage point narrower by the end of 2010. Despite the smaller GDP gap, the unemployment rate in this forecast is markedly higher than in the April Greenbook. Indeed, for some time now, the unemployment rate has risen more rapidly than would have been expected given the path of real GDP, and we are not expecting this widening divergence to narrow appreciably over this forecast period. (*The box entitled “Explanations for the Rapid Rise in the Unemployment Rate” provides a discussion of this divergence.*)

**Decomposition of Structural Labor Productivity  
Nonfarm Business Sector**

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

Measure	1974-95	1996-2000	2001-06	2007	2008	2009	2010
<b>Structural labor productivity</b>	<b>1.5</b>	<b>2.5</b>	<b>2.6</b>	<b>2.1</b>	<b>2.0</b>	<b>1.6</b>	<b>1.6</b>
Previous Greenbook	1.5	2.5	2.6	2.1	1.9	1.6	1.6
<i>Contributions<sup>1</sup></i>							
Capital deepening	.7	1.4	.7	.6	.5	-.2	-.1
Previous Greenbook	.7	1.4	.7	.6	.4	-.3	-.2
Multifactor productivity	.5	.7	1.6	1.2	1.3	1.6	1.5
Previous Greenbook	.5	.7	1.6	1.2	1.3	1.6	1.6
Labor composition	.3	.3	.3	.2	.2	.2	.1
MEMO							
Potential GDP	3.0	3.4	2.7	2.5	2.4	2.0	2.0
Previous Greenbook	3.0	3.4	2.6	2.5	2.5	2.0	2.0

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.

**The Outlook for the Labor Market**

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

Measure	2007	2008	2009	2010
Output per hour, nonfarm business	2.6	2.2	2.2	1.4
Previous Greenbook	2.6	2.2	1.3	2.1
Nonfarm private payroll employment	.8	-2.1	-3.9	1.5
Previous Greenbook	.8	-2.1	-3.7	1.2
Household survey employment	.4	-1.5	-3.0	1.0
Previous Greenbook	.4	-1.5	-2.7	1.0
Labor force participation rate <sup>1</sup>	66.0	65.9	65.6	65.3
Previous Greenbook	66.0	65.9	65.3	65.1
Civilian unemployment rate <sup>1</sup>	4.8	6.9	10.0	9.7
Previous Greenbook	4.8	6.9	9.3	9.1
MEMO				
GDP gap <sup>2</sup>	-.4	-3.6	-6.5	-5.6
Previous Greenbook	-.4	-3.6	-7.0	-6.4

1. Percent, average for the fourth quarter.

2. Actual less potential GDP in the fourth quarter of the year indicated as a percent of potential GDP. A negative number thus indicates that the economy is operating below potential.

**Productivity and the labor market.** We anticipate that the declines in payroll employment will end by the fourth quarter of this year. We expect net hiring to resume in early 2010, and we project that job gains will pick up over the course of that year as output accelerates. In all, we expect employment in the private sector to fall at an average monthly rate of about 50,000 in the second half of this year but then to rise at an average pace of 140,000 per month in 2010.

### Inflation Projections

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

Measure	2007	2008	2009	2010
PCE chain-weighted price index	3.5	1.9	1.4	1.1
Previous Greenbook	3.5	1.9	.7	1.0
Food and beverages	4.5	6.3	1.5	1.9
Previous Greenbook	4.5	6.3	1.7	1.2
Energy	19.1	-8.5	1.3	4.5
Previous Greenbook	19.1	-8.5	-8.9	6.1
Excluding food and energy	2.2	1.9	1.4	.8
Previous Greenbook	2.2	1.9	1.2	.7
Consumer price index	4.0	1.5	1.4	1.4
Previous Greenbook	4.0	1.5	.4	1.3
Excluding food and energy	2.3	2.0	1.5	1.0
Previous Greenbook	2.3	2.0	1.3	.9
GDP chain-weighted price index	2.6	2.0	1.3	1.1
Previous Greenbook	2.6	2.0	1.6	.9
ECI for compensation of private industry workers <sup>1</sup>	3.0	2.4	1.4	1.2
Previous Greenbook	3.0	2.4	1.8	1.3
Compensation per hour, nonfarm business sector	3.6	3.9	2.6	1.2
Previous Greenbook	3.6	4.1	2.3	1.3
Prices of core goods imports <sup>2</sup>	3.4	3.5	-1.6	1.1
Previous Greenbook	3.4	3.5	-3.3	1.1

1. December to December.

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

Despite the downturn in economic activity, we estimate that labor productivity rose about 3 percent at an annual rate over the first half of this year. We expect productivity to grow more slowly than its structural rate over the second half of this year and the first half of next, as firms better align employment with production. By the second half of 2010, productivity is expected to increase at its structural rate.

**Prices and labor costs.** Given the extent of slack in the economy, we expect core inflation to decelerate appreciably over the forecast period, from 1.9 percent in 2008 to 1.4 percent in 2009 and 0.8 percent in 2010. We have raised our projection relative to that in the April Greenbook, in light of higher-than-expected incoming data, the recent firmness in inflation expectations, and higher energy and relative import prices. The jump in energy prices has led to a sharp increase in our projection of headline inflation in 2009. Our projection for 2010 is little changed from the April forecast. We now project total PCE prices to increase 1.4 percent in 2009 and 1.1 percent in 2010, up 0.7 percentage point and 0.1 percentage point, respectively, from the April forecast.

Given the weak labor market and falling overall price inflation, we expect labor compensation to decelerate over the forecast period, as in the April forecast. The incoming news has been mixed. Recent data on the employment cost index and average hourly earnings have been weaker than expected, while readings on compensation per hour in the nonfarm business sector have come in just a little above our expectations. On the whole, we continue to view the various measures as suggesting that labor compensation will be held down significantly this year and next by the weakness of the labor market.

### **The Long-Term Outlook**

We have extended the staff forecast to 2013, using the FRB/US model and staff assessments of long-run supply-side conditions, fiscal policy, and other factors. The contour of the long-run outlook depends on the following key assumptions:

- Monetary policy aims to stabilize PCE inflation at 2 percent in the long run, consistent with the longer-term inflation projections provided by FOMC participants in April.
- There are no further nontraditional monetary policy actions beyond those that have already been announced. This assumption implies a gradual shrinking of the Federal Reserve's balance sheet over time.

- Risk premiums on corporate bonds and equity continue to fall back toward historically more normal levels beyond 2010.
- The fiscal stimulus package continues to boost government spending beyond 2010, as the grants in the package raise state and local government spending only gradually. By 2013, the increased spending from the grants is almost complete.
- Government budget deficits narrow after 2010. This improvement mostly reflects the effects of the economic recovery on tax receipts and transfer payments.
- From 2011 to 2013, the dollar is assumed to depreciate about 2½ percent per year in real terms. The price of WTI crude oil rises gradually from recent levels to a bit less than \$80 per barrel by the end of 2013, consistent with futures prices. Under these assumptions, movements in prices of energy and imports have only minor implications for domestic inflation. Finally, foreign real GDP expands 4¾ percent per year, on average, as the economic recovery picks up speed abroad.
- The NAIRU remains flat at 5 percent, and potential GDP expands 2½ percent per year, on average, over the 2011-13 period.

### The Long-Term Outlook

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

Measure	2008	2009	2010	2011	2012	2013
Real GDP	-0.8	-1.1	3.0	4.8	5.3	4.2
Civilian unemployment rate <sup>1</sup>	6.8	10.0	9.7	8.0	6.1	4.9
PCE prices, total	1.9	1.4	1.1	1.2	1.1	1.3
Core PCE prices	1.9	1.4	0.8	0.7	0.9	1.1
Federal funds rate <sup>1</sup>	0.5	0.1	0.1	0.1	2.4	4.1

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

The unemployment rate enters 2011 at a very high level, and inflation is well below the assumed long-run target. Under the assumptions used to construct the baseline extension, the federal funds rate remains at the effective lower bound through early 2012.<sup>2</sup> The lingering effects of financial upheaval continue to fade after 2010, and the recovery in residential construction gains momentum. Coupled with stimulative monetary policy, these factors propel real GDP to increase 4¾ percent per year, on average, from 2011 through 2013. With actual output increasing faster than its potential rate by a wide margin, the unemployment rate declines steadily over this period and reaches the NAIRU in 2013. Core PCE inflation moves up modestly after 2011 as economic activity recovers and long-run inflation expectations are assumed to remain relatively well anchored.

### **Financial Flows and Conditions**

We project that domestic nonfinancial debt will expand at an annual rate of 5½ percent in the current quarter, reflecting rapid growth of federal debt and a moderate rise in state and local government debt. In contrast, private-sector debt is expected to edge down for the third straight quarter. We project that federal debt will continue to increase rapidly through the end of 2010, but that borrowing by households and nonfinancial businesses during this period will remain extremely light by historical standards.

We estimate that household debt contracted at an annual rate of about 1 percent last quarter and expect a similar rate of decline this quarter. Consumer credit has been curtailed sharply as banks have reduced credit card limits, increased loan charge-offs, and taken a cautious approach to new lending. Meanwhile, household mortgage debt outstanding was essentially unchanged in the first quarter, as low mortgage rates helped offset the downward pressure of declining house prices and increased unemployment. We expect mortgage debt to decline through the end of this year before flattening out in 2010 as the recent increase in mortgage rates and continuing house price declines restrain borrowing. Although we expect overall household debt to begin to edge up next year as the economy improves, the rise in debt will be limited by the sharply elevated level of unemployment and lending standards that ease only slowly.

Nonfinancial business debt is expected to increase at an annual rate of 1 percent in the current quarter after having edged down last quarter. Net bond issuance by nonfinancial

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<sup>2</sup> The tightening in monetary policy occurs a year earlier than in the April Greenbook projection, largely because of a change in the method used to set the extended path of the federal funds rate. We are now using a version of the Taylor rule in which the intercept is held constant at 2½ percent—the long-run historical average of the real federal funds rate. Previously, we had set the intercept equal to a backward-looking moving average of the real federal funds rate.

firms has been robust this quarter, as it was in the first quarter, with the issuers reportedly using some of the proceeds to pay down commercial paper and bank loans. Although we expect the pace of business borrowing to edge up further in the third quarter, reflecting improvements in credit conditions, we anticipate that it will remain sluggish through the end of the forecast period, as the low level of capital expenditures limits the demand for external funds.

Federal government debt is expected to continue to increase rapidly over the forecast period, primarily reflecting the lower tax revenues and increased spending associated with the recession and the budget costs of the large fiscal stimulus package. All told, we anticipate net federal borrowing of about \$1.5 trillion in 2009 and nearly \$1.3 trillion in 2010. In the state and local government sector, debt increased at an annual rate of 6½ percent in the second quarter as strains in the municipal bond market eased further, helping clear a backlog of issuances. We project that state and local government borrowing will be slower for the remainder of 2009 and in 2010, reflecting relatively weak capital expenditures due to the poor fiscal outlook for this sector.

M2 expanded at an average annual rate of about ¾ percent during April and May, a significant deceleration from the first quarter of this year; M2 is expected to decelerate further over the rest of this year. In 2010, M2 is forecast to increase less rapidly than nominal GDP, as improvements in economic and financial market conditions continue to reduce demand for the safety of M2 assets.

### **Alternative Scenarios**

In this section, we illustrate risks to the staff forecast using simulations of the FRB/US model. In the first scenario, the easing in financial conditions and tentative signs of stabilization in demand seen this spring turn out to be short-lived, and both financial stress and the economic downturn intensify rather than abate. The second scenario examines a different downside risk to activity—namely, the possibility that demand will stabilize but fail to gather momentum given continuing financial and economic strains. By contrast, the third scenario considers the consequences of a rapid recovery that is more typical of the postwar experience. The fourth scenario considers the possibility that this recession will have persistent adverse effects on labor market efficiency. The next two scenarios examine opposing inflation risks—that long-run inflation expectations drift up, or, alternatively, that we have underestimated deflationary forces. The final scenario combines a more robust recovery with an increase in inflation expectations, leading to an earlier liftoff in the federal funds rate than is incorporated in the baseline projection.

**Alternative Scenarios**

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

Measure and scenario	2009		2010	2011	2012-13
	H1	H2			
<i>Real GDP</i>					
Extended Greenbook baseline	-3.3	1.1	3.0	4.8	4.8
False dawn	-3.4	-3.1	1.6	5.2	5.5
Slower recovery	-3.3	-.1	.8	4.3	5.7
Typical recovery	-3.3	5.6	5.0	4.5	3.6
Labor market damage	-3.3	.0	2.1	4.8	5.1
Higher inflation expectations	-3.3	1.1	3.2	5.1	4.6
Deflation	-3.3	1.1	2.9	4.7	4.8
Early liftoff	-3.3	5.6	5.1	4.4	3.5
<i>Unemployment rate<sup>1</sup></i>					
Extended Greenbook baseline	9.3	10.0	9.7	8.0	4.9
False dawn	9.3	10.5	11.0	9.2	5.4
Slower recovery	9.3	10.1	10.6	9.2	5.4
Typical recovery	9.3	9.5	8.3	6.8	4.8
Labor market damage	9.3	10.4	11.2	9.6	5.7
Higher inflation expectations	9.3	10.0	9.7	7.9	4.9
Deflation	9.3	10.0	9.7	8.1	5.0
Early liftoff	9.3	9.5	8.3	6.8	4.9
<i>Core PCE inflation</i>					
Extended Greenbook baseline	1.9	.9	.8	.7	1.0
False dawn	1.8	.9	.6	.5	.9
Slower recovery	1.9	.9	.8	.5	.9
Typical recovery	1.9	.9	1.0	.8	1.2
Labor market damage	1.9	.9	.8	.8	1.1
Higher inflation expectations	1.9	1.1	1.5	1.8	2.3
Deflation	1.9	-.1	.2	-.2	.3
Early liftoff	1.9	1.1	1.6	1.7	2.4
<i>Federal funds rate<sup>1</sup></i>					
Extended Greenbook baseline	.1	.1	.1	.1	4.1
False dawn	.1	.1	.1	.1	3.4
Slower recovery	.1	.1	.1	.1	3.4
Typical recovery	.1	.1	.6	2.0	4.4
Labor market damage	.1	.1	.1	.1	4.7
Higher inflation expectations	.1	.1	.1	1.3	5.8
Deflation	.1	.1	.1	.1	3.1
Early liftoff	.1	.1	1.6	3.3	5.8

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

In each of these scenarios, we assume that the federal funds rate follows the prescriptions of a version of the Taylor rule, subject to an effective lower bound of 12½ basis points.<sup>3</sup> Furthermore, these simulations extend the baseline assumption of a passive runoff of the assets acquired in the course of this year's large-scale asset purchase program.

**False dawn.** With employment and production continuing to contract and the financial system remaining quite fragile, the positive signals provided by recent financial market developments and some spending indicators could reverse themselves quickly. In this scenario, such a reversal comes to pass. Over the next several months, the stock market falls almost 30 percent below baseline while the spread of corporate bonds over 10-year Treasuries widens by 100 basis points. Banks further tighten lending terms and standards sharply. Consumer confidence and business sentiment falter rather than gradually improve as in the baseline. In response, household and business spending contracts markedly in the second half of the year. Economic activity abroad also slumps, depressing demand for U.S. exports. Buffeted by these shocks, real GDP contracts at an annual rate of about 3 percent in the second half (similar to its decline in the first half). An economic upturn is delayed until next year and begins at a pace noticeably below its potential rate. The unemployment rate peaks at 11 percent next year while core PCE inflation falls to ½ percent. Beyond 2010, a recovery becomes more firmly established as financial stress gradually abates, credit availability improves, and households and firms become more optimistic about future prospects. Nonetheless, the unemployment rate remains above the NAIRU through 2013, while inflation remains below the baseline. Weak real activity and low inflation in turn keep the federal funds rate close to zero until late 2012.

**Slower recovery.** Although the incoming data suggest that the economy may be in the process of stabilizing, the strength of any recovery remains highly uncertain. In this scenario, weak balance sheets, limited credit availability, and other restraining factors continue to weigh on economic activity. Real GDP is flat in the second half of this year, and then rises at an anemic pace of ¾ percent during 2010. The unemployment rate rises above 10½ percent by the end of 2010. Thereafter, we assume sentiment and credit availability gradually improve, which, in conjunction with low interest rates and continued gains in productivity, contribute to a quickening in activity. As in the previous scenario, the unemployment rate falls steadily while remaining well above the NAIRU,

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<sup>3</sup> The rule is  $i_t = 2.5 + \pi_t + 0.5(\pi_t - \pi^*) + 1.0y_t$ , where  $i_t$  is the nominal funds rate,  $\pi_t$  is the four-quarter rate of core PCE inflation,  $\pi^*$  is the inflation target (assumed to equal 2 percent), and  $y_t$  is the output gap. The constant in the equation (2.5 percent) is the historical average of the real federal funds rate.

and core inflation remains unusually low. The federal funds rate remains at the zero bound until late 2012.

**Typical recovery.** The developments of the past few months have brought into sharper focus the risk that financial conditions and household and business confidence could improve more quickly than we anticipate. In this scenario, rapid financial healing and a reassertion of economic fundamentals generate a robust recovery. Real output returns to its pre-recession peak by early 2010, a rate of recovery comparable to that seen in previous postwar recoveries. Specifically, real GDP expands at an annual rate of about 5¼ percent over the second half of this year and 2010. This rebound puts unemployment on a pronounced downward trajectory: The unemployment rate drops to 8¼ percent by the end of 2010 and then continues to move steadily down. With less slack in this scenario, inflation is somewhat higher than in the baseline, and the federal funds rate moves up from the zero bound in late 2010, almost two years earlier than in the baseline.

**Labor market damage.** The unusual depth and breadth of the downturn could well impair labor market efficiency by more than in the baseline projection, perhaps through unusually large intersectoral adjustments or the adverse effects of prolonged unemployment on workers' skills. This scenario considers the possibility that these factors have been boosting the NAIRU and will continue to do so, such that it reaches 6½ percent in 2010 and remains there for two years before drifting back down. Because this unfavorable supply-side development has adverse implications for household income and corporate profits, consumption and investment are weaker than in the baseline. As a result, real GDP is flat in the second half of this year and rises 2 percent next year. The unemployment rate peaks at over 11 percent in 2010. Over the course of this scenario, the average increase in the unemployment rate, relative to baseline, is somewhat less than that of the NAIRU, implying less slack. Hence, inflationary pressures are slightly greater than in the staff forecast.

**Higher inflation expectations.** Measures of expected long-run inflation have not moved down over the past year despite large increases in unemployment. One possible explanation is that the extraordinary expansion of the Federal Reserve's balance sheet has increased public concerns that our actions could result in some appreciable upward pressures on inflation. In this scenario, we consider the possibility that these concerns manifest themselves in an increase in long-run inflation expectations to 3 percent by early next year, thereby boosting actual inflation and becoming partially self-fulfilling. Core PCE inflation averages 1½ percent in 2010 and then climbs steadily, reaching 2½ percent

by 2013. That development in turn brings forward the liftoff in the federal funds rate to mid-2011. The implied reduction in real interest rates provides a small boost to real activity.

**Deflation.** Although inflation falls substantially in the staff projection, we may have understated the extent to which pronounced economic weakness will force some firms, domestic and foreign, to cut prices. In turn, persistently lower prices may become built into inflation expectations more quickly than we assume in the baseline. FRB/US and many of our other price models in fact point to a more pronounced decline in inflation than we are projecting. In this scenario, we allow inflation to follow a path more consistent with these models, so that core prices are flat or falling through 2011, and only rising slowly thereafter. With the nominal federal funds rate already near zero, the greater disinflation implies higher real interest rates. We further assume that the increasing real burden of nominal debt obligations boosts default risks and corporate bond spreads. Over time, these factors work to restrain aggregate spending more than in the staff forecast, resulting in a bit slower recovery in real activity.

**Early liftoff.** This scenario combines the shocks from the “typical recovery” and “higher inflation expectations” scenarios. As a result, real GDP expands at an average annual rate of about 5 percent over the second half of this year through 2011, the unemployment rate falls much more rapidly than in the baseline, and core PCE inflation averages 1½ percent next year and then rises steadily. In the face of such a strong sustained recovery, the federal funds rate begins to rise markedly starting early next year. Nevertheless, the pace of monetary tightening is constrained by a level of economic slack that remains persistently high and so the federal funds rate rises to only 1½ percent by late 2010 and does not climb above 4 percent until mid-2012.

### **Assessment of Forecast Uncertainty**

We continue to see the risks associated with the staff outlook as elevated relative to both the experience of the past 20 years (the benchmark used by the Committee) and the more volatile post-1968 sample period used by the staff for stochastic simulations. The disruptions to credit market functioning and to the stability of many financial institutions have (despite recent improvements) been extraordinary, and the potential for conditions either to deteriorate markedly or to improve faster than expected is considerable. These factors, combined with unprecedented policy responses, limit the applicability of the historical analyses and models used to guide our projections and so we see the range of

plausible outcomes for real GDP and unemployment as being wider than usual. In addition, we still see the risks to real activity as biased to the downside.

We also view the price outlook as more uncertain than usual. In particular, our standard inflation forecasting tools may be less useful than normal under the extreme conditions we currently face, with the economy in deep recession, monetary policy unable to provide further stimulus through conventional means, and the size of the Federal Reserve's balance sheet having expanded rapidly. For this reason, we suspect that our history-based confidence intervals probably understate the risks on both sides of our inflation forecast. We judge the risks to our price forecast as roughly balanced.

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

Measure	2009	2010	2011	2012	2013
<i>Real GDP</i>					
<i>(percent change, Q4 to Q4)</i>					
Projection	-1.1	3.0	4.8	5.3	4.2
Confidence interval					
Greenbook forecast errors	-2.3–.2	1.3–4.6	...	...	...
FRB/US stochastic simulations	-1.9–-.2	1.6–4.4	3.3–6.5	3.4–6.8	2.4–6.1
<i>Civilian unemployment rate</i>					
<i>(percent, Q4)</i>					
Projection	10.0	9.7	8.0	6.1	4.9
Confidence interval					
Greenbook forecast errors	9.5–10.5	8.9–10.4	...	...	...
FRB/US stochastic simulations	9.6–10.3	9.0–10.3	7.2–8.8	5.3–7.0	4.2–5.8
<i>PCE prices, total</i>					
<i>(percent change, Q4 to Q4)</i>					
Projection	1.4	1.1	1.2	1.1	1.3
Confidence interval					
Greenbook forecast errors	.7–2.2	.0–2.3	...	...	...
FRB/US stochastic simulations	.9–2.0	.3–2.2	.1–2.2	-.1–2.2	.1–2.4
<i>PCE prices excluding food and energy</i>					
<i>(percent change, Q4 to Q4)</i>					
Projection	1.4	0.8	0.7	0.9	1.1
Confidence interval					
Greenbook forecast errors	.9–1.9	.0–1.5	...	...	...
FRB/US stochastic simulations	1.1–1.7	.1–1.5	-.1–1.5	.0–1.6	.3–2.0
<i>Federal funds rate</i>					
<i>(percent, Q4)</i>					
Projection	0.1	0.1	0.1	2.4	4.1
Confidence interval					
FRB/US stochastic simulations	.1–.1	.1–.5	.1–2.3	.8–4.4	2.3–6.1

Notes: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969–2008 set of model equation residuals.

Intervals derived from Greenbook forecast errors are based on projections made from 1979–2008, except for PCE prices excluding food and energy, where the sample is 1981–2008.

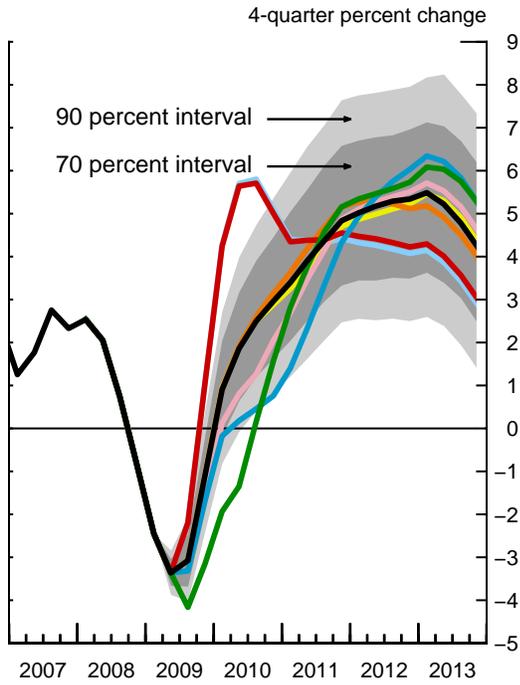
... Not applicable. The Greenbook forecast horizon has typically extended about two years.

## Forecast Confidence Intervals and Alternative Scenarios

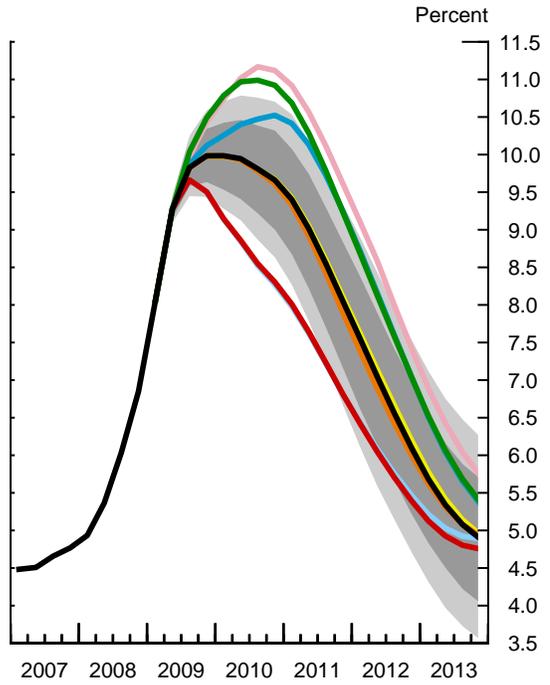
Confidence Intervals Based on FRB/US Stochastic Simulations

- Extended Greenbook baseline
- Typical recovery
- Deflation
- False dawn
- Labor market damage
- Early liftoff
- Slower recovery
- Higher inflation expectations

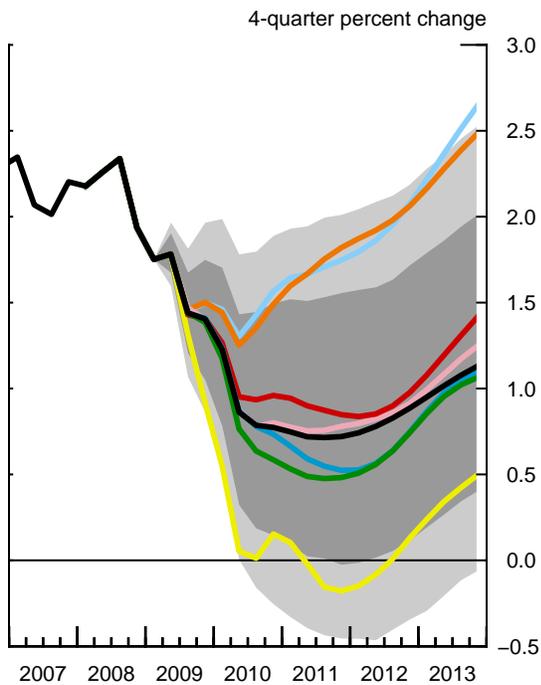
Real GDP



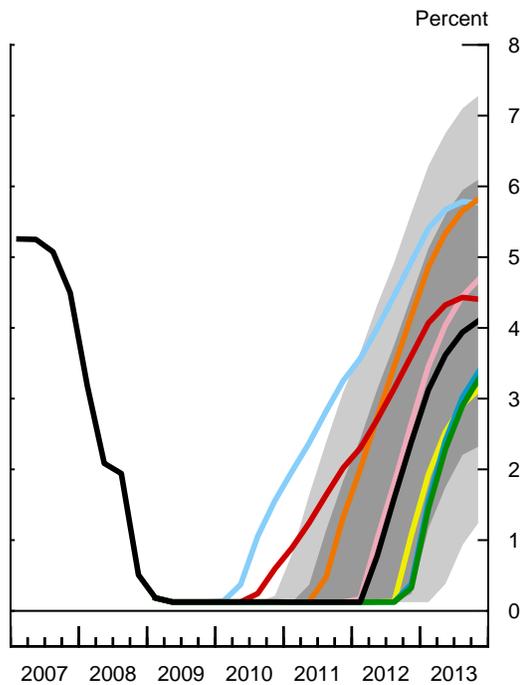
Unemployment Rate



PCE Prices excluding Food and Energy



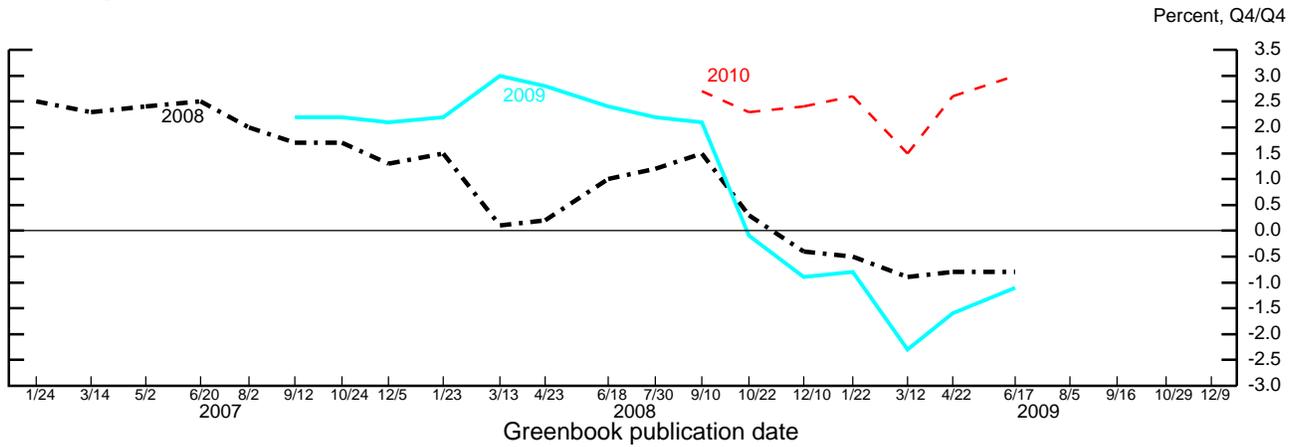
Federal Funds Rate



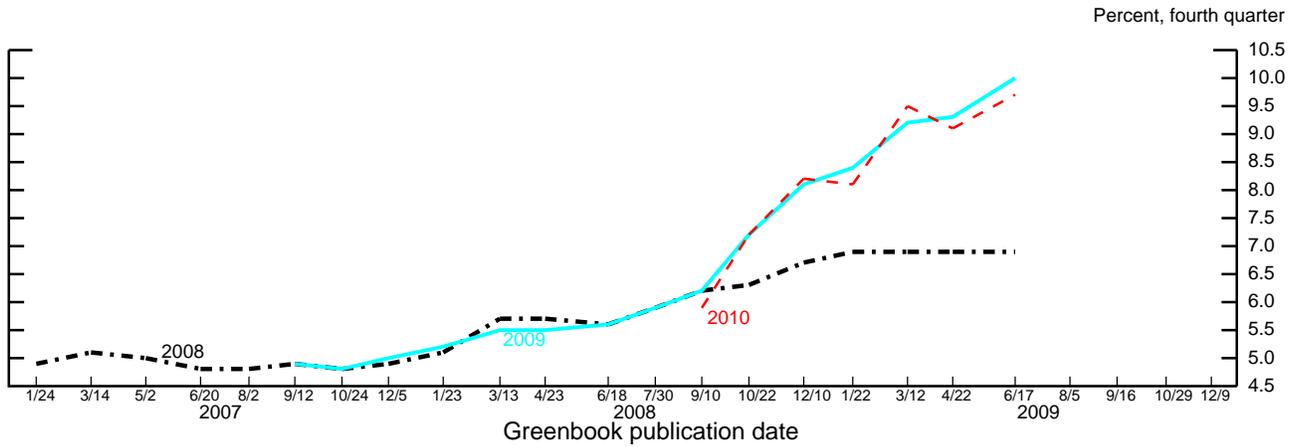
Class II FOMC - Restricted (FR)

### Evolution of the Staff Forecast

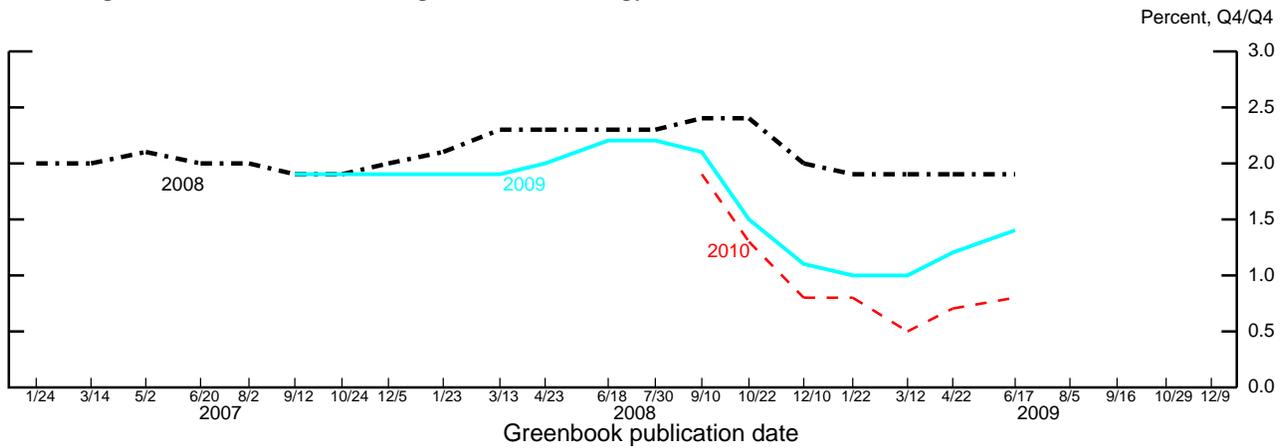
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy



**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>	
	4/22/09	6/17/09	4/22/09	6/17/09	4/22/09	6/17/09	4/22/09	6/17/09	4/22/09	6/17/09
<i>Quarterly</i>										
2008:Q1	3.5	3.5	.9	.9	3.6	3.6	2.3	2.3	4.9	4.9
2008:Q2	4.1	4.1	2.8	2.8	4.3	4.3	2.2	2.2	5.4	5.4
2008:Q3	3.4	3.4	-5	-5	5.0	5.0	2.4	2.4	6.0	6.0
2008:Q4	-5.8	-5.8	-6.3	-6.3	-4.9	-4.9	.9	.9	6.9	6.9
2009:Q1	-3.1	-3.0	-6.3	-5.5	-9	-9	1.7	1.5	8.1	8.1
2009:Q2	-1.0	-1.6	-1.5	-1.0	.8	.8	1.7	2.3	9.0	9.3
2009:Q3	1.9	2.2	.4	.7	1.6	1.6	.9	1.0	9.2	9.8
2009:Q4	2.3	3.2	1.2	1.6	1.4	1.7	.7	.8	9.3	10.0
2010:Q1	2.9	3.7	1.9	2.3	1.2	1.5	.7	.8	9.3	10.0
2010:Q2	3.5	4.1	2.5	2.8	1.1	1.2	.7	.8	9.2	9.9
2010:Q3	3.9	4.2	3.0	3.2	1.0	.9	.7	.7	9.1	9.8
2010:Q4	4.1	4.3	3.3	3.4	.8	.9	.6	.7	9.1	9.7
<i>Two-quarter<sup>2</sup></i>										
2008:Q2	3.8	3.8	1.8	1.8	3.9	3.9	2.2	2.2	.6	.6
2008:Q4	-1.3	-1.3	-3.5	-3.5	.0	.0	1.7	1.7	1.5	1.5
2009:Q2	-2.0	-2.3	-3.9	-3.3	-1	.3	1.7	1.9	2.1	2.4
2009:Q4	2.1	2.7	.8	1.1	1.5	2.6	.8	.9	.3	.7
2010:Q2	3.2	3.9	2.2	2.6	1.1	1.4	.7	.8	-1	-1
2010:Q4	4.0	4.3	3.1	3.3	.9	.9	.6	.7	-1	-2
<i>Four-quarter<sup>3</sup></i>										
2007:Q4	4.9	4.9	2.3	2.3	3.5	3.5	2.2	2.2	.4	.4
2008:Q4	1.2	1.2	-8	-8	1.9	1.9	1.9	1.9	2.1	2.1
2009:Q4	.0	.2	-1.6	-1.1	.7	1.4	1.2	1.4	2.4	3.1
2010:Q4	3.6	4.1	2.6	3.0	1.0	1.1	.7	.8	-2	-3
<i>Annual</i>										
2007	4.8	4.8	2.0	2.0	2.6	2.6	2.2	2.2	4.6	4.6
2008	3.3	3.3	1.1	1.1	3.3	3.3	2.2	2.2	5.8	5.8
2009	-1.0	-1.0	-2.8	-2.5	.1	.5	1.5	1.6	8.9	9.3
2010	2.7	3.3	1.7	2.1	1.2	1.6	.8	.9	9.2	9.9

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	2008				2009				2010				2008 <sup>1</sup>	2009 <sup>1</sup>	2010 <sup>1</sup>
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP <i>Previous Greenbook</i>	.9	2.8	-5	-6.3	-5.5	-1.0	.7	1.6	2.3	2.8	3.2	3.4	-8	-1.1	3.0
Final sales <i>Previous Greenbook</i>	.9	2.8	-5	-6.3	-6.3	-1.5	.4	1.2	1.9	2.5	3.0	3.3	-8	-1.6	2.6
Priv. dom. final purch. <i>Previous Greenbook</i>	.9	4.4	-1.3	-6.2	-3.1	-1	-4	-8	1.1	3.2	3.4	2.8	-7	-1.1	2.6
Personal cons. expend. <i>Previous Greenbook</i>	.9	4.4	-1.3	-6.2	-4.1	-1.4	-6	-5	.7	3.0	3.0	2.9	-7	-1.7	2.4
Durables	-3	.7	4.1	-7.5	-5.8	-2.3	-1.2	-5	1.3	2.9	3.7	4.5	-2.8	-2.5	3.1
Nondurables	-3	.7	-4.1	-7.5	-5.0	-4.0	-1.8	-5	1.3	2.8	3.6	4.3	-2.8	-2.9	3.0
Services	.9	1.2	-3.8	-4.3	1.6	-4	.8	1.4	2.1	2.7	3.1	3.4	-1.5	.8	2.8
Residential investment <i>Previous Greenbook</i>	.9	1.2	-3.8	-4.3	1.1	-5	.4	1.2	1.9	2.5	3.0	3.3	-1.5	.5	2.7
Business fixed invest. <i>Previous Greenbook</i>	-4.3	-2.8	-14.8	-22.1	9.4	-3.9	-1.6	2.1	7.5	8.0	6.3	6.3	-11.4	1.4	7.0
Equipment & software <i>Previous Greenbook</i>	-4	3.9	-7.1	-9.4	-3	-1.9	1.0	1.3	1.7	2.1	2.5	2.9	-3.4	.0	2.3
Nonres. structures <i>Previous Greenbook</i>	2.4	.7	-1	1.5	1.3	.8	1.1	1.3	1.5	2.2	2.8	3.3	1.1	1.1	2.5
Net exports <sup>2</sup> <i>Previous Greenbook</i> <sup>2</sup>	-25.1	-13.3	-16.0	-22.8	-38.0	-22.1	-13.3	-11.1	-2.2	12.4	13.6	20.1	-19.4	-21.9	10.7
Exports	-25.1	-13.3	-16.0	-22.8	-38.2	-27.4	-1.7	.0	8.2	13.8	11.3	10.7	-19.4	-18.5	11.0
Imports	2.4	2.5	-1.7	-21.7	-37.3	-10.3	-12.5	-12.0	-4.6	1.3	6.1	9.7	-5.2	-18.9	3.0
Gov't. cons. & invest. <i>Previous Greenbook</i>	2.4	2.5	-1.7	-21.7	-30.1	-20.8	-17.4	-13.6	-5.3	2.1	6.8	10.8	-5.2	-20.7	3.4
Federal	-6	-5.0	-7.5	-28.1	-33.6	-13.0	-6.8	-6.1	-2	6.3	11.4	15.3	-11.0	-15.7	8.0
Defense	-6	-5.0	-7.5	-28.1	-32.4	-13.6	-12.5	-8.9	-1.1	9.2	14.8	19.1	-11.0	-17.4	10.2
Nondefense	8.6	18.5	9.7	-9.4	-42.9	-5.7	-21.6	-21.8	-12.6	-7.7	-3.8	-1.2	6.3	-24.2	-6.4
State & local	8.6	18.5	9.7	-9.4	-26.4	-31.6	-25.4	-21.5	-13.0	-10.5	-7.9	-5.4	6.3	-26.3	-9.2
Change in bus. inventories <sup>2</sup> <i>Previous Greenbook</i> <sup>2</sup>	-462	-381	-353	-364	-297	-263	-264	-295	-313	-304	-298	-329	-390	-280	-311
Nonfarm <sup>2</sup>	-462	-381	-353	-364	-333	-314	-325	-351	-383	-378	-383	-407	-390	-331	-388
Farm <sup>2</sup>	5.1	12.3	3.0	-23.6	-30.6	-5.4	3.6	2.5	3.3	3.7	4.4	4.7	-1.8	-8.6	4.0
	-8	-7.3	-3.5	-17.5	-36.3	-12.3	3.1	10.3	7.4	.6	2.2	11.8	-7.5	-10.7	5.4
Gov't. cons. & invest. <i>Previous Greenbook</i>	1.9	3.9	5.8	1.3	-3.0	3.7	2.9	3.3	3.4	2.3	1.1	.8	3.2	1.7	1.9
Federal	1.9	3.9	5.8	1.3	-5.3	6.7	6.1	3.7	3.1	2.4	1.3	.9	3.2	2.7	1.9
Defense	5.8	6.6	13.8	7.0	-4.3	9.5	6.2	6.5	6.9	4.1	.8	.1	8.2	4.3	2.9
Nondefense	7.3	7.3	18.0	3.4	-6.8	11.7	6.9	5.1	4.2	3.1	2.0	.9	8.9	4.0	2.6
State & local	2.9	5.0	5.1	15.3	1.0	4.9	4.7	9.6	12.9	6.1	-1.7	-1.7	6.9	5.0	3.7
Change in bus. inventories <sup>2</sup> <i>Previous Greenbook</i> <sup>2</sup>	-3	2.5	1.3	-2.0	-2.2	.3	.8	1.2	1.2	1.2	1.3	1.3	.4	.0	1.2
Nonfarm <sup>2</sup>	-10	-51	-30	-26	-94	-127	-95	-27	7	-2	-6	13	-29	-86	3
Farm <sup>2</sup>	-10	-51	-30	-26	-93	-97	-66	-16	18	4	3	14	-29	-68	10
	-18	-55	-33	-31	-102	-134	-103	-34	1	-7	-12	8	-34	-93	-2
	6	2	2	4	5	4	4	4	4	3	3	3	4	4	3

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

2. Billions of chained (2000) 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	2002	2003	2004	2005	2006	2007	2008	2009	2010
Real GDP	1.9	3.7	3.1	2.7	2.4	2.3	-8	-1.1	3.0
<i>Previous Greenbook</i>	1.9	3.7	3.1	2.7	2.4	2.3	-8	-1.6	2.6
Final sales	.8	3.7	2.8	2.7	2.8	2.5	-7	-1.1	2.6
<i>Previous Greenbook</i>	.8	3.7	2.8	2.7	2.8	2.5	-7	-1.7	2.4
Priv. dom. final purch.	1.1	4.1	4.3	3.1	2.3	1.4	-2.8	-2.5	3.1
<i>Previous Greenbook</i>	1.1	4.1	4.3	3.1	2.3	1.4	-2.8	-2.9	3.0
Personal cons. expend.	1.9	3.4	3.7	2.6	3.2	2.2	-1.5	.8	2.8
<i>Previous Greenbook</i>	1.9	3.4	3.7	2.6	3.2	2.2	-1.5	.5	2.7
Durables	1.2	8.3	5.6	1.2	6.9	4.2	-11.4	1.4	7.0
Nondurables	2.1	3.9	3.5	3.6	3.2	1.7	-3.4	.0	2.3
Services	1.9	2.2	3.3	2.4	2.6	2.1	1.1	1.1	2.5
Residential investment	7.0	11.7	6.7	5.4	-15.5	-19.0	-19.4	-21.9	10.7
<i>Previous Greenbook</i>	7.0	11.7	6.7	5.4	-15.5	-19.0	-19.4	-18.5	11.0
Business fixed invest.	-6.5	4.9	7.5	4.9	6.5	6.4	-5.2	-18.9	3.0
<i>Previous Greenbook</i>	-6.5	4.9	7.5	4.9	6.5	6.4	-5.2	-20.7	3.4
Equipment & software	-3.4	6.6	9.4	7.0	4.2	2.8	-11.0	-15.7	8.0
<i>Previous Greenbook</i>	-3.4	6.6	9.4	7.0	4.2	2.8	-11.0	-17.4	10.2
Nonres. structures	-14.9	.2	2.3	-.5	12.8	14.5	6.3	-24.2	-6.4
<i>Previous Greenbook</i>	-14.9	.2	2.3	-.5	12.8	14.5	6.3	-26.3	-9.2
Net exports <sup>1</sup>	-471	-519	-594	-617	-616	-547	-390	-280	-311
<i>Previous Greenbook<sup>1</sup></i>	-471	-519	-594	-617	-616	-547	-390	-331	-388
Exports	3.8	5.8	7.4	7.0	10.1	8.9	-1.8	-8.6	4.0
Imports	9.7	4.8	11.5	4.8	3.8	1.1	-7.5	-10.7	5.4
Gov't cons. & invest.	4.0	1.7	.7	.6	2.1	2.4	3.2	1.7	1.9
<i>Previous Greenbook</i>	4.0	1.7	.7	.6	2.1	2.4	3.2	2.7	1.9
Federal	7.8	5.5	2.4	1.0	2.9	2.3	8.2	4.3	2.9
Defense	8.4	7.5	2.5	.8	4.1	2.7	8.9	4.0	2.6
Nondefense	6.8	1.9	2.3	1.4	.5	1.5	6.9	5.0	3.7
State & local	2.1	-.4	-.4	.3	1.6	2.4	.4	.0	1.2
Change in bus. inventories <sup>1</sup>	12	14	54	39	42	-2	-29	-86	3
<i>Previous Greenbook<sup>1</sup></i>	12	14	54	39	42	-2	-29	-68	10
Nonfarm <sup>1</sup>	15	14	48	39	46	-4	-34	-93	-2
Farm <sup>1</sup>	-2	0	6	0	-3	1	4	4	3

1. Billions of chained (2000) dollars.

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

Item	2008				2009				2010				2008 <sup>1</sup>	2009 <sup>1</sup>	2010 <sup>1</sup>
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
Real GDP <i>Previous Greenbook</i>	.9	2.8	-5	-6.3	-5.5	-1.0	.7	1.6	2.3	2.8	3.2	3.4	-8	-1.1	3.0
Final sales <i>Previous Greenbook</i>	.9	2.8	-5	-6.3	-6.3	-1.5	.4	1.2	1.9	2.5	3.0	3.3	-8	-1.6	2.6
Priv. dom. final purch. <i>Previous Greenbook</i>	.9	4.3	-1.4	-6.2	-3.1	-1	-4	-8	1.1	3.2	3.4	2.8	-7	-1.1	2.6
Personal cons. expend. <i>Previous Greenbook</i>	.9	4.3	-1.4	-6.2	-4.0	-1.4	-6	-5	.7	2.9	3.0	2.9	-7	-1.7	2.4
Durables	-3	.6	-3.5	-6.4	-4.8	-1.9	-1.0	-4	1.1	2.3	3.0	3.7	-2.4	-2.1	2.5
Nondurables	-3	.6	-3.5	-6.4	-4.1	-3.4	-1.5	-4	1.1	2.2	2.9	3.5	-2.4	-2.4	2.4
Services	.6	.9	-2.8	-3.0	1.2	-3	.6	1.0	1.5	2.0	2.2	2.5	-1.1	.6	2.0
Residential investment <i>Previous Greenbook</i>	.6	.9	-2.8	-3.0	.9	-3	.3	.8	1.4	1.7	2.1	2.3	-1.1	.4	1.9
Business fixed invest. <i>Previous Greenbook</i>	-3	-2	-1.2	-1.7	.6	-3	-1	.1	.5	.5	.4	.4	-9	.1	.5
Equipment & software <i>Previous Greenbook</i>	-1	.8	-1.6	-2.0	.0	-4	.2	.3	.4	.4	.5	.6	-7	.0	.5
Nonres. structures <i>Previous Greenbook</i>	1.0	.3	.0	.7	.6	.4	.5	.6	.7	1.0	1.2	1.5	.5	.5	1.1
Net exports <i>Previous Greenbook</i>	-1.1	-5	-6	-8	-1.4	-7	-4	-3	-1	.3	.3	.4	-8	-7	2
Exports	-1.1	-5	-6	-8	-1.4	-8	.0	.0	.2	.3	.3	.3	-8	-6	3
Imports	.3	.3	-2	-2.6	-4.7	-1.0	-1.2	-1.1	-4	.1	.5	.8	-6	-2.0	.3
Gov't. cons. & invest. <i>Previous Greenbook</i>	.3	.3	-2	-2.6	-3.6	-2.2	-1.7	-1.3	-5	.2	.5	.9	-6	-2.2	.3
Federal	.0	-4	-6	-2.2	-2.6	-8	-4	-4	.0	.3	.6	.8	-8	-1.0	.4
Defense	.0	-4	-6	-2.2	-2.4	-9	-8	-5	-1	.5	.8	1.0	-8	-1.1	.6
Nondefense	.3	.6	.4	-4	-2.1	-2	-8	-8	-4	-2	-1	.0	.2	-9	-2
State & local	.3	.6	.4	-4	-1.2	-1.3	-1.0	-7	-4	-3	-2	-1	.2	-1.0	-3
Net exports <i>Previous Greenbook</i>	.8	2.9	1.1	-2	2.1	1.1	.0	-1.1	-7	.3	.2	-1.1	1.1	.7	-3
Exports	.8	2.9	1.1	-2	1.0	.6	-4	-9	-1.1	.2	-2	-8	1.1	.1	-5
Imports	.6	1.5	.4	-3.4	-4.2	-6	.4	.3	.4	.4	.5	.5	-2	-1.0	.4
Gov't. cons. & invest. <i>Previous Greenbook</i>	.1	1.4	.7	3.3	6.4	1.7	-4	-1.4	-1.0	-1	-3	-1.6	1.3	1.7	-8
Federal	.4	.8	1.1	.3	-.6	.8	.6	.7	.7	.5	.2	.2	.6	.3	.4
Defense	.4	.8	1.1	.3	-1.1	1.3	1.2	.8	.7	.5	.3	.2	.6	.5	.4
Nondefense	.3	.4	.9	.2	-.3	.7	.5	.5	.6	.3	.1	.0	.6	.3	.2
State & local	.1	.1	.1	.3	.0	.1	.1	.2	.2	.2	.1	.1	.4	.2	.1
Change in bus. inventories <i>Previous Greenbook</i>	.0	.3	.2	-3	-3	.0	.1	.2	.2	.2	.2	.2	.0	.0	.2
Nonfarm	.0	-1.5	.8	-1	-2.4	-9	1.1	2.4	1.2	-3	-2	.7	-2	.0	.4
Farm	.0	-1.5	.8	-1	-2.2	-1	1.0	1.7	1.1	-5	-1	.4	-2	.1	.3
Nonfarm	.2	-1.4	.8	-2	-2.4	-1.1	1.1	2.4	1.2	-3	-2	.7	-1	.0	.4
Farm	-2	-1	.0	.1	.0	.2	.0	.0	.0	.0	.0	.0	-1	.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	2008				2009				2010				2008 <sup>1</sup>	2009 <sup>1</sup>	2010 <sup>1</sup>
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4			
GDP chain-wt. price index <i>Previous Greenbook</i>	2.6	1.1	3.9	.5	2.7	-6	1.6	1.6	1.4	1.2	1.0	.8	2.0	1.3	1.1
PCE chain-wt. price index <i>Previous Greenbook</i>	2.6	1.1	3.9	.5	3.3	.5	1.5	1.1	1.0	1.0	.9	.8	2.0	1.6	.9
Energy <i>Previous Greenbook</i>	3.6	4.3	5.0	-4.9	-1.0	1.5	3.5	1.7	1.5	1.2	.9	.9	1.9	1.4	1.1
Food <i>Previous Greenbook</i>	3.6	4.3	5.0	-4.9	-9	.8	1.6	1.4	1.2	1.1	1.0	.8	1.9	.7	1.0
Ex. food & energy <i>Previous Greenbook</i>	19.0	27.4	31.7	-65.0	-35.9	-3.3	51.8	12.0	6.9	4.7	3.5	2.8	-8.5	1.3	4.5
CPI <i>Previous Greenbook</i>	19.0	27.4	31.7	-65.0	-36.0	-13.1	12.2	10.5	8.2	6.6	5.2	4.4	-8.5	-8.9	6.1
Ex. food & energy <i>Previous Greenbook</i>	4.9	6.4	8.5	5.6	.9	-9	2.7	3.3	3.6	2.3	1.1	.7	6.3	1.5	1.9
CPI <i>Previous Greenbook</i>	4.9	6.4	8.5	5.6	.9	1.0	2.5	2.2	1.6	1.3	1.0	.8	6.3	1.7	1.2
Ex. food & energy <i>Previous Greenbook</i>	2.3	2.2	2.4	.9	1.5	2.3	1.0	.8	.8	.8	.7	.7	1.9	1.4	.8
ECL, hourly compensation <sup>2</sup> <i>Previous Greenbook</i> <sup>2</sup>	2.3	2.2	2.4	.9	1.7	1.7	.9	.7	.7	.7	.7	.6	1.9	1.2	.7
Nonfarm business sector Output per hour <i>Previous Greenbook</i>	4.5	4.5	6.2	-8.3	-2.4	1.2	4.5	2.3	1.9	1.5	1.2	1.1	1.5	1.4	1.4
Compensation per hour <i>Previous Greenbook</i>	4.5	4.5	6.2	-8.3	-2.4	.3	2.1	1.8	1.6	1.4	1.2	1.1	1.5	.4	1.3
Unit labor costs <i>Previous Greenbook</i>	2.5	2.0	2.8	.6	1.5	2.3	1.2	1.1	1.0	1.0	.9	.9	2.0	1.5	1.0
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Greenbook</i> <sup>3</sup>	2.5	2.0	2.8	.6	1.5	1.5	1.2	1.0	.9	.9	.9	.8	2.0	1.3	.9
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Greenbook</i> <sup>3</sup>	2.7	2.6	2.6	1.9	.7	1.8	1.7	1.5	1.3	1.3	1.2	1.1	2.4	1.4	1.2
Nonfarm business sector Output per hour <i>Previous Greenbook</i>	3.0	2.3	2.6	1.9	2.0	1.9	1.8	1.5	1.4	1.3	1.3	1.2	2.4	1.8	1.3
Compensation per hour <i>Previous Greenbook</i>	2.6	4.7	2.2	-6	1.9	4.4	1.5	1.1	1.2	1.2	1.6	1.6	2.2	2.2	1.4
Unit labor costs <i>Previous Greenbook</i>	2.6	4.7	2.2	-6	-1.0	3.1	1.6	1.6	2.2	2.1	2.0	1.9	2.2	1.3	2.1
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Greenbook</i> <sup>3</sup>	3.7	1.7	5.7	4.5	4.6	3.2	1.6	1.3	1.3	1.2	1.2	1.2	3.9	2.6	1.2
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Greenbook</i> <sup>3</sup>	3.7	1.7	5.7	5.2	3.2	2.9	1.9	1.4	1.4	1.4	1.3	1.3	4.1	2.3	1.3
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Greenbook</i> <sup>3</sup>	1.1	-2.8	3.5	5.1	2.6	-1.2	.1	.2	.1	.0	-4	-5	1.7	.4	-2
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Greenbook</i> <sup>3</sup>	1.1	-2.8	3.5	5.7	4.3	-2	.3	-.3	-8	-7	-7	-7	1.8	1.0	-7
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Greenbook</i> <sup>3</sup>	8.5	10.6	4.6	-8.5	-9.3	-1.0	2.4	1.8	1.4	1.1	.9	.9	3.5	-1.6	1.1
Core goods imports chain-wt. price index <sup>3</sup> <i>Previous Greenbook</i> <sup>3</sup>	8.5	10.6	4.6	-8.5	-9.7	-3.0	-7	.5	1.0	1.1	1.1	1.0	3.5	-3.3	1.1

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	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP chain-wt. price index <i>Previous Greenbook</i>	1.7 1.7	2.2 2.2	3.2 3.2	3.5 3.5	2.8 2.8	2.6 2.6	2.0 2.0	1.3 1.6	1.1 .9
PCE chain-wt. price index <i>Previous Greenbook</i>	1.8 1.8	1.9 1.9	3.1 3.1	3.3 3.3	1.9 1.9	3.5 3.5	1.9 1.9	1.4 .7	1.1 1.0
Energy <i>Previous Greenbook</i>	7.7 7.7	7.6 7.6	18.3 18.3	23.1 23.1	-4.0 -4.0	19.1 19.1	-8.5 -8.5	1.3 -8.9	4.5 6.1
Food <i>Previous Greenbook</i>	1.3 1.3	2.6 2.6	2.9 2.9	2.1 2.1	2.3 2.3	4.5 4.5	6.3 6.3	1.5 1.7	1.9 1.2
Ex. food & energy <i>Previous Greenbook</i>	1.6 1.6	1.4 1.4	2.2 2.2	2.2 2.2	2.3 2.3	2.2 2.2	1.9 1.9	1.4 1.2	.8 .7
CPI <i>Previous Greenbook</i>	2.3 2.3	2.0 2.0	3.4 3.4	3.8 3.8	1.9 1.9	4.0 4.0	1.5 1.5	1.4 .4	1.4 1.3
Ex. food & energy <i>Previous Greenbook</i>	2.1 2.1	1.2 1.2	2.2 2.2	2.1 2.1	2.7 2.7	2.3 2.3	2.0 2.0	1.5 1.3	1.0 .9
ECI, hourly compensation <sup>1</sup> <i>Previous Greenbook</i> <sup>1</sup>	3.1 3.1	4.0 4.0	3.8 3.8	2.9 2.9	3.2 3.2	3.0 3.0	2.4 2.4	1.4 1.8	1.2 1.3
Nonfarm business sector Output per hour <i>Previous Greenbook</i>	2.9 2.9	4.7 4.7	1.8 1.8	1.5 1.5	.6 .6	2.6 2.6	2.2 2.2	2.2 1.3	1.4 2.1
Compensation per hour <i>Previous Greenbook</i>	3.2 3.2	5.3 5.3	3.9 3.9	3.6 3.6	4.2 4.2	3.6 3.6	3.9 4.1	2.6 2.3	1.2 1.3
Unit labor costs <i>Previous Greenbook</i>	.2 .2	.5 .5	2.1 2.1	2.1 2.1	3.7 3.7	.9 .9	1.7 1.8	.4 1.0	-2 -7
Core goods imports chain-wt. price index <sup>2</sup> <i>Previous Greenbook</i> <sup>2</sup>	.1 .1	1.6 1.6	3.6 3.6	2.2 2.2	2.4 2.4	3.4 3.4	3.5 3.5	-1.6 -3.3	1.1 1.1

1. Private-industry workers.

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

## Other Macroeconomic Indicators

Item	2008				2009				2010				2008 <sup>1</sup>	2009 <sup>1</sup>	2010 <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>	-1	-4	-5	-1.3	-2.1	-1.5	-7	.0	.3	.7	.3	.5	-2.3	-4.3	1.8	
Unemployment rate <sup>3</sup>	4.9	5.4	6.0	6.9	8.1	9.3	9.8	10.0	10.0	9.9	9.8	9.7	6.9	10.0	9.7	
<i>Previous Greenbook<sup>3</sup></i>	4.9	5.4	6.0	6.9	8.1	9.0	9.2	9.3	9.3	9.2	9.1	9.1	6.9	9.3	9.1	
GDP gap <sup>4</sup>	-8	-7	-1.4	-3.6	-5.4	-6.1	-6.4	-6.5	-6.4	-6.2	-5.9	-5.6	-3.6	-6.5	-5.6	
<i>Previous Greenbook<sup>4</sup></i>	-8	-7	-1.4	-3.6	-5.6	-6.4	-6.8	-7.0	-7.0	-6.9	-6.7	-6.4	-3.6	-7.0	-6.4	
Industrial production <sup>5</sup>	.2	-4.6	-9.0	-13.0	-19.0	-11.5	3.2	2.6	3.8	4.5	4.9	5.3	-6.7	-6.7	4.6	
<i>Previous Greenbook<sup>5</sup></i>	.2	-4.6	-9.0	-12.7	-20.0	-9.2	.5	2.0	3.9	3.5	4.7	4.4	-6.7	-7.1	4.1	
Manufacturing industr. prod. <sup>5</sup>	-1.2	-5.4	-9.3	-18.1	-22.0	-10.0	4.1	3.0	3.9	4.6	4.8	5.7	-8.7	-6.9	4.7	
<i>Previous Greenbook<sup>5</sup></i>	-1.2	-5.4	-9.3	-17.7	-22.5	-8.9	1.5	2.5	3.9	3.4	4.4	4.2	-8.6	-7.4	4.0	
Capacity utilization rate - mfg. <sup>3</sup>	78.1	76.7	74.6	70.9	66.7	65.2	66.1	66.8	67.8	68.9	70.0	71.3	70.9	66.8	71.3	
<i>Previous Greenbook<sup>3</sup></i>	78.1	76.7	74.6	71.0	66.7	65.3	65.8	66.5	67.5	68.5	69.7	70.8	71.0	66.5	70.8	
Housing starts <sup>6</sup>	1.1	1.0	.9	.7	.5	.5	.5	.6	.6	.7	.8	.9	.9	.5	.8	
Light motor vehicle sales <sup>6</sup>	15.2	14.1	12.9	10.3	9.5	9.7	10.1	10.5	11.2	12.0	12.5	13.0	13.1	10.0	12.2	
<i>Income and saving</i>																
Nominal GDP <sup>5</sup>	3.5	4.1	3.4	-5.8	-3.0	-1.6	2.2	3.2	3.7	4.1	4.2	4.3	1.2	.2	4.1	
Real disposable pers. income <sup>5</sup>	-7	10.7	-8.5	2.9	6.5	4.9	-3.7	.9	2.0	1.9	3.2	2.5	.9	2.1	2.4	
<i>Previous Greenbook<sup>5</sup></i>	-7	10.7	-8.5	2.7	3.9	6.6	-1.5	1.6	.9	1.5	2.1	2.2	.8	2.6	1.7	
Personal saving rate <sup>3</sup>	.2	2.5	1.3	3.2	4.4	5.7	4.7	4.7	4.7	4.5	4.6	4.4	3.2	4.7	4.4	
<i>Previous Greenbook<sup>3</sup></i>	.2	2.5	1.3	3.2	3.9	5.6	5.1	5.3	5.1	4.9	4.7	4.5	3.2	5.3	4.5	
Corporate profits <sup>7</sup>	-4.3	-14.3	-4.7	-51.5	13.4	-3.5	-2.2	1.5	6.9	6.9	8.2	6.4	-21.5	2.1	7.1	
Profit share of GNP <sup>3</sup>	11.2	10.6	10.4	8.8	9.2	9.2	9.1	9.0	9.1	9.2	9.2	9.3	8.8	9.0	9.3	
Net federal savings <sup>8</sup>	-331	-650	-544	-576	-826	-1,117	-1,133	-1,152	-1,158	-1,146	-1,166	-1,147	-525	-1,057	-1,154	
Net state & local savings <sup>8</sup>	-52	-67	-104	-97	-73	-83	-43	-37	-45	-45	-31	-27	-80	-59	-37	
Gross national saving rate <sup>3</sup>	12.4	11.3	11.5	11.9	11.7	10.8	10.2	10.1	9.8	9.8	10.0	10.0	11.9	10.1	10.0	
Net national saving rate <sup>3</sup>	.0	-1.3	-1.8	-1.1	-1.5	-2.9	-3.7	-3.8	-4.1	-4.1	-4.0	-4.0	-1.1	-3.8	-4.0	

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	2002	2003	2004	2005	2006	2007	2008	2009	2010
<i>Employment and production</i>									
Nonfarm payroll employment <sup>1</sup>	-7	-1	2.0	2.4	2.1	1.2	-2.3	-4.3	1.8
Unemployment rate <sup>2</sup>	5.8	5.8	5.4	4.9	4.4	4.8	6.9	10.0	9.7
<i>Previous Greenbook</i> <sup>2</sup>	5.8	5.8	5.4	4.9	4.4	4.8	6.9	9.3	9.1
GDP gap <sup>3</sup>	-2.5	-1.7	-8	-3	-2	-4	-3.6	-6.5	-5.6
<i>Previous Greenbook</i> <sup>3</sup>	-2.6	-1.8	-8	-3	-2	-4	-3.6	-7.0	-6.4
Industrial production <sup>4</sup>	2.5	1.6	3.0	2.6	1.8	1.8	-6.7	-6.7	4.6
<i>Previous Greenbook</i> <sup>4</sup>	2.5	1.6	3.0	2.6	1.8	1.8	-6.7	-7.1	4.1
Manufacturing industr. prod. <sup>4</sup>	2.5	1.8	3.6	3.8	1.2	1.9	-8.7	-6.9	4.7
<i>Previous Greenbook</i> <sup>4</sup>	2.5	1.8	3.6	3.8	1.2	1.9	-8.6	-7.4	4.0
Capacity utilization rate - mfg. <sup>2</sup>	73.0	74.6	77.3	79.2	79.0	78.7	70.9	66.8	71.3
<i>Previous Greenbook</i> <sup>2</sup>	73.0	74.6	77.3	79.2	79.0	78.7	71.0	66.5	70.8
Housing starts <sup>5</sup>	1.7	1.8	2.0	2.1	1.8	1.4	.9	.5	.8
Light motor vehicle sales <sup>5</sup>	16.7	16.6	16.8	16.9	16.5	16.1	13.1	10.0	12.2
<i>Income and saving</i>									
Nominal GDP <sup>4</sup>	3.6	5.9	6.5	6.3	5.3	4.9	1.2	.2	4.1
Real disposable pers. income <sup>4</sup>	2.9	3.7	4.1	.9	3.6	1.8	.9	2.1	2.4
<i>Previous Greenbook</i> <sup>4</sup>	2.9	3.7	4.1	.9	3.6	1.8	.8	2.6	1.7
Personal saving rate <sup>2</sup>	1.8	2.2	2.5	.8	.9	.4	3.2	4.7	4.4
<i>Previous Greenbook</i> <sup>2</sup>	1.8	2.2	2.5	.8	.9	.4	3.2	5.3	4.5
Corporate profits <sup>6</sup>	20.6	12.6	20.3	18.8	6.9	-2.0	-21.5	2.1	7.1
Profit share of GNP <sup>2</sup>	9.0	9.5	10.8	12.0	12.2	11.3	8.8	9.0	9.3
Net federal saving <sup>7</sup>	-248	-372	-371	-292	-201	-229	-525	-1057	-1154
Net state & local saving <sup>7</sup>	-34	-20	2	29	46	10	-80	-59	-37
Gross national saving rate <sup>2</sup>	13.6	13.7	13.8	15.0	15.5	13.4	11.9	10.1	10.0
Net national saving rate <sup>2</sup>	1.5	1.9	2.1	2.8	3.4	1.2	-1.1	-3.8	-4.0

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.

Item	Fiscal year				2008				2009				2010			
	2007 <sup>a</sup>	2008 <sup>a</sup>	2009	2010	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
	Not seasonally adjusted															
<b>Unified budget</b>	Not seasonally adjusted															
Receipts <sup>1</sup>	2568	2524	2154	2297	540	788	590	547	442	614	550	521	503	694	579	566
Outlays <sup>1</sup>	2729	2983	3595	3730	746	761	759	880	891	918	906	936	958	933	902	963
Surplus/deficit <sup>1</sup>	-161	-459	-1441	-1432	-206	27	-169	-332	-449	-304	-356	-416	-455	-239	-323	-397
<i>Previous Greenbook</i>	-162	-455	-1647	-1473	-206	27	-169	-485	-472	-259	-431	-561	-481	-172	-260	-338
On-budget	-342	-642	-1567	-1548	-237	-64	-171	-385	-468	-365	-349	-461	-460	-311	-316	-445
Off-budget	181	183	126	116	31	91	2	53	19	61	-6	45	5	72	-7	48
Means of financing																
Borrowing	206	768	1711	1247	200	-48	526	561	465	324	361	370	275	264	338	387
Cash decrease	-23	-296	101	220	11	-7	-318	5	98	-54	53	86	165	-20	-10	15
Other <sup>2</sup>	-23	-13	-371	-35	-5	29	-39	-233	-114	35	-58	-40	15	-5	-5	-5
Cash operating balance, end of period	75	372	270	50	46	53	372	367	269	323	270	185	20	40	50	35
<b>NIPA federal sector</b>	Seasonally adjusted annual rates															
Receipts	2624	2607	2399	2473	2673	2479	2596	2530	2379	2335	2353	2391	2475	2495	2530	2569
Expenditures	2832	3047	3312	3628	3003	3128	3140	3106	3205	3451	3486	3543	3633	3641	3696	3716
Consumption expenditures	842	910	976	1049	898	918	954	957	960	983	1002	1021	1046	1061	1066	1070
Defense	569	624	665	706	614	629	660	657	652	669	683	693	703	711	716	720
Nondefense	273	286	310	343	284	289	295	301	308	314	319	329	343	350	350	350
Other spending	1990	2136	2337	2580	2105	2210	2186	2148	2245	2468	2485	2522	2587	2580	2630	2646
Current account surplus	-209	-440	-913	-1155	-331	-650	-544	-576	-826	-1117	-1133	-1152	-1158	-1146	-1166	-1147
Gross investment	123	134	147	156	129	138	144	150	142	147	150	153	155	157	158	159
Gross saving less gross investment <sup>3</sup>	-221	-458	-937	-1182	-344	-671	-569	-605	-846	-1140	-1158	-1178	-1184	-1173	-1192	-1172
<b>Fiscal indicators<sup>4</sup></b>																
High-employment (HEB) surplus/deficit	-221	-426	-701	-841	-322	-641	-503	-464	-635	-866	-839	-836	-842	-830	-856	-847
Change in HEB, percent of potential GDP	-0.3	1.4	1.7	0.8	0.6	2.2	-1.0	-0.3	1.1	1.5	-0.2	-0.1	-0.0	-0.1	0.1	-0.1
Fiscal impetus (FI), percent of GDP	0.2	0.8	0.8	0.9	0.1	0.5	0.7	-0.3	-0.1	0.7	0.1	0.2	0.4	0.1	0.1	-0.0
<i>Previous Greenbook</i>	0.2	0.8	0.8	0.9	0.1	0.5	0.7	-0.3	-0.2	0.8	0.3	0.2	0.3	0.1	0.1	-0.0

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 (2000) 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





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## International Developments

Following the sharp contraction in the first quarter, the pace of decline in foreign economic activity appears to be moderating. Across the foreign economies, purchasing managers indexes (PMIs) have turned up, industrial production is no longer collapsing, and confidence indicators have recovered somewhat. In addition, conditions in global financial markets continue to improve, which should support economic activity in coming quarters. We now forecast that real GDP abroad will fall at a 1½ percent rate in the current quarter and then expand 1¾ percent in the second half of 2009; these projections are up about 1 percentage point from the April Greenbook.

### Summary of Staff Projections

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

Indicator	2008		2009	Projection		
	H1	H2	Q1	2009		2010
				Q2	H2	
Foreign output	2.1	-3.9	-8.6	-1.4	1.7	3.1
Previous GB	1.7	-3.5	-7.2	-2.4	.8	2.8
Foreign CPI	5.0	1.7	-1.0	1.5	2.0	1.6
Previous GB	5.0	1.8	-.8	1.5	1.6	1.6
	Contribution to growth (percentage points)					
U.S. net exports	1.8	.4	2.1	1.1	-.6	-.3
Previous GB	1.8	.4	1.0	.6	-.6	-.5

Note: Changes for years are measured as Q4/Q4; half-years are Q2/Q4 or Q4/Q2.

Foreign consumer price inflation remains subdued. Even with oil and commodity prices now rising faster than anticipated in the last Greenbook, we project that consumer price inflation abroad will register just over 1 percent this year—a little higher than our previous forecast—and 1½ percent in 2010. The spot price of West Texas intermediate (WTI) crude oil has risen over 50 percent since the time of the last Greenbook to around \$70 per barrel, and futures prices suggest a further increase by the end of 2010. Non-fuel commodity prices have also risen in the intermeeting period. The dollar has depreciated

markedly against most other currencies, and our projected path for the dollar going forward has been lowered accordingly.

Although real exports plunged at an annual rate of about 30 percent in the first quarter, real imports contracted even more rapidly. As a result, real net exports added about 2 percentage points to U.S. GDP growth in the first quarter. This estimate is 1 percentage point higher than expected in the April Greenbook, as exports contracted less sharply than previously projected, while imports surprised on the downside. Based on data for April, we estimate that net exports will add about 1 percentage point to growth in the current quarter,  $\frac{1}{2}$  percentage point more than in the previous Greenbook, as a small decline in exports continues to be more than offset by a further drop in imports. Going forward, we expect that net exports will make, on average, a negative contribution to GDP growth of about  $\frac{1}{2}$  percentage point in the remainder of the forecast period, as imports pick up in line with the projected recovery of the U.S. economy. This projection is slightly less negative than in the previous Greenbook, mainly reflecting the weaker dollar.

### **International Financial Markets**

The foreign exchange value of the dollar, as measured by the staff's broad nominal index, has declined  $4\frac{1}{2}$  percent since the time of the April Greenbook. The dollar depreciated more than 6 percent against all the major foreign currencies except the yen (against which the dollar fell only 1 percent). The dollar also declined against the emerging market currencies, including 12 percent against the Brazilian *real* and almost 7 percent against the Korean won. The dollar's recent softness appears to have been driven by a reversal of the flows that led to its appreciation in the fourth quarter of 2008, when investors moved into safe U.S. assets; the improved global outlook seems to have induced some investors to shift back into riskier foreign investments.

As a result of the dollar's depreciation, the starting point for the projected path of the staff's broad real index of the dollar is 4 percent below that in the April Greenbook. We project that the broad real value of the dollar will depreciate at an annual rate of about 2 percent over the forecast period, consistent with pressures associated with financing persistent U.S. current account deficits. We explore the risk of a faster decline in the dollar in the alternative simulations below.

Conditions in global interbank markets continued to improve, and headline stock indexes in Europe and Japan rose 6 to 12 percent, boosted by double-digit percentage increases in banks' share prices. Like U.S. banks, foreign banks took advantage of better market

conditions to raise capital. Most emerging stock markets rose at least 10 percent, with several rising more than 20 percent, and mutual fund flows into those markets strengthened.

Yields on long-term sovereign bonds in Europe rose 25 to 45 basis points over the period, but less than the increase in comparable yields in the United States. The rise in yields was likely driven by several factors, including: an increased willingness on the part of investors to move out of safe assets, such as government bonds, and into riskier investments; the improvement in the global outlook, which led markets to expect that central banks will tighten rates sooner; and concerns among some investors that rising fiscal deficits may lead to higher inflation. The rise in yields came despite accommodative monetary conditions, in which the European Central Bank (ECB) lowered its policy rate and the Bank of England and Bank of Japan kept their policy rates fixed at very low levels.

### **Advanced Foreign Economies**

After a severe first-quarter contraction of more than 7½ percent at an annual rate, we expect the pace of decline in real GDP in the advanced foreign economies to moderate to 2¼ percent in the current quarter. Thereafter, these economies should gradually begin to expand, reaching a growth rate of almost 2½ percent by the end of 2010. This projection is predicated on the improved functioning of financial markets, monetary and fiscal stimulus, and recovery in U.S. economic activity. Our forecast is somewhat stronger than that in the previous Greenbook, particularly in the near term, reflecting better-than-expected incoming data and more robust growth forecasts for the United States and the emerging market economies.

Our sharpest upward revision is for Japan, where recent consumption and export data have picked up noticeably. We now expect Japanese GDP to hold steady in the second quarter, after having plunged roughly 14 percent in each of the previous two quarters, and to increase 1½ percent in 2010. Elsewhere, we expect output to continue to fall this quarter, in part reflecting weak exports, before growth returns by the end of the year. The recovery is projected to be most sluggish for the euro area, where rigidities in product and labor markets are expected to weigh on the rebound in domestic demand. We expect output growth in the advanced foreign economies to move only slightly above potential growth by the end of the forecast period, leaving sizable output gaps at the end of next year.

Consumer prices in the first quarter declined 1½ percent at an annual rate, the second consecutive negative quarterly reading. However, we anticipate that inflation will rise to 1 percent this quarter and to almost 2 percent, on average, in the second half of this year, on the back of sharply higher oil and other commodity prices. As commodity prices stabilize and output gaps persist, we are projecting inflation to moderate to a 1 percent pace in 2010.

We continue to expect the central banks of Canada, the United Kingdom, and Japan will hold rates constant at their current low levels through next year. For the euro area, we now expect the ECB to keep its main policy rate at 1 percent through the end of 2010, slightly higher than we had in the April Greenbook, reflecting our read of recent statements by ECB Governing Council members regarding the path of future policy actions. Our forecast also incorporates unconventional policy measures taken by the major central banks, including continued or expanded asset purchase programs by the Bank of Japan and the Bank of England and a newly announced plan by the ECB to purchase covered bonds.

### **Emerging Market Economies**

We estimate that real GDP in the emerging market economies (EMEs) fell 9¾ percent at an annual rate in the first quarter, led by a 21½ percent decline in Mexico. Indicators for the second quarter have generally been more upbeat, pointing to a trough in economic activity. In China, the economy continues to respond to the government's aggressive fiscal and monetary policies. Fixed asset investment and loan growth soared further, and all of the subindexes of the Chinese PMI in May indicate expansion, including the index of new export orders. In Korea, indicators suggest that economic activity has continued to pick up, with industrial production, exports, and consumer confidence all having risen this quarter. In Brazil, industrial production posted its fourth consecutive monthly increase in April. However, Mexico is still expected to experience a fairly large contraction, in part due to the negative economic impact of the H1N1 influenza virus.

We project that real GDP growth in the EMEs will recover to about 3½ percent in the second half of the year, about 1½ percentage points higher than projected in the April Greenbook, partly reflecting a rebound in Mexico from the effects of the virus. However, this improvement will still leave EME growth for 2009 as a whole in negative territory. In 2010, growth should pick up to about 4½ percent, as rebounding global activity provides support for EME exports and as access to international capital markets continues to improve.

Headline consumer prices fell  $\frac{1}{2}$  percent at an annual rate in the first quarter in the EMEs, with deflation in emerging Asia more than offsetting price increases in Latin America. In the current quarter, we estimate that inflation turned positive in emerging Asia. Over the remainder of the forecast period, we project inflation in emerging Asia will hold steady at around 2 percent, supported by moderate projected increases in commodity prices and strengthening economic growth. In contrast, we project that inflation in Latin America, where currencies depreciated sharply during the financial crisis, will edge down from recent highs.

### **Commodity Prices**

Oil prices have continued to move higher since the April Greenbook, with the spot price of West Texas intermediate (WTI) crude oil rising about \$25 per barrel, a gain of more than 50 percent, to close on June 16 at \$70.62 per barrel. The price of far-dated futures contracts also rose significantly and now stands at about \$92 per barrel. The jump in oil prices appears to reflect the view that the global demand for oil has begun to pick up once again. In addition, the ongoing effects of previous reductions in OPEC supply could be putting upward pressure on prices. Consistent with the path of futures prices, we currently project that the spot price of WTI will rise to \$78 per barrel by the end of next year. Relative to the April Greenbook, this projection is nearly \$19 per barrel higher, on average, over the remainder of this year and about \$16 per barrel higher next year.

Prices for a wide cross-section of nonfuel commodities have also increased sharply over the past two months. Part of the price run-up may be a response to increased purchases of commodities by China. Going forward, we expect further small increases in commodity prices, consistent with readings from futures markets.

### **Prices of Internationally Traded Goods**

We estimate that core import prices will decline 1 percent at an annual rate in the second quarter, following a  $9\frac{1}{4}$  percent decline in the first quarter. After several months of sharp declines, prices of material-intensive goods fell at a slower pace in April and then increased in May. Compared with the April Greenbook, the estimate for core import price inflation in the second quarter has been revised up 2 percentage points, in line with higher commodity prices and the lower level of the dollar. These developments have boosted our projection of core import price growth in the third quarter as well, to  $2\frac{1}{2}$  percent. As commodity prices flatten out and dollar depreciation slows, core import price inflation is projected to moderate to about 1 percent in 2010.

**Staff Projections of Selected Trade Prices**

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

Trade category	2008		2009	Projection		
	H1	H2	Q1	2009		2010
				Q2	H2	
<i>Imports</i>						
Core goods	9.5	-2.2	-9.3	-1.0	2.1	1.1
Previous GB	9.5	-2.2	-9.7	-3.0	-.1	1.1
Oil (dollars per barrel)	108.66	68.73	41.59	56.60	69.70	73.47
Previous GB	108.65	68.74	43.40	47.32	51.32	58.86
<i>Exports</i>						
Core goods	13.0	-12.0	-12.1	1.0	2.5	1.0
Previous GB	13.0	-12.0	-10.1	-2.3	.7	1.2

Note: Prices for core exports exclude computers and semiconductors. Prices for core imports exclude computers, semiconductors, oil, and natural gas. Both prices are on a national income and product account chain-weighted basis.

The price of imported oil for multi-quarter periods is the price for the final quarter of the period. Imported oil includes both crude oil and refined products.

We estimate that core export prices will increase 1 percent in the current quarter. Following several months of sharp price declines, prices of material-intensive export goods rose briskly in April and May. Given the current resurgence of commodity prices, core export prices are expected to increase 3½ percent in the third quarter, before decelerating to a rate of 1 percent as commodity price inflation slows. The projections for the second and third quarters of 2009 have each been revised up about 3 percentage points relative to the April Greenbook, as a result of higher prices for intermediate goods and agricultural products. Thereafter, the projection is little changed.

**Trade in Goods and Services**

Real exports of goods and services plunged 30½ percent at an annual rate in the first quarter, with declines broad-based and particularly marked in the auto sector. In the current quarter, we expect the fall in real exports to moderate to about 5½ percent, due to the slowing pace of contraction in foreign economic activity as well as to a bottoming out of auto exports. We lowered our forecast for the second quarter 2 percentage points, mainly in response to weak data for April. Going forward, we expect economic recovery among our trading partners to support a rebound in exports, which are projected to grow 3 percent in the second half of the year and 4 percent in 2010. This is a stronger outlook

than in the April Greenbook, reflecting both the upward revision to our outlook for foreign GDP growth and the downward revision to the projected path of the dollar.

**Staff Projections for  
Trade in Goods and Services**  
(Percent change from end of previous period, annual rate)

Measure	2008		2009	Projection		
	H1	H2	Q1	2009		2010
				Q2	H2	
Real imports	-4.1	-10.8	-36.3	-12.3	6.7	5.4
Previous GB	-4.1	-10.8	-31.1	-7.2	4.1	5.1
Real exports	8.6	-11.3	-30.6	-5.4	3.0	4.0
Previous GB	8.6	-11.3	-31.4	-3.4	-.7	2.3

Note: Changes for years are measured as Q4/Q4; half-years are measured as Q2/Q4 or Q4/Q2.

Real imports of goods and services also dropped sharply in the first quarter, falling at an annual rate of 36¼ percent, 5¼ percentage points more than projected in the April Greenbook. As with exports, a decline in imports of automotive products contributed significantly to the fall in overall imports in the first quarter, both as domestic automakers cut back production at plants in Canada and Mexico and as imports from non-U.S. manufacturers fell. In the current quarter, based on a fall in imports in the April trade data and continued weakness in U.S. GDP, we estimate that imports will decline a further 12¼ percent. Going forward, we expect import growth to turn positive, averaging 5¾ percent over the remainder of the forecast period, as the U.S. economy recovers and as auto imports rebound somewhat. Relative to the April Greenbook, this projection is just a touch higher, as the upward revision to U.S. GDP growth is mostly offset by the restraining effects of the lower dollar.

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## Perspectives on the U.S. Current Account Deficit

The U.S. current account deficit shrank sharply over the final quarter of 2008 and first quarter of 2009, narrowing to 2¾ percent of GDP from 5 percent of GDP in the third quarter of 2008.<sup>1</sup> However, we anticipate that some of this improvement will be reversed going forward, with the current account deficit expected to average 3½ percent of GDP in 2010. This box summarizes some key factors shaping the recent and prospective evolution of the current account.

The rapid narrowing of the current account deficit since late last year largely reflected a decline of more than \$300 billion in the value of oil imports, as shown in the top left panel of the exhibit. The dramatic decline in U.S. economic activity also led to a steep fall in non-oil imports. However, this decline was nearly balanced by an equally steep fall in exports, as economic activity also contracted rapidly in our trading partners. As a result, the U.S. non-oil trade balance narrowed only about \$65 billion over the period.

The current account balance is also a reflection of the pattern of net saving in the United States and the rest of the world. The rapid narrowing of the U.S. current account deficit was associated with a sharp drop in the domestic investment rate as the United States entered recession, as shown in the top right panel. The decline in investment more than offset a small decline in total domestic saving, as a jump in the private saving rate was surpassed by a fall in government saving. Much of the parallel narrowing of the foreign current account

surplus came through a collapse in the saving rate in the Middle East and Russia, as shown in the bottom table, primarily reflecting the dramatic drop in oil prices.

Our baseline projection that the current account deficit will again widen in the near term is premised on a forecast that oil prices will continue to move up in line with futures quotes. Further out, the deficit widens a bit more, as U.S. imports rise more quickly than exports. This widening coincides with an upturn in the U.S. investment rate and an easing back of the private saving rate, the combination of which outpaces fiscal consolidation.<sup>2</sup>

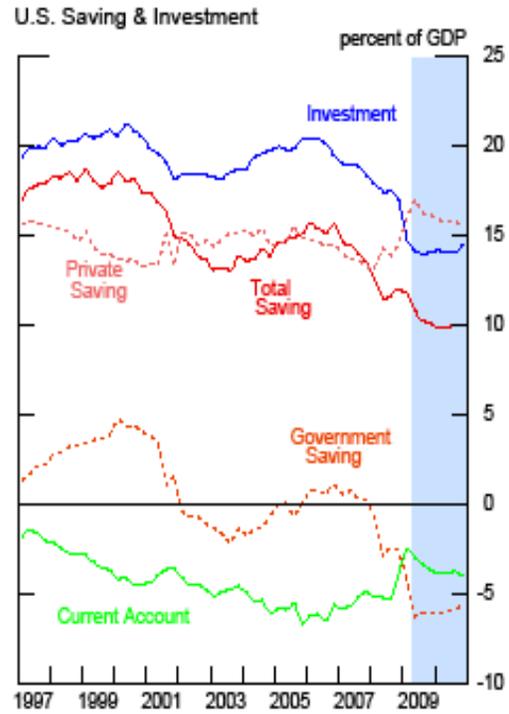
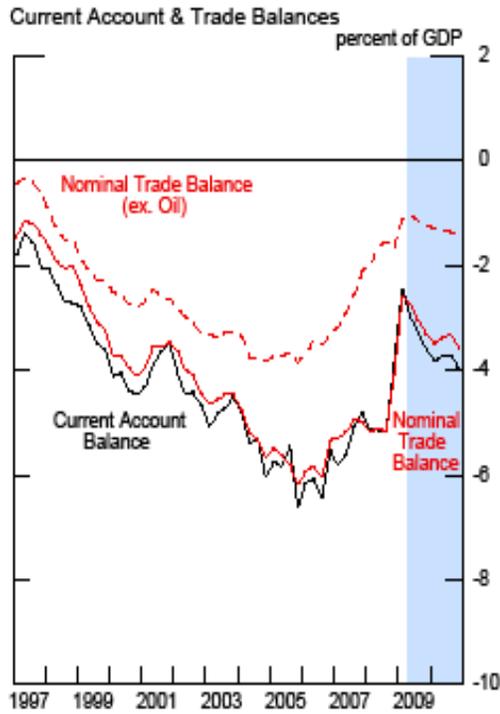
Our projection assumes that U.S. and foreign GDP will resume growth near trend, and future changes in exchange rates and oil prices will be modest. There is, of course, a great deal of uncertainty surrounding this forecast. One possibility that has attracted considerable attention is a further sustained upward movement in the U.S. private saving rate. In the staff's SIGMA model, a 1 percentage point increase in the domestic private saving rate generally narrows the current account deficit by about ½ percent of GDP. The less-than-proportional impact on the current account deficit results as the higher saving rate lowers U.S. interest rates, boosting investment and partly offsetting the effects of the increase in saving. However, if higher U.S. saving were accompanied by a similar sized reduction in the foreign saving rate, the current account would narrow by about 1 percent of GDP.

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<sup>1</sup> These figures reflect revised U.S. current account data released this morning by BEA after we closed our forecast and therefore differ from those shown elsewhere in the Greenbook.

<sup>2</sup> From a financing perspective, this trajectory for the U.S. current account balance appears fully sustainable over the forecast period and does not lead to outsized movements in the U.S. net international investment position, its servicing burden, or the implied share of U.S. assets in foreign portfolios.

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Current Account as a Percent of U.S. GDP

	1997	2006	2008	2009	2010
<b>United States</b>	-1.7	-6.0	-4.8	-3.1	-3.8
<b>Advanced Foreign Countries</b>					
Japan	1.2	1.3	1.1	0.5	0.6
Euro Area	0.6	-0.1	-0.9	-0.9	-0.1
Other	0.2	0.3	0.6	0.0	0.0
<b>Developing Countries</b>					
Asia	0.2	2.9	3.4	3.5	3.1
Latin America	-0.8	0.4	-0.2	-0.3	-0.2
Middle East and Africa	0.1	2.2	2.4	0.3	0.9
E. Europe and F.S.U	-0.3	0.0	-0.4	-0.6	-0.4
<b>Statistical Discrepancy</b>	0.5	-1.0	-1.3	0.6	-0.1

### Alternative Simulations

As noted above, the recent depreciation of the dollar appears to have been driven by a reversal of flight-to-quality flows amid an improving global outlook and increased appetite for risk. Although our baseline forecast assumes modest further declines, it is possible that the dollar could fall more sharply as global financial markets continue to heal. To investigate this possibility, we first use the SIGMA model to examine a dollar-risk premium shock that causes a 10 percent depreciation of the broad real dollar. In a second simulation, we couple that shock with declines in corporate bond and equity premiums both in the United States and the rest of the world, consistent with broader shifts in investor sentiment toward risky assets. In both of these simulations, we assume that U.S. and foreign monetary policies follow Taylor rules subject to the zero bound constraint on nominal interest rates.<sup>1</sup>

In the first scenario, the dollar risk-premium shock occurs in 2009:Q3 and causes the dollar to depreciate 10 percent below baseline after a year. Thereafter the shock gradually recedes. The decline in the dollar boosts the growth of U.S. real GDP 0.6 percentage point above baseline in the second half of 2009 and about 0.9 percentage point in 2010. Output rises because U.S. exports become more competitive abroad and because U.S. consumers substitute away from imports toward domestically produced goods. Core PCE price inflation rises gradually in response to higher import prices and greater resource utilization and peaks at 0.6 percentage point above baseline in 2010:H1. With the zero bound constraint binding, higher expected inflation causes a fall in real interest rates, stimulating domestic demand and further boosting GDP. The nominal trade balance as a percent of GDP improves almost 1.5 percentage points by 2010.

In the second scenario, the dollar risk premium shock is accompanied by 1 percentage point declines in corporate bond and equity premiums in the United States and the rest of the world. These declines in bond and equity premiums are phased in over one year starting in 2009:Q3, after which they gradually return to baseline. The lower U.S. risk premiums reduce the cost of investment and boost investment spending. In turn, the reductions in bond and equity premiums abroad stimulate foreign activity, strengthening U.S. exports. Accordingly, U.S. GDP growth rises about 1½ percentage points above baseline in 2010, while inflation rises nearly ¾ percentage point. The zero bound constraint binds initially, but higher activity and rising inflation prompt increases in the

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<sup>1</sup>Due to technical considerations associated with imposing the zero bound constraints, we use a two-country variant of SIGMA consisting of the United States and an aggregate foreign sector.

federal funds rate of 60 basis points above baseline by the end of 2010, which attenuates the stimulus to GDP.

**Alternative Scenarios:**  
**Dollar Depreciation with Lower Global Risk Premiums**  
 (Percent change from previous period, annual rate, except as noted)

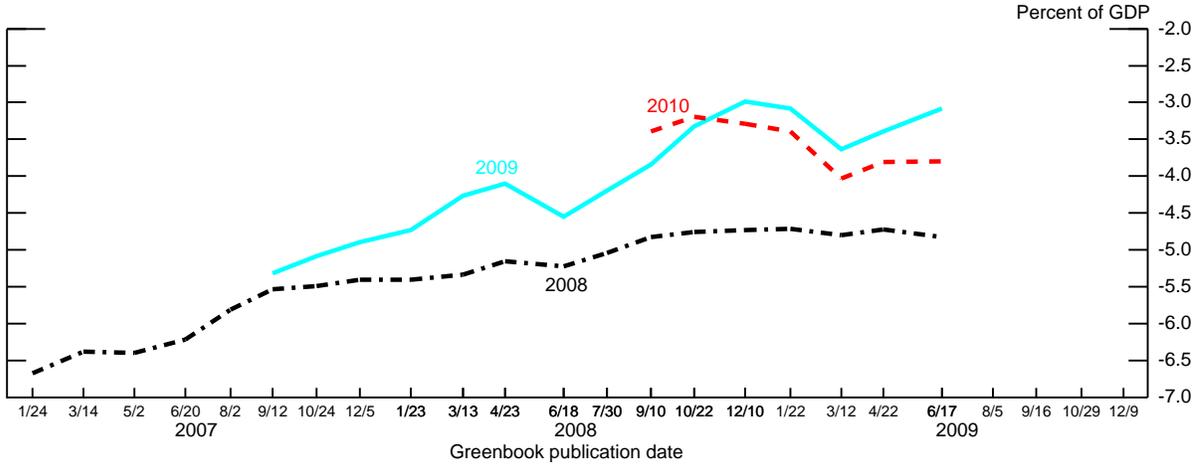
Indicator and simulation	2009	2010		2011	2012-13
	H2	H1	H2		
<i>U.S. real GDP</i>					
Baseline	1.1	2.6	3.3	4.8	4.8
Dollar Depreciation	1.7	3.9	3.9	4.5	4.6
Lower Global Risk Premiums	2.2	4.5	4.4	4.9	4.9
<i>U.S. PCE prices excluding food and energy</i>					
Baseline	.9	.8	.7	.7	1.0
Dollar Depreciation	1.3	1.4	.7	.6	.9
Lower Global Risk Premiums	1.5	1.7	1.1	1.0	1.3
<i>U.S. federal funds rate (percent)</i>					
Baseline	.1	.1	.1	.1	4.1
Dollar Depreciation	.1	.1	.1	.2	4.1
Lower Global Risk Premiums	.1	.2	.7	1.6	5.4
<i>U.S. trade balance (percent share of GDP)</i>					
Baseline	-2.9	-3.2	-3.2	-3.4	-3.6
Dollar Depreciation	-2.2	-1.8	-2.2	-3.1	-3.7
Lower Global Risk Premiums	-2.2	-1.8	-2.2	-3.1	-3.7

Note: H1 is Q2/Q4; H2 is Q4/Q2. U.S. real GDP, U.S. PCE prices, and the trade balance are average rates over the period. The federal funds rate is the value for the final quarter of the period.

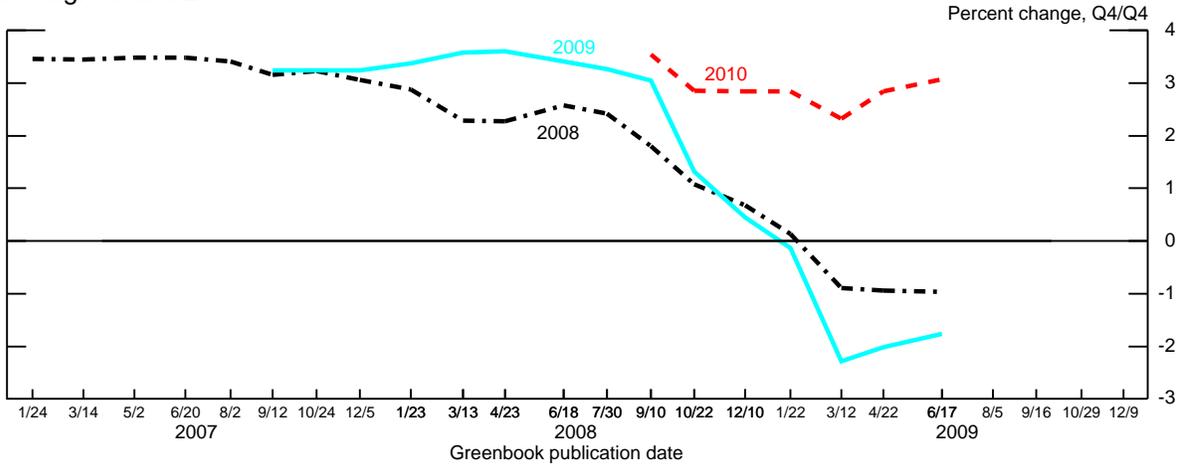
Class II FOMC -- Restricted (FR)

### Evolution of the Staff Forecast

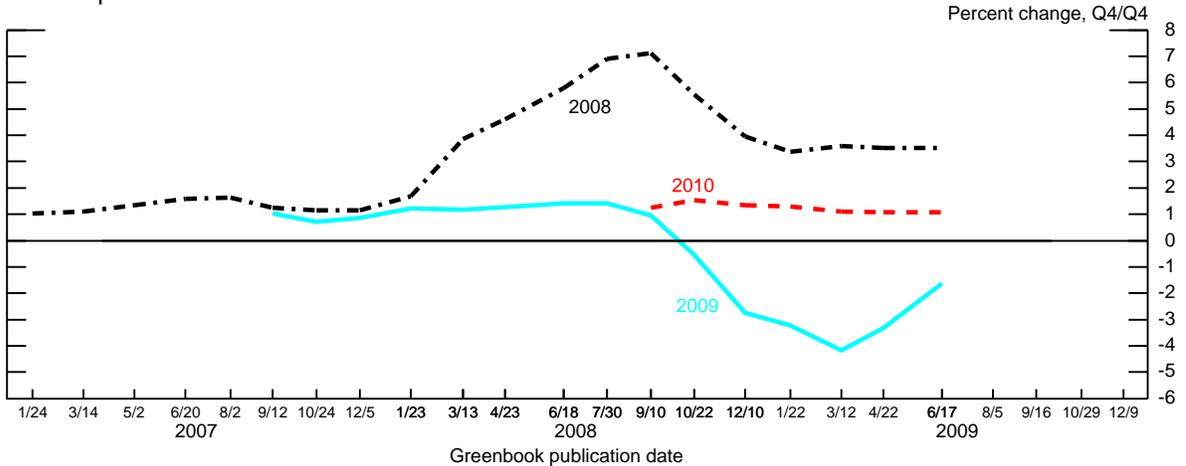
Current Account Balance



Foreign Real GDP



Core Import Prices\*



\*Prices for merchandise imports excluding computers, semiconductors, oil, and natural gas.

OUTLOOK FOR FOREIGN REAL GDP AND CONSUMER PRICES: SELECTED COUNTRIES  
(Percent changes)

Measure and country	2008				2009				Projected			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
REAL GDP (1)	----- Quarterly changes at an annual rate -----											
Total Foreign	3.0	1.1	-0.4	-7.3	-8.6	-1.4	1.5	1.8	2.5	2.9	3.4	3.5
Advanced Foreign Economies	0.9	-0.4	-0.8	-6.0	-7.6	-2.2	-0.1	0.7	1.5	1.7	2.2	2.4
Of which:												
Canada	-0.7	0.3	0.4	-3.7	-5.4	-2.8	0.2	1.1	2.1	2.1	2.5	2.7
Japan	1.5	-2.2	-2.9	-13.5	-14.2	0.3	0.4	0.6	1.2	1.4	1.7	1.7
United Kingdom	1.2	-0.1	-2.8	-6.1	-7.3	-0.9	0.4	1.3	1.3	1.3	2.1	2.3
Euro Area (2)	2.8	-1.0	-1.4	-6.8	-9.7	-3.0	-1.0	0.0	0.8	1.4	1.9	2.1
Germany	6.2	-2.0	-2.1	-8.6	-14.4	-3.1	-1.1	0.0	0.8	1.4	1.9	2.1
Emerging Market Economies	5.8	3.1	0.1	-8.8	-9.8	-0.4	3.7	3.2	3.8	4.5	4.9	5.0
Asia	7.2	3.1	0.7	-9.6	-2.9	2.4	3.3	4.2	4.9	5.6	6.1	6.2
Korea	4.4	1.7	1.0	-18.8	0.5	1.6	2.1	2.4	3.4	4.3	4.3	4.3
China	10.3	10.9	5.3	1.6	6.5	7.0	7.5	8.0	8.3	8.8	9.2	9.2
Latin America	4.3	2.9	-0.9	-9.1	-17.0	-3.7	4.3	2.1	2.6	3.3	3.5	3.7
Mexico	4.7	1.0	-2.3	-9.8	-21.5	-5.2	5.5	2.0	2.5	3.4	3.7	4.0
Brazil	7.9	6.6	5.6	-13.8	-3.3	2.0	3.0	3.0	3.2	3.2	3.2	3.2
CONSUMER PRICES (3)	----- Four-quarter changes -----											
Total Foreign	4.2	4.7	4.7	3.3	1.8	1.0	0.5	1.1	1.8	1.8	1.7	1.6
Advanced Foreign Economies	2.3	2.7	3.4	2.0	1.0	0.3	-0.1	0.8	1.4	1.4	1.1	1.0
Of which:												
Canada	1.9	2.3	3.4	1.9	1.2	0.6	0.1	1.5	2.1	2.0	1.7	1.5
Japan	1.0	1.4	2.2	1.0	-0.1	-0.6	-1.1	-0.2	0.5	0.4	-0.0	-0.5
United Kingdom (4)	2.4	3.4	4.8	3.8	3.0	2.1	1.1	1.4	1.9	1.6	1.3	1.2
Euro Area (2)	3.4	3.6	3.8	2.3	1.0	0.2	0.1	0.6	1.2	1.4	1.1	1.1
Germany	3.1	3.0	3.2	1.7	0.8	0.5	0.3	0.9	1.2	1.3	1.1	1.1
Emerging Market Economies	6.0	6.6	6.0	4.6	2.7	1.6	1.1	1.5	2.2	2.2	2.2	2.3
Asia	6.7	7.1	5.9	3.7	1.0	-0.3	-0.6	0.3	1.5	1.8	1.8	1.9
Korea	3.8	4.8	5.5	4.5	3.9	2.6	1.8	2.0	2.1	2.1	2.1	2.1
China	8.1	7.7	5.1	2.7	-0.6	-1.4	-1.2	-0.3	1.1	1.3	1.4	1.5
Latin America	4.4	5.4	6.0	6.5	6.3	5.9	4.9	4.0	3.7	3.1	3.0	3.0
Mexico	3.9	4.9	5.5	6.2	6.2	5.9	5.0	4.0	3.5	2.7	2.6	2.6
Brazil	4.6	5.5	6.3	6.2	5.9	5.3	4.6	4.6	4.4	4.1	4.0	4.0

1. Foreign GDP aggregates calculated using shares of U.S. exports.
2. Harmonized data for euro area from Eurostat.
3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.
4. CPI excluding mortgage interest payments, which is the targeted inflation rate.

June 17, 2009

Class II FOMC  
Restricted (FR)OUTLOOK FOR FOREIGN REAL GDP AND CONSUMER PRICES: SELECTED COUNTRIES  
(Percent, Q4 to Q4)

Measure and country	2002	2003	2004	2005	2006	2007	2008	Projected 2009	Projected 2010
REAL GDP (1)									
-----									
Total Foreign	3.1	2.9	3.8	4.0	4.0	4.3	-1.0	-1.8	3.1
Advanced Foreign Economies	2.5	1.8	2.6	2.7	2.6	2.6	-1.6	-2.4	1.9
Of which:									
Canada	3.5	1.5	3.7	3.1	1.9	2.8	-1.0	-1.7	2.3
Japan	2.0	2.4	1.0	2.9	2.1	1.9	-4.4	-3.4	1.5
United Kingdom	2.4	3.2	2.3	2.0	3.2	3.2	-2.0	-1.7	1.8
Euro Area (2)	1.2	1.2	1.8	2.1	3.4	2.2	-1.7	-3.5	1.6
Germany	0.0	0.2	0.2	1.6	4.1	1.7	-1.8	-4.8	1.5
Emerging Market Economies	3.9	4.5	5.5	5.8	5.9	6.4	-0.1	-1.0	4.5
Asia	6.5	6.9	6.0	7.7	7.2	8.2	0.2	1.7	5.7
Korea	8.0	3.7	2.6	5.2	4.6	5.7	-3.4	1.6	4.1
China	8.6	10.3	9.9	10.3	10.8	12.3	6.9	7.2	8.9
Latin America	1.6	1.8	5.0	4.0	4.6	4.5	-0.8	-3.9	3.3
Mexico	2.0	1.3	4.5	3.5	3.9	3.6	-1.7	-5.4	3.4
Brazil	4.9	1.0	4.7	3.6	4.6	6.0	1.1	1.1	3.2
CONSUMER PRICES (3)									
-----									
Total Foreign	2.5	2.1	2.8	2.3	2.1	3.7	3.3	1.1	1.6
Advanced Foreign Economies	2.1	1.3	1.8	1.6	1.4	2.2	2.0	0.8	1.0
Of which:									
Canada	3.8	1.7	2.3	2.3	1.4	2.5	1.9	1.5	1.5
Japan	-0.5	-0.3	0.5	-1.0	0.3	0.5	1.0	-0.2	-0.5
United Kingdom (4)	1.5	1.3	1.4	2.1	2.7	2.1	3.8	1.4	1.2
Euro Area (2)	2.3	2.0	2.3	2.3	1.8	2.9	2.3	0.6	1.1
Germany	1.2	1.1	2.1	2.2	1.3	3.1	1.7	0.9	1.1
Emerging Market Economies	2.9	3.1	3.9	3.0	2.9	5.1	4.6	1.5	2.3
Asia	0.8	2.3	3.1	2.6	2.4	5.5	3.7	0.3	1.9
Korea	3.3	3.5	3.4	2.5	2.1	3.4	4.5	2.0	2.1
China	-0.6	2.7	3.3	1.4	2.1	6.7	2.7	-0.3	1.5
Latin America	6.4	4.9	5.6	3.8	4.1	4.2	6.5	4.0	3.0
Mexico	5.2	3.9	5.3	3.1	4.1	3.8	6.2	4.0	2.6
Brazil	10.7	11.5	7.2	6.1	3.2	4.3	6.2	4.6	4.0

1. Foreign GDP aggregates calculated using shares of U.S. exports.

2. Harmonized data for euro area from Eurostat.

3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.

4. CPI excluding mortgage interest payments, which is the targeted inflation rate.

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2002	2003	2004	2005	2006	2007	2008	2009	Projected 2010
<b>NIPA REAL EXPORTS and IMPORTS</b>									
	Percentage point contribution to GDP growth, Q4/Q4								
Net Goods & Services	-0.9	-0.1	-0.9	-0.1	0.4	0.8	1.1	0.7	-0.3
Exports of G&S	0.4	0.6	0.7	0.7	1.1	1.0	-0.2	-1.0	0.4
Imports of G&S	-1.3	-0.7	-1.7	-0.8	-0.6	-0.2	1.3	1.7	-0.8
	Percentage change, Q4/Q4								
Exports of G&S	3.8	5.8	7.4	7.0	10.1	8.9	-1.8	-8.6	4.0
Services	10.2	3.0	8.3	4.0	11.5	9.3	2.5	-4.9	3.9
Computers	-1.1	11.3	5.8	14.2	8.1	0.9	-2.2	1.8	9.6
Semiconductors	10.1	38.3	-6.0	17.6	2.9	29.3	-13.8	-15.4	11.0
Core Goods 1/	0.6	4.9	8.0	7.4	10.0	8.2	-3.4	-10.7	3.7
Imports of G&S	9.7	4.8	11.5	4.8	3.8	1.1	-7.5	-10.7	5.4
Services	8.8	2.2	9.3	-0.1	8.0	1.8	-1.7	-4.4	3.5
Oil	3.8	1.2	10.8	1.0	-9.2	0.6	-1.1	-15.1	2.2
Natural Gas	19.5	1.3	4.9	13.7	-12.6	12.1	-27.3	5.5	11.3
Computers	13.2	17.0	23.2	12.5	13.8	8.4	-11.6	3.3	15.6
Semiconductors	11.0	-0.1	9.8	7.5	-0.3	3.8	-10.0	-7.2	5.0
Core Goods 2/	10.0	5.2	11.4	5.9	5.7	0.1	-9.8	-13.1	6.0
	Billions of Chained 2000 Dollars								
Net Goods & Services	-471.3	-518.9	-593.8	-616.6	-615.7	-546.5	-390.2	-279.8	-311.0
Exports of G&S	1013.3	1026.1	1126.1	1205.3	1314.8	1425.9	1514.1	1321.9	1360.5
Imports of G&S	1484.6	1545.0	1719.9	1821.9	1930.5	1972.4	1904.3	1601.8	1671.6
	Billions of dollars								
US CURRENT ACCOUNT BALANCE	-459.1	-521.5	-627.3	-732.7	-795.2	-732.4	-688.1	-435.1	-554.3
Current Acct as Percent of GDP	-4.4	-4.8	-5.4	-5.9	-6.0	-5.3	-4.8	-3.1	-3.8
Net Goods & Services (BOP)	-421.6	-495.0	-610.0	-715.3	-760.4	-701.4	-695.9	-413.5	-501.2
Investment Income, Net	33.0	51.0	73.4	78.8	63.8	88.8	134.8	101.2	72.1
Direct, Net	102.4	112.7	150.9	173.2	184.1	233.9	267.9	223.2	206.7
Portfolio, Net	-69.4	-61.7	-77.5	-94.4	-120.3	-145.1	-133.1	-122.0	-134.6
Other Income & Transfers, Net	-70.5	-77.5	-90.6	-96.2	-98.6	-119.7	-127.0	-122.9	-125.1

1. Merchandise exports excluding computers and semiconductors.  
2. Merchandise imports excluding oil, natural gas, computers, and semiconductors.

## OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2005				2006				2007			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NIPA REAL EXPORTS and IMPORTS												
	Percentage point contribution to GDP growth											
Net Goods & Services	0.3	0.8	-0.1	-1.3	0.1	0.6	-0.1	1.3	-1.2	1.7	2.0	0.9
Exports of G&S	0.8	0.9	0.0	1.1	1.7	0.6	0.4	1.7	0.1	1.0	2.5	0.5
Imports of G&S	-0.5	-0.1	-0.1	-2.4	-1.6	0.0	-0.5	-0.3	-1.2	0.7	-0.5	0.4
	Percentage change from previous period, s.a.a.r.											
Exports of G&S	8.1	8.8	0.4	10.9	16.7	5.5	3.5	15.6	0.6	8.8	23.0	4.4
Services	10.2	-2.8	3.2	5.7	13.4	2.7	3.2	28.6	-2.7	13.3	25.9	2.7
Computers	16.8	27.9	8.3	5.2	12.0	17.5	-7.9	12.7	3.9	-4.0	14.4	-9.2
Semiconductors	-5.2	11.7	30.7	38.0	20.3	16.1	-5.6	-15.0	15.9	23.7	20.5	61.7
Core Goods 1/	7.3	13.8	-2.9	12.4	18.3	5.6	4.8	11.8	1.3	6.6	22.1	3.7
Imports of G&S	3.2	0.6	0.8	15.3	10.3	0.1	3.1	2.0	7.7	-3.7	3.0	-2.3
Services	-5.7	-0.0	-1.0	6.8	17.7	-2.0	-0.3	18.4	4.2	-2.0	6.3	-0.9
Oil	5.1	-27.1	-11.6	53.6	-2.8	-27.1	7.5	-10.6	30.9	-22.3	-13.5	16.5
Natural Gas	58.6	-14.1	111.1	-41.9	-50.7	91.9	26.6	-51.2	70.8	74.2	28.2	-58.6
Computers	3.2	11.6	20.4	15.4	20.7	21.1	19.7	-4.3	34.9	-6.5	-0.2	9.7
Semiconductors	-9.2	7.7	14.0	20.0	0.2	-0.5	17.7	-15.8	1.2	6.7	1.0	6.4
Core Goods 2/	4.8	6.1	0.3	12.7	13.7	4.9	1.2	3.2	2.2	-1.1	5.8	-6.0
	Billions of Chained 2000 Dollars, s.a.a.r.											
Net Goods & Services	-623.7	-601.3	-603.6	-637.8	-636.0	-619.4	-623.0	-584.2	-618.6	-571.2	-511.8	-484.5
Exports of G&S	1177.9	1203.1	1204.3	1235.7	1284.3	1301.4	1312.6	1361.1	1363.2	1392.2	1466.2	1482.1
Imports of G&S	1801.7	1804.4	1807.9	1873.6	1920.2	1920.9	1935.7	1945.3	1981.8	1963.4	1978.0	1966.5
	Billions of dollars, s.a.a.r.											
US CURRENT ACCOUNT BALANCE	-697.6	-715.3	-679.1	-838.8	-793.9	-796.9	-850.9	-739.0	-781.7	-771.3	-705.2	-671.3
Current Account as % of GDP	-5.7	-5.8	-5.4	-6.6	-6.1	-6.1	-6.4	-5.5	-5.8	-5.6	-5.1	-4.8
Net Goods & Services (BOP)	-665.3	-686.9	-724.9	-783.9	-766.5	-764.7	-797.2	-713.1	-712.2	-710.2	-685.9	-697.4
Investment Income, Net	88.6	77.8	88.7	59.9	65.2	70.7	51.7	67.7	57.8	45.8	98.9	152.6
Direct, Net	170.2	168.5	187.8	166.3	177.2	189.2	171.9	198.2	201.1	196.2	238.8	299.3
Portfolio, Net	-81.6	-90.7	-99.0	-106.5	-112.0	-118.5	-120.3	-130.5	-143.2	-150.4	-139.9	-146.7
Other Inc. & Transfers, Net	-120.9	-106.2	-42.9	-114.8	-92.6	-103.0	-105.4	-93.6	-127.4	-106.9	-118.3	-126.4

1. Merchandise exports excluding computers and semiconductors.

2. Merchandise imports excluding oil, natural gas, computers, and semiconductors.

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2008				2009				Projected			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NIPA REAL EXPORTS and IMPORTS												
	Percentage point contribution to GDP growth											
Net Goods & Services	0.8	2.9	1.1	-0.2	2.1	1.1	-0.0	-1.1	-0.7	0.3	0.2	-1.1
Exports of G&S	0.6	1.5	0.4	-3.4	-4.2	-0.6	0.4	0.3	0.4	0.4	0.5	0.5
Imports of G&S	0.1	1.4	0.7	3.3	6.4	1.7	-0.4	-1.4	-1.0	-0.1	-0.3	-1.6
	Percentage change from previous period, s.a.a.r.											
Exports of G&S	5.1	12.3	3.0	-23.6	-30.6	-5.4	3.6	2.5	3.3	3.7	4.4	4.7
Services	6.4	3.8	1.4	-1.5	-11.1	-9.4	0.2	1.2	2.5	3.5	4.6	5.1
Computers	0.4	57.4	5.4	-45.2	-13.9	-5.4	20.5	9.6	9.6	9.6	9.6	9.6
Semiconductors	4.6	-6.8	21.3	-53.4	-65.2	15.2	15.2	11.0	11.0	11.0	11.0	11.0
Core Goods 1/	4.7	16.1	2.9	-30.4	-38.3	-3.7	4.5	2.7	3.2	3.4	3.9	4.1
Imports of G&S	-0.8	-7.3	-3.5	-17.5	-36.3	-12.3	3.1	10.3	7.4	0.6	2.2	11.8
Services	5.5	-8.0	3.3	-6.7	-9.2	-10.5	1.6	1.3	6.4	-0.9	4.3	4.5
Oil	17.6	-38.1	-6.6	40.7	-10.7	-46.1	-27.3	48.9	12.9	-21.1	-21.3	55.6
Natural Gas	-40.5	3.7	-38.0	-27.2	-23.3	22.9	24.7	-17.2	31.4	4.4	36.6	-18.2
Computers	6.3	26.0	-13.1	-47.4	-20.8	6.1	17.1	15.6	15.6	15.6	15.6	15.6
Semiconductors	-3.3	14.4	-4.5	-37.9	-47.7	14.5	18.1	5.0	5.0	5.0	5.0	5.0
Core Goods 2/	-6.4	2.4	-2.5	-29.2	-47.6	-6.7	10.2	5.9	5.5	6.0	6.2	6.2
	Billions of Chained 2000 Dollars, s.a.a.r.											
Net Goods & Services	-462.0	-381.3	-353.0	-364.5	-297.4	-263.1	-263.8	-295.1	-313.4	-303.6	-298.0	-329.2
Exports of G&S	1500.6	1544.7	1556.1	1454.9	1327.9	1309.5	1321.1	1329.2	1340.0	1352.3	1367.0	1382.9
Imports of G&S	1962.6	1926.0	1909.1	1819.4	1625.3	1572.7	1584.8	1624.2	1653.4	1655.9	1665.0	1712.0
	Billions of dollars, s.a.a.r.											
US CURRENT ACCOUNT BALANCE	-724.5	-734.7	-745.4	-547.7	-343.7	-417.0	-466.8	-513.0	-548.1	-542.2	-540.8	-585.9
Current Account as % of GDP	-5.1	-5.1	-5.2	-3.9	-2.4	-3.0	-3.3	-3.6	-3.8	-3.7	-3.7	-4.0
Net Goods & Services (BOP)	-730.6	-731.4	-743.8	-578.0	-364.8	-385.5	-432.1	-471.6	-500.2	-490.5	-486.2	-528.1
Investment Income, Net	140.3	120.0	125.5	153.5	139.5	92.8	89.6	83.0	76.4	72.6	69.8	69.5
Direct, Net	281.3	259.7	256.3	274.2	249.8	216.3	215.8	211.0	206.5	204.8	205.8	209.8
Portfolio, Net	-141.1	-139.7	-130.8	-120.7	-110.3	-123.5	-126.1	-128.0	-130.1	-132.1	-136.0	-140.3
Other Inc. & Transfers, Net	-134.1	-123.3	-127.2	-123.2	-118.5	-124.4	-124.4	-124.4	-124.4	-124.4	-124.4	-127.4

1. Merchandise exports excluding computers and semiconductors.  
2. Merchandise imports excluding oil, natural gas, computers, and semiconductors.

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## Abbreviations

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BEA	Bureau of Economic Analysis, U.S. Department of Commerce
E&S	equipment and software
ECB	European Central Bank
EME	emerging market economy
EUC	emergency unemployment compensation
FOMC	Federal Open Market Committee; also, the Committee
GDI	gross domestic income
GDP	gross domestic product
GSE	government-sponsored enterprise
IP	industrial production
MBS	mortgage-backed securities
NAIRU	non-accelerating inflation rate of unemployment
OPEC	Organization of the Petroleum Exporting Countries
PCE	personal consumption expenditures
PMI	purchasing managers index
TARP	Troubled Asset Relief Program
WTI	West Texas intermediate