## 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

Real GDP growth now appears to have slowed sharply in the second quarter. The cumulative effects of tighter financial conditions and the run-up in crude oil prices seem to have weighed heavily on the household sector. Consumer spending has decelerated considerably in recent months, and residential construction has dropped back noticeably from the weather-inflated levels of the first quarter. In the business sector, firms have continued to add to their payrolls but at a slower pace than earlier in the year. However, capital spending still seems to be growing briskly apart from a dropoff in outlays for motor vehicles, and manufacturing output has continued to trend up at a solid pace. On balance, we now project real GDP to rise at an annual rate of just 2 percent in the current quarter, about $13 / 4$ percentage points less than in the May Greenbook.

We have also marked down our projection going forward. The information that we have received since the May FOMC meeting indicates that the slowdown in housing activity has been more rapid and substantial than we had been anticipating. More broadly, a general deterioration in the underlying economic fundamentals is likely to restrain activity over the forecast period: A drop in the stock market, downward revisions to labor income, and a slightly higher path for the federal funds rate are only partially offset by lower energy prices. All told, we now project that real GDP will rise at an annual rate of $23 / 4$ percent over the next year and half, about $1 / 4$ percentage point below the pace that was projected in the May Greenbook.

The latest readings on core consumer prices were above our expectations, with the surprise coming not only from large increases in shelter costs but also from higher prices for a broad range of other goods and services. In reaction, we have raised our forecast for core consumer prices $1 / 4$ percentage point in both 2006 and 2007. However, as the effects of higher energy and import prices abate and some slack emerges in labor and product markets, we continue to expect core PCE prices to decelerate: We project core PCE inflation of 2.4 percent this year and 2.2 percent in 2007. Our outlook for headline consumer price inflation is little changed for this year, as the larger projected increases in core consumer prices are offset by downward revisions to the outlook for energy prices; for 2007, we have revised headline inflation up $1 / 4$ percentage point.

## Key Background Factors

With inflationary pressures a bit more intense than at the time of the May Greenbook, we have built an additional 25 basis point tightening into this forecast. We now assume that the federal funds rate will rise to $51 / 4$ percent at the June FOMC meeting and will remain

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


Note. The projection for the BAA corporate rate is unchanged from the May Greenbook. Dotted line for the 10-year Treasury rate represents May Greenbook projection.
House Prices
Index, 2002:Q1=100, ratio scale


Note. The projection period begins in 2006:Q2. Dotted line represents May Greenbook projection.

Broad Real Dollar


Note. Shading represents the projection period.
at that level through the end of 2007, a path that averages just a shade below market expectations. Longer-term rates are little changed from the last Greenbook, and we assume that they will remain around current levels through the end of 2007.

Broad equity indexes are currently about 7 percent below the level we had assumed in the May Greenbook. This decline likely reflects both a less optimistic outlook for economic growth on the part of investors and some increase in required compensation for risk. We assume that equity prices will increase from their current level at an annual rate of $61 / 2$ percent, a pace that roughly maintains risk-adjusted parity with the return on Treasury securities. Regarding house prices, the OFHEO repeat-transactions index decelerated somewhat in the first quarter, in line with our May Greenbook forecast. We continue to expect this index to decelerate appreciably more in coming quarters. After rising $131 / 4$ percent last year, house prices are projected to rise $51 / 2$ percent this year and 2½ percent in 2007.

The outlook for fiscal policy is little changed. The supplemental appropriations bill recently passed by the Congress is consistent with our May Greenbook assumptions. On the tax side, we had been assuming that most of the tax provisions that expired at the end of 2005 would be extended. The recently enacted tax reconciliation legislation went part of the way to validating that assumption: It extended AMT relief for one year and delayed the expiration of the reduced tax rates on capital gains and dividends. We continue to assume that the Congress will extend most of the other expired provisions, most notably the research and experimentation credit, and will extend AMT relief again next year. In all, we project federal fiscal policy to provide an impetus to real GDP growth of almost $1 / 2$ percentage point this year and to be roughly neutral next year, about the same forecast as that in the May Greenbook. Our deficit projections are also little changed from the last forecast: We expect the federal unified budget to post deficits of $\$ 296$ billion in the current fiscal year and $\$ 330$ billion in fiscal 2007.

The foreign exchange value of the dollar has risen a bit since the May Greenbook, and we have edged up the starting point for the projected path of the real trade-weighted dollar about 1 percent. However, we continue to assume that the dollar will depreciate over the forecast period, with the decline averaging about 2 percent at an annual rate. After a stronger-than-expected increase in the first quarter, foreign growth appears to be on a slightly lower trajectory than in our previous projection. We now project that foreign economic activity will expand at an annual rate of roughly $3 \frac{1}{4}$ percent through the end of 2007.

The spot price of West Texas intermediate (WTI) crude oil has fallen to about \$69 per barrel, about $\$ 5$ per barrel below its level at the time of the May Greenbook. This decrease reflects some alleviation of political tensions in the Middle East as well as expectations of weaker economic growth. Futures prices have also fallen, and we have lowered our projected path for the spot price to about $\$ 72$ per barrel by the end of 2007, about $\$ 4$ per barrel lower than forecast in the previous Greenbook.

## Recent Developments and the Near-Term Outlook

Real GDP is estimated to have risen at an annual rate of 5.8 percent in the first quarter, $1 / 2$ percentage point faster than we had anticipated at the time of the last Greenbook. Incoming data for the current quarter, however, point to a bigger stepdown in growth than we had been expecting, due in large part to slower-than-expected growth in consumer spending and a sharper decline in residential investment.

Recent readings on the labor market indicate that payroll employment has decelerated over the past several months. Private employment growth averaged 92,000 in April and May, down from a monthly average gain of 169,000 in the first quarter. Over the past four weeks, initial claims for unemployment insurance have averaged 316,000 per week, about the same as in April and roughly in line with the moderate 115,000 increase in private payroll employment we are projecting for June.

Manufacturing output edged down in May, but we estimate that it will increase at an annual rate of about 4 percent for the second quarter as a whole. This pace of activity, while still solid, represents a drop of about $1 \frac{1}{4}$ percentage points from the first-quarter pace and is consistent with the generally softer aggregate economic conditions.

We had anticipated some slowdown in consumption from the rapid first-quarter pace, but incoming data on consumer spending have been more sluggish than we had expected. Data on retail sales and consumer prices through May point to flat real spending this quarter on goods other than motor vehicles. Sales of light vehicles in April and May averaged 16.4 million units per month (about 300,000 lower than projected last Greenbook), and the most recent reports from vehicle makers point to continued softness in sales in June. Factoring in continued growth in services, we now project real PCE to grow $21 / 4$ percent this quarter, down $11 / 2$ percentage points from the May Greenbook.

| Summary of the Near-Term Outlook (Percent change at annual rate except as noted) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Measure | 2006:Q1 |  | 2006:Q2 |  |
|  | $\begin{gathered} \text { May } \\ \text { GB } \end{gathered}$ | $\begin{gathered} \text { June } \\ \text { GB } \end{gathered}$ | $\begin{aligned} & \text { May } \\ & \text { GB } \end{aligned}$ | $\begin{gathered} \text { June } \\ \text { GB } \end{gathered}$ |
| Real GDP | 5.3 | 5.8 | 3.7 | 2.0 |
| Private domestic final purchases | 6.6 | 5.9 | 3.4 | 1.8 |
| Personal consumption expenditures | 5.5 | 5.2 | 3.7 | 2.2 |
| Residential investment | 3.8 | 1.7 | -1.7 | -7.4 |
| Business fixed investment | 15.6 | 13.2 | 4.4 | 4.8 |
| Government outlays for consumption and investment | 4.4 | 4.8 | . 5 | . 9 |
|  | Contribution to growth (percentage points) |  |  |  |
| Inventory investment | -. 5 | -. 0 | . 3 | . 1 |
| Net exports | -. 7 | -. 2 | . 3 | . 2 |

Recent data suggest that the residential construction sector is weaker than we had previously thought. Single-family housing starts fell to an average annual rate of 1.57 million units in April and May, and other near-term indicators of housing activity, including the permits data and inventories of homes for sale, suggest that underlying conditions have deteriorated as well. We now expect real residential investment to fall at an annual rate of about 7 percent this quarter, a downward revision of almost 6 percentage points from the May Greenbook forecast.

As we had projected last Greenbook, real spending on equipment and software (E\&S) appears to have decelerated sharply, from an annual rate of growth of 14 percent in the first quarter to about 2 percent this quarter. Much of this deceleration reflects a retrenchment in business spending on motor vehicles and a flattening out of outlays on communications equipment; spending in both of these categories surged in the first quarter. The data on orders and shipments for capital goods suggest that growth in equipment spending outside the high-tech and transportation sectors-which accounts for about one-half of total E\&S—will rebound this quarter from its low first-quarter pace.

The pickup in business investment in nonresidential structures (NRS) that occurred at the start of this year appears to be continuing, with spending boosted not only by further expansion in drilling and mining but also by increased activity in other construction
sectors. We now expect real NRS spending to grow at an annual rate of about 13 percent this quarter, just a bit more than in the first quarter and about $21 / 2$ percentage points higher than the last Greenbook forecast.

Recent data indicate that inventory investment was roughly neutral for real GDP growth in the first quarter, rather than being the $1 / 2$ percentage point drag that we had assumed last Greenbook. We expect stockbuilding to be a neutral force again this quarter, as stocks of new motor vehicles remain essentially flat and as inventories outside the motor vehicle sector continue to trend up at a pace that keeps stocks roughly in line with sales.

Real federal purchases increased at an annual rate of $101 / 2$ percent in the first quarter, reflecting a sharp bounceback in defense spending and continued rapid growth in hurricane-related nondefense spending. Data from the Monthly Treasury Statements for April and May suggest that, as anticipated in the last Greenbook, real purchases will fall this quarter: Defense outlays appear to have grown moderately, but nondefense outlays are likely to decline noticeably as hurricane-related expenditures fall back. Incoming data for the state and local sector suggest that spending rose $11 / 2$ percent in the first quarter and is on track to rise a bit faster this quarter.

We now estimate that net exports subtracted about $1 / 4$ percentage point from real GDP growth in the first quarter, roughly $1 / 2$ percentage point less drag than in the May Greenbook projection. Recent trade data suggest a slowdown in the growth of both exports and imports from the first to the second quarter. On net, with growth of imports now well below that of exports, we expect the external sector to boost real GDP growth about $1 / 4$ percentage point this quarter.

Core CPI inflation in April and May was higher than expected. The large increase in owners' equivalent rent accounted for part of the surprise, but other components were also above our expectations. In addition, April nonmarket PCE prices came in higher than we had been expecting. We now project that the core PCE price index will increase at an annual rate of 3.1 percent this quarter, up about $1 / 2$ percentage point from the May Greenbook.

## The Longer-Run Outlook for the Economy

After increasing at an annual rate of 2 percent in the second quarter, real GDP is projected to grow at an average annual rate of $23 / 4$ percent over the remainder of the forecast period. Real activity in the second quarter was held down by several factors,

## Projections of Real GDP

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

| Measure | 2006 |  |  |
| :---: | ---: | ---: | ---: |
|  | H1 | H2 |  |
|  |  |  |  |
| Real GDP | 3.9 | $\mathbf{2 . 7}$ | 2.7 |
| Previous | $\mathbf{4 . 5}$ | $\mathbf{3 . 1}$ | $\mathbf{3 . 0}$ |
| Final sales | 3.9 | 2.6 | 2.6 |
| Previous | 4.6 | 3.1 | 2.9 |
| PCE | 3.7 | 3.0 | 2.9 |
| Previous | 4.6 | 3.4 | 3.2 |
| Residential investment | -2.9 | -7.5 | -1.7 |
| Previous | 1.0 | -1.4 | -.7 |
| BFI | 8.9 | 6.8 | 5.4 |
| Previous | 9.8 | 7.9 | 6.1 |
| Government purchases | 2.8 | 1.5 | 1.3 |
| Previous | 2.4 | 1.6 | 1.4 |
| Exports | 10.0 | 5.2 | 5.2 |
| Previous | 9.3 | 5.6 | 5.8 |
| Imports | 6.3 | 3.5 | 4.6 |
| Previous | 7.2 | 5.7 | 5.1 |
|  | Contribution to growth |  |  |
| (percentage points) |  |  |  |
|  | .0 | .1 | .1 |
| Inventory change | -.1 | .0 | .1 |
| Previous | -.0 | -.0 | -.2 |
| Net exports | -.2 | -.4 | -.3 |
| Previous |  |  |  |

including a decline in federal hurricane-related spending, subdued motor vehicle production, and a partial adjustment in the level of consumer spending to higher energy prices. Going forward, the expansion is expected to pick up but still to proceed at a below-potential pace as growth is restrained importantly by the anticipated housing market adjustment, the remaining effects of the tightening in monetary policy, and the waning of wealth effects. In such an environment, the unemployment rate is expected to move up to $51 / 4$ percent, which is slightly above our estimate of the NAIRU.

Household spending. We project real consumer spending to increase at an average annual rate of about 3 percent over the next year and a half, about $1 / 4$ percentage point slower growth than in the May Greenbook. This markdown in spending growth reflects a number of factors, including a downward revision to the level of labor income and a lower stock market.

As noted, near-term indicators suggest that the housing market is significantly weaker than we assumed in the last Greenbook, and we have taken considerable signal from this surprising weakness. In addition, the downward revisions to wealth and employment in this forecast act as a further restraint on residential spending going forward. We now project real outlays in the residential sector to decline $71 / 2$ percent at an annual rate in the second half of this year and about $1 \frac{13}{4}$ percent next year.

Business spending. We expect investment in equipment and software to decelerate from the first half to the second half of this year as underlying investment demand responds to the moderation in business output growth and the rise in bond rates over the past year. In addition, spending to replace equipment damaged by last year's hurricanes is projected to tail off over the remainder of this year. Spending growth steps down a bit more next year as truck sales decline following the implementation of the EPA's new emission regulations. Outside the transportation sector, real E\&S spending is forecast to rise about 7 percent in 2007, a pace roughly in line with its long-run average.

We expect real spending in the nonresidential construction sector to increase about 10 percent this year, boosted by continued strength in drilling and mining and the ongoing rebound in the growth of outlays for nonresidential buildings. Spending growth drops back to 4122 percent next year: With drilling activity already at a very high level and with prices of natural gas and crude oil expected to be flat to declining, the expansion in drilling activity slows; growth in spending on other nonresidential construction moderates from its robust 2006 pace.

Inventory investment is projected to be a relatively neutral factor for real GDP growth over the forecast period. Businesses in most sectors appear fairly comfortable with their current inventory positions; thus we expect stocks to rise at a pace only a bit below that of sales over the next two years.

Government spending. Our projection for government purchases is little changed in this forecast. Over the next year and a half, real federal purchases-both defense and
nondefense—are assumed to remain flat; this assumption allows for a bit of slippage from the tight spending goals announced by the Administration and the Congress for fiscal 2007. Real purchases by state and local governments are projected to grow at an annual rate of roughly 2 percent over the next year and a half; this pace of expenditures represents a pickup from the anemic growth rates of the past few years as governments start boosting spending in response to their more-favorable budget conditions.

Net exports. We have lowered the projected growth of real imports to $31 / 2$ percent in the second half of this year and to $41 / 2$ percent in 2007, in part reflecting the markdown in projected economic growth in the United States. We have also lowered export growth a bit in response to somewhat weaker foreign GDP growth and a slightly higher dollar. On net, the external sector is expected to be roughly neutral for real GDP growth in the second half of 2006 and to restrain growth almost $1 / 4$ percentage point in 2007. (The International Developments section provides more detail on the outlook for the external sector.)

## Aggregate Supply, the Labor Market, and Inflation

We have edged down our estimates of the growth of structural labor productivity and potential GDP over the forecast period because of a slight downward revision in our estimates of capital deepening for 2007. We now assume that structural productivity grows 3 percent and potential GDP grows 3.2 percent in both 2006 and 2007. With actual GDP growth falling short of potential over the next year and a half, the output gap, which we think is about closed now, widens to $3 / 4$ percentage point by the end of 2007.

Productivity and the labor market. The slower anticipated growth in real GDP has led us to lower our forecast of productivity growth; as in the typical pattern, firms are expected to adjust employee hours to the slower pace of output only with a lag. We now project productivity growth of 2.6 percent in 2006 and 2.9 percent in 2007, about $1 / 4$ percentage point slower than in the last forecast.

That said, the current and projected slowdown in output growth has led us to mark down our employment forecast, particularly for next year. We now expect monthly private payroll gains to slow sharply from an average of about 125,000 this year to about 40,000 next year. With this sluggish pace of hiring, the unemployment rate moves up to about $51 / 4$ percent by the end of 2007.

## Decomposition of Structural Labor Productivity

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

| Measure | $1974-$ <br> 95 | $1996-$ <br> 2000 | $2001-$ <br> 04 | 2004 | 2005 | 2006 | 2007 |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Structural labor productivity | $\mathbf{1 . 5}$ | $\mathbf{2 . 5}$ | $\mathbf{3 . 3}$ | $\mathbf{3 . 1}$ | $\mathbf{3 . 1}$ | $\mathbf{3 . 0}$ | $\mathbf{3 . 0}$ |
| $\quad$ Previous | 1.5 | 2.5 | 3.3 | 3.1 | 3.1 | 3.1 | 3.1 |
| Contributions $^{1}$ |  |  |  |  |  |  |  |
| Capital deepening | .7 | 1.4 | .7 | .7 | 1.0 | 1.0 | 1.0 |
| $\quad$ Previous | .7 | 1.4 | .7 | .7 | 1.0 | 1.0 | 1.1 |
| Multifactor productivity | .5 | .8 | 2.3 | 2.1 | 1.9 | 1.8 | 1.8 |
| $\quad$ Previous | .5 | .8 | 2.3 | 2.1 | 1.9 | 1.8 | 1.8 |
| Labor composition | .3 | .3 | .3 | .3 | .3 | .2 | .2 |
| MEMO |  |  |  |  |  |  |  |
| Potential GDP | 3.0 | 3.3 | 3.2 | 2.9 | 2.9 | 3.2 | 3.2 |
| $\quad$ Previous | 3.0 | 3.4 | 3.1 | 2.9 | 2.9 | 3.2 | 3.3 |

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 | 2004 | 2005 | 2006 | 2007 |
| :--- | ---: | ---: | ---: | ---: |
| Output per hour, nonfarm business | 2.6 | 2.5 | 2.6 | 2.9 |
| $\quad$ Previous | 2.6 | 2.5 | 2.8 | 3.1 |
| Nonfarm private payroll employment | 1.7 | 1.6 | 1.4 | .4 |
| $\quad$ Previous | 1.7 | 1.6 | 1.5 | .6 |
| Household survey employment | 1.3 | 1.9 | 1.2 | .3 |
| $\quad$ Previous | 1.3 | 1.9 | 1.2 | .6 |
| Labor force participation rate $^{1}$ | 66.0 | 66.1 | 66.0 | 65.7 |
| $\quad$ Previous | 66.0 | 66.1 | 66.0 | 65.8 |
| Civilian unemployment rate $^{1}$ | 5.4 | 5.0 | 4.9 | 5.2 |
| $\quad$ Previous | 5.4 | 5.0 | 4.8 | 5.0 |
| MEMO |  |  |  |  |
| GDP gap $^{2}$ | -.7 | -.4 | -.3 | -.8 |
| $\quad$ Previous | -.7 | -.4 | .1 | -.2 |

1. Percent, average for the fourth quarter.
2. Percent difference between actual and potential GDP in the fourth quarter of the year indicated. A negative number indicates that the economy is operating below potential.

## Inflation Projections

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

| Measure | 2004 | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: | :---: |
| PCE chain-weighted price index | 3.1 | 3.0 | 2.5 | 2.2 |
| Previous | 3.1 | 3.0 | 2.5 | 2.0 |
| Food and beverages | 2.9 | 2.1 | 2.4 | 2.3 |
| Previous | 2.9 | 2.1 | 2.4 | 2.2 |
| Energy | 17.9 | 21.8 | 4.1 | 1.4 |
| Previous | 17.9 | 21.8 | 7.4 | 1.5 |
| Excluding food and energy | 2.2 | 2.0 | 2.4 | 2.2 |
| Previous | 2.2 | 2.0 | 2.2 | 2.0 |
| Consumer price index | 3.3 | 3.7 | 2.6 | 2.3 |
| Previous | 3.3 | 3.7 | 2.8 | 2.2 |
| Excluding food and energy | 2.1 | 2.1 | 2.7 | 2.4 |
| Previous | 2.1 | 2.1 | 2.5 | 2.3 |
| GDP chain-weighted price index | 2.9 | 3.1 | 2.7 | 2.3 |
| Previous | 2.9 | 3.1 | 2.6 | 2.3 |
| ECI for compensation of private |  |  |  |  |
| industry workers ${ }^{1}$ | 3.8 | 2.9 | 3.2 | 3.7 |
| Previous | 3.8 | 2.9 | 3.2 | 3.8 |
| Compensation per hour, |  |  |  |  |
| nonfarm business sector | 5.9 | 2.8 | 5.1 | 5.2 |
| Previous | 5.9 | 3.7 | 5.2 | 5.4 |
| Prices of core nonfuel imports | 3.7 | 2.2 | 3.1 | 1.5 |
| Previous | 3.7 | 2.2 | 3.1 | 1.3 |

1. December to December.

Prices and labor costs. Core consumer price inflation has come in above our expectations, and in response, we have marked up our projection for the increase in core PCE prices 0.2 percentage point this year and next. Nonetheless, the basic contour of our forecast is unchanged. Despite the higher incoming data on prices, measures of longerrun inflation expectations remain within the range observed over the past few years; we anticipate that these expectations will remain reasonably well anchored over the next year and a half. Moreover, many of the forces that have driven up core inflation are likely to abate over the forecast period: Energy prices are expected to flatten out, core nonfuel import prices are projected to decelerate from a pace of 3 percent this year to $11 / 2$ percent in 2007, and increases in rents are expected to moderate (although not to the slow pace
seen in the 2003-05 period). As a result, we expect core PCE inflation to slow from 2.4 percent this year to 2.2 percent in 2007.

The incoming data on compensation have been softer than we had expected, and we have made some small downward adjustments to our compensation forecast. Even so, we continue to expect compensation to accelerate in 2006 and 2007 as past productivity gains and increases in price inflation pass through to wages. We currently project the ECI to rise $31 / 4$ percent in 2006 and $33 / 4$ percent in 2007 . We expect the productivity and cost measure of compensation per hour to rise a bit more than 5 percent this year and next.

## Financial Flows and Conditions

After having expanded $91 / 2$ percent in 2005, the debt of the domestic nonfinancial sector is projected to increase more slowly over the next couple of years-8 percent this year and $61 / 2$ percent in 2007-with a downshift in borrowing in every major sector except the federal government. Although the basic contour of this forecast is similar to that in the May Greenbook, we have marked up debt growth this year, as the incoming data have indicated more borrowing by households and nonfinancial businesses than we had anticipated.

Household debt expanded 113/4 percent in 2005 and about matched that robust pace in the first quarter of this year. We estimate that cash-out refinancings were important for the sizable first-quarter increase in mortgage debt, as homeowners continued to tap into some of the substantial equity that has built up with the increase in home values over the past few years. We expect the growth of mortgage debt-which has been driving the rapid household borrowing for some time-to slow markedly, as home-price appreciation cools and mortgage rates remain near their recent levels. Factoring in continued subdued growth of consumer credit, household debt is projected to increase $911 / 4$ percent this year and 61/4 percent in 2007.

Nonfinancial corporate borrowing so far this year has moved up sharply from the pace in 2005, in large part to finance an exceptional volume of equity retirements from mergers and acquisitions and share repurchases. Even as equity retirements move down to a more-typical level over the forecast period, we project borrowing to be supported by stillbrisk increases in capital expenditures and, relative to last year, less reliance on internal funds. All told, we expect that growth of nonfinancial corporate debt will increase from a pace of $51 / 2$ percent in 2005 to an average annual pace of $63 / 4$ percent this year and next.

Municipal debt is projected to increase at an average annual rate of $41 / 2$ percent in both 2006 and 2007, well below last year's $101 / 4$ percent rise. The deceleration reflects paydowns of previously refunded debt and, given higher interest rates, substantially fewer opportunities for advance-refunding issues. We project that debt of the federal government will expand at an average annual rate of 7 percent over 2006 and 2007, the same pace as last year.

As was the case in 2005, growth of M2 is projected to fall short of nominal GDP growth this year, reflecting a continued drag from the increase in the opportunity cost associated with rising short-term interest rates. With short-term rates assumed to flatten out, however, we expect M2 growth to pick up to 5 percent in 2007, essentially matching the increase in nominal GDP.

## Alternative Simulations

In this section, we evaluate several risks to the staff forecast using simulations of the FRB/US model. The first scenario concerns the implications of a more-pronounced slump in the housing market. The second scenario, in contrast, involves stronger-thanexpected aggregate spending, led by robust business investment. Next we turn to inflation risks, starting with a pair of scenarios in which prices rise more rapidly than in the baseline - in the first, because firms are able to keep profit margins at their current high levels and, in the second, because inflation expectations become unanchored. A follow-up simulation then explores how such a worsening of inflation might affect investor sentiment, with adverse consequences for real activity. Our final scenario considers the risk that we have underestimated the amount of slack in the labor market and have thus overstated the upward pressures on inflation. In all these scenarios, monetary policy responds gradually to deviations from the baseline as suggested by an estimated version of the Taylor rule.

Housing slump. While we think that a moderate weakening of the housing market is still the most likely outcome, we cannot rule out the emergence of a more-pronounced slump, especially as by some estimates home prices would remain roughly 20 percent overvalued under our baseline forecast. In this scenario, home prices fall enough to eliminate the estimated overvaluation by the end of next year, thereby reducing household wealth $\$ 41 / 2$ trillion. Falling real estate values in turn prompt a reassessment of the return to homeownership, weakening the demand for new homes and causing real residential investment to fall 25 percent below baseline by late next year-a retrenchment

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

| Measure and scenario | 2006 |  | 2007 |
| :---: | :---: | :---: | :---: |
|  | H1 | H2 |  |
| Real GDP |  |  |  |
| Greenbook Baseline | 3.9 | 2.7 | 2.7 |
| Housing slump | 3.9 | 2.0 | 2.1 |
| Robust investment | 3.9 | 3.2 | 3.2 |
| Greater pricing power | 3.9 | 2.6 | 2.4 |
| Rising inflation expectations | 3.9 | 2.6 | 2.7 |
| Skittish investors | 3.9 | 2.4 | 1.9 |
| Lower NAIRU | 3.9 | 2.9 | 3.0 |
| Unemployment rate ${ }^{1}$ |  |  |  |
| Greenbook Baseline | 4.7 | 4.9 | 5.2 |
| Housing slump | 4.7 | 5.0 | 5.7 |
| Robust investment | 4.7 | 4.8 | 4.9 |
| Greater pricing power | 4.7 | 4.9 | 5.4 |
| Rising inflation expectations | 4.7 | 4.9 | 5.2 |
| Skittish investors | 4.7 | 4.9 | 5.6 |
| Lower NAIRU | 4.7 | 4.9 | 5.1 |
| Core PCE inflation |  |  |  |
| Greenbook Baseline | 2.5 | 2.2 | 2.2 |
| Housing slump | 2.5 | 2.2 | 2.2 |
| Robust investment | 2.5 | 2.2 | 2.1 |
| Greater pricing power | 2.5 | 2.9 | 3.2 |
| Rising inflation expectations | 2.5 | 2.5 | 2.8 |
| Skittish investors | 2.5 | 2.4 | 2.7 |
| Lower NAIRU | 2.5 | 2.0 | 1.8 |
| Federal funds rate ${ }^{1}$ |  |  |  |
| Greenbook Baseline | 4.9 | 5.3 | 5.3 |
| Housing slump | 4.9 | 5.1 | 4.4 |
| Robust investment | 4.9 | 5.5 | 5.8 |
| Greater pricing power | 4.9 | 5.4 | 6.1 |
| Rising inflation expectations | 4.9 | 5.3 | 5.8 |
| Skittish investors | 4.9 | 5.3 | 5.0 |
| Lower NAIRU | 4.9 | 5.1 | 4.7 |

1. Percent, average for the final quarter of the period.
similar to that seen during the early 1990s. The reductions in employment and income implied by the falloff in construction activity, coupled with the loss in wealth, directly damp consumer spending and indirectly depress business investment. Overall, real GDP growth slows to an annual pace of 2 percent on average over the second half of 2006 and in 2007, causing the unemployment rate to climb to $53 / 4$ percent by the end of next year.

Inflation remains close to baseline through 2007, as significant slack emerges only toward the end of the simulation. Monetary policy responds to the emerging weakness in real activity by steadily lowering the federal funds rate, to $41 / 2$ percent by late next year. Monetary policy would likely have to ease further in 2008 as households more fully adjust to the loss in wealth.

Robust investment. In the baseline projection, real business spending on equipment and software decelerates from a gain of $83 / 4$ percent in 2005 to 53/4 percent in 2007. But profits are historically high, and anecdotal reports remain upbeat about capital spending. In this scenario, the growth in real E\&S spending observed in 2005 continues over the rest of this year and next. In addition, nonresidential construction, rather than decelerating as in the baseline, continues to rise at the double-digit rates seen so far this year. Increased business spending boosts real GDP growth to $31 / 4$ percent in 2007, about $1 / 2$ percentage point above baseline, and the unemployment rate remains below 5 percent. Because the additional capital deepening in this scenario boosts labor productivity, inflation is actually a touch below baseline, despite a lower unemployment rate.

Greater pricing power. In the baseline forecast, the markup of prices over unit labor costs slowly retreats from its current record high. However, the markup has been elevated for some years now, and it might remain so through the forecast period. In this simulation, firms maintain their current profit margins by charging higher prices (rather than by restraining wage growth), pushing core PCE inflation to around 3 percent in the second half of this year and $31 / 4$ percent in 2007. Higher inflation leads to tighter monetary policy, and as a result, real activity is weaker next year.

Rising inflation expectations. Largely because of sharp increases in energy prices, headline CPI inflation has been running at $31 / 2$ percent, on average, over the past two years. Although household survey measures of expected long-run inflation have been relatively stable to date, the potential exists for a more-pronounced response over time to past and future price increases. In this scenario, long-run inflation expectations move steadily upward and by the end of 2007 are a full percentage point above baseline. As a result, core PCE inflation rises to $23 / 4$ percent in 2007. As in the previous scenario, monetary policy responds to higher inflation by raising the federal funds rate, which reaches $53 / 4$ percent by late next year. Given the deterioration in inflation expectations, this modest tightening has almost no contractionary effect on real activity over the forecast period. Eventually, the gradualist Taylor rule policy will tighten enough to raise
both short- and long-term real interest rates by an amount that brings inflation back to baseline.

Skittish investors. Further increases in inflation might have an adverse effect on financial market sentiment. This scenario builds on the previous one by assuming that term premiums on long-term Treasury bonds and highly rated private securities rise 50 basis points more than in the baseline by late 2007, and risk premiums on lower-rated private debt rise 100 basis points. Combined with a rise in the equity premium, these changes prompt a 15 percent fall in share prices relative to baseline. Less-favorable financial conditions in turn limit the gain in real output to a bit less than 2 percent in 2007; as a result, the unemployment rate climbs to $51 / 2$ percent, checking the rise in inflation a bit. Confronted with the dilemma posed by this mix of higher inflation and weaker real activity, monetary policy eases slightly, taking the funds rate 25 basis points below baseline.

Lower NAIRU. Hourly compensation gains have remained moderate (and have even been revised down recently) despite an unemployment rate that, by our assessment, suggests that conditions are a bit on the tight side. In this scenario, we assume that considerable slack remains in labor markets and specifically that the NAIRU has declined from 5 percent to $411 / 4$ percent over the past several years. Reflecting the substantial margin of slack, core PCE inflation falls to $13 / 4$ percent in 2007. Policymakers gradually ease relative to baseline as they observe these favorable price developments and come to realize that the level of output is well below potential. By late 2007, the nominal funds rate falls to $43 / 4$ percent. Real activity receives a slight boost from the associated decline in the real funds rate, causing the unemployment rate to be a touch below baseline by the end of next year.

Market-based federal funds rate. Quotes from futures markets imply a path for the federal funds rate that is, on average, only a bit above the staff's assumed path over the forecast period. Consequently, taking on board the market's expectations for the federal funds rate has little effect on the outlook for real activity or inflation.

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

| Measure | 2006 | 2007 |
| :--- | :---: | :---: |
| Real GDP <br> (percent change, Q4 to Q4) <br> Projection <br> Confidence interval <br> Greenbook forecast errors |  |  |
| FRB/US stochastic simulations | $2.1-4.5$ | 2.7 |
| Civilian unemployment rate | $2.4-4.2$ | $1.1-4.3$ |
| (percent, Q4) |  | $1.2-4.2$ |
| Projection |  |  |
| Confidence interval | 4.9 | 5.2 |
| Greenbook forecast errors <br> FRB/US stochastic simulations | $4.6-5.2$ | $4.4-6.0$ |
| PCE prices |  |  |
| excluding food and energy |  |  |
| (percent change, Q4 to Q4) | $4.5-5.2$ | $4.5-5.8$ |
| Projection |  |  |
| Confidence interval |  |  |
| Greenbook forecast errors <br> FRB/US stochastic simulations | 2.4 |  |
| Federal funds rate | $1.9-2.8$ | 2.2 |
| (percent, Q4) | $2.1-2.7$ | $1.4-3.0$ |
| Projection |  |  |
| Confidence interval |  | $1.5-2.9$ |
| FRB/US stochastic simulations | $4.7-5.8$ | $4.1-6.6$ |

NOTE. Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1986-2004 set of model equation residuals. Intervals derived from Greenbook forecast errors are based on the 1986-2004 set of Greenbook historical errors.

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 | Greater pricing power |
| :--- | :--- | :--- |
| Housing slump | Rising inflation expectations |
| Robust investment | Skittish investors |$\quad$| Lower NAIRU |
| :--- |

Real GDP


PCE Prices excluding Food and Energy


Unemployment Rate


Federal Funds Rate


## Evolution of the Staff Forecast

Change in Real GDP


Unemployment Rate


## Change in PCE Prices excluding Food and Energy




1. Level, except for two-quarter and four-quarter intervals.


|  | त | No | oo on ㄴㅅㅜ |  | $\underset{i}{\sim}$ |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned} \hat{0} \text { No }$ | $\underset{\sim}{n} 000 \cdot \underset{\sim}{1}$ | サプー |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ¢ | $\begin{aligned} & n \\ & m \times n \end{aligned}$ | min m? |  | $\underset{i}{n}$ |  <br> $\stackrel{\infty}{0} \dot{0} 0$ |  |  |  |
|  | $\stackrel{\rightharpoonup}{\hat{O}}$ | $\begin{aligned} & \mathrm{N} \\ & \text { min } \end{aligned}$ | m |  | $\begin{aligned} & 0 \\ & \underset{\sim}{O} \end{aligned}$ |  |  | oomrọ N | 잉ํ |
| $\stackrel{\rightharpoonup}{e}$ | $\pm$ | $\stackrel{\rightharpoonup}{\mathrm{N}}$ | №n | $\infty \underset{\sim}{\infty} \underset{\sim}{\sim} \stackrel{n}{r}$ | $\begin{gathered} \text { No } \\ \text { Ni } \end{gathered}$ |  |  | $\cdots \underset{\sim}{\sim} 000 \cdot \square$ | $\text { min } n \text { r }$ |
|  | $\hat{\sigma}$ | $\stackrel{\rightharpoonup}{\mathrm{N}}$ | のーのツ $\dot{\operatorname{rin}} \dot{\mathrm{n}}$ |  ヘウi in i | $\frac{n}{i} \stackrel{0}{i}$ | nonon mo ウーシーナーシ |  | $\cdots+0.0 . \bar{i}$ | nべ |
|  | $\approx$ | $\begin{array}{ll} \infty \\ \cdots & \dot{r} \end{array}$ | $0 \text { n } 0.7$ $\dot{\text { rim }}$ |  <br> へウ in i | $\cdots$ |  |  | $\because \pm 000 \cdot \frac{\square}{\sim}$ | F |
|  | $\cdots$ | $\begin{array}{ll} n \\ n \\ \text { n } \end{array}$ | $\cdots$ Non ヘ N ヘ ゥ | $0 \stackrel{N}{0}$ | $\underset{i}{N}$ | $\underset{\forall}{\wedge} \dot{\forall} \dot{+} \dot{\sim}$ | $\hat{\theta}_{0}^{2} \hat{o}_{0} \text { in }$ | $\cdots$ | かか ${ }_{+}^{\infty}$ |
| $\stackrel{0}{0}$ | $\pm$ | $\stackrel{i}{\mathrm{i}}$ | $+\infty$ のn 수ํ | $\infty \underset{\sim}{\infty} \underset{\sim}{\star} \underset{\sim}{\star} \underset{\sim}{\tau}$ | ${\underset{i}{n}}_{\substack{0}}$ | $+\infty$ の $\because$ ก 0 $0 \dot{0}$ i $0 \times \infty$ |  | $\stackrel{0}{-} 0.9!$ |  |
|  | $\stackrel{\otimes}{0}$ | $\stackrel{N}{\mathrm{~N}}$ | のッロッ． Ni Nm |  | $\underset{T}{\underset{\sim}{i}} \underset{i}{T}$ | NOO O O N $\checkmark \infty \dot{\infty} \infty$ |  | $\because \underset{-}{0} \div$ | m®N－ |
|  | $\approx$ | $\stackrel{0}{\mathrm{i}}$ | $\underset{\sim}{n} \underset{\sim}{\infty} \underset{\sim}{+}$ | $\underset{N}{N} \underset{\sim}{\sim}$ | $\stackrel{+}{1}$ |  |  | $\bigcirc \cap \overbrace{i} \underset{\sim}{\circ} \underset{i}{*} \underset{\sim}{\infty}$ | mon m T |
|  | $\cdots$ | ¢n | $9 \infty \quad 0$ in in 0 | $\begin{aligned} & \text { Nin } \\ & \text { in in } \\ & \text { in } \end{aligned}$ | $\underset{\sim}{\infty}$ |  |  |  | べべナ |
| $\stackrel{n}{8}$ | $\pm$ | $\xrightarrow{\sim}$ | NTM？ | $90.000$ | $\begin{aligned} & \infty \\ & \stackrel{\infty}{\mathrm{N}} \end{aligned}$ | nnoon－ <br> ナーヴウゥウ | $\begin{aligned} & n \\ & n_{1}^{n} \underset{\sim}{n} \\ & \hline \end{aligned}$ | $\underset{1}{\infty}=$ | $\cdots \cdots$ |
|  | $\stackrel{\otimes}{0}$ | $\underset{\sim}{\square}$ | $\underset{\dot{\sim}}{\bullet} \underset{\sim}{\bullet} \underset{\sim}{\infty} \underset{\dot{\gamma}}{\infty}$ | Fionnm | $\stackrel{n}{N}$ |  | $\frac{N}{0} \frac{n}{0}$ | an to. | $\underset{1}{m} \infty_{1} n$ |
|  | $\underset{O}{\mathrm{O}}$ | $\begin{aligned} & n \\ & \text { nim } \end{aligned}$ | $\begin{array}{ll} 0 & 0 \\ i n \\ \cdots & n \\ \hline \end{array}$ |  | $\stackrel{\infty}{\infty} \stackrel{\infty}{0}$ | $\infty \infty$ ののヘヘ $\infty \infty \dot{0} \dot{0}$ तi | $\pm \pm \underset{0}{\pi} \underset{0}{0}$ | いい ナヘット <br>  | $N_{1} \times+$ |
|  | $\cdots$ | $\begin{aligned} & \infty \infty \\ & \dot{n} \\ & \text { n } \end{aligned}$ | nn n ت | n ตゥ へin | no | Nr．moo． $\dot{\operatorname{nin}} \infty \times$ ヘ |  | $9 \cdots \cdots \stackrel{+}{i}$ | $\stackrel{\infty}{\sim} \sim_{n}$ NT |
| E |  | $\begin{aligned} & \text { Real GDP } \\ & \text { Previous } \end{aligned}$ |  |  |  |  |  |  |  |


| $\stackrel{\rightharpoonup}{\hat{O}}$ | $\stackrel{\mathrm{N}}{\mathrm{~N}}$ | oのan 수 |  <br> in $\dot{\operatorname{rin}}$ | $\underset{i}{T}$ |  | $\left.\begin{array}{l} 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{array}\right)$ | $\xrightarrow[-]{\pi} 0.00 \cdot \bar{\sim}$ | サホ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \overline{0} \\ & \stackrel{i}{6} \end{aligned}$ | $\begin{aligned} & n \\ & \text { min } \end{aligned}$ | min m | mo mo o $\dot{r} \dot{\infty} \dot{\sim}$ | $\underset{i}{n}$ | $909 \rightarrow$ no $\stackrel{+\infty}{\circ} \dot{0} 0$ |  | $\underset{\mathrm{N}}{\mathrm{j}} \mathrm{~N} \text { Ǹ } \stackrel{+\infty}{\infty}$ | へल |
| $\stackrel{n}{6}$ | $\begin{aligned} & \mathrm{N} \\ & \text { m } \end{aligned}$ | morr |  |  | $09 \times \infty$ | Mợ No n | oonNọ | 잉ํ |
| － | $\begin{aligned} & \infty \\ & \dot{m} \\ & \dot{n} \end{aligned}$ | $\stackrel{\bullet}{\bullet} \stackrel{\infty}{\dot{\sim}} \stackrel{\infty}{\underset{\sim}{+}}$ | $\infty \infty$ Noー． $\dot{m} \dot{\sim} \dot{\sim}$ | $\stackrel{0}{0}$ |  | 훙 |  | NiN N |
| $\stackrel{\bar{m}}{\substack{8 \\ N}}$ | $\stackrel{\bigcirc}{\dagger} \underset{+}{\circ}$ |  |  | $\stackrel{\infty}{=} \underset{=}{\infty}$ |  |  | gonnoor | nn no |
| $\begin{aligned} & \text { N} \\ & \text { O} \\ & \text { N} \end{aligned}$ | 99 | $\infty \times \cdots$ | $99 \underset{-}{9}$ | $\begin{aligned} & \circ \\ & \sim \end{aligned}$ |  | $\underset{寸}{\underset{F}{F}} \underset{\sim}{\infty}$ | $\underset{\forall}{\circ} \underset{\sim}{\circ} \infty \underset{\sim}{+} \underset{\sim}{\infty} \cdot \bar{\sim}$ | ヘフロペ |
| $\stackrel{\rightharpoonup}{8}$ | ก | $\mathfrak{n} 0$ | $\infty \infty \infty \bigcirc$ <br> 누 $-\underset{-}{\infty}$ | $\underset{-}{+}$ |  |  | $0 \text { On N N N }$ | NNNO |
| $\begin{aligned} & \text { è } \\ & \text { è } \end{aligned}$ | $\stackrel{N}{N}$ | in | $\underset{\forall}{F} \underset{F}{\sim}$ | $9 \frac{9}{1}$ | $\infty \infty$ n $n \infty \infty$ ヘヘヘヘ |  | $\forall \quad \underset{\sim}{\text { Non }}$ | $\cdots$ |
| $\begin{aligned} & \text { à } \\ & \text { 人̀ } \end{aligned}$ | $\underset{\sim}{\underset{\sim}{r}}$ | $\begin{array}{lll} \cdots & n \\ \forall & n \\ \hline \end{array}$ |  | $\begin{array}{ll} 0 & 0 \\ \dot{r} \dot{m} \end{array}$ | $\underset{\sim}{\sim} \underset{\sim}{\infty} \underset{0}{\infty} 9_{i} a_{i}$ |  |  | ）刀N？ |
| $\underset{=}{E}$ |  |  |  |  |  |  |  |  |

[^0]

| Item | 2005 |  |  |  | 2006 |  |  |  | 2007 |  |  |  | $2005^{1}$ | $2006{ }^{1}$ | $2007{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| GDP chain-wt. price index | 3.1 | 2.6 | 3.3 | 3.5 | 3.3 | 3.8 | 2.3 | 1.6 | 2.3 | 2.5 | 2.3 | 2.1 | 3.1 | 2.7 | 2.3 |
| Previous | 3.1 | 2.6 | 3.3 | 3.5 | 3.3 | 3.2 | 1.9 | 2.1 | 2.3 | 2.4 | 2.2 | 2.0 | 3.1 | 2.6 | 2.3 |
| PCE chain.-wt. price index | 2.3 | 3.3 | 3.7 | 2.9 | 2.0 | 4.3 | 1.8 | 1.8 | 2.2 | 2.2 | 2.1 | 2.0 | 3.0 | 2.5 | 2.2 |
| Previous | 2.3 | 3.3 | 3.7 | 2.9 | 2.0 | 3.9 | 2.1 | 2.2 | 2.2 | 2.0 | 1.9 | 1.8 | 3.0 | 2.5 | 2.0 |
| Energy | 3.6 | 28.6 | 50.0 | 10.3 | -. 2 | 30.2 | -5.0 | -5.0 | 2.2 | 2.0 | 1.3 | . 2 | 21.8 | 4.1 | 1.4 |
| Previous | 3.6 | 28.6 | 50.0 | 10.3 | -. 2 | 30.0 | . 4 | 2.3 | 3.0 | 1.7 | 1.1 | . 1 | 21.8 | 7.4 | 1.5 |
| Food | 1.0 | 3.5 | 1.3 | 2.4 | 2.7 | 1.7 | 2.6 | 2.5 | 2.4 | 2.4 | 2.4 | 2.3 | 2.1 | 2.4 | 2.3 |
| Previous | 1.0 | 3.5 | 1.3 | 2.4 | 2.7 | 1.9 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.4 | 2.2 |
| Ex. food \& energy | 2.4 | 1.7 | 1.4 | 2.4 | 2.0 | 3.1 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 | 2.0 | 2.4 | 2.2 |
| Previous | 2.4 | 1.7 | 1.4 | 2.4 | 2.0 | 2.5 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | 1.9 | 2.0 | 2.2 | 2.0 |
| CPI | 2.3 | 3.8 | 5.5 | 3.3 | 2.2 | 4.8 | 1.7 | 1.7 | 2.4 | 2.4 | 2.3 | 2.1 | 3.7 | 2.6 | 2.3 |
| Previous | 2.3 | 3.8 | 5.5 | 3.3 | 2.2 | 4.4 | 2.2 | 2.4 | 2.4 | 2.2 | 2.1 | 2.0 | 3.7 | 2.8 | 2.2 |
| Ex. food \& energy | 2.6 | 1.8 | 1.6 | 2.4 | 2.4 | 3.4 | 2.5 | 2.4 | 2.4 | 2.4 | 2.4 | 2.3 | 2.1 | 2.7 | 2.4 |
| Previous | 2.6 | 1.8 | 1.6 | 2.4 | 2.4 | 2.7 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 | 2.1 | 2.5 | 2.3 |
| ECI, hourly compensation ${ }^{2}$ | 3.8 | 2.5 | 2.9 | 2.8 | 2.4 | 3.4 | 3.5 | 3.6 | 3.7 | 3.7 | 3.7 | 3.7 | 2.9 | 3.2 | 3.7 |
| Previous ${ }^{2}$ | 3.8 | 2.5 | 2.9 | 2.8 | 2.4 | 3.4 | 3.5 | 3.7 | 3.7 | 3.7 | 3.9 | 3.9 | 2.9 | 3.2 | 3.8 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour | 3.8 | 2.4 | 4.2 | -. 3 | 4.4 | . 9 | 2.3 | 2.7 | 2.6 | 2.9 | 2.9 | 2.9 | 2.5 | 2.6 | 2.9 |
| Previous | 3.8 | 2.4 | 4.2 | -. 4 | 3.3 | 2.5 | 2.7 | 2.9 | 3.1 | 3.1 | 3.1 | 3.1 | 2.5 | 2.8 | 3.1 |
| Compensation per hour | 5.6 | 1.3 | 5.5 | -. 9 | 5.1 | 4.8 | 5.1 | 5.3 | 5.3 | 5.3 | 5.2 | 5.1 | 2.8 | 5.1 | 5.2 |
| Previous | 5.6 | 1.3 | 5.5 | 2.6 | 5.0 | 4.6 | 5.5 | 5.5 | 5.5 | 5.4 | 5.3 | 5.3 | 3.7 | 5.2 | 5.4 |
| Unit labor costs | 1.8 | -1.0 | 1.2 | -. 6 | . 6 | 3.8 | 2.7 | 2.5 | 2.6 | 2.3 | 2.2 | 2.1 | . 3 | 2.4 | 2.3 |
| Previous | 1.8 | -1.0 | 1.2 | 3.0 | 1.7 | 2.0 | 2.7 | 2.5 | 2.3 | 2.3 | 2.2 | 2.2 | 1.2 | 2.2 | 2.3 |

[^1]Other Macroeconomic Indicators

| Item | 2005 |  |  |  | 2006 |  |  |  | 2007 |  |  |  | $2005^{1}$ | $2006{ }^{1}$ | $2007{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| Employment and production Nonfarm payroll employment ${ }^{2}$ | . 5 | . 5 | . 5 | . 4 | . 6 | . 4 | . 4 | . 3 | . 2 | . 2 | . 2 | . 1 | 1.9 | 1.7 | . 7 |
| Unemployment rate ${ }^{3}$ | 5.2 | 5.1 | 5.0 | 5.0 | 4.7 | 4.7 | 4.8 | 4.9 | 5.0 | 5.1 | 5.1 | 5.2 | 5.0 | 4.9 | 5.2 |
| Previous ${ }^{3}$ | 5.2 | 5.1 | 5.0 | 5.0 | 4.7 | 4.7 | 4.8 | 4.8 | 4.9 | 4.9 | 4.9 | 5.0 | 5.0 | 4.8 | 5.0 |
| GDP gap ${ }^{4}$ | -. 5 | -. 4 | -. 1 | -. 4 | . 3 | . 0 | -. 1 | -. 3 | -. 4 | -. 5 | -. 7 | -. 8 | -. 4 | -. 3 | -. 8 |
| Previous ${ }^{4}$ | -. 5 | -. 4 | -. 1 | -. 4 | . 1 | . 2 | . 1 | . 1 | . 0 | . 0 | -. 1 | -. 2 | -. 4 | . 1 | -. 2 |
| Industrial production ${ }^{5}$ | 3.8 | 1.6 | 1.4 | 5.3 | 5.3 | 5.5 | 3.7 | 4.5 | 3.7 | 2.9 | 2.6 | 2.6 | 3.0 | 4.7 | 2.9 |
| Previous ${ }^{5}$ | 3.8 | 1.6 | 1.4 | 5.3 | 4.5 | 7.2 | 5.8 | 4.5 | 4.0 | 3.1 | 2.8 | 2.8 | 3.0 | 5.5 | 3.2 |
| Manufacturing industr. prod. ${ }^{5}$ | 4.5 | 1.3 | 2.0 | 9.1 | 5.4 | 4.1 | 3.3 | 4.2 | 3.8 | 3.0 | 2.7 | 2.9 | 4.2 | 4.3 | 3.1 |
| Previous ${ }^{5}$ | 4.5 | 1.3 | 2.0 | 9.1 | 5.4 | 5.5 | 5.4 | 4.3 | 4.1 | 3.3 | 3.1 | 3.1 | 4.2 | 5.2 | 3.4 |
| Capacity utilization rate - mfg. ${ }^{3}$ | 78.7 | 78.5 | 78.5 | 79.8 | 80.4 | 80.7 | 80.8 | 81.1 | 81.3 | 81.3 | 81.2 | 81.1 | 79.8 | 81.1 | 81.1 |
| Previous ${ }^{3}$ | 78.7 | 78.5 | 78.5 | 79.8 | 80.4 | 80.9 | 81.5 | 81.8 | 82.1 | 82.1 | 82.1 | 82.0 | 79.8 | 81.8 | 82.0 |
| Housing starts ${ }^{6}$ | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 2.1 | 2.0 | 1.9 |
| Light motor vehicle sales ${ }^{6}$ | 16.5 | 17.2 | 17.9 | 15.8 | 16.9 | 16.4 | 16.7 | 16.7 | 16.7 | 16.7 | 16.7 | 16.7 | 16.9 | 16.7 | 16.7 |
| Income and saving Nominal GDP5 | 7.0 | 6.0 | 7.6 | 5.2 | 9.3 | 5.9 | 5.0 | 4.3 | 4.8 | 5.3 | 5.1 | 4.9 | 6.4 | 6.1 | 5.0 |
| Real disposable pers. income ${ }^{5}$ | -3.4 | . 2 | -1.4 | 5.1 | 2.0 | 2.5 | 5.3 | 4.7 | 4.9 | 3.9 | 3.8 | 3.9 | . 1 | 3.6 | 4.1 |
| Previous ${ }^{5}$ | -3.4 | . 2 | -1.4 | 6.7 | 3.2 | 3.8 | 5.5 | 4.2 | 4.6 | 4.6 | 3.9 | 3.7 | . 5 | 4.2 | 4.2 |
| Personal saving rate ${ }^{3}$ | . 5 | -. 2 | -1.6 | -. 5 | -1.3 | -1.3 | -. 8 | -. 3 | . 1 | . 4 | . 6 | . 9 | -. 5 | -. 3 | . 9 |
| Previous ${ }^{3}$ | . 5 | -. 2 | -1.6 | -. 2 | -. 7 | -. 7 | -. 2 | . 0 | . 4 | . 7 | . 9 | 1.0 | -. 2 | . 0 | 1.0 |
| Corporate profits ${ }^{7}$ | 24.5 | 19.7 | -15.2 | 71.1 | 35.4 | 6.8 | -3.1 | -9.0 | -5.3 | . 2 | -. 4 | . 6 | 21.3 | 6.2 | -1.2 |
| Profit share of GNP3 | 10.5 | 10.9 | 10.2 | 11.6 | 12.2 | 12.2 | 12.0 | 11.6 | 11.3 | 11.2 | 11.1 | 11.0 | 11.6 | 11.6 | 11.0 |
| Net federal saving ${ }^{8}$ | -298 | -297 | -408 | -303 | -241 | -295 | -313 | -329 | -355 | -356 | -359 | -367 | -323 | -295 | -359 |
| Net state \& local saving ${ }^{8}$ | 7 | 21 | -6 | -10 | 19 | 36 | 23 | 21 | 26 | 27 | 27 | 31 | 3 | 25 | 28 |
| Gross national saving rate ${ }^{3}$ | 13.4 | 13.1 | 13.6 | 13.2 | 13.7 | 13.4 | 13.4 | 13.3 | 13.3 | 13.3 | 13.4 | 13.4 | 13.2 | 13.3 | 13.4 |
| Net national saving rate ${ }^{3}$ | 1.7 | 1.6 | -1.3 | 1.4 | 2.4 | 2.2 | 2.2 | 2.0 | 1.9 | 2.0 | 2.0 | 2.0 | 1.4 | 2.0 | 2.0 |

[^2]3. Percent, annual values are for the fourth quarter of the year indicated.

| Item | Fiscal year |  |  |  | 2005 |  |  |  | 2006 |  |  |  | 2007 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2004{ }^{\text {a }}$ | $2005{ }^{\text {a }}$ | 2006 | 2007 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 ${ }^{\text {a }}$ | Q4 ${ }^{\text {a }}$ | Q1 ${ }^{\text {a }}$ | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{1}$ | 1880 | 2154 | 2376 | 2443 | 452 | 665 | 549 | 530 | 507 | 769 | 569 | 550 | 508 | 789 | 597 | 579 |
| Outlays ${ }^{1}$ | 2293 | 2472 | 2672 | 2773 | 628 | 620 | 618 | 650 | 691 | 671 | 660 | 679 | 727 | 691 | 676 | 734 |
| Surplus/deficit ${ }^{1}$ | -412 | -318 | -296 | -330 | -177 | 45 | -69 | -119 | -184 | 98 | -91 | -129 | -219 | 97 | -79 | -155 |
| Previous | -412 | -318 | -293 | -320 | -177 | 45 | -69 | -119 | -184 | 100 | -90 | -133 | -205 | 88 | -70 | -150 |
| On-budget | -568 | -494 | -471 | -508 | -202 | -37 | -84 | -170 | -216 | 17 | -103 | -188 | -241 | 13 | -92 | -214 |
| Off-budget | 155 | 175 | 175 | 178 | 25 | 83 | 15 | 51 | 32 | 81 | 12 | 60 | 22 | 84 | 12 | 60 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 378 | 297 | 292 | 348 | 165 | -43 | 73 | 112 | 156 | -83 | 107 | 124 | 204 | -68 | 88 | 145 |
| Cash decrease | -1 | 1 | 5 | -5 | 2 | -11 | -2 | -1 | 28 | -17 | -5 | 6 | 15 | -25 | 0 | 10 |
| Other ${ }^{2}$ | 35 | 21 | -2 | -13 | 10 | 8 | -1 | 8 | -1 | 2 | -11 | -1 | 0 | -4 | -8 | -0 |
| Cash operating balance, end of period | 36 | 36 | 30 | 35 | 22 | 33 | 36 | 37 | 8 | 25 | 30 | 25 | 10 | 35 | 35 | 25 |
| NIPA federal sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 1933 | 2159 | 2395 | 2499 | 2197 | 2228 | 2156 | 2307 | 2396 | 2432 | 2443 | 2461 | 2485 | 2512 | 2538 | 2567 |
| Expenditures | 2348 | 2503 | 2683 | 2849 | 2495 | 2525 | 2564 | 2610 | 2638 | 2727 | 2756 | 2790 | 2840 | 2868 | 2897 | 2934 |
| Consumption expenditures | 711 | 760 | 803 | 839 | 760 | 763 | 783 | 773 | 806 | 814 | 821 | 826 | 840 | 844 | 848 | 852 |
| Defense | 474 | 510 | 536 | 563 | 509 | 512 | 529 | 514 | 534 | 545 | 549 | 554 | 563 | 566 | 568 | 571 |
| Nondefense | 237 | 250 | 268 | 277 | 251 | 251 | 254 | 259 | 272 | 269 | 271 | 272 | 277 | 278 | 280 | 281 |
| Other spending | 1637 | 1742 | 1879 | 2010 | 1735 | 1762 | 1781 | 1837 | 1831 | 1913 | 1935 | 1964 | 2000 | 2024 | 2049 | 2082 |
| Current account surplus | -415 | -344 | -288 | -350 | -298 | -297 | -408 | -303 | -241 | -295 | -313 | -329 | -355 | -356 | -359 | -367 |
| Gross investment | 99 | 106 | 116 | 117 | 101 | 107 | 109 | 115 | 119 | 116 | 116 | 117 | 117 | 117 | 117 | 117 |
| Gross saving less gross investment ${ }^{3}$ | -421 | -352 | -303 | -361 | -302 | -307 | -418 | -319 | -259 | -309 | -326 | -342 | -367 | -367 | -369 | -376 |
| Fiscal indicators ${ }^{4}$ <br> High-employment (HEB) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| surplus/deficit | -382 | -340 | -307 | -349 | -287 | -297 | -418 | -311 | -270 | -317 | -328 | -341 | -356 | -351 | -347 | -349 |
| Change in HEB, percent of potential GDP | 0.7 | -0.5 | -0.4 | 0.2 | -0.6 | 0.0 | 0.9 | -0.9 | -0.4 | 0.3 | 0.0 | 0.1 | 0.1 | -0.1 | -0.1 | -0.0 |
| Fiscal impetus (FI) percent of GDP | 0.8 | 0.3 | 0.4 | 0.2 | 0.0 | 0.1 | 0.1 | -0.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.1 | -0.0 | -0.0 | 0.0 |
| Previous | 0.8 | 0.3 | 0.4 | 0.1 | 0.0 | 0.1 | 0.1 | -0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

[^3]
## Staff Projections of Federal Sector Accounts and Related Items

June 21, 2006

| Class II FOMC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Restricted (FR) |

Note. Quarterly data are at seasonally adjusted annual rates.
GDP growth, which is calculated from Q 4 to Q 4 .
2.6.3 FOF
Class II FOMC
Flow of Funds Projections: Highlights
(Billions of dollars at seasonally adjusted annual rates except as noted)

| Category | 2004 | 2005 | 2006 | 2007 | 2005 |  | 2006 |  |  |  | 2007 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Domestic nonfinancial sectors Net funds raised |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1815.8 | 1935.5 | 1722.7 | 1577.7 | 1934.8 | 2014.1 | 2331.3 | 1232.5 | 1707.9 | 1618.9 | 2041.2 | 1098.5 | 1504.4 | 1666.7 |
| Net equity issuance | -126.6 | -363.8 | -402.5 | -242.4 | -470.8 | -420.0 | -543.6 | -444.0 | -340.0 | -282.4 | -242.4 | -242.4 | -242.4 | -242.4 |
| Net debt issuance | 1942.4 | 2299.3 | 2125.2 | 1820.1 | 2405.6 | 2434.1 | 2874.9 | 1676.5 | 2047.9 | 1901.3 | 2283.6 | 1340.9 | 1746.8 | 1909.1 |
| Borrowing indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt (percent of GDP) ${ }^{1}$ | 197.1 | 202.2 | 206.3 | 210.7 | 202.2 | 204.4 | 205.0 | 206.4 | 207.4 | 208.8 | 210.2 | 210.7 | 210.9 | 211.6 |
| Borrowing (percent of GDP) | 16.6 | 18.4 | 16.0 | 13.0 | 19.1 | 19.1 | 22.0 | 12.7 | 15.3 | 14.0 | 16.7 | 9.7 | 12.4 | 13.4 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing ${ }^{2}$ | 1032.8 | 1208.7 | 1060.9 | 791.1 | 1333.2 | 1242.8 | 1333.9 | 1043.9 | 981.4 | 884.3 | 830.9 | 799.7 | 778.6 | 755.0 |
| Home mortgages | 910.1 | 1078.4 | 950.5 | 688.3 | 1207.7 | 1122.3 | 1181.5 | 946.1 | 879.8 | 794.7 | 737.9 | 700.1 | 671.7 | 643.3 |
| Consumer credit | 86.2 | 57.4 | 56.9 | 70.8 | 100.5 | -15.3 | 48.1 | 58.5 | 65.5 | 55.6 | 61.1 | 67.7 | 75.0 | 79.3 |
| Debt/DPI (percent) ${ }^{3}$ | 112.8 | 120.7 | 126.2 | 127.4 | 122.1 | 123.3 | 125.5 | 126.6 | 127.0 | 127.4 | 127.3 | 127.5 | 127.5 | 127.5 |
| Business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Financing gap ${ }^{4}$ | 46.4 | -93.2 | 88.2 | 151.0 | -237.0 | -130.7 | 32.2 | 82.1 | 95.0 | 143.6 | 123.9 | 138.0 | 151.0 | 191.1 |
| Net equity issuance | -126.6 | -363.8 | -402.5 | -242.4 | -470.8 | -420.0 | -543.6 | -444.0 | -340.0 | -282.4 | -242.4 | -242.4 | -242.4 | -242.4 |
| Credit market borrowing | 432.4 | 611.0 | 669.2 | 578.1 | 611.5 | 676.8 | 825.7 | 728.3 | 574.8 | 548.1 | 571.2 | 577.3 | 584.5 | 579.5 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 115.3 | 172.6 | 90.6 | 82.8 | 228.9 | 155.5 | 107.6 | 84.0 | 111.7 | 59.0 | 82.8 | 82.8 | 82.8 | 82.8 |
| Current surplus ${ }^{5}$ | 181.3 | 206.3 | 197.3 | 206.6 | 208.3 | 195.3 | 192.5 | 206.2 | 195.7 | 195.0 | 202.4 | 204.8 | 207.1 | 212.1 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 361.9 | 306.9 | 304.7 | 368.1 | 231.9 | 359.0 | 607.7 | -179.7 | 380.0 | 409.9 | 798.7 | -118.9 | 300.9 | 491.8 |
| Net borrowing (n.s.a.) | 361.9 | 306.9 | 304.7 | 368.1 | 72.8 | 112.2 | 156.1 | -82.9 | 107.0 | 124.5 | 203.9 | -68.1 | 87.7 | 144.7 |
| Unified deficit (n.s.a.) | 400.7 | 319.7 | 305.6 | 355.9 | 69.0 | 119.3 | 183.7 | -98.1 | 91.2 | 128.9 | 219.1 | -97.1 | 79.3 | 154.6 |
| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^4]
## Class II FOMC-Restricted (FR)

## International Developments

Financial market volatility and lowered expectations for U.S. economic growth following some lackluster data releases have raised concerns about the strength and durability of the economic expansion abroad. Although indicators of foreign economic activity remain generally favorable and emerging-market fundamentals are still strong, a shift by global investors away from risky assets has raised the specter of a larger correction in financial markets that could have additional negative effects on real activity, especially in emerging markets. At the same time, rising inflationary pressures have prompted a tightening of monetary policy in a number of industrial and emerging-market economies in the past few weeks, adding to fears that economic growth could slow more than desired.

At this time we do not see either rapidly rising inflation or a global recession as likely outcomes. Our forecast shows a moderate slowdown in foreign economic growth from its strong first-quarter pace and is only slightly weaker than in the May Greenbook. However, downside risks do appear to have increased for some of the more vulnerable emerging-market economies. Nevertheless, some upside risks have increased as well. In particular, the Chinese economy now appears not to have slowed as much as anticipated in response to recently imposed administrative measures to curb investment. In addition, the recent decline in oil prices should help ease inflationary pressures and may reduce the need for further monetary policy tightening going forward.

Summary of Staff Projections

| Indicator | 2005 |  | 2006 | Projection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 | Q1 | 2006 |  | 2007 |
|  |  |  |  | Q2 | H2 |  |
| Foreign output | 3.3 | 4.1 | 4.5 | 3.5 | 3.3 | 3.3 |
| May GB | 3.3 | 4.2 | 4.0 | 3.7 | 3.5 | 3.4 |
| Foreign CPI | 2.0 | 2.6 | 2.0 | 2.7 | 2.7 | 2.5 |
| May GB | 2.0 | 2.6 | 2.0 | 2.8 | 2.8 | 2.5 |

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

The dollar has appreciated about 1 percent on a broad trade-weighted basis since the time of the May Greenbook, perhaps reflecting the increase in demand for safer assets. Nevertheless, we still expect a moderate decline in the value of the dollar over the forecast period. The combination of some improvement in the outlook for supply along with lowered expectations for demand has contributed to a dip in oil prices below $\$ 70$ per barrel. In line with futures markets, we continue to assume that oil prices will increase about $\$ 3$ per barrel through the second quarter of next year and remain roughly flat after that.

We estimate that real net exports made a negative arithmetic contribution of about $1 / 4$ percentage point to U.S. real GDP growth in the first quarter. In the second quarter, we expect the contribution to swing to a positive $1 / 4$ percentage point, mainly as a result of a large recorded decline in oil imports partly related to seasonal adjustment issues. We expect a slightly larger contribution of real net exports in the third quarter, reflecting a further decline in imports of oil along with a fall in imports of natural gas. For the remainder of the forecast period, net exports are expected to subtract about $1 / 4$ percentage point from GDP growth on average.

The U.S. current account deficit narrowed about $\$ 60$ billion in the first quarter, to $\$ 835$ billion (annual rate), reflecting smaller unilateral transfers abroad along with some improvement in the trade deficit and the balance on investment income. Going forward, we expect both the trade and the investment income balances to resume their downward trends, leading the current account deficit to widen to $\$ 1$ trillion, about $71 / 4$ percent of GDP, by the end of 2007. The projected deficit is somewhat narrower than shown in the May Greenbook, as slower U.S. GDP growth results in weaker demand for real imports while lower oil prices reduce nominal oil imports.

## Oil Prices

The spot price of West Texas intermediate (WTI) crude oil closed at $\$ 68.94$ per barrel on June 20, a decrease of roughly $\$ 5$ per barrel since the time of the May Greenbook, when oil prices were near their recent peak. Crude oil futures prices have moved lower by a similar amount. The price of the futures contract for delivery in December 2012 settled at $\$ 63.86$ per barrel on June 20.

The recent decline in oil prices appears to be related both to a perceived reduction in the risks to supply and to some downward revision to the prospects for demand. The improved views regarding supply are partly due to progress in negotiations with Iran over
its nuclear program, with the United States having recently joined directly in the dialogue. The death in Iraq of Abu Musab al-Zarqawi and the long-awaited formation of a new Iraqi government provide some hope for greater stability. On the demand side, recent U.S. data pointing to slower economic growth have lowered prospects for global oil demand. In addition, the potential effect of future cutbacks in supply may be smaller than previously anticipated because of increased crude oil inventories in the OECD.

Nevertheless, oil prices remain elevated because of continuing supply disruptions, a stillstrong level of global oil demand, and limited spare production capacity. Iraqi production remains well below pre-war levels, and at least 500,000 barrels per day of Nigerian oil production remains shut in as a result of rebel attacks on oil facilities and workers. About 200,000 barrels per day of oil production in the Gulf of Mexico is still off line because of Hurricanes Katrina and Rita, even as the new hurricane season started this month. Global spare oil production capacity, which is currently insufficient to offset a major disruption of oil supplies from Iraq, Iran, Nigeria, or Venezuela, is expected to increase only gradually as a host of political and economic factors continue to hinder investment by international oil companies.

In line with NYMEX futures prices, our projection calls for the spot price of WTI to rise to about $\$ 72.40$ per barrel in the second quarter of 2007 and remain near that level through the end of the forecast period. Compared with the May Greenbook forecast, the current projection averages about $\$ 5.90$ per barrel lower in the second half of this year and $\$ 4.30$ lower in 2007. The projected path of the oil import price has been revised down a similar amount.

## International Financial Markets

The broad trade-weighted exchange value of the dollar has risen $21 / 4$ percent on balance since the May FOMC meeting, as the dollar appreciated $13 / 4$ percent against the major foreign currencies and $23 / 4$ percent against the currencies of the other important trading partners (OITP) of the United States. The dollar's OITP index rose in the middle of May, as investors reportedly engaged in flight-to-safety transactions into dollar-denominated assets and as financial market indicators in many emerging-market economies deteriorated. Although the dollar did not move much on net against the currencies of the major foreign industrial economies during May, it appreciated against these currencies in early June following comments on recent inflation developments by Chairman Bernanke and several other FOMC members. On net over the intermeeting period, the dollar has appreciated 4 percent against the yen, $1 \frac{1}{4}$ percent against the euro and sterling, and
slightly less against the Canadian dollar. The dollar was little changed against the Chinese renminbi over the intermeeting period, but it rose 6 and 10 percent, respectively, against the Mexican peso and Brazilian real and between 2 percent and 4 percent against the currencies of several emerging Asian economies.

The rise in the broad dollar index since the May FOMC meeting followed a decline of roughly 1 percent between the day the May Greenbook was finalized and the day of the FOMC meeting, leaving the current value of the nominal index up about 1 percent on balance compared with the May Greenbook projection. As a result, we have revised up about 1 percent the starting point of the projected path for the broad real dollar. The broad real dollar is projected to decline at an annual rate of about 2 percent over the forecast period, roughly the same as in the May Greenbook, reflecting continued concerns about the rising U.S. current account deficit.

The Bank of Canada, the European Central Bank, the Swiss National Bank, and Sweden's Riksbank raised their target policy rates 25 basis points during the intermeeting period. In contrast, the Bank of England and the Bank of Japan did not change their policy interest rates. Ten-year nominal sovereign yields fluctuated as markets responded to mixed data on economic activity and inflation, flight-to-safety moves from equities and emerging-market financial assets into government bonds, and statements by some central bank officials that highlighted their discomfort with recent inflation rates. On net, ten-year sovereign yields are up 2 to 6 basis points in Germany, the United Kingdom, and Canada. In contrast, Japanese long bond rates dropped 15 basis points, as investors reportedly scaled back expectations for the pace of both economic activity and policy tightening by the Bank of Japan. Yields on ten-year inflation-indexed securities rose 7 to 12 basis points on balance in most of the major foreign economies, consistent with expectations for tighter monetary policy. In Japan, inflation-indexed yields declined very slightly.

Against the backdrop of previous sharp run-ups in stock prices, mounting investor concern about risks to the global outlook contributed to sizable declines in headline equity indexes in the industrial economies over the intermeeting period. On balance, stock prices were down 13 percent in Japan, 11 percent in Canada and the euro area, and 8 percent in the United Kingdom. These concerns weighed even more on share prices in most emerging-market economies. Share price indexes fell roughly 20 percent in Latin America and 8 to 20 percent in emerging Asia, and EMBI+ spreads widened about 30 basis points for Mexico, 40 basis points for Brazil, and 60 basis points for Argentina.

However, these spreads had declined to multi-year lows in April and despite the recent increases they remain low compared with recent history.
. The Desk did not intervene during
the period for the accounts of the System or the Treasury.

## Advanced Foreign Economies

Real GDP growth in the advanced foreign economies is estimated at $23 / 4$ percent in the second quarter, down from the 3 percent pace posted in the previous quarter. Growth is expected to slow further, averaging around $2 \frac{1}{2}$ percent for the remainder of the forecast period. This projection is lower than in the May Greenbook primarily because of the lower growth path for the U.S. economy and, to a lesser extent, the drop in equity prices in these countries. The average four-quarter change in consumer prices is expected to peak at 2 percent this quarter, pushed up by recent energy price increases. Inflation should then moderate a bit, fluctuating near $13 / 4$ percent for most of the rest of the forecast.

Japanese GDP expanded 3.1 percent in the first quarter, and growth is projected to remain near that pace in the current quarter, as monthly shipments and orders suggest a very strong pace of investment spending. Going forward, we project that real GDP growth will slow to $1 \frac{1}{2}$ percent by the end of 2007 , as the recent drop in equity prices weighs on consumption growth and investment decelerates to rates more compatible with our assessment of potential growth. The recent robust output growth along with the passthrough of oil price increases earlier this year should push the twelve-month rate of inflation up from around $1 / 2$ percent this quarter to almost 1 percent later this year and slightly less in 2007. We now expect the Bank of Japan's exit from the zero interest rate policy to occur by the end of the third quarter, a little earlier than in our last forecast, as the Bank of Japan has indicated that its previous halt in reserve reduction was only temporary and upward pressure on the yen has eased. We continue to assume that the policy target rate will increase 75 basis points by the end of the forecast period.

Euro-area GDP growth of 2.4 percent in the first quarter was in line with our previous forecast, but underlying activity was stronger than expected, as a weather-related drop in construction activity offset substantial gains in both private consumption and equipment investment. This stronger momentum and relatively robust data-on retail sales, new orders, labor market conditions, and measures of consumer and business confidence-
more than compensate in the near term for the negative effect on our outlook of lower U.S. GDP growth and the recent declines in euro-area equity markets. Thus, we project second-quarter GDP growth of $23 / 4$ percent, a bit higher than in May Greenbook. Going forward, we expect growth in the euro-area economy to slow to $13 / 4$ percent by next year as the decline in global growth weighs on exports, monetary policy is tightened, and a planned value-added tax hike in Germany restrains activity. We estimate that higher energy prices have pushed up the twelve-month rate of headline inflation to almost $21 / 2$ percent in the second quarter. Inflation is expected to drop to 2 percent by the end of this year and remain around that rate in 2007. Next year's hike in the German VAT adds about $1 / 4$ percentage point to inflation. However, this is offset by the leveling-off of energy prices as well as the effect of further monetary policy tightening, as we continue to assume that the ECB will raise its official interest rates another 50 basis points to $31 / 4$ percent this year.

In response to the lower U.S. forecast, we have marked down Canadian GDP growth $3 / 4$ percentage point in the current quarter and $1 / 4$ percentage point, on average, over the rest of the forecast period. We now estimate that GDP growth will slow from 3.8 percent in the first quarter to about $2 \frac{1}{2}$ percent for following three quarters, before gradually returning to its potential rate of 3 percent by mid-2007. Core inflation increased to 2 percent in May, and higher energy prices should boost headline inflation to $23 / 4$ percent in the second quarter. Going forward, inflation is expected to fall below 2 percent by mid-2007 in part because of a reduction in the value-added tax next month. We assume that the Bank of Canada will keep monetary policy on hold for the forecast period.

We have revised down the path of U.K. GDP growth by about $1 / 4$ percentage point in response to lower stock prices and much weaker-than-expected private consumption in the first quarter. We are projecting GDP growth to average around $2 \frac{1}{2}$ percent for the rest of 2006 and $23 / 4$ percent in 2007. The recent increase in energy prices should raise the twelve-month rate of headline inflation to $2 \frac{1}{4}$ percent by the first quarter of 2007. Inflation is then expected to fall to around 2 percent by the end of the forecast period as the effects of high energy prices recede. We are assuming that the Bank of England will raise its policy rates 25 basis points in the third quarter, sooner than previously expected, in response to the projected run-up in prices over the course of the year.

## Emerging-Market Economies

Average output growth in the emerging-market economies is estimated to have dropped to a still-robust $41 / 2$ percent in the current quarter from $61 / 2$ percent in the first quarter. We
expect growth to stay around this rate over the remainder of the forecast period. This projection is a little weaker than in the May Greenbook, mainly as a result of lower U.S. real GDP growth and the effect of sharp stock price and other asset price declines in several emerging-market economies. Four-quarter inflation in emerging-market economies is expected to rise from about 3 percent in the second quarter to $33 / 4$ percent by the middle of next year. The rise largely reflects the continued effect on headline fourquarter inflation of this year's increase in oil prices, which occurs in some cases with delays that reflect fuel subsidies and price controls. Inflation is expected to fall back to about $31 / 4$ percent by the end of 2007.

Average growth in emerging Asia appears to have slowed from $7 \frac{1}{4}$ percent in the first quarter to $5 \frac{1}{2}$ percent in the current quarter. Growth in China appears to have slowed from 13 percent in the first quarter to around 8 percent in the current quarter, a somewhat stronger pace than we had expected in light of administrative measures to restrain investment. In response to investment growth of more than 30 percent over the year ended in May and a pickup in growth of M2 and lending, the government has imposed additional restrictions on investment in real estate and the central bank raised reserve requirements. As a result, Chinese growth is expected to slow a little in the second half of this year but then return to about 8 percent over the rest of the forecast period. Indian real GDP growth is estimated to have dropped from the very rapid $15 \frac{1}{2}$ percent firstquarter pace to $61 / 2$ percent this quarter and is expected to remain around that rate through 2007. Growth in emerging Asia excluding China and India is expected to be a little below 5 percent over the forecast period, supported by continued expansion in global high-tech demand.

In Latin America, real GDP growth is estimated to have stepped down from $61 / 4$ percent in the first quarter to $31 / 2$ percent in the second quarter, largely because of a slowdown in the Mexican economy following a very rapid first-quarter expansion. Although little second-quarter information is available for Mexico, production growth appears to have moderated. Going forward, we expect the Mexican economy to expand at a rate of about $31 / 2$ percent, roughly in line with growth in U.S. manufacturing production. Growth in South America is expected to average about $41 / 4$ percent over the forecast period, reflecting strong expansions in Chile, Colombia, and Venezuela, which benefit the most from continued high commodity prices, along with more moderate growth in Brazil and Argentina. The Brazilian economy expanded at an unexpectedly rapid $53 / 4$ percent pace in the first quarter, but is expected to slow to a more sustainable pace in the second
quarter. We have revised down our forecast for Brazil a small amount as a result of the recent deterioration in financial conditions.

Four-quarter inflation in the emerging-market economies is projected to increase from just over 3 percent in 2005 to a peak of $33 / 4$ percent in early 2007 before edging down to $31 / 4$ percent by the end of the year. This pattern is largely a result of the pass-through of higher oil prices in emerging Asia. In that region, inflation is expected to move up from its current rate of about $21 / 2$ percent to around $33 / 4$ percent by early 2007 and then to drop back to close to 3 percent by the end of the year. This forecast, which is little changed from the May Greenbook, reflects both the strong growth outlook and reduced fuel subsidies in some countries. Several of the emerging Asian economies, including China, Korea, India, and Thailand, have recently tightened monetary policy.

In Latin America, four-quarter inflation is expected to decline from about $41 / 4$ percent in the first quarter of 2006 to less than $33 / 4$ percent on average over the forecast period, as authorities in Mexico, Brazil, and Venezuela, are expected to continue avoiding full passthrough of energy price increases. Brazil has continued to ease monetary policy in the past few months, although the most recent decrease in the policy rate was smaller than the previous reductions.

## Prices of Internationally Traded Goods

Core import prices are projected to increase at an annual rate of $31 / 4$ percent in the current quarter following a first-quarter rise of $13 / 4$ percent. The pickup largely reflects a jump in core import prices in May. As in the first quarter, much of the recent rise in core import prices has been concentrated in prices for imported nonfuel industrial supplies, especially metals. In contrast, prices of finished goods have shown much smaller increases. Our current projection for the second-quarter increase is down $1 / 2$ percentage point from the May Greenbook.

For the third quarter, we project that core import price inflation will rise to an annual rate of 4 percent, reflecting the continuing effects of higher nonfuel commodity prices and the depreciation of the dollar that occurred earlier this year. Spot prices for many metals rose sharply in May, and retraced only a portion of the May increase in June, thus remaining well above their first-quarter levels. The increase in commodity prices should continue to provide upward impetus to import prices for the next several quarters.

By the fourth quarter, core import prices are projected to decelerate, reflecting a moderation of the effect of higher commodity prices and earlier dollar depreciation. By the end of 2007, with commodity prices having leveled off and the dollar depreciating only gradually, core import price inflation is projected to drop to about 1 percent. Our projection of core import price inflation is slightly higher than in the May Greenbook in both the second half of this year and next year, as the effect on the forecast of higher commodity prices is partially offset by the slightly stronger dollar.

Staff Projections of Selected Trade Prices
(Percent change from end of previous period excepted as noted, s.a.a.r.)

| Indicator | 2005 |  | 2006 | Projection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 | Q1 | 2006 |  | 2007 |
|  |  |  |  | Q2 | H2 |  |
| Exports |  |  |  |  |  |  |
| Core goods | 4.9 | 2.9 | 3.6 | 6.9 | 5.1 | 1.7 |
| May GB | 4.9 | 2.9 | 3.3 | 5.1 | 4.3 | 1.7 |
| Imports |  |  |  |  |  |  |
| Nonfuel core goods | 3.3 | 1.1 | 1.8 | 3.3 | 3.6 | 1.5 |
| May GB | 3.3 | 1.1 | 1.7 | 3.8 | 3.5 | 1.3 |
| Oil (dollars per barrel) | 46.28 | 55.39 | 55.10 | 63.03 | 65.43 | 66.63 |
| May GB | 46.30 | 55.40 | 55.12 | 64.73 | 71.03 | 70.65 |

Note. Prices for core exports exclude computers and semiconductors. Prices for nonfuel core imports exclude computers, semiconductors, oil, and natural gas. Both price series 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.

Core export prices are projected to increase at an annual rate of almost 7 percent in the current quarter, nearly twice the rate recorded in the first quarter and 2 percentage points higher than was projected in the May Greenbook. The sharp pickup has been concentrated in prices of material-intensive goods. The average level of prices for exported nonagricultural industrial supplies in April and May was 15 percent at an annual rate above the first-quarter average. In addition, after several months of decline, prices of agricultural products rose in May.

Core export price inflation is expected to remain high at $61 / 2$ percent in the third quarter, reflecting the recent strength of producer prices for intermediate materials excluding food and energy as well as the prices of primary commodities (especially metals). Thereafter,
core export price inflation is expected to decline, as prices for petroleum products, intermediate materials, and primary commodities are projected to level off. Compared with the previous Greenbook, the projected rate of core export price inflation in the second half of 2006 is about $3 / 4$ percentage points higher, reflecting higher projected prices for intermediate materials and metals. In 2007, the forecast is little changed.

## Trade in Goods and Services

Since the May Greenbook, we have received monthly nominal trade data for March and April as well as revisions to trade data for previous months. We now estimate that real net exports subtracted $1 / 4$ percentage point from real GDP growth in the first quarter; although export growth exceeded import growth, the higher initial level of imports resulted in a fall in net exports. For the current and next quarter, we are projecting that real net exports will add about $1 / 4$ and $1 / 3$ percentage point, respectively, to real GDP growth, largely because of steep declines in oil imports. As oil imports recover, the contribution of net exports again turns negative, amounting to $1 / 3$ percentage point in the fourth quarter and $1 / 4$ percentage point in 2007. Compared with the May Greenbook, net exports subtract about $1 / 2$ percentage point less in the first quarter because of both stronger-than-expected exports and weaker imports in the new data for the first quarter. For the remainder of the projection period the contribution is a bit stronger than in the May Greenbook, mainly a result of a downward revision to the projection for U.S. GDP growth.

Real imports of goods and services are estimated to have increased $101 / 2$ percent at an annual rate in the first quarter, as strong U.S. GDP growth supported the rapid expansion of imports of both services and core goods. Nevertheless, import growth in the first quarter was about $2 \frac{1}{4}$ percentage points lower than estimated in the May Greenbook, as first-quarter imports were revised down significantly with the release of the April trade data.

In April, nominal imports increased moderately, as a rise in the value of oil and natural gas imports more than offset a sharp decline in imports of consumer goods. We estimate that real import growth fell sharply to $2 \frac{1}{4}$ percent in the current quarter, as slowing U.S. growth held back imports of core goods and services and a quirky seasonal adjustment factor led to a fall in reported oil imports. We expect real import growth to pick up to $31 / 2$ percent in the second half of 2006 and further to $41 / 2$ percent in 2007, in part reflecting an increase in imports of oil and natural gas. We expect core import growth to bottom out around $4 \frac{1}{4}$ percent early next year before moving up gradually over the rest of the
year as U.S. growth stabilizes and core import price inflation declines. Similarly, the growth of imported services should recover as the effects of the step-down in U.S. growth and rapid fall in the dollar earlier this year wane. Imports of computers and semiconductors are expected to continue growing apace. Our projection for the current quarter is a little higher than in the previous Greenbook, as the effect on core imports of slower U.S. growth and weak non-oil nominal import data for April is more than offset by an upward revision to imports of oil and natural gas. We have revised down our projection for real import growth $2 \frac{1}{4}$ percentage points in the second half of this year in response to the markdown in U.S. growth as well as lower projected oil imports, and we have revised down our projection for next year $1 / 2$ percentage point.

## Summary of Staff Projections

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

| Indicator | 2005 |  | 2006 | Projection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2007 |  |  |  |  |  |
|  |  | H 2 | Q 1 | 2006 |  |  |
|  |  |  |  | Q 2 | H 2 |  |
| Real exports | 9.1 | 3.8 | 14.9 | 5.4 | 5.2 | 5.2 |
| $\quad$ May GB | 9.1 | 3.8 | 12.7 | 6.0 | 5.6 | 5.8 |
| Real imports | 3.5 | 7.1 | 10.5 | 2.3 | 3.5 | 4.6 |
| May GB | 3.5 | 7.1 | 12.7 | 1.9 | 5.7 | 5.1 |

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

Real exports of goods and services rose nearly 15 percent in the first quarter in response to strong foreign growth as well as the continued recovery of exports of industrial supplies from supply disruptions following last year's hurricanes. The first-quarter increase was a little more than 2 percentage points higher than shown in the May Greenbook, with most of the revision attributable to higher first-quarter services exports.

We estimate that real export growth fell to $51 / 2$ percent in the current quarter, a pace in line with the projected path of relative prices and foreign growth. The expected deceleration is almost entirely concentrated in core goods. Going forward, we expect total export growth to continue at about its second-quarter pace throughout the forecast period. The growth of exported core goods edges down as the lagged effects of the sharp
dollar depreciation of 2003-04 wane, but growth of services exports moves up a little as relative prices become more favorable; exports of computers and semiconductors continue to grow at a normal pace. Since the May Greenbook, we have reduced our projection for the current quarter about $1 / 2$ percentage point because of weaker-thanexpected nominal export growth in April as well as a slightly lower projection for foreign growth. Our projection for the remainder of the forecast period also is down about $1 / 2$ percentage point, reflecting the effect of an increase in projected export prices as well as a slight increase in the projected path of the dollar.

## Alternative Simulation

Since its peak in early 2002, the broad nominal dollar index has declined roughly 15 percent, much more than the $2 \frac{1}{4}$ percent depreciation over the next year and a half incorporated into our baseline projection. In our alternative scenario, we use the FRB/Global model to assess the effects of a rise in the risk premium on U.S. assets that induces the dollar to fall an additional 15 percent by the end of the forecast period. ${ }^{1}$ This shock, which matches the decline of the broad dollar index since its peak in early 2002, begins in 2006:Q3 and is phased in gradually through 2007:Q4.

The decline in the dollar increases U.S. real GDP growth 0.1 percent above baseline in 2006:H2 and about 0.7 percent on average in 2007. 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 increases about 0.1 percentage point above baseline in 2006:H2 and 0.3 percentage point in 2007 in response to rising import prices and higher resource utilization. With U.S. monetary policy responding according to an estimated Taylor rule, the federal funds rate increases about 100 basis points by $2007: \mathrm{H} 2$. The nominal trade balance exhibits a J-curve effect that is especially protracted given the gradual depreciation of the dollar. In 2007:H2, the ratio of the trade balance to GDP is only 0.1 percentage point above baseline. However, an extension of the simulation into 2008 would show the ratio of the trade balance to GDP rising almost 1 percentage point above baseline.

[^5]| Alternative Simulation: 15 Percent Dollar Depreciation <br> (Percent change from previous period, annual rate) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Indicator and simulation | 2006 |  | 2007 |  |
|  | H1 | H2 | H1 | H2 |
| U.S. real GDP |  |  |  |  |
| Baseline | 3.9 | 2.7 | 2.6 | 2.7 |
| Alternative | 3.9 | 2.8 | 3.2 | 3.5 |
| U.S. PCE prices excluding food and energy |  |  |  |  |
| Baseline | 2.5 | 2.2 | 2.2 | 2.2 |
| Alternative | 2.5 | 2.3 | 2.4 | 2.5 |
| U.S. federal funds rate, annual rate |  |  |  |  |
| Baseline | 4.9 | 5.3 | 5.3 | 5.3 |
| Alternative | 4.9 | 5.4 | 5.7 | 6.3 |
| U.S. trade balance, percent of GDP |  |  |  |  |
| Baseline | -5.9 | -5.9 | -6.1 | -5.9 |
| Alternative | -5.9 | -6.0 | -6.2 | -5.8 |

Note. H1 is Q2/Q4; H2 is Q4/Q2. The monetary authorities in the United States and the major foreign economies adjust their policy rates according to Taylor rules.

## Evolution of the Staff Forecast



Foreign Real GDP


Core Import Prices*

*Prices for merchandise imports excluding computers, semiconductors, oil, and natural gas.
Class II FOMC
Restricted (FR)
COUNTRIES

| Measure and country | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | $\begin{gathered} \text { Projected } \\ 2006 \quad 2007 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REAL GDP (1) |  |  |  |  |  |  |  |  |  |
| Total foreign | 5.1 | 4.2 | 0.4 | 3.1 | 2.9 | 3.8 | 3.7 | 3.7 | 3.3 |
| Industrial Countries of which: | 4.4 | 3.6 | 0.9 | 2.5 | 1.8 | 2.5 | 2.6 | 2.7 | 2.4 |
| Canada | 5.9 | 4.1 | 1.3 | 3.5 | 1.5 | 3.7 | 2.8 | 2.9 | 2.9 |
| Japan | 0.2 | 3.3 | -1.5 | 2.0 | 2.6 | 0.5 | 4.0 | 2.5 | 1.8 |
| United Kingdom | 3.4 | 3.2 | 2.0 | 2.1 | 3.1 | 2.6 | 1.8 | 2.5 | 2.7 |
| Euro Area (2) | 4.1 | 3.3 | 1.1 | 1.2 | 1.0 | 1.6 | 1.7 | 2.3 | 1.5 |
| Germany | 3.5 | 2.3 | 1.1 | 0.2 | 0.2 | 0.5 | 1.7 | 2.3 | 0.9 |
| Developing Countries | 6.3 | 5.2 | -0.3 | 3.9 | 4.7 | 5.7 | 5.3 | 5.1 | 4.6 |
| Asia | 8.8 | 5.8 | 1.1 | 6.3 | 6.9 | 6.1 | 7.2 | 6.0 | 5.7 |
| Korea | 11.8 | 4.3 | 4.7 | 7.8 | 4.2 | 2.9 | 5.3 | 4.4 | 4.1 |
| China | 7.7 | 8.2 | 7.8 | 9.2 | 10.5 | 10.1 | 9.9 | 9.1 | 8.1 |
| Latin America | 4.4 | 4.4 | -1.3 | 1.6 | 2.3 | 5.2 | 3.1 | 4.2 | 3.6 |
| Mexico | 5.5 | 4.8 | -1.3 | 2.0 | 2.1 | 4.8 | 2.7 | 4.1 | 3.4 |
| Brazil | 3.4 | 3.8 | -0.9 | 4.1 | 0.9 | 4.7 | 1.5 | 3.9 | 3.2 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |
| Industrial Countries of which: | 1.2 | 1.8 | 0.9 | 2.1 | 1.3 | 1.8 | 1.6 | 1.8 | 1.7 |
| Canada | 2.4 | 3.1 | 1.1 | 3.8 | 1.7 | 2.3 | 2.3 | 2.3 | 1.9 |
| Japan | -1.0 | -0.9 | -1.0 | -0.5 | -0.4 | 0.5 | -0.5 | 0.9 | 0.7 |
| United Kingdom (4) | 1.1 | 0.9 | 1.1 | 1.5 | 1.3 | 1.4 | 2.1 | 2.1 | 2.0 |
| Euro Area (2) | 1.5 | 2.5 | 2.1 | 2.3 | 2.0 | 2.3 | 2.3 | 2.0 | 2.0 |
| Germany | 1.1 | 1.7 | 1.4 | 1.2 | 1.1 | 2.1 | 2.2 | 1.4 | 2.5 |
| Developing Countries | 4.5 | 4.1 | 2.8 | 2.9 | 3.1 | 3.9 | 3.1 | 3.4 | 3.3 |
| Asia | 0.1 | 1.8 | 1.2 | 0.8 | 2.2 | 3.2 | 2.7 | 3.2 | 3.1 |
| Korea | 1.2 | 2.5 | 3.3 | 3.4 | 3.5 | 3.4 | 2.5 | 3.4 | 3.2 |
| China | -1.0 | 1.0 | -0.1 | -0.5 | 2.7 | 3.3 | 1.4 | 3.0 | 3.0 |
| Latin America | 12.5 | 8.4 | 5.3 | 6.4 | 4.9 | 5.7 | 3.8 | 3.6 | 3.8 |
| Mexico | 13.4 | 8.7 | 5.1 | 5.2 | 3.9 | 5.3 | 3.1 | 3.4 | 3.5 |
| Brazil | 8.4 | 6.4 | 7.5 | 10.7 | 11.5 | 7.2 | 6.1 | 4.1 | 4.1 |

[^6]| Measure and country | 2005 |  |  |  | 2006 |  |  |  | 2007 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| REAL GDP (1) ------------------ Quarterly changes at an annual rate |  |  |  |  |  |  |  |  |  |  |  |  |
| Total foreign | 2.7 | 3.8 | 4.4 | 3.9 | 4.5 | 3.5 | 3.3 | 3.3 | 3.2 | 3.4 | 3.4 | 3.3 |
| Industrial Countries | 2.2 | 3.2 | 2.5 | 2.6 | 3.1 | 2.7 | 2.5 | 2.3 | 2.2 | 2.5 | 2.5 | 2.4 |
| Canada | 2.2 | 3.4 | 3.2 | 2.6 | 3.8 | 2.5 | 2.6 | 2.6 | 2.8 | 2.9 | 3.0 | 3.0 |
| Japan Kin | 5.1 | 5.5 | 1.0 | 4.5 | 3.1 | 3.0 | 2.4 | 1.6 | 1.9 | 1.8 | 1.7 | 1.6 |
| United Kingdom | 0.8 | 2.1 | 2.1 | 2.3 | 2.3 | 2.5 | 2.6 | ${ }_{2} 2.6$ | 2.6 | 2.7 | 2.8 | 2.7 |
| $\underset{\text { Euro Area (2) }}{\text { Germany }}$ | $\frac{1}{2.4}$ | 1.6 | 2.6 | 1.2 0.0 | 2.4 1.5 | 2.7 3.2 | 2.0 2.0 | 2.0 2.4 | 1.0 -0.9 | 1.7 1.6 | 1.7 1.4 | 1.7 1.4 |
| Developing Countries | 3.6 | 4.8 | 7.1 | 5.7 | 6.6 | 4.6 | 4.6 | 4.7 | 4.7 | 4.7 | 4.6 | 4.6 |
| Asia Korea | 5.4 | 7.7 | 7.9 | 7.8 | 7.3 | 5.5 | 5.5 | 5.6 | 5.7 | 5.7 | 5.7 | 5.7 |
| Korea China | $\stackrel{2.1}{9}$ | 5.9 | 6.6 | 6.7 | 4.9 | 4.3 | 4.2 | 4.2 | 4.1 | 4.1 | 4.1 | 4.1 |
| Latin America | 11.2 | 1.4 | 8.5 | 1.5 3.2 | 13.2 | 3.5 | 3.6 | 3.7 | 8.6 | 8.1 3.6 | 3.15 3.5 | 3.15 3.5 |
| Mexico | 0.4 | -0.5 | 8.5 | 2.7 | 6.3 | 3.2 | 3.4 | 3.5 | 3.5 | 3.5 | 3.4 | 3.4 |
| Brazil | 0.4 | 5.5 | -3.3 | 3.8 | 5.7 | 3.2 | 3.2 | 3.3 | 3.3 | 3.2 | 3.2 | 3.2 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |  |  |  |
| Industrial Countries | 1.5 | 1.5 | 1.8 | 1.6 | 1.9 | 2.0 | 1.8 | 1.8 | 1.9 | 1.7 | 1.7 | 1.7 |
| of which: | 2.1 | 1.9 | 2.7 | 2.3 | 2.5 | 2.7 | 2.2 | 2.3 | 2.2 | 1.9 |  |  |
| Japan | -0.2 | -0.1 | -0.2 | -0.5 | 0.4 | 0.6 | 0.8 | 0.9 | 0.5 | 0.6 | 0.6 | 0.7 |
| United Kingdom (4) | 1.7 | 2.0 | 2.4 | 2.1 | 2.0 | 2.1 | 1.9 | 2.1 | 2.3 | 2.1 | 2.1 | 2.0 |
| Euro Area (2) | 2.1 | 2.0 | 2.3 | 2.3 | 2.3 | 2.4 | 2.1 | 2.0 1.4 | 2.4 | 2.1 | 2.0 | 2.0 2.0 |
| Developing Countries | 3.5 | 3.3 | 3.0 | 3.1 | 3.1 | 3.0 | 3.1 | 3.4 | 3.7 | 3.8 | 3.5 | 3.3 |
| Asia | 2.9 | 2.4 | 2.3 | 2.7 | 2.4 | 2.5 | 2.8 | 3.2 | 3.8 | 3.8 | 3.4 | 3.1 |
| Korea | 3.1 | 3.0 | 2.4 | 2.5 | 2.4 | 2.4 | 2.7 | 3.4 | 3.9 | 4.0 | 3.6 | 3.2 |
| China | 2.7 | 1.8 | 1.3 | 1.4 | 1.2 | 1.4 | 2.1 | 3.0 | 3.7 | 3.8 | 3.3 | 3.0 |
| Latin America | 4.9 | 5.1 | 4.5 | 3.8 | 4.2 | 3.6 | 3.6 | 3.6 | 3.5 | 3.7 3 | 3.8 |  |
| Mexico Brazil | 4.4 7.4 | 4.5 7.7 | 4.0 6.2 | 3.1 6.1 | 3.7 5.6 | 3.2 4.5 | 3.2 4.7 | 3.4 4.1 | 3.1 3.8 | 3.4 4.0 | 3.5 4.1 | 3.5 4.1 |

[^7]Class II FOMC
Restricted (FR)
OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

|  | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | $\begin{array}{r} \mathrm{Pr} \\ 2006 \end{array}$ | $\begin{aligned} & \text { ected } \\ & 2007 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NIPA REAL EXPORTS and IMPORTS |  |  |  |  |  |  |  |  |  |
|  | Percent | ge point | contribu | on to | growt | Q4/Q4 |  |  |  |
| Net Goods \& Services | -1.0 | -0.9 | -0.2 | -0.9 | -0.1 | -0.9 | -0.2 | 0.0 | -0.2 |
| Exports of $\mathrm{G} \& \mathrm{~S}$ | 0.6 | 0.7 | -1.3 | 0.4 | 0.6 | 0.6 | 0.6 | 0.8 | 0.6 |
| Imports of $G \& S$ | -1.6 | -1.6 | 1.1 | -1.3 | -0.7 | -1.5 | -0.9 | -0.8 | -0.8 |
| Percentage change, Q4/Q4 |  |  |  |  |  |  |  |  |  |
| Exports of G\&S | 5.6 | 6.5 | -11.9 | 3.8 | 6.0 | 6.1 | 6.4 | 7.6 | 5.2 |
| Services | 5.3 | 1.8 | -8.9 | 10.2 | 4.5 | 4.6 | 2.8 | 6.1 | 6.6 |
| Computers | 13.4 | 22.7 | -23.5 | -1.1 | 11.0 | 6.3 | 13.7 | 9.8 | 14.4 |
| Semiconductors | 34.6 | 27.6 | -34.6 | 10.1 | 38.8 | -6.1 | 17.5 | 19.9 | 17.0 |
| Other Goods 1/ | 3.3 | 5.9 | -10.2 | 0.7 | 4.5 | 7.8 | 7.2 | 7.5 | 3.5 |
| Imports of G\&S | 12.1 | 11.2 | -7.6 | 9.7 | 5.1 | 10.6 | 5.3 | 4.9 | 4.6 |
| Services | 6.6 | 10.6 | -5.9 | 8.8 | 4.2 | 7.7 | 2.4 | 3.5 | 3.0 |
| Oil | -3.4 | 13.3 | 3.7 | 3.8 | 1.5 | 9.7 | 1.9 | -7.8 | 0.6 |
| Computers | 26.0 | 13.9 | -13.6 | 13.2 | 16.8 | 22.2 | 12.1 | 20.0 | 17.5 |
| Semiconductors | 34.2 | 22.8 | -51.1 | 11.0 | $-0.2$ | 9.4 | 7.7 | 14.6 | 17.0 |
| Other Goods 2/ | 13.0 | 10.3 | -6.5 | 10.0 | 5.2 | 10.6 | 6.3 | 7.4 | 4.8 |
| Billions of Chained 2000 Dollars |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -296.2 |  |  |  |  |  |  | -653.2 |  |
| Exports of G\&S | 1008.2 | $1096.3$ | $1036.7$ | $1013.3$ | $1031.2$ | $1117.9$ | $1195.3$ | 1285.3 | $1352.2$ |
| Imports of $\mathrm{G} \& \mathrm{~S}$ | 1304.4 | 1475.8 | 1435.8 | 1484.6 | 1552.6 | 1719.2 | 1828.3 | 1938.5 | 2018.2 |
| Billions of dollars |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -299.8 | -415.2 | -389.0 | -472.4 | -527.5 | -665.3 | -791.5 | -890.5 | -997.5 |
| Current Acct as Percent of GDP | -3.2 | -4.2 | -3.8 | -4.5 | -4.8 | -5.7 | -6.3 | -6.7 | -7.1 |
| Net Goods \& Services (BOP) | -263.3 | -377.6 | -362.8 | -421.1 | -494.9 | -611.3 | -716.7 | -785.6 | -838.5 |
| Investment Income, Net | 19.1 | 25.7 | 30.3 | 17.8 | 42.3 | 33.6 | 17.6 | -9.1 | -66.4 |
| Direct, Net | 78.2 | 94.9 | 115.9 | 102.4 | 112.8 | 123.9 | 134.4 | 159.7 | 177.5 |
| Portfolio, Net | -59.1 | -69.2 | -85.5 | -84.6 | -70.5 | -90.2 | -116.8 | -168.8 | -243.9 |
| Other Income \& Transfers, Net | -55.6 | -63.3 | -56.5 | -69.2 | -74.9 | -87.6 | -92.4 | -95.9 | -92.6 |

[^8]NIPA REAL EXPORTS and IMPORTS

|  | 2002 |  |  |  | 2003 |  |  |  | 2004 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 Exports of $G \& S$ Imports of $G \& S$ | -1.0 | -0.6 | -0.5 | -1.5 | 0.1 | -0.7 | 0.5 | -0.5 | -1.2 | -1.4 | -0.2 | -1.0 |
|  | 0.5 | 1.0 | 0.3 | -0.3 | -0.3 | -0.2 | 1.0 | 1.7 | 0.5 | 0.7 | 0.5 | 0.7 |
|  | -1.4 | -1.6 | -0.8 | -1.2 | 0.4 | -0.5 | -0.6 | -2.2 | -1.6 | -2.0 | -0.7 | -1.7 |
|  |  | Perce | ntage ch | nge fro | m previo | us perio | d, s.a.a |  |  |  |  |  |
| Exports of G\&S | 5.2 | 10.6 | 2.9 | -3.1 | -2.9 | -2.1 | 11.5 | 19.1 | 5.0 | 6.9 | 5.5 | 7.1 |
|  | 22.9 | 2.7 | 4.6 | 11.7 | -11.9 | -6.6 | 17.2 | 23.7 | -0.4 | 4.8 | -0.6 | 15.5 |
| Computers | -21.1 | 14.7 | -6.0 | 12.6 | -5.7 | 0.2 | 35.9 | 18.2 | -7.4 | 1.6 | 21.7 | 11.5 |
| Semiconductors | 22.3 | 42.1 | 12.6 | -25.0 | 34.8 | 33.9 | 43.7 | 43.2 | 7.0 | -4.8 | -19.4 | -5.5 |
| Other Goods 1/ | -1.6 | 12.5 | 2.0 | -9.1 | 0.0 | -2.0 | 5.5 | 15.4 | 8.6 | 9.2 | 9.5 | 3.8 |
| Imports of G\&S | 11.7 | 12.5 | 5.7 | 9.0 | -2.5 | 3.3 | 4.1 | 16.5 | 12.0 | 14.5 | 4.7 | 11.3 |
| ServicesOil | 24.7 | -3.0 | 1.7 | 14.0 | -2.2 | -10.2 | 21.4 | 10.7 | 10.0 | 13.7 | 4.6 | 3.1 |
|  | -9.8 | -10.3 | -12.7 | 64.3 | -9.0 | 7.8 | -1.3 | 9.5 | 35.7 | -26.0 | -0.5 | 45.0 |
| Computers | 52.2 | 5.3 | 2.8 | -0.2 | 11.5 | 12.4 | 8.7 | 36.4 | 21.2 | 34.3 | 25.3 | 9.5 |
| SemiconductorsOther Goods 2/ | 39.8 | 34.8 | -6.2 | -14.0 | -6.7 | 1.5 | -3.7 | 8.9 | 42.6 | 20.2 | 4.7 | -20.3 |
|  | 7.7 | 19.6 | 9.2 | 4.0 | -1.8 | 5.4 | -0.4 | 18.7 | 8.1 | 20.3 | 3.1 | 11.5 |
| Billions of Chained 2000 Dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -441.3 | -458.9 | -472.2 | -513.0 | -510.7 | -528.4 | -516.2 | -530.2 | -563.0 | -601.7 | -606.5 | -634.1 |
|  | 992.8 | 1018.0 | 1025.2 | 1017.2 | 1009.7 | 1004.5 | 1032.2 | 1078.4 | 1091.8 | 1110.2 | 1125.0 | 1144.5 |
|  | 1434.0 | 1476.9 | 1497.4 | 1530.2 | 1520.4 | 1532.9 | 1548.4 | 1608.6 | 1654.8 | 1711.9 | 1731.5 | 1778.6 |
| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -436.2 | -476.9 | -476.3 | -500.3 | -553.6 | -521.3 | -523.4 | -511.7 | -589.3 | -662.7 | -661.2 | -747.9 |
| Current Account as \% of GDP | -4.2 | -4.6 | -4.5 | -4.7 | -5.2 | -4.8 | -4.7 | -4.6 | -5.1 | -5.7 | -5.6 | -6.2 |
| Net Goods \& Services (BOP) | -372.7 | -413.1 | -429.0 | -469.4 | -501.8 | -489.8 | -489.1 | -498.8 | -550.6 | -601.1 | -622.6 | -670.8 |
| Investment Income, Net | 15.3 | 1.1 | 16.5 | 38.3 | 24.4 | 41.7 | 39.2 | 63.8 | 57.3 | 28.2 | 33.4 | 15.6 |
| Direct, Net | 104.8 | 90.9 | 97.6 | 116.2 | 97.2 | 108.4 | 109.3 | 136.3 | 130.4 | 113.4 | 122.8 | 128.8 |
| Portfolio, Net | -89.5 | -89.8 | -81.1 | -77.8 | -72.7 | -66.6 | -70.1 | -72.5 | -73.1 | -85.2 | -89.4 | -113.2 |
| Other Inc. \& Transfers, Net | -78.8 | -64.8 | -63.8 | -69.2 | -76.2 | -73.2 | -73.5 | -76.7 | -96.1 | -89.7 | -72.0 | -92.7 |

[^9]Last Page
NIPA REAL EXPORTS and IMPORTS


| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US CURRENT ACCOUNT BALANCE | -766.9 | -773.0 | -733.7 | -892.4 | -834.7 | -892.1 | -890.3 | -945.1 | -975.4 | -983.6 | -991.0 | -1039.9 |
| Current Account as \% of GDP | -6.3 | -6.2 | -5.8 | -7.0 | -6.4 | -6.7 | -6. 6 | -7.0 | -7.1 | -7.1 | -7.0 | -7.3 |
| Net Goods \& Services (BOP) | $-672.4$ | $-688.2$ | -727.2 | -779.1 | -763.0 | -789.7 | -780.3 | -809.5 | -841.2 | -833.4 | -827.7 | -851.8 |
| Investment Income, Net | 20.7 | 14.2 | 37.9 | -2.3 | 14.0 | -3.6 | -13.2 | -33.4 | -45.3 | -59.9 | -71.2 | -89.1 |
| Direct, Net | 121.4 | 124.2 | 161.5 | 130.6 | 155.6 | 156.5 | 164.2 | 162.6 | 169.8 | 174.7 | 182.8 | 182.9 |
| Portfolio, Net | -100.7 | -110.0 | -123.6 | -132.9 | -141.6 | -160.0 | -177.4 | -196.1 | -215.0 | $-234.6$ | -254.0 | -272.0 |
| Other Inc. \& Transfers, Ne | -115.1 | -99.0 | -44.3 | -111.0 | -85.7 | -98.8 | -96.8 | -102.1 | -88.9 | -90.3 | -92.0 | -99.0 |

[^10]
[^0]:    1．Change from fourth quarter of previous year to fourth quarter of year indicated．
    2．Billions of chained（2000）dollars．

[^1]:    1. Change from fourth quarter of previous year to fourth quarter of year indicated
    2. Private-industry workers.
[^2]:    4. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. (In previous
    hat a positive number indicated that actual output fell short of potential.) Annual values are for the fourth quarter of the year indicated.
    5. Percent change, annual rate.
    6. Percent change, annual rate, with inventory valuation and capital consumption adjustments.
    7. Billions of dollars, annual values are annual averages.
[^3]:    2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.
    3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
    4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2000) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate
    aggregate demand stimulus.
    a--Actual 2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.
[^4]:    Note. Data after 2006:Q1 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
[^5]:    ${ }^{1}$ The risk premium shocks are calibrated to induce a dollar depreciation of 15 percent assuming that U.S. and foreign monetary policies respond according to Taylor rules. In the absence of endogenous adjustment of interest rates, the risk premium shocks would induce a dollar depreciation of 20 percent.

[^6]:    . Foreign GDP aggregates calculated using shares of U.S. exports

    1. Foreign GDP aggregates calculated using shares of U.S. exports.
    2. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.
[^7]:    1. Foreign GDP aggregates calculated using shares of U.S. exports.

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

[^8]:    1. Merchandise exports excluding computers and semiconductors
    2. Merchandise imports excluding oil, computers, and semiconductors.
[^9]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors
[^10]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors
