Prefatory Note

The attached document represents the most complete and accurate version available based on original files from the FOMC Secretariat at the Board of Governors of the Federal Reserve System.

Please note that some material may have been redacted from this document if that material was received on a confidential basis. Redacted material is indicated by occasional gaps in the text or by gray boxes around non-text content. All redacted passages are exempt from disclosure under applicable provisions of the Freedom of Information Act.

Content last modified 04/01/2015.

Class II FOMC - Restricted (FR)

Part 1

September 16, 2009

CURRENT ECONOMIC AND FINANCIAL CONDITIONS

Summary and Outlook

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

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Domestic Developments

The information received since the time of the August Greenbook seems to be pointing to a more noticeable upturn in economic activity than we had been expecting. Both sales and starts of single-family homes have continued the rise that began in the spring, providing stronger evidence that housing activity is firming. Data on orders and shipments of capital goods, together with indicators of business sentiment, suggest that investment in equipment and software is bottoming out earlier than we had anticipated. And the increase in retail sales in August provides at least a tentative sign that consumer spending may be picking up. To be sure, commercial construction remains moribund; and, as expected, improvement in labor markets continues to lag behind that of production and sales. But overall, we now see evidence that production increases in the second half of this year will stem not only from firms' desire to curtail the pace of inventory drawdowns, but also from rising final sales.

In addition to the stronger incoming data, the conditioning assumptions in this projection have become more favorable than they were at the time of the August Greenbook. Equity prices have moved higher, interest rates on both corporate bonds and fixed-rate mortgages have declined, and foreign growth is projected to be stronger. We also revised up our projection for the change in house prices going forward, a reflection of the incoming news on housing activity and a pop-up in several measures of house prices in recent months. Together, these conditioning assumptions led us to revise up our medium-term projection.

We now project that real GDP will rise at an annual rate of 2¾ percent in the second half of this year—1½ percentage points above the pace we projected in the August Greenbook—and 3½ percent in 2010 (versus 3 percent in August). In 2011, which we added to the medium-term projection for the first time, we expect real GDP to accelerate further and rise 4½ percent. Nevertheless, because this forecast begins from a starting point of substantial slack in resources, even after two years of solid economic expansion, we expect the level of real activity to be well below its potential. In particular, although the stronger rebound in GDP in this forecast generates somewhat larger employment gains than in the August Greenbook, the unemployment rate only falls from nearly 10 percent at the end of this year to 9¼ percent at the end of 2010 and to roughly 8 percent at the end of 2011—rates well above the NAIRU.

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

The stronger outlook for real activity in this projection led us to shade up our forecast for core PCE inflation next year to 1.1 percent—still a noticeable slowing from this year's anticipated inflation rate of 1.4 percent. In 2011, with resource slack remaining substantial, we look for core inflation to edge down to 1.0 percent. As before, the magnitude of the decline in our projection for core inflation is greatly tempered by the relative stability of inflation expectations. With energy prices trending up into next year, we expect overall consumer price inflation to be a bit higher than core next year at 1¼ percent but to be the same as core in 2011.

Key Background Factors

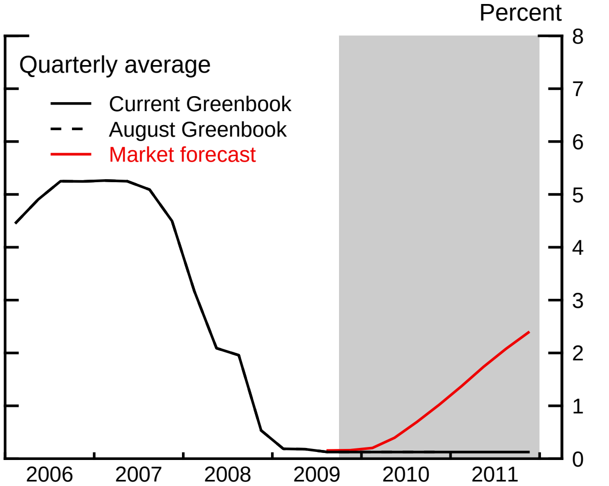
We continue to assume that the FOMC will hold the target federal funds rate in the current range of 0 to ¼ percent through 2011. We have also left our assumptions for nontraditional policy actions mostly unchanged. As in the August forecast, we assume that the Federal Reserve's purchases of long-term securities will total $1.7 trillion—$300 billion of Treasury debt, $150 billion of agency debt, and $1.25 trillion of agency mortgage-backed securities (MBS), with the purchases of Treasury debt to be completed by October. However, we have delayed the assumed completion of the agency debt and MBS purchases by one quarter, to the end of the first quarter of 2010, to allow for a tapering of purchase activity before the program ends. Holdings of these long-term securities are assumed to run off gradually thereafter, declining to a total of $1.4 trillion by the end of 2011.

The 10-year Treasury rate has fallen about 30 basis points since the time of the August Greenbook. We assume that some part of this decline reflects a lower expected path for the federal funds rate, which implies that market participants will be less surprised as they see our policy path unfold than was the case in August. Accordingly, we now project a somewhat larger increase in Treasury rates from here forward than in the last Greenbook. As before, the main factor pushing up Treasury rates is the movement of the 10-year valuation window through and eventually beyond the period of very low short-term rates.

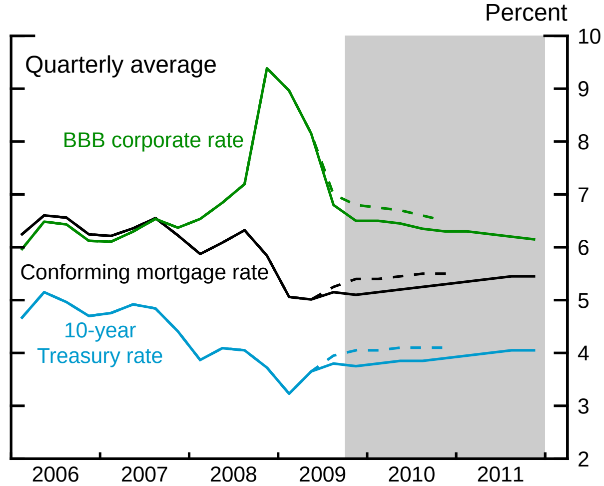
The BBB corporate bond rate has declined about in line with long-term Treasury rates, and we have adjusted our assumed bond rate path down commensurately. We still expect the BBB rate to move down from its current level even as Treasury rates increase, on the assumption that risk premiums in the bond market will continue to recede. Mortgage rates have also declined since early August, though in this case, the spread to Treasury securities has widened a bit. The conforming mortgage rate now stands just above

Key Background Factors Underlying the Baseline Staff Projection

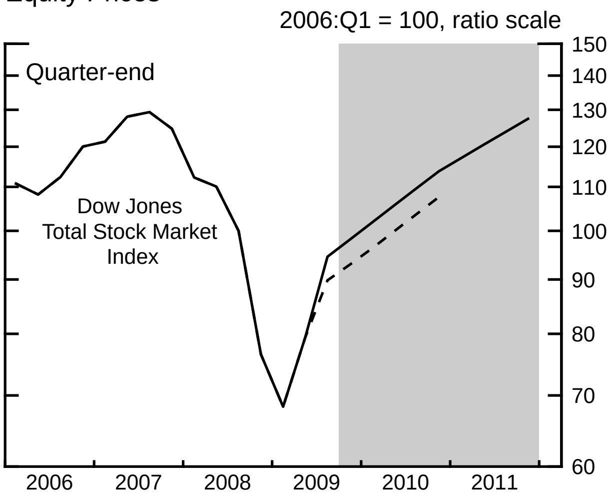
Federal Funds Rate



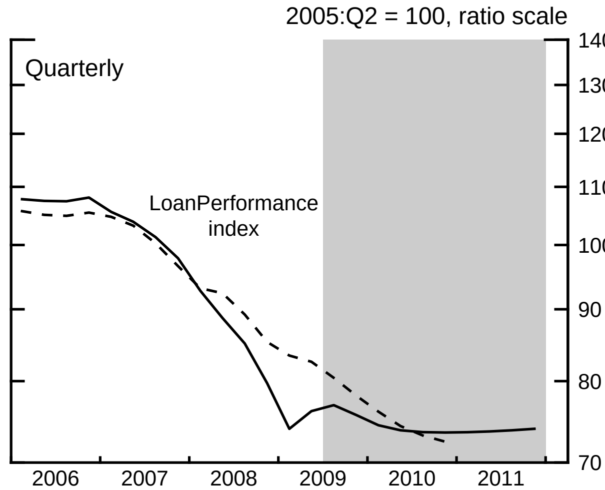
Long-Term Interest Rates



Equity Prices

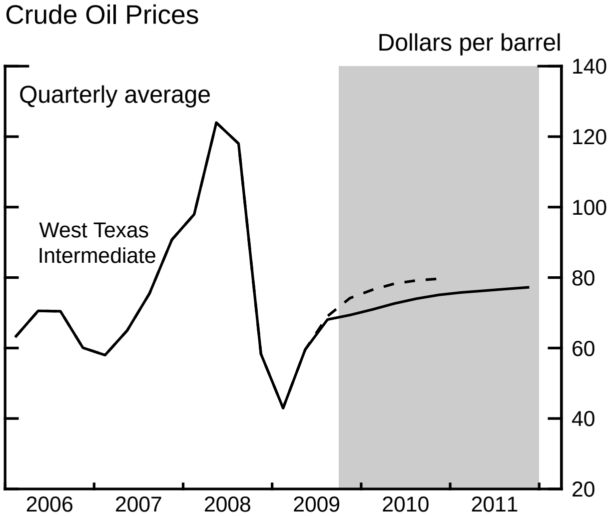


House Prices

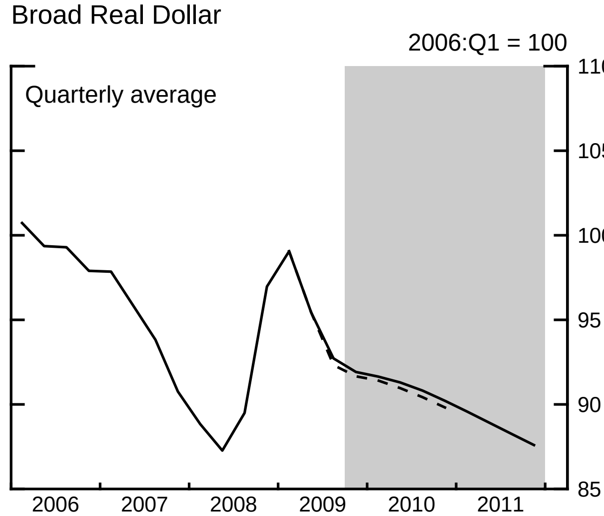


Note: The projection period begins in 2009:Q3.

Crude Oil Prices



Broad Real Dollar



Note: In each panel, shading represents the projection period, which begins in 2009:Q4, except where noted. 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 August and current Greenbooks are the same.

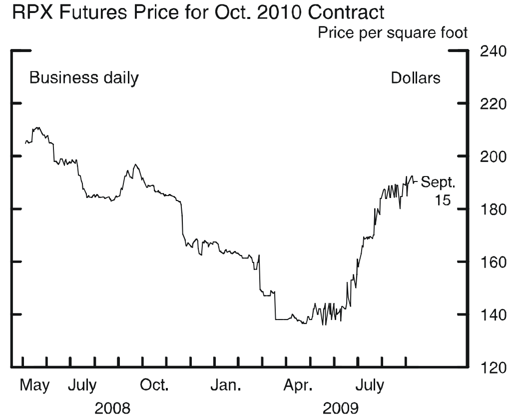
Revisions to the Staff Forecast of Residential House Prices

A variety of house price measures (shown in the figure “House Price Appreciation”) have turned positive in recent months after having fallen at double-digit annual rates for the past two years. For the second quarter as a whole, the LoanPerformance price index—our preferred measure— rose at an annual rate of 12.3 percent, in contrast to the decline of 4.0 percent shown in the August Greenbook.

Based on futures prices, financial market participants have also become more optimistic about the house price outlook: The implied level of the RadarLogic RPX (one of the more liquid futures markets tied to house prices) for October 2010 has risen more than one-third from its low during the spring (see the figure “RPX Futures Price for Oct. 2010 Contract”). Households appear to share this recent optimism. The percentage of respondents to the Reuters/University of Michigan Surveys of Consumers who reported that they expected house prices to decline over the next year has fallen from about 25 percent at the start of this year to 15 percent in the latest survey, roughly where it was when we added the question to the survey in March 2007 (see the figure “Home Value Expectations over Next Year”). The share expecting an increase has rebounded from its low earlier this year, although it remains well below its March 2007 level.

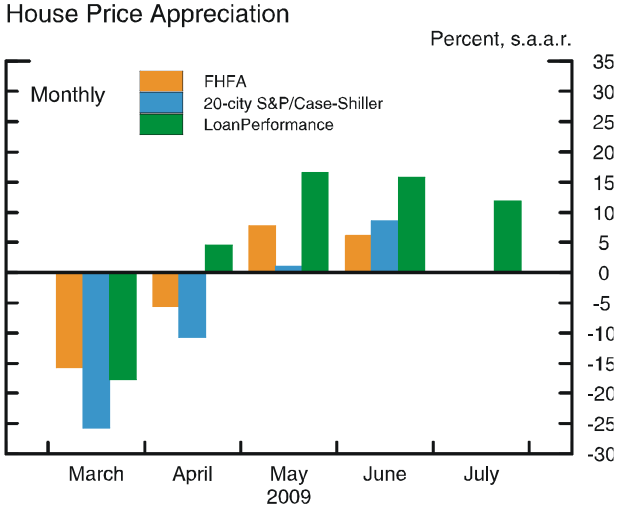
In addition to a surprisingly strong second-quarter reading, we also received a significant revision to historical values of the LoanPerformance index. As shown by the difference between the red and the

RPX Futures Price for Oct. 2010 Contract



Source: RadarLogic.

House Price Appreciation



Note: For July, only LoanPerformance data are available.
Source: For FHFA, Federal Housing Finance Agency; for S&P/Case-Shiller, Standard & Poor’s; for LoanPerformance, First American CoreLogic.

Home Value Expectations over Next Year

Source: Reuters/University of Michigan Surveys of Consumers.

black lines in the figure titled "House Prices" on the next page, LoanPerformance revised up the level of house prices at the peak in 2006, but it now shows a significantly sharper decline going into this year. In particular, the revised index shows prices in 2008 falling much faster than we had previously thought; the level as of the end of the first quarter of this year was revised down about 10 percent.

In putting together our forecast, we use deviations of house prices from their long-run relationship to rents to measure housing's over- or undervaluation (see the figure "Over/Under Valuation of Single-Family Homes"). In this regard, the downward revision to the LoanPerformance index in history is a positive influence on the house price projection: With more of the downward adjustment to house prices behind us, all else equal, prices would need to fall less to hit the same undervaluation. Moreover, given households' rosier outlooks, we now think that prices need to fall less relative to rents to entice buyers; we thus no longer believe that housing valuations will fall as far as we did as of the last Greenbook.

Change in House Prices

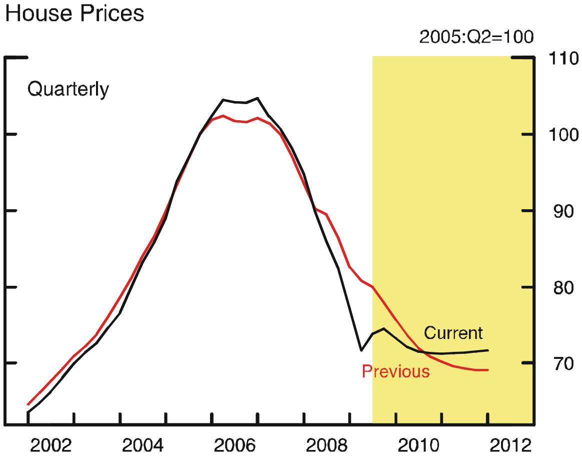
Percent change at annual rate
from end of preceding period

	2009		2010	2011
	Q2	H2		
Current	12.3	-1.2	-2.8	0.6
Aug. GB	-4.0	-11.0	-7.3	-1.5

That said, we expect house prices to begin falling again late in 2009 and in 2010, with only sluggish nominal growth in 2011. We anticipate that foreclosure-related sales and tighter-than-normal credit supply conditions will push down prices as the effects of the dramatic jump in foreclosures started in the first half of 2009 begin to be felt in the housing market this fall. We now expect prices to fall 1.2 percent at an annual rate in the second half of this year and 2.8 percent in 2010.

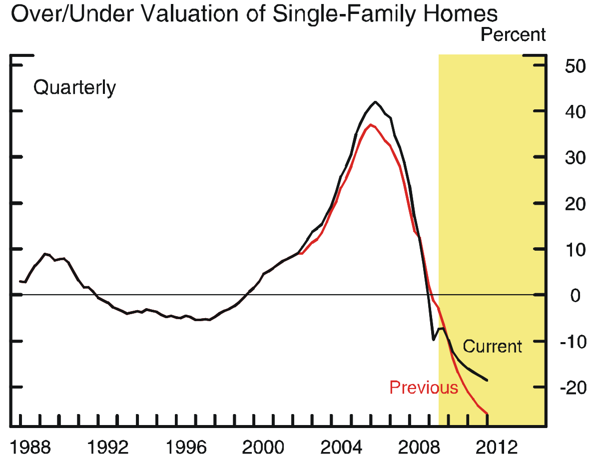
Under our revised forecast, combining the downward revision to the index's level with the shallower trajectory of house price declines going forward leaves house prices at the end of 2011 3.7 percent above the level implied by the August Greenbook forecast.

House Prices



Source: First American CoreLogic.

Over/Under Valuation of Single-Family Homes



Source: First American CoreLogic.

5 percent, and we project it to drift up with Treasury yields over the forecast period to reach 5½ percent at the end of 2011.

Broad indexes of equity prices currently stand about 5 percent above the level assumed in the August Greenbook; we have raised the projected path for stock prices accordingly. As in prior forecasts, we assume that the equity risk premium will trend down over the forecast period, and as a result, we have equity prices rising 16 percent in 2010 and 12 percent in 2011.

The incoming information on changes in house prices has been to the high side of our expectations in recent months even as revised data point to sharper declines last year (see the box titled "Revisions to the Staff Forecast of Residential House Prices").[1] This information, together with a further strengthening of the outlook for housing demand, has led us to revise up significantly our projection for the change in house prices. We now expect house prices to decline at an annual rate averaging 2¼ percent through the end of 2010, compared with 8½ percent in the August Greenbook. In 2011, house prices are projected to edge up slightly.

Our assumptions for fiscal policy through 2010 are essentially unchanged from the August Greenbook. We continue to assume that no new stimulus packages will be enacted and that there will be no additional funding for financial stabilization programs beyond the TARP and the conservatorship for the mortgage-related GSEs. We look for the unified budget deficit to be about $1.4 trillion (10 percent of GDP) in both fiscal 2009 and fiscal 2010; the deficit for fiscal 2010 is a little less than in the August Greenbook, reflecting the faster pace of economic recovery in this projection.

In 2011, we expect the deficit to narrow to $1.1 trillion (7½ percent of GDP). This decline stems both from the effects of the strengthening pace of economic activity on revenues and outlays and from a drop in the costs associated with the 2009 fiscal stimulus package and financial stabilization programs. We assume that most provisions of current tax law will be extended in 2011 but that some of the 2001–03 tax cuts for high-income households will be allowed to expire, resulting in a small boost in revenues in that fiscal year. As for expenditures, we expect that emergency unemployment benefits will be extended, but that grants to state and local governments from the stimulus package will start to phase out; meanwhile, defense spending is projected to remain flat in real terms in

[1] As discussed in the box, LoanPerformance has revised its historical data. These revised data are confidential.

2011 after rising modestly in 2010. In all, we expect fiscal impetus to be a roughly neutral factor in 2011 after contributing about 1 percentage point to the change in real GDP in both 2009 and 2010.

The foreign exchange value of the dollar on a trade-weighted basis is little changed since the time of the last Greenbook. We project the real trade-weighted dollar to depreciate 2 percent next year and 3 percent in 2011. Meanwhile, the incoming data on economic activity abroad have again been somewhat stronger than we had anticipated, and we have strengthened our projection for foreign growth over the forecast period. We now expect foreign real GDP to rise at an annual rate of 3½ percent in the second half of this year and in 2010, and to move up 4 percent in 2011.

The spot price of West Texas Intermediate (WTI) crude oil has moved down, on net, in recent weeks and now stands around $69 per barrel, about $2.50 below its level at the time of the August Greenbook. Consistent with futures prices, we expect WTI to drift up to about $75 by the end of next year and to edge up slightly further in 2011 to about $77. In the near term and in 2010, this path is about $5 per barrel below that in the August Greenbook.

Recent Developments and the Near-Term Outlook

In response to the better-than-expected tone of the incoming spending data, we now project that real GDP will increase at an annual rate averaging 2¾ percent this quarter and next, up from a forecast of 1¼ percent in August.[2] As before, we expect that firms will boost output into closer alignment with sales now that inventories seem to be less burdensome. But we also expect final sales to post a small increase in the second half, an upward adjustment from our forecast in August, when we projected the improvement in final sales to be delayed until early next year. The upward adjustment to our near-term projection is prominent for each of household spending, housing activity, and business investment in equipment and software.

Labor market conditions have evolved about as we had been expecting, with the latest data showing a slower pace of deterioration but not yet an improvement. Declines in

[2] We also now estimate that real GDP declined at an annual rate of 1 percent in the second quarter, a little less negative than the 1½ percent rate of decline we projected in August.

Summary of the Near-Term Outlook
(Percent change at annual rate except as noted)

Measure	2009:Q2		2009:Q3		2009:Q4	
	Aug. GB	Sept. GB	Aug. GB	Sept. GB	Aug. GB	Sept. GB
Real GDP	**-1.5**	-1.0	**.8**	**2.5**	**1.7**	**3.2**
Private domestic final purchases	-3.5	-2.8	-1.0	1.6	-.7	-.5
Personal consumption expenditures	-1.2	-.9	.9	2.3	1.2	.8
Residential investment	-30.1	-22.9	-9.8	3.0	-6.8	4.0
Business fixed investment	-10.7	-10.3	-11.9	-3.8	-12.5	-11.3
Government outlays for consumption and investment	6.1	6.5	2.9	1.8	3.2	4.3
	Contribution to growth (percentage points)					
Inventory investment	-.9	-1.5	1.4	1.0	1.5	2.8
Net exports	1.1	1.6	-.3	-.2	.1	-.1

private payrolls averaged 223,000 per month in July and August, down from an average loss of 425,000 per month in the second quarter; we expect to see job losses slow further to 100,000 in September and then to end by the turn of the year. This employment path is close to that in the August Greenbook. Although we have revised up our projection for real activity this quarter and next, we have tempered our projected employment response because unemployment insurance claims, while off their peaks, have not yet declined to levels that would be consistent with a stabilization of employment. Given our projection for payrolls, we expect the unemployment rate to edge up from 9.7 percent in August to 9.9 percent by the end of the year.

Industrial production (IP) posted large gains in both July and August. The increases were driven in part by a rebound in motor vehicle assemblies from exceptionally low levels earlier in the year and the associated effects on upstream industries. Production outside of the motor vehicle sector has also firmed, and forward-looking indicators such as durable goods orders and the various manufacturing surveys have improved substantially. With vehicle assemblies expected to step up further in September, we project another sizable gain in manufacturing IP this month and moderate increases in the following months. On a quarterly average basis, this pattern translates into increases in manufacturing output at annual rates of 6¼ percent in the current quarter and 5 percent in the fourth quarter.

In the housing sector, the incoming data on both home sales and starts have surprised us to the upside, and a gradual recovery now seems to be under way. Single-family starts registered their fifth consecutive monthly increase in July, and with demand evidently improving—likely reflecting both low mortgage interest rates and a perception by potential homebuyers that purchase prices are nearing their bottom—we expect that starts will continue to move higher in coming months. We now project that single-family starts will average an annual pace of 550,000 units in the fourth quarter, about 60,000 higher than we projected in the August Greenbook. Meanwhile, we expect multifamily starts, which have been depressed by high vacancy rates, falling prices, and tight credit conditions, to remain near current exceptionally low levels. In all, we now project that real residential investment will rise at an annual rate of 3½ percent in the second half of this year; in the August projection, we had projected an 8 percent rate of decline.

Consumer spending has been supported by the "cash for clunkers" program. Excluding motor vehicles, real PCE appears to have flattened out earlier in the summer after falling sharply in late 2008 and early 2009, and the jump in retail sales in August hints that spending may now be turning upward. With the labor market beginning to stabilize and with the drag from the earlier declines in wealth gradually waning, the negative forces that have been restraining household spending should diminish further as we move forward. Our projection calls for real PCE to rise at annual rates of 2¼ percent in the third quarter and ¾ percent in the fourth quarter, with that quarterly pattern reflecting swings in vehicle sales associated with cash for clunkers. On average, the rate of increase over the second half of this year is about ½ percentage point higher than that projected in the last Greenbook.

The outlook for business investment in equipment and software (E&S) appears better than it did in August. Spending on transportation equipment is no longer falling sharply, and the demand for high tech and other types of equipment seems to be stabilizing. In particular, orders and shipments of nondefense capital goods excluding aircraft have recovered somewhat in recent months, readings on business sentiment from the monthly manufacturing surveys have improved, and corporate bond yields have continued to ease. In light of this news, we now project that E&S will start to turn up in the second half—two quarters earlier than in the August Greenbook—rising at an annual rate of ¾ percent.

In contrast, the near-term outlook for nonresidential construction remains about as bleak as we had expected. Although real spending on nonresidential buildings rose in the second quarter, nominal construction outlays dropped considerably in July, suggesting that the second-quarter increase was transitory. And in the drilling and mining sector, spending still appears to be falling in response to low prices for natural gas. With vacancy rates rising and property prices falling, and with credit conditions for this sector extremely tight, we expect to see further sharp declines in real outlays for nonresidential structures in the second half of this year.

We do not yet have much data on inventory investment in the third quarter outside of motor vehicles, where the cash-for-clunkers program reduced inventories to very low levels. Outside of the motor vehicles sector, the sizable drawdown in stocks in the first half of the year has improved inventory positions, and we expect a diminishing pace of liquidation in the period ahead. Folding in the anticipated increase in motor vehicle inventories in the fourth quarter, we expect that, after having subtracted about 2 percentage points from the annual rate of change in real GDP over the first half of this year, nonfarm inventory investment will add that same amount in the second half.

Real federal expenditures for consumption and gross investment are projected to increase appreciably over the second half of this year, reflecting the appropriated funding for defense spending and the continued boost to nondefense spending from the stimulus plan. Although the incoming data on defense spending have been below our expectations, we think this pattern represents shifts in the timing of expenditures and have not changed projected spending for the second half of the year as a whole. In the state and local sector, purchases are projected to edge up this quarter and next as the stimulus grants help these governments maintain their spending in the face of weak revenues.

After sharp declines earlier in the year, exports appear to be rebounding strongly in the current quarter, reflecting both an improvement in activity abroad and a bounceback in exports of automotive products. At the same time, we also expect a sharp rebound in imports. Overall, we project that net exports will make a small negative contribution to the change in real GDP this quarter, and we look for a similar contribution in the fourth quarter.

The incoming data on consumer prices have been a little above our expectations but continue to show smaller increases in core prices this quarter than were evident in the spring, when price measures were boosted by a jump in excise taxes on cigarettes. We continue to project that core PCE prices will rise at an annual rate of 1¼ percent on average in the second half of this year, down from a 1½ percent rate of increase in the first half.[3] Meanwhile, because of a jump in energy prices, total PCE prices are expected to rise at a faster pace of 2 percent in the second half.

The Medium-Term Outlook

The pace of economic activity is expected to strengthen gradually over the next two years as financial stresses continue to diminish, the negative effects of earlier declines in income and wealth fade, and the housing sector continues to recover. We project the change in real GDP to step up to gains of 3½ percent next year and 4½ percent in 2011. The further acceleration of activity in 2011 occurs despite the decline in the impetus to growth from fiscal policy. Even with the projected pickup in real activity, the level of real GDP only returns to its previous peak in late 2010, and output is still projected to be 3½ percent below the level of potential output at the end of the forecast period.

Household sector. We expect the modest recovery in household spending that begins in the second half of this year to gain strength over the remainder of the forecast period. Although the impetus to growth in consumer spending from the fiscal stimulus package is expected to be smaller next year, growth of spending should be supported by a waning of the sizable drag from earlier declines in wealth as well as by rising labor income, low interest rates, and a gradual improvement in credit availability. In all, we expect consumer spending to post increases of 3 percent next year and 3½ percent in 2011. Given a similar projected acceleration in real disposable income, this path of spending leaves the personal saving rate roughly flat near 4 percent. Relative to the last Greenbook, our projection for next year's increase in real PCE is revised up ¼ percentage point, with the effect of the higher path for household wealth contributing importantly to that revision.

We have raised our projection for the housing sector noticeably in this Greenbook. This upward revision reflects both the incoming data on activity, which indicate that demand has started to strengthen more quickly than we had expected, and the revised path of house prices, which implies greater optimism on the part of potential homebuyers about future price gains. As before, we anticipate that demand will continue to improve as incomes pick up and lower prices and favorable mortgage rates enhance affordability; these factors, together with a diminishing overhang of unsold new homes, are projected to contribute to the uptrend in construction activity. We now project that single-family

[3] The cash-for-clunkers rebates are being recorded as lower vehicle prices in the PCE price index, but, in part because the lower prices and the subsequent rebound both occur within the third quarter, we estimate the rebates' effect on the core PCE index for the quarter as a whole to be very small.

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

Measure	2009 H1	2009 H2	2010	2011
Real GDP	**-3.8**	**2.8**	**3.5**	**4.5**
Previous Greenbook	-4.0	1.2	3.1	
Final sales	-1.8	.9	2.9	4.1
Previous Greenbook	-2.3	-.2	2.6	
Personal consumption expenditures	-.2	1.6	2.9	3.6
Previous Greenbook	-.3	1.0	2.6	
Residential investment	-31.0	3.5	12.9	25.3
Previous Greenbook	-34.3	-8.3	9.3	
Business fixed investment	-26.1	-7.6	5.0	9.9
Previous Greenbook	-26.3	-12.2	3.5	
Government purchases	1.9	3.1	1.6	1.0
Previous Greenbook	1.7	3.1	1.6	
Exports	-18.2	14.3	8.2	8.6
Previous Greenbook	-18.7	7.3	5.3	
Imports	-26.3	12.7	8.0	8.0
Previous Greenbook	-25.4	6.8	4.8	
	Contribution to growth (percentage points)			
Inventory change	-1.9	1.9	.6	.4
Previous Greenbook	-1.6	1.4	.5	
Net exports	2.1	-.2	-.2	-.2
Previous Greenbook	1.9	-.1	-.1	

starts will reach an annual pace of almost 800,000 units by the end of 2010—70,000 above our projection in August—and will move up to a pace of 1.12 million units by the end of 2011. Meanwhile, we expect multifamily starts to pick up only modestly from their recent low levels because credit conditions and the returns to investment in this sector remain highly unfavorable. In total, we project real residential expenditures to rise 13 percent next year and 25 percent in 2011. Of course, these large percentage increases are from a very low level, and the pace of spending that we project for late 2011 remains more than one-third below the pace of activity in 2005.

Business investment. We have revised up our projection for investment in equipment and software in response to both the incoming data and the upward revisions to business output over the forecast period. After flattening out in the second half of this year, real E&S spending is now projected to rise 10 percent next year and almost 15 percent in 2011. This acceleration reflects an easing of credit conditions, the strengthening of business output, and some purchases of equipment that had been deferred during the recession.

By contrast, our projection for business investment in structures remains quite downbeat. Demand for such large-scale and long-lived assets typically takes longer to improve after a downturn, and with vacancy rates high and rising and with credit conditions in this sector likely to remain quite restrictive for some time, we expect recovery in nonresidential construction to be slow to emerge. To be sure, we expect investment in the drilling and mining sector to turn back up over the next two years given our projected path for energy prices. But outside that area, we project real outlays to fall another 8½ percent next year and to edge down further in 2011.

Because we expect inventory positions to be much improved going into 2010, we expect the drawdowns in inventories outside the motor vehicle industry to end around the middle of next year. Thereafter, we project a modest restocking that picks up speed as firms become increasingly confident about the durability of demand. (Given the currently low level of motor vehicle stocks, we expect automakers to start boosting inventories immediately.) All told, we expect overall inventory investment to contribute about ½ percentage point to real GDP growth in each of 2010 and 2011.

Government spending. Given the fiscal policy assumptions discussed earlier, we expect federal government purchases to decelerate over the projection period. The rise in real federal expenditures for consumption and investment is projected to slow from about 5 percent this year to 2½ percent in 2010 and less than 1 percent in 2011, primarily reflecting the assumed deceleration in defense spending. States and localities likely will continue to face considerable budget pressures in 2010, but we expect real purchases by these governments to rise 1 percent—the same pace as this year—as federal grants from the stimulus bill remain sizable and tax receipts start to pick up with the economic recovery. In 2011, we project another 1 percent increase in real state and local purchases as the ongoing improvement in revenues offsets the restraint from the winding down of the federal stimulus grants.

The NAIRU in the Staff Projection

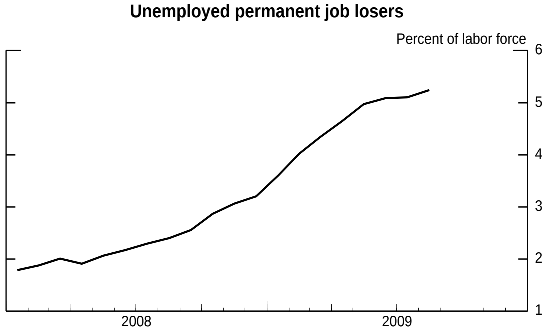
The severe contraction in employment in this recession has been associated with a strikingly large number of workers who lost their jobs through permanent layoffs. Such workers typically take longer to become reemployed than do workers who lose their jobs through temporary layoffs or who become unemployed upon entering or reentering the labor force. In recognition of the higher level of frictional unemployment that this process may entail, we raised our estimate of the NAIRU from 4¾ percent to 5 percent in the June Greenbook forecast.

Since that time, the number of permanent job losers who remain unemployed has risen further, as can be seen in the lower-left figure.

Another indicator of frictional unemployment that has informed our assumption for the NAIRU is the relationship between the unemployment rate and the job vacancy rate, known as the Beveridge curve. One version of this relationship is shown in the lower-right figure. As indicated by the open square, the most recent observation appears to have moved further to the right of the line implied by the earlier years of this decade (the dots), suggesting that frictional unemployment may have risen more than we had assumed in June.

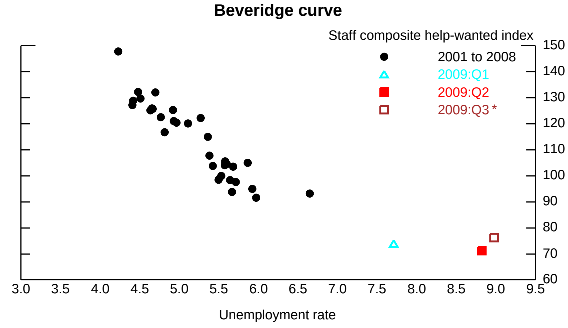
These considerations have led us to raise our estimate of the NAIRU by another ¼ percentage point, to 5¼ percent, in the current forecast. We assume that the NAIRU will remain at this level through the medium term and then begin to edge back down as the labor market tightens and reemployment opportunities become more abundant.

Unemployed permanent job losers



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

Beveridge curve



Note: The unemployment rate is adjusted to remove the staff estimate of the influence of the Emergency Unemployment Compensation program.
* Average of July and August.
Source: For unemployment rate, U.S. Department of Labor, Bureau of Labor Statistics; for help-wanted index, Conference Board and staff calculations.

Net exports. Over the next two years, as imports and exports both recover, we expect net exports to continue to make small negative contributions to the change in real GDP, about on par with those projected for the second half of this year. This projected contribution is not much changed from the August Greenbook, as the dollar is little revised and the stronger growth forecasts for both the U.S. and foreign economies imply a larger rebound in both imports and exports. *(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 through 2010.[4] Structural productivity is still assumed to rise about 1¾ percent per year, on average, this year and next while potential GDP is assumed to increase 2 percent per year. In 2011, we expect the growth of structural productivity and potential GDP to step up to 2 percent and 2¼ percent, respectively, reflecting the anticipated rebound in capital spending, which boosts the contribution of capital deepening to potential output growth. As discussed in the box titled "The NAIRU in the Staff Projection," we have also revised our estimate of the NAIRU slightly higher, to 5¼ percent.

Given the upward revisions to our projection for the change in real GDP, we now expect the GDP gap to narrow somewhat more than in the August Greenbook. We estimate that GDP stood 7¼ percent below its potential in the second quarter, and we project that this gap will narrow to 5½ percent by the end of 2010 (1¼ percentage points smaller than in August) and to 3½ percent by the end of 2011.

Productivity and the labor market. Productivity in the nonfarm business sector soared in the second quarter, and we project another large increase in the current quarter. Productivity had fallen well below our estimate of its structural level during the preceding few quarters as demand fell faster than firms were able or willing to cut hours, but the jumps in output per hour in the second and third quarters are expected to bring the level of productivity back above trend. We anticipate that firms will remain somewhat cautious in their hiring until the recovery gains more steam, and as a result, the level of

[4] In the August Greenbook, we made a tentative decision to leave unchanged our estimate of potential output growth over the past few years even as real GDP was revised down in the comprehensive revision of the NIPA. We therefore allowed our estimate of the GDP gap to become more negative in the first half of this year. That interpretation still seems correct to us, so we have maintained that assumption in the current Greenbook.

Decomposition of Structural Labor Productivity
Nonfarm Business Sector
(Percent change, Q4 to Q4, except as noted)

Measure	1974-95	1996-2000	2001-07	2008	2009	2010	2011
Structural labor productivity	**1.5**	**2.5**	**2.8**	**2.0**	**1.8**	**1.6**	**1.9**
Previous Greenbook	1.5	2.5	2.8	2.0	1.6	1.6	
Contributions[1]							
Capital deepening	.7	1.4	.7	.5	.0	-.1	.4
Previous Greenbook	.7	1.4	.7	.5	-.2	-.1	
Multifactor productivity	.5	.7	1.6	1.3	1.7	1.6	1.4
Previous Greenbook	.5	.7	1.6	1.3	1.6	1.5	
Labor composition	.3	.3	.3	.2	.2	.1	.1
MEMO							
Potential GDP	3.0	3.4	2.8	2.4	2.0	2.1	2.3
Previous Greenbook	3.0	3.4	2.8	2.4	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	2008	2009	2010	2011
Output per hour, nonfarm business	.9	3.7	1.3	1.4
Previous Greenbook	1.0	2.3	1.7	
Nonfarm private payroll employment	-2.1	-4.1	2.1	3.3
Previous Greenbook	-2.1	-4.1	1.5	
Household survey employment	-1.5	-3.0	1.7	2.3
Previous Greenbook	-1.5	-3.0	1.2	
Labor force participation rate[1]	65.9	65.5	65.4	65.3
Previous Greenbook	65.9	65.6	65.3	
Civilian unemployment rate[1]	6.9	9.9	9.2	7.9
Previous Greenbook	6.9	10.0	9.6	
MEMO				
GDP gap[2]	-4.6	-6.9	-5.6	-3.6
Previous Greenbook	-4.6	-7.8	-6.8	

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 is projected to return only gradually to trend. We project private payroll employment to rise an average of almost 200,000 per month next year and about 300,000 per month in 2011 when output is rebounding more sharply. Given this pace of hiring, the unemployment rate is projected to edge down from a peak of just under 10 percent in the fourth quarter to 9¼ percent by the end of 2010, and to fall to 8 percent by the end of 2011.

Prices and labor costs. Given the substantial amount of slack in resource utilization in our forecast, we project that core PCE inflation will slow from 2 percent in 2008 to 1.4 percent this year, and that it will decline further to 1.1 percent in 2010. In 2011, when slack is expected to be diminished but still sizable, we look for core inflation to edge down to 1.0 percent. As in previous Greenbooks, the extent of the deceleration in this projection is considerably less than would be predicted by many reduced-form models of inflation; this relatively small deceleration is because of the stability in inflation expectations in recent years and our anticipation that inflation expectations will only edge slightly lower over the next couple of years. Relative to the August Greenbook, we nudged up our projection for core inflation next year 0.1 percentage point because the downward revision to the unemployment rate in this forecast, together with our higher estimate of the NAIRU, implies somewhat less slack than we had earlier projected. Meanwhile, overall consumer price inflation is projected to be just a little above core inflation in 2010 and in line with core in 2011.

Hourly compensation costs have decelerated sharply this year. The productivity and cost measure of compensation per hour is now reported to have declined at an annual rate of 2¼ percent in the first half of this year after rising 2½ percent in 2008. The employment cost index has decelerated considerably this year as well. To a large extent, we think that the steep deceleration in hourly compensation reflects a drop in bonuses and other one-time adjustments to the level of compensation in an extremely weak labor market. Thus, with the labor market gradually improving, we project that hourly compensation will post moderate increases in the period ahead, rising 1¾ percent next year and 2 percent in 2011.

Financial Flows and Conditions

We project that domestic nonfinancial debt will expand at an average annual rate of about 5 percent through the end of 2011, reflecting a combination of rapid growth in federal government debt, a moderate rise in state and local government debt, and modest increases in household and nonfinancial business debt.

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

Measure	2008	2009	2010	2011
PCE chain-weighted price index	1.7	1.0	1.3	1.0
Previous Greenbook	1.7	1.1	1.3	
Food and beverages	6.8	-1.1	1.5	.7
Previous Greenbook	6.8	-.3	1.6	
Energy	-9.1	-2.4	5.0	2.1
Previous Greenbook	-9.1	-1.3	5.4	
Excluding food and energy	2.0	1.4	1.1	1.0
Previous Greenbook	2.0	1.4	1.0	
Consumer price index	1.5	1.1	1.5	1.1
Previous Greenbook	1.5	1.3	1.5	
Excluding food and energy	2.0	1.7	1.2	1.1
Previous Greenbook	2.0	1.7	1.1	
GDP chain-weighted price index	1.9	.9	1.2	1.1
Previous Greenbook	1.9	1.0	1.1	
ECI for compensation of private industry workers[1]	2.4	1.2	1.8	2.0
Previous Greenbook	2.4	1.0	1.2	
Compensation per hour, nonfarm business sector	2.6	-.3	1.8	2.1
Previous Greenbook	2.6	-.4	1.2	
Prices of core goods imports[2]	3.8	-1.4	1.3	1.0
Previous Greenbook	3.8	-1.6	1.2	

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

Household debt contracted at an annual rate of about 1½ percent in the first half of the year, and we anticipate a further slight contraction in the second half. We expect that the growth of mortgage debt and nonmortgage consumer credit will be held down thereafter by the relatively low levels of spending for housing and consumer durables and by constricted credit availability. Although we anticipate that household debt will begin to expand again next year as the economy improves, the pace of borrowing through 2011 is expected to be tepid because of the elevated unemployment rate, continued deleveraging by households, and lending standards that remain relatively tight.

Nonfinancial business debt is expected to be little changed on net in the second half of this year after having declined in the first half. Firms with access to credit markets continued to borrow in volume in August, as investment-grade bond issuance remained robust and speculative-grade issuance picked up significantly. However, we anticipate that the rise in debt for nonfinancial businesses overall will strengthen slowly during the forecast period, as banks' terms and standards for business loans are expected to ease only gradually and the commercial real estate market is projected to remain very weak.

Federal government debt is expected to balloon further over the forecast period as deficits remain extremely large. All told, we anticipate net federal borrowing of about $1½ trillion in 2009 and 2010, and about $1 trillion in 2011. In the state and local government sector, borrowing rebounded in the first half of the year as earlier strains in the municipal bond market eased. We expect state and local government borrowing to slow to a more sustainable pace over the projection period, in part because infrastructure stimulus grants will finance some of the projected rise in the sector's capital outlays.

M2 is projected to contract over the second half of this year as households continue to reallocate some of their wealth toward riskier assets. In 2010 and 2011, M2 is forecast to increase less rapidly than nominal GDP, as improvements in economic and financial market conditions continue to reduce demand for M2 assets.

The Long-Term Outlook

We have extended the staff forecast to 2014, 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 majority of longer-term inflation projections provided by the FOMC participants in June.

- No further nontraditional monetary policy actions are undertaken 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, which are expected to be just a little above historically normal levels at the end of 2011, only edge down thereafter. Banks ease their lending terms and standards somewhat further as well.

- The fiscal stimulus package continues to boost the level of government purchases through 2012, but spending associated with these funds is essentially complete by 2013. Government budget deficits continue to narrow. This improvement reflects both the effects of the economic recovery on tax receipts and transfer payments as well as further policy actions after 2011 aimed at reducing the deficit.

- From 2012 to 2014, the foreign exchange value of the dollar is assumed to depreciate 2 percent per year in real terms. The price of WTI crude oil rises gradually to nearly $85 per barrel by the end of 2014, consistent with futures prices. Under these assumptions, movements in the prices of energy and imports have only minor implications for domestic inflation. Foreign real GDP expands 3¾ percent per year, on average, such that foreign output gaps continue to narrow.

- As discussed in the box on the NAIRU, the factors that the staff sees as having raised the NAIRU during the recession are expected to slowly fade; we also assume that the effect of emergency unemployment compensation on the unemployment rate will diminish after 2011. Finally, potential GDP is assumed to expand 2¾ percent per year, on average, over the 2012–14 period.

The unemployment rate enters 2012 still at a very high level, and inflation is noticeably below the assumed long-run target. Under the assumptions used to construct the baseline extension, the federal funds rate begins to rise in early 2012, reaching 2½ percent by the

The Long-Term Outlook
(Percent change, Q4 to Q4, except as noted)

Measure	2009	2010	2011	2012	2013	2014
Real GDP	-.5	3.5	4.5	4.9	4.3	2.8
Civilian unemployment rate[1]	9.9	9.2	7.9	5.9	4.7	4.6
PCE prices, total	1.0	1.3	1.0	1.2	1.5	1.7
Core PCE prices	1.4	1.1	1.0	1.1	1.4	1.7
Federal funds rate[1]	.1	.1	.1	2.4	3.8	4.1

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

end of that year and 3¾ percent in 2013.[5] The recovery in investment spending helps to boost GDP growth to 5 percent in 2012 and 4¼ percent in 2013. As a result, the unemployment rate dips slightly below the NAIRU by the end of 2013. By 2014, the slow recovery in investment shares toward historical norms is largely complete, so output growth moves down toward its potential rate and unemployment stabilizes. Core PCE inflation moves up modestly after 2011 as economic activity recovers and long-run inflation expectations are assumed to remain reasonably well anchored.

Alternative Scenarios

In this section, we consider risks to the baseline projection using simulations of the FRB/US model. In the first scenario, we consider the possibility that real activity will recover more rapidly than we anticipate. The next scenario combines this more robust expansion with an increase in inflation expectations, leading to a much earlier increase in the federal funds rate than in the baseline projection. The third scenario examines a downside risk to activity—the possibility that households boost their saving appreciably relative to baseline. The next scenario examines another downside risk to activity and assumes that the recent strength in demand is short-lived as impaired balance sheets exert greater restraint on economic activity and some of the improvement in financial conditions since early spring is given back. The final two scenarios address risks to aggregate supply: first, the possibility that inflation expectations may fall more significantly in response to economic slack than in our baseline, and second, the possibility that the recession will have larger adverse effects on labor market functioning. In each of these scenarios, the federal funds rate is assumed to follow the prescriptions of a version of the Taylor rule (subject to an effective lower bound of 12½ basis points), and nontraditional policy is assumed to follow the baseline path.

V-shaped recovery. Incoming production and spending data, including upward surprises in business and household investment, have led us to mark up the baseline projection appreciably. But even with this revision, household and business outlays on durable goods and structures remain remarkably low by historical standards relative to replacement demand, suggesting a risk of a greater-than-anticipated rebound in spending

[5] In the long-run outlook, the federal funds rate (R) follows the prescriptions of a Taylor rule of the form $R = 2.5 + \pi + 0.5y + 0.5(\pi - 2)$, subject to the zero lower bound constraint. In this expression, π denotes the four-quarter rate of core PCE inflation and y is a measure of the output gap. The latter is defined using labor market data; it equals the difference between the staff estimate of the NAIRU and the unemployment rate divided by the Okun's Law coefficient (0.45). The same policy rule is used to set the federal funds rate in the alternative scenarios discussed below.

Alternative Scenarios

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

Measure and scenario	2009 H2	2010	2011	2012	2013-14
Real GDP					
Extended Greenbook baseline	2.8	3.5	4.5	4.9	3.5
V-shaped recovery	4.0	5.0	5.4	4.6	2.8
Earlier liftoff	4.0	5.3	5.2	4.0	2.4
Higher saving rate	1.6	.9	4.1	4.8	4.3
Greater financial headwinds	1.3	.8	4.2	5.3	4.7
Greater disinflation	2.8	3.4	4.2	4.9	4.2
Labor market damage	2.5	2.6	4.3	5.8	3.8
Unemployment rate[1]					
Extended Greenbook baseline	9.9	9.2	7.9	5.9	4.6
V-shaped recovery	9.8	8.6	7.0	5.2	4.6
Earlier liftoff	9.8	8.5	6.9	5.3	5.0
Higher saving rate	10.0	10.4	9.3	7.3	5.2
Greater financial headwinds	10.1	10.4	9.3	7.1	4.7
Greater disinflation	9.9	9.2	8.0	6.1	4.2
Labor market damage	10.1	10.3	9.2	6.0	4.4
Core PCE inflation					
Extended Greenbook baseline	1.3	1.1	1.0	1.1	1.5
V-shaped recovery	1.3	1.1	1.0	1.1	1.7
Earlier liftoff	1.2	1.6	1.9	2.2	2.8
Higher saving rate	1.3	.9	.5	.6	1.0
Greater financial headwinds	1.3	.9	.5	.7	1.2
Greater disinflation	1.0	.4	.1	-.1	.0
Labor market damage	1.4	1.1	1.2	1.5	1.9
Federal funds rate[1]					
Extended Greenbook baseline	.1	.1	.1	2.4	4.1
V-shaped recovery	.1	.1	1.0	3.2	4.4
Earlier liftoff	.1	.6	2.4	4.6	5.5
Higher saving rate	.1	.1	.1	.2	2.6
Greater financial headwinds	.1	.1	.1	.6	3.5
Greater disinflation	.1	.1	.1	.5	2.4
Labor market damage	.1	.1	.3	3.0	4.9

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

that in turn might spark stronger activity in other sectors. In this scenario, a pronounced snapback in investment leads to private outlays on durable goods and structures that are 12 percent above baseline by the end of 2011. In the more favorable economic environment created by this additional demand, we assume that risk spreads on equities, corporate bonds, and residential mortgages fall faster than expected; consumer sentiment also improves more quickly, further stimulating overall spending. As a result, real GDP returns to its previous peak by early next year and expands at an annual rate of about 5¼ percent, on average, over the next two years. This V-shaped recovery puts unemployment on a more pronounced downward trajectory: The unemployment rate drops to 8½ percent by the end of 2010 and then continues to move steadily down. With less slack in this scenario but little change in long-run price expectations and faster capital-driven productivity growth, inflation is little changed from baseline. In response to the more robust economy, the federal funds rate moves up from the zero bound in early 2011.

Earlier liftoff. In this scenario, the rapidly improving economy of the V-shaped recovery is assumed to be accompanied by an increase in long-run inflation expectations, perhaps reflecting concerns over the ability or willingness of monetary policymakers to restrain inflationary pressures given strong output growth and the expansion of the Federal Reserve's balance sheet. Specifically, we assume that long-run inflation expectations rise to 3 percent later this year, an expectation that becomes partially self-fulfilling. Core PCE inflation averages 1½ percent in 2010 and then climbs steadily, reaching 3 percent by 2014. The combination of falling unemployment and rising inflation brings forward the liftoff in the federal funds rate to the end of next year. Relative to the V-shaped scenario, real activity is a bit stronger in 2010 but rises less rapidly thereafter, reflecting the earlier and sharper rise in the federal funds rate.

Higher saving rate. The personal saving rate has moved up considerably in recent quarters from what had been a very low level by historical standards. In the baseline, we expect the saving rate to hover near 4 percent through 2011, as the drag on consumer spending from the decline in wealth over the past two years is offset by low interest rates, increasing consumer confidence, and improved credit availability. However, the baseline projection may underestimate the extent to which households' desired saving has moved up in response to the decline in net worth and the heightened economic uncertainty of the past two years. In addition, we may have overstated the degree to which credit conditions for households will ease. In this scenario, the saving rate moves up to 7 percent by next year and remains elevated through 2014. As a result, real GDP rises less rapidly than in the baseline in the second half of this year and over the next two years. The unemployment rate rises to nearly 10½ percent by the end of 2010 and inflation slows noticeably, delaying the liftoff of the federal funds rate until the end of 2012.

Greater financial headwinds. The strength in demand suggested by the positive tone of the data received in recent months could easily prove short-lived, particularly given some of the factors weighing on the economy. For example, the baseline may understate the restraint on spending that will be exerted by impaired balance sheets at banks, many households, and some nonfinancial firms. In this scenario, we assume that these factors directly damp demand more significantly and also lead to greater restraint on credit availability, more-elevated external finance premiums for borrowers, and a renewed decline in consumer and business sentiment. As a result, the stock market falls 35 percent while the spread of BBB-rated corporate bonds over 10-year Treasury securities widens 150 basis points, both relative to baseline. Real GDP rises at an annual rate of only about 1¼ percent in the second half of 2009 and about ¾ percent next year. The unemployment rate peaks at 10½ percent next year while core PCE inflation falls to ½ percent in 2011.

Greater disinflation. Inflation slows only modestly in the baseline projection despite a very high level of unemployment, in contrast with earlier episodes in which elevated levels of slack led to more marked and persistent decelerations in prices. The modest slowing in the baseline reflects our assessment that inflation expectations are now reasonably well anchored, which greatly attenuates the degree to which economic slack reduces long-run inflation expectations and hence the persistent element in actual inflation. In this scenario, we assume that inflation expectations instead fall more significantly in response to economic slack in a manner that is implicit in many accelerationist Phillips curve models. As a result, core PCE inflation drops to 1 percent in the second half of this year and to about zero in 2011 and remains roughly unchanged thereafter. With the nominal funds rate constrained by the zero lower bound initially, the decline in inflation causes real interest rates to rise above baseline, weakening real activity a bit. In the longer run, however, monetary policy is able to respond to the unwelcome disinflation by holding the nominal federal funds rate below baseline. As a result, both nominal and real long-term interest rates are lower, and the resulting stimulus causes the unemployment rate to decline noticeably below baseline by 2014.

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 and costly 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 more than anticipated in the baseline and will continue to do so, such that it reaches 6½ percent in 2010 and remains there through 2011 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 rises at an annual rate of 2½ percent in the second half of this year and 2010. The unemployment rate peaks at about 10¼ 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 greater than in the staff forecast.

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

Measure	2009	2010	2011	2012	2013	2014
Real GDP						
(percent change, Q4 to Q4)						
Projection	-.5	3.5	4.5	4.9	4.3	2.8
Confidence interval						
Greenbook forecast errors	-1.4±.3	1.7±5.3	2.8±6.3	. . .	. . .	. . .
FRB/US stochastic simulations	-1.2±.1	2.2±5.2	2.7±6.2	2.6±6.5	2.5±6.5	1.0±4.9
Civilian unemployment rate						
(percent, Q4)						
Projection	9.9	9.2	7.9	5.9	4.7	4.6
Confidence interval						
Greenbook forecast errors	9.5±10.2	8.4±10.0	6.8±9.0	. . .	. . .	. . .
FRB/US stochastic simulations	9.6±10.1	8.4±9.8	7.0±8.8	5.1±7.0	3.9±5.6	3.7±5.4
PCE prices, total						
(percent change, Q4 to Q4)						
Projection	1.0	1.3	1.0	1.2	1.5	1.7
Confidence interval						
Greenbook forecast errors	.5±1.5	.2±2.4	-.3±2.3	. . .	. . .	. . .
FRB/US stochastic simulations	.7±1.4	.5±2.3	.0±2.1	.1±2.2	.5±2.5	.7±2.8
PCE prices excluding						
food and energy						
(percent change, Q4 to Q4)						
Projection	1.4	1.1	1.0	1.1	1.4	1.7
Confidence interval						
Greenbook forecast errors	1.1±1.8	.4±1.8	.0±2.0	. . .	. . .	. . .
FRB/US stochastic simulations	1.2±1.7	.4±1.8	.2±1.8	.3±1.9	.7±2.3	.9±2.6
Federal funds rate						
(percent, Q4)						
Projection	.1	.1	.1	2.4	3.8	4.1
Confidence interval						
FRB/US stochastic simulations	.1±.1	.1±.2	.1±2.4	.1±4.2	2.1±5.6	2.5±5.9

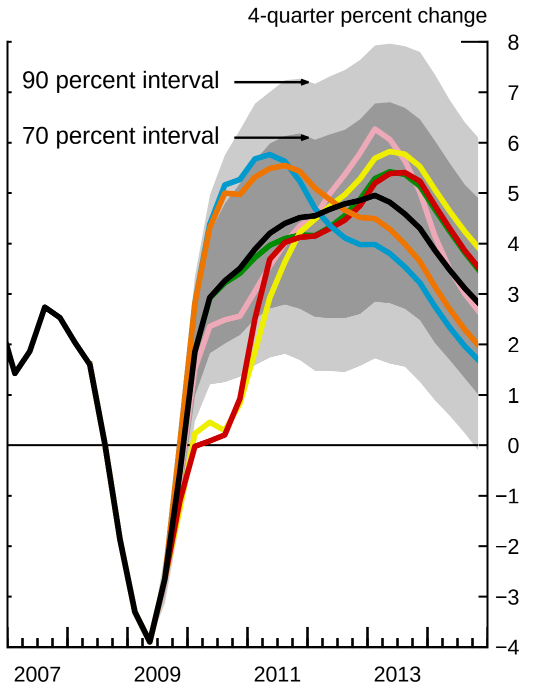
Notes: Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1969-2008 set of model equation residuals.
Intervals derived from Greenbook forecast errors are based on projections made from 1979-2008, except for PCE prices excluding food and energy, where the sample is 1981-2008.
. . . Not applicable. The Greenbook forecast horizon has typically extended about two years.

Forecast Confidence Intervals and Alternative Scenarios

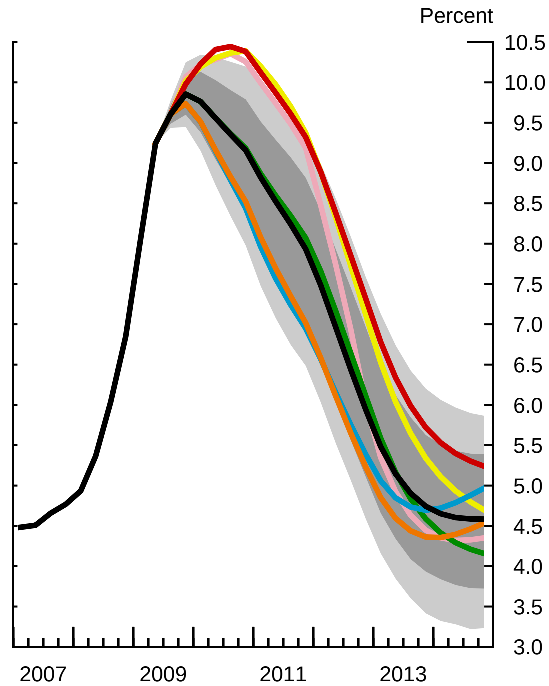
Confidence Intervals Based on FRB/US Stochastic Simulations

Extended Greenbook baseline
V−shaped recovery
Earlier liftoff
Higher saving rate
Greater financial headwinds
Greater disinflation
Labor market damage

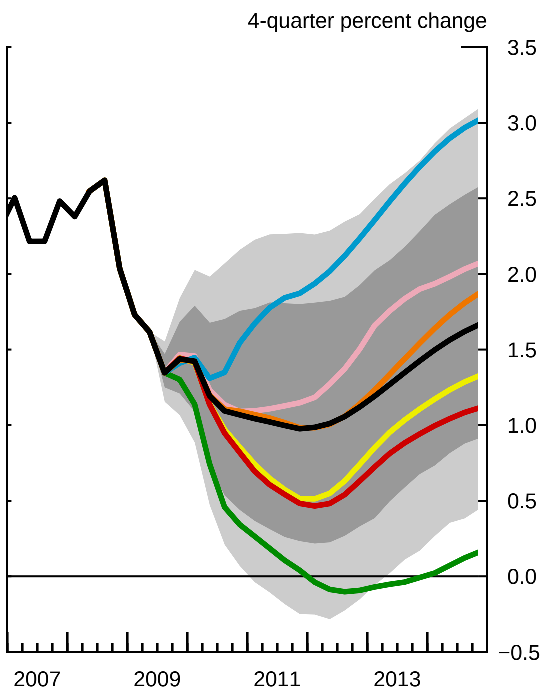
Real GDP



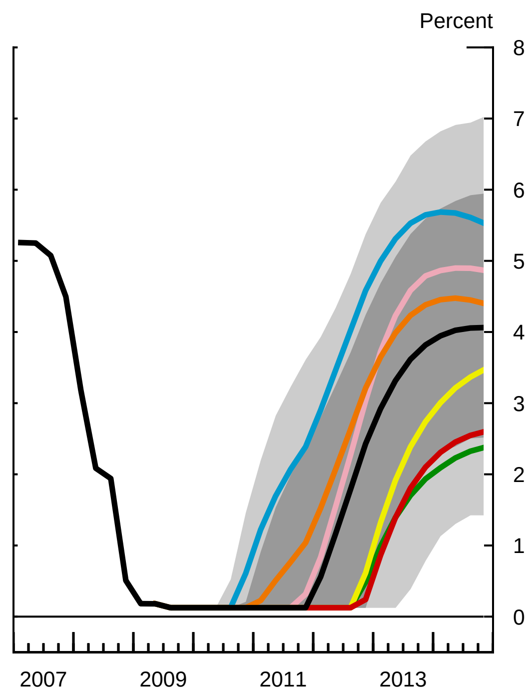
Unemployment Rate



PCE Prices excluding Food and Energy

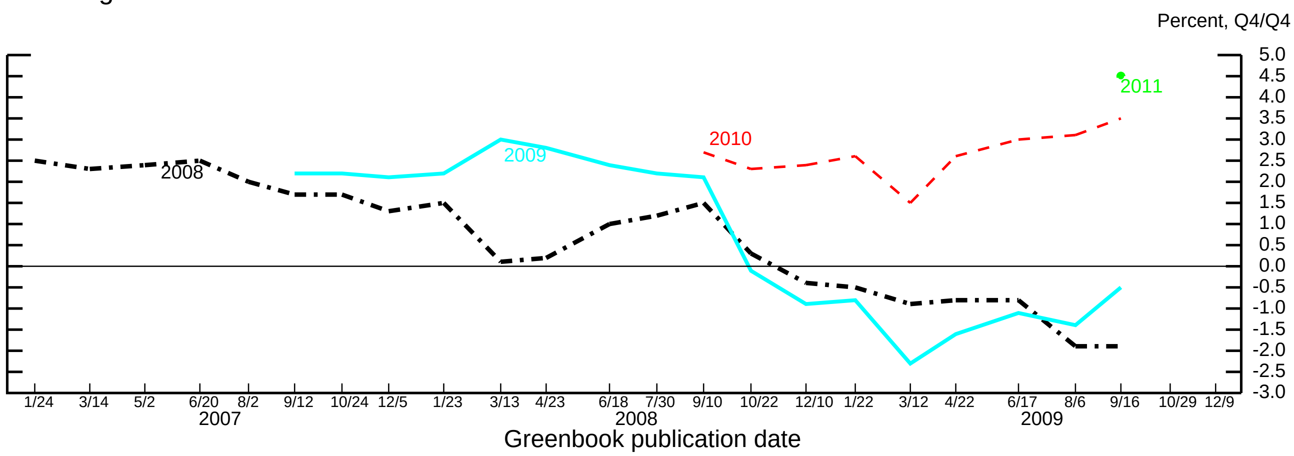


Federal Funds Rate

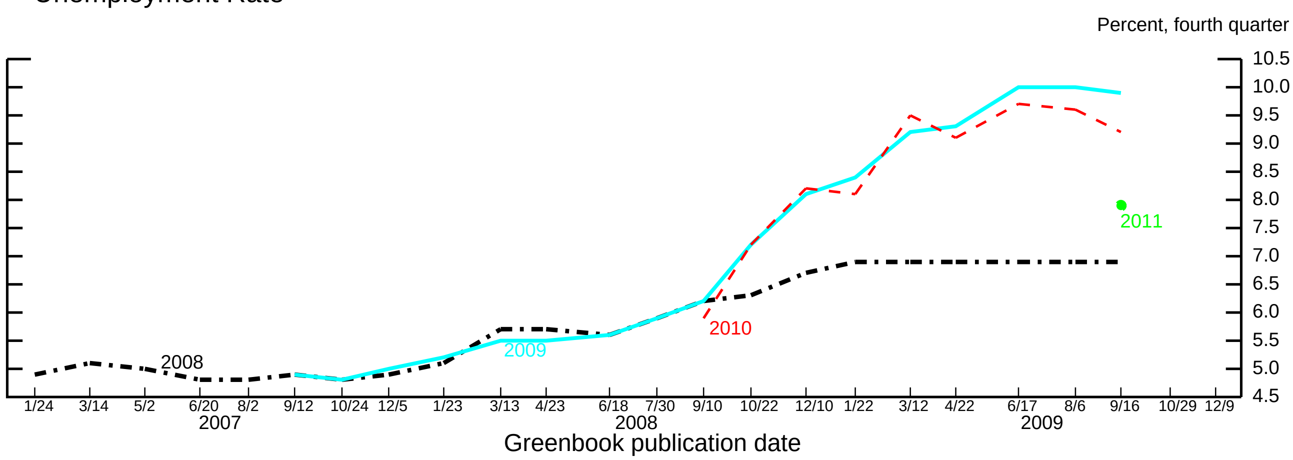


Evolution of the Staff Forecast

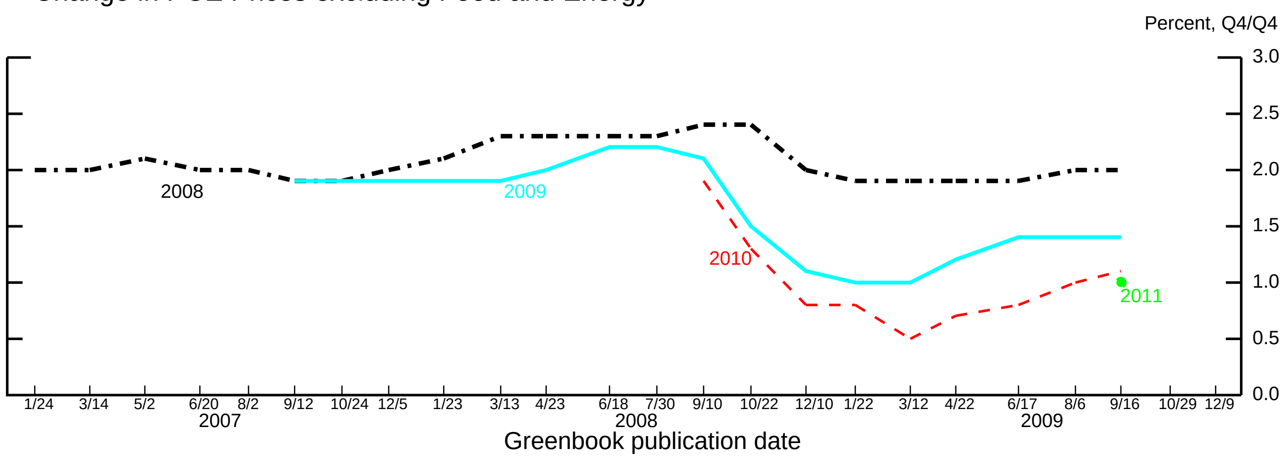
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy*



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

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[1]	
	08/06/09	09/16/09	08/06/09	09/16/09	08/06/09	09/16/09	08/06/09	09/16/09	08/06/09	09/16/09
Quarterly										
2009:Q1	-4.6	-4.6	-6.4	-6.4	-1.5	-1.5	1.1	1.1	8.1	8.1
Q2	-1.2	-1.0	-1.5	-1.0	1.3	1.3	2.0	2.0	9.2	9.2
Q3	1.6	3.1	.8	2.5	2.4	2.9	1.2	1.5	9.8	9.6
Q4	2.9	4.2	1.7	3.2	2.2	1.4	1.2	1.2	10.0	9.9
2010:Q1	3.7	4.3	2.5	2.8	1.5	1.4	1.0	1.1	10.0	9.8
Q2	4.2	4.4	3.0	3.2	1.3	1.4	1.0	1.1	9.9	9.6
Q3	4.6	5.0	3.4	3.8	1.1	1.3	1.0	1.1	9.8	9.4
Q4	4.6	5.3	3.6	4.2	1.0	1.2	1.0	1.1	9.6	9.2
2011:Q1	. . .	5.6	. . .	4.4	. . .	1.1	. . .	1.0	. . .	8.8
Q2	. . .	5.6	. . .	4.5	. . .	1.0	. . .	1.0	. . .	8.5
Q3	. . .	5.6	. . .	4.6	. . .	1.0	. . .	1.0	. . .	8.2
Q4	. . .	5.6	. . .	4.6	. . .	1.0	. . .	1.0	. . .	7.9
Two-quarter[2]										
2009:Q2	-3.0	-2.9	-4.0	-3.8	-.1	-.1	1.6	1.6	2.3	2.3
Q4	2.2	3.7	1.2	2.8	2.3	2.1	1.2	1.3	.8	.7
2010:Q2	4.0	4.4	2.8	3.0	1.4	1.4	1.0	1.1	-.1	-.3
Q4	4.6	5.1	3.5	4.0	1.1	1.2	1.0	1.1	-.3	-.4
2011:Q2	. . .	5.6	. . .	4.4	. . .	1.0	. . .	1.0	. . .	-.7
Q4	. . .	5.6	. . .	4.6	. . .	1.0	. . .	1.0	. . .	-.6
Four-quarter[3]										
2008:Q4	.1	.1	-1.9	-1.9	1.7	1.7	2.0	2.0	2.1	2.1
2009:Q4	-.4	.4	-1.4	-.5	1.1	1.0	1.4	1.4	3.1	3.0
2010:Q4	4.3	4.7	3.1	3.5	1.3	1.3	1.0	1.1	-.4	-.7
2011:Q4	. . .	5.6	. . .	4.5	. . .	1.0	. . .	1.0	. . .	-1.3
Annual										
2008	2.6	2.6	.4	.4	3.3	3.3	2.4	2.4	5.8	5.8
2009	-1.7	-1.4	-3.0	-2.6	.1	.2	1.5	1.5	9.3	9.2
2010	3.2	4.0	2.2	2.9	1.6	1.5	1.1	1.2	9.8	9.5
2011	. . .	5.4	. . .	4.3	. . .	1.1	. . .	1.0	. . .	8.4

1. Level, except for two-quarter and four-quarter intervals.
2. Percent change from two quarters earlier; for unemployment rate, change is in percentage points.
3. Percent change from four quarters earlier; for unemployment rate, change is in percentage points.

Changes in Real Gross Domestic Product and Related Items
(Percent, annual rate except as noted)

Item	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2009[1]	2010[1]	2011[1]
Real GDP	-6.4	-1.0	2.5	3.2	2.8	3.2	3.8	4.2	4.4	4.5	4.6	4.6	-.5	3.5	4.5
Previous Greenbook	-6.4	-1.5	.8	1.7	2.5	3.0	3.4	3.6	...	...	...	...	-1.4	3.1	...
Final sales	-4.1	.5	1.5	.3	2.2	3.1	2.9	3.4	3.6	4.1	4.2	4.6	-.5	2.9	4.1
Previous Greenbook	-4.1	-.5	-.5	.2	1.8	2.6	2.9	3.3	...	...	...	...	-1.3	2.6	...
Priv. dom. final purch.	-7.2	-2.8	1.6	-.5	2.3	3.3	3.7	4.3	4.4	4.9	5.0	5.4	-2.3	3.4	5.0
Previous Greenbook	-7.2	-3.5	-1.0	-.7	1.5	2.7	3.4	4.1	...	...	...	...	-3.1	2.9	...
Personal cons. expend.	.6	-.9	2.3	.8	2.5	2.8	2.9	3.3	3.3	3.6	3.6	3.8	.7	2.9	3.6
Previous Greenbook	.6	-1.2	.9	1.2	2.1	2.4	2.8	3.2	...	...	...	...	.4	2.6	...
Durables	3.9	-5.5	15.9	-7.0	10.0	9.9	7.5	10.7	9.8	11.9	11.5	13.0	1.4	9.5	11.6
Nondurables	1.9	-2.1	.6	1.9	2.0	2.2	2.7	2.9	2.9	3.0	3.1	3.2	.6	2.5	3.1
Services	-.3	.2	.9	1.7	1.6	1.9	2.3	2.3	2.4	2.5	2.6	2.6	.6	2.0	2.5
Residential investment	-38.2	-22.9	3.0	4.0	7.0	12.4	15.4	17.0	20.2	23.9	26.8	30.5	-15.5	12.9	25.3
Previous Greenbook	-38.2	-30.1	-9.8	-6.8	-3.1	10.4	13.0	18.1	...	...	...	...	-22.4	9.3	...
Business fixed invest.	-39.2	-10.3	-3.8	-11.3	-.3	4.8	7.2	8.7	9.2	10.3	9.8	10.3	-17.4	5.0	9.9
Previous Greenbook	-39.2	-10.7	-11.9	-12.5	-2.3	2.8	6.0	8.0	...	...	...	...	-19.5	3.5	...
Equipment & software	-36.4	-6.2	4.8	-3.0	5.2	10.2	11.8	12.3	12.8	15.0	14.4	14.9	-11.7	9.8	14.3
Previous Greenbook	-36.4	-8.3	-5.7	-4.2	2.7	7.7	10.5	12.0	...	...	...	...	-14.8	8.2	...
Nonres. structures	-43.6	-17.1	-18.0	-25.9	-11.0	-5.9	-2.3	.7	1.1	-.2	-.9	-.8	-27.0	-4.7	-.2
Previous Greenbook	-43.6	-14.6	-22.1	-26.6	-11.6	-6.8	-3.2	-.6	...	...	...	...	-27.6	-5.7	...
Net exports[2]	-386	-332	-339	-342	-351	-351	-359	-367	-374	-379	-385	-387	-350	-357	-381
Previous Greenbook[2]	-386	-347	-357	-355	-357	-358	-362	-364	...	...	...	...	-362	-360	...
Exports	-29.9	-4.6	20.9	8.1	7.4	7.9	8.4	8.9	8.6	8.4	8.3	9.0	-3.3	8.2	8.6
Imports	-36.4	-14.8	18.4	7.2	8.1	6.4	8.7	8.9	8.6	7.8	8.0	7.6	-8.9	8.0	8.0
Gov't. cons. & invest.	-2.6	6.5	1.8	4.3	3.1	2.0	.7	.6	1.0	1.0	1.0	1.0	2.5	1.6	1.0
Previous Greenbook	-2.6	6.1	2.9	3.2	3.3	2.1	.7	.5	...	...	...	...	2.4	1.6	...
Federal	-4.3	11.0	3.5	9.6	6.2	3.5	.1	-.2	.8	.9	.8	.8	4.8	2.4	.8
Defense	-5.1	13.3	2.7	10.2	3.5	2.2	1.3	.7	.0	.1	-.1	.0	5.0	1.9	.0
Nondefense	-2.5	6.2	5.3	8.3	12.0	6.2	-2.2	-2.0	2.5	2.5	2.5	2.5	4.2	3.3	2.5
State & local	-1.5	3.8	.7	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.1	1.1
Change in bus. inventories[2]	-114	-165	-134	-45	-25	-20	7	33	58	71	85	87	-114	-1	75
Previous Greenbook[2]	-114	-145	-103	-55	-32	-18	0	8	...	...	...	...	-104	-10	...
Nonfarm[2]	-115	-169	-138	-48	-28	-23	4	30	55	69	83	85	-117	-4	73
Farm[2]	0	3	4	4	4	3	3	3	3	3	3	3	3	3	3

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

Changes in Real Gross Domestic Product and Related Items
(Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise noted)

Item	2003	2004	2005	2006	2007	2008	2009	2010	2011
Real GDP	3.8	3.1	2.7	2.4	2.5	-1.9	-.5	3.5	4.5
Previous Greenbook	3.8	3.1	2.7	2.4	2.5	-1.9	-1.4	3.1	. . .
Final sales	3.8	2.8	2.7	2.8	2.7	-1.4	-.5	2.9	4.1
Previous Greenbook	3.8	2.8	2.7	2.8	2.7	-1.4	-1.3	2.6	. . .
Priv. dom. final purch.	4.2	4.2	3.1	2.5	1.4	-3.2	-2.3	3.4	5.0
Previous Greenbook	4.2	4.2	3.1	2.5	1.4	-3.2	-3.1	2.9	. . .
Personal cons. expend.	3.4	3.5	2.7	3.3	2.0	-1.8	.7	2.9	3.6
Previous Greenbook	3.4	3.5	2.7	3.3	2.0	-1.8	.4	2.6	. . .
Durables	8.9	5.5	2.1	6.3	4.6	-11.8	1.4	9.5	11.6
Nondurables	3.9	3.0	3.3	3.2	1.5	-2.9	.6	2.5	3.1
Services	2.2	3.4	2.6	2.8	1.7	.3	.6	2.0	2.5
Residential investment	11.5	6.6	5.3	-15.7	-20.5	-21.0	-15.5	12.9	25.3
Previous Greenbook	11.5	6.6	5.3	-15.7	-20.5	-21.0	-22.4	9.3	. . .
Business fixed invest.	5.9	7.0	4.4	7.8	7.9	-6.0	-17.4	5.0	9.9
Previous Greenbook	5.9	7.0	4.4	7.8	7.9	-6.0	-19.5	3.5	. . .
Equipment & software	7.5	8.8	6.1	6.0	3.2	-10.7	-11.7	9.8	14.3
Previous Greenbook	7.5	8.8	6.1	6.0	3.2	-10.7	-14.8	8.2	. . .
Nonres. structures	1.3	1.7	-.1	13.0	18.9	3.2	-27.0	-4.7	-.2
Previous Greenbook	1.3	1.7	-.1	13.0	18.9	3.2	-27.6	-5.7	. . .
Net exports[1]	-604	-688	-723	-729	-648	-494	-350	-357	-381
Previous Greenbook[1]	-604	-688	-723	-729	-648	-494	-362	-360	. . .
Exports	6.2	7.1	6.7	10.2	10.2	-3.4	-3.3	8.2	8.6
Imports	5.1	10.9	5.2	4.1	.9	-6.8	-8.9	8.0	8.0
Gov't. cons. & invest.	1.6	.6	.7	1.5	2.5	3.0	2.5	1.6	1.0
Previous Greenbook	1.6	.6	.7	1.5	2.5	3.0	2.4	1.6	. . .
Federal	5.7	2.3	1.2	2.2	3.4	8.9	4.8	2.4	.8
Defense	8.4	2.4	.4	4.4	2.6	9.5	5.0	1.9	.0
Nondefense	.7	2.3	2.6	-2.3	5.2	7.5	4.2	3.3	2.5
State & local	-.5	-.4	.4	1.2	1.9	-.3	1.0	1.1	1.1
Change in bus. inventories[1]	17	66	50	59	19	-26	-114	-1	75
Previous Greenbook[1]	17	66	50	59	19	-26	-104	-10	. . .
Nonfarm[1]	17	58	50	63	20	-20	-117	-4	73
Farm[1]	0	8	0	-4	-1	-5	3	3	3

1. Billions of chained (2005) dollars.

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

Item	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2009[1]	2010[1]	2011[1]
Real GDP	-6.4	-1.0	2.5	3.2	2.8	3.2	3.8	4.2	4.4	4.5	4.6	4.6	-.5	3.5	4.5
Previous Greenbook	-6.4	-1.5	.8	1.7	2.5	3.0	3.4	3.6	. . .	. . .	. . .	. . .	-1.4	3.1	. . .
Final sales	-4.1	.5	1.5	.4	2.2	3.1	3.0	3.4	3.6	4.1	4.2	4.6	-.5	2.9	4.1
Previous Greenbook	-4.1	-.5	-.5	.2	1.8	2.6	2.9	3.3	. . .	. . .	. . .	. . .	-1.3	2.7	. . .
Priv. dom. final purch.	-6.1	-2.4	1.3	-.4	1.9	2.7	3.1	3.5	3.6	4.0	4.1	4.4	-1.9	2.8	4.1
Previous Greenbook	-6.1	-2.9	-.8	-.6	1.2	2.2	2.8	3.3	. . .	. . .	. . .	. . .	-2.6	2.4	. . .
Personal cons. expend.	.4	-.6	1.6	.6	1.8	2.0	2.1	2.3	2.3	2.5	2.6	2.7	.5	2.0	2.5
Previous Greenbook	.4	-.9	.6	.8	1.5	1.7	2.0	2.2	. . .	. . .	. . .	. . .	.2	1.9	. . .
Durables	.3	-.4	1.1	-.5	.7	.7	.5	.7	.7	.8	.8	.9	.1	.7	.8
Nondurables	.3	-.3	.1	.3	.3	.4	.4	.5	.5	.5	.5	.5	.1	.4	.5
Services	-.1	.1	.5	.8	.8	.9	1.1	1.1	1.2	1.2	1.3	1.3	.3	1.0	1.2
Residential investment	-1.3	-.7	.1	.1	.2	.3	.4	.4	.5	.6	.7	.8	-.5	.3	.7
Previous Greenbook	-1.3	-.9	-.2	-.2	-.1	.2	.3	.4	. . .	. . .	. . .	. . .	-.7	.2	. . .
Business fixed invest.	-5.3	-1.1	-.4	-1.1	.0	.4	.6	.8	.8	.9	.9	.9	-2.0	.5	.9
Previous Greenbook	-5.3	-1.1	-1.2	-1.2	-.2	.3	.5	.7	. . .	. . .	. . .	. . .	-2.2	.3	. . .
Equipment & software	-3.0	-.4	.3	-.2	.3	.6	.7	.8	.8	.9	.9	1.0	-.8	.6	.9
Previous Greenbook	-3.0	-.6	-.4	-.3	.2	.5	.6	.7	. . .	. . .	. . .	. . .	-1.0	.5	. . .
Nonres. structures	-2.3	-.7	-.7	-.9	-.3	-.2	-.1	.0	.0	.0	.0	.0	-1.1	-.1	.0
Previous Greenbook	-2.3	-.6	-.9	-1.0	-.4	-.2	-.1	.0	. . .	. . .	. . .	. . .	-1.2	-.2	. . .
Net exports	2.6	1.6	-.2	-.1	-.3	.0	-.3	-.2	-.2	-.2	-.2	-.1	1.0	-.2	-.2
Previous Greenbook	2.6	1.1	-.3	.1	-.1	.0	-.1	-.1	. . .	. . .	. . .	. . .	.9	-.1	. . .
Exports	-4.0	-.5	2.1	.9	.8	.9	1.0	1.0	1.0	1.0	1.0	1.1	-.4	.9	1.0
Imports	6.6	2.1	-2.3	-1.0	-1.1	-.9	-1.2	-1.3	-1.3	-1.1	-1.2	-1.1	1.4	-1.1	-1.2
Gov't. cons. & invest.	-.5	1.3	.4	.9	.6	.4	.2	.1	.2	.2	.2	.2	.5	.3	.2
Previous Greenbook	-.5	1.2	.6	.7	.7	.4	.2	.1	. . .	. . .	. . .	. . .	.5	.3	. . .
Federal	-.3	.8	.3	.8	.5	.3	.0	.0	.1	.1	.1	.1	.4	.2	.1
Defense	-.3	.7	.1	.5	.2	.1	.1	.0	.0	.0	.0	.0	.3	.1	.0
Nondefense	-.1	.2	.1	.2	.3	.2	-.1	-.1	.1	.1	.1	.1	.1	.1	.1
State & local	-.2	.5	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
Change in bus. inventories	-2.4	-1.5	1.0	2.8	.6	.1	.8	.8	.8	.4	.4	.1	.0	.6	.4
Previous Greenbook	-2.4	-.9	1.4	1.5	.7	.4	.6	.2	. . .	. . .	. . .	. . .	-.1	.5	. . .
Nonfarm	-2.4	-1.6	1.0	2.8	.6	.2	.8	.8	.8	.4	.4	.1	-.1	.6	.4
Farm	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0

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

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

Item	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2009[1]	2010[1]	2011[1]
GDP chain-wt. price index	1.9	.0	.7	1.0	1.4	1.2	1.1	1.1	1.2	1.1	1.0	1.0	.9	1.2	1.1
Previous Greenbook	1.9	.2	.8	1.2	1.1	1.2	1.1	1.0	...	...	...	...	1.0	1.1	...
PCE chain-wt. price index	-1.5	1.3	2.9	1.4	1.4	1.4	1.3	1.2	1.1	1.0	1.0	1.0	1.0	1.3	1.0
Previous Greenbook	-1.5	1.3	2.4	2.2	1.5	1.3	1.1	1.0	...	...	...	...	1.1	1.3	...
Energy	-36.7	-2.2	39.5	4.9	6.0	6.2	4.5	3.5	2.8	2.0	1.9	1.8	-2.4	5.0	2.1
Previous Greenbook	-36.7	-2.2	27.7	20.1	10.1	6.4	3.5	1.9	...	...	...	...	-1.3	5.4	...
Food	-1.1	-3.6	-1.5	1.8	1.7	1.6	1.5	1.0	.7	.7	.7	.7	-1.1	1.5	.7
Previous Greenbook	-1.1	-3.6	1.5	2.2	2.1	1.9	1.5	1.0	...	...	...	...	-.3	1.6	...
Ex. food & energy	1.1	2.0	1.5	1.2	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	1.4	1.1	1.0
Previous Greenbook	1.1	2.0	1.2	1.2	1.0	1.0	1.0	1.0	...	...	...	...	1.4	1.0	...
CPI	-2.4	1.3	3.6	1.8	1.6	1.7	1.5	1.3	1.2	1.1	1.1	1.1	1.1	1.5	1.1
Previous Greenbook	-2.4	1.3	3.6	2.7	1.9	1.6	1.3	1.1	...	...	...	...	1.3	1.5	...
Ex. food & energy	1.5	2.4	1.5	1.5	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.7	1.2	1.1
Previous Greenbook	1.5	2.4	1.5	1.3	1.1	1.0	1.0	1.0	...	...	...	...	1.7	1.1	...
ECI, hourly compensation[2]	.7	.7	1.7	1.6	1.7	1.7	1.8	1.9	2.0	2.0	2.1	2.1	1.2	1.8	2.0
Previous Greenbook[2]	.7	.7	1.3	1.3	1.3	1.2	1.1	1.1	...	...	...	...	1.0	1.2	...
Nonfarm business sector															
Output per hour	.3	6.6	5.2	2.9	1.4	1.4	1.1	1.3	1.1	1.6	1.6	1.5	3.7	1.3	1.4
Previous Greenbook	.3	5.3	2.2	1.3	1.8	1.4	1.9	1.9	...	...	...	...	2.3	1.7	...
Compensation per hour	-4.7	.4	1.8	1.6	1.6	1.7	1.8	1.9	2.0	2.0	2.1	2.1	-.3	1.8	2.1
Previous Greenbook	-2.6	-.8	.8	1.0	1.2	1.2	1.2	1.2	...	...	...	...	-.4	1.2	...
Unit labor costs	-5.0	-5.8	-3.2	-1.2	.3	.3	.7	.6	.9	.4	.5	.6	-3.8	.5	.6
Previous Greenbook	-2.8	-5.9	-1.3	-.3	-.6	-.2	-.7	-.7	...	...	...	...	-2.6	-.5	...
Core goods imports chain-wt. price index[3]	-9.4	-2.4	3.5	3.5	2.0	1.3	1.0	1.0	1.0	1.0	1.0	1.0	-1.4	1.3	1.0
Previous Greenbook[3]	-9.4	-2.3	3.1	2.7	1.6	1.1	1.0	.9	...	...	...	...	-1.6	1.2	...

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

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

Item	2003	2004	2005	2006	2007	2008	2009	2010	2011
GDP chain-wt. price index	2.1	3.2	3.5	2.9	2.7	1.9	.9	1.2	1.1
Previous Greenbook	2.1	3.2	3.5	2.9	2.7	1.9	1.0	1.1	. . .
PCE chain-wt. price index	1.9	3.0	3.3	1.9	3.6	1.7	1.0	1.3	1.0
Previous Greenbook	1.9	3.0	3.3	1.9	3.6	1.7	1.1	1.3	. . .
Energy	8.6	18.6	21.5	-3.7	19.7	-9.1	-2.4	5.0	2.1
Previous Greenbook	8.6	18.6	21.5	-3.7	19.7	-9.1	-1.3	5.4	. . .
Food	3.2	2.7	1.5	1.7	4.7	6.8	-1.1	1.5	.7
Previous Greenbook	3.2	2.7	1.5	1.7	4.7	6.8	-.3	1.6	. . .
Ex. food & energy	1.5	2.2	2.3	2.3	2.5	2.0	1.4	1.1	1.0
Previous Greenbook	1.5	2.2	2.3	2.3	2.5	2.0	1.4	1.0	. . .
CPI	2.0	3.4	3.8	1.9	4.0	1.5	1.1	1.5	1.1
Previous Greenbook	2.0	3.4	3.8	1.9	4.0	1.5	1.3	1.5	. . .
Ex. food & energy	1.2	2.2	2.1	2.7	2.3	2.0	1.7	1.2	1.1
Previous Greenbook	1.2	2.2	2.1	2.7	2.3	2.0	1.7	1.1	. . .
ECI, hourly compensation[1]	4.0	3.8	2.9	3.2	3.0	2.4	1.2	1.8	2.0
Previous Greenbook[1]	4.0	3.8	2.9	3.2	3.0	2.4	1.0	1.2	. . .
Nonfarm business sector									
Output per hour	5.0	1.5	1.4	.9	2.8	.9	3.7	1.3	1.4
Previous Greenbook	5.0	1.5	1.4	.9	2.8	1.0	2.3	1.7	. . .
Compensation per hour	5.7	3.4	3.5	4.5	3.6	2.6	-.3	1.8	2.1
Previous Greenbook	5.6	3.3	3.5	4.4	3.6	2.6	-.4	1.2	. . .
Unit labor costs	.6	1.9	2.0	3.5	.7	1.6	-3.8	.5	.6
Previous Greenbook	.6	1.8	2.0	3.5	.7	1.6	-2.6	-.5	. . .
Core goods imports chain-wt. price index[2]	1.6	3.6	2.2	2.5	3.5	3.8	-1.4	1.3	1.0
Previous Greenbook[2]	1.6	3.6	2.2	2.5	3.5	3.8	-1.6	1.2	. . .

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

Other Macroeconomic Indicators

Item	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2009[1]	2010[1]	2011[1]
Employment and production															
Nonfarm payroll employment[2]	-2.1	-1.5	-.9	-.2	.3	.7	.5	.7	1.0	.9	.9	1.0	-4.6	2.4	3.7
Unemployment rate[3]	8.1	9.2	9.6	9.9	9.8	9.6	9.4	9.2	8.8	8.5	8.2	7.9	9.9	9.2	7.9
Previous Greenbook[3]	8.1	9.2	9.8	10.0	10.0	9.9	9.8	9.6	...	...	...	...	10.0	9.6	...
GDP gap[4]	-6.6	-7.3	-7.2	-6.9	-6.8	-6.5	-6.1	-5.6	-5.2	-4.7	-4.2	-3.6	-6.9	-5.6	-3.6
Previous Greenbook[4]	-6.6	-7.4	-7.7	-7.8	-7.7	-7.4	-7.1	-6.8	...	...	...	...	-7.8	-6.8	...
Industrial production[5]	-19.0	-10.5	4.3	5.0	5.3	5.1	5.5	6.2	6.0	5.8	7.0	8.7	-5.6	5.5	6.9
Previous Greenbook[5]	-19.1	-11.6	3.0	3.4	3.9	4.7	5.2	5.5	...	...	...	...	-6.6	4.8	...
Manufacturing industr. prod.[5]	-22.0	-9.0	6.3	4.9	5.1	5.2	5.6	6.7	6.6	6.5	7.9	9.9	-5.7	5.6	7.7
Previous Greenbook[5]	-22.1	-10.5	4.4	3.5	3.8	4.8	5.1	6.0	...	...	...	...	-6.8	4.9	...
Capacity utilization rate - mfg.[3]	66.7	65.3	66.6	67.7	68.8	70.0	71.2	72.7	74.0	75.4	77.0	79.0	67.7	72.7	79.0
Previous Greenbook[3]	66.7	65.1	66.0	66.9	67.8	68.9	70.1	71.5	...	...	...	...	66.9	71.5	...
Housing starts[6]	.5	.5	.6	.7	.7	.8	.9	1.0	1.1	1.2	1.3	1.4	.6	.9	1.2
Light motor vehicle sales[6]	9.5	9.6	11.3	10.0	11.1	12.0	12.5	13.1	13.6	14.3	15.0	16.0	10.1	12.2	14.7
Income and saving															
Nominal GDP[5]	-4.6	-1.0	3.1	4.2	4.3	4.4	5.0	5.3	5.6	5.6	5.6	5.6	.4	4.7	5.6
Real disposable pers. income[5]	.2	3.9	-3.4	1.0	1.9	2.6	3.4	3.7	1.8	3.9	4.2	4.3	.4	2.9	3.6
Previous Greenbook[5]	1.1	3.2	-2.5	.5	1.6	1.4	2.7	2.3	...	...	...	...	.6	2.0	...
Personal saving rate[3]	3.7	5.0	3.8	3.9	3.8	3.8	4.0	4.1	3.8	3.9	4.0	4.1	3.9	4.1	4.1
Previous Greenbook[3]	4.0	5.2	4.5	4.4	4.3	4.1	4.0	3.9	...	...	...	...	4.4	3.9	...
Corporate profits[7]	22.8	19.2	25.2	16.8	6.9	6.7	14.5	9.5	8.1	8.5	11.2	6.9	21.0	9.4	8.7
Profit share of GNP[3]	8.3	8.7	9.1	9.4	9.4	9.5	9.7	9.8	9.8	9.9	10.0	10.1	9.4	9.8	10.1
Net federal saving[8]	-969	-1,307	-1,263	-1,286	-1,287	-1,277	-1,289	-1,285	-1,175	-1,140	-1,126	-1,106	-1,206	-1,285	-1,137
Net state & local saving[8]	-37	-11	-13	11	35	40	47	55	7	5	0	-1	-12	44	3
Gross national saving rate[3]	11.2	10.2	10.1	10.4	10.3	10.5	10.7	11.0	11.2	11.6	11.9	12.1	10.4	11.0	12.1
Net national saving rate[3]	-2.5	-3.1	-3.3	-2.8	-2.9	-2.6	-2.3	-1.9	-1.6	-1.1	-.7	-.4	-2.8	-1.9	-.4

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

Other Macroeconomic Indicators

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

Item	2003	2004	2005	2006	2007	2008	2009	2010	2011
Employment and production									
Nonfarm payroll employment[1]	-.1	2.0	2.4	2.1	1.2	-2.3	-4.6	2.4	3.7
Unemployment rate[2]	5.8	5.4	4.9	4.4	4.8	6.9	9.9	9.2	7.9
Previous Greenbook[2]	5.8	5.4	4.9	4.4	4.8	6.9	10.0	9.6	. . .
GDP gap[3]	-1.7	-.8	-.4	-.4	-.5	-4.6	-6.9	-5.6	-3.6
Previous Greenbook[3]	-1.7	-.8	-.4	-.4	-.5	-4.6	-7.8	-6.8	. . .
Industrial production[4]	1.6	3.0	2.6	1.8	1.8	-6.7	-5.6	5.5	6.9
Previous Greenbook[4]	1.6	3.0	2.6	1.8	1.8	-6.7	-6.6	4.8	. . .
Manufacturing industr. prod.[4]	1.8	3.6	3.8	1.2	1.9	-8.7	-5.7	5.6	7.7
Previous Greenbook[4]	1.8	3.6	3.8	1.2	1.9	-8.7	-6.8	4.9	. . .
Capacity utilization rate - mfg.[2]	74.6	77.3	79.2	79.0	78.7	70.9	67.7	72.7	79.0
Previous Greenbook[2]	74.6	77.3	79.2	79.0	78.7	70.9	66.9	71.5	. . .
Housing starts[5]	1.8	2.0	2.1	1.8	1.4	.9	.6	.9	1.2
Light motor vehicle sales[5]	16.6	16.8	16.9	16.5	16.1	13.1	10.1	12.2	14.7
Income and saving									
Nominal GDP[4]	6.0	6.4	6.3	5.4	5.3	.1	.4	4.7	5.6
Real disposable pers. income[4]	3.9	3.5	.6	4.6	1.0	.3	.4	2.9	3.6
Previous Greenbook[4]	3.9	3.5	.6	4.6	1.0	.3	.6	2.0	. . .
Personal saving rate[2]	3.6	3.6	1.5	2.5	1.5	3.8	3.9	4.1	4.1
Previous Greenbook[2]	3.6	3.6	1.5	2.5	1.5	3.8	4.4	3.9	. . .
Corporate profits[6]	12.2	21.9	19.6	3.7	-5.7	-25.1	21.0	9.4	8.7
Profit share of GNP[2]	9.1	10.5	11.8	11.6	10.3	7.8	9.4	9.8	10.1
Net federal saving[7]	-376	-379	-283	-204	-236	-643	-1206	-1285	-1137
Net state & local saving[7]	-39	-8	26	51	22	-40	-12	44	3
Gross national saving rate[2]	14.3	14.3	15.5	16.3	13.8	12.2	10.4	11.0	12.1
Net national saving rate[2]	2.5	2.7	3.5	4.2	1.6	-.7	-2.8	-1.9	-.4

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

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

Item	Fiscal year				2009				2010				2011			
	2008[a]	2009	2010	2011	Q1[a]	Q2[a]	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts[1]	2524	2109	2202	2470	442	599	520	502	475	665	561	557	527	757	628	597
Outlays[1]	2983	3540	3621	3619	891	904	865	925	931	893	873	910	922	893	894	914
Surplus/deficit[1]	-459	-1431	-1419	-1149	-449	-305	-345	-423	-455	-228	-313	-352	-395	-136	-266	-317
Previous Greenbook	*-459*	*-1437*	*-1467*	*-1268*	*-449*	*-305*	*-351*	*-405*	*-485*	*-247*	*-329*	*-388*	*-422*	*-170*	*-287*	*-334*
On-budget	-642	-1572	-1532	-1280	-468	-382	-337	-468	-459	-300	-305	-402	-401	-213	-263	-366
Off-budget	183	141	113	131	19	77	-8	45	4	72	-7	50	6	77	-2	48
Means of financing																
Borrowing	768	1727	1469	1169	465	338	363	276	648	218	328	342	385	161	281	307
Cash decrease	-296	89	33	0	98	-49	35	198	-170	15	-10	15	15	-20	-10	15
Other[2]	-13	-385	-83	-20	-114	16	-52	-50	-23	-5	-5	-5	-5	-5	-5	-5
Cash operating balance, end of period	372	283	250	250	269	318	283	85	255	240	250	235	220	240	250	235
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2534	2285	2355	2580	2251	2203	2238	2261	2355	2385	2419	2457	2578	2619	2666	2710
Expenditures	3074	3338	3640	3762	3220	3510	3501	3547	3643	3662	3708	3742	3753	3759	3793	3816
Consumption expenditures	914	970	1047	1083	954	980	991	1016	1048	1061	1064	1067	1082	1088	1094	1100
Defense	620	655	699	719	643	662	668	684	699	705	709	712	719	721	723	725
Nondefense	294	315	348	364	311	318	323	332	349	356	356	355	363	367	371	375
Other spending	2160	2368	2593	2679	2266	2530	2510	2531	2595	2601	2644	2676	2672	2671	2698	2715
Current account surplus	-540	-1053	-1285	-1182	-969	-1307	-1263	-1286	-1287	-1277	-1289	-1285	-1175	-1140	-1126	-1106
Gross investment	141	157	166	168	152	157	159	164	166	167	168	168	168	168	168	168
Gross saving less gross investment[3]	-563	-1087	-1324	-1219	-999	-1340	-1297	-1324	-1326	-1316	-1328	-1324	-1212	-1177	-1162	-1140
Fiscal indicators[4]																
High-employment (HEB) surplus/deficit	-495	-659	-751	-762	-611	-845	-736	-740	-744	-745	-774	-793	-732	-742	-781	-823
Change in HEB, percent of potential GDP	1.7	1.0	0.5	-0.1	1.1	1.5	-0.7	-0.0	-0.0	-0.0	0.1	0.1	-0.4	0.0	0.2	0.2
Fiscal impetus (FI), percent of GDP	0.8	1.0	0.9	-0.0	0.0	0.7	0.2	0.3	0.2	0.2	0.1	0.1	-0.1	-0.0	-0.1	-0.2
Previous Greenbook	*0.9*	*1.0*	*0.9*	*-0.2*	*0.0*	*0.7*	*0.2*	*0.3*	*0.4*	*0.1*	*0.1*	*-0.0*	*-0.1*	*-0.1*	*-0.1*	*-0.1*

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

Class II FOMC
Restricted (FR)

Change in Debt of the Domestic Nonfinancial Sectors
(Percent)

September 16, 2009

Period [1]	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
Year								
2004	8.9	11.1	13.6	5.6	6.3	7.4	9.0	6.4
2005	9.5	11.1	13.2	4.5	8.7	10.2	7.0	6.3
2006	9.0	10.0	11.0	4.1	10.5	8.2	3.9	5.4
2007	8.7	6.6	6.6	5.7	13.5	9.3	4.9	5.3
2008	6.0	.3	-.6	1.6	5.4	1.9	24.2	.1
2009	4.2	-.9	-.2	-4.8	-.6	7.6	22.7	.4
2010	5.7	.9	.5	.8	2.2	4.1	19.7	4.7
2011	5.0	2.3	.8	7.2	2.9	3.9	12.1	5.6
Quarter								
2008:1	5.4	3.0	2.4	4.5	7.8	3.6	8.1	1.0
2	3.3	.3	-.5	4.1	6.4	.9	5.9	3.5
3	8.2	-.5	-2.5	.6	5.1	3.3	39.2	1.4
4	6.4	-1.7	-1.7	-2.9	1.8	-.2	37.0	-5.4
2009:1	4.1	-1.1	-.1	-3.7	-.2	4.9	22.6	-4.6
2	4.8	-1.7	-1.4	-6.5	-1.8	8.3	28.2	-1.0
3	4.1	-.3	.4	-4.9	-1.5	8.4	19.8	3.1
4	3.6	-.4	.2	-4.7	1.1	7.9	13.4	4.2
2010:1	7.1	.3	.4	-1.9	1.7	4.1	27.8	4.3
2	5.1	.8	.5	.0	2.0	4.0	16.9	4.4
3	5.0	1.1	.5	1.7	2.6	4.0	14.7	5.0
4	5.1	1.4	.5	3.6	2.4	3.9	14.2	5.3
2011:1	4.7	1.8	.6	5.1	2.6	3.9	11.9	5.6
2	5.2	2.1	.7	6.5	3.2	3.9	12.3	5.6
3	4.8	2.4	.8	7.7	2.7	3.8	11.0	5.6
4	5.0	2.7	.9	8.8	2.8	3.8	11.2	5.6

Note. Quarterly data are at seasonally adjusted annual rates.
1. Data after 2009:Q2 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.

2.6.3 FOF

Flow of Funds Projections: Highlights

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

					2009		2010				2011			
Category	2008	2009	2010	2011	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Domestic nonfinancial sectors														
Net funds raised														
Total	1553.3	1429.0	1913.6	1768.3	1470.4	1264.3	2456.6	1733.8	1715.2	1748.7	1653.1	1842.6	1740.1	1837.7
Net equity issuance	-334.9	8.7	-85.0	-100.0	69.6	0.0	-40.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
Net debt issuance	1888.2	1420.3	1998.6	1868.3	1400.8	1264.3	2496.6	1833.8	1815.2	1848.7	1753.1	1942.6	1840.1	1937.7
Borrowing indicators														
Debt (percent of GDP) [1]	226.1	240.9	243.3	243.2	242.3	242.1	242.8	243.9	244.0	243.9	243.6	243.2	242.9	242.6
Borrowing (percent of GDP)	13.1	10.0	13.5	12.0	9.8	8.8	17.2	12.5	12.2	12.3	11.5	12.5	11.7	12.2
Households														
Net borrowing [2]	35.6	-123.7	121.9	310.9	-47.4	-58.3	39.3	105.4	147.7	195.3	243.3	289.8	334.6	376.0
Home mortgages	-59.5	-24.1	52.2	80.7	38.0	19.0	38.0	57.0	57.0	57.0	66.5	76.0	85.5	95.0
Consumer credit	40.2	-125.6	20.8	178.9	-123.9	-116.3	-46.1	0.0	41.3	88.0	126.0	162.9	197.7	229.2
Debt/DPI (percent) [3]	127.5	126.2	122.3	119.0	125.8	124.9	123.8	122.8	121.7	120.6	120.2	119.3	118.4	117.7
Business														
Financing gap [4]	228.9	-176.0	-151.2	-50.2	-233.9	-219.1	-176.6	-165.6	-146.5	-116.1	-80.7	-57.2	-39.8	-23.2
Net equity issuance	-334.9	8.7	-85.0	-100.0	69.6	0.0	-40.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0	-100.0
Credit market borrowing	571.8	-68.2	243.8	326.0	-168.1	121.4	192.7	220.0	287.7	275.0	296.1	371.0	313.3	323.6
State and local governments														
Net borrowing	41.7	169.0	97.8	97.8	193.8	185.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8
Current surplus [5]	212.7	212.7	262.3	225.9	201.2	226.5	251.5	257.5	265.5	274.6	228.1	227.7	223.7	223.9
Federal government														
Net borrowing	1239.2	1442.3	1535.0	1133.7	1422.5	1015.5	2166.9	1410.6	1282.0	1280.6	1115.9	1184.1	1094.5	1140.3
Net borrowing (n.s.a.)	1239.2	1442.3	1535.0	1133.7	362.6	275.9	647.7	217.7	327.5	342.2	385.0	161.0	280.6	307.1
Unified deficit (n.s.a.)	680.5	1521.9	1347.9	1113.7	345.0	423.0	455.2	228.0	312.5	352.2	395.0	136.0	265.6	317.1
Depository institutions														
Funds supplied	415.1	-444.0	-351.1	1133.3	-794.8	36.1	160.0	11.3	88.4	-1664.0	-1805.7	1974.6	1993.3	2371.1

Note. Data after 2009:Q2 are staff projections.
1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.
2. Includes change in liabilities not shown in home mortgages and consumer credit.
3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.
4. For corporations, excess of capital expenditures over U.S. internal funds.
5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.
n.s.a. Not seasonally adjusted.

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International Developments

The foreign economies appear to have gained a firmer footing on the path to recovery. Economic growth turned positive in the second quarter in some key advanced foreign economies—including Japan, Germany, and France—as well as in emerging Asia and parts of Latin America, most notably Brazil. However, real GDP continued to contract in Canada, the United Kingdom, and Mexico. Indicators from the current quarter reaffirm the robustness of activity in emerging Asia and suggest the recovery has become more widespread in other regions of the global economy. There is further evidence that global trade is picking up, although it remains at levels well below pre-crisis peaks.

Financial markets have continued to improve since the time of the August Greenbook, with foreign equity markets generally remaining on an upward trend and financing conditions easing further. The broad nominal dollar index is little changed.

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

Indicator	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
Foreign output	-8.6	1.7	3.8	3.2	3.5	4.1
Previous Greenbook	-8.7	.6	2.8	2.6	3.3	…
Foreign CPI	-1.0	1.0	1.7	1.7	1.6	1.8
Previous Greenbook	-1.0	1.0	1.7	1.7	1.7	…
	Contribution to growth (percentage points)					
U.S. net exports	2.6	1.6	-.2	-.1	-.2	-.2
Previous Greenbook	2.6	1.1	-.3	.1	-.1	…

Note: Changes for years measured as Q4/Q4.
… Not applicable.

Based on the improvement in financial markets and on recent indicators of activity, we estimate that growth abroad will register nearly 4 percent in the third quarter, more than double the rate observed in the previous quarter. Although activity in emerging Asia likely decelerated, this is expected to be more than offset by the strength of output in the advanced foreign economies and in Latin America. Looking ahead, we expect foreign growth to slow a bit in the next two quarters as the pace of expansion in the developing world moderates. Thereafter, with the recovery in the advanced foreign economies gaining traction, total foreign growth should pick up again, rising to more than 4 percent by 2011. The projections through the end of next year are somewhat higher than those in the August Greenbook, particularly in the near term, reflecting upside surprises from the incoming data, further improvement in consumer and business sentiment, and a stronger recovery in the United States.

The spot price of West Texas Intermediate (WTI) crude oil is down a bit since the time of the August Greenbook, and the prices of futures contracts have eased by somewhat more, amid some favorable supply developments. Prices of nonfuel commodities have firmed, and futures markets suggest small further increases over the forecast period. Based on the futures path of commodity prices and continued recovery abroad, we expect foreign inflation to pick up a bit, to 1¾ percent by the end of the forecast period.

The pace of decline for U.S. real exports and imports moderated significantly in the second quarter, but imports continued to fall faster than exports. Accordingly, real net exports added 1½ percentage points to the change in U.S. GDP, ½ percentage point more than in the August Greenbook. Trade data for July point to a strong rebound in both exports and imports in the current quarter, and we expect the contribution of net exports to swing to negative ¼ percentage point, about unchanged from the August Greenbook. Over the next two years, we forecast net exports to continue to make small negative contributions to GDP growth, as imports and exports both recover with the global economy.

International Financial Markets

Since the August Greenbook, the dollar's moves against foreign currencies have been largely offsetting on a trade-weighted basis. Most notably, the dollar has firmed against the U.K. pound and the Mexican peso but has declined against the euro and the yen. Accordingly, the starting point for the projected path of the staff's broad real index of the dollar is about that envisaged in the August Greenbook. We project that the broad real value of the dollar will depreciate 2 percent next year, as forecast in the previous Greenbook, and then about 3 percent in 2011. The faster decline in the dollar in 2011 partly reflects a step-up in the rate of appreciation of the renminbi, as China allows upward movements in its currency to resume after the global recovery becomes entrenched.

Equity markets have generally moved up in both the advanced economies and the developing world, although Japan and China are two exceptions. Share prices in the euro area and the United Kingdom increased 7-to-8 percent over the period, partly reflecting the improved economic outlook. China's A-shares declined 13 percent, amid concerns that authorities will continue to take actions to moderate the pace of loan growth in China. However, China's A-shares have not historically had a strong link with the real economy and are more susceptible to speculative activity than many equity markets elsewhere in the world, as linkages to outside markets are limited due to restrictions on foreign ownership and trading. H-shares, which are shares of some Chinese enterprises that are traded in Hong Kong and open to global investors, declined only about 2 percent.

Despite the more positive tone of recent economic indicators, sovereign yields in the major foreign economies declined over the period, as central banks reinforced their intentions to maintain accommodative policies. The Bank of England (BOE) surprised markets by expanding its asset purchase program £50 billion at its August meeting, and the minutes showed some support for further expansion. In mid-August, the BOE released its quarterly inflation report, which market participants interpreted as relatively pessimistic on the outlook for recovery. The European Central Bank (ECB) left its main policy rate unchanged at 1 percent, as expected, but surprised markets by announcing that it will again offer banks 12-month funds at only 1 percent at its upcoming long-term refinancing operation.

Advanced Foreign Economies

Economic performance in the advanced foreign economies (AFEs) improved notably in the second quarter, with positive growth recorded in a number of countries. Japanese GDP grew 2¼ percent at an annual rate, boosted by a sharp rebound in exports to emerging Asia and solid growth in private consumption. The German and French economies also expanded, supported by some improvement in export performance and a strong but short-term boost to consumption from government incentives for automobile purchases. In contrast, real GDP in the United Kingdom and Canada continued to contract. In Canada, a sizable drawdown in inventories and a continued sharp decline in exports masked a recovery in consumption, while in the United Kingdom, weakness in consumption and investment overwhelmed positive contributions from trade and inventories.

We project aggregate AFE growth to come in at just over 2 percent in the second half of this year, as the recovery becomes more broad-based. Supporting this return to positive growth are pickups in the U.K. housing market, North American auto production, and the contributions of exports and inventories across the AFEs. Further out, we expect AFE growth to rise to 2½ percent next year and then to 3¼ percent in 2011. Relative to the previous Greenbook, our forecast is up 1 percentage point in the second half and about ¼ percentage point next year. The upward revisions reflect extrapolation of incoming data, greater than previously anticipated strengthening of demand from the emerging market economies and the United States, and rebounding business and consumer sentiment.

After having dropped at an annual rate of ¾ percent in the first half of this year, consumer prices in the AFEs are expected to rise around 1 percent in the second half, following a contour shaped by the path of commodity prices. Thereafter, we project AFE inflation to hover around 1 percent for the remainder of the forecast period. Despite significant slack, we have not put in a substantial deceleration in prices as core inflation has so far been relatively stable outside of Japan and inflation expectations have remained well-anchored.

We assume that major central banks hold their policy rates unchanged at very low levels through the remainder of this year and most of next year. The Bank of Canada reiterated its conditional commitment to keep its policy rate at 25 basis points through 2010:Q2, and we expect it to begin raising its policy rate late next year. The BOE begins tightening soon thereafter, in early 2011. The ECB is expected to guide overnight rates, currently at around 35 basis points, back up toward its 1 percent policy rate during the next year and to begin raising the policy rate in 2011.

Fiscal stimulus programs across the AFEs appear to have boosted growth in the second quarter, as suggested by improved final sales, particularly for automobiles. We expect these programs to remain sizable in the second half of this year. For the year as a whole, fiscal stimulus should add roughly 1 percentage point to AFE growth. We expect the fiscal impact next year to be minimal in most countries. We forecast a withdrawal of the stimulus in 2011, which is likely to subtract about ½ percentage point from AFE growth. In the United Kingdom, the reversal of the value-added tax cut and other temporary measures should reduce growth in 2010 by about 1 percentage point.

Staff Projections for Foreign GDP Growth by Region
(Percent change from end of previous period, annual rate)

Indicator	2009		Projection			
	2009		2009		2010	2011
	Q1	Q2	Q3	Q4		
Advanced Foreign Economies	-7.8	-1.5	2.1	2.1	2.5	3.2
Previous Greenbook	-7.8	-2.2	.7	1.4	2.2	…
Emerging Market Economies	-9.6	6.0	6.2	4.5	4.7	5.2
Previous Greenbook	-9.8	4.4	5.5	4.2	4.6	…

Note: Changes for years measured as Q4/Q4.
… Not applicable.

Emerging Market Economies

Incoming data from the emerging market economies (EMEs) reaffirm the robustness of growth in emerging Asia, although growth has stepped down from the red-hot pace of the second quarter. Activity in Asia has been supported by a resurgence in manufacturing activity. At the same time, the recovery of exports—particularly to the advanced economies—has been comparatively weak, which we interpret as indicating that domestic demand has so far been the main force behind the rebound in output. Although credit growth in China moderated in July and August, financial conditions remain accommodative. Chinese monthly indicators point to robust growth; industrial production in July and August was 4½ percent higher than the second-quarter average, and real retail sales were 18 percent higher than their year-earlier level. Given the positive momentum and improved outlook for the advanced economies, we raised our forecast for real GDP growth in emerging Asia in the current quarter by about ½ percentage point to an annual rate of 7½ percent.

The outlook for Latin America has also improved. Brazil came out of recession in the second quarter, growing at an 8 percent rate. In contrast, Mexico's GDP contracted 4½ percent in the second quarter, pulled down by the economic drag associated with the H1N1 influenza virus and the slump in the U.S. auto sector. In the third quarter, as these factors reverse, we expect Mexican GDP to rebound, increasing 6½ percent. This boosts overall growth in Latin America to 5¼ percent, a bit higher than in the August Greenbook.

For the EMEs as a whole, we now project real GDP growth of 6¼ percent in the third quarter. This pace is slightly higher than that observed in the second quarter, with the step-down in Asian growth offset by the return to growth in Latin America. We project that the pace of activity in the EMEs will ease to 5 percent over the forecast period as policy stimulus wanes and growth settles at more sustainable rates. The projection through next year is slightly higher than in the August Greenbook.

In recent months, consumer price inflation has been increasing in many emerging Asian economies, generally from very low or negative rates, and receding in Latin America from relatively high rates. We expect these trends to continue and project that aggregate quarterly inflation in the EMEs will hover at an annual rate of about 2¼ percent over the forecast period. This projection is little changed from the August Greenbook.

Commodity Prices

The spot price of West Texas Intermediate (WTI) crude oil has traded in a fairly narrow range around $70 per barrel in recent weeks, closing most recently on September 15 at $70.93 per barrel, a bit lower than at the time of the August Greenbook. The futures curve has declined more. While the reasons behind the decline in futures prices are not entirely clear, some market commentators have pointed to favorable supply-side developments. Russian production has exceeded expectations by climbing back over 10 million barrels per day in recent months. In addition, BP announced a major oil discovery in the U.S. Gulf of Mexico; although production from the field is many years away, the news may have assuaged pessimism regarding future oil supply prospects. Consistent with the futures path, we project that the spot price of WTI will rise to about $77 per barrel by the end of 2011. Relative to the August Greenbook, this projection is about $5 lower, on average, over the forecast period.

Since the previous Greenbook, prices for nonfuel commodities generally have increased. Metals prices rose briskly in the weeks following the close of the August Greenbook but have stabilized more recently amid elevated inventory levels. Food prices are also up, on balance; sugar and soybean prices increased, whereas prices for wheat and corn declined. We expect further small increases in our index of nonfuel commodity prices over the forecast period, consistent with readings from futures markets. On net, the current projection is somewhat higher than in the August Greenbook.

Prices of Internationally Traded Goods

Having declined for the past several quarters, core import prices are projected to increase 3½ percent at an annual rate in the current quarter, reflecting the effects of recent dollar depreciation and upward movements in nonfuel commodity prices. As commodity prices flatten out and the dollar depreciates at a more modest pace, core import price inflation is projected to decline to about 1 percent by 2011. Compared with the August Greenbook, this forecast has been revised up ½ percentage point in the second half of this year, reflecting the recent strength in commodity prices, but is little changed for next year.

Staff Projections of Selected Trade Prices
(Percent change from end of previous period, annual rate, except as noted)

Trade category	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
Imports						
Core goods	-9.4	-2.4	3.5	3.5	1.3	1.0
Previous Greenbook	-9.4	-2.3	3.1	2.7	1.2	…
Oil (dollars per barrel)	41.58	53.71	64.56	64.68	70.58	72.72
Previous Greenbook	41.58	53.52	64.21	69.48	75.17	…
Exports						
Core goods	-12.5	2.6	4.0	3.2	1.9	1.2
Previous Greenbook	-15.3	3.0	4.0	2.2	1.4	…

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 multiquarter periods is the price for the final quarter of the period. Imported oil includes both crude oil and refined products.

. . . Not applicable.

Core export prices are also estimated to increase in the third quarter, by 4 percent, driven by recent upward movements of prices for metals and petroleum products. In the following two quarters, core export price inflation should ease only gradually, supported by firming prices for metals and intermediate goods. Thereafter, we project further deceleration in core export prices to a rate of 1 percent by the end of 2011, as commodity prices level out. Relative to the August Greenbook, the projection for next year is up about ½ percentage point.

Trade in Goods and Services

Real exports of goods and services contracted in the second quarter, although the pace of decline slowed significantly as nominal exports rose in both May and June. In July, exports again rose sharply, reflecting in part a bounceback in exports of automotive products. For the current quarter, we now estimate that real export growth will surge to an annual rate of 21 percent, a significantly faster rebound than we wrote down in August. The upward revision is mainly driven by the trajectory of incoming data and stronger estimates of foreign growth.

Thereafter, we expect export growth to average a little above 8 percent, driven by the recovery in foreign growth and the recent and prospective depreciation of the dollar. Relative to the August Greenbook, this forecast has been revised up nearly 3 percentage points in 2010. Part of this upward revision reflects the improved outlook for the foreign economies, but, with the path of the dollar little changed, the bulk of it reflects our judgment that trade will recover somewhat more quickly from its precipitous decline than we had projected earlier.

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

Measure	2009		Projection			
			2009		2010	2011
	Q1	Q2	Q3	Q4		
Real imports	-36.4	-14.8	18.4	7.2	8.0	8.0
Previous Greenbook	-36.4	-12.5	10.5	3.2	4.8	…
Real exports	-29.9	-4.6	20.9	8.1	8.2	8.6
Previous Greenbook	-29.9	-5.6	10.1	4.6	5.3	…

Note: Changes for years are measured as Q4/Q4.

Real imports continued to contract in the second quarter at a double-digit pace, but recent data point to a rebound in the third quarter. Nominal imports rose sharply in July; as with exports, a good part of the rise resulted from a recovery in automotive trade, although increases in imports of capital and consumer goods were also noteworthy. Based on the strength of incoming data, as well as the more favorable outlook for U.S. activity, we have marked up our estimate of import growth about 8 percentage points in the current quarter to an annual rate of 18 percent.

For the remainder of the forecast period, we estimate that real imports will grow at an average pace of about 8 percent. For 2010, this growth rate is about 3 percentage points higher than in the previous Greenbook. Part of this upward revision reflects the stronger path for U.S. GDP growth. The remainder can be attributed to our judgment, as noted above, that trade will recover from its downturn more quickly than previously projected.

Alternative Simulation

Although our baseline forecast assumes a modest depreciation of the dollar, any number of factors could precipitate more rapid declines: a sharper revival in risk appetite, concerns about the sustainability of the U.S. fiscal or external balance positions, or a faster-than-expected recovery abroad. To investigate this possibility, we use the SIGMA model to examine the effects of a dollar risk-premium shock that causes a 10 percent depreciation of the broad real dollar. In the simulation, we assume that U.S. monetary policy follows a Taylor rule subject to the zero lower bound constraint on nominal interest rates.[1]

The dollar risk-premium shock occurs in 2009:Q4 and causes the dollar to depreciate 10 percent below baseline after a year, before the shock recedes. The decline in the dollar boosts the growth of U.S. real GDP 0.3 percentage point above baseline in the second half of 2009 and about 1¼ percentage points 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

[1]We use a two-country variant of SIGMA consisting of the United States and an aggregate foreign sector. In the simulation, we assume that the foreign sector has the latitude to reduce policy rates in response to the shock. However, even if the entire foreign sector were constrained from reducing policy rates because of the zero bound, the effects on the United States would not differ appreciably from those reported in the table: Although foreign output would decline more in this case, the higher foreign interest rate path would induce a somewhat weaker dollar, with offsetting effects on U.S. exports.

gradually in response to higher import prices and greater resource utilization and peaks at 0.6 percentage point above baseline in 2010:H1. Because the federal funds rate remains near zero through 2010, higher expected inflation causes short-term real interest rates to decline, which boosts domestic demand and hence amplifies the rise in output. Policy rates begin rising in 2011:Q2, well before the 2012 liftoff embedded in our baseline. With higher policy rates and some waning of the shock, the level of output gradually reverts toward baseline beginning in mid-2011.

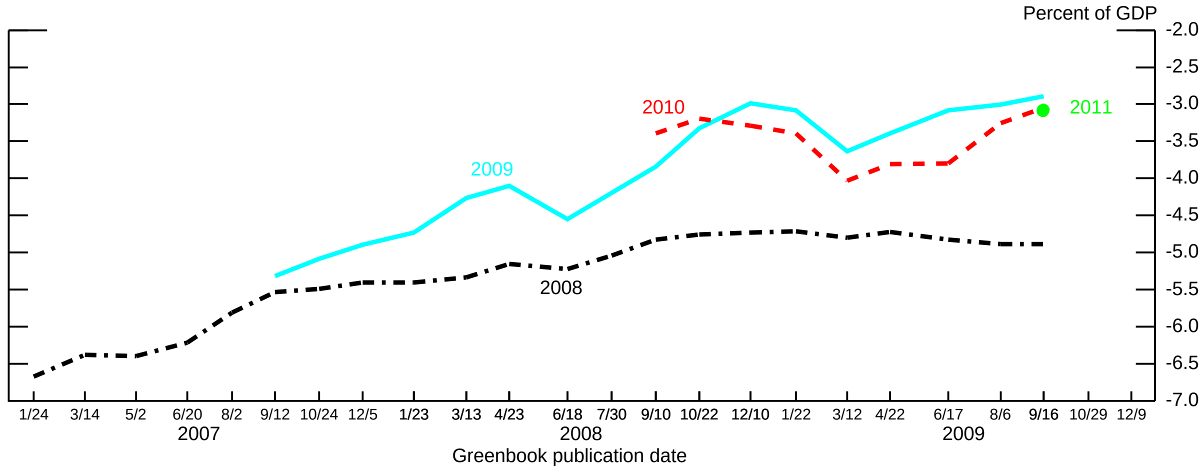
Alternative Scenario:
Dollar Depreciation
(Percent change from previous period, annual rate, except as noted)

Indicator and simulation	2009	2010		2011	2012-13
	H2	H1	H2		
U.S. real GDP					
Baseline	2.8	3.0	4.0	4.5	4.6
Dollar Depreciation	3.1	4.1	5.2	4.1	4.4
U.S. PCE prices excluding food and energy					
Baseline	1.3	1.1	1.1	1.0	1.3
Dollar Depreciation	1.6	1.7	1.4	.9	1.3
U.S. federal funds rate (percent)					
Baseline	.1	.1	.1	.1	3.8
Dollar Depreciation	.1	.1	.1	.5	3.9
U.S. trade balance (percent share of GDP)					
Baseline	-2.8	-2.9	-3.0	-3.0	-2.8
Dollar Depreciation	-2.4	-1.8	-1.8	-2.4	-2.8

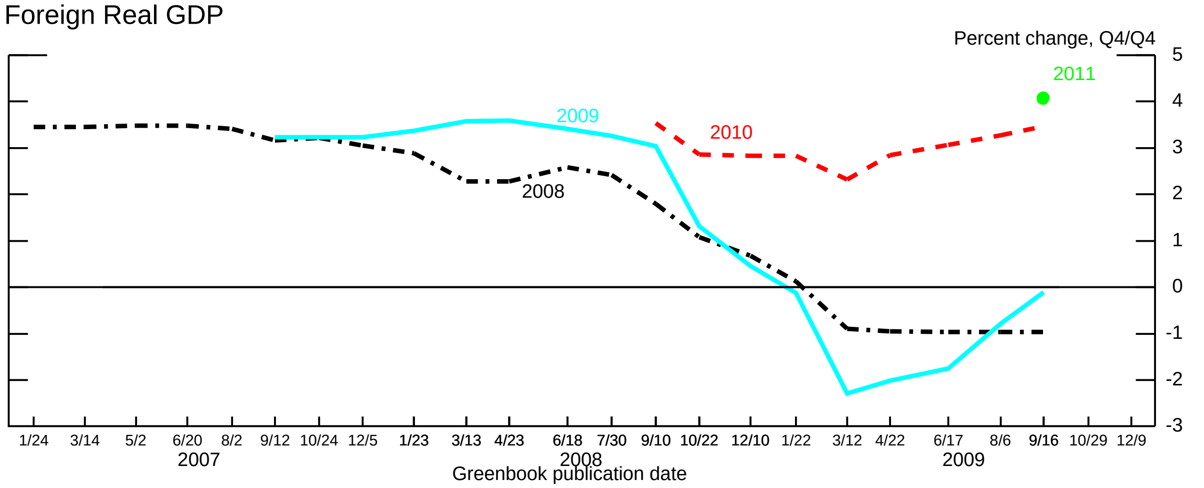
Note: H1 is Q2/Q4; H2 is Q4/Q2. U.S. real GDP and U.S. PCE prices are the average rates over the period. The federal funds rate and the trade balance are the values for the final quarter of the period.

Evolution of the Staff Forecast

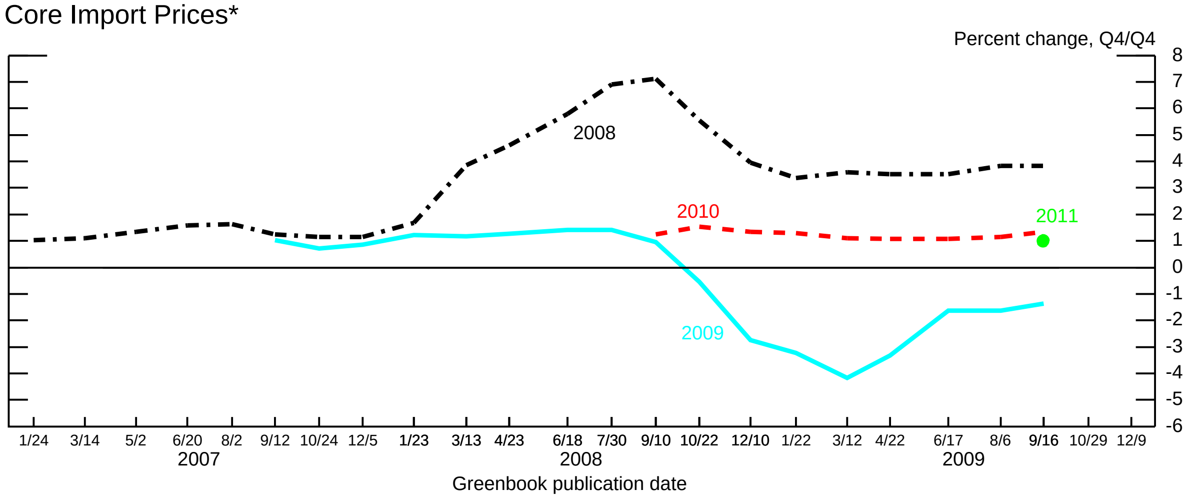
Current Account Balance



Foreign Real GDP



Core Import Prices*



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

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September 16, 2009

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

	---- Projected ----											
	2009				2010				2011			
Measure and country	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
REAL GDP (1)	Quarterly changes at an annual rate											
Total Foreign	-8.6	1.7	3.8	3.2	3.1	3.4	3.6	3.8	4.0	4.1	4.1	4.1
Advanced Foreign Economies	-7.8	-1.5	2.1	2.1	2.0	2.4	2.7	2.9	3.1	3.2	3.3	3.3
of which:												
Canada	-6.1	-3.4	2.3	2.7	2.5	2.7	3.2	3.3	3.8	3.8	3.9	3.9
Japan	-12.4	2.3	3.9	2.4	1.9	1.9	2.0	2.0	2.1	2.1	2.1	2.1
United Kingdom	-9.3	-2.6	1.4	2.0	1.8	2.4	2.7	3.0	3.0	3.1	3.2	3.2
Euro Area (2)	-9.5	-0.5	1.6	1.4	1.6	2.0	2.3	2.6	2.7	2.9	3.0	3.1
Germany	-13.4	1.3	2.7	2.2	2.1	2.2	2.4	2.7	2.8	3.0	3.5	3.6
Emerging Market Economies	-9.6	6.0	6.2	4.5	4.4	4.7	4.9	5.0	5.1	5.2	5.2	5.2
Asia	-2.7	14.3	7.4	6.1	5.7	5.7	5.9	6.0	5.9	6.0	6.0	6.0
Korea	0.5	11.0	4.0	3.8	3.8	4.4	4.5	4.5	4.4	4.4	4.4	4.4
China	6.5	18.5	12.1	10.2	8.8	8.0	8.2	8.4	8.5	8.6	8.7	8.8
Latin America	-16.7	-1.9	5.3	3.1	3.3	3.8	4.0	4.1	4.4	4.4	4.4	4.4
Mexico	-21.2	-4.4	6.5	3.2	3.3	4.0	4.2	4.4	4.5	4.5	4.5	4.5
Brazil	-3.8	7.8	4.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
CONSUMER PRICES (3)	Four-quarter changes											
Total Foreign	1.8	0.9	0.3	0.8	1.5	1.7	1.6	1.6	1.7	1.7	1.7	1.8
Advanced Foreign Economies	1.0	0.0	-0.6	0.2	0.8	1.1	1.1	1.0	1.0	1.1	1.1	1.1
of which:												
Canada	1.2	0.1	-0.6	0.5	1.1	1.4	1.4	1.5	1.6	1.7	1.7	1.8
Japan	-0.1	-1.0	-1.8	-1.2	-0.5	-0.2	-0.4	-0.5	-0.5	-0.6	-0.6	-0.6
United Kingdom (4)	3.0	2.1	1.5	1.9	2.5	2.3	1.7	1.5	1.1	1.3	1.6	1.8
Euro Area (2)	1.0	0.2	-0.3	0.3	1.0	1.3	1.3	1.2	1.2	1.2	1.3	1.3
Germany	0.8	0.2	-0.2	0.5	0.9	1.2	1.1	1.1	1.1	1.1	1.1	1.1
Emerging Market Economies	2.7	1.6	1.1	1.5	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.4
Asia	1.0	-0.3	-0.6	0.3	1.4	1.8	1.8	1.8	1.9	2.0	2.0	2.1
Korea	3.9	2.8	2.0	2.3	2.4	2.2	2.2	2.2	2.2	2.3	2.3	2.3
China	-0.6	-1.5	-1.4	-0.5	0.8	1.1	1.3	1.3	1.4	1.5	1.6	1.6
Latin America	6.3	5.9	5.0	4.0	3.6	3.0	2.9	2.9	3.0	3.0	3.0	3.0
Mexico	6.2	6.0	5.2	4.1	3.6	2.7	2.5	2.5	2.5	2.5	2.5	2.5
Brazil	5.9	5.3	4.4	4.2	3.9	3.5	3.6	3.7	3.7	3.7	3.7	3.7

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 FOREIGN REAL GDP AND CONSUMER PRICES: SELECTED COUNTRIES
(Percent, Q4 to Q4)

Measure and country	2003	2004	2005	2006	2007	2008	2009 (Projected)	2010 (Projected)	2011 (Projected)
REAL GDP (1)									
Total Foreign	2.9	3.8	4.1	4.0	4.2	-1.0	-0.1	3.5	4.1
Advanced Foreign Economies	1.8	2.6	2.8	2.5	2.5	-1.6	-1.4	2.5	3.2
of which:									
Canada	1.5	3.7	3.1	1.9	2.8	-1.0	-1.2	2.9	3.8
Japan	2.4	1.1	2.9	2.1	1.9	-4.5	-1.2	1.9	2.1
United Kingdom	3.2	2.4	2.4	2.8	2.4	-1.8	-2.2	2.5	3.1
Euro Area (2)	1.2	1.8	2.2	3.5	2.2	-1.7	-1.8	2.1	2.9
Germany	0.1	0.2	1.6	4.3	1.6	-1.8	-2.1	2.3	3.2
Emerging Market Economies	4.5	5.5	5.9	5.9	6.4	-0.1	1.5	4.7	5.2
Asia	6.9	6.0	7.7	7.2	8.2	0.2	6.1	5.8	6.0
Korea	3.7	2.6	5.2	4.6	5.7	-3.4	4.8	4.3	4.4
China	10.3	9.9	10.3	10.8	12.3	6.9	11.7	8.3	8.6
Latin America	1.8	5.0	4.0	4.7	4.5	-0.8	-2.9	3.8	4.4
Mexico	1.3	4.5	3.5	4.0	3.7	-1.7	-4.6	4.0	4.5
Brazil	1.0	4.7	3.7	4.6	6.1	1.2	3.0	4.0	4.0
CONSUMER PRICES (3)									
Total Foreign	2.1	2.8	2.3	2.1	3.7	3.3	0.8	1.6	1.8
Advanced Foreign Economies	1.3	1.8	1.6	1.4	2.2	2.0	0.2	1.0	1.1
of which:									
Canada	1.7	2.3	2.3	1.4	2.5	1.9	0.5	1.5	1.8
Japan	-0.3	0.5	-1.0	0.3	0.5	1.0	-1.2	-0.5	-0.6
United Kingdom (4)	1.3	1.4	2.1	2.7	2.1	3.8	1.9	1.5	1.8
Euro Area (2)	2.0	2.3	2.3	1.8	2.9	2.3	0.3	1.2	1.3
Germany	1.1	2.1	2.2	1.3	3.1	1.7	0.5	1.1	1.1
Emerging Market Economies	3.1	3.9	3.0	2.9	5.1	4.6	1.5	2.2	2.4
Asia	2.3	3.1	2.6	2.4	5.5	3.7	0.3	1.8	2.1
Korea	3.5	3.4	2.5	2.1	3.4	4.5	2.3	2.2	2.3
China	2.7	3.3	1.4	2.1	6.7	2.7	-0.5	1.3	1.6
Latin America	4.9	5.6	3.8	4.1	4.2	6.5	4.0	2.9	3.0
Mexico	3.9	5.3	3.1	4.1	3.8	6.2	4.1	2.5	2.5
Brazil	11.5	7.2	6.1	3.2	4.3	6.2	4.2	3.7	3.7

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.

Class II FOMC
Restricted (FR)

September 16, 2009

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2003	2004	2005	2006	2007	2008	2009 (Projected)	2010 (Projected)	2011 (Projected)
NIPA REAL EXPORTS and IMPORTS									
Percentage point contribution to GDP growth, Q4/Q4									
Net Goods & Services	-0.1	-0.9	-0.2	0.4	1.0	0.7	1.0	-0.2	-0.2
Exports of G&S	0.6	0.7	0.7	1.1	1.2	-0.4	-0.4	0.9	1.0
Imports of G&S	-0.7	-1.6	-0.8	-0.7	-0.2	1.2	1.4	-1.1	-1.2
Percentage change, Q4/Q4									
Exports of G&S	6.2	7.1	6.7	10.2	10.2	-3.4	-3.3	8.2	8.6
Services	4.3	9.1	3.6	12.0	13.0	-3.5	-1.3	5.8	6.0
Computers	11.3	5.8	14.2	8.4	1.3	-2.4	9.0	9.5	9.5
Semiconductors	38.3	-6.0	17.6	2.1	29.1	-12.7	15.8	11.0	11.0
Core Goods 1/	4.8	7.2	7.2	9.9	8.4	-3.1	-5.5	9.3	9.9
Imports of G&S	5.1	10.9	5.2	4.1	0.9	-6.8	-8.9	8.0	8.0
Services	3.3	8.8	2.3	7.1	2.0	0.2	-2.8	4.0	6.1
Oil	1.3	10.7	1.3	-8.2	0.0	0.3	-12.7	-0.4	-2.1
Natural Gas	1.3	4.9	13.7	-10.1	13.4	-24.0	-0.6	18.6	0.6
Computers	17.1	23.2	12.5	14.3	8.8	-11.3	16.4	15.5	15.5
Semiconductors	-0.1	9.8	7.5	-0.8	3.6	-9.7	2.2	5.0	5.0
Core Goods 2/	5.3	10.9	5.8	5.8	0.2	-9.8	-11.7	10.6	10.4
Billions of Chained 2000 Dollars									
Net Goods & Services	-603.9	-688.0	-722.7	-729.2	-647.7	-494.3	-349.7	-356.9	-381.4
Exports of G&S	1116.8	1222.8	1305.1	1422.0	1546.1	1629.3	1463.7	1589.8	1725.8
Imports of G&S	1720.7	1910.8	2027.8	2151.2	2193.8	2123.5	1813.4	1946.7	2107.2
Billions of dollars									
US CURRENT ACCOUNT BALANCE	-521.5	-631.1	-748.7	-803.5	-726.6	-706.1	-412.4	-450.7	-480.3
Current Acct as Percent of GDP	-4.7	-5.3	-5.9	-6.0	-5.2	-4.9	-2.9	-3.0	-3.1
Net Goods & Services (BOP)	-495.0	-610.0	-715.3	-760.4	-701.4	-695.9	-370.2	-426.7	-461.0
Investment Income, Net	51.0	73.4	78.8	54.7	97.9	125.5	86.6	105.4	110.1
Direct, Net	112.7	150.9	173.2	174.0	236.7	249.9	208.1	231.7	249.5
Portfolio, Net	-61.7	-77.5	-94.4	-119.4	-138.8	-124.3	-121.5	-126.4	-139.4
Other Income & Transfers,Net	-77.5	-94.5	-112.2	-97.9	-123.1	-135.7	-128.8	-129.4	-129.4

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

Class II FOMC
Restricted (FR)

September 16, 2009

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2006 Q1	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 Q3	2007 Q4	2008 Q1	2008 Q2	2008 Q3	2008 Q4
NIPA REAL EXPORTS and IMPORTS												
Percentage point contribution to GDP growth												
Net Goods & Services	0.4	0.0	-0.7	1.9	-0.3	0.7	1.4	2.2	0.4	2.4	-0.1	0.5
Exports of G&S	1.6	0.7	0.1	1.8	0.4	0.6	2.0	1.6	-0.0	1.5	-0.5	-2.7
Imports of G&S	-1.2	-0.7	-0.8	0.1	-0.7	0.1	-0.6	0.6	0.4	0.9	0.4	3.1
Percentage change from previous period, s.a.a.r.												
Exports of G&S	16.5	6.9	0.6	17.8	3.5	5.2	18.5	14.5	-0.1	12.1	-3.6	-19.5
Services	13.6	5.6	1.5	29.1	4.7	2.8	27.2	19.2	-9.0	7.8	-7.7	-4.3
Computers	18.1	8.9	-9.6	19.0	11.6	-15.4	11.5	0.0	8.7	33.5	1.3	-38.3
Semiconductors	22.1	19.5	-14.2	-13.3	23.7	26.3	4.7	69.9	15.0	-3.8	6.5	-50.7
Core Goods 1/	17.6	6.7	1.6	14.5	1.5	6.4	15.4	10.8	3.5	14.3	-2.2	-23.7
Imports of G&S	7.8	4.5	4.9	-0.5	4.3	-0.5	3.7	-3.6	-2.5	-5.0	-2.2	-16.7
Services	16.1	1.8	1.3	10.0	0.4	2.1	8.6	-2.9	3.0	-7.1	6.1	-0.9
Oil	-20.8	5.0	22.1	-30.1	0.8	14.7	-3.4	-10.4	-1.5	-9.3	2.7	10.3
Natural Gas	-50.2	80.0	26.1	-42.2	52.8	54.0	36.5	-48.5	-5.0	-38.2	12.2	-49.5
Computers	24.8	13.0	17.3	3.1	39.0	-15.4	-2.2	21.6	12.7	8.6	-15.9	-39.9
Semiconductors	2.4	-2.8	17.4	-17.3	7.3	2.6	-0.4	4.9	5.6	8.9	-6.3	-38.2
Core Goods 2/	14.0	3.1	0.6	5.8	3.1	-3.6	4.1	-2.5	-5.1	-3.2	-5.1	-24.2
Billions of Chained 2000 Dollars, s.a.a.r.												
Net Goods & Services	-732.6	-732.8	-756.5	-694.9	-705.0	-683.4	-638.4	-564.0	-550.9	-476.0	-479.2	-470.9
Exports of G&S	1388.8	1412.1	1414.1	1473.2	1485.9	1504.8	1569.9	1624.0	1623.4	1670.4	1655.2	1568.0
Imports of G&S	2121.3	2144.9	2170.5	2168.1	2190.8	2188.1	2208.3	2188.0	2174.3	2146.5	2134.4	2038.9
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-794.6	-808.3	-859.2	-752.1	-796.4	-762.1	-686.5	-661.3	-717.2	-750.9	-736.7	-619.5
Current Account as % of GDP	-6.0	-6.1	-6.4	-5.5	-5.8	-5.4	-4.8	-4.6	-5.0	-5.2	-5.1	-4.3
Net Goods & Services (BOP)	-766.5	-764.7	-797.2	-713.1	-712.2	-710.2	-685.9	-697.4	-730.6	-731.4	-743.8	-578.0
Investment Income, Net	62.4	57.7	44.0	54.6	45.8	58.2	120.7	167.0	154.0	112.3	143.7	92.1
Direct, Net	173.9	175.2	163.1	183.9	186.7	204.4	252.7	303.0	284.6	241.9	268.0	205.1
Portfolio, Net	-111.5	-117.5	-119.1	-129.3	-140.9	-146.2	-132.0	-136.0	-130.6	-129.6	-124.2	-113.0
Other Inc. & Transfers, Net	-90.5	-101.3	-106.0	-93.6	-130.0	-110.1	-121.3	-130.9	-140.6	-131.8	-136.7	-133.6

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

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2011 Q1	2011 Q2	2011 Q3	2011 Q4
					Projected							
NIPA REAL EXPORTS and IMPORTS												
Percentage point contribution to GDP growth												
Net Goods & Services	2.6	1.6	-0.2	-0.1	-0.3	-0.0	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1
Exports of G&S	-4.0	-0.5	2.1	0.9	0.8	0.9	1.0	1.0	1.0	1.0	1.0	1.1
Imports of G&S	6.6	2.1	-2.3	-1.0	-1.1	-0.9	-1.2	-1.3	-1.3	-1.1	-1.2	-1.1
Percentage change from previous period, s.a.a.r.												
Exports of G&S	-29.9	-4.6	20.9	8.1	7.4	7.9	8.4	8.9	8.6	8.4	8.3	9.0
Services	-13.6	-0.1	5.1	4.8	4.8	5.5	6.2	6.6	6.3	5.9	5.8	5.9
Computers	-14.0	-10.8	59.6	15.2	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
Semiconductors	-17.1	12.6	61.6	19.3	11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
Core Goods 1/	-38.3	-7.3	27.7	9.2	8.6	9.0	9.5	10.1	9.8	9.5	9.5	10.6
Imports of G&S	-36.4	-14.8	18.4	7.2	8.1	6.4	8.7	8.9	8.6	7.8	8.0	7.6
Services	-11.5	-7.6	5.3	3.6	6.0	-0.1	4.7	5.5	5.9	6.0	6.1	6.4
Oil	-15.9	-21.9	-6.3	-5.8	0.8	-1.8	0.0	-0.5	-1.6	-4.6	-1.0	-1.4
Natural Gas	5.9	-2.4	-18.2	15.7	57.3	10.2	40.8	-18.9	-9.7	3.3	36.0	-19.3
Computers	-22.3	24.8	61.0	17.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
Semiconductors	-47.8	24.7	43.0	17.3	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Core Goods 2/	-46.7	-18.6	26.5	10.4	9.5	9.7	11.0	12.3	11.7	10.7	9.5	9.9
Billions of Chained 2000 Dollars, s.a.a.r.												
Net Goods & Services	-386.5	-332.0	-338.8	-341.5	-350.9	-350.8	-359.2	-366.7	-374.4	-379.3	-385.2	-386.6
Exports of G&S	1434.5	1417.8	1486.6	1515.7	1542.9	1572.5	1604.6	1639.3	1673.7	1707.6	1742.1	1780.0
Imports of G&S	1821.0	1749.8	1825.4	1857.2	1893.8	1923.3	1963.8	2006.1	2048.0	2086.8	2127.3	2166.7
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-410.8	-392.4	-419.2	-427.3	-454.6	-440.0	-451.9	-456.3	-481.1	-471.1	-482.8	-486.4
Current Account as % of GDP	-2.9	-2.8	-2.9	-3.0	-3.1	-3.0	-3.0	-3.0	-3.1	-3.0	-3.1	-3.1
Net Goods & Services (BOP)	-369.6	-332.0	-384.0	-395.1	-414.2	-418.6	-431.2	-442.8	-454.8	-458.0	-464.3	-466.9
Investment Income, Net	84.3	80.4	88.7	92.8	98.6	103.5	107.8	111.6	112.7	111.8	110.1	105.6
Direct, Net	208.0	203.4	207.0	214.0	221.2	228.6	235.6	241.7	246.5	249.5	250.8	251.0
Portfolio, Net	-123.7	-123.0	-118.3	-121.2	-122.6	-125.1	-127.8	-130.0	-133.8	-137.7	-140.7	-145.5
Other Inc. & Transfers, Net	-125.5	-140.9	-123.8	-125.1	-139.0	-124.9	-128.5	-125.1	-139.0	-124.9	-128.5	-125.1

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

(Page I-58 is intentionally blank.)

Abbreviations

AFE	advanced foreign economy
BOE	Bank of England
E&S	equipment and software
ECB	European Central Bank
EME	emerging market economy
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
GSE	government-sponsored enterprise
IP	industrial production
MBS	mortgage-backed securities
NAIRU	non-accelerating inflation rate of unemployment
NIPA	national income and product accounts
PCE	personal consumption expenditures
TARP	Troubled Asset Relief Program
WTI	West Texas Intermediate