## Prefatory Note

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

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

## Part 1

## CURRENT ECONOMIC AND FINANCIAL CONDITIONS

## Summary and Outlook

## Summary and Outlook

## Class II FOMC—Restricted (FR)

## Domestic Developments

The economic data that we have received in recent weeks have generally come in close to our expectations, and we have made little change to our projection. Although the data are far from conclusive, we continue to believe that the economy is likely in recession. The strongest support for that view comes from the labor market, where private payrolls are estimated to have contracted about 100,000 per month since the turn of the year and the unemployment rate moved above 5 percent in March. The available spending indicators also suggest that a substantial softening of activity is under way. Consumer outlays have continued to post only meager gains, and business outlays for equipment appear to be weakening. In addition, consumer and business sentiment has deteriorated further. Housing construction has continued to contract sharply, and nonresidential building now looks to be turning down as well. A notable bright spot in the picture remains export demand, which has provided some cushion to the weakening in domestic spending. All told, we estimate that real gross domestic product (GDP) rose at an annual rate of less than $1 / 2$ percent in the first quarter and project that output will decline at a $11 / 2$ percent rate in the second quarter.

Real GDP is expected to rise at roughly a 1 percent pace over the second half of the year, as the tax rebates are expected to limit the deterioration of the economy over the next few quarters. However, with the growth of output remaining well below the economy's potential, the unemployment rate is projected to rise to $53 / 4$ percent by year-end. Over time, the past and projected easing in monetary policy, along with the depreciation of the dollar, gradually improving financial conditions, and the waning drag on activity from past increases in energy prices, should foster a recovery in aggregate demand. As a consequence, we project that real GDP will increase 2.8 percent in 2009 and that the unemployment rate will edge down to $5 ½$ percent by year-end. From 2010 to 2012, we expect real GDP to rise a bit less than 3 percent per year on average and the unemployment rate to fall to $43 / 4$ percent by the end of that period.

Recent data on core consumer price inflation have been somewhat lower than we projected in the last Greenbook. However, the details of the recent reports suggest that much of the favorable news is probably transitory, and with prices for crude oil and other imports showing larger increases than we had anticipated in March, we have marked up our inflation forecast a bit in the second half of this year. That said, we continue to anticipate that increasing slack in labor and product markets will put some offsetting downward pressure on inflation over time. All told, we expect core personal consumption expenditures (PCE) inflation to increase 2.3 percent this year, the same as in

## Class II FOMC -- Restricted (FR)

## Key Background Factors Underlying the Baseline Staff Projection

Federal Funds Rate


## Equity Prices



Crude Oil Prices


Long-Term Interest Rates


House Prices


Broad Real Dollar


Note. In each panel, shading represents the projection period, which begins in 2008:Q2 except as noted.
the March Greenbook. In 2009, as the pass-through of higher energy and import prices fades in an environment with some noticeable slack in resource utilization, core price inflation is expected to moderate to a 2.0 percent pace. Total PCE inflation is expected to slow from 3.3 percent this year to 1.8 percent next year, as energy prices stabilize and core inflation steps down.

## Key Background Factors

We assume that the Federal Open Market Committee (FOMC) will reduce the target federal funds rate to 2 percent at this meeting and to $1 \frac{3}{4}$ percent at the June meeting. The federal funds rate is assumed to remain at that level through the end of 2009. Futures quotes suggest that market participants have priced in a bit less easing over the near term and expect the Committee to begin gradually tightening policy this fall; by the end of 2009, the market's expected path for the federal funds rate reaches $23 / 4$ percent, an upward shift of about $1 / 2$ percentage point from the path prevailing at the time of the March Greenbook. With respect to longer-term rates, we expect the 10-year Treasury rate to drift up over the projection period as the 10-year window moves through the especially low short rates this year and next. However, the upward tilt to this trajectory is shallower than in the March Greenbook, because the staff's assumed path for policy implies a larger downward surprise in interest rates for market participants than in March, and because at least part of the rise in Treasury yields that we had anticipated to result from a reversal of safe-haven demands appears to have already occurred.

Although short-term funding markets remain under considerable stress, conditions in financial markets overall have improved somewhat since we closed the March Greenbook. Investors seem to have become less concerned about the risk of a financial crisis, likely a response to the actions taken by the Federal Reserve and news regarding financial firms that were seen as reducing the likelihood of potential failures. In this environment, yield spreads on speculative-grade corporate bonds have fallen noticeably. Spreads on investment-grade bonds also have come down since mid-March, albeit by less than we had expected. Similarly, the spread of the conforming fixed mortgage rate over Treasury securities has narrowed less than we were anticipating in the March Greenbook. Still, in the context of gradually improving economic and financial conditions, we expect both spreads to decline over the forecast period and to end the projection at levels only a bit above those assumed in the last Greenbook.

Partly reflecting the market's reduced fears about a financial meltdown, broad indexes of stock prices have moved up since the March Greenbook and currently stand about

5 percent above the level implicit in our previous forecast. Even so, the equity risk premium remains elevated relative to historical norms. As in the March Greenbook, we are assuming that the equity premium stays near its current level through the end of this year and then narrows in 2009 as the economy strengthens. Accordingly, equity prices are assumed to rise at an annual rate of 7 percent over the rest of this year from the higher starting level and then to increase $11 \frac{1}{2}$ percent next year. We have built in a bit more downward tilt to our projection for house prices than we had in the March Greenbook. We now assume that the Office of Federal Housing Enterprise Oversight purchase-only house price index will fall $61 / 2$ percent this year and $43 / 4$ percent next year, leaving the level of house prices at the end of 2009 about 1 percent lower than last Greenbook.

Our assumptions about fiscal policy are unchanged from the March Greenbook; we estimate that fiscal impetus will boost real GDP growth about $1 / 2$ percentage point this year and that impetus drops to about zero next year. We expect real defense spending to rise a cumulative 10 percent over the next two years, reflecting further increases in spending related to Iraq and Afghanistan and some ramping up of expenditures for other defense programs. We are not assuming any other new spending initiatives over the projection period. ${ }^{1}$ As for tax policy, we expect the Treasury to distribute about $\$ 95$ billion in rebates to households from the beginning of May through mid-July, with an additional $\$ 18$ billion spread over late 2008 and early 2009; in addition, we anticipate that corporate income tax collections will be reduced this year by the 50 percent bonus depreciation included in the stimulus package. We continue to assume that other major expiring tax provisions will be extended and that no other significant tax policy changes will be made over the next two years.

The combination of the fiscal stimulus package and the weakening economy leads to a projected widening of the unified budget deficit from $\$ 162$ billion in fiscal 2007 to about $\$ 375$ billion in fiscal 2008 and to over $\$ 400$ billion next year. Our projected deficit for fiscal year 2008 is somewhat lower than last round because of the surprisingly strong corporate income tax payments in April.

[^0]The foreign exchange value of the dollar has changed little on balance since the March Greenbook. We continue to expect the real trade-weighted value of the dollar to decline at an annual rate of about 3 percent over the remainder of the projection period. The downturn in the U.S. economy and the stresses in foreign financial markets are likely to affect the path of activity abroad. In particular, we anticipate these influences to slow the growth of foreign activity from a pace of slightly more than 4 percent in 2007 to $21 / 4$ percent this year. As these restraining effects begin to fade, growth of foreign output is projected to pick up to a $31 / 2$ percent rate in 2009.

The spot price of West Texas intermediate (WTI) crude oil reached a new high during the intermeeting period and stood close to $\$ 120$ per barrel at the close of the Greenbook. Meanwhile, WTI contracts for delivery this summer have risen about $\$ 11$ dollars per barrel while longer-dated contracts have moved up a bit less. Some of the upward movement reportedly reflects diminished prospects for non-OPEC supply from Mexico and Russia. Incoming information on demand has been mixed as analysts have marked down their projections for demand from advanced economies but have revised up their projections for emerging market economies. Consistent with futures market quotes, our projection calls for the price of WTI to average about $\$ 117$ per barrel in the current quarter and then to edge down to $\$ 110$ by the end of the forecast period-a level about $\$ 10$ per barrel above our previous projection.

## Recent Developments and the Near-Term Outlook

Based on the data currently available, we estimate that real GDP edged up at an annual rate of $1 / 2$ percent in the first quarter. For the second quarter, we project real GDP to contract at an annual rate of $11 / 2$ percent. With the incoming information, both on the whole and in the particulars, close to our expectations, our projection for the first half of this year is very similar to that in the March Greenbook. Still, the contraction in real activity that we are projecting for the current quarter rests importantly on two maintained assumptions. The first is that the economy has shifted into a recession regime, and that, consequently, household and business spending will-in line with the experience from previous recessions-decline more than suggested by our standard models. The second is that part of the stimulus to consumer spending from the tax rebates will be met from imports and, in the first instance, from inventories, thereby limiting the impetus to domestic production.

Labor demand deteriorated noticeably in the first quarter. Private nonfarm payrolls fell nearly 100,000 in March, and the figures for January and February were revised down to

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

| Measure | 2008:Q1 |  | 2008:Q2 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Mar } \\ \text { GB } \end{gathered}$ | Apr GB | $\begin{gathered} \text { Mar } \\ \text { GB } \end{gathered}$ | $\begin{aligned} & \text { Apr } \\ & \text { GB } \end{aligned}$ |
| Real GDP | . 1 | . 4 | -1.0 | -1.4 |
| Private domestic final purchases | -1.4 | -1.0 | -2.0 | -2.2 |
| Personal consumption expenditures | . 2 | 1.0 | . 5 | . 2 |
| Residential investment | -33.1 | -30.9 | -33.3 | -32.0 |
| Business fixed investment | 2.0 | -1.1 | -6.5 | -6.7 |
| Government outlays for consumption and investment | 3.1 | 0.7 | 1.4 | 2.8 |
|  | Contribution to growth (percentage points) |  |  |  |
| Inventory investment | . 1 | . 7 | -1.7 | -2.4 |
| Net exports | . 7 | . 3 | 2.2 | 2.3 |

show similar declines. In addition, the unemployment rate rose to 5.1 percent last month, and claims for unemployment insurance remained at elevated levels through mid-April. Given our forecast for a downturn in business output, we expect additional cuts in private payrolls of roughly 160,000 workers per month, on average, this quarter, and an increase in the unemployment rate to 5.3 percent by June.

Real personal consumption expenditures have been moving essentially sideways since late last year. With mounting job losses and outsized increases in energy prices holding down real income, falling home values cutting into household net worth, and consumer sentiment deteriorating further, we would, all else equal, expect a noticeable decline in PCE in the second quarter. However, the tax rebates are anticipated to boost the change in spending by $11 / 2$ percentage points in the second quarter, leading us to project PCE to increase at an annual rate of $1 / 4$ percent.

As we had expected, activity in the housing sector continues to contract sharply. Starts of single-family homes fell to an annual rate of 680,000 units in March, and given the low level of new permit issuance, we are looking for starts to fall to a rate of 600,000 units in the second quarter. As a result, we expect residential investment to drop at an annual rate of more than 30 percent in both the first and second quarters. The cutbacks in new construction over the past year have enabled builders to make some progress in reducing the stock of unsold new homes. Nevertheless, with sales down sharply over that period
as well, months' supply of new homes has increased further from an already elevated level.

In the business sector, real investment in equipment and software (E\&S) appears to have been about unchanged in the first quarter, after having risen at an annual rate of 3 percent in the fourth quarter. The available data point to a noticeable deceleration in high-tech investment and a sharp drop in business outlays for motor vehicles; spending on goods outside of high-tech and transportation looks to have been roughly unchanged in the first quarter. We expect real $E \& S$ spending to decline at an annual rate of $81 / 2$ percent in the second quarter, reflecting the deteriorating outlook for sales, reduced credit availability, and downbeat readings on business sentiment. As is the case for other components of private spending, E\&S spending tends to move to levels below those implied by fundamentals during recessionary periods, and we expect that this episode will not prove to be an exception to this pattern.

Given the data on nominal construction put in place through February, we estimate that real investment on nonresidential structures decreased at an annual rate of $23 / 4$ percent in the first quarter after having posted a double-digit gain last year. The apparent softening in structures investment has been more rapid than we had anticipated in our previous forecast, but it is consistent with anecdotal reports from general contractors suggesting that reduced credit availability and less-favorable lending terms are weighing heavily on new activity in this sector. Accordingly, we have marked down our near-term forecast for spending in this sector to show a drop at an annual rate of $31 / 4$ percent in the second quarter. The one notable exception to the emerging weakness in this sector is in drilling and mining structures, where high prices for crude oil and natural gas are providing considerable support to new investment.

We estimate that real nonfarm inventories edged down at an annual rate of $\$ 2$ billion in the first quarter following a $\$ 22$ billion runoff in the fourth quarter; the slower pace of liquidation is estimated to have boosted the growth of real GDP by $3 / 4$ percentage point last quarter. In general, we see only scattered evidence of inventory overhangs. Even so, we foresee a sharp drop-off in inventories in the current quarter, both because we expect firms to cut production promptly in response to any deterioration in sales and because we anticipate that much of the increased demand from the tax rebates will initially be met by drawing down inventories. As a result, we project that inventory investment will subtract $21 / 2$ percentage points from the change in real GDP in the second quarter.

In the government sector, we estimate that real federal purchases rose at an annual rate of 2 percent in the first quarter. This increase is smaller than we had anticipated, as defense spending was unusually weak for the second consecutive quarter. Given the budget appropriations enacted last year, we expect a rebound in defense spending this quarter to boost the rise in federal purchases to an annual rate of 5 percent. We estimate that real state and local expenditures on goods and services were about unchanged in the first quarter, with continued moderate gains in real compensation offset by a drop in construction spending. The ongoing increases in compensation reflect hiring for education, which we anticipate will persist into the second quarter. While we are expecting a slowdown in construction spending, we suspect that some of the weakness last quarter was transitory, given the volatility of the data. Accordingly, we look for a small increase in real construction outlays in the second quarter and a $11 / 2$ percent gain for state and local spending as a whole.

Export demand has remained brisk, supported by the depreciation of the dollar and solid foreign economic growth. We estimate that real exports rose at an annual rate of $61 / 4$ percent in the first quarter, and we expect exports to expand at a similar pace in the second quarter. After having declined in the fourth quarter, real imports are estimated to have risen at an annual rate of $21 / 2$ percent in the first quarter, boosted by sizable increases in imports of crude oil and natural gas. We project imports to fall at an annual rate of $81 / 4$ percent in the second quarter as the surge in oil imports reverses and as core imports slump further in response to weak domestic demand and the rising relative price of foreign goods. All told, we estimate that net exports contributed $1 / 4$ percentage point to real GDP growth in the first quarter, and we expect that they will add $21 / 4$ percentage points to growth in the current quarter.

Based on data from the consumer price index and producer price index through March, we estimate that core PCE prices rose at an annual rate of 2.1 percent in the first quarter. This estimate is 0.6 percentage point lower than we were anticipating in the last Greenbook, with downside surprises in both market-based prices, particularly for housing and medical services, and in nonmarket prices. Although we have carried some of the good news on services prices forward into the second quarter, it has been offset by upward revisions to our projections for goods prices in response to the higher readings on import prices. As a result, our forecast for core PCE inflation for the current quarter is 2.3 percent, the same as in the March Greenbook. Meanwhile, further sizable increases in food and energy prices boosted total PCE inflation to 3.5 percent last quarter; as with core inflation, this estimate is also 0.6 percentage point lower than in our previous
forecast. However, with energy prices expected to rise sharply in coming months, we are projecting total PCE inflation to move up to 4.3 percent this quarter, 0.3 percentage point higher than in the March Greenbook.

## The Medium-Term Outlook

As in the March Greenbook, we project that real GDP will rise slowly over the second half of this year and then accelerate to a pace above potential growth in 2009. The slow pace of growth later this year reflects our assessment that the impetus from fiscal and monetary stimulus, along with continued strong demand from the external sector, will be mostly offset by ongoing restraint from financial market turmoil, falling household wealth, the past increases in oil prices, and the continuing contraction in housing. In 2009, we assume that the stimulus from monetary policy will be reinforced by a gradual improvement in the tenor of financial markets and by a lessening of the drag on demand from past increases in oil prices. As a result, real GDP is projected to rise 2.8 percent next year despite the fading effects of the fiscal stimulus on aggregate demand.

Household spending. The projected contour for real PCE is similar to that in the March Greenbook, with a negligible rise projected for this year and relatively subdued growth expected in 2009. The quarterly pattern of spending in our forecast is affected importantly by the tax rebates: The addition to income should temporarily provide a significant boost to consumption in the second and third quarters of this year, then the level of spending is projected to drop back to a level consistent with the fundamentals, falling noticeably in the fourth quarter and posting only a small gain in the first quarter of next year. Abstracting from the effects of the tax rebates, real PCE is expected to remain weak throughout the year. As economic and financial conditions begin to improve and consumer sentiment recovers, the growth of real PCE is projected to pick up to a 2 percent pace in 2009.

Residential investment. After plunging at an annual rate of 32 percent during the first half of 2008, residential investment is projected to contract at a 22 percent pace during the second half of the year and to decline a further 4 percent in 2009. This forecast is similar to that in the March Greenbook. We continue to look for sales to flatten out at a low level in the second half of this year. But, with months' supply of unsold homes being extremely high, we continue to believe that builders will need to reduce the pace of construction substantially further in coming quarters. As a result, we are looking for single-family starts to decline to an annual rate of 570,000 units by the fourth quarter of

## Projections of Real GDP

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

| Measure |  |  |  |
| :---: | ---: | ---: | ---: |
|  | 2008 |  | 2009 |
|  | H1 | H2 |  |
| Real GDP | -.5 | .9 | 2.8 |
| Previous | -.4 | .7 | 3.0 |
| Final sales | .3 | -.2 | 2.1 |
| Previous | .4 | .2 | 2.2 |
| PCE | .6 | -.7 | 2.0 |
| Previous | .4 | -.4 | 2.0 |
| Residential investment | -31.5 | -22.1 | -3.9 |
| Previous | -33.2 | -18.8 | -3.9 |
| BFI | -3.9 | -3.7 | 1.3 |
| Previous | -2.4 | -2.7 | 2.1 |
| Government purchases | 1.8 | 2.2 | 1.5 |
| Previous | 2.2 | 2.1 | 1.6 |
| Exports | 6.3 | 7.3 | 8.2 |
| Previous | 6.3 | 7.5 | 8.1 |
| Imports | -3.0 | -.3 | 3.9 |
| Previous | -3.7 | -.0 | 4.2 |
|  | Contribution to growth |  |  |
|  | (percentage points) |  |  |
|  | 1.2 |  |  |
| Inventory change | -.8 | .7 |  |
| Previous | -.8 | .5 | .8 |
| Net exports | 1.3 | 1.0 | .4 |
| Previous | 1.4 | 1.0 | .3 |

this year. We then expect starts to begin to show some signs of modest improvement in 2009 as demand conditions improve and inventories become better aligned with sales. Meanwhile, multifamily starts are projected to hold steady at a 300,000 unit pace over the projection period.

Business investment. We anticipate that real business investment on equipment and software will decline at an annual rate of 4 percent over the second half of this year as the weak pace of output growth, reduced credit availability, and continued uncertainty about
the economic outlook lead to a further pullback in capital spending plans. Although the bonus-depreciation provision may provide some incentive to purchase new equipment late this year, we expect that the boost to $\mathrm{E} \& \mathrm{~S}$ will be small and transitory. We anticipate that improving economic and financial conditions will contribute to a modest pickup in investment spending next year, and thus we are projecting E\&S outlays to rise $31 / 4$ percent in 2009.

We have marked down our outlook for investment in nonresidential structures in this Greenbook in response to the accumulating evidence that a retrenchment in building construction is under way. We are now projecting that nonresidential construction excluding drilling and mining will fall at an annual rate of 9 percent over the second half of 2008; previously, we had assumed a more delayed and muted response to financing constraints and the weak projected pace of output growth. Given the considerable lags in planning and construction in this sector, we anticipate that spending on nonresidential structures excluding drilling and mining will decline $61 / 2$ percent in 2009 even as financing conditions improve and economic activity picks up. By contrast, investment in drilling and mining structures is expected to rise rapidly over the second half of this year in response to the recent increases in prices for crude oil and natural gas, and then to taper off in 2009 after energy prices stabilize somewhat.

Against a backdrop of weak sales growth, we expect businesses to continue to trim inventories over the course of the year. Moreover, we anticipate that firms will draw down stocks at a particularly rapid pace in the second and third quarters to smooth production in response to the temporary increase in demand from the rebates, then build inventories over the course of 2009 as sales rise and the tax-related drawdown is restocked. On net, inventory investment is projected to be a relatively neutral influence on the change in real GDP in 2008 and to contribute $3 / 4$ percentage point in 2009.

Government spending. After having posted a gain of $21 / 4$ percent in 2007, total real government purchases are projected to rise 2 percent this year and $11 / 2$ percent in 2009. At the federal level, we expect real purchases to increase at an annual rate of $43 / 4$ percent over the second half of this year, as outlays catch up to past appropriations for defense. Federal expenditures should rise more slowly next year when spending increases related to Iraq and Afghanistan are expected to step down; also, budget pressures are likely to keep a lid on nondefense spending. Spending at the state and local level is projected to be increasingly constrained over the forecast period in response to budget pressures associated with the weakness in economic activity.

Net exports. The arithmetic contribution of net exports to real GDP growth is projected to increase from $3 / 4$ percentage point in 2007 to $11 / 4$ percentage points this year and then fall back to $1 / 2$ percentage point in 2009. We project real export growth to slow this year, in part because of a slowdown in the pace of foreign activity, and then pick up next year as foreign activity strengthens. Throughout the projection period, export demand is supported by the past and prospective depreciation of the dollar. Rising relative import prices and stagnant domestic demand are expected to lead to a decline in real imports this year, while the projected rebound in domestic demand should boost imports in 2009. (The "International Developments" section provides greater detail on the outlook for the external sector.)

## Aggregate Supply, the Labor Market, and Inflation

We made no material changes to our supply side assumptions in this Greenbook. In particular, we continue to project that structural labor productivity will rise nearly 2 percent per year in 2008 and 2009 and that potential GDP will increase about $21 / 4$ percent in both years. Given our projected path for actual real GDP, we expect the output gap, which was about zero at the end of last year, to reach 2 percent of potential GDP by the end of this year and then narrow to $1 \frac{1}{4}$ percent by the end of 2009, the same as the previous forecast. Accordingly, we continue to expect the unemployment rate to rise to $53 / 4$ percent by the end of 2008 and then edge down to $51 / 2$ percent by the end of 2009.

Productivity and the labor market. Given the available data on output and hours, we estimate that productivity growth in the nonfarm business sector slowed from an annual rate of 2 percent in the fourth quarter of last year to a 1 percent pace in the first quarter. Such a deceleration in productivity is not unusual during periods of weak economic growth and generally reflects some lags in the speed with which employers adjust their labor inputs to changes in production; indeed, we expect productivity to edge down in the second quarter as output contracts. With output growth projected to pick up later this year and next, productivity is anticipated to accelerate to a $13 / 4$ percent pace in the second half of 2008 and to rise $23 / 4$ percent in 2009. Following steep declines during the first half of the year, private payroll employment is projected to contract at a monthly rate of 50,000 during the second half of this year and then to increase at an average monthly pace of 100,000 next year.

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

| Measure | $1974-$ <br> 95 | $1996-$ <br> 2000 | $2001-$ <br> 05 | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | :---: | ---: | ---: | ---: | ---: | ---: |
| Structural labor productivity | $\mathbf{1 . 5}$ | $\mathbf{2 . 5}$ | $\mathbf{2 . 8}$ | $\mathbf{2 . 1}$ | $\mathbf{2 . 1}$ | $\mathbf{1 . 9}$ | $\mathbf{1 . 8}$ |
| $\quad$ Previous | 1.5 | 2.5 | 2.8 | 2.1 | 2.1 | 1.9 | 1.8 |
| Contributions |  |  |  |  |  |  |  |
| Capital deepening <br> $\quad$ Previous | .7 | 1.4 | .7 | .7 | .7 | .5 | .5 |
| Multifactor productivity | .7 | 1.4 | .7 | .7 | .6 | .4 | .4 |
| $\quad$ Previous | .5 | .7 | 1.8 | 1.1 | 1.2 | 1.2 | 1.2 |
| Labor composition | .5 | .7 | 1.8 | 1.2 | 1.3 | 1.3 | 1.3 |
| MEMO | .3 | .3 | .3 | .2 | .2 | .2 | .1 |
| Potential GDP |  |  |  |  |  |  |  |
| $\quad$ Previous | 3.0 | 3.4 | 2.8 | 2.4 | 2.4 | 2.3 | 2.2 |

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

1. Percentage points.

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

| Measure | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: |
| Output per hour, nonfarm business | .9 | 2.9 | 1.0 | 2.7 |
| $\quad$ Previous | .9 | 2.9 | 1.1 | 2.8 |
| Nonfarm private payroll employment | 1.7 | .9 | -.9 | 1.0 |
| $\quad$ Previous | 1.7 | .9 | -.9 | .9 |
| Household survey employment | 2.1 | .4 | -.6 | 1.0 |
| $\quad$ Previous | 2.1 | .4 | -.6 | 1.0 |
| Labor force participation rate $^{1}$ | 66.3 | 66.0 | 65.6 | 65.4 |
| $\quad$ Previous | 66.3 | 66.0 | 65.6 | 65.4 |
| Civilian unemployment rate $^{1}$ | 4.4 | 4.8 | 5.7 | 5.5 |
| $\quad$ Previous | 4.4 | 4.8 | 5.7 | 5.5 |
| MEMO |  |  |  |  |
| GDP gap $^{2}$ | .1 | .1 | -1.9 | -1.3 |
| $\quad$ Previous | .1 | .1 | -2.0 | -1.3 |

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.

Prices and labor costs. Although we have marked down our forecast for core and headline inflation for the first half of 2008, we have revised up our forecast for both measures in the second half. In large part, this upward revision reflects recent movements in energy and core nonfuel import prices, which we now expect to run higher this year than we anticipated in the March Greenbook and to impart a bit more upward pressure on core consumer prices this year and next. Our projection for food price inflation has also been revised up somewhat in this projection in response to somewhat higher-than-expected incoming data on retail food prices as well as further increases in farm commodity prices. Over the past year, consumer food prices have risen rapidly as commodity prices, especially for grains, have soared. However, with futures markets suggesting that these farm prices will stabilize on average (albeit at a high level) in the period ahead, we continue to expect retail price increases to slow markedly toward core inflation in coming months. Despite these higher food and energy prices, we have not seen any convincing evidence of a further deterioration in long-run inflation expectations.

With the slack that we are projecting in labor and product markets expected to put downward pressure on core price inflation, and with commodity prices still projected to flatten out, we expect inflation to slow over the projection period. In particular, we anticipate that core PCE prices will increase 2.3 percent in 2008 and then decelerate to a 2 percent pace in 2009, just a shade higher than our previous projection. The upward revisions to energy and food prices in this projection boost total PCE inflation to 3.3 percent this year, 0.4 percentage point higher than in the March Greenbook. However, total PCE inflation is projected to drop back to 1.8 percent in 2009 as food price increases slow and energy prices turn down.

We have received little new information about labor compensation since the last Greenbook. We project hourly compensation to increase 4 percent this year and then slow to 3.8 percent in 2009 in response to slack in labor markets and moderating headline inflation. The projection for the employment cost index, which has been running well below nonfarm compensation, has a similar contour but is on a lower path.

## The Long-Term Outlook

We have extended the staff forecast to 2012 using the FRB/US model, adjusted to incorporate staff assessments of long-run potential output growth, fiscal policy, and foreign economic conditions. The contour of the long-run extension depends on several key assumptions:

## The Long-Term Outlook

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

| Measure | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP | 2.5 | 0.2 | 2.8 | 3.1 | 3.0 | 2.8 |
| Civilian unemployment rate $^{1}$ | 4.8 | 5.7 | 5.5 | 5.2 | 4.9 | 4.7 |
| PCE prices, total | 3.4 | 3.3 | 1.8 | 1.8 | 1.7 | 1.6 |
| Core PCE prices $_{\text {Federal funds rate }^{1}}$ | 2.1 | 2.3 | 2.0 | 1.8 | 1.7 | 1.7 |

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

- Monetary policy is assumed to aim at stabilizing PCE inflation at $13 / 4$ percent, the midpoint of the range of longer-term inflation forecasts provided by FOMC participants in January.
- Risk premiums on corporate bonds and equity continue falling back to historically more normal levels as current financial market strains abate further. Similarly, the unusually restrictive lending standards and other factors now restraining household and business spending continue to ease after 2009.
- Fiscal policy is an essentially neutral factor. Cyclically adjusted, the deficit of the federal government remains about flat as a percent of GDP, while the fiscal balance of state and local governments improves somewhat.
- Beyond 2009, foreign real GDP expands $31 / 4$ percent per year while the dollar depreciates 1 percent per year in real terms; real oil prices edge down slightly, as is consistent with far-dated futures prices. Under these assumptions, the current account deficit diminishes to about 3 percent of GDP by 2012, and movements in energy and import prices have only minor implications for domestic inflation.
- The non-accelerating inflation rate of unemployment (NAIRU) remains flat at 43/4 percent, and potential GDP expands a little less than $2^{1 ⁄ 2}$ percent per year from 2010 to 2012.

Together, these assumptions imply that real GDP growth will average a bit less than 3 percent per year from 2010 to 2012. These increases are well above those of potential GDP, and as a result, the unemployment rate falls steadily and reaches the NAIRU in 2012. Inflation edges down a bit over this period and is near the target rate from 2010 to 2012. Monetary policy gradually tightens past 2010 as the economy recovers, and by the end of 2012, the nominal federal funds rate reaches 4 percent.

## Financial Flows and Conditions

Domestic nonfinancial debt growth is expected to slow to an annual rate of $33 / 4$ percent in the second quarter and then maintain an average annual pace of about $41 / 2$ percent over the balance of the projection period. The sharp deceleration from the 8 percent rise last year is attributable, in part, to our view that financial headwinds will persist for some time.

After having expanded 7 percent in 2007, household debt is projected to have risen at an annual rate of just $31 / 2$ percent in the first quarter and is expected to decelerate a bit further in the current quarter. We expect household borrowing to expand at less than a 3 percent pace over the rest of this year and in 2009. The slowdown mostly reflects a curbing of home mortgage borrowing in response to tighter credit terms and standards as well as falling home prices and weak home sales. We also anticipate a slowing in nonmortgage borrowing due to more restrictive standards on consumer loans and relatively sluggish growth in household spending.

Nonfinancial business debt is projected to increase at an average annual rate of about $41 / 2$ percent through the end of 2009, less than half of last year's pace. Although we expect the wide bond spreads now prevailing to narrow somewhat over the forecast period, they are projected to remain high by historical standards and to crimp borrowing. In addition, bank lending standards are expected to stay relatively tight, in part as the balance sheets and profits of banks remain under pressure, holding down business loans for much of the forecast period.

Federal government debt is expected to rise $71 / 2$ percent this year, up from 5 percent last year, boosted in part by borrowing to fund the fiscal stimulus package. In 2009, we project that federal debt growth will remain elevated as the budget deficit widens further.

The rise in state and local government debt is projected to slow from $911 / 4$ percent last year to about 6 percent in 2008 and 2009, as issuance for both new capital and advance refunding is expected to moderate. We expect the cost of financing for some municipalities to remain elevated for some time due to persistent doubts among market participants about the value of bond insurance. Moreover, the liquidity pressures impinging on securities firms have made them less eager to underwrite offerings, likely boosting issuance costs.

M2 growth is expected to rise to $91 / 2$ percent in 2008 from 53/4 percent in 2007 as a result of declines in the opportunity cost of holding money and heightened demand for safe and liquid assets. In 2009, M2 is expected to decelerate but still increases a bit faster than nominal GDP due to some lingering effects of earlier declines in opportunity costs.

## Alternative Simulations

In this section, we consider alternatives to the staff forecast using simulations of the FRB/US model. The first scenario assumes that stresses in financial markets intensify and are more persistent than in the baseline, leading to weaker real activity. The second scenario explores another downside risk-that we have underestimated the extent to which consumers will boost their saving in response to weakened balance sheets, poorer employment prospects, and heightened uncertainty. We then consider two upside risks to the outlook. In the first, we assume that we have overreacted to the economic and financial news in projecting an outright contraction in aggregate output in the near term. In the second, we add in the assumption that the strains in financial markets will dissipate more quickly than in the baseline. The remaining three scenarios focus on several risks to inflation and aggregate supply: First, that food and energy price increases will not abate as we expect; second, that consumer prices will decelerate more than we predict because we have misjudged the magnitude of pass-through effects and the slope of the Phillips curve; and third, that potential output is rising faster than we estimate. In all of the scenarios, we assume that monetary policy responds to the change in the outlook as suggested by an estimated version of the Taylor rule.

Greater financial stress. Although tighter lending standards and other effects of financial stress seem to be significantly restraining household and business spending at present, we expect this restraint to fade over time as market conditions improve and financial firms shore up their balance sheets. However, the current financial crisis may prove to be more entrenched than we anticipate, and in this scenario, mounting credit losses at banks lead to a more severe credit crunch that directly constrains private spending by more and for longer than assumed in the baseline. In addition, risk spreads on corporate bonds and equity increase in response to weaker real activity to levels near the peaks seen over the past 25 years, further depressing aggregate demand and intensifying credit losses. Taken together, these adverse effects result in a prolonged period of high unemployment and low real interest rates similar to the financial headwinds period of the early 1990s. Real GDP declines almost 1 percent this year and expands only 1 percent next year, resulting in an unemployment rate that peaks at $61 / 2$ percent in late 2009; this higher level of slack puts inflation on a more noticeable

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

| Measure and scenario | 2007 | 2008 |  | 2009 | 2010 | $\begin{gathered} 2011- \\ 12 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H2 | H1 | H2 |  |  |  |
| Real GDP |  |  |  |  |  |  |
| Greenbook baseline | 2.7 | -0.5 | 0.9 | 2.8 | 3.1 | 2.9 |
| Greater financial stress | 2.7 | -1.1 | -0.6 | 0.9 | 3.2 | 3.5 |
| More-cautious consumers | 2.7 | -1.3 | -0.3 | 2.6 | 3.7 | 3.2 |
| Near-term upside risk | 2.7 | 0.8 | 2.4 | 2.3 | 2.9 | 2.6 |
| Less financial restraint | 2.7 | 0.8 | 2.8 | 3.0 | 2.5 | 2.5 |
| Greater inflationary pressures | 2.7 | -0.5 | 0.7 | 2.8 | 3.2 | 2.6 |
| Lower inflation | 2.7 | -0.5 | 0.9 | 2.8 | 3.2 | 3.0 |
| More room to grow | 2.7 | -0.4 | 1.5 | 3.4 | 3.6 | 3.4 |
| Civilian unemployment rate ${ }^{1}$ |  |  |  |  |  |  |
| Greenbook baseline | 4.8 | 5.2 | 5.7 | 5.5 | 5.2 | 4.7 |
| Greater financial stress | 4.8 | 5.3 | 6.0 | 6.5 | 6.2 | 5.1 |
| More-cautious consumers | 4.8 | 5.3 | 6.0 | 6.0 | 5.6 | 4.7 |
| Near-term upside risk | 4.8 | 5.1 | 5.3 | 5.1 | 5.0 | 4.7 |
| Less financial restraint | 4.8 | 5.1 | 5.2 | 4.8 | 4.7 | 4.7 |
| Greater inflationary pressures | 4.8 | 5.2 | 5.7 | 5.6 | 5.2 | 4.8 |
| Lower inflation | 4.8 | 5.2 | 5.7 | 5.5 | 5.2 | 4.6 |
| More room to grow | 4.8 | 5.2 | 5.7 | 5.5 | 5.2 | 4.7 |
| Core PCE inflation |  |  |  |  |  |  |
| Greenbook baseline | 2.3 | 2.2 | 2.4 | 2.0 | 1.8 | 1.7 |
| Greater financial stress | 2.3 | 2.2 | 2.4 | 2.0 | 1.7 | 1.4 |
| More-cautious consumers | 2.3 | 2.2 | 2.4 | 1.9 | 1.6 | 1.5 |
| Near-term upside risk | 2.3 | 2.2 | 2.4 | 2.0 | 1.9 | 1.9 |
| Less financial restraint | 2.3 | 2.2 | 2.3 | 2.0 | 2.0 | 2.0 |
| Greater inflationary pressures | 2.3 | 2.2 | 2.6 | 2.5 | 2.3 | 2.0 |
| Lower inflation | 2.3 | 2.2 | 2.2 | 1.8 | 1.6 | 1.5 |
| More room to grow | 2.3 | 2.2 | 2.3 | 1.8 | 1.7 | 1.5 |
| Federal funds rate ${ }^{1}$ |  |  |  |  |  |  |
| Greenbook baseline | 4.5 | 2.1 | 1.8 | 1.8 | 2.0 | 4.1 |
| Greater financial stress | 4.5 | 1.9 | 0.9 | 0.0 | 0.3 | 3.4 |
| More-cautious consumers | 4.5 | 1.8 | 0.9 | 0.5 | 1.3 | 3.9 |
| Near-term upside risk | 4.5 | 2.5 | 3.1 | 2.5 | 2.3 | 4.1 |
| Less financial restraint | 4.5 | 2.5 | 3.2 | 3.3 | 2.8 | 4.3 |
| Greater inflationary pressures | 4.5 | 2.1 | 1.7 | 2.1 | 2.9 | 4.3 |
| Lower inflation | 4.5 | 2.1 | 1.8 | 1.5 | 1.6 | 3.9 |
| More room to grow | 4.5 | 2.0 | 1.7 | 1.7 | 1.9 | 3.8 |

[^1]downward trajectory heading into 2010 and beyond. In response to these weak conditions, the federal funds rate falls to zero in 2009 and then moves up gradually over the longer run as financial market conditions slowly improve.

More-cautious consumers. In the baseline projection, although consumers are unusually cautious about spending this year, their outlays move into better alignment with fundamentals next year as financial stress eases and real activity recovers. However, this caution may linger longer than we expect in an environment of heightened uncertainty associated with, among other things, falling home prices, elevated home foreclosures, and a still weak economy. In this scenario, households trim spending by enough to boost the personal saving rate to 2 percent by the end of 2009, 1 percentage point higher than in the baseline. Under these assumptions, real GDP declines $3 / 4$ percent this year and rises $21 / 2$ percent next year. As a result, the unemployment rate climbs to 6 percent by year-end and remains there through the end of 2009. In response to persistently weak activity, the federal funds rate declines to $1 / 2$ percent by the end of next year and remains below baseline through 2012. The resultant monetary stimulus, coupled with a gradual improvement in consumer confidence, enables GDP to rise faster than potential after 2009, allowing the unemployment rate to drift down slowly over time. Increased labor and product market slack, in turn, helps to push inflation down to $11 / 2$ percent over the longer run.

Near-term upside risk. In the baseline forecast, we have read the recent news as signaling that the economy has fallen into recession. On that assumption, we have built in some special, downward adjustments to business and household spending of the sort observed in past cyclical downturns. But we may have overreacted in making this recession call, and in this scenario, we remove these special adjustments. Under this assumption, real activity does not contract; instead, real GDP expands $11 / 2$ percent this year, and unemployment ends 2008 only slightly higher than its recent level. Because the weakness in spending this year is less pronounced than in the baseline, the rebound next year is also less vigorous, with real GDP increasing $2 \frac{1}{4}$ percent in 2009 and the unemployment rate staying close to 5 percent. With a higher level of near-term economic activity and little difference in inflation, the federal funds rate is higher than in the baseline and stands at about $21 / 2$ percent at the end of next year. Beyond 2009, increases in real GDP average a bit faster than potential, and the unemployment rate moves down gradually to the NAIRU.

Less financial restraint. Aside from the risk that a recession may not be under way, we may also be overstating the persistence of the effects of financial market turmoil on spending. This scenario builds on the preceding one by assuming, in addition, that strains in financial markets will ease more quickly, leading to a more rapid decline in risk premiums on corporate bonds and equity as well as less restrictive lending standards; the improvement in financial conditions reinforces the pickup in consumer spending and business investment. Under these assumptions, real GDP expands $13 / 4$ percent this year and 3 percent in 2009, causing the unemployment rate to fall back to the NAIRU by the end of next year. Monetary policy tightens in response, pushing the federal funds rate to $31 / 4$ percent by the end of 2009. Inflation is unchanged from baseline through next year, in part because the tightening in monetary policy pushes up the dollar and holds down import prices. Over the longer run, however, inflation runs somewhat above baseline because, unlike the situation in the staff forecast, no appreciable slack emerges to help reduce long-run inflation expectations.

Greater inflationary pressures. In the staff projection, we expect inflation pressures to ease substantially as oil prices level out and food prices stop rising at unusually rapid rates. But supply shocks and continued robust growth in developing countries may cause prices for these and other commodities to continue rising briskly for a time; if so, inflation expectations may start to drift up noticeably in response to yet another year of elevated readings on headline inflation. In this scenario, crude oil prices climb to $\$ 150$ per barrel next year and relative food prices continue rising at their average pace of the past three years; in response, we assume long-run inflation expectations move up $1 / 4$ percentage point relative to baseline by the end of next year. As a result, core PCE prices increase $21 / 2$ percent both this year and next, and headline inflation averages 3114 percent this year and next. At the same time, real GDP expands somewhat more slowly than in the staff forecast, in part because the rise in food and energy prices erodes real household income. Under the estimated Taylor rule, monetary policy responds to these changes in real activity and inflation by tightening gradually, boosting the federal funds rate to 2 percent in 2009 and 3 percent in 2010. Because the impetus from rising food and energy prices is assumed to fade after 2009, core inflation moderates over the longer term, although it remains persistently above baseline because of the deterioration in inflation expectations.

Lower inflation. Given the imprecision of estimated pass-through effects, we may be understating the degree to which rising costs of energy, food, and other commodities have boosted core consumer prices over the past several years. If so, inflation should
slow more than we predict once the relative prices of these goods level out. Moreover, the slope of the Phillips curve may not be as flat as it appears to have been of late. Accordingly, the projected slowdown in real activity may reduce inflation more than in the baseline. In this scenario, these risks manifest themselves as a steady decline in core PCE inflation to $11 / 2$ percent by 2010. The more rapid disinflation implies little change in real activity relative to baseline, in part because the path of the federal funds rate shifts down in response to lower inflation.

More room to grow. The staff's estimate of potential GDP growth is below the consensus among other forecasters. In this scenario, we assume that potential output expands $23 / 4$ percent in 2008 and 2009, about $1 / 2$ percentage point faster than in the baseline. About one-third of the additional economic potential comes from higher labor force participation, while the rest results from faster growth of trend productivity. Because higher potential output implies higher permanent household income and corporate earnings, the upward revision to trend growth implies more favorable prospects for consumer and business spending. However, the revision has no major implications for asset prices, because we assume that current market prices already embody the more favorable assessment of supply-side conditions. Under these assumptions, actual output growth shifts up roughly in line with the revision in potential, and real GDP rises $1 / 2$ percentage point faster in the second half of this year and in 2009 relative to baseline. Accordingly, the unemployment rate is unchanged from baseline. Unit labor costs, however, rise more slowly than in the staff forecast because nominal compensation adjusts only gradually to accelerating productivity. Consequently, inflation moderates more noticeably than in the baseline and leads to a lower path for the nominal federal funds rate.

## Assessment of Forecast Uncertainty

The uncertainty that attends the staff forecast is always considerable, and the alternative scenarios discussed in the previous section represent just a few of the possible outcomes for real activity, inflation, and interest rates. Moreover, our ability to discriminate between periods of higher or lower degrees of uncertainty is extremely limited. That said, we think that the uncertainty surrounding our current projection of real activity is probably greater than that seen on average over the past 20 years, as gauged by confidence intervals derived from historical forecasting errors. This assessment stems from the difficulty of predicting business-cycle turning points-as we have done in this projection-as well as the highly unusual nature of the current stresses on the financial system. In addition, we see the distribution of future outcomes for output and
employment growth as skewed to the downside, largely reflecting elevated "tail risks" associated with the ongoing housing market correction and the capital positions of some financial institutions.

In contrast, we do not think that the uncertainty attached to our inflation projection is unusually wide relative to historical norms, nor do we see the risks to the price outlook as markedly asymmetric. In broad terms, the recent behavior of core inflation and survey measures of expected inflation have not been particularly surprising, given changes in energy prices and other factors. To be sure, energy and other commodity prices have surprised us and the financial markets to the upside over the past several years and continue to constitute an upside risk to the projection. However, we can identify some risks skewed in the opposite direction, such as those associated with resource utilization and labor costs.

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

| Measure | 2008 | 2009 | 2010 | 2011 | 2012 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP <br> (percent change, Q4 to Q4) |  |  |  |  |  |
| Projection | 0.2 | 2.8 | 3.1 | 3.0 | 2.8 |
| Confidence interval |  |  |  |  |  |
| Greenbook forecast errors | -1.2-1.6 | 1.4-4.2 |  |  |  |
| FRB/US stochastic simulations | -.8-1.2 | 1.5-4.3 | 1.5-4.7 | 1.3-4.8 | 1.1-4.6 |
| Civilian unemployment rate (percent, Q4) |  |  |  |  |  |
| Projection | 5.7 | 5.5 | 5.2 | 4.9 | 4.7 |
| Confidence interval |  |  |  |  |  |
| Greenbook forecast errors | 5.2-6.1 | 4.6-6.4 | $\ldots$ |  |  |
| FRB/US stochastic simulations | 5.3-6.0 | 4.9-6.0 | 4.5-5.9 | 4.1-5.7 | 3.9-5.5 |
| PCE prices, total (percent change, Q4 to Q4) |  |  |  |  |  |
| Projection | 3.3 | 1.8 | 1.8 | 1.7 | 1.6 |
| Confidence interval |  |  |  |  |  |
| Greenbook forecast errors | 2.5-4.1 | .9-2.7 | $\ldots$ |  |  |
| FRB/US stochastic simulations | 2.6-4.0 | .9-2.7 | .8-2.8 | .7-2.7 | .7-2.7 |
| PCE prices excluding food and energy (percent change, Q4 to Q4) |  |  |  |  |  |
| Projection | 2.3 | 2.0 | 1.8 | 1.7 | 1.7 |
| Confidence interval |  |  |  |  |  |
| Greenbook forecast errors | 1.8-2.8 | 1.1-2.8 | .. | $\ldots$ |  |
| FRB/US stochastic simulations | 2.0-2.6 | 1.4-2.6 | 1.1-2.5 | 1.0-2.5 | .9-2.5 |
| Federal funds rate (percent, Q4) |  |  |  |  |  |
| Projection | 1.7 | 1.7 | 2.0 | 3.2 | 4.1 |
| Confidence interval |  |  |  |  |  |
| FRB/US stochastic simulations | 1.0-2.6 | .4-3.3 | .6-3.8 | 1.6-5.0 | 2.5-6.0 |

Notes: Intervals derived from Greenbook forecast errors are based on projections made from 1986-2006. Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1986-2006 set of model equation residuals.
. . . Not applicable. The Greenbook forecast horizon has typically extended about two years.

## Forecast Confidence Intervals and Alternative Scenarios under the Assumption that Monetary Policy Follows an Estimated Taylor Rule

Confidence Intervals based on FRB/US Stochastic Simulations

Greenbook baseline<br>$\square$ Greater financial stress<br>$\square$ More-cautious consumers

\author{

- Near-term upside risk <br> Less financial restraint
}
$\square$ Lower inflation
More room to grow

Real GDP


PCE Prices excluding Food and Energy


Unemployment Rate


Federal Funds Rate


Class II FOMC - Restricted (FR)

## Evolution of the Staff Forecast



Greenbook publication date

Unemployment Rate


Change in PCE Prices excluding Food and Energy
Percent, Q4/Q4



[^2]


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[^3]

| Item | 2007 |  |  |  | 2008 |  |  |  | 2009 |  |  |  | $2007{ }^{1}$ | $2008^{1}$ | $2009^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| GDP chain-wt. price index | 4.2 | 2.6 | 1.0 | 2.4 | 2.6 | . 9 | 2.4 | 2.1 | 2.3 | 2.1 | 1.9 | 1.8 | 2.6 | 2.0 | 2.0 |
| Previous | 4.2 | 2.6 | 1.0 | 2.7 | 2.5 | 1.6 | 2.0 | 2.0 | 2.1 | 2.1 | 1.9 | 1.9 | 2.6 | 2.0 | 2.0 |
| PCE chain-wt. price index | 3.5 | 4.3 | 1.8 | 3.9 | 3.5 | 4.3 | 3.2 | 2.2 | 2.0 | 1.7 | 1.6 | 1.7 | 3.4 | 3.3 | 1.8 |
| Previous | 3.5 | 4.3 | 1.8 | 4.1 | 4.1 | 4.0 | 1.7 | 1.8 | 1.8 | 1.7 | 1.7 | 1.8 | 3.4 | 2.9 | 1.7 |
| Energy | 16.1 | 51.3 | -6.7 | 24.9 | 18.7 | 35.7 | 13.8 | -. 6 | -. 7 | -2.2 | -1.8 | -1.0 | 19.6 | 16.2 | -1.4 |
| Previous | 16.1 | 51.3 | -6.7 | 25.1 | 22.0 | 29.7 | -4.3 | -2.0 | -1.2 | -2.6 | -1.8 | -. 5 | 19.6 | 10.4 | -1.5 |
| Food | 4.8 | 4.7 | 4.7 | 3.6 | 4.8 | 2.5 | 2.4 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 | 4.5 | 3.0 | 2.2 |
| Previous | 4.8 | 4.7 | 4.7 | 3.6 | 4.3 | 2.5 | 2.3 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 4.5 | 2.8 | 2.0 |
| Ex. food \& energy | 2.4 | 1.4 | 2.0 | 2.5 | 2.1 | 2.3 | 2.4 | 2.4 | 2.2 | 2.0 | 1.9 | 1.9 | 2.1 | 2.3 | 2.0 |
| Previous | 2.4 | 1.4 | 2.0 | 2.7 | 2.7 | 2.3 | 2.2 | 2.1 | 2.0 | 2.0 | 1.9 | 1.9 | 2.1 | 2.3 | 1.9 |
| CPI | 3.7 | 4.6 | 2.8 | 5.0 | 4.3 | 5.2 | 3.7 | 2.2 | 2.1 | 1.7 | 1.7 | 1.8 | 4.0 | 3.8 | 1.8 |
| Previous | 3.7 | 4.6 | 2.8 | 5.0 | 5.0 | 4.8 | 1.7 | 1.8 | 1.8 | 1.7 | 1.7 | 1.8 | 4.0 | 3.3 | 1.8 |
| Ex. food \& energy | 2.3 | 2.0 | 2.5 | 2.5 | 2.5 | 2.3 | 2.6 | 2.5 | 2.4 | 2.2 | 2.1 | 2.1 | 2.3 | 2.5 | 2.2 |
| Previous | 2.3 | 2.0 | 2.5 | 2.5 | 3.0 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.3 | 2.5 | 2.1 |
| ECI, hourly compensation ${ }^{2}$ | 2.3 | 3.5 | 3.1 | 3.1 | 3.3 | 3.3 | 3.4 | 3.4 | 3.3 | 3.3 | 3.3 | 3.3 | 3.0 | 3.4 | 3.3 |
| Previous ${ }^{2}$ | 2.3 | 3.5 | 3.1 | 3.1 | 3.3 | 3.3 | 3.4 | 3.4 | 3.3 | 3.3 | 3.3 | 3.3 | 3.0 | 3.4 | 3.3 |
| Nonfarm business sector Output per hour | 1.0 | 2.6 | 6.3 | 1.9 | 1.0 | -. 5 | 2.3 | 1.3 | 2.1 | 3.2 | 2.8 | 2.7 | 2.9 | 1.0 | 2.7 |
| Previous | 1.0 | 2.6 | 6.3 | 1.8 | 1.7 | -. 1 | 1.8 | 1.1 | 2.4 | 2.9 | 3.0 | 2.9 | 2.9 | 1.1 | 2.8 |
| Compensation per hour | 6.4 | 1.3 | 3.4 | 4.7 | 4.1 | 3.9 | 4.0 | 3.9 | 3.8 | 3.8 | 3.7 | 3.7 | 3.9 | 4.0 | 3.8 |
| Previous | 6.4 | 1.3 | 3.4 | 4.6 | 4.0 | 4.0 | 4.0 | 3.9 | 3.8 | 3.8 | 3.7 | 3.7 | 3.9 | 4.0 | 3.8 |
| Unit labor costs | 5.4 | -1.3 | -2.7 | 2.7 | 3.1 | 4.4 | 1.7 | 2.5 | 1.7 | . 7 | . 9 | . 9 | . 9 | 2.9 | 1.0 |
| Previous | 5.4 | -1.3 | -2.7 | 2.8 | 2.3 | 4.1 | 2.1 | 2.7 | 1.4 | . 9 | . 7 | . 7 | 1.0 | 2.8 | . 9 |

[^4]| Item | 2007 |  |  |  | 2008 |  |  |  | 2009 |  |  |  | $2007{ }^{1}$ | $2008{ }^{1}$ | $200{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| Employment and production Nonfarm payroll employment ${ }^{2}$ | . 4 | . 3 | . 3 | . 3 | -. 1 | -. 4 | -. 2 | -. 1 | . 2 | . 2 | . 5 | . 4 | 1.2 | -. 9 | 1.3 |
| Unemployment rate ${ }^{3}$ | 4.5 | 4.5 | 4.7 | 4.8 | 4.9 | 5.2 | 5.5 | 5.7 | 5.7 | 5.6 | 5.6 | 5.5 | 4.8 | 5.7 | 5.5 |
| Previous ${ }^{3}$ | 4.5 | 4.5 | 4.7 | 4.8 | 4.9 | 5.2 | 5.5 | 5.7 | 5.7 | 5.6 | 5.6 | 5.5 | 4.8 | 5.7 | 5.5 |
| GDP gap ${ }^{4}$ | -. 3 | . 0 | . 6 | . 1 | -. 3 | -1.2 | -1.5 | -1.9 | -2.0 | -1.8 | -1.6 | -1.3 | . 1 | -1.9 | -1.3 |
| Previous ${ }^{4}$ | -. 4 | . 0 | . 6 | . 1 | -. 4 | -1.3 | -1.6 | -2.0 | -2.0 | -1.8 | -1.6 | -1.3 | . 1 | -2.0 | -1.3 |
| Industrial production ${ }^{5}$ | 1.5 | 3.2 | 3.6 | . 4 | -. 1 | -. 8 | . 2 | 2.7 | 2.4 | 2.3 | 2.4 | 3.1 | 2.2 | . 5 | 2.6 |
| Previous ${ }^{5}$ | 1.1 | 3.5 | 3.6 | -1.0 | -. 2 | -. 7 | -. 5 | 1.6 | 2.7 | 2.9 | 3.1 | 3.5 | 1.8 | . 0 | 3.1 |
| Manufacturing industr. prod. ${ }^{5}$ | 1.1 | 4.7 | 4.0 | -. 6 | -. 5 | -1.4 | -. 8 | 1.9 | 2.2 | 2.8 | 2.7 | 3.5 | 2.3 | -. 2 | 2.8 |
| Previous ${ }^{5}$ | . 8 | 4.3 | 3.6 | -1.7 | . 3 | -1.2 | -1.5 | . 9 | 2.7 | 3.3 | 3.4 | 3.8 | 1.7 | -. 4 | 3.3 |
| Capacity utilization rate - mfg. ${ }^{3}$ | 78.9 | 79.5 | 79.8 | 79.3 | 78.8 | 78.1 | 77.7 | 77.8 | 77.9 | 78.2 | 78.4 | 78.8 | 79.3 | 77.8 | 78.8 |
| Previous ${ }^{3}$ | 79.8 | 80.3 | 80.6 | 79.8 | 79.4 | 78.8 | 78.1 | 77.8 | 77.9 | 78.1 | 78.3 | 78.5 | 79.8 | 77.8 | 78.5 |
| Housing starts ${ }^{6}$ | 1.5 | 1.5 | 1.3 | 1.2 | 1.0 | . 9 | . 9 | . 9 | . 9 | . 9 | . 9 | . 9 | 1.4 | . 9 | . 9 |
| Light motor vehicle sales ${ }^{6}$ | 16.4 | 16.0 | 15.9 | 16.1 | 15.2 | 14.6 | 15.2 | 15.7 | 15.6 | 15.7 | 15.8 | 15.9 | 16.1 | 15.2 | 15.7 |
| Income and saving Nominal GDP ${ }^{5}$ | 4.9 | 6.6 | 6.0 | 3.0 | 3.0 | -. 6 | 3.7 | 2.8 | 4.0 | 5.3 | 5.2 | 5.2 | 5.1 | 2.2 | 4.9 |
| Real disposable pers. income ${ }^{5}$ | 5.4 | -. 8 | 4.0 | . 1 | 2.1 | 9.5 | -8.4 | -1.5 | 4.2 | 2.1 | 1.5 | 2.5 | 2.2 | . 2 | 2.6 |
| Previous ${ }^{5}$ | 5.4 | -. 8 | 4.0 | -. 3 | . 7 | 10.2 | -7.6 | -. 9 | 4.3 | 2.4 | 1.6 | 2.6 | 2.0 | . 4 | 2.7 |
| Personal saving rate ${ }^{3}$ | 1.0 | . 3 | . 4 | . 0 | . 2 | 2.4 | -. 4 | . 2 | 1.1 | 1.1 | . 9 | . 9 | . 0 | . 2 | . 9 |
| Previous ${ }^{3}$ | 1.0 | . 3 | . 4 | . 0 | . 1 | 2.4 | . 0 | . 4 | 1.2 | 1.2 | 1.1 | 1.0 | . 0 | . 4 | 1.0 |
| Corporate profits ${ }^{7}$ | 4.4 | 26.8 | -4.9 | -12.4 | -3.5 | -1.5 | -. 8 | . 5 | -. 6 | 11.0 | 11.7 | 10.3 | 2.5 | -1.3 | 8.0 |
| Profit share of GNP3 | 11.4 | 11.9 | 11.5 | 11.0 | 10.9 | 10.8 | 10.7 | 10.7 | 10.5 | 10.7 | 10.8 | 11.0 | 11.0 | 10.7 | 11.0 |
| Net federal saving ${ }^{8}$ | -219 | -207 | -230 | -227 | -356 | -684 | -474 | -428 | -443 | -434 | -404 | -404 | -221 | -485 | -421 |
| Net state \& local saving ${ }^{8}$ | -6 | 13 | -13 | -42 | -33 | -67 | -61 | -65 | -65 | -58 | -49 | -40 | -12 | -56 | -53 |
| Gross national saving rate ${ }^{3}$ | 13.8 | 13.8 | 13.2 | 12.4 | 11.8 | 11.3 | 10.8 | 11.5 | 11.6 | 11.8 | 12.1 | 12.2 | 12.4 | 11.5 | 12.2 |
| Net national saving rate ${ }^{3}$ | 1.7 | 1.7 | 1.2 | . 1 | -. 3 | -1.2 | -1.9 | -1.0 | -. 9 | -. 6 | -. 3 | -. 1 | . 1 | -1.0 | -. 1 |

[^5]| Item | Fiscal year |  |  |  | 2007 |  |  |  | 2008 |  |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2006{ }^{\text {a }}$ | $2007{ }^{\text {a }}$ | 2008 | 2009 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 ${ }^{\text {a }}$ | Q4 ${ }^{\text {a }}$ | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget $\quad$ Not seasonally adjus |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{1}$ | 2407 | 2568 | 2502 | 2634 | 547 | 824 | 622 | 606 | 540 | 742 | 614 | 608 | 528 | 832 | 666 | 641 |
| Outlays ${ }^{1}$ | 2655 | 2730 | 2877 | 3042 | 725 | 687 | 664 | 712 | 746 | 707 | 713 | 741 | 789 | 765 | 748 | 802 |
| Surplus/deficit ${ }^{1}$ | -248 | -162 | -375 | -408 | -178 | 137 | -42 | -106 | -206 | 35 | -99 | -133 | -261 | 68 | -82 | -161 |
| Previous | -248 | -162 | -418 | -393 | -178 | 137 | -42 | -106 | -219 | 9 | -102 | -138 | -245 | 69 | -80 | -160 |
| On-budget | -434 | -343 | -566 | -589 | -212 | 53 | -49 | -165 | -237 | -55 | -109 | -201 | -277 | -23 | -88 | -229 |
| Off-budget | 186 | 181 | 191 | 181 | 34 | 85 | 7 | 59 | 31 | 90 | 10 | 68 | 16 | 91 | 6 | 68 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 237 | 206 | 348 | 436 | 152 | -110 | 106 | 89 | 200 | -50 | 108 | 132 | 250 | -43 | 97 | 151 |
| Cash decrease | -16 | -23 | 35 | -10 | 25 | -19 | -50 | 18 | 11 | 6 | -0 | 5 | 15 | -20 | -10 | 15 |
| Other ${ }^{2}$ | 28 | -21 | -7 | -18 | 1 | -8 | -14 | -2 | -5 | 9 | -9 | -5 | -5 | -5 | -5 | -5 |
| Cash operating balance, end of period | 52 | 75 | 40 | 50 | 6 | 25 | 75 | 57 | 46 | 40 | 40 | 35 | 20 | 40 | 50 | 35 |
| NIPA federal sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 2437 | 2635 | 2567 | 2728 | 2620 | 2670 | 2689 | 2706 | 2649 | 2327 | 2585 | 2656 | 2704 | 2741 | 2809 | 2848 |
| Expenditures | 2685 | 2845 | 3002 | 3155 | 2838 | 2877 | 2920 | 2934 | 3005 | 3011 | 3059 | 3083 | 3147 | 3175 | 3213 | 3252 |
| Consumption expenditures | 798 | 843 | 903 | 963 | 830 | 850 | 868 | 877 | 897 | 911 | 925 | 939 | 960 | 972 | 982 | 992 |
| Defense | 533 | 570 | 616 | 665 | 556 | 574 | 590 | 596 | 610 | 623 | 635 | 647 | 662 | 671 | 679 | 686 |
| Nondefense | 266 | 273 | 287 | 299 | 274 | 276 | 278 | 281 | 287 | 289 | 290 | 293 | 298 | 301 | 303 | 306 |
| Other spending | 1887 | 2001 | 2100 | 2191 | 2008 | 2027 | 2052 | 2057 | 2108 | 2099 | 2134 | 2144 | 2187 | 2204 | 2231 | 2261 |
| Current account surplus | -248 | -209 | -435 | -427 | -219 | -207 | -230 | -227 | -356 | -684 | -474 | -428 | -443 | -434 | -404 | -404 |
| Gross investment | 117 | 121 | 124 | 135 | 117 | 120 | 123 | 121 | 122 | 126 | 129 | 132 | 134 | 136 | 138 | 140 |
| Gross saving less gross investment ${ }^{3}$ | -262 | -221 | -445 | -442 | -227 | -216 | -242 | -236 | -365 | -694 | -487 | -442 | -458 | -450 | -420 | -420 |
| Fiscal indicators ${ }^{4}$ <br> High-employment (HEB) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| surplus/deficit | -280 | -235 | -418 | -334 | -231 | -224 | -266 | -245 | -357 | -654 | -414 | -342 | -340 | -338 | -315 | -328 |
| Change in HEB, percent of potential GDP | -0.5 | -0.4 | 1.2 | -0.7 | 0.1 | -0.1 | 0.3 | -0.2 | 0.8 | 2.1 | -1.7 | -0.5 | -0.0 | -0.0 | -0.2 | 0.1 |
| Fiscal impetus (FI), percent of GDP | 0.3 | 0.2 | 0.6 | -0.0 | -0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 0.7 | -0.5 | -0.2 | 0.1 | -0.0 | -0.0 |
| Previous | 0.3 | 0.2 | 0.6 | -0.0 | -0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.3 | 0.7 | -0.5 | -0.1 | 0.1 | -0.0 | -0.0 |

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
[^6]| Class II FOMC <br> Restricted (FR) |  | Change in Debt of the Domestic Nonfinancial Sectors (Percent) |  |  |  |  | April 23, 2008 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Households |  |  |  |  |  |
| Period ${ }^{1}$ | Total | Total | Home mortgages | Consumer credit | Business | State and local governments | Federal government | Nominal GDP |
| Year |  |  |  |  |  |  |  |  |
| 2002 | 7.3 | 10.9 | 13.3 | 5.7 | 2.4 | 11.0 | 7.6 | 3.6 |
| 2003 | 8.1 | 11.5 | 14.2 | 5.2 | 2.5 | 8.3 | 10.9 | 5.9 |
| 2004 | 8.8 | 11.2 | 13.7 | 5.5 | 5.8 | 7.4 | 9.0 | 6.5 |
| 2005 | 9.2 | 11.1 | 13.1 | 4.3 | 7.7 | 10.2 | 7.0 | 6.3 |
| 2006 | 8.8 | 10.2 | 11.1 | 4.5 | 9.7 | 8.2 | 3.9 | 5.4 |
| 2007 | 8.1 | 6.9 | 6.7 | 5.7 | 11.5 | 9.2 | 4.9 | 5.1 |
| 2008 | 4.6 | 3.1 | 3.0 | 2.6 | 4.7 | 6.1 | 7.6 | 2.3 |
| 2009 | 4.6 | 2.8 | 2.5 | 2.6 | 4.7 | 5.9 | 8.2 | 5.0 |
| Quarter |  |  |  |  |  |  |  |  |
| 2007:1 | 8.1 | 6.8 | 7.4 | 4.8 | 10.0 | 11.2 | 6.7 | 4.9 |
| 2 | 7.2 | 7.2 | 7.4 | 5.6 | 11.0 | 10.3 | -1.4 | 6.6 |
| 3 | 9.1 | 7.0 | 6.3 | 8.1 | 12.8 | 6.5 | 8.8 | 6.0 |
| 4 | 7.3 | 5.7 | 5.1 | 4.0 | 10.6 | 7.6 | 5.1 | 3.0 |
| 2008:1 | 5.8 | 3.6 | 3.5 | 3.2 | 6.5 | 5.9 | 10.1 | 3.0 |
| 2 | 3.7 | 3.1 | 3.0 | 2.2 | 4.1 | 6.7 | 3.2 | -. 5 |
| 3 | 4.3 | 2.9 | 2.7 | 2.4 | 3.8 | 5.7 | 8.4 | 3.8 |
| 4 | 4.3 | 2.8 | 2.6 | 2.5 | 4.0 | 5.7 | 7.9 | 2.8 |
| 2009:1 | 5.2 | 2.7 | 2.5 | 2.4 | 4.4 | 5.8 | 13.0 | 4.0 |
| 2 | 3.7 | 2.7 | 2.5 | 2.4 | 4.6 | 5.7 | 3.5 | 5.3 |
| 3 | 4.4 | 2.8 | 2.5 | 2.7 | 4.8 | 5.9 | 7.0 | 5.3 |
| 4 | 4.7 | 2.9 | 2.6 | 3.0 | 4.9 | 5.8 | 8.6 | 5.2 |

[^7]1. Data after 2007: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.
Class II FOMC
Flow of Funds Projections: Highlights
(Billions of dollars at seasonally adjusted annual rates except as noted)

| Category | 2006 | 2007 | 2008 | 2009 | 2007 |  | 2008 |  |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Domestic nonfinancial sectors Net funds raised |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1713.0 | 1498.9 | 1038.2 | 1220.5 | 1896.8 | 1078.7 | 1352.4 | 672.3 | 1038.4 | 1089.6 | 1427.2 | 943.5 | 1185.7 | 1325.7 |
| Net equity issuance | -614.1 | -847.8 | -394.3 | -272.0 | -834.8 | -1157.6 | -457.2 | -496.0 | -332.0 | -292.0 | -272.0 | -272.0 | -272.0 | -272.0 |
| Net debt issuance | 2327.1 | 2346.7 | 1432.5 | 1492.5 | 2731.6 | 2236.3 | 1809.6 | 1168.3 | 1370.4 | 1381.6 | 1699.2 | 1215.5 | 1457.7 | 1597.7 |
| Borrowing indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt (percent of GDP) ${ }^{1}$ | 210.0 | 217.1 | 224.0 | 225.3 | 217.1 | 219.9 | 221.8 | 224.7 | 224.8 | 225.7 | 226.1 | 225.6 | 225.0 | 224.7 |
| Borrowing (percent of GDP) | 17.6 | 17.0 | 10.0 | 10.1 | 19.6 | 15.9 | 12.8 | 8.2 | 9.6 | 9.6 | 11.7 | 8.3 | 9.8 | 10.6 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing ${ }^{2}$ | 1194.2 | 887.4 | 434.7 | 399.5 | 944.9 | 770.9 | 502.1 | 430.8 | 403.8 | 402.0 | 386.0 | 391.3 | 403.8 | 417.0 |
| Home mortgages | 987.8 | 658.4 | 313.8 | 276.0 | 640.0 | 527.1 | 363.3 | 320.9 | 287.8 | 283.1 | 269.0 | 273.7 | 278.4 | 283.1 |
| Consumer credit | 104.4 | 139.0 | 67.1 | 69.4 | 202.1 | 101.1 | 82.6 | 56.9 | 62.9 | 65.9 | 63.4 | 63.5 | 71.3 | 79.3 |
| Debt/DPI (percent) ${ }^{3}$ | 128.3 | 131.6 | 131.5 | 131.2 | 132.0 | 132.8 | 132.5 | 129.2 | 132.0 | 132.7 | 131.6 | 131.3 | 131.1 | 130.7 |
| Business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Financing gap ${ }^{4}$ | 186.6 | 254.3 | 178.0 | 273.4 | 271.4 | 305.1 | 262.2 | 149.2 | 100.9 | 199.6 | 289.4 | 266.4 | 254.7 | 283.3 |
| Net equity issuance | -614.1 | -847.8 | -394.3 | -272.0 | -834.8 | -1157.6 | -457.2 | -496.0 | -332.0 | -292.0 | -272.0 | -272.0 | -272.0 | -272.0 |
| Credit market borrowing | 798.4 | 1038.0 | 473.0 | 500.8 | 1215.2 | 1043.8 | 659.9 | 419.3 | 391.1 | 422.0 | 461.7 | 493.1 | 512.7 | 535.7 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 151.2 | 184.2 | 134.6 | 137.7 | 136.4 | 163.8 | 129.3 | 149.7 | 129.7 | 129.7 | 133.7 | 133.7 | 141.7 | 141.7 |
| Current surplus 5 | 243.8 | 223.7 | 140.0 | 151.0 | 229.2 | 200.6 | 161.0 | 128.0 | 136.6 | 134.4 | 136.5 | 144.6 | 156.1 | 166.6 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 183.4 | 237.1 | 390.2 | 454.5 | 435.0 | 257.8 | 518.4 | 168.6 | 445.9 | 427.9 | 717.8 | 197.4 | 399.6 | 503.3 |
| Net borrowing (n.s.a.) | 183.4 | 237.1 | 390.2 | 454.5 | 105.7 | 89.4 | 200.2 | -50.4 | 108.5 | 131.9 | 250.1 | -43.2 | 96.9 | 150.8 |
| Unified deficit (n.s.a.) | 209.2 | 187.9 | 402.4 | 436.5 | 41.8 | 105.5 | 205.9 | -35.1 | 99.1 | 132.6 | 260.6 | -67.7 | 82.4 | 161.3 |
| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Funds supplied | 693.7 | 852.9 | 346.4 | 471.0 | 1146.2 | 1061.8 | 587.5 | 234.3 | 314.3 | 249.4 | 342.1 | 434.6 | 575.3 | 532.1 |

[^8]
## Class II FOMC-Restricted (FR)

## International Developments

We continue to see evidence that growth abroad is moderating. In the advanced foreign economies, incoming data were mixed, but the tenor generally accords with our view that economic activity in those economies is slowing. In most emerging market economies, real GDP growth also appears to be softening, as exports decelerate in line with economic activity in the United States and other major economies. However, domestic demand remains solid in emerging market economies and is supporting oil and other commodity prices. On balance, the information received since the March Greenbook has not materially altered our outlook for foreign economic activity. Our forecast for foreign inflation is a bit higher this year in response to the recent increase in oil prices.

Summary of Staff Projections

| (Percent change from end of previous period except as noted, s.a.a.r.) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Indicator | 2007 |  | Projection |  |  |  |  |
|  | H1 | H2 | 2008 |  |  |  |  |
|  |  |  | Q1 | Q2 | H2 |  |  |
| Foreign output | 4.6 | 3.7 | 2.7 | 1.9 | 2.2 | 3.6 |  |
| March GB | 4.5 | 3.8 | 2.5 | 1.9 | 2.3 | 3.6 |  |
| Foreign CPI | 3.0 | 4.2 | 4.7 | 3.3 | 2.8 | 2.5 |  |
| March GB | 3.1 | 4.2 | 4.6 | 2.9 | 2.6 | 2.5 |  |

Contribution to U.S. real GDP growth
(percentage points)
U.S. net exports

March GB

| 0.4 | 1.2 | 0.3 | 2.3 | 1.0 | 0.4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 0.4 | 1.2 | 0.7 | 2.2 | 1.0 | 0.3 |

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

Foreign equity markets and government bond yields have moved higher since our March forecast, and credit default swap premiums have narrowed, suggesting that market participants are somewhat more confident about financial prospects. Nonetheless, conditions remain strained in major money markets abroad, particularly in the United Kingdom and the euro area, where term interbank lending spreads have risen since the March FOMC meeting, notwithstanding steps taken by their central banks to help
funding markets. Further deteriorations in international financial conditions pose an important downside risk to our outlook for foreign growth.

Following a decline at the end of March, oil prices posted yet another record in April. In line with futures markets, we project oil prices to edge lower over the forecast period. On average, prices for other commodities have eased a little since early March, and we project that these prices will stabilize going forward. Further increases in commodity prices pose an upside risk to our outlook for foreign inflation, as discussed in the box below. Our projected path for the real foreign exchange value of the dollar is little changed since the March Greenbook.

Real net exports are estimated to have added $1 / 4$ percentage point to U.S. GDP growth in the first quarter as solid export growth was only partly offset by strong imports of oil. This estimate is about half that in the March Greenbook, reflecting stronger-thanexpected core imports in February. In the current quarter, a continued decline in core imports, a sharp fall in oil imports (in part reflecting residual seasonality), and strong exports boost the net export contribution to $2 \frac{1}{4}$ percentage points. The contribution steps down to a still strong 1 percentage point in the second half of 2008 and $1 / 2$ percentage point in 2009 , as the projected recovery of import growth is more pronounced than the further strengthening of export growth.

We estimate that the U.S. current account deficit widened to $\$ 742$ billion ( $5 \frac{1}{4}$ percent of GDP) in the first quarter as higher oil imports more than offset an improvement in the non-oil trade balance. However, by the second half of 2009, we expect the deficit to decline to about $\$ 570$ billion, less than 4 percent of GDP, as the non-oil trade deficit continues to narrow.

## Oil and Other Commodity Prices

The spot price of West Texas intermediate (WTI) crude oil traded in the range of $\$ 100$ to $\$ 110$ per barrel for much of the time since the March Greenbook. However, late in the intermeeting period, the spot price of WTI surged yet again into record territory, to close at nearly $\$ 120$ on April 22. The price of the December 2016 futures contract fluctuated around $\$ 100$ per barrel for much of the intermeeting period, before moving up to about $\$ 109$. Given the path of futures prices, we project that the price of WTI crude oil will fall modestly to about $\$ 110$ by the end of next year. Relative to the March Greenbook, this projection is about $\$ 10$ per barrel higher, on average, over the forecast period.

Incoming news regarding the prospects for oil supply has been grim. Officials from the state-owned energy company Pemex announced in late March that proved oil reserves in Mexico fell for the sixth straight year, as extraction continued to exceed identification of new reserves. In addition, the Russian energy ministry announced a flat export schedule for the coming year, raising concerns that Russian production has peaked. This news may point to another disappointing year for non-OPEC supply, shifting more of the burden to OPEC member nations to satisfy demand in the coming year. Over the past few weeks, however, rhetoric from OPEC officials continues to indicate a reluctance to increase supply, and multiple sources reported that OPEC supply declined during March.

Incoming information regarding oil demand has been mixed. On the one hand, weaker economic growth and the high level of prices appear to be damping U.S. oil consumption; both the Energy Information Administration and the International Energy Agency recently marked down their projections for U.S. demand for the coming year. At the same time, demand from emerging market economies continues to be robust.

Our import-weighted index of nonfuel commodity prices peaked in early March and has edged down since then. Even so, prices for most commodities continue to be well above their levels of late 2007. Moreover, since the March Greenbook, corn prices have moved higher, reflecting news from the U.S. Department of Agriculture that farmers are shifting acreage from corn toward wheat and soybeans to a greater extent than had been expected. Rice prices have also increased, inducing a number of rice-producing countries to enact export bans, adding further upward pressure to the price.

On the basis of these recent price movements and quotes from commodity futures markets, we project that our trade-weighted average of nonfuel commodity prices, having increased at an annual rate of over 50 percent in the first quarter, will increase at a 13 percent pace in the second quarter. Thereafter, we project that nonfuel commodity prices will remain roughly stable for the remainder of the forecast period. The projection for the second quarter is down almost 9 percentage points from that in the March Greenbook, reflecting the declines in spot prices in the second half of March. Our outlook is little changed for the remainder of the forecast period.

## International Financial Markets

Alongside improved market sentiment in the United States, major headline equity indexes in Europe and Japan ended the period up 2 to 6 percent. Ten-year nominal sovereign yields are up about 35 basis points in the euro-area, 25 basis points in the United

Kingdom, and about 10 basis points in Canada and Japan. Ten-year real rates moved up 10 to 40 basis points in most major industrial countries. However, heightened liquidity pressures are evident in money markets. Libor-OIS spreads widened in sterling and euro despite the passing of quarter end and actions by foreign central banks to channel liquidity to markets at longer maturities. In addition, the Bank of England and the Bank of Canada lowered their policy interest rate 25 basis points and 50 basis points, respectively. The European Central Bank and the Bank of Japan left their policy rates unchanged.

The trade-weighted index of the exchange value of the dollar against the major foreign currencies is little changed on net since the March Greenbook. In contrast, the exchange value of the dollar against the currencies of other important trading partners of the United States fell $11 / 4$ percent since the time of the March Greenbook, as the dollar depreciated against most Asian and Latin American currencies. The dollar declined $13 / 4$ percent against the renminbi, consistent with reports that Chinese authorities appear more willing to use currency appreciation to help fight mounting inflation. In addition, the People's Bank of China raised reserve requirements 100 basis points, as stronger-than-expected data showed the Chinese economy still growing at a rapid pace.

On balance, the starting point for the projected path of the staff's broad real index of the foreign exchange value of the dollar is little changed from that in the March Greenbook. Going forward, we continue to project further decline in the broad real value of the dollar at an annual rate of about 3 percent, about the same pace as in the March Greenbook.

## Advanced Foreign Economies

We estimate that real GDP growth in the advanced foreign economies slowed further to an annual rate of around 1 percent in the first quarter. Consumer and business sentiment is generally down in most countries. Although domestic demand is holding up in Canada, exports have weakened. Growth in Europe appears to have edged down further last quarter, but the extent of the decline has varied across countries, with Germany and France faring better than Italy and Spain.

Growth in the advanced foreign economies is expected to deteriorate further, to about $1 / 2$ percent in the current quarter. This decline in part reflects the ongoing drag from the financial turmoil-credit conditions continue to tighten and the pace of lending to households has slowed. Also, past appreciation of major foreign currencies and the contraction in U.S. GDP should weigh on growth abroad, especially in Canada, where

GDP is expected to contract slightly in the current quarter. However, we project that growth in the advanced foreign economies will improve to $2 \frac{1}{2}$ percent by the end of the forecast period as a result of lessening financial market stresses, a recovery in U.S. GDP growth, and monetary policy easing by most of the major central banks. We assume that the Bank of Canada and the Bank of England will ease further; the ECB has kept its policy rate unchanged so far, but we expect easing eventually in response to a softening outlook.

Headline inflation in the advanced foreign economies moved down to a still elevated $21 / 2$ percent (quarterly change, annual rate) in the first quarter. As the effects of food and energy prices level out and some slack in resource utilization emerges, we expect that inflation will drop to about $13 / 4$ percent by the end of the forecast period.

Our outlook for GDP growth is little changed from that in the March Greenbook. Our inflation forecast is only slightly higher in aggregate, as higher oil prices and headline inflation data in most countries were mostly offset by lower readings on Canadian inflation.

## Emerging Market Economies

Data from the emerging market economies have generally come in as expected at the time of the March Greenbook, although first-quarter growth in China was somewhat stronger than anticipated. Real GDP growth in the emerging market economies slowed to 5 percent in the fourth quarter; we estimate that growth continued at about this pace in the first quarter. We project that growth in the emerging market economies will move lower through the middle of this year as anemic activity in the advanced economies continues to weigh on developing-country exports. This additional slowing in exports should be tempered by solid domestic demand. In line with the rebound projected for the advanced economies next year, growth in the emerging market economies will recover to around $51 / 4$ percent in 2009. Relative to the March Greenbook, this forecast is little changed, as slightly stronger growth in emerging Asia offsets slower growth in Latin America this year.

In emerging Asia, we estimate that real GDP grew at a $63 / 4$ percent rate in the first quarter, about $11 / 2$ percentage points faster than in the fourth quarter. Data from China indicate that growth increased to $103 / 4$ percent last quarter; although exports continued to decelerate, strong retail sales and investment likely contributed to the pickup in economic activity. Despite the unexpectedly strong first quarter data, we have revised up only
slightly our projection of Chinese growth for the remainder of 2008, as we expect exports to wane further and authorities to continue to tighten monetary policy. In Singapore, first-quarter growth is now estimated at 10 percent, reflecting a stronger-than-expected rebound from a 5 percent contraction in the fourth quarter. Economic activity in the rest of emerging Asia is projected to remain subdued this year, but many Asian governments have scope to provide stimulus should their economies weaken more than expected.

## Box: Commodity Prices and the Outlook for Foreign Inflation

Since late 2006, rising energy and food prices have pushed headline inflation sharply higher around the globe. In the first quarter of 2008, the combined contribution of food and energy prices to headline inflation in the advanced foreign economies is estimated to be about 2 percentage points, roughly $2 / 3$ of total inflation. In the emerging market economies, these two components account for $3 / 4$ of total inflation.

Consistent with futures prices, we project commodity prices to stabilize, reducing the contribution to inflation from food and energy prices going forward. This implies a substantial decline in headline inflation abroad. However, this projected decline is not outsized relative to several other episodes of disinflation that have occurred over the past decade. Clearly, the main risks to this projection lie in the future path of commodity prices.

To illustrate the sensitivity of our inflation forecast to our assumptions on food and oil prices, we use options-implied volatilities to compute one-standard-deviation bands around our baseline forecasts for both food and energy prices. We used these paths for oil and food prices to provide alternative forecasts for headline inflation for the second half of this year. For the advanced economies, the alternative paths produce estimates of inflation between roughly 1 percent and 2.5 percent in the second half of 2008, compared with our baseline projection of 1.6 percent.

The inflation range for the emerging market economies of about 6 percentage points is much larger than for the advanced economies, reflecting higher sensitivity to food prices in these countries and the higher implied volatilities of agricultural commodities. At the end of 2008, the alternative paths yield inflation of between roughly 1 percent and 7 percent.

## Box continued: Commodity Prices and the Outlook for Foreign Inflation



AFE Food and Energy Contributions


AFE: Alternative Food and Energy Paths


EME Food and Energy Contributions



For Latin America, we estimate that real GDP increased at a 3 percent rate in the first quarter, down from a 4 percent pace in the fourth quarter of last year. We project Latin American growth to drop further, largely because the Mexican economy is restrained by its close ties to the slowing U.S. economy. Even so, Mexican domestic demand should help mitigate this drag, and Mexican GDP growth should rebound to $31 / 2$ percent next year as the U.S. economy picks up. Growth in the rest of Latin America is expected to average around $43 / 4$ percent this year and next, down considerably from the rapid pace of the past couple of years.

Inflation in the emerging market economies rose to 7 percent (a.r.) in the first quarter, owing to rising food and energy prices. Chinese prices soared earlier this year but were relatively flat in March compared with February. We expect inflation in emerging market economies to move down to just under $31 / 2$ percent by the end of the forecast period, as food and energy prices decelerate. To help alleviate upward pressures on domestic food prices, some food exporters have levied high export duties or banned exports of certain food items, and some importers have lowered tariffs.

## Prices of Internationally Traded Goods

Following two months of large increases, core import prices rose even more sharply in March, largely because of higher prices for material-intensive goods, especially metals and chemicals. Prices for imported consumer goods also accelerated. For the first quarter as a whole, we estimate that core import prices rose at an annual rate of $71 / 2$ percent, $31 / 2$ percentage points faster than in the fourth quarter and somewhat above the pace we would have expected given recent developments in commodity prices, exchange rates, and foreign prices. Our read of the data suggests that these surprisingly high rates of import price inflation are attributable to a greater-than-usual effect from commodity prices rather than a pickup in exchange rate pass-through. The latter, however, remains an important risk to the forecast and is evaluated in the alternative simulations. For the second quarter, we expect core import prices to rise at a 6 percent pace. Our projection for the first half of the year is about $1 \frac{1}{2}$ percentage points higher than in the previous forecast in light of the higher-than-expected March trade prices.

With commodity prices projected to level off and the dollar to depreciate at a more modest pace, we expect core import price inflation to fall to $2 \frac{1}{2}$ percent in the second half of 2008 and to stabilize at $1 \frac{1}{4}$ percent in 2009. Compared with the March Greenbook, this forecast is little changed.

## Staff Projections of Selected Trade Prices

(Percent change from end of previous period excepted as noted, s.a.a.r.)

| Indicator | 2007 |  | Projection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 | 2008 |  |  | 2009 |
|  |  |  | Q1 | Q2 | H2 |  |
| Imports |  |  |  |  |  |  |
| Core goods | 3.1 | 3.5 | 7.5 | 6.0 | 2.5 | 1.3 |
| March GB | 3.1 | 3.3 | 5.8 | 4.8 | 2.4 | 1.2 |
| Oil (dollars per barrel) | 63.84 | 80.34 | 88.02 | 108.30 | 109.96 | 105.31 |
| March GB | 63.84 | 80.34 | 91.85 | 103.44 | 99.21 | 95.58 |
| Exports |  |  |  |  |  |  |
| Core goods | 6.7 | 6.0 | 11.5 | 7.5 | 2.4 | 1.0 |
| March GB | 6.7 | 6.0 | 9.5 | 4.6 | 1.5 | 0.8 |

Note. Prices for core exports and nonfuel core imports, which exclude computers and semiconductors, are on a NIPA chain-weighted basis.
The price of imported oil for multiquarter periods is the price for the final quarter of the period. Imported oil includes both crude oil and refined products.

We estimate that core export prices rose $11 \frac{1}{2}$ percent (a.r.) in the first quarter, much faster than in the fourth quarter and the largest increase since 1988. The increase reflects sharply higher agricultural prices, especially for corn, wheat, and soybeans. Prices for nonagricultural industrial supplies also rose sharply, as prices for metals, chemicals, and petroleum products increased. We expect core export price inflation to slow to $71 / 2$ percent in the second quarter, reflecting lower rates of inflation for agricultural products. Going forward, the flattening out of commodity prices should push core export price inflation down further. Compared with the March Greenbook, the forecast for core export price inflation in the current quarter has been revised up almost 3 percentage points because of higher prices for intermediate inputs and agricultural products. For the remainder of the forecast period, the forecast is somewhat stronger because of higher projected domestic prices for intermediate inputs.

## Trade in Goods and Services

We estimate that real exports of goods and services grew at an annual rate of $61 / 4$ percent in the first quarter, about unchanged from our estimate in the March Greenbook. Exports in February grew in line with our expectations. We expect real export growth to remain at its first-quarter pace in the current quarter, as the increasing effect of past dollar depreciation offsets the impact of weakening foreign GDP growth. Beyond the current quarter, we project real export growth to strengthen further, reaching $81 / 4$ percent next
year, as foreign growth recovers and past and projected dollar depreciation provides a boost. Our projection for export growth is little changed from the March Greenbook.

Staff Projections for Trade in Goods and Services
(Percent change from end of previous period, s.a.a.r.)

| Indicator | 2007 |  | Projection |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | H 1 | H 2 | 2008 |  |  | 2009 |
|  |  |  | Q 1 | Q 2 | H 2 |  |
| Real exports | 4.3 |  | 6.2 | 6.3 | 7.3 | 8.2 |
| March GB | 4.3 | 12.6 | 6.0 | 6.6 | 7.5 | 8.1 |
| Real imports | 0.5 | 1.4 | 2.4 | -8.2 | -0.3 | 3.9 |
| $\quad$ March GB | 0.5 | 1.5 | 0.3 | -7.5 | 0.0 | 4.2 |

Note. Changes for years are measured as $\mathrm{q} 4 / \mathrm{q} 4$; for half-years, Q2/Q4 or Q4/Q2.

Real imports of goods and services are estimated to have risen $21 / 2$ percent at an annual rate in the first quarter, though the increase is wholly attributable to higher oil imports. After sharp declines in December and January, nominal imports of non-oil goods jumped up in February, with most major categories registering large gains. February's increase was stronger than expected, leading us to revise up our projection for real import growth in the first quarter. In the second quarter, we expect imports to decline at an annual rate of $8 \frac{1}{4}$ percent, as oil imports drop, in part reflecting residual seasonality, and non-oil imports plunge further, reflecting weak U.S. GDP and higher import prices.

The projected recovery in the United States and the slower pace of import price inflation should lift import growth into positive territory by the end of the year and to an annual rate of about 4 percent in 2009. Real import growth in the remainder of this year is slightly weaker than in the March Greenbook, owing to faster projected import price inflation, but it is basically unchanged next year.

## Alternative Simulations

Concerns about the sustainability of the U.S. trade deficit or stresses in the financial sector could trigger a shift away from dollar-denominated assets, precipitating a much larger decline in the dollar than in our baseline forecast. To investigate this possibility, we use the SIGMA model to examine the effects of a risk-premium shock that would generate a cumulative decline in the dollar of 10 percent in the absence of endogenous adjustments of domestic and foreign interest rates. The shock begins in 2008:Q2 and is
phased in over two years. Our first simulation uses the benchmark version of our model in which pass-through from the exchange rate to U.S. import prices equals roughly $1 / 3$ in the long run, a rate consistent with empirical evidence indicating relatively low passthrough since the early 1990s. In a second simulation, we consider a scenario in which foreign firms attempt to preserve their profit margins; accordingly, we set pass-through from the exchange rate to import prices to be $2 / 3$ in the long-run, which is roughly consistent with estimates of pass-through based on data for years preceding the 1990s.

Under our benchmark specification of relatively low pass-through, the decline in the dollar boosts the growth of U.S. real GDP 0.3 percentage point (a.r.) above baseline in the second half of 2008 and about 0.2 percentage point in 2009. Output rises because U.S. exports become more competitive abroad and because U.S. consumers substitute away from imports toward domestically produced goods. Core PCE price inflation rises gradually in response to higher import prices and greater resource utilization and peaks at 0.2 percentage point above baseline in 2009. Given higher activity and prices, the federal funds rate eventually rises 60 basis points above its baseline level. The nominal trade balance as a percent of GDP improves roughly $1 \frac{1}{2}$ percentage points relative to baseline after three years. In the longer term, the risk premium shock causes output to fall relative to baseline, as persistently higher interest rates restrain investment and thus the capital stock.

In the higher pass-through specification, U.S. real GDP growth rises 0.4 percentage point above baseline by the second half of 2008 and about 0.3 percentage point above baseline in 2009. The increase in real activity is somewhat higher than in the first scenario because the larger rise in the relative price of imported goods induces more substitution toward U.S. goods. Moreover, because import prices show a larger rise and overall resource utilization is somewhat higher, core PCE inflation rises 0.4 percentage point above baseline in 2009, roughly twice as much as in the low pass-through scenario. Given the heightened response of real activity and prices, the federal funds rate rises 80 basis points above baseline by 2010 .

Alternative Scenarios:
Dollar Depreciation under Low and High Pass-through
(Percent change from previous period, annual rate, except as noted)

| Indicator and simulation | 2008 |  | 2009 |  | 2010 | $2011-$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H 1 | H 2 | H 1 | H 2 |  | 12 |
| U.S. real GDP |  |  |  |  |  |  |
| Baseline | -0.5 | 0.9 | 2.4 | 3.3 | 3.1 | 2.9 |
| Low pass-through (benchmark) | -0.4 | 1.2 | 2.6 | 3.5 | 2.9 | 2.5 |
| High pass-through | -0.4 | 1.3 | 2.7 | 3.5 | 2.8 | 2.5 |
| U.S. PCE prices |  |  |  |  |  |  |
| excluding food and energy |  |  |  |  |  |  |
| Baseline | 2.2 | 2.4 | 2.1 | 1.9 | 1.8 | 1.7 |
| Low pass-through (benchmark) | 2.2 | 2.5 | 2.2 | 2.1 | 1.9 | 1.5 |
| High pass-through | 2.2 | 2.6 | 2.4 | 2.3 | 2.2 | 1.6 |
|  |  |  |  |  |  |  |
| U.S federal funds rate |  |  |  |  |  |  |
| (percent) | 2.1 | 1.8 | 1.8 | 1.8 | 2.0 | 4.1 |
| Baseline | 2.1 | 1.9 | 2.0 | 2.2 | 2.6 | 4.4 |
| Low pass-through (benchmark) | 2.1 | 1.9 | 2.1 | 2.4 | 2.8 | 4.4 |
| High pass-through |  |  |  |  |  |  |
| U.S. trade balance |  |  |  |  |  |  |
| (percent share of GDP) | -5.3 | -4.9 | -4.5 | -4.0 | -3.4 | -3.1 |
| Baseline |  |  |  |  |  |  |
| Low pass-through (benchmark) | -5.1 | -4.4 | -3.6 | -2.8 | -2.0 | -1.5 |
| High pass-through | -5.1 | -4.4 | -3.6 | -2.8 | -1.9 | -1.4 |

Note. H 1 is $\mathrm{Q} 2 / \mathrm{Q} 4 ; \mathrm{H} 2$ is $\mathrm{Q} 4 / \mathrm{Q} 2$. The federal funds rate is the average rate for the final quarter of the period.

## Evolution of the Staff Forecast



Foreign Real GDP


Core Import Prices*

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

|  | 2007 |  |  |  | 2008 |  |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measure and country | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| REAL GDP (1) ------------------- Quarterly changes at |  |  |  |  |  |  |  |  |  |  |  |  |
| Total Foreign | 4.4 | 4.7 | 4.5 | 3.0 | 2.7 | 1.9 | 2.1 | 2.4 | 3.4 | 3.6 | 3.7 | 3.8 |
| Advanced Foreign Economies of which: | 3.6 | 2.4 | 2.8 | 1.6 | 1.1 | 0.4 | 0.7 | 1.0 | 2.2 | 2.3 | 2.4 | 2.6 |
| Canada | 4.0 | 3.8 | 3.0 | 0.8 | 0.8 | -0.5 | 0.0 | 0.3 | 2.4 | 2.5 | 2.6 | 2.7 |
| Japan United Kingdom | 3.8 2.8 2. | -1.5 3.4 | 1.2 2.6 | 3.5 2.5 | 1.0 | 0.7 1.4 | 0.7 1.5 | 1.3 1.8 | 1.6 2.1 | 1.5 2.3 | 1.6 2.5 | 1.8 2.6 |
| Euro Area (2) | 3.8 3.0 | 1.3 | 2.9 2.9 | 1.4 | 1.3 | 1.9 0.9 | 1.1 | 1.4 | 2.0 | 2.3 | 2.5 | 2.7 |
| Germany | 2.6 | 0.7 | 2.7 | 1.1 | 1.3 | 1.0 | 1.0 | 1.4 | 2.1 | 2.5 | 2.7 | 3.0 |
| Emerging Market Economies | 5.6 | 7.7 | 6.7 | 4.9 | 4.8 | 3.9 | 3.9 | 4.3 | 5.0 | 5. 2 | 5.3 | 5.4 |
| Asia Korea | 8. 4 4.0 | 9.9 7.1 | 7.5 6.0 | 5.3 6.4 | 6.7 4.4 | 5.1 3.6 | 5.3 3.6 | 5.5 3.6 | 6.3 |  | 6.5 4.6 | 6.6 4.7 |
| China | 13.4 | 14.0 | 8.1 | 9.6 | 10.8 | 8.5 | 8.8 | 8.5 | 9.8 | 9.8 | 9.8 | 9.8 |
| Latin America | 2.7 | 5.6 | 5.9 | 4.0 | 3.0 | 2.4 | 2.2 | 3.0 | 3.7 | 3.9 | 4.1 | 4.2 |
| Mexico | 1.7 | 5.4 | 5.3 | 3.0 | 2.4 | 1.7 | 1.4 | 2.4 | 3.3 | 3.6 | 3.8 | 3.9 |
| Brazil | 4.0 | 6.3 | 7.4 | 6.6 | 4.0 | 3.8 | 3.8 | 4.2 | 4.2 | 4.5 | 4.5 | 4.5 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total Foreign | 2.3 | 2.5 | 3.0 | 3.6 | 4.1 | 4.1 | 3.7 | 3.4 | 2.9 | 2.7 | 2.7 | 2.5 |
| Advanced Foreign Economies | 1.5 | 1.6 | 1.5 | 2.2 | 2.2 | 2.2 | 2.3 | 2.0 | 1.8 | 1.6 | 1.7 | 1.7 |
| Canada | 1.9 | 2.1 | 2.1 | 2.4 | 1.8 | 1.4 | 1.7 | 1.6 | 1.7 | 1.7 | 1.9 | 2.0 |
| Japan | -0.1 | -0.1 | -0.1 | 0.5 | 0.9 | 0.9 | 0.8 | 0.6 | 0.5 | 0.4 | 0.5 | 0.4 |
| United Kingdom (4) | 2.9 | 2.6 | 1.8 | 2.1 | 2.4 | 2.6 | 3.0 3 | 2.8 | 2.4 | 2.2 | 2.2 | 2.1 |
| Euro Area (2) Germany | 1.9 1.9 | $\frac{1}{2.9}$ | $\frac{1}{2.9}$ | 2.9 3.1 | 3.4 3.1 | 3.7 3.0 | 3.7 2.9 | 3.0 2.3 | 2.6 2.0 | 2.1 1.9 | 2.0 1.9 | 2.0 2.0 |
| Emerging Market Economies | 3.1 | 3.3 | 4.5 | 5.1 | 5.9 | 6.0 | 5.2 | 4.8 | 3.9 | 3.7 | 3.6 | 3.4 |
| Asia Korea | 2.7 2.0 | 3.1 2.5 | 4.6 2.3 | 5.4 3.4 | 6.5 3.8 | 6.3 3.6 | 5.2 3.8 3 | 4.8 3.3 | 3.8 3.2 | 3.6 3.1 | 3.6 3.0 | 3.2 2.9 |
| China | 2.7 | 3.6 | 6.1 | 6.6 | 8.0 | 7.5 | 5.6 | 5.3 | 3.9 | 3.8 | 3.8 | 3.2 |
| Latin America | 4.2 | 4.1 | 4.3 | 4.3 | 4.5 | 5.1 | 4.8 | 4.6 | 4.3 | 3.9 | 3.8 | 3.7 |
| Mexico Brazil | 4.1 | 4.0 | 4.0 | ${ }^{3} .8$ | 3.9 | 4.5 | 4.3 | 4.2 | 3.9 | 3.5 | 3.4 | 3.3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

[^9]Class II FOMC
Restricted (FR)

| Measure and country | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | $\begin{array}{cc} \text { Projected } \\ 2008 & 2009 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REAL GDP (1) |  |  |  |  |  |  |  |  |  |
| Total Foreign | 0.4 | 3.0 | 3.0 | 3.8 | 3.8 | 4.0 | 4.1 | 2.3 | 3.6 |
| Advanced Foreign Economies of which: | 0.9 | 2.4 | 1.8 | 2.5 | 2.7 | 2.5 | 2.6 | 0.8 | 2.4 |
| Canada | 1.3 | 3.5 | 1.5 | 3.5 | 3.2 | 1.9 | 2.9 | 0.2 | 2.5 |
| Japan | -1.7 | 2.0 | 2.4 | 1.1 | 2.9 | 2.5 | 1.7 | 0.9 | 1.6 |
| United Kingdom | 2.1 | 2.3 | 3.4 | 2.6 | 1.8 | 3.2 | 2.8 | 1.6 | 2.4 |
| Euro Area (2) | 1.0 | 1.1 | 1.2 | 1.7 | 2.0 | 3.2 | 2.2 | 1.2 | 2.3 |
| Germany | 1.1 | 0.0 | 0.1 | 0.1 | 1.6 | 3.9 | 1.7 | 1.2 | 2.6 |
| Emerging Market Economies | -0.3 | 3.9 | 4.8 | 5.6 | 5.4 | 5.9 | 6.2 | 4.2 | 5.2 |
| Asia | 1.0 | 6.4 | 6.9 | 6.0 | 7.6 | 7.0 | 7.8 | 5.6 | 6.5 |
| Korea | 4.7 | 7.7 | 4.1 | 2.9 | 5.6 | 4.2 | 5.9 | 3.8 | 4.5 |
| China | 7.1 | 8.5 | 10.1 | 9.7 | 10.0 | 10.5 | 11.2 | 9.2 | 9.8 |
| Latin America | -1.3 | 1.6 | 2.4 | 5.3 | 3.1 | 5.0 | 4.6 | 2.6 | 4.0 |
| Mexico | -1.3 | 2.0 | 2.1 | 4.8 | 2.5 | 4.3 | 3.8 | 2.0 | 3.6 |
| Brazil | -0.6 | 4.9 | 1.0 | 4.5 | 3.4 | 4.9 | 6.1 | 3.9 | 4.4 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |
| Total Foreign | 1.7 | 2.5 | 2.1 | 2.8 | 2.3 | 2.1 | 3.6 | 3.4 | 2.5 |
| Advanced Foreign Economies of which: | 0.9 | 2.1 | 1.3 | 1.8 | 1.6 | 1.4 | 2.2 | 2.0 | 1.7 |
| Canada | 1.1 | 3.8 | 1.7 | 2.3 | 2.3 | 1.3 | 2.4 | 1.6 | 2.0 |
| Japan | -1.1 | -0.5 | -0.3 | 0.5 | -1.0 | 0.3 | 0.5 | 0.6 | 0.4 |
| United Kingdom (4) | 1.0 | 1.5 | 1.3 | 1.4 | 2.1 | 2.7 | 2.1 | 2.8 | 2.1 |
| Euro Area (2) | 2.1 | 2.3 | 2.0 | 2.3 | 2.3 | 1.8 | 2.9 | 3.0 | 2.0 |
| Germany | 1.5 | 1.2 | 1.1 | 2.1 | 2.2 | 1.3 | 3.1 | 2.3 | 2.0 |
| Emerging Market Economies | 2.8 | 2.9 | 3.1 | 3.9 | 3.0 | 2.9 | 5.1 | 4.8 | 3.4 |
| Asia | 1.2 | 0.8 | 2.3 | 3.1 | 2.6 | 2.3 | 5.4 | 4.8 | 3.2 |
| Korea | 3.3 | 3.4 | 3.5 | 3.4 | 2.5 | 2.1 | 3.4 | 3.3 | 2.9 |
| China | -0.1 | -0.6 | 2.7 | 3.2 | 1.4 | 2.1 | 6.6 | 5.3 | 3.2 |
| Latin America | 5.3 | 6.4 | 4.9 | 5.7 | 3.8 | 4.1 | 4.3 | 4.6 | 3.7 |
| Mexico | 5.1 | 5.2 | 3.9 | 5.3 | 3.1 | 4.1 | 3.8 | 4.2 | 3.3 |
| Brazil | 7.5 | 10.7 | 11.5 | 7.2 | 6.1 | 3.2 | 4.3 | 4.9 | 4.3 |

[^10]Class II FOMC
Restricted (FR)
OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

|  | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | $\begin{array}{r} \text { Pr } \\ 2008 \end{array}$ | $\begin{aligned} & \text { ected } \\ & 2009 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NIPA REAL EXPORTS and IMPORTS Percentage point contribution to |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -0.2 | -0.9 | $-0.1$ | -0.9 | -0.1 | 0.4 | 0.8 |  |  |
| Exports of $G \& S$ | $-1.3$ | 0.4 | $0.6$ | $0.7$ | 0.7 | 1.0 | 1.0 | 0.9 | $1.1$ |
| Imports of G\&S | 1.1 |  | -0.7 | $-1.7$ | -0.8 | $-0.6$ | $-0.2$ | 0.3 | -0.7 |
| Percentage change, Q4/Q4 |  |  |  |  |  |  |  |  |  |
| Exports of G\&S | -11.9 | 3.8 | 5.8 | 7.4 | 7.0 | 9.3 | 8.4 | 6.8 | 8.2 |
| Services | -8.9 | 10.2 | 3.0 | 8.3 | 4.1 | 8.3 | 7.0 | 7.0 | 6.8 |
| Computers | -23.5 | -1.1 | 11.3 | 5.8 | 14.0 | 8.2 | -5.9 | 13.2 | 9.5 |
| Semiconductors | -34.6 | 10.1 | 38.3 | -6.0 | 17.5 | 2.4 | 27.6 | 5.5 | 11.0 |
| Core Goods 1/ | -10.2 | 0.6 | 4.9 | 8.0 | 7.5 | 10.2 | 8.8 | 6.6 | 8.7 |
| Imports of G\&S | $-7.6$ | 9.7 | 4.8 | 11.5 | 5.1 | 3.7 | 1.0 | $-1.7$ | 3.9 |
| Services | -5.9 | 8.8 | 2.2 | 9.3 | 1.4 | 6.1 | 2.0 | -1.1 | 4.0 |
| Oil | 3.7 | 3.8 | 1.2 | 10.8 | 1.2 | -9.0 | 1.3 | -2. 4 | 0.9 |
| Natural Gas | -6.5 | 19.5 | 1.3 | 4.9 | 11.3 | $-13.4$ | -18.0 | 36.7 | 1.7 |
| Computers | $-13.6$ | 13.2 | 17.0 | 23.2 | 12.2 | 13.6 | 6.8 | 14.8 | 15.5 |
| Semiconductors | $-51.1$ | 11.0 | $-0.1$ | 9.8 | 7.6 | -0.5 | 4.1 | 4.2 | 5.0 |
| Core Goods 2/ | $-6.5$ | 10.0 | 5.2 | 11.4 | 6.0 | 5.9 | 0.3 | -3.2 | 4.1 |
| Billions of Chained 2000 Dollars |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -399.1 | $-471.3$ | -518.9 | -593.8 | $-618.0$ | -624.5 | $-555.6$ | $-419.8$ | $-330.0$ |
| Exports of G\&S | 1036.7 | 1013.3 | 1026.1 | 1126.1 | 1203.4 | 1304.1 | 1409.9 | 1523.8 | $1643.4$ |
| Imports of G\&S |  | 1484.6 |  | 1719.9 |  | 1928.6 |  |  |  |
| Billions of dollars |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | $-384.7$ | $-459.6$ | $-522.1$ | $-640.2$ | $-754.8$ | $-811.5$ | $-738.6$ | $-734.4$ | -607.5 |
| Current Acct as Percent of GDP | -3.8 | $-4.4$ | $-4.8$ | $-5.5$ | $-6.1$ | $-6.2$ | $-5.3$ | $-5.2$ | -4.1 |
| Net Goods \& Services (BOP) | $-365.1$ | $-423.7$ | -496.9 | $-612.1$ | $-714.4$ | $-758.5$ | $-708.5$ | -726.4 | -628.1 |
| Investment Income, Net | 36.9 | 33.2 | 51.1 | 62.5 | 54.5 | 43.2 | 81.1 | 107.9 | 130.7 |
| Direct, Net | 115.9 | 102.4 | 112.7 | 139.4 | 152.5 | 174.2 | 223.6 | 305.9 | 329.6 |
| Portfolio, Net | -79.0 | -69.1 | -61.5 | -76.9 | -98.1 | -131.0 | -142.5 | -198.0 | -198.9 |
| Other Income \& Transfers, Net | $-56.5$ | $-69.2$ | $-76.3$ | -90.6 | -94.9 | -96.1 | -111.2 | -116.0 | -110.0 |

[^11]NIPA REAL EXPORTS and IMPORTS
OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

|  | 2004 |  |  |  | 2005 |  |  |  | 2006 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | -1.5 | -0.4 | -1.1 | 0.3 | 0.8 | -0.1 | -1.4 | 0.1 | 0.5 | -0.2 | 1.2 |
| Exports of G\&S | 0.9 | 0.6 | 0.3 | 1.0 | 0.6 | 0.9 | 0.2 | 1.1 | 1.2 | 0.6 | 0.6 | 1.5 |
| Imports of G\&S | -1.7 | -2.1 | -0.7 | -2.0 | -0.3 | -0.1 | -0.3 | -2.5 | -1.1 | -0.1 | -0.9 | -0.3 |
| Percentage change from previous period, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of G\&S | 10.0 | 6.5 | 3.1 | 10.0 | 6.0 | 9.5 | 2.1 | 10.6 | 11.5 | 5.7 | 5.7 | 14.3 |
| Services | 16.2 | 5.1 | -3.4 | 16.8 | 6.5 | 0.9 | 2.6 | 6.3 | 2.9 | 3.9 | 2.0 | 26.0 |
| Computers | -7.0 | 1.7 | 16.7 | 13.4 | 17.4 | 24.9 | 12.8 | 2.0 | 14.6 | 13.0 | -3.9 | 9.9 |
| Semiconductors | 16.7 | -13.4 | -20.9 | -2.4 | -1.7 | 9.3 | 23.2 | 43.8 | 25.3 | 14.5 | -11.5 | -13.5 |
| Core Goods 1/ | 7.8 | 9.2 | 7.7 | 7.4 | 5.6 | 13.1 | 0.2 | 11.6 | 14.9 | 5.7 | 9.2 | 11.0 |
| Imports of G\&S | 12.3 | 15.2 | 4.8 | 13.8 | 2.1 | 0.8 | 2.1 | 16.2 | 6.9 | 0.9 | 5.4 | 1.6 |
| Services | 16.5 | 8.9 | 1.8 | 10.5 | -3.5 | -0.5 | 0.0 | 10.3 | 9.5 | -0.1 | 1.3 | 14.2 |
| Oil | 39.2 | -26.3 | -7.1 | 58.3 | 5.4 | -26.2 | -14.2 | 57.1 | -3.6 | -26.1 | 3.3 | -6.9 |
| Natural Gas | 33.4 | 43.1 | 48.5 | -57.3 | 53.9 | -4.0 | 108.6 | -50.2 | -49.4 | 123.0 | 24.1 | -59.8 |
| Computers | 20.7 | 30.1 | 25.6 | 17.0 | 5.7 | 9.8 | 17.0 | 16.6 | 27.0 | 16.9 | 16.0 | -3.2 |
| Semiconductors | 43.0 | 18.5 | 3.9 | -17.4 | -9.5 | 7.7 | 15.7 | 18.8 | 0.1 | -1.5 | 20.9 | -17.9 |
| Core Goods $2 /$ | 6.5 | 23.0 | 5.4 | 11.6 | 2.3 | 6.1 | 2.8 | 13.1 | 9.7 | 5.4 | 5.5 | 3.1 |
| Billions of Chained 2000 Dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of G\&S | $1101.8$ | $1119.4$ | $1128.0$ | $1155.3$ | $1172.4$ | $1199.3$ | $1205.6$ | $1236.4$ | $1270.6$ | $1288.4$ | $1306.6$ | $1350.9$ |
| Imports of $G \& S$ | 1650.9 | 1710.5 | 1730.8 | 1787.7 | 1796.8 | 1800.3 | 1809.7 | 1879.0 | 1910.7 | 1915.0 | 1940.4 |  |
| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -559.8 | -634.7 | -632.3 | -733.8 | -729.6 | -732.9 | -693.6 | -863.2 | -802.4 | -822.4 | -869.3 | -751.8 |
| Current Account as \% of GDP | -4.9 | -5.5 | -5.4 | -6.1 | -6.0 | -6.0 | -5.5 | -6.8 | -6.2 | -6.3 | -6.6 | -5.6 |
| Net Goods \& Services (BOP) | -544.1 | -602.4 | -626.4 | -675.4 | -666.6 | -682.7 | -723.8 | -784.4 | $-758.8$ | -770.3 | -797.2 | -707.7 |
| Investment Income, Net | 82.2 | 59.4 | 69.2 | 39.2 | 56.2 | 53.5 | 72.8 | 35.3 | 48.3 | 49.2 | 30.0 | 45.3 |
| Direct, Net | 146.2 | 129.6 | 143.4 | 138.4 | 140.4 | 147.3 | 176.1 | 146.2 | 168.0 | 178.6 | 161.9 | 188.3 |
| Portfolio, Net | -63.9 | -70.3 | -74.2 | -99.2 | -84.3 | -93.8 | -103.3 | -110.9 | -119.8 | -129.4 | -132.0 | -143.0 |
| Other Inc. \& Transfers, Net | -97.8 | -91.7 | -75.1 | -97.6 | -119.2 | -103.8 | -42.6 | -114.1 | -91.8 | -101.2 | -102.1 | -89.4 |

[^12]Last Page
NIPA REAL EXPORTS and IMPORTS
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|  |  | 2007 |  |  |  | 2008 |  |  | Projected |  | 2009 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NIPA REAL EXPORTS and IMPORTS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Goods \＆Services | －0．5 | 1.3 | 1.4 | 1．0 | 0.3 0.8 | 2.3 | 1.4 | 0.6 | 0.1 | 1.2 | 0.8 | －0．5 |
|  | Imports of G\＆S | －0．6 | 0.5 | －0．7 | 0.2 | －0．4 | 1.5 | 0.5 | －0．4 | －1．0 | 0.1 | －0．3 | －1．7 |
| Percentage change from previous period，s．a．a．r． |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of G ¢ S |  | 1.1 | 7.5 | 19.1 | 6.5 | 6.2 | 6.3 | 7.1 | 7.5 | 8.3 | 8.2 | 8.2 | 8.2 |
|  |  | 1.6 | 9.6 | 4.0 | 13.2 | 7.8 | 7.1 | 6.6 | 6.6 | 7.1 | 6.9 | 6.7 | 6.5 |
|  | Computers | －8．2 | －17．8 | 19.9 | －13．3 | 34.2 | 1.9 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 | 9.5 |
|  | Semiconductors | 25.4 | 23.2 | 6．3 | 61.4 | 2.0 | －1．3 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 | 11.0 |
|  | Core Goods 1／ | 0.3 | 7.1 | 27.4 | 2.5 | 4.8 | 6.5 | 7.1 | 7.8 | 8.7 | 8.7 | 8.7 | 8.8 |
| Imports of $\mathrm{G} \mathrm{\& S}$ |  | 3.9 | －2．7 | 4.4 | －1．4 | 2.4 | －8．2 | －2．7 | 2.1 | 5.6 | －0．8 | 1.6 | 9.5 |
|  |  | 2.3 | $-1.7$ | 1.7 | 5.5 | 0.7 | －5．2 | 4.4 | －4．3 | 2.0 | 4.6 | 4.8 | 4.8 |
| Oil |  | 29.6 | －22．3 | －18．2 | 28.1 | 21.9 | －27．0 | －15．2 | 20.4 | 20.8 | －22．7 | －16．5 | 32.7 |
| Natural Gas |  | 8.3 | 258.5 | －16．7 | －86．0 | 193.7 | 50.9 | 51.3 | －47．9 | 7.9 | 55.4 | 22.6 | －48．0 |
| Computers |  | 41.1 | －13．1 | －3．8 | 10.3 | 19.2 | 9.1 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 |
|  |  | 4.0 | 3.3 | 3.4 |  | －0．3 | 7.1 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| Semiconductors |  | －2．3 | －0．5 | 11.8 | －6．7 | －4．9 | －4．5 | －2．6 | －0．6 | 1.0 | 3.9 | 5.6 | 6.1 |
| Billions of Chained 2000 Dollars，s．a．a．r． |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Goods \＆Services Exports of $G \& S$ | $\begin{array}{r} -612.1 \\ 1354.7 \end{array}$ | $\begin{array}{r} -573.9 \\ 1379.5 \end{array}$ | $\begin{aligned} & -533.1 \\ & 1441.2 \end{aligned}$ | $\begin{aligned} & -503.2 \\ & 1464.1 \end{aligned}$ | $\begin{aligned} & -492.4 \\ & 1486.4 \end{aligned}$ | $\begin{aligned} & -427.7 \\ & 1509.5 \end{aligned}$ | $\begin{array}{r} -388.4 \\ 1535.6 \end{array}$ | $\begin{aligned} & -370.6 \\ & 1563.7 \end{aligned}$ | $\begin{aligned} & -365.7 \\ & 1595.3 \end{aligned}$ | $\begin{aligned} & -330.3 \\ & 1627.0 \end{aligned}$ | $\begin{array}{r} -305.9 \\ 1659.2 \end{array}$ | $\begin{array}{r} -318.2 \\ 1692.1 \end{array}$ |
|  | Imports of $G \& S$ |  | $1953.4$ |  | 1967.3 | 1978.8 | 1937.2 | 1924.1 | 1934.3 | 1961.0 | 1957.3 | 1965.1 | 2010.3 |
| Billions of dollars，s．a．a．r． |  |  |  |  |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE Current Account as \％of GDP |  | －792．8 | －760．2 | －709．8 | －691．7 | －742．0 | －764．0 | －728．4 | －703．2 | －678．2 | －609．0 | －563．4 | －579．3 |
|  |  | －5．9 | －5．5 | －5．1 | －4．9 | －5．2 | －5．4 | －5．1 | －4．9 | －4．7 | －4．1 | －3．8 | －3．8 |
| Net Goods \＆Services（BOP） |  | －714．5 | －717．9 | －690．3 | －711．4 | －731．7 | －758．4 | －719．3 | －696．1 | －688．0 | －628．5 | －590．3 | －605．7 |
| Investment Income，Net Direct，Net |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & 141.7 \\ & 334.5 \end{aligned}$ |
| Direct，${ }^{\text {Net }}$ Portfolio，Net |  | $\begin{array}{r} 190.9 \\ -154.8 \end{array}$ | $\begin{array}{r} 201.2 \\ -144.2 \end{array}$ | $\begin{array}{r} 224.3 \\ -132.2 \end{array}$ | $\begin{array}{r} 218.0 \\ -139.0 \end{array}$ | $\begin{array}{r} 210.8 \\ -171.2 \end{array}$ | $\begin{array}{r} 308.1 \\ -198.3 \end{array}$ | $\begin{array}{r} 311.9 \\ -211.1 \end{array}$ | $-211.3$ | $\begin{array}{r} 324.0 \\ -206.5 \end{array}$ | $\begin{array}{r} 328.3 \\ -200.5 \end{array}$ | $\begin{array}{r} 521.1 \\ -195.9 \end{array}$ | $\begin{array}{r} 354.0 \\ -192.8 \end{array}$ |
| Other Inc．\＆Transfers，Ne |  | t－114．4 | －99．4 | －111．6 | －119．3 | －116．0 | －116．0 | －116．0 | －116．0 | －108．3 | －108．3 | －108．3 | －115．3 |

[^13]
# Board of Governors of the Federal Reserve System 

Division of Research and Statistics

Date: April 25, 2008
To: Federal Open Market Committee
From: David Stockton
Subject: Greenbook Part 1 Errata

The attached table showing the staff inflation projections was inadvertently omitted from Part 1 of the April Greenbook. This would have been page I-14, before the subheading Prices and labor costs.

## Inflation Projections

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

| Measure | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | ---: |
| PCE chain-weighted price index | 1.9 | 3.4 | 3.3 | 1.8 |
| Previous | 1.9 | 3.4 | 2.9 | 1.7 |
| Food and beverages | 2.3 | 4.5 | 3.0 | 2.2 |
| Previous | 2.3 | 4.5 | 2.8 | 2.0 |
| Energy | -4.0 | 19.6 | 16.2 | -1.4 |
| $\quad$ Previous | -4.0 | 19.6 | 10.4 | -1.5 |
| Excluding food and energy | 2.3 | 2.1 | 2.3 | 2.0 |
| $\quad$ Previous | 2.3 | 2.1 | 2.3 | 1.9 |
| Consumer price index | 1.9 | 4.0 | 3.8 | 1.8 |
| $\quad$ Previous | 1.9 | 4.0 | 3.3 | 1.8 |
| Excluding food and energy | 2.7 | 2.3 | 2.5 | 2.2 |
| $\quad$ Previous | 2.7 | 2.3 | 2.5 | 2.1 |
| GDP chain-weighted price index | 2.7 | 2.6 | 2.0 | 2.0 |
| $\quad$ Previous | 2.7 | 2.6 | 2.0 | 2.0 |
| ECI for compensation of private |  |  |  |  |
| $\quad$ industry workers |  |  |  |  |

1. December to December.

[^0]:    ${ }^{1}$ The Congress is considering various proposals to address problems in housing markets and economic weakness. These policies include extending eligibility for unemployment benefits, increasing grants to state and local governments, and providing targeted tax incentives for housing. At this time, because enactment of these measures is quite uncertain, and because the proposals currently under consideration would have only a small effect on aggregate demand, we have not included them in our policy assumptions.

[^1]:    1. Percent, average for the final quarter of the period.
[^2]:    1. Level, except for two-quarter and four-quarter intervals.
[^3]:    1．Change from fourth quarter of previous year to fourth quarter of year indicated．
    2．Billions of chained（2000）dollars．

[^4]:    1. Change from fourth quarter of previous year to fourth quarter of year indicated.
    2. Private-industry workers.
[^5]:    1. Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise indicated.
     Greenbooks, we expressed the GDP gap with the opposite sign, so that a positive number indicated that actual output fell short of potential.) Annual values are for the fourth quarter of the year indicated.
    2. Percent change, annual rate.
    3. Percent change, annual rate, with inventory valuation and capital consumption adjustments. 8. Billions of dollars, annual values are annual averages.
[^6]:    aggregate demand stimulus.

[^7]:    Note. Quarterly data are at seasonally adjusted annual rates. 2.6.3 FOF

[^8]:    Note. Data after 2007:Q4 are staff projections.

    1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.
    2. Includes change in liabilities not shown in home mortgages and consumer credit.
    3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.
    4. For corporations, excess of capital expenditures over U.S. internal funds.
    5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers
    n.s.a. Not seasonally adjusted.
    2.6.4 FOF
[^9]:    1. Foreign GDP aggregates calculated using shares of U.S. exports.
    2. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.
    3. CPI excluding mortgage interest payments, which is the targeted inflation rate.
[^10]:    . 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.

[^11]:    2. Merchandise imports excluding oil, natural gas, computers, and semiconductors.
[^12]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, natural gas, computers, and semiconductors.
[^13]:    1．Merchandise exports excluding computers and semiconductors，
    1．Merchandise exports excluding computers and semiconductors，and semiconductors．

