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.

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Content last modified 04/01/2015.

Class II FOMC - Restricted (FR)

Part 1

April 22, 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 hints of stabilization in the incoming spending data as well as some favorable financial developments since the time of the March Greenbook offer some support to our view that the rate of decline in real GDP is slowing, although the evidence on this issue is by no means decisive. Consumer spending appears to have leveled off, and there are tentative signs that the steep decline in housing activity may be abating. At the same time, labor markets and industrial production have continued to deteriorate sharply. Such crosscurrents highlight the uncertainty attending the near-term projection. Nonetheless, we anticipate that final demand will fall less rapidly this quarter and that real GDP will decline at an annual rate of 1½ percent, much less than the 6¼ percent decline that we estimate occurred in the first quarter.

Many of the key determinants of the longer-run outlook for economic activity have evolved more favorably than we had expected in the March Greenbook. Most importantly, conditions in financial markets have improved more than we had assumed: Private borrowing rates have moved lower, in part because of the FOMC's decision to undertake additional large-scale asset purchases; stock prices have moved higher; and the measures of financial stress that we monitor have improved more than had been anticipated in the March Greenbook forecast. In addition, the foreign exchange value of the dollar has declined. Higher oil prices provide a partial offset to these positive developments.

In light of these less restrictive conditions, we now expect the decline in real activity to end sooner and the recovery to be somewhat less anemic than we had assumed in the March Greenbook. Even so, unusually tight credit conditions and the adjustment of consumer and business spending to the large decline in asset prices over the past year are expected to continue to weigh heavily on activity over the medium term. We expect real GDP to edge up at an annual rate of only ¾ percent in the second half of this year before rising 2½ percent in 2010; both figures are about 1 percentage point higher than our projection in the March Greenbook. Given the still tepid recovery, we expect the unemployment rate to continue to rise further and average 9¼ percent in the second half of the year. As real output is anticipated to expand slightly faster than potential next year, the unemployment rate is projected to move gradually lower, ending the year at about 9 percent, nearly ½ percentage point below our assumption in the March Greenbook.

Note: A list of abbreviations is available at the end of *Part 1: Summary and Outlook*.

Recent data on core consumer prices have come in a bit higher than we had anticipated in the March Greenbook, and we have marked up our near-term estimate of core PCE inflation in response. Beyond the near term, we still expect the low level of resource utilization over the projection period, reduced cost pressures from oil and other commodity prices, and a gradual decline in inflation expectations to lead to a deceleration in core PCE prices. These prices are projected to increase 1¼ percent this year and ¾ percent in 2010. Both figures are ¼ percentage point higher than our projection in the March Greenbook, reflecting the higher incoming data on price inflation and the current forecast's assumption of tighter resource utilization, a weaker dollar, and higher oil prices.

Key Background Factors

As in the March Greenbook, we assume that the FOMC will hold the target federal funds rate in the current range of 0 to ¼ percent over the next several years. In contrast to the staff's assumed trajectory, the path of the federal funds rate that is implied by futures quotes slopes upward beginning late this year (although the amount and timing of tightening expected by market participants is difficult to gauge because term premiums in these markets could well be higher than usual). Regarding nontraditional policy, we assume the Federal Reserve will purchase $1.25 trillion of agency mortgage-backed securities (MBS), $200 billion of agency debt, and $300 billion of Treasury securities. (In the March Greenbook, we assumed that the Federal Reserve would buy only the $600 billion in combined agency debt and MBS that had already been announced.) We have not assumed any further nontraditional policy actions beyond those already announced, and we are assuming that the Federal Reserve will allow its holdings of long-term assets to begin passively running off in 2010. *(For further discussion, see the box entitled "Large-Scale Asset Purchases and the Economic Outlook.")*

Longer-term Treasury yields have decreased about 15 basis points, on net, since the time of the March Greenbook. These yields dropped on the FOMC's announcement of its plans to expand the scale and scope of the Federal Reserve's asset purchase program but moved up subsequently on a perceived improvement in the economic outlook and a reduction in safe-haven demands. As in the March forecast, we assume that the 10-year rate will edge higher over the forecast horizon, as the 10-year window for the Treasury rate moves through the period of very low short-term rates that are anticipated for the next few years. As noted above, we had conditioned the March Greenbook projection on an assumption that the FOMC, in contrast to market expectations, would not announce a further expansion of its planned purchases of long-term assets, and that the market's

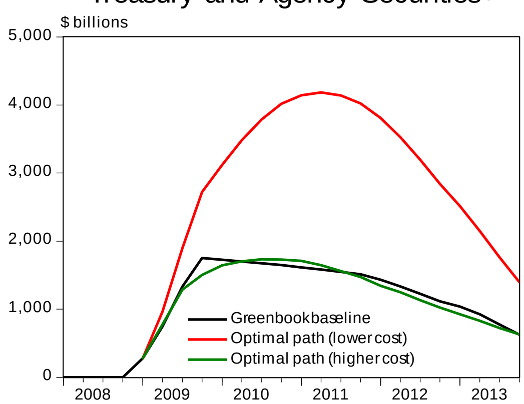
Large-Scale Asset Purchases and the Economic Outlook

The Federal Reserve has announced plans to purchase $1.75 trillion in long-term Treasury securities, agency debt, and agency MBS by the end of this year. As indicated by the black line in the chart at the bottom left, we have incorporated no additional purchases into the baseline outlook. In addition, we have assumed that the FOMC will let these assets run off gradually as the securities mature and as home mortgages in MBS pools are refinanced. Under this assumption, at the end of 2013 the Federal Reserve holds $625 billion more in long-term assets than it otherwise would; the runoff is completed by 2015. As illustrated in the chart to the bottom right, we judge that these purchases will help to reduce unemployment modestly over the next several years.

As discussed in a recent memo to the FOMC, designing an "optimal" large-scale asset purchase (LSAP) program is complex, in part because of uncertainty about the costs associated with buying and selling these assets.* The costs may include such things as disruptions to market functioning, exposure of the Federal Reserve to large capital losses, and impaired management of our balance sheet. Designing an LSAP program is also complicated by uncertainty about its effects on interest rates, real activity, and inflation. As a consequence, we suggest that these simulations be taken with an even larger-than-usual grain of salt and with the reminder that the alternatives are "optimal" only within the very narrow terms of this exercise.

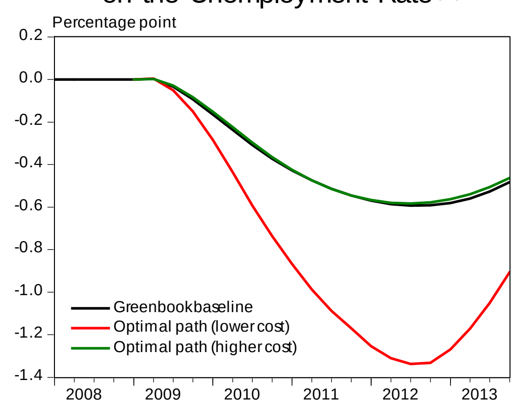
That said, the optimal-control exercises suggest that a path similar to the baseline assumption would be appropriate if policymakers judge the costs of buying and selling these assets as fairly high (the green lines). However, if policymakers judge the costs of an LSAP program as less substantial, then an expansion of the current program might be desirable (the red lines).

Holdings of Long-Term
Treasury and Agency Securities+



+ Net of usual Federal Reserve holdings

Effect of LSAP Programs
on the Unemployment Rate++



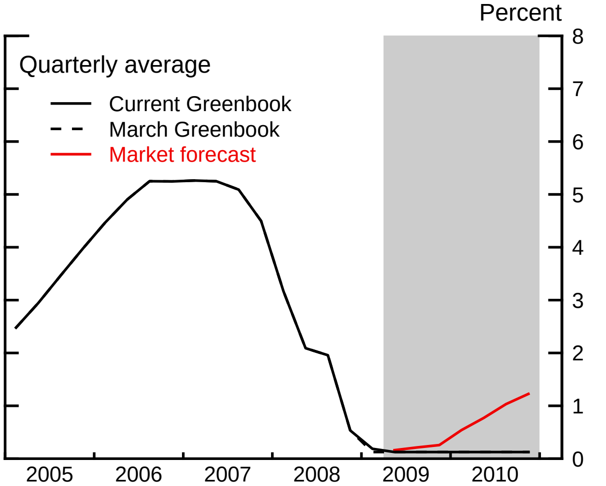
++ Reported as changes from a path with no LSAP program

*Eileen Mauskopf and Jae Sim, "Optimal Paths for Large-Scale Asset Purchases," FOMC memo (April 20, 2009).

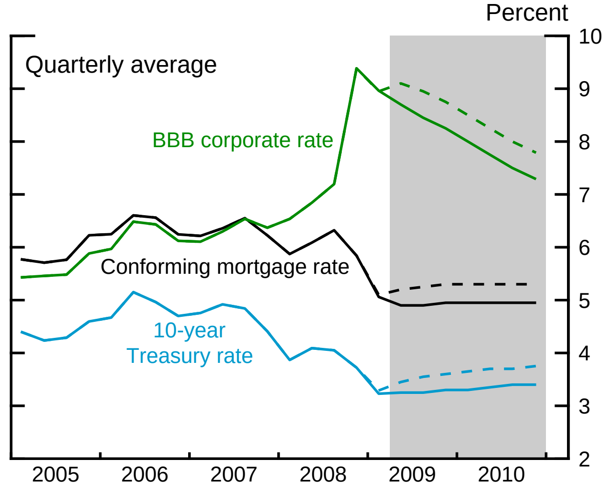
Class II FOMC − Restricted (FR)

Key Background Factors Underlying the Baseline Staff Projection

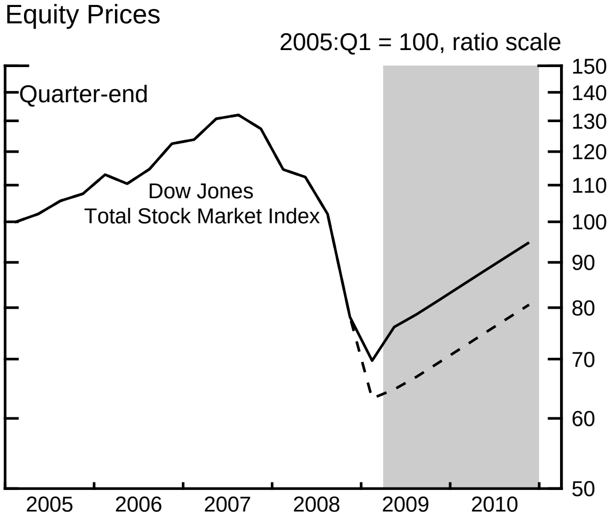
Federal Funds Rate



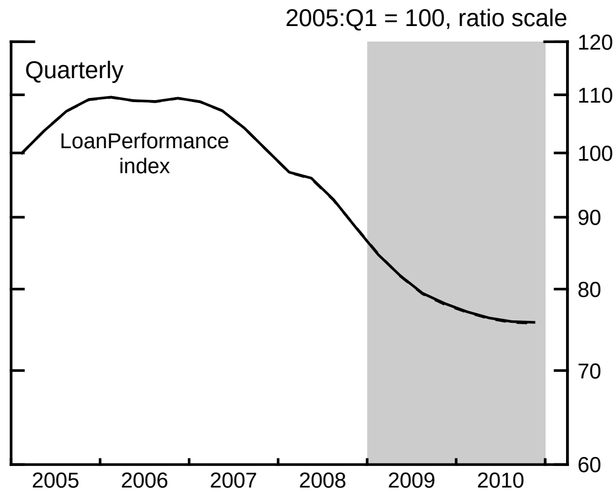
Long-Term Interest Rates



Equity Prices

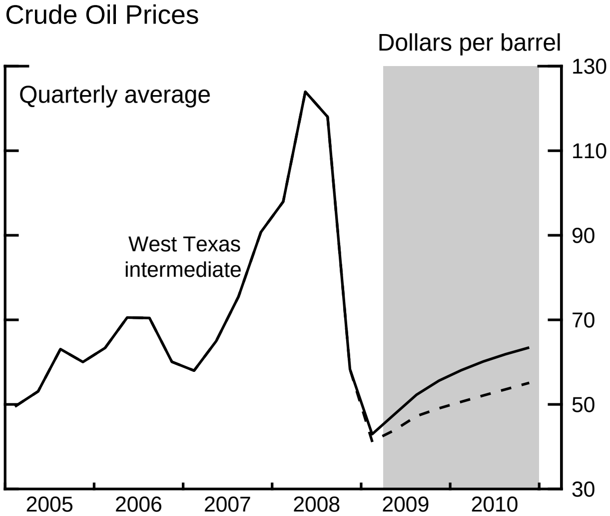


House Prices

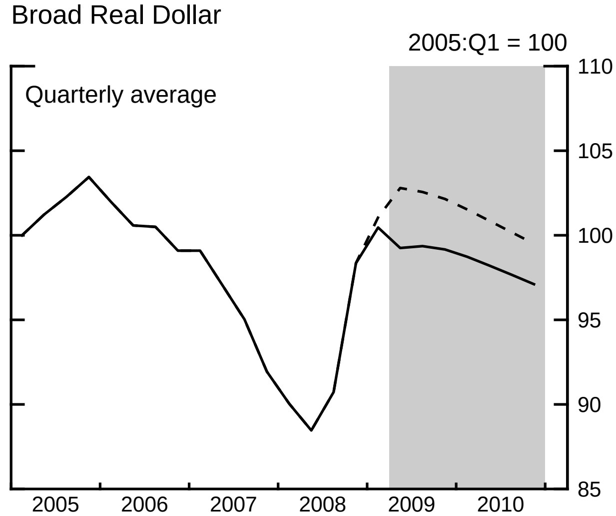


Note: The projection period begins in 2009:Q1.

Crude Oil Prices



Broad Real Dollar



Note: In each panel, shading represents the projection period, which begins in 2009:Q2, 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 March and current Greenbooks are the same.

eventual recognition of the FOMC's intentions would also tend to push up long-term rates. We now assume that market expectations about asset purchases are reasonably well aligned with those of the staff, resulting in a less pronounced upward tilt to 10-year Treasury rates over the projection period.

Yields on investment-grade corporate bonds have moved down, on net, about 50 basis points since the close of the March Greenbook, resulting in somewhat narrower spreads to longer-term Treasury yields. As before, we expect corporate bond spreads, which remain unusually elevated, to continue to decrease over the remainder of this year and next year. In all, the path of the BBB-rated corporate bond yield is about ½ percentage point lower than in the last Greenbook.[1]

The conforming fixed 30-year mortgage rate has moved down about 20 basis points since the March Greenbook to just under 5 percent, and the spread between this mortgage rate and the yield on 10-year Treasury notes has edged down, on net. We expect the mortgage rate to remain at about its current level over the medium term, as the projected rise in the 10-year Treasury rate is roughly offset by the slight downward pressure on the spread from gradually improving economic conditions. This path for the mortgage rate averages about 35 basis points lower than we assumed in March.

Equity prices have increased 18 percent since the March Greenbook, and we have raised the projected path for stock prices by a similar amount throughout the forecast period. Earnings reports from some major banks were better than expected, and market participants appear to view the downside risks to the economic outlook as having diminished recently. As in prior forecasts, we assume that the equity risk premium, which remains very high by historical standards, will moderate gradually, implying that stock prices will rise at an annual rate of about 15 percent over the medium term. Regarding house prices, we assume that the LoanPerformance house price index will decrease about 12 percent this year and 3 percent next year, similar to the forecast in the March Greenbook.

[1] In this Greenbook, we switched from using Moody's series for yields on Baa-rated corporate bonds to the series constructed by Board staff for yields on BBB-rated corporate bonds that is presented elsewhere in the Greenbook and the Blucbook. The staff series is calculated from the universe of BBB-rated bonds issued by domestic firms and thus provides a better summary measure of yields at this rating level than the Moody's series, which is based on a relatively small number of bonds. In the current forecast round, we have also begun projecting the off-the-run 10-year Treasury yield rather than the on-the-run yield.

Our estimates of the effects of the fiscal stimulus package are unchanged from the March Greenbook. We estimate that the tax and spending initiatives contained in this legislation will add 1.1 percentage points to the change in real GDP in 2009 and 0.8 percentage point in 2010. The combination of the fiscal stimulus legislation, the costs of financial stabilization programs, and the weak economic outlook lead to large projected federal deficits in the next two years. In particular, we expect the federal deficit to be $1.6 trillion (12 percent of GDP) in fiscal 2009 and $1.5 trillion (10 percent of GDP) in fiscal 2010.[2]

The foreign exchange value of the dollar has declined around 3½ percent since the time of the March Greenbook, and we have revised down the path for the dollar nearly 3 percent, on average, over the medium term. We assume that the broad real dollar will edge down ¼ percent at an annual rate over the remainder of this year and then fall about 2 percent in 2010. The incoming data continue to point to a broad-based contraction in economic activity in most of the advanced and emerging foreign economies over the first half of this year. As in the United States, some indicators of economic activity show faint signs of stabilization, and we expect a gradual recovery in activity abroad to begin at the end of this year. All told, after a projected drop of 2 percent this year, real foreign GDP is anticipated to rise 2¾ percent in 2010.

The spot price of West Texas intermediate (WTI) crude oil currently stands at $47 per barrel, up about $4 per barrel from the time of the March Greenbook. In accord with futures prices, we have revised up our projection of the average level of oil prices over the second half of this year by about $6 per barrel and the average level of prices over 2010 by about $8 per barrel. The upward shift in the path of oil prices since the March Greenbook likely reflects further reductions in OPEC supply and, perhaps, market participants' views that the global economic outlook has improved somewhat. Crude prices are expected to increase as global economic activity recovers, with the price of WTI anticipated to reach $57 per barrel by the end of this year and $64 per barrel by the end of 2010.

[2] Relative to our assumption in the March Greenbook, the projected deficit is somewhat lower in fiscal year 2009 and somewhat higher in fiscal year 2010. These revisions reflect our view that $250 billion of TARP funds will be dispersed in fiscal 2010, rather than fiscal 2009 as we had assumed in the last Greenbook.

Recent Developments and the Near-Term Outlook

We estimate that real GDP dropped at an annual rate of 6¼ percent in the first quarter, as final sales fell steeply and the pace of inventory liquidation quickened. In the current quarter, with fiscal stimulus kicking in, defense spending rebounding, and motor vehicle production stepping up, we are projecting that real GDP will decline at a more moderate annual rate of 1½ percent.

The severe contraction in the labor market continued into March. Private nonfarm payrolls shrank another 660,000 last month, and the unemployment rate jumped to 8.5 percent. With initial claims for unemployment insurance remaining extremely elevated in April, we expect private employment to fall 600,000 further this month. Thereafter, we anticipate some moderation in the pace of job loss, with private payrolls dropping 400,000 in May and 300,000 in June. These job cuts are projected to push the unemployment rate up to 9.1 percent by June.

Industrial production has continued to fall sharply. Manufacturing production declined at an annual rate of 23 percent last quarter, and the factory utilization rate dropped to a new postwar low of 65.8 percent in March. As in the last Greenbook, we anticipate a slower pace of decline in the second quarter. After plummeting to a historically low level last

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

Measure	2009:Q1		2009:Q2	
	March Greenbook	April Greenbook	March Greenbook	April Greenbook
Real GDP	**-6.5**	**-6.3**	**-2.0**	**-1.5**
Private domestic final purchases	-5.3	-5.0	-4.3	-4.0
Personal consumption expenditures	.4	1.1	.0	-.5
Residential investment	-41.2	-38.2	-34.3	-27.4
Business fixed investment	-27.3	-30.1	-23.4	-20.8
Government outlays for consumption and investment	-.2	-5.3	5.5	6.7
	Contribution to growth (percentage points)			
Inventory investment	-2.2	-2.2	.5	-.1
Net exports	.1	1.0	.0	.6

quarter, motor vehicle production is expected to move up this quarter, a pattern of activity that contributes 2½ percentage points to the moderation in the rate of decline in real GDP between the first and second quarters. For the balance of the manufacturing sector, forward-looking indicators have improved a bit of late and suggest some slackening in the pace of production cuts in the current quarter. All told, we project manufacturing IP to decline at an annual rate of about 9 percent in the second quarter.

Consumption expenditures appear, on balance, to have steadied after a sharp drop last summer and autumn. Although widespread job losses, weak consumer sentiment, and the drag from previous large declines in household wealth should continue to weigh down consumption going forward, we expect spending to be supported by the boost to household incomes from the recently enacted fiscal stimulus package. On average, real PCE is expected to edge up at an annual rate of ¼ percent over the first half of the year, the same as in the March Greenbook.

The incoming data on housing activity have been somewhat firmer than we were anticipating. Sales of new single-family homes moved higher in February after several months of large declines. Single-family housing starts—after falling precipitously around the turn of the year—leveled off at an annual pace of around 360,000 units in February and March. We expect single-family starts to hold at around a 350,000 unit pace in the second quarter, an upward revision of about 70,000 units from our assumption in the March Greenbook. Because of the usual lag between starts and overall building activity, the projected flattening out of starts does not show through to residential investment until the second half of the year, and we expect real residential investment to contract at an annual rate of 27 percent this quarter after a nearly 40 percent drop in the first quarter.

The broad-based decline in equipment and software (E&S) investment continued into the first quarter, with spending estimated to have fallen at an annual rate of more than 30 percent. In the current quarter, investment in transportation equipment is expected to get a boost, as fleet sales of motor vehicles reverse part of their unusually large first-quarter decline. In addition, some recent indicators of business sentiment—though still at very low levels—have improved a little. However, declining sales and rapidly shrinking backlogs of unfilled orders, along with tight credit conditions, suggest that investment outside of transportation equipment will continue to move sharply lower. All told, we project E&S spending to fall at an annual rate of nearly 14 percent in the second quarter.

Following a large decline in the first quarter, nonresidential investment is projected to drop at an annual rate of more than 30 percent in the second quarter, as tight financing conditions, rising vacancy rates, and falling property prices push down construction of nonresidential buildings. For drilling and mining structures, the sharp drop in energy prices over the second half of last year is expected to reduce investment further this quarter.

Businesses appear to have reacted to the abrupt rise in inventory-sales ratios at the end of last year by running off inventories more rapidly in the first quarter. We estimate that total nonfarm inventories decreased at an annual rate of about $100 billion last quarter, with much of the liquidation occurring in the motor vehicle sector. With automakers planning to move production up from the exceptionally low first-quarter pace, we expect the runoff in motor vehicle inventories to diminish this quarter. However, firms outside the motor vehicle sector are anticipated to make larger cuts to stocks that continue to be elevated relative to sales. In total, the pace of liquidation this quarter is projected to be similar to that in the first quarter.

In the government sector, information in the March *Monthly Treasury Statement* suggests that federal expenditures in the first quarter were much weaker than we had expected in the previous Greenbook; in particular, defense spending appears to have dropped back significantly. The estimated level of first-quarter defense expenditures is well below that implied by the Congressional Budget Office's projection of spending for fiscal year 2009, suggesting that outlays for defense should increase at an above-trend rate in coming months. Accordingly, after falling at an estimated annual rate of more than 9 percent in the first quarter, real federal purchases are projected to rebound at a rate of nearly 15 percent in the second quarter. In the state and local sector, we estimate that real outlays decreased at an annual rate of 2½ percent in the first quarter—somewhat weaker than we had projected in the March Greenbook—as budgetary pressures appear to have caused larger cutbacks in spending than we had earlier anticipated. The grants included in the fiscal stimulus legislation should ease budgetary restraint somewhat, and we expect real state and local purchases to increase at an annual rate of 2 percent in the second quarter.

In response to the ongoing deterioration in foreign and domestic demand, both real imports and real exports are expected to contract further in the near term. With the incoming data on real imports considerably weaker than we had anticipated at the time of the March Greenbook, we have steepened the expected decline in imports over the first half of the year; the drop in the level of imports is now anticipated to be considerably larger than that of exports. As a result, net exports are expected to contribute 1 percentage point to the annual rate of change in real GDP in the first quarter and about ½ percentage point in the second quarter, as compared with negligible contributions in the March Greenbook.

Core consumer prices have been increasing a bit faster than we had expected at the time of the last Greenbook. In March, core PCE prices are estimated to have increased 0.2 percent for a third consecutive month; this increase follows three months in which core prices were about unchanged. The pickup in core inflation largely reflects a snapback in prices for goods that were reportedly heavily discounted at the end of last year and an increase in the federal excise tax on cigarettes.[3] The nonmarket component of PCE prices has also posted larger increases after being especially soft late last year. We now estimate that core PCE prices increased at an annual rate of 1¾ percent in the first quarter and expect them to increase at a similar rate in the current quarter. These figures are up ¾ percentage point and ¼ percentage point, respectively, from the March Greenbook.

Consumer energy prices have flattened out, on balance, so far this year following their sharp drops late in 2008 (which imply a large drop on a quarterly-average basis in the first quarter). After small increases early in the year, retail gasoline prices in April appear to have declined for a second month despite the upturn in the cost of crude since mid-February. With high inventories holding down margins, we expect energy prices to change relatively little in the remaining two months of the quarter before rising more noticeably over the summer. Meanwhile, food prices—responding to the downturn in agricultural commodity prices late last year—have continued to show considerable moderation. In all, we estimate that total PCE prices declined at an annual rate of 1 percent in the first quarter and will rise ¾ percent in the current quarter.

The Medium-Term Outlook

After falling rapidly in the first half of this year, real GDP is projected to edge higher in the second half and then increase moderately next year. The key factors driving the acceleration in activity are the boost to spending from fiscal stimulus, the bottoming out of the housing market, a turn in the inventory cycle from sharp liquidation to modest

[3] The rise in tobacco-product prices in response to the increase in the federal excise tax appears to have happened earlier and to have been somewhat larger than we had anticipated in the March Greenbook.

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

Measure	2009 H1	2009 H2	2010
Real GDP	**-3.9**	**.8**	**2.6**
Previous Greenbook	-4.2	-.3	1.5
Final sales	-2.8	-.6	2.4
Previous Greenbook	-3.4	-1.5	1.4
Personal consumption expenditures	.3	.8	2.7
Previous Greenbook	.2	.6	1.9
Residential investment	-33.0	-.9	11.0
Previous Greenbook	-37.9	-9.5	6.7
Business fixed investment	-25.6	-15.5	3.4
Previous Greenbook	-25.4	-19.7	-.9
Government purchases	.5	4.9	1.9
Previous Greenbook	2.6	4.3	1.8
Exports	-18.6	-.7	2.3
Previous Greenbook	-15.1	-2.3	1.0
Imports	-20.1	4.1	5.1
Previous Greenbook	-12.5	3.2	3.8
	Contribution to growth (percentage points)		
Inventory change	-1.1	1.4	.3
Previous Greenbook	-.8	1.2	.1
Net exports	.9	-.6	-.5
Previous Greenbook	.1	-.7	-.4

accumulation, and a gradual repair of financial markets. Relative to the last Greenbook, lower borrowing rates and higher equity prices boost our forecast through the usual channels. Moreover, given that measures of financial market stress appear to have eased somewhat more than we had assumed, we have also reduced our judgmental estimate of the restraint on spending from financial channels that are outside those that are routinely captured by our models. *(See the box entitled "Judgmental Effects of Financial Market Turmoil in the Staff Projection" for more details.)*

Judgmental Effects of Financial Market Turmoil in the Staff Projection

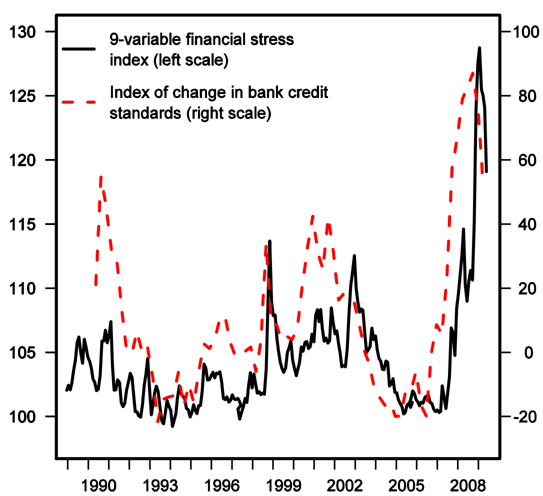
As discussed last fall in the September and October Greenbooks, our standard models probably do not capture all the effects of financial turmoil on real activity, such as those associated with tighter lending standards and other factors that influence spending outside of conventional cost-of-capital and wealth channels. For this reason, we continue to use supplementary analyses to inform our judgmental estimates of these effects.

As before, we use two types of financial data to quantify the extent of financial turmoil: indicators of capital market stress derived from risk spreads and volatility measures, and indicators of bank lending conditions from the Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS). We then gauge the implications of this stress for the economic outlook using two empirical methods: one that exploits the historical correlation between stress and errors in FRB/US spending equations to project the path of these errors forward, and another that incorporates indicators of stress within small-scale VAR models.

As shown in the chart and table below, measures of stress have improved somewhat since last fall, especially in recent weeks. Accordingly, our various econometric estimates of the fallout from financial turmoil—shown in the table on the facing page—are now smaller than they were in March. In particular, estimated effects on the level of real GDP have revised up ½ percent in 2009 and about ¾ percent in 2010, averaging across all the models.

In updating the staff projection in response to the recent easing in financial stress, we have had to wrestle with several issues. First, each estimate reported in the table has its own merits and drawbacks, and all are subject to considerable coefficient and model uncertainty. Second, each of the approaches poses significant identification challenges that have been exacerbated as the economy has experienced other contractionary shocks. Third, the estimates are sensitive to the projected speed at which financial stress fades away over time. Finally, the econometric

Measures of Financial Turmoil



Recent Movements in Measures of Financial Turmoil

SLOOS index	
October 2008 survey	87.0
January 2009 survey	76.0
April 2009 survey	51.9
Financial stress index	
October 2008 average	124.0
March 2009 average	124.2
Early April 2009 average	119.1

estimates do not fully account for the likely ameliorative effects of the various traditional and nontraditional policy actions taken in recent months by the Federal Reserve and the federal government to mitigate the effects of the current crisis.

After weighing these considerations, we have marked up the forecast from the last Greenbook to account for the diminished financial stress by an amount towards the low end of the range suggested by the model results.

As shown in the bottom portion of the table, our judgmental adjustments (which include the effects of recession dynamics as well as financial turmoil) now cut about 5 percent off the level of real GDP by the end of this year and 3½ percent by the end of 2010, over and above the restraint imposed by traditional cost-of-capital and wealth effects. As can be seen, these effects are somewhat smaller than what we assumed in March. Beyond 2010, we expect the unusual restraint from financial turmoil and recession dynamics to continue to abate as financial institutions repair their balance sheets, credit availability improves further, and households and firms become more confident about the permanence of the economic recovery.

Selected Econometric Estimates of the Effects of Financial Turmoil on Real GDP

Date of Estimate and Data Source	Methodology	Percent deviation from Q4 baseline level			
		2007	2008	2009	2010
Senior Loan Officer Opinion Survey					
Index of survey responses	FRB/US[1]	-.4	-2.9	-1.8	-0.1
Commercial loan credit standards	VAR[2]	-.1	-2.8	-4.4	-3.1
Change in bank credit standards[3]	VAR[2]	-.1	-1.2	-2.3	-1.5
Capital markets data					
9-variable stress index	FRB/US[2]	-.1	-1.1	-2.0	-1.3
9-variable stress index	FRB/US[1]	-.4	-1.7	-4.6	-4.5
9-variable stress index	VAR[2]	.0	-.1	-1.6	-2.6
Revision in estimates since March Greenbook					
Average				**.5**	**.8**
Range				(.1, .9)	(.1, 1.5)
Memo item: Staff judgmental projection adjustments[4]					
April Greenbook		-.3	-3.5	-5.2	-3.5
March Greenbook		-.3	-3.5	-5.4	-4.0
Revision		.0	.0	**.2**	**.5**

1. Stress treated as exogenous and phased out over four quarters.
2. Stress treated as endogenous and simulated as part of a system of equations.
3. Series shown as the dashed line in the chart; includes both business and consumer lending standards.
4. Includes the effects of financial stress and adjustments for recession dynamics.

Household sector. We expect real PCE to accelerate over the projection period, as fiscal stimulus bolsters household incomes, uncertainty about job and income prospects lessens, and the terms and availability of consumer credit begin to ease. Even so, the large net reduction in wealth over the past year and still tight markets for consumer finance should restrain household consumption over the projection period and cause the saving rate to remain well above its level in recent years. Our projection calls for real PCE to increase at an annual rate of ¾ percent in the second half of this year and 2¾ percent in 2010. The saving rate is projected to average about 5 percent this year and in 2010.

Residential investment. The incoming data suggest that housing activity stabilizes sooner, and at a somewhat higher level, than we had projected in the March Greenbook. However, the general contour of residential investment, and the forces shaping it, remain largely the same. Lower mortgage rates, a temporary tax credit for first-time homebuyers, and large reductions in home prices are making housing increasingly affordable. And as uncertainties over job and income prospects abate and the expected rate of decline in house prices lessens, potential homebuyers should become increasingly willing to enter the housing market. Accordingly, we anticipate that housing demand will turn up over the second half of this year. Even the very modest recovery in sales that we are anticipating results in a downturn in the months' supply of new homes for sale in the second half of this year, leading to an increase in construction activity next year. After a projected decline of nearly 20 percent this year, residential investment is expected to rise 11 percent in 2010.

Business investment. We expect real business outlays for E&S to fall a little over 10 percent at an annual rate in the second half of this year, as firms continue to adjust investment spending downward in response to declining sales, considerable uncertainty about the economic outlook, tight credit conditions, and very low rates of capital utilization. In response to the resumption of the expansion in business sales and some improvement in financial conditions, real E&S expenditures are anticipated to turn around next year and rise 10 percent. The downturn in spending for nonresidential structures is expected to be more protracted, as the substantial planning and implementation lags in this sector cause outlays to trail aggregate economic activity. As a result, we expect construction of nonresidential buildings to continue falling through next year. Because the expected increase in oil prices over the medium term reverses only a small part of the dramatic drop in prices in the second half of last year, we anticipate that investment in drilling and mining structures will remain subdued in 2010, after falling sharply this year. All told, real expenditures for nonresidential structures are projected to fall about 26 percent this year and 9 percent in 2010.

We expect the pace of inventory reductions to slow over the second half of 2009, as the large runoff in stocks in the first half of this year leads to a better alignment of inventories to final sales. The projected slowing in the pace of inventory liquidation contributes importantly to the bottoming out and the small upturn in real GDP that occurs over the second half of this year. Firms are expected to begin accumulating inventories in 2010, providing a small boost to real GDP growth.

Government spending. We continue to assume that the grants provided in the fiscal stimulus package will allow state and local governments to raise spending at a moderate pace over the medium term despite weak revenues. Our projection calls for state and local spending to increase at an average annual rate of roughly 2 percent in the second half of this year and in 2010. At the federal level, we expect the rate of increase in real purchases to slow markedly, from 8¼ percent in 2008 to 5½ percent in 2009 and 2 percent in 2010, led by a deceleration in defense purchases.

Net exports. After collapsing in the fourth and first quarters, real exports are projected to stabilize by the end of this year and then rise modestly in 2010—a trajectory largely shaped by the expected evolution of foreign demand. Real imports follow a similar contour in response to the pattern of domestic activity, although both the decline in the level of imports this year and the expected rise next year are more pronounced than the projected movements in exports. As a result, net exports contribute ¼ percentage point to the change in real GDP this year and subtract about ½ percentage point in 2010. *(The International Developments section provides more detail on the outlook for the external sector.)*

Aggregate Supply, the Labor Market, and Inflation

In this forecast, we have made no revisions to our estimates of structural productivity and potential output growth. We assume that structural productivity will increase 1½ percent in 2009 and 2010 and that potential GDP will rise 2 percent in both years. By the end of next year, the projected level of output is below potential by 6½ percent; in the March Greenbook, the projected shortfall was 8¼ percent.

Productivity and the labor market. Productivity moved lower in the fourth and first quarters, as firms' workforce adjustments lagged the rapid deterioration in demand.

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

Measure	1974-95	1996-2000	2001-06	2007	2008	2009	2010
Structural labor productivity	**1.5**	**2.5**	**2.6**	**2.1**	**1.9**	**1.6**	**1.6**
Previous Greenbook	1.5	2.5	2.6	2.1	1.9	1.6	1.5
Contributions[1]							
Capital deepening	.7	1.4	.7	.6	.4	-.3	-.2
Previous Greenbook	.7	1.4	.7	.6	.4	-.3	-.3
Multifactor productivity	.5	.7	1.6	1.2	1.3	1.6	1.6
Previous Greenbook	.5	.7	1.6	1.2	1.3	1.7	1.7
Labor composition	.3	.3	.3	.2	.2	.2	.1
MEMO							
Potential GDP	3.0	3.4	2.6	2.5	2.5	2.0	2.0
Previous Greenbook	3.0	3.4	2.6	2.5	2.5	2.0	2.0

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

1. Percentage points.

The Outlook for the Labor Market
(Percent change, Q4 to Q4, except as noted)

Measure	2007	2008	2009	2010
Output per hour, nonfarm business	2.6	2.2	1.3	2.1
Previous Greenbook	2.6	2.1	.9	2.0
Nonfarm private payroll employment	.8	-2.1	-3.7	1.2
Previous Greenbook	.8	-2.1	-3.8	-.1
Household survey employment	.4	-1.5	-2.7	1.0
Previous Greenbook	.4	-1.5	-2.6	.4
Labor force participation rate[1]	66.0	65.9	65.3	65.1
Previous Greenbook	66.0	65.9	65.3	65.1
Civilian unemployment rate[1]	4.8	6.9	9.3	9.1
Previous Greenbook	4.8	6.9	9.2	9.5
MEMO				
GDP gap[2]	-.4	-3.6	-7.0	-6.4
Previous Greenbook	-.4	-3.7	-7.7	-8.2

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.

We expect aggressive job cutting this quarter to bring labor input back in accord with firms' reduced production levels and result in a significant increase in productivity. Over the remainder of the medium term, productivity is expected to increase at roughly its structural rate, with firms adjusting their workforces in line with the expected gradual increase in aggregate demand. As a result, the stabilization of real GDP in the second half of this year produces a marked slowing in the pace of employment losses, and next year's increase in economic activity leads firms to begin hiring again. Specifically, after a sizable decline in the second quarter, private payroll employment is expected to fall only 40,000 per month in the second half of the year and then rise about 100,000 per month in 2010. Reflecting the brighter economic outlook, employment changes beyond the near term are higher, on average, than we had written down in the March Greenbook and are sufficient next year to begin to reduce the unemployment rate.

Wages and prices. Given the stronger outlook for economic activity, the higher path for oil prices, and the weaker dollar, we are projecting somewhat less deceleration in core consumer prices than in the March Greenbook. Nevertheless, low levels of resource utilization, reduced cost pressures from earlier declines in the prices of oil and other key commodities, and a gradual decline in inflation expectations are expected to push core PCE inflation appreciably lower over the projection period. The projected decline in inflation over the forecast period is limited by our judgment that inflation expectations will respond only slowly to these disinflationary forces. In addition, we believe that the large-scale disruption to existing employment relationships that result from this recession's very high rates of permanent job loss will raise the level of frictional unemployment (and thus the "effective NAIRU") for a time. In all, we expect core inflation to slow from 1.9 percent in 2008 to 1.2 percent in 2009 and 0.7 percent in 2010. Reflecting falling energy prices, headline PCE prices are projected to rise ¾ percent in 2009—somewhat slower than core prices. In 2010, energy prices turn back up, and the projected 1 percent increase in total PCE prices is a bit above the increase in core prices.

As in the March Greenbook, we expect falling price inflation and weak labor markets to combine to slow the rise in labor compensation over the medium term, although we have attenuated the projected decline in wage inflation to account for our previously noted assumption of an increase in the level of frictional unemployment. We project that compensation per hour in the nonfarm business sector will rise 2¼ percent in 2009 and 1¼ percent in 2010. Similarly, the change in the employment cost index is projected to slow from 1¾ percent in 2009 to 1¼ percent in 2010.

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

Measure	2007	2008	2009	2010
PCE chain-weighted price index	3.5	1.9	.7	1.0
Previous Greenbook	3.5	1.9	.4	.8
Food and beverages	4.5	6.3	1.7	1.2
Previous Greenbook	4.5	6.3	1.9	1.2
Energy	19.1	-8.5	-8.9	6.1
Previous Greenbook	19.1	-8.6	-11.3	4.5
Excluding food and energy	2.2	1.9	1.2	.7
Previous Greenbook	2.2	1.9	1.0	.5
Consumer price index	4.0	1.5	.4	1.3
Previous Greenbook	4.0	1.5	.3	1.1
Excluding food and energy	2.3	2.0	1.3	.9
Previous Greenbook	2.3	2.0	1.3	.7
GDP chain-weighted price index	2.6	2.0	1.6	.9
Previous Greenbook	2.6	2.0	1.6	.8
ECI for compensation of private industry workers[1]	3.0	2.4	1.8	1.3
Previous Greenbook	3.0	2.4	1.8	1.1
Compensation per hour, nonfarm business sector	3.6	4.1	2.3	1.3
Previous Greenbook	3.6	4.1	2.2	1.1
Prices of core goods imports[2]	3.4	3.5	-3.3	1.1
Previous Greenbook	3.4	3.6	-4.2	1.1

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

The Long-Term Outlook

We have extended the staff forecast to 2013 using the FRB/US model, which was adjusted to incorporate staff assessments of long-run potential output growth, fiscal policy, and foreign economic conditions. The contour of the long-run outlook depends on the following key assumptions:

- Monetary policy aims to stabilize PCE inflation at 2 percent in the long run, consistent with the longer-term inflation projections provided by FOMC participants in January. We have made no provision for further nontraditional policy actions in the construction of this extension beyond those that have already been announced.

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

Measure	2008	2009	2010	2011	2012	2013
Real GDP	-0.8	-1.6	2.6	4.8	5.4	5.2
Civilian unemployment rate[1]	6.9	9.3	9.1	7.7	5.9	4.7
PCE prices, total	1.9	0.7	1.0	0.8	0.9	1.1
Core PCE prices	1.9	1.2	0.7	0.7	0.8	1.1
Federal funds rate[1]	0.5	0.1	0.1	0.1	0.1	2.0

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

- Federal Reserve holdings of long-term Treasury securities, agency debt, and agency MBS are allowed to run off gradually as the securities mature and mortgages in MBS pools are refinanced. This strategy causes term premiums on Treasury bonds to gradually move back up to their historical averages after 2010.
- Risk premiums on corporate bonds, mortgages, and corporate equity continue to fall back toward historically more normal levels beyond 2010.
- The fiscal stimulus package continues to boost government spending beyond 2010, reflecting the staff's assumptions about the rate at which state and local governments respond to increased grants. However, the level of government spending from this source gradually fades and is small by 2013.
- Government budget deficits narrow after 2010. This improvement mostly reflects the effects of the economic recovery on tax receipts and transfer payments.
- Beyond 2010, foreign real GDP expands 5 percent per year, on average, as the economic recovery picks up speed abroad. The dollar is assumed to depreciate about 2¾ percent per year in real terms. Nominal WTI crude oil prices rise gradually from recent levels to a bit more than $70 per barrel by the end of 2013, consistent with futures prices. Under these assumptions, movements in prices of energy and imports have only minor implications for domestic inflation.
- The NAIRU remains flat at 4¾ percent, and potential GDP expands 2½ percent per year, on average, over the 2011-13 period.

The unemployment rate enters 2011 at a very high level, and inflation is well below the assumed long-run target. Under the assumptions used to construct the baseline extension, the federal funds rate remains at the effective lower bound through 2012. The lingering effects of financial upheaval continue to fade after 2010, and the recovery in residential construction gains momentum; coupled with stimulative monetary policy, these factors propel real GDP to increases of about 5 percent per year, on average, from 2011 through 2013. With actual output increasing faster than its potential rate by a wide margin, the unemployment rate declines steadily over this period and reaches the NAIRU in 2013. Core PCE inflation moves up modestly after 2011 as economic activity recovers and long-run inflation expectations are assumed to remain relatively well anchored.

Financial Flows and Conditions

We expect domestic nonfinancial debt to rise 4¼ percent in the current quarter after increasing by a similar amount in the first quarter. We forecast that the level of nonfederal debt will decrease in the second quarter as households pay down debt, on net, and as borrowing by nonfinancial businesses remains weak. We project that borrowing by households and nonfinancial businesses will remain extremely light by historical standards through 2010, but that federal debt will continue to expand at a rapid pace over this period.

We estimate that household debt contracted at an annual rate of about 2¼ percent last quarter and expect a 1¾ percent rate of decline this quarter. Mortgage borrowing and consumer credit have been sharply curtailed in response to falling home prices, very weak household spending, and tight terms and standards for bank loans. With these conditions expected to persist for some time, we expect household debt to contract in 2009 as a whole and to rise only slightly in 2010.

Nonfinancial business debt is expected to be about flat this quarter, after having expanded at an annual rate of 2¼ percent last quarter. The projected slowdown in borrowing reflects in large part a drop in net bond issuance, which surged last quarter as a number of investment-grade firms chose to lock in longer-term financing and pay down some bank loans and commercial paper. Although we expect the pace of business borrowing to pick up somewhat in the third quarter, it is anticipated to remain sluggish through the end of the forecast period, reflecting weak investment spending, borrowing costs that remain relatively high, and tight terms and standards for bank loans.

Federal government debt is expected to climb 24 percent in 2009 and 16 percent in 2010 because of cyclical shortfalls in tax receipts, the large fiscal stimulus package, and outlays by the Treasury associated with the GSEs and the TARP. State and local government debt increased at an annual rate of 4½ percent in the first quarter as retirements decreased and strains in the municipal bond market eased somewhat.
We project that state and local government borrowing will moderate this quarter and stay

sluggish for the remainder of 2009 and in 2010, reflecting subdued capital spending and a weak fiscal outlook for this sector.

M2 expanded at an average annual rate of about 13 percent during the first quarter of 2009, about the same as in the fourth quarter of last year. M2 is expected to decelerate over the rest of this year, although the 3½ percent increase for the year as a whole is sizable given the lack of growth in nominal GDP. In 2010, M2 is forecast to increase less rapidly than nominal GDP, as demand for the safety of M2 assets abates as a result of improvements in economic and financial market conditions.

Alternative Scenarios

In this section, we illustrate risks to the staff forecast using simulations of the FRB/US model. In the first scenario, the recent easing in financial conditions and scattered signs of stabilization in demand turn out to be short-lived, and both financial stress and the economic downturn intensify rather than abate. By contrast, the second scenario considers the consequences of a rapid recovery beginning later this year that is more typical of the postwar experience. The third scenario considers the possibility that this recession will have persistent adverse effects on labor market efficiency. The final two scenarios examine opposing inflation risks—that long-run inflation expectations will remain more solidly anchored than we anticipate, or, alternatively, that we have underestimated deflationary forces. In each of these scenarios, we assume that the federal funds rate follows the prescriptions of a version of the Taylor rule, subject to an effective lower bound of 12½ basis points.[4] Furthermore, these simulations extend the baseline assumption of a passive runoff of the assets acquired in the course of this year's large-scale asset purchase program.

False dawn. With employment and production continuing to contract and the financial system remaining quite fragile, the hopeful signs provided by some recent financial and spending indicators could reverse themselves quickly. In this scenario, such a reversal comes to pass. The stock market falls 25 percent below baseline by midyear. Corporate bond yields and mortgage rates increase 50 basis points over the next several months and banks tighten lending terms and standards sharply. Consumer confidence and business sentiment falter rather than gradually improve as in the baseline. In response, household and business spending continues to contract markedly through the end of the year.

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[4] The rule is $i_t = \rho_t + \pi_t + 0.5(\pi_t - \pi^*) + 1.0y_t$, where i_t is the nominal funds rate, ρ_t is a weighted moving average of past values of the real federal funds rate, π_t is the four-quarter rate of core PCE inflation, π^* is the inflation target (assumed to equal 2 percent), and y_t is the output gap.

Alternative Scenarios

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

Measure and scenario	2009		2010	2011	2012-13
	H1	H2			
Real GDP					
Extended Greenbook baseline	-3.9	.8	2.6	4.8	5.3
False dawn	-5.8	-3.5	1.5	4.6	5.3
Typical recovery	-3.9	6.2	3.6	4.6	4.2
Labor market damage	-3.9	.1	2.2	4.8	5.0
Anchored inflation expectations	-3.9	.8	2.7	5.0	5.4
Deflation	-3.9	.8	2.5	4.6	4.9
Unemployment rate[1]					
Extended Greenbook baseline	9.0	9.3	9.1	7.7	4.7
False dawn	9.2	10.1	10.5	9.1	5.7
Typical recovery	9.0	8.7	7.9	6.6	4.5
Labor market damage	9.2	9.9	9.9	8.5	5.8
Anchored inflation expectations	9.0	9.3	9.1	7.6	4.5
Deflation	9.0	9.3	9.1	7.8	5.0
Core PCE inflation					
Extended Greenbook baseline	1.7	.8	.7	.7	.9
False dawn	1.7	.7	.4	.4	.5
Typical recovery	1.7	.8	.9	.9	1.1
Labor market damage	1.8	.8	.7	.8	1.0
Anchored inflation expectations	1.7	.9	.9	1.1	1.4
Deflation	1.1	-.4	-.4	-.6	-.3
Federal funds rate[1]					
Extended Greenbook baseline	.1	.1	.1	.1	2.0
False dawn	.1	.1	.1	.1	.1
Typical recovery	.1	.1	.1	.1	2.2
Labor market damage	.1	.1	.1	.1	2.0
Anchored inflation expectations	.1	.1	.1	.1	3.0
Deflation	.1	.1	.1	.1	.2

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

Economic activity abroad also falters, depressing demand for U.S. exports. Buffeted by these shocks, real GDP contracts at an annual rate of 5¾ percent in the first half of this year and 3½ percent in the second half. In 2010, the economic recovery begins, but at a pace noticeably below its potential. The unemployment rate peaks at 10½ percent next year, and core PCE inflation edges below ½ percent. Beyond 2010, the recovery becomes more firmly established as financial stress gradually abates, credit availability improves, and households and firms become more optimistic about future prospects. Nonetheless, the unemployment rate is still more than 1 percentage point above the NAIRU at the end of 2013, and in response to so much persistent slack, inflation stays close to ½ percent. Weak real activity and low inflation in turn keep the federal funds rate close to zero through the end of 2013.

Typical recovery. Despite the many factors that we currently anticipate will persistently weigh on economic activity, financial markets and spending indicators may continue to surprise us to the upside. In this scenario, a robust recovery in demand starts this year that returns real output to its pre-recession peak at a rate comparable to that seen in previous postwar episodes. Accompanying and supporting the stronger rebound in real activity are more-pronounced declines in risk spreads on private securities and mortgages than assumed in the Greenbook baseline; credit availability also improves more rapidly. All told, real GDP expands at an annual rate of 6¼ percent in the second half of this year and increases 3½ percent in 2010; beyond 2010, aggregate output expands at an average rate of close to 4 percent for several years. This rebound puts unemployment on a pronounced downward trajectory: The unemployment rate reaches 8 percent by the end of 2010, and then continues to move steadily down towards the NAIRU. With less slack in this scenario, inflation is a little higher than in the baseline and the federal funds rate begins moving noticeably above zero in late 2012, about one year earlier than in the baseline.

Labor market damage. The unusual depth and breadth of the downturn may impair labor market efficiency, perhaps through unusually large intersectoral adjustments or the adverse effects of prolonged unemployment on workers' skills. In this scenario, we assume that such factors have raised the NAIRU by about ½ percentage point over the past two years, to about 5¼ percent today. We further assume that the NAIRU will rise to 6 percent by the end of 2009 and then remain at this level through the middle of 2012 before starting to drift back down. Because these unfavorable supply-side developments have adverse implications for household income and corporate profits, consumption and investment are weaker than in the baseline. As a result, real GDP is roughly flat in the second half of this year and rises only 2 percent next year, and the unemployment rate climbs to 10 percent by the end of this year. Nevertheless, the declines in potential output relative to baseline are even more pronounced, and so inflationary pressures are somewhat greater than in the staff forecast.

Anchored inflation expectations. In the baseline forecast, core inflation remains at ¾ percent through 2011 and increases only slowly thereafter, as the impetus to prices from an improving economy is roughly offset by our projection that long-term inflation expectations will slowly drift down in light of persistently low inflation and high unemployment. In this scenario, long-run inflation expectations remain near their current level of about 2 percent, which is more than ½ percentage point above the projected baseline level in 2013. Actual inflation thus proves more resistant to deteriorating economic conditions in the first few years of the scenario and turns upward earlier than in the baseline. By late this year, core inflation dips below 1 percent later this year and in 2010, and the federal funds rate remains near zero until late 2012. The implied reduction in real interest rates provides a small boost to real activity.

Deflation. Although inflation falls substantially in the staff projection, we may have understated the extent to which pronounced economic weakness will force firms, domestic and foreign, to continue to reduce prices in an increasingly competitive environment. In turn, persistently lower prices might then become built into inflation expectations more quickly than we currently assume in the baseline. FRB/US and many of our other price models in fact point to a more pronounced decline in inflation than we are projecting and, in this scenario, we allow inflation to follow a path more consistent with these models. Late this year, core inflation falls to negative ½ percent and remains below zero through 2013. With the nominal federal funds rate already near zero, the greater disinflation implies higher real interest rates. At the same time, the increasing real burden of nominal debt obligations boosts corporate bond spreads. Over time, these factors work to restrain aggregate spending more than in the staff forecast, resulting in a somewhat slower recovery in real activity after 2010.

Assessment of Forecast Uncertainty

In response to the events of the past two years, we have reassessed our estimates of forecast uncertainty. We are no longer basing our uncertainty estimates on the relative tranquility of the "Great Moderation" conditions that have prevailed during the past 20 years or so, but instead are deriving them using information from a longer and more volatile sample period. These changes result in noticeably wider confidence intervals than those reported in recent Greenbooks.[5]

[5] For more information, see Robert Tetlow and Peter Tulip (2009), "Changes in Macroeconomic Uncertainty," memo to the FOMC, April 20.

Despite the widening in our estimates of *average* forecast uncertainty, we still see the risks associated with the staff outlook at this juncture as elevated relative to historical experience. The disruptions to credit market functioning and to the stability of many financial institutions have been extraordinary, and the potential for conditions either to deteriorate markedly or to improve faster than expected is considerable. These developments, combined with unprecedented policy responses, limit the applicability of the historical analyses and models used to guide our projections, and so we see the range of plausible outcomes for real GDP and unemployment as being wider than usual. In addition, we still see the risks as being skewed to the downside.

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

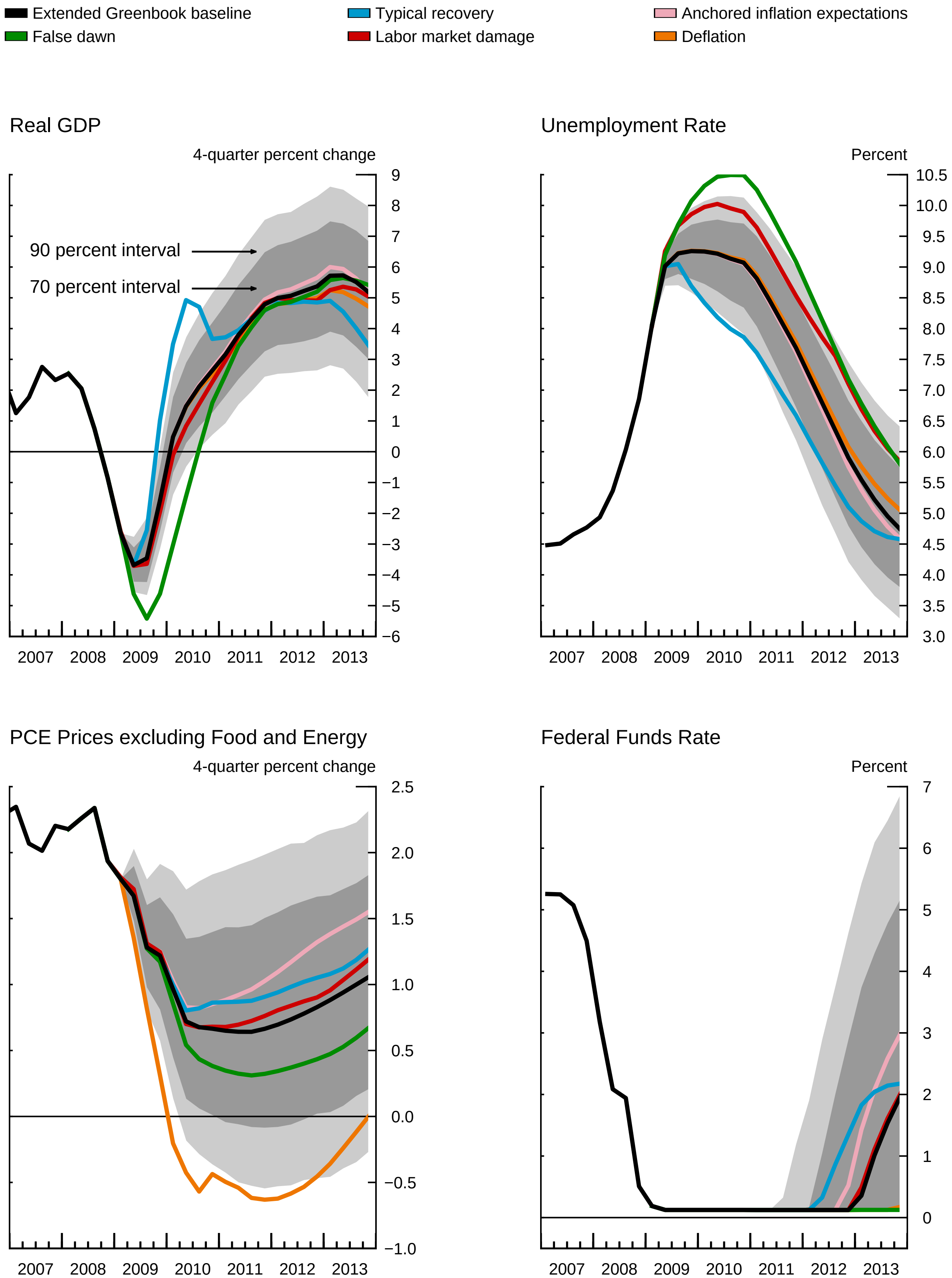
Selected Greenbook Projections and 70 Percent Confidence Intervals Derived from Historical Greenbook Forecast Errors and FRB/US Simulations

Measure	2009	2010	2011	2012	2013
Real GDP (percent change, Q4 to Q4)					
Projection	-1.6	2.6	4.8	5.4	5.2
Confidence interval					
Greenbook forecast errors	-2.8– -.3	1.0–4.3	. . .	. . .	. . .
FRB/US stochastic simulations	-2.6– -.5	1.3–4.2	3.3–6.5	3.7–7.2	3.0–6.8
Civilian unemployment rate (percent, Q4)					
Projection	9.3	9.1	7.7	5.9	4.7
Confidence interval					
Greenbook forecast errors	8.8–9.8	8.3–9.8	. . .	. . .	. . .
FRB/US stochastic simulations	8.8–9.7	8.3–9.7	6.7–8.5	4.8–6.8	3.8–5.7
PCE prices, total (percent change, Q4 to Q4)					
Projection	0.7	1.0	0.8	0.9	1.1
Confidence interval					
Greenbook forecast errors	.0–1.4	-.2–2.2	. . .	. . .	. . .
FRB/US stochastic simulations	.2–1.3	.2–1.9	-.1–1.8	.0–1.9	.2–2.0
PCE prices excluding food and energy (percent change, Q4 to Q4)					
Projection	1.2	0.7	0.7	0.8	1.1
Confidence interval					
Greenbook forecast errors	.8–1.7	-.1–1.4	. . .	. . .	. . .
FRB/US stochastic simulations	.8–1.7	.0–1.4	-.1–1.5	.0–1.7	.2–1.8
Federal funds rate (percent, Q4)					
Projection	0.1	0.1	0.1	0.1	2.0
Confidence interval					
FRB/US stochastic simulations	.1–.1	.1–.1	.1–.1	.1–2.9	.1–5.2

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.

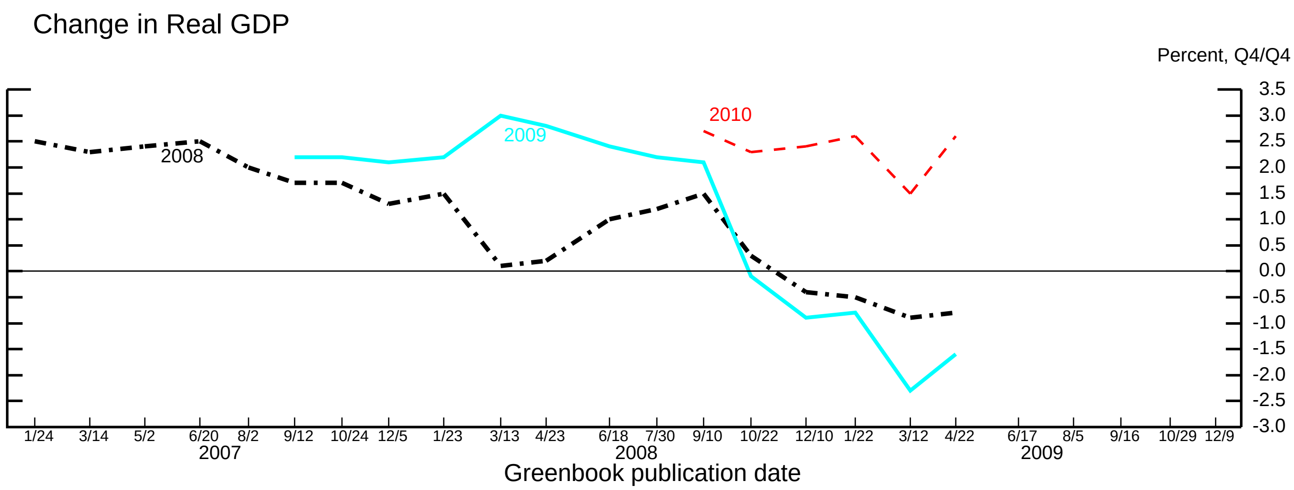
Forecast Confidence Intervals and Alternative Scenarios

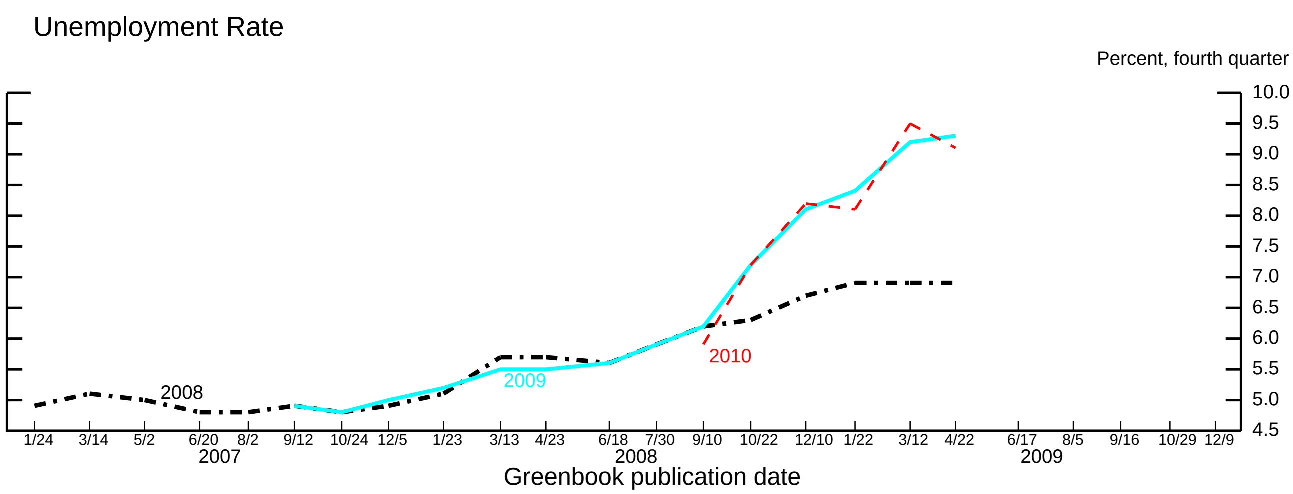
Confidence Intervals Based on FRB/US Stochastic Simulations

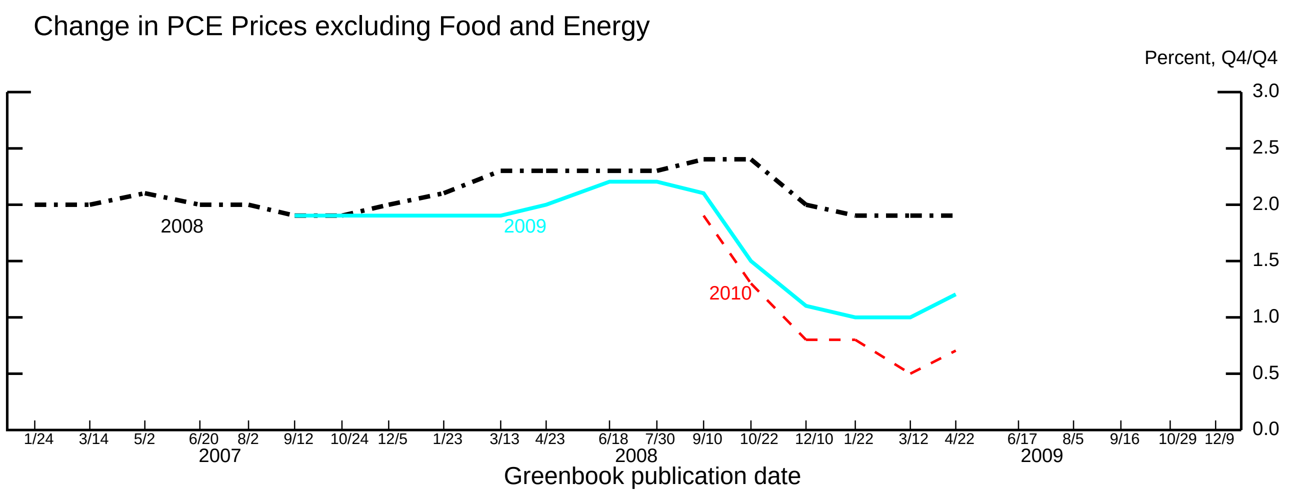


Class II FOMC - Restricted (FR)

Evolution of the Staff Forecast







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

	Nominal GDP		Real GDP		PCE price index		Core PCE price index		Unemployment rate[1]	
Interval	3/12/09	4/22/09	3/12/09	4/22/09	3/12/09	4/22/09	3/12/09	4/22/09	3/12/09	4/22/09
Quarterly										
2008:Q1	3.5	3.5	.9	.9	3.6	3.6	2.3	2.3	4.9	4.9
Q2	4.1	4.1	2.8	2.8	4.3	4.3	2.2	2.2	5.4	5.4
Q3	3.4	3.4	-.5	-.5	5.0	5.0	2.4	2.4	6.0	6.0
Q4	-6.3	-5.8	-6.7	-6.3	-5.0	-4.9	.8	.9	6.9	6.9
2009:Q1	-3.3	-3.1	-6.5	-6.3	-1.4	-.9	.9	1.7	8.0	8.1
Q2	-1.1	-1.0	-2.0	-1.5	1.0	.8	1.4	1.7	8.7	9.0
Q3	.6	1.9	-.5	.4	1.1	1.6	.9	.9	9.0	9.2
Q4	.8	2.3	-.1	1.2	1.0	1.4	.7	.7	9.2	9.3
2010:Q1	1.6	2.9	.7	1.9	.9	1.2	.6	.7	9.4	9.3
Q2	2.2	3.5	1.4	2.5	.8	1.1	.5	.7	9.5	9.2
Q3	2.6	3.9	1.9	3.0	.7	1.0	.5	.7	9.5	9.1
Q4	2.8	4.1	2.1	3.3	.7	.8	.4	.6	9.5	9.1
Two-quarter[2]										
2008:Q2	3.8	3.8	1.8	1.8	3.9	3.9	2.2	2.2	.6	.6
Q4	-1.6	-1.3	-3.6	-3.5	-.1	.0	1.6	1.7	1.5	1.5
2009:Q2	-2.2	-2.0	-4.2	-3.9	-.2	-.1	1.2	1.7	1.8	2.1
Q4	.7	2.1	-.3	.8	1.0	1.5	.8	.8	.5	.3
2010:Q2	1.9	3.2	1.1	2.2	.8	1.1	.5	.7	.3	-.1
Q4	2.7	4.0	2.0	3.1	.7	.9	.4	.6	.0	-.1
Four-quarter[3]										
2007:Q4	4.9	4.9	2.3	2.3	3.5	3.5	2.2	2.2	.4	.4
2008:Q4	1.1	1.2	-.9	-.8	1.9	1.9	1.9	1.9	2.1	2.1
2009:Q4	-.8	.0	-2.3	-1.6	.4	.7	1.0	1.2	2.3	2.4
2010:Q4	2.3	3.6	1.5	2.6	.8	1.0	.5	.7	.3	-.2
Annual										
2007	4.8	4.8	2.0	2.0	2.6	2.6	2.2	2.2	4.6	4.6
2008	3.3	3.3	1.1	1.1	3.3	3.3	2.2	2.2	5.8	5.8
2009	-1.5	-1.0	-3.2	-2.8	-.1	.1	1.2	1.5	8.7	8.9
2010	1.5	2.7	.6	1.7	.9	1.2	.7	.8	9.5	9.2

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

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

Item	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2008[1]	2009[1]	2010[1]
Real GDP	.9	2.8	-.5	-6.3	-6.3	-1.5	.4	1.2	1.9	2.5	3.0	3.3	-.8	-1.6	2.6
Previous Greenbook	.9	2.8	-.5	-6.7	-6.5	-2.0	-.5	-.1	.7	1.4	1.9	2.1	-.9	-2.3	1.5
Final sales	.9	4.4	-1.3	-6.2	-4.1	-1.4	-.6	-.5	.7	3.0	3.0	2.9	-.7	-1.7	2.4
Previous Greenbook	.9	4.4	-1.3	-6.5	-4.3	-2.5	-1.9	-1.2	-.3	1.9	2.1	1.9	-.7	-2.5	1.4
Priv. dom. final purch.	-.3	.7	-4.1	-7.5	-5.0	-4.0	-1.8	-.5	1.3	2.8	3.6	4.3	-2.8	-2.9	3.0
Previous Greenbook	-.3	.7	-4.1	-7.5	-5.3	-4.3	-3.0	-1.2	.1	1.7	2.4	2.9	-2.8	-3.5	1.8
Personal cons. expend.	.9	1.2	-3.8	-4.3	1.1	-.5	.4	1.2	1.9	2.5	3.0	3.3	-1.5	.5	2.7
Previous Greenbook	.9	1.2	-3.8	-4.3	.4	.0	.0	1.2	1.3	1.8	2.1	2.4	-1.5	.4	1.9
Durables	-4.3	-2.8	-14.8	-22.1	6.0	-6.0	.8	3.9	6.9	7.6	6.5	6.1	-11.4	1.1	6.8
Nondurables	-.4	3.9	-7.1	-9.4	1.1	-.1	.3	1.1	1.8	2.2	2.7	3.0	-3.4	.6	2.4
Services	2.4	.7	-.1	1.5	.4	.2	.3	.8	1.2	1.8	2.6	3.0	1.1	.4	2.2
Residential investment	-25.1	-13.3	-16.0	-22.8	-38.2	-27.4	-1.7	.0	8.2	13.8	11.3	10.7	-19.4	-18.5	11.0
Previous Greenbook	-25.1	-13.3	-16.0	-23.4	-41.2	-34.3	-13.4	-5.5	2.5	9.0	8.7	6.8	-19.6	-25.0	6.7
Business fixed invest.	2.4	2.5	-1.7	-21.7	-30.1	-20.8	-17.4	-13.6	-5.3	2.1	6.8	10.8	-5.2	-20.7	3.4
Previous Greenbook	2.4	2.5	-1.7	-21.6	-27.3	-23.4	-21.7	-17.8	-11.1	-1.6	3.2	6.6	-5.2	-22.6	-.9
Equipment & software	-.6	-5.0	-7.5	-28.1	-32.4	-13.6	-12.5	-8.9	-1.1	9.2	14.8	19.1	-11.0	-17.4	10.2
Previous Greenbook	-.6	-5.0	-7.5	-28.1	-26.6	-17.9	-17.4	-13.6	-8.3	5.2	11.1	14.3	-11.0	-19.0	5.2
Nonres. structures	8.6	18.5	9.7	-9.4	-26.4	-31.6	-25.4	-21.5	-13.0	-10.5	-7.9	-5.4	6.3	-26.3	-9.2
Previous Greenbook	8.6	18.5	9.7	-9.0	-28.4	-31.9	-28.8	-24.9	-16.1	-13.4	-11.0	-8.1	6.4	-28.5	-12.2
Net exports[2]	-462	-381	-353	-364	-333	-314	-325	-351	-383	-378	-383	-407	-390	-331	-388
Previous Greenbook[2]	-462	-381	-353	-373	-370	-369	-384	-411	-438	-436	-442	-464	-392	-383	-445
Exports	5.1	12.3	3.0	-23.6	-31.4	-3.4	-1.5	.2	1.2	2.1	2.7	3.2	-1.8	-10.1	2.3
Imports	-.8	-7.3	-3.5	-17.5	-31.1	-7.2	1.4	6.9	8.9	.3	3.3	8.2	-7.5	-8.8	5.1
Gov't. cons. & invest.	1.9	3.9	5.8	1.3	-5.3	6.7	6.1	3.7	3.1	2.4	1.3	.9	3.2	2.7	1.9
Previous Greenbook	1.9	3.9	5.8	1.2	-.2	5.5	5.5	3.1	2.6	2.1	1.5	1.2	3.2	3.4	1.8
Federal	5.8	6.6	13.8	7.0	-9.4	14.8	12.5	5.7	5.3	3.2	-.2	-.4	8.2	5.5	2.0
Defense	7.3	7.3	18.0	3.4	-13.8	19.8	15.5	3.9	1.9	1.8	.6	.2	8.9	5.5	1.1
Nondefense	2.9	5.0	5.1	15.3	.7	4.9	6.5	9.6	12.9	6.0	-1.7	-1.7	6.9	5.3	3.7
State & local	-.3	2.5	1.3	-2.0	-2.6	2.0	2.2	2.4	1.7	2.0	2.2	1.8	.4	1.0	1.9
Change in bus. inventories[2]	-10	-51	-30	-26	-93	-97	-66	-16	18	4	3	14	-29	-68	10
Previous Greenbook[2]	-10	-51	-30	-31	-101	-87	-46	-16	13	0	-6	0	-30	-62	2
Nonfarm[2]	-18	-55	-33	-31	-96	-99	-70	-19	15	1	-1	11	-34	-71	6
Farm[2]	6	2	2	4	3	3	3	3	3	3	3	3	4	3	3

1. Change from fourth quarter of previous year to fourth quarter of year indicated.
2. Billions of chained (2000) dollars.

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

Item	2002	2003	2004	2005	2006	2007	2008	2009	2010
Real GDP	1.9	3.7	3.1	2.7	2.4	2.3	-.8	-1.6	2.6
Previous Greenbook	1.9	3.7	3.1	2.7	2.4	2.3	-.9	-2.3	1.5
Final sales	.8	3.7	2.8	2.7	2.8	2.5	-.7	-1.7	2.4
Previous Greenbook	.8	3.7	2.8	2.7	2.8	2.5	-.7	-2.5	1.4
Priv. dom. final purch.	1.1	4.1	4.3	3.1	2.3	1.4	-2.8	-2.9	3.0
Previous Greenbook	1.1	4.1	4.3	3.1	2.3	1.4	-2.8	-3.5	1.8
Personal cons. expend.	1.9	3.4	3.7	2.6	3.2	2.2	-1.5	.5	2.7
Previous Greenbook	1.9	3.4	3.7	2.6	3.2	2.2	-1.5	.4	1.9
Durables	1.2	8.3	5.6	1.2	6.9	4.2	-11.4	1.1	6.8
Nondurables	2.1	3.9	3.5	3.6	3.2	1.7	-3.4	.6	2.4
Services	1.9	2.2	3.3	2.4	2.6	2.1	1.1	.4	2.2
Residential investment	7.0	11.7	6.7	5.4	-15.5	-19.0	-19.4	-18.5	11.0
Previous Greenbook	7.0	11.7	6.7	5.4	-15.5	-19.0	-19.6	-25.0	6.7
Business fixed invest.	-6.5	4.9	7.5	4.9	6.5	6.4	-5.2	-20.7	3.4
Previous Greenbook	-6.5	4.9	7.5	4.9	6.5	6.4	-5.2	-22.6	-.9
Equipment & software	-3.4	6.6	9.4	7.0	4.2	2.8	-11.0	-17.4	10.2
Previous Greenbook	-3.4	6.6	9.4	7.0	4.2	2.8	-11.0	-19.0	5.2
Nonres. structures	-14.9	.2	2.3	-.5	12.8	14.5	6.3	-26.3	-9.2
Previous Greenbook	-14.9	.2	2.3	-.5	12.8	14.5	6.4	-28.5	-12.2
Net exports[1]	-471	-519	-594	-617	-616	-547	-390	-331	-388
Previous Greenbook[1]	-471	-519	-594	-617	-616	-547	-392	-383	-445
Exports	3.8	5.8	7.4	7.0	10.1	8.9	-1.8	-10.1	2.3
Imports	9.7	4.8	11.5	4.8	3.8	1.1	-7.5	-8.8	5.1
Gov't. cons. & invest.	4.0	1.7	.7	.6	2.1	2.4	3.2	2.7	1.9
Previous Greenbook	4.0	1.7	.7	.6	2.1	2.4	3.2	3.4	1.8
Federal	7.8	5.5	2.4	1.0	2.9	2.3	8.2	5.5	2.0
Defense	8.4	7.5	2.5	.8	4.1	2.7	8.9	5.5	1.1
Nondefense	6.8	1.9	2.3	1.4	.5	1.5	6.9	5.3	3.7
State & local	2.1	-.4	-.4	.3	1.6	2.4	.4	1.0	1.9
Change in bus. inventories[1]	12	14	54	39	42	-2	-29	-68	10
Previous Greenbook[1]	12	14	54	39	42	-2	-30	-62	2
Nonfarm[1]	15	14	48	39	46	-4	-34	-71	6
Farm[1]	-2	0	6	0	-3	1	4	3	3

1. Billions of chained (2000) dollars.

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

Item	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2008[1]	2009[1]	2010[1]
Real GDP	.9	2.8	-.5	-6.3	-6.3	-1.5	.4	1.2	1.9	2.5	3.0	3.3	-.8	-1.6	2.6
Previous Greenbook	.9	2.8	-.5	-6.7	-6.5	-2.0	-.5	-.1	.7	1.4	1.9	2.1	-.9	-2.3	1.5
Final sales	.9	4.3	-1.4	-6.2	-4.0	-1.4	-.6	-.5	.7	2.9	3.0	2.9	-.7	-1.7	2.4
Previous Greenbook	.9	4.3	-1.4	-6.6	-4.2	-2.5	-1.9	-1.2	-.3	1.9	2.1	1.9	-.7	-2.5	1.4
Priv. dom. final purch.	-.3	.6	-3.5	-6.4	-4.1	-3.4	-1.5	-.4	1.1	2.2	2.9	3.5	-2.4	-2.4	2.4
Previous Greenbook	-.3	.6	-3.5	-6.4	-4.4	-3.6	-2.5	-1.0	.1	1.4	2.0	2.4	-2.4	-2.9	1.4
Personal cons. expend.	.6	.9	-2.8	-3.0	.9	-.3	.3	.8	1.4	1.7	2.1	2.3	-1.1	.4	1.9
Previous Greenbook	.6	.9	-2.8	-3.0	.4	.0	.0	.8	1.0	1.3	1.5	1.7	-1.1	.3	1.4
Durables	-.3	-.2	-1.2	-1.7	.4	-.4	.1	.3	.4	.5	.4	.4	-.9	.1	.4
Nondurables	-.1	.8	-1.6	-2.0	.2	.0	.1	.2	.4	.4	.5	.6	-.7	.1	.5
Services	1.0	.3	.0	.7	.2	.1	.1	.4	.6	.8	1.1	1.3	.5	.2	1.0
Residential investment	-1.1	-.5	-.6	-.8	-1.4	-.8	.0	.0	.2	.3	.3	.3	-.8	-.6	.3
Previous Greenbook	-1.1	-.5	-.6	-.9	-1.5	-1.1	-.3	-.1	.1	.2	.2	.2	-.8	-.8	.2
Business fixed invest.	.3	.3	-.2	-2.6	-3.6	-2.2	-1.7	-1.3	-.5	.2	.5	.9	-.6	-2.2	.3
Previous Greenbook	.3	.3	-.2	-2.6	-3.2	-2.6	-2.2	-1.7	-1.0	-.1	.3	.5	-.6	-2.4	-.1
Equipment & software	.0	-.4	-.6	-2.2	-2.4	-.9	-.8	-.5	-.1	.5	.8	1.0	-.8	-1.1	.6
Previous Greenbook	.0	-.4	-.6	-2.2	-2.0	-1.2	-1.1	-.8	-.5	.3	.6	.7	-.8	-1.2	.3
Nonres. structures	.3	.6	.4	-.4	-1.2	-1.3	-1.0	-.7	-.4	-.3	-.2	-.1	.2	-1.0	-.3
Previous Greenbook	.3	.6	.4	-.4	-1.3	-1.4	-1.1	-.9	-.5	-.4	-.3	-.2	.2	-1.1	-.4
Net exports	.8	2.9	1.1	-.2	1.0	.6	-.4	-.9	-1.1	.2	-.2	-.8	1.1	.1	-.5
Previous Greenbook	.8	2.9	1.1	-.6	.1	.0	-.5	-.9	-.9	.0	-.2	-.7	1.0	-.3	-.4
Exports	.6	1.5	.4	-3.4	-4.4	-.4	-.2	.0	.1	.2	.3	.3	-.2	-1.2	.2
Imports	.1	1.4	.7	3.3	5.3	1.0	-.2	-.9	-1.2	.0	-.5	-1.1	1.3	1.3	-.7
Gov't. cons. & invest.	.4	.8	1.1	.3	-1.1	1.3	1.2	.8	.7	.5	.3	.2	.6	.5	.4
Previous Greenbook	.4	.8	1.1	.3	.0	1.1	1.1	.7	.6	.5	.3	.3	.6	.7	.4
Federal	.4	.5	1.0	.5	-.7	1.1	1.0	.5	.4	.3	.0	.0	.6	.4	.2
Defense	.3	.4	.9	.2	-.8	1.0	.8	.2	.1	.1	.0	.0	.4	.3	.1
Nondefense	.1	.1	.1	.3	.0	.1	.2	.2	.3	.2	.0	.0	.2	.1	.1
State & local	.0	.3	.2	-.3	-.3	.3	.3	.3	.2	.3	.3	.2	.0	.1	.3
Change in bus. inventories	.0	-1.5	.8	-.1	-2.2	-.1	1.0	1.7	1.1	-.5	-.1	.4	-.2	.1	.3
Previous Greenbook	.0	-1.5	.8	-.1	-2.2	.5	1.4	1.1	1.0	-.4	-.2	.2	-.2	.2	.1
Nonfarm	.2	-1.4	.8	-.2	-2.2	-.1	1.0	1.7	1.2	-.5	-.1	.4	-.1	.1	.3
Farm	-.2	-.1	.0	.1	.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	2008				2009				2010						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	2008[1]	2009[1]	2010[1]
GDP chain-wt. price index	2.6	1.1	3.9	.5	3.3	.5	1.5	1.1	1.0	1.0	.9	.8	2.0	1.6	.9
Previous Greenbook	2.6	1.1	3.9	.3	3.4	.9	1.1	.9	.8	.8	.7	.6	2.0	1.6	.8
PCE chain-wt. price index	3.6	4.3	5.0	-4.9	-.9	.8	1.6	1.4	1.2	1.1	1.0	.8	1.9	.7	1.0
Previous Greenbook	3.6	4.3	5.0	-5.0	-1.4	1.0	1.1	1.0	.9	.8	.7	.7	1.9	.4	.8
Energy	19.0	27.4	31.7	-65.0	-36.0	-13.1	12.2	10.5	8.2	6.6	5.2	4.4	-8.5	-8.9	6.1
Previous Greenbook	19.0	27.4	31.7	-65.1	-36.0	-7.8	1.9	2.6	4.4	4.8	4.4	4.3	-8.6	-11.3	4.5
Food	4.9	6.4	8.5	5.6	.9	1.0	2.5	2.2	1.6	1.3	1.0	.8	6.3	1.7	1.2
Previous Greenbook	4.9	6.4	8.5	5.6	1.8	1.8	2.1	1.9	1.3	1.2	1.1	1.1	6.3	1.9	1.2
Ex. food & energy	2.3	2.2	2.4	.9	1.7	1.7	.9	.7	.7	.7	.7	.6	1.9	1.2	.7
Previous Greenbook	2.3	2.2	2.4	.8	.9	1.4	.9	.7	.6	.5	.5	.4	1.9	1.0	.5
CPI	4.5	4.5	6.2	-8.3	-2.4	.3	2.1	1.8	1.6	1.4	1.2	1.1	1.5	.4	1.3
Previous Greenbook	4.5	4.5	6.2	-8.3	-2.4	.9	1.4	1.3	1.2	1.1	1.0	1.0	1.5	.3	1.1
Ex. food & energy	2.5	2.0	2.8	.6	1.5	1.5	1.2	1.0	.9	.9	.9	.8	2.0	1.3	.9
Previous Greenbook	2.5	2.0	2.8	.6	1.3	1.6	1.2	1.0	.8	.7	.7	.6	2.0	1.3	.7
ECI, hourly compensation[2]	3.0	2.3	2.6	1.9	2.0	1.9	1.8	1.5	1.4	1.3	1.3	1.2	2.4	1.8	1.3
Previous Greenbook[2]	3.0	2.3	2.6	1.9	2.0	1.9	1.8	1.5	1.3	1.2	1.1	1.0	2.4	1.8	1.1
Nonfarm business sector															
Output per hour	2.6	4.7	2.2	-.5	-1.0	3.1	1.6	1.6	2.2	2.1	2.0	1.9	2.2	1.3	2.1
Previous Greenbook	2.6	4.7	2.2	-.9	-1.1	2.4	1.3	1.2	2.1	2.0	1.9	1.8	2.1	.9	2.0
Compensation per hour	3.7	1.7	5.7	5.2	3.2	2.9	1.9	1.4	1.4	1.4	1.3	1.3	4.1	2.3	1.3
Previous Greenbook	3.7	1.7	5.7	5.2	2.5	2.7	2.1	1.5	1.3	1.2	1.1	1.0	4.1	2.2	1.1
Unit labor costs	1.1	-2.8	3.5	5.7	4.3	-.2	.3	-.3	-.8	-.7	-.7	-.7	1.8	1.0	-.7
Previous Greenbook	1.1	-2.8	3.5	6.2	3.7	.3	.8	.3	-.8	-.8	-.8	-.7	1.9	1.3	-.8
Core goods imports chain-wt price index[3]	8.5	10.6	4.6	-8.5	-9.7	-3.0	-.7	.5	1.0	1.1	1.1	1.0	3.5	-3.3	1.1
Previous Greenbook[3]	8.5	10.6	4.6	-8.3	-10.0	-4.7	-2.1	.4	1.0	1.2	1.1	1.1	3.6	-4.2	1.1

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

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

Item	2002	2003	2004	2005	2006	2007	2008	2009	2010
GDP chain-wt price index	1.7	2.2	3.2	3.5	2.8	2.6	2.0	1.6	.9
Previous Greenbook	1.7	2.2	3.2	3.5	2.8	2.6	2.0	1.6	.8
PCE chain-wt price index	1.8	1.9	3.1	3.3	1.9	3.5	1.9	.7	1.0
Previous Greenbook	1.8	1.9	3.1	3.3	1.9	3.5	1.9	.4	.8
Energy	7.7	7.6	18.3	23.1	-4.0	19.1	-8.5	-8.9	6.1
Previous Greenbook	7.7	7.6	18.3	23.1	-4.0	19.1	-8.6	-11.3	4.5
Food	1.3	2.6	2.9	2.1	2.3	4.5	6.3	1.7	1.2
Previous Greenbook	1.3	2.6	2.9	2.1	2.3	4.5	6.3	1.9	1.2
Ex. food & energy	1.6	1.4	2.2	2.2	2.3	2.2	1.9	1.2	.7
Previous Greenbook	1.6	1.4	2.2	2.2	2.3	2.2	1.9	1.0	.5
CPI	2.3	2.0	3.4	3.8	1.9	4.0	1.5	.4	1.3
Previous Greenbook	2.3	2.0	3.4	3.8	1.9	4.0	1.5	.3	1.1
Ex. food & energy	2.1	1.2	2.2	2.1	2.7	2.3	2.0	1.3	.9
Previous Greenbook	2.1	1.2	2.2	2.1	2.7	2.3	2.0	1.3	.7
ECI, hourly compensation[1]	3.1	4.0	3.8	2.9	3.2	3.0	2.4	1.8	1.3
Previous Greenbook[1]	3.1	4.0	3.8	2.9	3.2	3.0	2.4	1.8	1.1
Nonfarm business sector									
Output per hour	2.9	4.7	1.8	1.5	.6	2.6	2.2	1.3	2.1
Previous Greenbook	2.9	4.7	1.8	1.5	.6	2.6	2.1	.9	2.0
Compensation per hour	3.2	5.3	3.9	3.6	4.2	3.6	4.1	2.3	1.3
Previous Greenbook	3.2	5.3	3.9	3.6	4.2	3.6	4.1	2.2	1.1
Unit labor costs	.2	.5	2.1	2.1	3.7	.9	1.8	1.0	-.7
Previous Greenbook	.2	.5	2.1	2.1	3.7	.9	1.9	1.3	-.8
Core goods imports chain-wt. price index[2]	.1	1.6	3.6	2.2	2.4	3.4	3.5	-3.3	1.1
Previous Greenbook[2]	.1	1.6	3.6	2.2	2.4	3.4	3.6	-4.2	1.1

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

Other Macroeconomic Indicators

Item	2008 Q1	2008 Q2	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4	2008[1]	2009[1]	2010[1]
Employment and production															
Nonfarm payroll employment[2]	-.1	-.4	-.5	-1.3	-2.0	-1.6	-.4	.0	.2	.5	.3	.5	-2.3	-4.1	1.5
Unemployment rate[3]	4.9	5.4	6.0	6.9	8.1	9.0	9.2	9.3	9.3	9.2	9.1	9.1	6.9	9.3	9.1
Previous Greenbook[3]	4.9	5.4	6.0	6.9	8.0	8.7	9.0	9.2	9.4	9.5	9.5	9.5	6.9	9.2	9.5
GDP gap[4]	-.8	-.7	-1.4	-3.6	-5.6	-6.4	-6.8	-7.0	-7.0	-6.9	-6.7	-6.4	-3.6	-7.0	-6.4
Previous Greenbook[4]	-.8	-.7	-1.4	-3.7	-5.7	-6.7	-7.3	-7.7	-8.0	-8.2	-8.2	-8.2	-3.7	-7.7	-8.2
Industrial production[5]	.2	-4.6	-9.0	-12.7	-20.0	-9.2	.5	2.0	3.9	3.5	4.7	4.4	-6.7	-7.1	4.1
Previous Greenbook[5]	.4	-3.4	-8.9	-12.1	-18.3	-9.3	-2.6	-.2	2.7	3.0	3.1	3.5	-6.1	-7.9	3.1
Manufacturing industr. prod.[5]	-1.2	-5.4	-9.3	-17.7	-22.5	-8.9	1.5	2.5	3.9	3.4	4.4	4.2	-8.6	-7.4	4.0
Previous Greenbook[5]	-1.0	-4.1	-8.7	-17.4	-21.7	-9.9	-2.0	.3	2.5	2.9	2.9	3.1	-8.0	-8.7	2.9
Capacity utilization rate - mfg.[3]	78.1	76.7	74.6	71.0	66.7	65.3	65.8	66.5	67.5	68.5	69.7	70.8	71.0	66.5	70.8
Previous Greenbook[3]	78.7	77.5	75.5	71.7	67.4	65.8	65.6	65.8	66.6	67.5	68.3	69.2	71.7	65.8	69.2
Housing starts[6]	1.1	1.0	.9	.7	.5	.5	.6	.6	.7	.7	.8	.9	.9	.5	.8
Light motor vehicle sales[6]	15.2	14.1	12.9	10.3	9.5	9.9	10.1	10.5	11.2	12.0	12.5	13.0	13.1	10.0	12.2
Income and saving															
Nominal GDP[5]	3.5	4.1	3.4	-5.8	-3.1	-1.0	1.9	2.3	2.9	3.5	3.9	4.1	1.2	.0	3.6
Real disposable pers. income[5]	-.7	10.7	-8.5	2.7	3.9	6.6	-1.5	1.6	.9	1.5	2.1	2.2	.8	2.6	1.7
Previous Greenbook[5]	-.7	10.7	-8.5	3.3	6.4	4.3	-1.6	1.5	1.7	1.1	1.4	1.3	1.0	2.6	1.4
Personal saving rate[3]	.2	2.5	1.3	3.2	3.9	5.6	5.1	5.3	5.1	4.9	4.7	4.5	3.2	5.3	4.5
Previous Greenbook[3]	.2	2.5	1.3	3.2	4.6	5.6	5.3	5.4	5.5	5.4	5.2	5.0	3.2	5.4	5.0
Corporate profits[7]	-4.3	-14.3	-4.7	-51.5	-18.9	-6.5	-3.3	-5.0	24.5	6.7	6.8	8.3	-21.5	-8.7	11.3
Profit share of GNP[3]	11.2	10.6	10.4	8.8	8.5	8.4	8.3	8.1	8.5	8.6	8.6	8.7	8.8	8.1	8.7
Net federal saving[8]	-331	-650	-544	-561	-803	-1,030	-1,097	-1,146	-1,138	-1,116	-1,157	-1,138	-521	-1,019	-1,137
Net state & local saving[8]	-52	-67	-104	-97	-15	-67	-42	-42	-36	-42	-29	-28	-80	-42	-34
Gross national saving rate[3]	12.4	11.3	11.5	12.0	11.1	10.5	9.9	9.6	9.5	9.6	9.4	9.4	12.0	9.6	9.4
Net national saving rate[3]	.0	-1.3	-1.8	-1.0	-2.4	-3.3	-4.1	-4.5	-4.6	-4.5	-4.8	-4.7	-1.0	-4.5	-4.7

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

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

Item	2002	2003	2004	2005	2006	2007	2008	2009	2010
Employment and production									
Nonfarm payroll employment[1]	-.7	-.1	2.0	2.4	2.1	1.2	-2.3	-4.1	1.5
Unemployment rate[2]	5.8	5.8	5.4	4.9	4.4	4.8	6.9	9.3	9.1
Previous Greenbook[2]	5.8	5.8	5.4	4.9	4.4	4.8	6.9	9.2	9.5
GDP gap[3]	-2.6	-1.8	-.8	-.3	-.2	-.4	-3.6	-7.0	-6.4
Previous Greenbook[3]	-2.6	-1.8	-.8	-.3	-.2	-.4	-3.7	-7.7	-8.2
Industrial production[4]	2.5	1.6	3.0	2.6	1.8	1.8	-6.7	-7.1	4.1
Previous Greenbook[4]	2.6	1.5	3.1	2.6	1.7	2.1	-6.1	-7.9	3.1
Manufacturing industr. prod.[4]	2.5	1.8	3.6	3.8	1.2	1.9	-8.6	-7.4	4.0
Previous Greenbook[4]	2.6	1.7	3.7	3.7	1.1	2.3	-8.0	-8.7	2.9
Capacity utilization rate - mfg.[2]	73.0	74.6	77.3	79.2	79.0	78.7	71.0	66.5	70.8
Previous Greenbook[2]	73.2	74.8	77.5	79.2	79.0	79.3	71.7	65.8	69.2
Housing starts[5]	1.7	1.8	2.0	2.1	1.8	1.4	.9	.5	.8
Light motor vehicle sales[5]	16.7	16.6	16.8	16.9	16.5	16.1	13.1	10.0	12.2
Income and saving									
Nominal GDP[4]	3.6	5.9	6.5	6.3	5.3	4.9	1.2	.0	3.6
Real disposable pers. income[4]	2.9	3.7	4.1	.9	3.6	1.8	.8	2.6	1.7
Previous Greenbook[4]	2.9	3.7	4.1	.9	3.6	1.8	1.0	2.6	1.4
Personal saving rate[2]	1.8	2.2	2.5	.8	.9	.4	3.2	5.3	4.5
Previous Greenbook[2]	1.8	2.2	2.5	.8	.9	.4	3.2	5.4	5.0
Corporate profits[6]	20.6	12.6	20.3	18.8	6.9	-2.0	-21.5	-8.7	11.3
Profit share of GNP[2]	9.0	9.5	10.8	12.0	12.2	11.3	8.8	8.1	8.7
Net federal saving[7]	-248	-372	-371	-292	-201	-229	-521	-1019	-1137
Net state & local saving[7]	-34	-20	2	29	46	10	-80	-42	-34
Gross national saving rate[2]	13.6	13.7	13.8	15.0	15.5	13.4	12.0	9.6	9.4
Net national saving rate[2]	1.5	1.9	2.1	2.8	3.4	1.2	-1.0	-4.5	-4.7

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				2008				2009				2010			
	2007[a]	2008[a]	2009	2010	Q1[a]	Q2[a]	Q3[a]	Q4[a]	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget					Not seasonally adjusted											
Receipts[1]	2568	2524	2185	2292	540	788	590	547	442	640	555	524	506	689	574	562
Outlays[1]	2729	2978	3832	3766	746	761	759	1033	914	899	986	1084	987	861	834	899
Surplus/deficit[1]	-162	-455	-1647	-1473	-206	27	-169	-485	-472	-259	-431	-561	-481	-172	-260	-338
Previous Greenbook	*-162*	*-455*	*-1915*	*-1221*	*-206*	*27*	*-169*	*-485*	*-520*	*-494*	*-416*	*-408*	*-346*	*-194*	*-273*	*-348*
On-budget	-343	-638	-1779	-1607	-237	-64	-171	-538	-490	-325	-425	-616	-486	-253	-252	-392
Off-budget	181	183	132	134	31	91	2	53	19	66	-6	55	5	81	-8	55
Means of financing																
Borrowing	206	768	1770	1283	200	-48	526	561	465	263	481	340	471	197	275	328
Cash decrease	-23	-296	111	210	11	-7	-318	5	98	24	-15	225	15	-20	-10	15
Other[2]	-22	-17	-235	-20	-5	29	-39	-81	-92	-27	-35	-5	-5	-5	-5	-5
Cash operating balance, end of period	75	372	260	50	46	53	372	367	269	245	260	35	20	40	50	35
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2624	2607	2425	2469	2673	2479	2596	2544	2418	2370	2366	2389	2470	2505	2513	2554
Expenditures	2832	3047	3298	3609	3003	3128	3140	3106	3222	3400	3463	3535	3608	3621	3670	3692
Consumption expenditures	842	910	975	1055	898	918	954	957	948	981	1013	1031	1053	1066	1069	1072
Defense	569	624	664	710	614	629	660	657	641	668	692	701	708	714	718	721
Nondefense	273	286	311	345	284	289	295	301	308	313	321	331	345	352	352	351
Other spending	1990	2136	2323	2554	2105	2210	2186	2148	2273	2418	2450	2504	2555	2555	2601	2620
Current account surplus	-209	-440	-873	-1139	-331	-650	-544	-561	-803	-1030	-1097	-1146	-1138	-1116	-1157	-1138
Gross investment	123	134	149	160	129	138	144	150	141	149	156	158	159	160	161	161
Gross saving less gross investment[3]	-221	-458	-899	-1169	-344	-671	-569	-590	-822	-1055	-1128	-1177	-1168	-1146	-1186	-1166
Fiscal indicators[4]																
High-employment (HEB) surplus/deficit	-222	-426	-654	-810	-322	-641	-502	-447	-599	-771	-799	-824	-809	-783	-826	-813
Change in HEB, percent of potential GDP	-0.3	1.3	1.4	0.9	0.6	2.2	-1.0	-0.4	1.0	1.1	0.1	0.1	-0.1	-0.2	0.2	-0.1
Fiscal impetus (FI), percent of GDP	0.2	0.8	0.8	0.9	0.1	0.5	0.7	-0.3	-0.2	0.8	0.3	0.2	0.3	0.1	0.1	-0.0
Previous Greenbook	*0.2*	*0.8*	*0.9*	*0.9*	*0.1*	*0.5*	*0.7*	*-0.3*	*0.0*	*0.6*	*0.2*	*0.2*	*0.3*	*0.2*	*0.1*	*0.0*

1. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law.
2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.
3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2000) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus.
a--Actual

Class II FOMC
Restricted (FR)

Change in Debt of the Domestic Nonfinancial Sectors
(Percent)

April 22, 2009

Period [1]	Total	Households			Business	State and local governments	Federal government	Memo: Nominal GDP
		Total	Home mortgages	Consumer credit				
Year								
2003	8.1	11.6	14.2	5.2	2.5	8.3	10.9	5.9
2004	8.9	11.2	13.6	5.5	6.2	7.4	9.0	6.5
2005	9.5	11.1	13.3	4.3	8.7	10.2	7.0	6.3
2006	8.9	10.0	10.9	4.5	10.5	8.2	3.9	5.3
2007	8.6	6.6	6.6	5.5	13.1	9.3	4.9	4.9
2008	5.8	.4	-.4	1.8	4.8	1.8	24.2	1.2
2009	4.8	-1.3	-1.6	-1.5	1.5	3.3	24.4	.0
2010	5.0	1.4	.7	2.8	2.1	2.7	16.1	3.6
Quarter								
2008:1	5.2	3.0	2.4	4.7	7.2	3.5	8.1	3.5
2	3.1	.3	-.3	3.9	5.8	.9	5.9	4.1
3	8.1	.2	-2.3	1.4	4.1	3.2	39.2	3.4
4	6.3	-1.9	-1.5	-2.9	1.7	-.4	37.0	-5.8
2009:1	4.5	-2.2	-2.7	-2.0	2.2	4.6	23.2	-3.1
2	4.2	-1.7	-2.0	-2.2	.3	2.4	23.1	-1.0
3	6.0	-.9	-1.1	-1.6	1.9	3.1	26.7	1.9
4	4.3	-.4	-.6	-.5	1.7	3.0	16.8	2.3
2010:1	5.3	.6	.1	1.2	1.9	2.9	18.9	2.9
2	4.9	1.1	.5	2.5	2.0	2.8	15.6	3.5
3	4.4	1.6	.9	3.4	2.0	2.5	12.4	3.9
4	5.1	2.1	1.4	4.2	2.4	2.5	13.8	4.1

Note. Quarterly data are at seasonally adjusted annual rates.
1. Data after 2008:Q4 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.

2.6.3 FOF

Flow of Funds Projections: Highlights

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

Category	2007	2008	2009	2010	2008 Q3	2008 Q4	2009 Q1	2009 Q2	2009 Q3	2009 Q4	2010 Q1	2010 Q2	2010 Q3	2010 Q4
Domestic nonfinancial sectors														
Net funds raised														
Total	1668.9	1444.9	1398.6	1595.2	2235.0	1600.8	1213.5	1206.5	1866.4	1308.2	1695.5	1576.1	1418.3	1691.1
Net equity issuance	-831.2	-395.1	-214.3	-160.0	-393.2	-450.0	-297.0	-200.0	-180.0	-180.0	-160.0	-160.0	-160.0	-160.0
Net debt issuance	2500.1	1840.0	1612.9	1755.2	2628.2	2050.9	1510.5	1406.5	2046.4	1488.2	1855.5	1736.1	1578.3	1851.1
Borrowing indicators														
Debt (percent of GDP) [1]	220.3	228.5	243.1	248.3	226.7	234.2	239.2	242.4	244.3	246.0	247.2	248.2	248.7	249.1
Borrowing (percent of GDP)	18.1	12.9	11.4	12.1	18.2	14.4	10.7	10.0	14.5	10.5	13.0	12.0	10.8	12.6
Households														
Net borrowing [2]	848.7	53.5	-179.6	184.4	26.7	-265.7	-308.6	-230.2	-129.7	-49.7	76.5	148.5	220.8	291.6
Home mortgages	651.5	-43.7	-168.9	73.5	-238.1	-155.9	-287.2	-203.8	-118.5	-66.3	9.5	47.4	94.8	142.2
Consumer credit	133.6	45.0	-40.1	72.3	35.4	-77.1	-51.1	-56.0	-40.5	-12.6	30.3	63.5	87.0	108.4
Debt/DPI (percent) [3]	131.2	129.6	126.2	123.0	129.8	130.3	128.6	125.7	125.3	124.2	123.5	123.0	122.5	122.2
Business														
Financing gap [4]	185.6	181.3	-65.8	-33.7	127.9	110.0	-37.6	-86.7	-89.7	-49.2	-20.2	-43.4	-48.0	-22.9
Net equity issuance	-831.2	-395.1	-214.3	-160.0	-393.2	-450.0	-297.0	-200.0	-180.0	-180.0	-160.0	-160.0	-160.0	-160.0
Credit market borrowing	1228.4	507.1	168.6	238.7	451.4	169.3	242.6	28.2	208.4	195.3	217.2	229.2	228.7	279.9
State and local governments														
Net borrowing	185.9	40.1	74.1	61.7	71.6	-7.9	103.0	54.1	69.7	69.7	65.7	65.7	57.7	57.7
Current surplus [5]	246.6	171.9	174.9	188.2	153.1	118.5	199.5	148.8	175.3	176.1	184.0	179.5	193.3	195.9
Federal government														
Net borrowing	237.1	1239.2	1549.7	1270.4	2078.5	2155.2	1473.4	1554.4	1898.0	1272.8	1496.0	1292.6	1071.1	1221.9
Net borrowing (n.s.a.)	237.1	1239.2	1549.7	1270.4	526.5	560.9	465.4	262.6	481.4	340.3	471.1	197.1	274.6	327.6
Unified deficit (n.s.a.)	187.9	833.2	1722.4	1250.4	168.9	485.2	471.6	259.3	431.0	560.6	481.1	172.1	259.6	337.6
Depository institutions														
Funds supplied	858.7	422.6	79.2	309.4	549.5	503.4	-498.1	-117.5	544.4	388.0	293.0	406.0	373.7	164.9

Note. Data after 2008:Q4 are staff projections.
1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.
2. Includes change in liabilities not shown in home mortgages and consumer credit.
3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.
4. For corporations, excess of capital expenditures over U.S. internal funds.
5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.
n.s.a. Not seasonally adjusted.

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International Developments

Following the substantial macroeconomic and financial policy actions of the last several months, the decline in foreign economic activity appears to be moderating and investor sentiment and financial market functioning have improved somewhat. Industrial production has started to move up in some emerging market economies, such as China, Korea, and Brazil, but more widespread indications of stabilization abroad remain tenuous. After dropping sharply in the first quarter, foreign economic activity through the remainder of 2009 is projected to evolve at rates a bit above those in the March Greenbook, still contracting in the second quarter and becoming slightly positive in the latter half of the year. We see the risks to this projection as being a bit less skewed to the downside than in March, but the outlook remains very uncertain.

Summary of Staff Projections

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

Indicator	2008		Projection			
			2009			2010
	H1	H2	Q1	Q2	H2	
Foreign output	1.7	-3.5	-7.2	-2.4	.8	2.8
Previous GB	1.7	-3.4	-6.7	-2.9	.3	2.3
Foreign CPI	5.0	1.8	-.8	1.5	1.6	1.6
Previous GB	5.0	1.7	-1.5	1.1	1.5	1.5
	Contribution to growth (percentage points)					
U.S. net exports	1.8	.4	1.0	.6	-.6	-.5
Previous GB	1.8	.2	.1	.0	-.7	-.4

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

Commodity prices have started to turn up some, but with output below potential in most foreign economies, consumer price inflation abroad remains subdued. We estimate that foreign consumer prices dropped ¾ percent at an annual rate in the first quarter and project that prices will rise at roughly a 1½ percent pace over the remainder of 2009 and 2010, about the same as in the March Greenbook. Spot oil prices moved up about

10 percent since the time of our last forecast to around $47 per barrel, and futures prices point to a further rise to $64 per barrel by the end of 2010. Prices for most nonfuel primary commodities are slightly higher on net. The dollar has depreciated against most other currencies since the time of the March Greenbook, and we have revised down our forecast accordingly.

With the monthly trade data for January and February in hand, we estimate that real net exports added 1 percentage point to U.S. GDP growth in the first quarter, as a substantial fall in exports was more than offset by a surprisingly steep decline in imports. This estimate is about 1 percentage point higher than projected in the March Greenbook. In the current quarter, we forecast that net exports will contribute just over ½ percentage point to GDP growth, as imports are projected to decline at a more rapid pace than exports. This projection is up about ½ percentage point from the previous Greenbook. For the remainder of the forecast period, we expect net exports to subtract, on average, about ½ percentage point from GDP growth as the U.S. recovery prompts import growth to resume. This is little changed from the March Greenbook, as the stimulus from the weaker dollar and slightly higher foreign GDP growth is just offset by the effect of higher U.S. growth on imports.

International Financial Markets

Stock markets around the world have risen substantially since the time of the last Greenbook. In Europe and the United Kingdom, much of the rise can be attributed to the strong performance of the financial sector, with banking sector indexes having gained over 45 percent. Several major U.K. banks reported a strong start to the year, and HSBC raised $19 billion in the largest-ever U.K. rights issue. In interbank funding markets, spreads between Libor and OIS rates have narrowed by roughly 30 basis points for funding denominated in both euro and sterling.

The intervening period saw continued unconventional monetary policy actions and new moves by the IMF. The Bank of England has so far purchased close to £30 billion in assets as part of its announced £75 billion program of asset purchases. The Bank of Japan has expanded its regular purchases of Japanese government bonds and has announced that it will expand eligible collateral to include municipal debt. The European Central Bank (ECB) reduced its policy rate by a less-than-expected 25 basis points to 1.25 percent and deferred a decision regarding any new policy tools until its meeting in May. Many emerging market economies (EMEs) eased monetary policy as well, and Mexico drew $3.2 billion on its swap line with the Federal Reserve, its first drawing on the $30 billion line. Mexico, Poland, and Colombia have (or soon will have) access to the IMF's recently established Flexible Credit Line, and IMF loan packages for Romania and Serbia were announced.

The dollar depreciated against most other currencies, particularly against currencies of some EMEs, consistent with an increase in investor risk appetite and greater confidence in EMEs. The major currencies index declined 2 percent, with the dollar falling 4½ percent against sterling and 1¼ percent against the euro, but the dollar was flat against the yen. The dollar fell about 4 percent against the currencies of our other important trading partners, including a double-digit decline against the Mexican peso. The starting point for the projected path of the staff's broad real index of the dollar is 3½ percent lower compared with the March Greenbook. We project that the broad real value of the dollar will depreciate at an annual rate of about 1½ percent over the forecast period, consistent with a decline at some point in investor willingness to finance U.S. current account deficits. The pace of the dollar's projected decline is slightly more modest than in the previous Greenbook.

Advanced Foreign Economies

We estimate that real GDP in the advanced foreign economies contracted at a 7¾ percent annual rate in the first quarter, with weakness widespread across private expenditure components. Japanese GDP is estimated to have fallen almost 18 percent, driven by a collapse in exports and investment. Indicators continue to point to significant weakness in all the advanced foreign economies. However, purchasing managers' indexes edged up from record-low levels in March, suggesting some deceleration in the pace of contraction. Real GDP in the advanced foreign economies is projected to fall 3¾ percent in the second quarter and bottom out in the second half of 2009. Growth subsequently increases to 2 percent by the end of the forecast period, supported by improving financial conditions, recovery in the United States, and monetary and fiscal stimulus.

Our estimate for growth in the first quarter is ¾ percentage point lower than in the March Greenbook, reflecting weaker-than-expected data in Canada, Japan, and the United Kingdom, as well as a reassessment of the depth of the inventory cycle in the euro area. The outlook is unchanged in the second quarter and is up about ¼ percentage point on average through the rest of the forecast period, mainly supported by the upward revision to the path of U.S. GDP.

Previous declines in food and energy prices continued to hold down consumer price inflation in the first quarter. Average inflation in the advanced foreign economies is projected to remain near 1 percent through next year, as substantial output gaps weigh on prices. We continue to project that Japanese inflation will be negative throughout the forecast period. The outlook for inflation in advanced foreign economies in 2009 is up about ½ percentage point from the March Greenbook, in line with recent data and the higher path for oil and other commodity prices.

We assume that the major foreign central banks will not remove policy accommodation during the forecast period and that unconventional monetary policy measures will continue. Our projections for policy in Canada, Japan, and the United Kingdom are unchanged from the March Greenbook. In the euro area, we now project that the main refinancing rate will bottom out at ¾ percent, although the effective rate for overnight euro funding likely will remain below the refinancing rate. We continue to expect that fiscal stimulus will add roughly 1 percentage point to GDP growth in the advanced foreign economies in 2009 and provide little impetus in 2010.

Emerging Market Economies

Real GDP dropped an estimated 6¼ percent at an annual rate in the first quarter in the EMEs, about unchanged from the March Greenbook. The pace of the overall decline, albeit still large, is actually a moderation compared with the fourth quarter's 9½ percent fall.

In China, the government's aggressive fiscal and monetary policies appear to be stimulating economic activity. Chinese GDP grew a surprisingly strong 6½ percent in the first quarter, and the PMI climbed above 50 in March for the first time since September. In Korea, industrial production and business confidence improved in January and February. Boosted by government stimulus, Brazilian auto production and sales rebounded strongly from their steep declines late last year. In Mexico, the manufacturing PMI began moving up during the February-March period, and auto production declines abated over the course of the first quarter. In Singapore, however, the flash real GDP release pointed to an unexpectedly large contraction of 20 percent in the first quarter. Activity was also weaker than had been expected in Chile, Indonesia, and Thailand.

We expect growth in the EMEs to be slightly negative in the current quarter, up a little from the March Greenbook. Output growth is projected to recover to 2 percent in the second half of this year and to move up further thereafter. This forecast has been revised up about 1 percentage point, on average, over the forecast period. Our projected recovery depends on a pickup in the advanced economies, a resumption of capital flows to EMEs, and some support from expansionary fiscal and monetary policies. The downside risks to the outlook for EME growth appear to have diminished somewhat after the introduction of the IMF's new Flexible Credit Line and the recent G-20 commitment to increase the IMF's lending capacity.

Consumer prices in EMEs have softened in recent months, driving down our estimate of four-quarter inflation to about 1½ percent for the current quarter. The fall in inflation has been concentrated in emerging Asia and largely reflects weak economic activity and lower prices for food and other commodities. Inflation pressures have also begun to moderate in Latin America, albeit to a lesser extent. Four-quarter inflation in the EMEs is projected to fall further to about 1 percent in the third quarter, before increasing to around 2¼ percent next year, a forecast path that is a touch higher than we had projected in the March Greenbook.

Commodity Prices

Oil prices have moved higher since the March Greenbook, with the spot price of West Texas intermediate (WTI) crude oil rising over $4 to close on April 21 at $46.51 per barrel. The prices of futures contracts dated for delivery further out moved up more, steepening the upward slope of the futures curve. Recent upward price pressure reflects, in part, further reductions in OPEC supply as well as an apparent improvement in sentiment regarding the global economic outlook. Consistent with this path of futures prices, we currently project that the spot price of WTI will rise to $64 per barrel by the end of next year. Relative to the March Greenbook, this projection averages nearly $6 per barrel higher over the remainder of 2009 and $8 per barrel higher next year.

Average nonfuel commodity prices have started to edge up recently after having declined precipitously at the end of last year. Going forward, we expect further small increases in commodity prices, consistent with readings from futures markets. Our projection is slightly higher than in the March Greenbook.

Prices of Internationally Traded Goods

We estimate that core import prices declined at an annual rate of 9¾ percent in the first quarter of this year, pulled down by continued steep declines in prices for material-intensive goods. We project core import prices to fall at an annual rate of 3 percent in the current quarter and to begin rising by the fourth quarter of this year, as commodity prices increase at a moderate pace and the dollar depreciates.

We estimate that core export prices declined at an annual rate of 10 percent in the first quarter of this year. Prices for exported finished goods moved down a bit, joining the large declines in prices of agricultural products and industrial supplies that started in the fourth quarter of last year. With the flattening of commodity prices, core export prices are expected to bottom out around the middle of the year and then to increase moderately over the remainder of the forecast period.

Trade in Goods and Services

We estimate that real exports of goods and services plummeted at an annual rate of 31 percent in the first quarter, about 8 percentage points more than previously projected. The downward revision is largely in response to the weakness of the January trade data, which were released immediately after the close of the March Greenbook but before the March FOMC meeting. In the current quarter, we expect the decline in real exports to moderate to about 3½ percent; exports rose a bit in February, other trade indicators look less gloomy, and foreign GDP is projected to decline more slowly. We project real exports to flatten out in the second half of 2009 before increasing 2¼ percent in 2010, in line with the projected recovery in foreign GDP growth. Relative to the March Greenbook, our export growth projection is somewhat stronger, reflecting the weaker dollar and slightly stronger foreign growth in this forecast.

We estimate that real imports of goods and services decreased at an annual rate of 31 percent in the first quarter, more than 10 percentage points weaker than projected in the March Greenbook, on account of larger-than-expected drops in the January and February trade data. Although February's decline was widespread across categories, some of the weakness owes to disruptions related to the Chinese New Year holidays in January. For the current quarter, we expect imports to decline by 7¼ percent, 2½ percentage points more than previously projected, on continued weak U.S. demand and lower projected oil imports. For the remainder of the forecast period, we project import growth to pick up to an annual rate of 4¾ percent on average. This is about 1¼ percentage point higher than in the March Greenbook, in line with the higher growth path for the U.S. economy.

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

Trade category	2008		Projection			
			2009			2010
	H1	H2	Q1	Q2	H2	
Imports						
Core goods	9.5	-2.2	-9.7	-3.0	-.1	1.1
Previous GB	9.5	-2.0	-10.0	-4.7	-.8	1.1
Oil (dollars per barrel)	108.65	68.74	43.40	47.32	51.32	58.86
Previous GB	108.65	68.74	41.46	43.09	44.79	50.51
Exports						
Core goods	13.0	-12.0	-10.1	-2.3	.7	1.2
Previous GB	13.0	-10.9	-10.9	-5.2	-.3	1.2

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

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

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

Measure	2008		Projection			
			2009			2010
	H1	H2	Q1	Q2	H2	
Real imports	-4.1	-10.8	-31.1	-7.2	4.1	5.1
Previous GB	-4.1	-10.0	-19.7	-4.7	3.2	3.8
Real exports	8.6	-11.3	-31.4	-3.4	-.7	2.3
Previous GB	8.6	-11.3	-23.6	-5.6	-2.3	1.0

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

Alternative Simulation

Although our baseline forecast assumes that major foreign economies will begin to recover in the second half of this year, there is considerable downside risk to our outlook. One risk is that emerging market economies may experience deeper-than-expected recessions that are accompanied by capital outflows and large depreciations of their currencies. We use the SIGMA model to examine the implications of a demand-induced weakening in foreign activity coupled with risk premium shocks that cause the dollar to appreciate substantially. Such risk premium shocks may be interpreted as reflecting a flight to higher quality assets denominated in dollars.[1]

The foreign demand shock begins in the current quarter and is calibrated to reduce overall foreign growth 1 percentage point below baseline in early 2010 before gradually receding. The demand shock by itself would induce a small appreciation of the dollar, but the risk premium shocks are calibrated so that the broad real dollar appreciates about 10 percent above baseline in 2010 before slowly returning to baseline. The broad real dollar appreciated by a similar magnitude during the Asian crisis.

In the simulation, U.S. real net exports decline in response to the weaker foreign activity and the appreciation of the dollar. As discussed in more detail in the accompanying box, the contractionary effect on U.S. real activity is amplified because the federal funds rate is constrained by the zero bound from declining. Expected inflation falls in response to the negative shock and, accordingly, real interest rates rise substantially relative to baseline, causing U.S. domestic demand to fall. Declines in stock prices and associated reductions in collateral values work through the financial accelerator channel to boost corporate bond spreads about 0.9 percentage point relative to baseline, deepening the decline in private demand. U.S. GDP growth declines 1.7 percentage points relative to baseline in the second half of 2009 and in 2010. Weaker U.S. growth and lower import price inflation cause core PCE price inflation to fall 0.7 and 0.5 percentage point below baseline in 2009:H2 and 2010, respectively.

[1] Due to technical considerations associated with imposing a zero bound constraint, we use a two-country version of the model that includes the United States and an aggregate foreign sector.

Alternative Simulation:
Weaker Foreign GDP and Stronger Dollar
(Percent change from previous period, annual rate, except as noted)

Indicator and simulation	2009		2010		2011	2012-13
	H1	H2	H1	H2		
U.S. real GDP						
Baseline	-3.9	.8	2.2	3.1	4.8	5.3
Weaker foreign GDP and stronger dollar	-4.2	-.9	.0	1.9	4.5	5.6
U.S. PCE prices excluding food and energy						
Baseline	1.7	.8	.7	.6	.7	.9
Weaker foreign GDP and stronger dollar	1.4	.1	.0	.2	.5	.9
U.S federal funds rate (percent)						
Baseline	.1	.1	.1	.1	.1	2.0
Weaker foreign GDP and stronger dollar	.1	.1	.1	.1	.1	1.6
U.S. trade balance (percent share of GDP)						
Baseline	-2.7	-2.9	-3.3	-3.4	-3.6	-3.9
Weaker foreign GDP and stronger dollar	-3.1	-4.0	-4.8	-4.8	-4.7	-4.0

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.

The Role of the Zero Lower Bound in Amplifying Foreign Shocks

In this box, we show that external disturbances can pose a much greater risk to domestic economic activity when monetary policy is constrained by the zero lower bound than when policy is unconstrained.

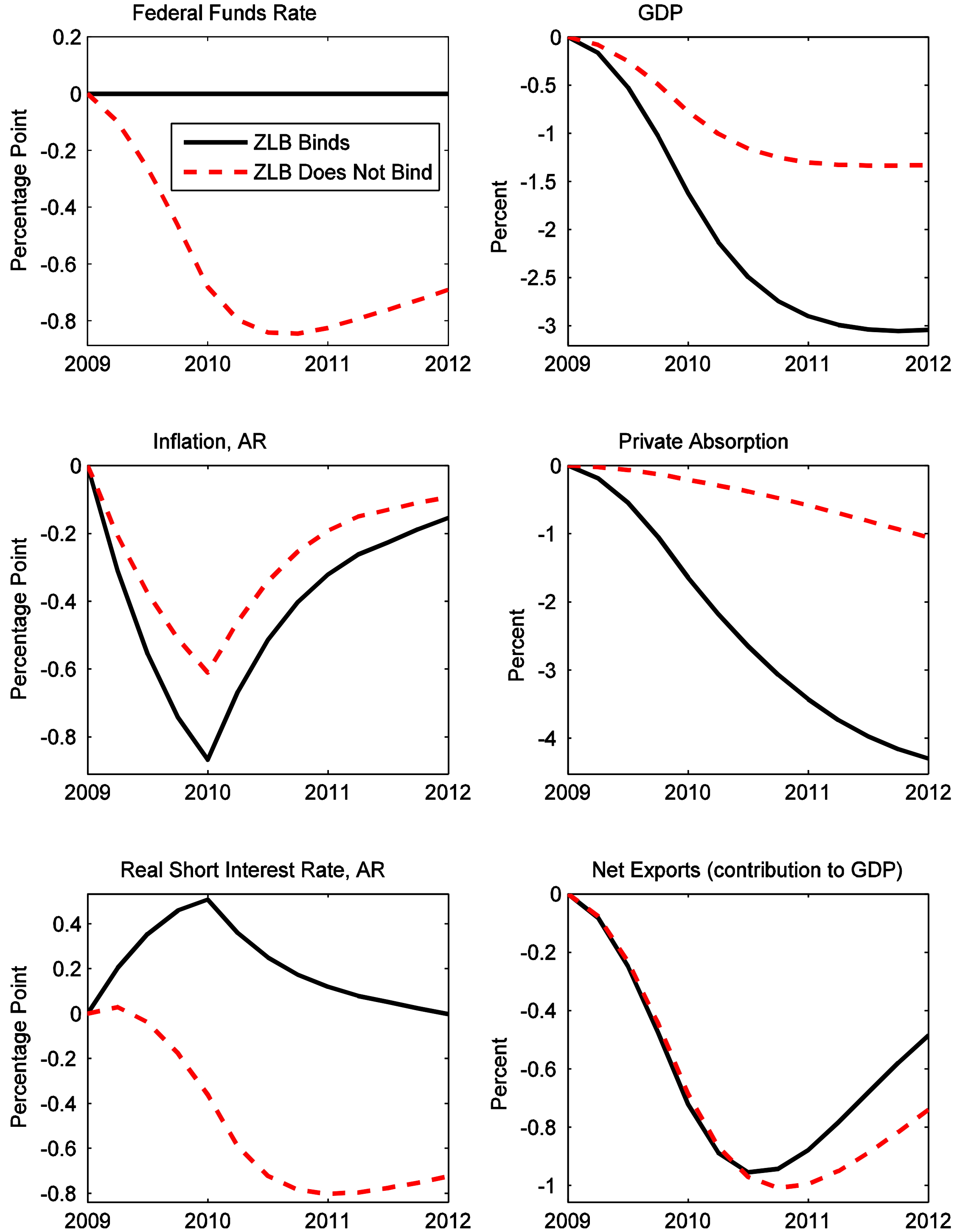
The solid lines in Figure 1 reproduce the previously discussed alternative simulation, showing the effects of foreign demand and risk premium shocks on key U.S. variables. In this scenario, the federal funds rate responds according to a Taylor rule but is constrained by the zero lower bound over the period shown. All simulation results are reported as deviations from baseline.

The dashed lines show the response to the same shocks in a different scenario, in which the federal funds rate is unconstrained and allowed to fall below the zero lower bound. In this case, the shocks have a depressing effect on U.S. real net exports through both weaker foreign activity and an appreciation of the dollar. This fall in external demand causes the level of U.S. GDP to decline more than 1 percent below baseline in 2010, while core PCE price inflation declines 0.4 percentage point. However, the contractionary effects of the shock are alleviated by the impact of a decline in the real interest rate on private absorption, reflecting an easing of monetary policy.

When policy is constrained by the zero bound, the shocks have nearly the same effect on U.S. net exports, but the decline in U.S. GDP is about three times larger. The zero bound constraint keeps nominal interest rates from declining in the face of lower expected inflation, inducing a pronounced rise in the real interest rate. As a result, U.S. domestic absorption falls sharply, reinforcing the deflationary effects of the shocks.

The constrained simulation assumes that U.S. monetary policymakers do not engage in unconventional forms of stimulus. Such policies would bring the effects of the shocks closer to those seen when the federal funds rate is unconstrained.

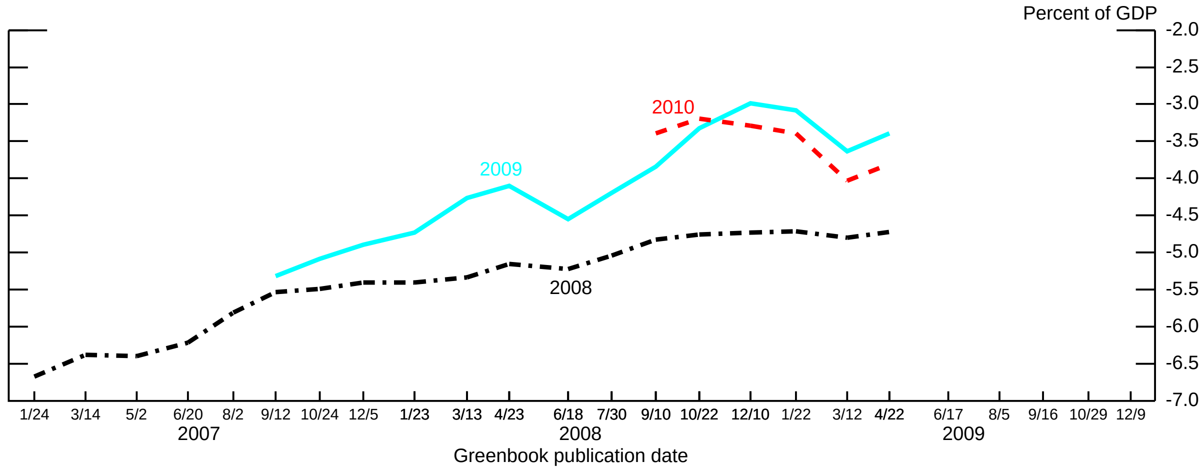
Figure 1
(Deviation from Baseline)



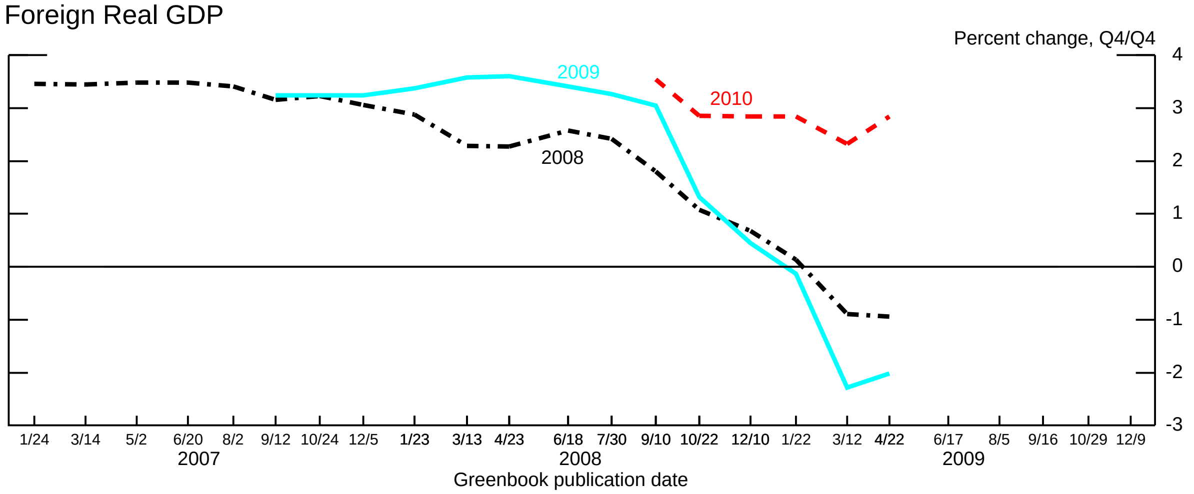
Class II FOMC -- Restricted (FR)

Evolution of the Staff Forecast

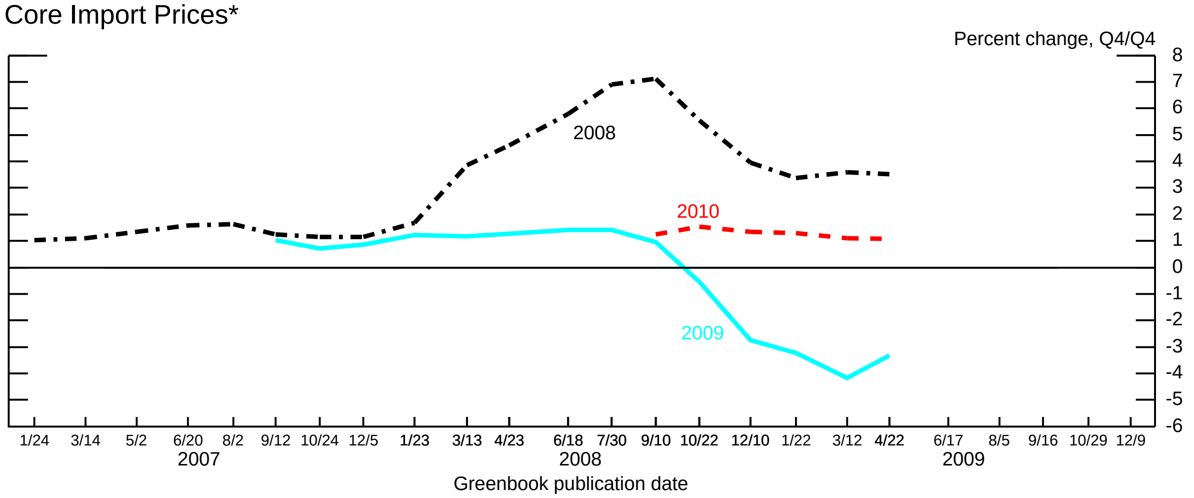
Current Account Balance



Foreign Real GDP



Core Import Prices*



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

Class II FOMC
Restricted (FR)

April 22, 2009

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

	2008				Projected 2009				Projected 2010			
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	2.2	1.1	0.4	-7.3	-7.2	-2.4	0.4	1.3	2.1	2.8	3.2	3.3
Advanced Foreign Economies	0.7	-0.5	-0.3	-5.4	-7.8	-3.8	-0.6	0.5	1.0	1.7	2.0	2.1
of which:												
Canada	-0.9	0.6	0.9	-3.4	-6.4	-3.8	-0.0	0.7	1.0	2.1	2.3	2.4
Japan	1.4	-4.5	-1.4	-12.1	-17.8	-5.7	-2.1	-0.3	0.7	1.0	1.3	1.3
United Kingdom	1.2	-0.1	-2.8	-6.1	-7.0	-2.8	-1.0	1.0	1.0	1.3	2.2	2.3
Euro Area (2)	2.7	-1.0	-1.0	-6.3	-6.5	-3.6	-1.0	0.2	1.1	1.5	1.8	1.8
Germany	6.2	-2.0	-2.1	-8.2	-7.0	-3.8	-1.1	0.0	1.0	1.4	1.5	1.7
Emerging Market Economies	4.3	3.3	1.4	-9.6	-6.3	-0.5	1.7	2.4	3.5	4.3	4.8	4.9
Asia	7.0	3.5	0.7	-10.6	-4.7	0.6	2.7	3.6	4.5	5.3	5.8	6.0
Korea	4.4	1.7	1.0	-18.8	-5.3	-4.1	1.6	2.3	3.3	4.2	4.2	4.2
China	10.3	10.9	5.3	1.6	6.5	6.9	7.4	8.0	8.3	8.8	9.2	9.2
Latin America	1.4	2.9	2.1	-9.4	-8.5	-1.8	0.6	1.2	2.3	3.2	3.8	3.9
Mexico	1.2	1.3	1.6	-10.3	-10.0	-2.0	0.6	1.0	2.0	3.2	4.0	4.2
Brazil	6.7	6.5	6.9	-13.6	-4.0	-0.5	1.0	2.3	3.2	3.2	3.2	3.2
CONSUMER PRICES (3)	Four-quarter changes											
Total Foreign	4.1	4.7	4.8	3.3	1.9	1.0	0.4	0.9	1.6	1.6	1.6	1.6
Advanced Foreign Economies	2.3	2.7	3.4	2.0	1.0	0.5	-0.2	0.5	1.1	1.0	0.9	0.9
of which:												
Canada	1.9	2.3	3.4	1.9	1.1	0.4	-0.4	0.8	1.3	1.3	1.2	1.2
Japan	1.0	1.4	2.2	1.0	0.4	-0.3	-1.2	-0.7	-0.6	-0.4	-0.5	-0.5
United Kingdom (4)	2.4	3.4	4.8	3.9	3.0	2.2	0.9	1.2	2.0	1.6	1.7	1.6
Euro Area (2)	3.4	3.6	3.8	2.3	1.0	0.7	0.4	0.9	1.6	1.3	1.3	1.2
Germany	3.1	3.0	3.2	1.7	0.8	0.6	0.2	0.7	1.0	1.0	1.0	1.1
Emerging Market Economies	6.0	6.6	6.1	4.7	2.8	1.6	1.0	1.4	2.1	2.2	2.2	2.2
Asia	6.6	7.0	6.0	3.7	1.1	-0.2	-0.7	0.3	1.4	1.7	1.8	1.8
Korea	3.8	4.8	5.5	4.5	3.9	2.5	1.7	1.8	1.8	1.8	1.8	1.8
China	8.1	7.7	5.1	2.7	-0.6	-1.5	-1.3	-0.4	1.0	1.3	1.4	1.4
Latin America	4.5	5.5	6.1	6.6	6.4	5.5	4.5	3.6	3.3	3.1	3.1	3.0
Mexico	3.9	4.9	5.5	6.2	6.2	5.4	4.4	3.4	2.9	2.6	2.6	2.6
Brazil	4.6	5.5	6.3	6.2	5.9	5.0	4.1	4.0	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	2002	2003	2004	2005	2006	2007	2008	Projected 2009	Projected 2010
REAL GDP (1)									
Total Foreign	3.0	2.9	3.8	4.0	4.1	4.2	-0.9	-2.0	2.8
Advanced Foreign Economies	2.5	1.8	2.6	2.7	2.7	2.6	-1.4	-3.0	1.7
of which:									
Canada	3.5	1.5	3.7	3.0	2.2	2.8	-0.7	-2.4	1.9
Japan	2.1	2.4	1.1	2.9	2.2	2.1	-4.3	-6.7	1.0
United Kingdom	2.4	3.2	2.3	2.0	3.2	3.2	-2.0	-2.5	1.7
Euro Area (2)	1.1	1.2	1.7	2.1	3.4	2.1	-1.5	-2.8	1.6
Germany	0.0	0.2	0.2	1.6	4.1	1.7	-1.6	-3.0	1.4
Emerging Market Economies	3.9	4.6	5.5	5.9	5.9	6.3	-0.3	-0.7	4.4
Asia	6.4	6.9	6.0	7.7	7.2	8.1	-0.1	0.5	5.4
Korea	7.5	3.7	2.5	5.2	4.6	5.7	-3.4	-1.4	4.0
China	8.6	10.3	9.9	10.3	10.8	12.3	6.9	7.2	8.9
Latin America	1.6	2.0	5.0	4.1	4.7	4.5	-0.9	-2.2	3.3
Mexico	2.0	1.5	4.5	3.6	4.0	3.7	-1.7	-2.7	3.3
Brazil	4.9	1.0	4.7	3.7	4.6	6.1	1.2	-0.3	3.2
CONSUMER PRICES (3)									
Total Foreign	2.5	2.1	2.8	2.3	2.1	3.6	3.3	0.9	1.6
Advanced Foreign Economies	2.1	1.3	1.8	1.6	1.4	2.2	2.0	0.5	0.9
of which:									
Canada	3.8	1.7	2.3	2.3	1.4	2.5	1.9	0.8	1.2
Japan	-0.5	-0.3	0.5	-1.0	0.3	0.5	1.0	-0.7	-0.5
United Kingdom (4)	1.5	1.3	1.4	2.1	2.7	2.1	3.9	1.2	1.6
Euro Area (2)	2.3	2.0	2.3	2.3	1.8	2.9	2.3	0.9	1.2
Germany	1.2	1.1	2.1	2.2	1.3	3.1	1.7	0.7	1.1
Emerging Market Economies	2.9	3.1	3.9	3.0	2.9	5.1	4.7	1.4	2.2
Asia	0.8	2.3	3.2	2.6	2.4	5.4	3.7	0.3	1.8
Korea	3.3	3.5	3.4	2.5	2.1	3.4	4.5	1.8	1.8
China	-0.6	2.7	3.3	1.4	2.1	6.7	2.7	-0.4	1.4
Latin America	6.4	4.9	5.6	3.8	4.1	4.3	6.6	3.6	3.0
Mexico	5.2	3.9	5.3	3.1	4.1	3.8	6.2	3.4	2.6
Brazil	10.7	11.5	7.2	6.1	3.2	4.3	6.2	4.0	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)

April 22, 2009

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2002	2003	2004	2005	2006	2007	2008	Projected 2009	Projected 2010
NIPA REAL EXPORTS and IMPORTS									
	Percentage point contribution to GDP growth, Q4/Q4								
Net Goods & Services	-0.9	-0.1	-0.9	-0.1	0.4	0.8	1.1	0.1	-0.5
Exports of G&S	0.4	0.6	0.7	0.7	1.1	1.0	-0.2	-1.2	0.2
Imports of G&S	-1.3	-0.7	-1.7	-0.8	-0.6	-0.2	1.3	1.3	-0.7
	Percentage change, Q4/Q4								
Exports of G&S	3.8	5.8	7.4	7.0	10.1	8.9	-1.8	-10.1	2.3
Services	10.2	3.0	8.3	4.0	11.5	9.3	2.5	-7.0	2.2
Computers	-1.1	11.3	5.8	14.2	8.1	0.9	-2.2	3.2	9.5
Semiconductors	10.1	38.3	-6.0	17.6	2.9	29.3	-13.8	-13.1	11.1
Core Goods 1/	0.6	4.9	8.0	7.4	10.0	8.2	-3.4	-12.0	1.7
Imports of G&S	9.7	4.8	11.5	4.8	3.8	1.1	-7.5	-8.8	5.1
Services	8.8	2.2	9.3	-0.1	8.0	1.8	-1.7	-3.1	3.6
Oil	3.8	1.2	10.8	1.0	-9.2	0.6	-1.1	-13.5	-0.0
Natural Gas	19.5	1.3	4.9	13.7	-12.6	12.1	-27.3	11.4	2.0
Computers	13.2	17.0	23.2	12.5	13.8	8.4	-11.6	1.6	15.5
Semiconductors	11.0	-0.1	9.8	7.5	-0.3	3.8	-10.0	-15.0	5.0
Core Goods 2/	10.0	5.2	11.4	5.9	5.7	0.1	-9.8	-10.9	6.0
	Billions of Chained 2000 Dollars								
Net Goods & Services	-471.3	-518.9	-593.8	-616.6	-615.7	-546.5	-390.2	-330.8	-387.7
Exports of G&S	1013.3	1026.1	1126.1	1205.3	1314.8	1425.9	1514.1	1313.2	1324.2
Imports of G&S	1484.6	1545.0	1719.9	1821.9	1930.5	1972.4	1904.3	1644.0	1711.9
	Billions of dollars								
US CURRENT ACCOUNT BALANCE	-461.3	-523.4	-625.0	-729.0	-788.1	-731.2	-673.3	-478.9	-552.3
Current Acct as Percent of GDP	-4.4	-4.8	-5.3	-5.9	-6.0	-5.3	-4.7	-3.4	-3.8
Net Goods & Services (BOP)	-423.7	-496.9	-607.7	-711.6	-753.3	-700.3	-681.1	-393.8	-486.5
Investment Income, Net	33.0	51.0	73.4	78.8	63.8	88.8	134.8	46.8	64.2
Direct, Net	102.4	112.7	150.9	173.2	184.1	233.9	267.9	172.1	197.0
Portfolio, Net	-69.4	-61.7	-77.5	-94.4	-120.3	-145.1	-133.1	-125.2	-132.8
Other Income & Transfers,Net	-70.5	-77.5	-90.6	-96.2	-98.6	-119.7	-127.0	-132.0	-130.0

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

Class II FOMC
Restricted (FR)

April 22, 2009

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2005				2006				2007			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NIPA REAL EXPORTS and IMPORTS												
Percentage point contribution to GDP growth												
Net Goods & Services	0.3	0.8	-0.1	-1.3	0.1	0.6	-0.1	1.3	-1.2	1.7	2.0	0.9
Exports of G&S	0.8	0.9	0.0	1.1	1.7	0.6	0.4	1.7	0.1	1.0	2.5	0.5
Imports of G&S	-0.5	-0.1	-0.1	-2.4	-1.6	0.0	-0.5	-0.3	-1.2	0.7	-0.5	0.4
Percentage change from previous period, s.a.a.r.												
Exports of G&S	8.1	8.8	0.4	10.9	16.7	5.5	3.5	15.6	0.6	8.8	23.0	4.4
Services	10.2	-2.8	3.2	5.7	13.4	2.7	3.2	28.6	-2.7	13.3	25.9	2.7
Computers	16.8	27.9	8.3	5.2	12.0	17.5	-7.9	12.7	3.9	-4.0	14.4	-9.2
Semiconductors	-5.2	11.7	30.7	38.0	20.3	16.1	-5.6	-15.0	15.9	23.7	20.5	61.7
Core Goods 1/	7.3	13.8	-2.9	12.4	18.3	5.6	4.8	11.8	1.3	6.6	22.1	3.7
Imports of G&S	3.2	0.6	0.8	15.3	10.3	0.1	3.1	2.0	7.7	-3.7	3.0	-2.3
Services	-5.7	-0.0	-1.0	6.8	17.7	-2.0	-0.3	18.4	4.2	-2.0	6.3	-0.9
Oil	5.1	-27.1	-11.6	53.6	-2.8	-27.1	7.5	-10.6	30.9	-22.3	-13.5	16.5
Natural Gas	58.6	-14.1	111.1	-41.9	-50.7	91.9	26.6	-51.2	70.8	74.2	28.2	-58.6
Computers	3.2	11.6	20.4	15.4	20.7	21.1	19.7	-4.3	34.9	-6.5	-0.2	9.7
Semiconductors	-9.2	7.7	14.0	20.0	0.2	-0.5	17.7	-15.8	1.2	6.7	1.0	6.4
Core Goods 2/	4.8	6.1	0.3	12.7	13.7	4.9	1.2	3.2	2.2	-1.1	5.8	-6.0
Billions of Chained 2000 Dollars, s.a.a.r.												
Net Goods & Services	-623.7	-601.3	-603.6	-637.8	-636.0	-619.4	-623.0	-584.2	-618.6	-571.2	-511.8	-484.5
Exports of G&S	1177.9	1203.1	1204.3	1235.7	1284.3	1301.4	1312.6	1361.1	1363.2	1392.2	1466.2	1482.1
Imports of G&S	1801.7	1804.4	1807.9	1873.6	1920.2	1920.9	1935.7	1945.3	1981.8	1963.4	1978.0	1966.5
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-696.2	-711.3	-675.6	-832.9	-783.8	-799.6	-843.6	-725.4	-787.7	-776.4	-691.8	-669.0
Current Account as % of GDP	-5.7	-5.8	-5.4	-6.6	-6.0	-6.1	-6.4	-5.4	-5.8	-5.7	-5.0	-4.8
Net Goods & Services (BOP)	-664.0	-682.9	-721.4	-778.0	-756.4	-767.4	-789.9	-699.5	-718.2	-715.3	-672.5	-695.1
Investment Income, Net	88.6	77.8	88.7	59.9	65.2	70.7	51.7	67.7	57.8	45.8	98.9	152.6
Direct, Net	170.2	168.5	187.8	166.3	177.2	189.2	171.9	198.2	201.1	196.2	238.8	299.3
Portfolio, Net	-81.6	-90.7	-99.0	-106.5	-112.0	-118.5	-120.3	-130.5	-143.2	-150.4	-139.9	-146.7
Other Inc. & Transfers, Net	-120.9	-106.2	-42.9	-114.8	-92.6	-103.0	-105.4	-93.6	-127.4	-106.9	-118.3	-126.4

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

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2008				Projected 2009				Projected 2010			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NIPA REAL EXPORTS and IMPORTS												
Percentage point contribution to GDP growth												
Net Goods & Services	0.8	2.9	1.1	-0.2	1.0	0.6	-0.4	-0.9	-1.1	0.2	-0.2	-0.8
Exports of G&S	0.6	1.5	0.4	-3.4	-4.4	-0.4	-0.2	0.0	0.1	0.2	0.3	0.3
Imports of G&S	0.1	1.4	0.7	3.3	5.3	1.0	-0.2	-0.9	-1.2	0.0	-0.5	-1.1
Percentage change from previous period, s.a.a.r.												
Exports of G&S	5.1	12.3	3.0	-23.6	-31.4	-3.4	-1.5	0.2	1.2	2.1	2.7	3.2
Services	6.4	3.8	1.4	-1.5	-14.4	-7.8	-3.8	-1.6	0.1	1.7	3.2	3.9
Computers	0.4	57.4	5.4	-45.2	-18.5	15.8	9.5	9.5	9.5	9.5	9.5	9.5
Semiconductors	4.6	-6.8	21.3	-53.4	-64.8	31.2	11.1	11.1	11.1	11.1	11.1	11.1
Core Goods 1/	4.7	16.1	2.9	-30.4	-38.1	-2.6	-1.1	0.6	1.1	1.7	1.9	2.2
Imports of G&S	-0.8	-7.3	-3.5	-17.5	-31.1	-7.2	1.4	6.9	8.9	0.3	3.3	8.2
Services	5.5	-8.0	3.3	-6.7	-15.7	0.5	2.2	1.8	6.7	-0.8	4.1	4.6
Oil	17.6	-38.1	-6.6	40.7	7.6	-52.5	-15.8	30.3	29.9	-28.5	-17.7	30.9
Natural Gas	-40.5	3.7	-38.0	-27.2	81.6	-1.0	37.1	-37.4	15.6	11.8	27.0	-34.1
Computers	6.3	26.0	-13.1	-47.4	-26.4	8.6	15.5	15.5	15.5	15.5	15.5	15.5
Semiconductors	-3.3	14.4	-4.5	-37.9	-55.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Core Goods 2/	-6.4	2.4	-2.5	-29.2	-41.8	-0.0	2.8	5.2	5.7	6.0	6.1	6.1
Billions of Chained 2000 Dollars, s.a.a.r.												
Net Goods & Services	-462.0	-381.3	-353.0	-364.5	-333.4	-314.0	-324.7	-351.2	-383.3	-377.9	-382.9	-406.5
Exports of G&S	1500.6	1544.7	1556.1	1454.9	1324.1	1312.7	1307.6	1308.4	1312.2	1318.9	1327.7	1338.1
Imports of G&S	1962.6	1926.0	1909.1	1819.4	1657.5	1626.7	1632.3	1659.6	1695.5	1696.7	1710.6	1744.7
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-707.6	-728.9	-725.2	-531.3	-470.2	-462.7	-474.7	-508.2	-550.5	-542.1	-544.6	-571.9
Current Account as % of GDP	-5.0	-5.1	-5.0	-3.7	-3.3	-3.3	-3.4	-3.6	-3.8	-3.8	-3.7	-3.9
Net Goods & Services (BOP)	-713.8	-725.7	-723.5	-561.5	-389.2	-374.7	-386.4	-424.9	-473.3	-472.4	-483.4	-516.7
Investment Income, Net	140.3	120.0	125.5	153.5	59.1	41.3	41.0	46.0	52.1	59.6	68.1	77.1
Direct, Net	281.3	259.7	256.3	274.2	171.1	167.0	171.7	178.4	185.7	193.7	201.3	207.2
Portfolio, Net	-141.1	-139.7	-130.8	-120.7	-112.0	-125.7	-130.7	-132.4	-133.6	-134.1	-133.2	-130.2
Other Inc. & Transfers, Net	-134.1	-123.3	-127.2	-123.2	-140.1	-129.3	-129.3	-129.3	-129.3	-129.3	-129.3	-132.3

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

(Page I-58 is intentionally blank.)

Abbreviations

E&S	equipment and software
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
GSE	government-sponsored enterprise
IP	industrial production
MBS	mortgage-backed securities
NAIRU	nonaccelerating-inflation rate of unemployment
OPEC	Organization of the Petroleum Exporting Countries
PCE	personal consumption expenditures
TARP	Troubled Asset Relief Program
WTI	West Texas intermediate