## Prefatory Note

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

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## Part 1

## CURRENT ECONOMIC AND FINANCIAL CONDITIONS

## Summary and Outlook

May 3, 2006

## Summary and Outlook

## Class II FOMC—Restricted (FR)

## Domestic Developments

The data on economic activity that we have received during the intermeeting period have been stronger than we had anticipated in the March Greenbook. Real gross domestic product bounced back in the first quarter from a sluggish performance in the fourth quarter, led by surprisingly strong growth in domestic final demand. We do not, however, expect the greater momentum to carry forward. Crude oil and gasoline prices have jumped again; in this Greenbook, energy prices remain at a higher level and therefore exert a greater drag on real activity over the projection period. In addition, long-term interest rates moved up over the intermeeting period and are now expected to remain higher through the end of next year. All told, we now anticipate that the growth of real GDP will slow to about a 3 percent rate in the second half of this year and in 2007-a pace that is somewhat slower than we projected in the March Greenbook.

We also expect the higher energy prices to boost headline inflation in the near term. Moreover, the latest readings on core consumer price inflation have been on the high side of our expectations. That information, coupled with the prospect of greater impetus from higher oil prices and a slight deterioration in inflation expectations, led us to nudge up our projection for core inflation this year and next. But with structural productivity growth remaining strong, and with the influence of higher energy and materials costs moderating over the course of the projection period, we are forecasting a deceleration in core consumer prices later this year and in 2007.

## Key Background Factors

The federal funds rate is assumed to rise to 5 percent at the upcoming FOMC meeting and to stay at that level through the end of 2007. Because of the intensified upward pressure on prices in this forecast, we have removed the 25 basis point easing in the middle of 2007 that we had assumed in the last projection. Since late March, market expectations for the federal funds rate have moved up about 20 basis points by the end of this year and 30 basis points by the end of next year; the market's outlook for policy is quite similar to the staff's assumed path. Reflecting both the rise in expected policy rates and some increase in the term premium, longer-term nominal rates have moved up about 40 basis points since the March Greenbook. We assume that long rates will remain around current levels through year-end 2007.

Broad equity market indexes currently stand about 1 percent above the level that we had assumed in the March Greenbook, and we have raised our path for stock prices by about this amount throughout the projection period. As usual, we have assumed that share

Key Background Factors Underlying the Baseline Staff Projection

Federal Funds Rate


## Equity Prices



## Crude Oil Prices



Long-term Interest Rates


House Prices
Index, 2002:Q1=100, ratio scale


Note. The projection period begins in 2006:Q1. The projection for this index is unrevised from the March Greenbook.

Broad Real Dollar


Note. Shading represents the projection period.
prices increase at an annual rate of $61 / 2$ percent beyond the current quarter, a pace that would roughly maintain risk-adjusted parity with the yield on long-term Treasury securities. We continue to project that house prices will decelerate from last year's 13 percent increase, to a $51 / 2$ percent rise this year and a $2 \frac{1}{2}$ percent increase in 2007.

Our assumptions about fiscal policy are little changed from the March Greenbook. We project that federal fiscal policy will provide an impetus to real activity equal to about $1 / 2$ percentage point of GDP this year; the new Medicare drug benefit is the biggest source of stimulus, but defense spending and hurricane relief add a bit as well. Next year, we expect that fiscal policy will be a roughly neutral influence. We continue to assume that most of the tax provisions that expired at the end of last year, including partial AMT relief and the research and experimentation credit, will eventually be extended. Since the last Greenbook, tax revenues from individuals have come in much higher than we had expected. We have therefore revised down our forecast for the unified federal budget deficit, to $\$ 293$ billion in the current fiscal year-lower than last year's actual deficitand $\$ 320$ billion in fiscal 2007.

The foreign exchange value of the dollar has moved down since the March Greenbook, and we have reduced the starting point for the projected path of the broad real dollar index by about 2 percent. From this lower level, we expect the broad real dollar to depreciate at an annual rate of about 2 percent, on average, over the next year and a half-a bit more than in the last forecast. Foreign real GDP appears to have increased at a 4 percent annual rate in the first quarter; in our projection, the growth of foreign output gradually moves down, to $31 / 2$ percent next year.

The spot price of West Texas intermediate (WTI) crude oil has jumped about $\$ 14$ per barrel since late March; futures prices have also moved up and are about $\$ 10$ per barrel higher for year-end 2007. We think that strong global demand remains an important factor behind rising crude oil prices, but the proximate cause for the latest jump seems to have been concerns about the reliability of supply from several countries-notably Iran and Nigeria. Consistent with futures quotes, we expect the price of WTI to move up from its current level of almost $\$ 75$ per barrel to $\$ 77$ per barrel by the end of this year and then to edge down to $\$ 76$ per barrel by the end of 2007.

## Recent Developments and the Near-Term Outlook

We currently estimate that real GDP increased at a 5.3 percent annual rate in the first quarter. That estimate is $1 / 2$ percentage point higher than in the advance release by the

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

| Measure | 2006:Q1 |  | 2006:Q2 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Mar. <br> GB | May GB | Mar. GB | May GB |
| Real GDP | 4.7 | 5.3 | 3.5 | 3.7 |
| Private domestic final purchases | 5.7 | 6.6 | 3.5 | 3.4 |
| Personal consumption expenditures | 5.2 | 5.5 | 3.6 | 3.7 |
| Residential investment | -. 2 | 3.8 | -. 9 | -1.7 |
| Business fixed investment | 12.8 | 15.6 | 4.9 | 4.4 |
| Government outlays for consumption and investment | 2.9 | 4.4 | 1.6 | . 5 |
|  | Contribution to growth (percentage points) |  |  |  |
| Inventory investment | -. 3 | -. 5 | . 0 | . 3 |
| Net exports | -. 5 | -. 7 | . 2 | . 3 |

Bureau of Economic Analysis (BEA) and reflects stronger incoming data on inventories and investment and different assumptions about net exports. It is also about $1 / 2$ percentage point stronger than our forecast in the March Greenbook. Final sales moved up even faster than GDP last quarter, at a $53 / 4$ percent pace. For the current quarter, we expect GDP growth to drop back to a $33 / 4$ percent annual rate, in line with its average pace over the past four quarters.

Labor demand has increased at a robust pace in recent months: Private nonfarm payrolls increased 188,000 per month, on average, in the first quarter. Initial claims for unemployment insurance have averaged a bit more than 300,000 in recent weeks, suggesting that private payroll gains remain solid; we have penciled in an increase of 175,000 for April. Private employment gains are projected to slow to about 150,000 per month by June, reflecting the overall slowing in the economy in the current quarter.

Industrial production (IP) in the manufacturing sector rose $1 / 2$ percent in March, and we are expecting another solid gain in April. For the first quarter as a whole, manufacturing IP increased at a $5 \frac{1}{2}$ percent annual rate, down from a 9 percent pace in the fourth quarter. Growth in both quarters was boosted by the recovery from hurricane-related disruptions.

The BEA estimates that real personal consumption expenditures (PCE) increased at a $51 / 2$ percent annual rate in the first quarter, reflecting a rebound in motor vehicle sales and a hefty rise in other consumer spending. The bulk of those gains had come at the turn of the year, however, and spending gains slowed by the end of the first quarter: Real PCE moved up just 0.2 percent in February and March. Steep increases in energy prices should weigh on consumer spending in the months ahead, but ongoing job gains and well-maintained consumer sentiment suggest only a moderate slowdown. On balance, we expect that real PCE growth will slow to a $33 / 4$ percent annual rate in the current quarter.

The incoming information on housing markets continues to support our view that a gradual softening of sales and construction is under way. To be sure, as of March, sales of both new and existing homes had recovered somewhat from sharp drops this past winter. But, on net, both measures of sales are well off the peaks that they reached in the middle of last year, and inventories of homes for sale have continued to move up. Consistent with these indications of softening demand, permits for single-family construction have been moving down over the past two quarters. Starts plunged in March, but we are interpreting that drop as having been exaggerated by the earlier weather-related pull-forward of activity into the first two months of the year. We anticipate that single-family housing starts will average an annual rate of 1.63 million units in the current quarter, down from a 1.75 million pace in the first quarter. Overall, we are forecasting a moderate decline in real residential investment this quarter.

Business spending on equipment and software (E\&S) increased at a 17 percent annual rate in the first quarter, well above the 9 percent increase over the four quarters of 2005. We expect $\mathrm{E} \& \mathrm{~S}$ to expand at about a 2 percent annual rate in the current quarter. Transportation outlays have been volatile of late. Business spending on motor vehicles surged in the first quarter but is expected to drop back in the current quarter. We forecast spending on aircraft to move up sharply in the first half of the year after a steep drop in the second half of last year. Outside of transportation, E\&S rose at a robust 13 percent annual rate in the first quarter; we expect a deceleration to a 6 percent pace in the second quarter. Spending on communications equipment jumped in the first quarter, and we are expecting some payback. More broadly, incoming data on orders and shipments are signaling solid growth in this sector.

We estimate that business spending on nonresidential structures (NRS) increased at an annual rate of $11 \frac{1}{2}$ percent in the first quarter, and we forecast that NRS spending will
rise at a $10 \frac{1}{2}$ percent pace in the current quarter following several years of little growth. Part of the resurgence in NRS spending reflects drilling and mining activity in the aftermath of the huge run-up in prices of natural gas and crude oil in the past couple of years. But the positive readings for a number of indicators-most prominently, declining vacancy rates, rising rents, and increased architectural billings-suggest a broader rebound in construction activity. In a recent survey conducted by the Reserve Banks, many firms reported plans to increase their spending on new structures, and builders were quite upbeat.

Stocks of new motor vehicles edged down in the first quarter and are expected to move down a bit further in the current quarter. We estimate that inventory investment outside of the motor vehicle sector, which was quite low in the second half of last year, moved up last quarter, and we anticipate a further step-up this quarter. Overall, we expect nonfarm inventory investment to add $1 / 4$ percentage point to GDP growth in this quarter after trimming $1 / 2$ percentage point in the first quarter.

Real federal purchases rose at an 11 percent annual rate in the first quarter, with large increases both in defense and in other spending. We had anticipated a bounceback in defense spending after the drop in the fourth quarter; we are projecting a small increase in the current quarter. The large increase in nondefense purchases reflected a pickup in purchases of goods related to hurricane recovery, such as trailers and other temporary housing, and we expect the level of these purchases to fall back in the current quarter. We estimate that real state and local spending posted a modest increase in the first quarter. Given the continued improvement in the sector's fiscal condition, we expect growth in real spending to pick up a bit in the current quarter.

By our reckoning, net exports trimmed $3 / 4$ percentage point from first-quarter GDP growth. Both imports and exports rose at double-digit annualized rates in real terms last quarter. The surge in exports likely reflected a rebound from hurricane-related disruptions in the fourth quarter; the strength in imports was broad-based and appeared to be a response to strong domestic demand. Increases in both categories are expected to diminish in the current quarter; import growth slows somewhat more, however, and net exports are projected to add $1 / 4$ percentage point to real GDP growth in the current quarter.

Readings on core consumer prices for March were a touch higher than we were expecting at the time of March Greenbook, and we now anticipate that the core PCE price index
will increase at an annual rate of 2.5 percent in the current quarter, up 0.3 percentage point from our previous projection. Gasoline prices have risen sharply, reflecting not only the steep run-up in crude-oil prices but also some added costs from the switch to ethanol in reformulated gasoline and some additional widening of retailers' and producers' margins. We forecast that overall PCE prices will rise at an annual rate of 4 percent in the current quarter.

## The Longer-Run Outlook for the Economy

As in the March Greenbook, we are projecting some moderation in the growth of output over the forecast period. Cutting through the quarter-to-quarter movements, real GDP has been increasing at an annual rate of about $31 / 2$ percent, on average, over the past several quarters. By next year, we expect growth to have slowed to 3 percent. The deceleration in real GDP reflects the lagged effects of the tightening of monetary policy, the waning impetus from increases in household wealth, and reduced stimulus from fiscal policy.

Household spending. Following its very strong growth in the first quarter of this year, real PCE is projected to increase at about a $31 / 2$ percent annual rate in the remainder of 2006 before decelerating slightly to a $31 / 4$ percent increase next year. The sharp upward revision to energy prices in this forecast trims almost $1 / 2$ percent from real income by the end of this year and, all else equal, would reduce the level of real PCE by about twothirds of this amount by the end of next year. Partially offsetting this factor is the annual revision to retail sales, our response to which implies greater scope for growth in consumer spending given our forecasts for income and wealth. ${ }^{1}$ More broadly, we continue to expect that the slowdown in house-price appreciation in our forecast, as well as the lagged effects of higher interest rates, will restrain the growth of consumer outlays and result in a gradual rise in the personal saving rate.

We now expect that real spending on residential construction will edge down over the projection period. In response to the higher mortgage interest rates in this projection, we have revised down the change in residential construction by about 1 percentage point in

[^0]
## Projections of Real GDP

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

| Measure | 2006 |  |  |
| :---: | ---: | :---: | :---: |
|  | H1 | H2 |  |
|  |  |  |  |
| Real GDP | 4.5 | 3.1 | 3.0 |
| Previous | 4.1 | 3.5 | 3.1 |
| Final sales | 4.6 | 3.1 | 2.9 |
| Previous | 4.3 | 3.4 | 2.9 |
| PCE | 4.6 | 3.4 | 3.2 |
| Previous | 4.4 | 3.4 | 3.3 |
| Residential investment | 1.0 | -1.4 | -.7 |
| Previous | -.5 | 2.5 | .4 |
| BFI | 9.8 | 7.9 | 6.1 |
| Previous | 8.8 | 8.5 | 6.0 |
| Government purchases | 2.4 | 1.6 | 1.4 |
| Previous | 2.2 | 1.7 | 1.4 |
| Exports | 9.3 | 5.6 | 5.8 |
| Previous | 10.3 | 5.1 | 4.9 |
| Imports | 7.2 | 5.7 | 5.1 |
| Previous | 7.4 | 5.9 | 5.5 |
|  | Contribution to growth |  |  |
| (percentage points) |  |  |  |
|  | -.1 | .0 | .1 |
| Inventory change | -.2 | .2 | .2 |
| Previous | -.2 | -.4 | -.3 |
| Net exports | -.2 | -.4 | -.4 |
| Previous |  |  |  |

2006 and 2007. In addition, we now think that hurricane-related rebuilding will be more drawn out than we had previously projected. Our reassessment stems in part from reports of delays in establishing the regulations for housing reconstruction in New Orleans. For 2007, the shift in rebuilding assumptions would tend to push up the growth rate of residential construction.

Business spending. We forecast business spending on equipment and software to increase $81 / 2$ percent this year and 6 percent next year. Transportation equipment is responsible for a portion of this deceleration: Trucking firms reportedly are pulling forward their orders for new trucks into 2006 before new environmental regulations go into effect in 2007. We also expect the rapid build-up in aircraft deliveries to domestic airlines to continue into the second half before leveling out next year. In addition, business outlays to replace equipment damaged or destroyed during last year's hurricanes are likely to hit a peak near the middle of this year; the gradual unwinding of this rebuilding effort should hold down the growth of E\&S spending starting in the second half of this year. More fundamentally, financing costs have moved up since last fall-Baa-rated corporate bond yields are up 75 basis points-and business-sector output decelerates between this year and next.

In this forecast we have substantially revised up our outlook for business spending on nonresidential structures, to a 10 percent increase this year and 6 percent in 2007. As noted earlier, the incoming data for business construction activity have been stronger than we had expected, and in our projection we have carried some of the greater momentum into the second half of 2006. The higher oil prices in this forecast have led us to boost our projection of outlays for drilling and mining structures; the typical lags in this relationship suggest that a substantial impetus to spending growth will remain in 2007. Spending on other types of structures decelerates slightly next year, to about the same $31 / 2$ percent growth rate as in the March Greenbook, which we view as consistent with longer-run fundamentals in this sector.

As in the March Greenbook, inventories are expected to play only a small role in the dynamics of aggregate output beyond the near term. We view inventories, overall, as being reasonably in line with sales at present, and we project that businesses will add to stocks at a rate consistent with a gradual decline in the ratio of inventories to sales that reflects businesses' ongoing improvements in inventory management.

Government spending. We expect defense spending to continue to rise a bit in the remainder of this year but to flatten out next year, as an assumed downturn in Iraq-related spending offsets increases expected in other defense programs. On the nondefense side, we are looking for federal spending to be about flat in real terms in the second half of this year and in 2007. We expect real spending by state and local governments to increase at an annual rate of a bit more than 2 percent over the next year and a half; although budgets are generally sound in most jurisdictions, we anticipate that pressures from rising costs-

## 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 | $\mathbf{1 . 5}$ | $\mathbf{2 . 5}$ | $\mathbf{3 . 3}$ | $\mathbf{3 . 1}$ | $\mathbf{3 . 1}$ | $\mathbf{3 . 1}$ | $\mathbf{3 . 1}$ |
| $\quad$ Previous | 1.5 | 2.5 | 3.3 | 3.1 | 3.1 | 3.1 | 3.1 |
| Contributions $^{1}$ |  |  |  |  |  |  |  |
| Capital deepening $^{\text {Previous }}$ | .7 | 1.4 | .7 | .7 | 1.0 | 1.0 | 1.1 |
| Multifactor productivity | .7 | 1.4 | .7 | .7 | 1.0 | 1.1 | 1.1 |
| $\quad$ Previous | .5 | .8 | 2.3 | 2.1 | 1.9 | 1.8 | 1.8 |
| Labor composition | .5 | .8 | 2.3 | 2.1 | 1.9 | 1.8 | 1.8 |
| MEMO | .3 | .3 | .2 | .3 | .3 | .2 | .2 |
| Potential GDP |  |  |  |  |  |  |  |
| $\quad$ 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 Q 4 of the year preceding the first year shown to Q 4 of the last year shown.

1. Percentage points.
especially for energy and construction materials-will restrain real spending by these governments.

Net exports. We expect net exports to trim 0.3 percentage point from GDP growth both this year and next-slightly more drag than in 2005 but a little less on average than in the March Greenbook. Real exports are projected to expand at a $51 / 2$ percent annual rate in the second half of this year and $53 / 4$ percent in 2007, supported by solid growth abroad and dollar depreciation. We project that real import growth will average about 51/4 percent at an annual rate in the second half of this year and in 2007. (These topics are discussed in more detail in the International Developments section of Part 1.)

## Aggregate Supply, the Labor Market, and Inflation

We project that potential output will grow at a rate essentially unchanged from the March Greenbook- $31 / 4$ percent both this year and next. We estimate that the strong growth in the first quarter brought the level of actual output about in line with potential. For the remainder of this year, real GDP grows at about the same pace as potential. As output growth slows a bit below potential next year, a small gap opens up by the end of the forecast period.

## 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 | 2.8 | 3.1 |
| $\quad$ Previous | 2.6 | 2.5 | 2.8 | 3.1 |
| Nonfarm private payroll employment | 1.7 | 1.6 | 1.5 | .6 |
| $\quad$ Previous | 1.7 | 1.6 | 1.6 | .5 |
| Household survey employment $^{\text {Previous }}$ | 1.3 | 1.9 | 1.2 | .6 |
| Labor force participation rate $^{1}$ | 1.3 | 1.9 | 1.3 | .7 |
| $\quad$ Previous | 66.0 | 66.1 | 66.0 | 65.8 |
| Civilian unemployment rate $^{1}$ | 66.0 | 66.1 | 66.0 | 65.8 |
| $\quad$ Previous | 5.4 | 5.0 | 4.8 | 5.0 |
| MEMO $^{\text {GDP gap }}$ |  | 5.4 | 5.0 | 4.8 |
| Previous |  |  |  | 4.9 |

[^1]Productivity and the labor market. We estimate that output per hour in the nonfarm business sector increased at an annual rate of 3.3 percent in the first quarter, 1 percentage point faster than we forecasted in the March Greenbook. With labor and product markets both close to their equilibrium levels, we expect that productivity gains will be close to their structural pace of a bit more than 3 percent.

Monthly private payroll gains are expected to slow to 75,000 by the end of this year and to 50,000 in 2007 . We estimate that a steady unemployment rate would require growth of about 85,000 per month in private payrolls this year and next, on average. With employment rising less than that, the unemployment rate creeps up, reaching 5 percent by the end of next year.

Prices and labor costs. Reflecting the higher energy prices incorporated into this Greenbook, we have marked up our projection for the increase in total PCE prices this year by $1 / 2$ percentage point, to $21 / 2$ percent. Higher prices for energy and other commodities are also expected to put some additional pressure on core PCE inflation, which has been revised upward a bit for this year and next. Still, as prices for energy and

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 | 2.0 |
| Previous | 3.1 | 3.0 | 2.0 | 1.9 |
| Food and beverages | 2.9 | 2.1 | 2.4 | 2.2 |
| Previous | 2.9 | 2.1 | 2.5 | 2.2 |
| Energy | 17.9 | 21.8 | 7.4 | 1.5 |
| $\quad$ Previous | 17.9 | 21.8 | .3 | 1.6 |
| Excluding food and energy | 2.2 | 2.0 | 2.2 | 2.0 |
| $\quad$ Previous | 2.2 | 1.9 | 2.1 | 1.9 |
| Consumer price index | 3.3 | 3.7 | 2.8 | 2.2 |
| $\quad$ Previous | 3.3 | 3.7 | 2.2 | 2.2 |
| Excluding food and energy | 2.1 | 2.1 | 2.5 | 2.3 |
| $\quad$ Previous | 2.1 | 2.1 | 2.4 | 2.2 |
| GDP chain-weighted price index | 2.9 | 3.1 | 2.6 | 2.3 |
| $\quad$ Previous | 2.9 | 3.1 | 2.5 | 2.1 |
| ECI for compensation of private |  |  |  |  |
| $\quad$ industry workers |  |  |  |  |

1. December to December.
other materials flatten out later this year, we expect some slowing of both core and headline inflation in 2007.

The incoming data offer no clear signal on labor costs. The employment cost index (ECI) for hourly compensation increased at an annual rate of just $2 \frac{1}{2}$ percent in the first quarter, while we estimate that the productivity and cost ( $\mathrm{P} \& \mathrm{C}$ ) measure of hourly compensation in the nonfarm business sector increased at an annual rate of 5 percent last quarter. Looking over the past year, the discrepancy is less marked: The ECI measure increased $2 \frac{1}{2}$ percent over the four quarters ending in 2006:Q1, whereas the $\mathrm{P} \& \mathrm{C}$ measure increased an estimated $31 / 2$ percent over the same period; for both measures, that marks a
deceleration from the preceding four-quarter period. However, we expect to see some acceleration in hourly compensation owing to tight labor markets and elevated price inflation. But with the markup of prices over unit labor costs currently at a high level, we believe that these higher labor costs will be absorbed through some erosion of profit margins and will not generate any upward pressure on price inflation.

## Financial Flows and Conditions

After rising $91 / 2$ percent last year, domestic nonfinancial debt is projected to expand more slowly over the next couple of years- $71 / 4$ percent this year and $61 / 2$ percent in 2007, a forecast that is little changed from that in the March Greenbook. A reduced pace of borrowing by households and by state and local governments accounts for most of the expected deceleration.

Household debt, which expanded $113 / 4$ percent in 2005, is projected to grow 8 percent this year and $61 / 2$ percent in 2007. Mortgage borrowing is expected to move down from its double-digit pace as house-price appreciation slows in our forecast, and the growth of consumer credit is expected to remain subdued. Given our outlook for debt growth and interest rates, household debt service as a share of income holds about steady over the projection period.

We anticipate that nonfinancial corporate debt will grow at an annual rate of 7 percent this year and next, up from $53 / 4$ percent in 2005. The increase reflects our forecast that capital expenditures will grow briskly and that, relative to recent quarters, firms will likely rely less on their large holdings of liquid assets to finance investment. In contrast, we anticipate that debt growth for nonfinancial businesses outside the corporate sector will slow considerably from last year's pace, largely because of decreased commercialmortgage borrowing. All told, debt growth for the nonfinancial business sector is projected to moderate to an average annual rate of 7 percent this year and next.

State and local government debt is expected to expand at an average annual rate of $31 / 2$ percent this year and next, a pace well below the $10^{1} / 2$ percent increase in 2005. The deceleration reflects paydowns of previously refunded debt and fewer opportunities for advance refunding given higher interest rates. We project that federal debt will grow at an average annual rate of just under 7 percent this year and next, a touch below the pace registered last year.

After increasing 4 percent in 2005, M2 is expected to expand 5 percent this year, somewhat below the projected rise in nominal GDP owing to the lagged effects of increases in M2 opportunity cost. We anticipate that M2 growth will be about in line with nominal GDP growth in 2007.

## Alternative Simulations

In this section, we evaluate several risks to the staff forecast using simulations of the FRB/US model. The first three simulations explore the implications of alternative assumptions about the underlying strength of demand. In one, our projection of a nearterm deceleration in final sales fails to materialize; in the next two, the housing market weakens more than we expect, with possible spillover effects on other asset markets. In the next three simulations, we focus on the inflation outlook and consider the implications of pass-through effects from rising commodity and energy prices that differ from those built into the baseline. We then examine two contrasting supply-side risksthat the NAIRU is lower than we assume and that structural productivity is rising less rapidly than we estimate. In all of these scenarios, monetary policy responds gradually to deviations from the baseline as suggested by an estimated version of the Taylor rule. ${ }^{2}$

Domestic boom. Both household and business spending are expected to decelerate noticeably from here forward in response to rising interest rates, higher energy prices, and slowing house-price appreciation. But clear signs of an imminent slowdown are still limited. Accordingly, in this scenario, aggregate demand continues to outstrip the economy's productive potential by a substantial margin. In particular, household spending expands more in line with the growth in disposable income, so that the saving rate edges up to only $1 / 4$ percent by late next year, almost $3 / 4$ percentage point below baseline. Spending on equipment and software is also stronger than in the baseline and, rather than decelerating, continues to rise at a rate similar to that seen over the past year. Under these assumptions, real GDP growth is $41 / 2$ percent this year and $33 / 4$ percent next year, well above the growth of potential. Consequently, the unemployment rate falls to $41 / 4$ percent by the end of the projection period. In response to markedly tighter labor and product markets, the federal funds rate rises steadily to $61 / 4$ percent by late 2007. The tighter stance of policy, in turn, keeps inflation expectations well anchored and contributes to a stronger dollar. Faster productivity growth from greater capital

[^2]
## Alternative Scenarios

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

| Measure and scenario | 2006 |  | 2007 |
| :---: | :---: | :---: | :---: |
|  | H1 | H2 |  |
| Real GDP |  |  |  |
| Baseline | 4.5 | 3.1 | 3.0 |
| Domestic boom | 5.0 | 4.2 | 3.7 |
| Housing slump | 4.5 | 2.9 | 2.7 |
| With greater fallout | 4.5 | 2.3 | 2.2 |
| Greater pass-through | 4.5 | 3.0 | 3.0 |
| With unanchored expectations | 4.5 | 3.0 | 3.0 |
| Less pass-through | 4.5 | 3.2 | 3.0 |
| Lower NAIRU | 4.6 | 3.3 | 3.3 |
| Less room to grow | 4.3 | 2.5 | 2.2 |
| Civilian unemployment rate ${ }^{1}$ |  |  |  |
| Baseline | 4.7 | 4.8 | 5.0 |
| Domestic boom | 4.6 | 4.5 | 4.3 |
| Housing slump | 4.7 | 4.8 | 5.2 |
| With greater fallout | 4.7 | 4.9 | 5.5 |
| Greater pass-through | 4.7 | 4.8 | 5.0 |
| With unanchored expectations | 4.7 | 4.8 | 5.0 |
| Less pass-through | 4.7 | 4.8 | 5.0 |
| Lower NAIRU | 4.7 | 4.8 | 4.9 |
| Less room to grow | 4.6 | 4.7 | 4.9 |
| PCE prices excluding food and energy |  |  |  |
| Baseline | 2.3 | 2.1 | 2.0 |
| Domestic boom | 2.3 | 2.1 | 2.0 |
| Housing slump | 2.3 | 2.1 | 2.0 |
| With greater fallout | 2.2 | 2.0 | 2.0 |
| Greater pass-through | 2.4 | 2.4 | 2.1 |
| With unanchored expectations | 2.4 | 2.5 | 2.4 |
| Less pass-through | 2.2 | 1.7 | 1.6 |
| Lower NAIRU | 2.2 | 1.9 | 1.7 |
| Less room to grow | 2.4 | 2.3 | 2.3 |
| Federal funds rate ${ }^{1}$ |  |  |  |
| Baseline | 4.9 | 5.0 | 5.0 |
| Domestic boom | 5.0 | 5.6 | 6.2 |
| Housing slump | 4.9 | 4.9 | 4.7 |
| With greater fallout | 4.9 | 4.7 | 3.8 |
| Greater pass-through | 4.9 | 5.1 | 5.2 |
| With unanchored expectations | 4.9 | 5.1 | 5.5 |
| Less pass-through | 4.9 | 4.9 | 4.6 |
| Lower NAIRU | 4.9 | 4.8 | 4.5 |
| Less room to grow | 5.0 | 5.2 | 5.2 |

1. Percent, average for the final quarter of the period.
deepening also restrains price pressures. As a consequence, inflation stays close to baseline despite the higher rate of resource utilization. Beyond 2007, the federal funds rate would need to rise further to keep inflation in check.

Housing slump. While housing activity so far this year appears to be cooling gradually, a more pronounced decline cannot be ruled out. In this scenario, a major slump in the real estate market develops, with home prices falling at an average annual rate of close to 10 percent over the remainder of this year and next. Relative to baseline, the resultant loss in wealth-which cumulates to almost $\$ 41 / 2$ trillion by the end of the projection period-would gradually restrain household spending and add $1 / 2$ percentage point to the saving rate by late next year, assuming no unusual confidence effects or special role for equity extraction. Under these assumptions, real GDP growth slows to $23 / 4$ percent in 2007; the unemployment rate consequently rises to $5 \frac{1}{4}$ percent by late next year. With economic slack only modestly greater than in the baseline, inflation is little changed. In response to somewhat weaker economic conditions, the federal funds rate is, on average, 25 basis points below baseline next year and would be substantially lower after 2007.

Housing slump with greater fallout. A pronounced slump in the real estate market might prompt investors in other markets to see the macroeconomic outlook as having become more risky. Accordingly, this scenario builds on the previous one and assumes that the fall in home prices is accompanied by a 60 basis point rise in the term premium on long-term Treasury securities relative to baseline, which would put it close to its level before the onset of the current round of policy tightening. This increase in turn boosts yields on corporate bonds and initially reduces share values by about 10 percent. Coupled with the fall in housing wealth, these less favorable financial conditions cause real GDP to grow at an average rate of only $2 \frac{1}{4}$ percent over the second half of 2006 and in 2007 and boost the unemployment rate to $51 / 2$ percent by late next year. Monetary policy responds to this weaker real activity by gradually lowering the federal funds rate to $33 / 4$ percent - an easing that reverses much of the initial rise in bond yields and fall in share prices and heads off a much more pronounced economic downturn. The policy easing is also sufficient to keep inflation close to baseline.

Greater pass-through. In the baseline, the pass-through to core prices from the run-up in energy and commodity prices is more modest than has been seen on average over the past forty years, consistent with evidence that such effects have diminished over time. In this scenario, we instead assume that pass-through effects are roughly double the baseline assumption, putting the overall effect at the high end of predictions from estimated price
equations. However, if the public recognizes the one-time nature of the cost shock, and long-run inflation expectations remain firmly anchored, the economic implications of greater pass-through are still limited: Core PCE inflation rises to about $2 \frac{1}{2}$ percent in the second half of this year but then falls back to near 2 percent in 2007, and real activity is little changed from baseline. In response to the modest step-up in inflation, the federal funds rate edges up to $51 / 4$ percent by the end of 2007 .

Greater pass-through with unanchored expectations. Greater pass-through would have more pronounced implications for the economy and monetary policy if it were to lead to a persistent deterioration in inflation expectations. This scenario builds on the previous one by assuming that long-run inflation expectations gradually rise $1 / 2$ percentage point relative to baseline. Under these conditions, core inflation picks up to $2 \frac{1}{2}$ percent in the second half of this year and remains close to this level through 2007. Under the assumed gradualist monetary policy, the nominal federal funds rate rises to $51 / 2$ percent by the end of 2007, enough to keep real interest rates about unchanged from baseline. As a consequence, real activity is about the same as in the baseline through the end of next year. Beyond 2007, the policy would yield a noticeable rise in the real federal funds rate.

Less pass-through. Taken literally, econometric estimates based on data since the mid1980s suggest no pass-through of energy prices to core inflation. Thus, we may be overstating the contribution of recent energy price increases to both actual and expected inflation. In this scenario, we assume that firms absorb recent increases in energy costs into their profit margins rather than raising prices. In addition, we assume that inflation expectations-rather than contributing to an updrift in actual inflation in the recent past and in the projection-have been and will remain firmly anchored. If energy prices and inflation expectations do not explain the upturn in inflation since 2003, some other factors must do so. In this scenario, these factors are assumed to be transitory. Accordingly, core PCE inflation slows appreciably more than in the baseline, declining to a bit more than $11 / 2$ percent by the end of 2007. In response, the nominal federal funds rate gradually moves down to about $41 / 2$ percent. Because real interest rates are close to baseline on average over the projection period, real activity is little altered.

Lower NAIRU. On balance, price and wage increases have remained moderate even as the unemployment rate has fallen to a level that, on our estimates, indicates slack has been eliminated from labor markets and that conditions are now a bit on the tight side. In this scenario, we assume that considerable slack still remains in labor markets and
specifically that the NAIRU has declined from 5 percent to $41 / 4$ percent over the past several years. Reflecting the large margin of slack, core PCE inflation falls to $13 / 4$ percent in 2007. Policymakers gradually reduce the federal funds rate relative to baseline as they see these favorable inflation developments and, in addition, as they come to realize that the level of output is well below potential. By the end of 2007, the federal funds rate falls to about $41 / 2$ percent. The improved prospects for the level of permanent income and earnings provide a modest stimulus to real activity.

Less room to grow. In contrast to the preceding scenario, this one offers a less sanguine view on aggregate supply conditions. One reason for such pessimism is that the drop in the unemployment rate over the past year has been somewhat greater than predicted by our current estimates of the output gap, which may mean that potential GDP is not rising as rapidly as we have assumed. In this scenario, we assume that, since early 2005, the annual growth rate of structural multifactor productivity (MFP) has been 0.3 percentage point less than we have assumed in the baseline. Structural MFP growth then slows further this year and next, falling to 1.3 percent by 2007 -a rate $1 / 2$ percentage point below baseline and equal to the average rate of increase from 1995 to 2004. Under these assumptions, unit labor costs rise more rapidly than in the baseline, and core inflation averages about $2 \frac{1}{4}$ percent over the second half of 2006 and in 2007. The weakened long-run outlook for personal income and corporate earnings implies smaller increases in household spending and business investment. Consequently, a slower pace of aggregate demand emerges, one that roughly matches the slowdown in aggregate supply, and the unemployment rate by the end of 2007 is close to baseline. In response to higher inflation and little change in economic slack, the federal funds rate averages about $51 / 4$ percent over the remainder of this year and next.

Market-based federal funds rate. Quotes from futures markets imply a path for the federal funds rate that is quite similar to the staff's assumption in both 2006 and 2007. 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) |  |  |
| Projection | 3.8 | 3.0 |
| Confidence interval |  |  |
| Greenbook forecast errors | 2.6-5.0 | 1.4-4.6 |
| FRB/US stochastic simulations | 2.7-4.9 | 1.5-4.5 |
| Civilian unemployment rate (percent, Q4) |  |  |
| Projection | 4.8 | 5.0 |
| Confidence interval |  |  |
| Greenbook forecast errors | 4.5-5.1 | 4.2-5.8 |
| FRB/US stochastic simulations | 4.4-5.2 | 4.3-5.6 |
| PCE prices excluding food and energy (percent change, Q4 to Q4) |  |  |
| Projection | 2.2 | 2.0 |
| Confidence interval |  |  |
| Greenbook forecast errors | 1.8-2.6 | 1.2-2.8 |
| FRB/US stochastic simulations | 1.8-2.6 | 1.2-2.9 |
| Federal funds rate (percent, Q4) |  |  |
| Projection | 5.0 | 5.0 |
| Confidence interval FRB/US stochastic simulations | 4.3-5.8 | 3.8-6.5 |

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


Real GDP


PCE Prices excluding Food and Energy


Unemployment Rate


Federal Funds Rate


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Evolution of the Staff Forecast

Change in Real GDP


Unemployment Rate


## Change in PCE Prices excluding Food and Energy




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| $\stackrel{\rightharpoonup}{\mathrm{e}}$ | $\bigcirc$ | O.O. | ñM | $\vec{m} \dot{m} \dot{\sim}$ | $\underset{i}{\circ}{ }_{i}^{\infty}$ | －r．mobn $\dot{\circ} \dot{\circ} \dot{\circ}$ in | $\underset{\underset{i}{m}}{\underset{\sim}{m}}$ | $\underset{-}{+}$ | non－ |
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| 㤐 |  |  |  |  | Residential investment Previous |  |  |  |  |


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| Item |  |  |  |  |  |  |  |

[^4]
Class II FOMC
Restricted (FR)

| 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 | 3.2 | 1.9 | 2.1 | 2.3 | 2.4 | 2.2 | 2.0 | 3.1 | 2.6 | 2.3 |
| Previous | 3.1 | 2.6 | 3.3 | 3.3 | 3.4 | 2.6 | 2.0 | 2.0 | 2.1 | 2.2 | 2.1 | 1.9 | 3.1 | 2.5 | 2.1 |
| PCE chain-wt. price index | 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 |
| Previous | 2.3 | 3.3 | 3.7 | 2.7 | 1.9 | 2.0 | 2.1 | 2.2 | 2.1 | 2.0 | 1.9 | 1.8 | 3.0 | 2.0 | 1.9 |
| Energy | 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 |
| Previous | 3.6 | 28.6 | 50.0 | 10.2 | -. 1 | -1.2 | . 6 | 1.8 | 2.9 | 1.9 | 1.0 | . 5 | 21.8 | . 3 | 1.6 |
| Food | 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 |
| Previous | 1.0 | 3.5 | 1.3 | 2.4 | 2.9 | 2.2 | 2.4 | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.5 | 2.2 |
| Ex. food \& energy | 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 |
| Previous | 2.4 | 1.7 | 1.4 | 2.1 | 1.9 | 2.2 | 2.2 | 2.2 | 2.0 | 1.9 | 1.9 | 1.8 | 1.9 | 2.1 | 1.9 |
| CPI | 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 |
| Previous | 2.3 | 3.8 | 5.5 | 3.3 | 2.1 | 2.0 | 2.3 | 2.3 | 2.4 | 2.2 | 2.1 | 2.0 | 3.7 | 2.2 | 2.2 |
| ECI, hourly compensation ${ }^{2}$ | 3.8 | 2.5 | 2.9 | $\begin{aligned} & 2.8 \\ & 3.2 \end{aligned}$ | ${ }_{4}^{2.4}$ | 3.4 | 3.5 | $\begin{aligned} & 3.7 \\ & 4 \end{aligned}$ | 3.7 | $\begin{aligned} & 3.7 \\ & 4.2 \end{aligned}$ | $\begin{aligned} & 3.9 \\ & 4.2 \end{aligned}$ | $\begin{aligned} & 3.9 \\ & 4.2 \end{aligned}$ | ${ }_{3}^{2.9}$ | ${ }_{4.2}$ | 3.8 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour | 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 |
| Previous | 3.8 | 2.4 | 4.2 | -. 2 | 2.3 | 2.4 | 3.1 | 3.3 | 3.2 | 3.1 | 3.1 | 3.0 | 2.5 | 2.8 | 3.1 |
| Compensation per hour | 5.6 | 1.3 | 5.5 |  | 5.0 | 4.6 | 5.5 | 5.5 | 5.5 | 5.4 | 5.3 | 5.3 | 3.7 | 5.2 | 5.4 |
| Previous | 5.6 | 1.3 | 5.5 | 2.8 | 4.3 | 5.1 | 5.6 | 5.6 | 5.4 | 5.3 | 5.2 | 5.2 | 3.8 | 5.2 | 5.3 |
| Unit labor costs | 1.8 | -1.0 |  |  | 1.7 | 2.0 |  |  | 2.3 |  | 2.2 | 2.2 | 1.2 | 2.2 | 2.3 |
| Previous | 1.8 | -1.0 | 1.2 | 3.1 | 2.0 |  | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 1.3 | 2.3 | 2.1 |

[^5]| 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 | . 6 | . 4 | . 3 | . 3 | . 2 | . 2 | . 2 | 1.9 | 1.9 | . 9 |
| Unemployment rate ${ }^{3}$ | 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 |
| Previous ${ }^{3}$ | 5.2 | 5.1 | 5.0 | 5.0 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 | 4.9 | 4.9 | 5.0 | 4.8 | 4.9 |
| GDP gap ${ }^{4}$ | -. 5 | -. 4 | -. 1 | -. 4 | . 1 | . 2 | . 1 | . 1 | . 0 | . 0 | -. 1 | -. 2 | -. 4 | . 1 | -. 2 |
| Previous ${ }^{4}$ | -. 6 | -. 5 | -. 2 | -. 4 | -. 1 | . 0 | . 1 | . 1 | . 1 | . 0 | . 0 | -. 1 | -. 4 | . 1 | -. 1 |
| Industrial production ${ }^{5}$ | 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 |
| Previous ${ }^{5}$ | 3.8 | 1.6 | 1.4 | 5.3 | 5.2 | 6.8 | 5.4 | 4.5 | 3.8 | 3.1 | 2.7 | 2.9 | 3.0 | 5.5 | 3.1 |
| Manufacturing industr. prod. ${ }^{5}$ | 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 |
| Previous ${ }^{5}$ | 4.5 | 1.3 | 2.0 | 9.2 | 6.0 | 4.7 | 4.8 | 4.4 | 3.9 | 3.2 | 2.8 | 3.2 | 4.2 | 5.0 | 3.3 |
| Capacity utilization rate - mfg. ${ }^{3}$ | 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 |
| Previous ${ }^{3}$ | 78.7 | 78.5 | 78.5 | 79.8 | 80.5 | 80.9 | 81.3 | 81.7 | 81.9 | 81.9 | 81.9 | 81.8 | 79.8 | 81.7 | 81.8 |
| Housing starts ${ }^{6}$ | 2.1 | 2.0 | 2.1 | 2.1 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 | 2.0 | 2.0 |
| Light motor vehicle sales ${ }^{6}$ | 16.5 | 17.2 | 17.9 | 15.8 | 16.9 | 16.7 | 16.9 | 17.0 | 17.1 | 17.1 | 17.1 | 17.2 | 16.9 | 16.9 | 17.1 |
| Income and saving Nominal GDP5 | 7.0 | 6.0 | 7.6 | 5.2 | 8.8 | 7.0 | 5.1 | 5.2 | 5.4 | 5.5 | 5.3 | 5.1 | 6.4 | 6.5 | 5.3 |
| Real disposable pers. income ${ }^{5}$ | -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 |
| Previous ${ }^{5}$ | -3.4 | . 2 | -1.4 | 7.1 | 4.2 | 5.2 | 5.1 | 4.6 | 4.8 | 4.5 | 4.0 | 4.0 | . 5 | 4.8 | 4.3 |
| Personal saving rate ${ }^{3}$ | . 5 | -. 2 | -1.6 | -. 2 | -. 7 | -. 7 | -. 2 | . 0 | . 4 | . 7 | . 9 | 1.0 | -. 2 | . 0 | 1.0 |
| Previous ${ }^{3}$ | . 5 | -. 2 | -1.6 | -. 2 | -. 4 | . 0 | . 3 | . 6 | . 9 | 1.2 | 1.4 | 1.6 | -. 2 | . 6 | 1.6 |
| Corporate profits ${ }^{7}$ | 24.5 | 19.7 | -15.2 | 71.1 | 13.1 | 15.8 | -4.5 | -4.0 | -3.2 | . 5 | -. 4 | 4.5 | 21.3 | 4.7 | . 3 |
| Profit share of GNP3 | 10.5 | 10.9 | 10.2 | 11.6 | 11.7 | 11.9 | 11.7 | 11.4 | 11.2 | 11.1 | 10.9 | 10.9 | 11.6 | 11.4 | 10.9 |
| Net federal saving ${ }^{8}$ | -298 | -297 | -408 | -289 | -248 | -301 | -314 | -316 | -321 | -334 | -335 | -339 | -323 | -295 | -333 |
| Net state \& local saving ${ }^{8}$ | 7 | 21 | -6 | -10 | 16 | 28 | 21 | 22 | 23 | 24 | 24 | 26 | 3 | 22 | 24 |
| Gross national saving rate ${ }^{3}$ | 13.4 | 13.1 | 13.6 | 13.6 | 13.5 | 13.4 | 13.4 | 13.3 | 13.3 | 13.3 | 13.4 | 13.3 | 13.6 | 13.3 | 13.3 |
| Net national saving rate ${ }^{3}$ | 1.7 | 1.6 | -1.3 | 1.9 | 2.2 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.1 | 2.2 | 1.9 | 2.0 | 2.2 |

[^6]| 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 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget Not seasonally adjusted |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{1}$ | 1880 | 2154 | 2369 | 2453 | 452 | 665 | 549 | 530 | 507 | 761 | 570 | 556 | 515 | 781 | 600 | 586 |
| Outlays ${ }^{1}$ | 2293 | 2472 | 2662 | 2773 | 628 | 620 | 618 | 650 | 691 | 661 | 660 | 689 | 720 | 694 | 670 | 736 |
| Surplus/deficit ${ }^{1}$ | -412 | -318 | -293 | -320 | -177 | 45 | -69 | -119 | -184 | 100 | -90 | -133 | -205 | 88 | -70 | -150 |
| Previous | -412 | -318 | -333 | -343 | -177 | 45 | -69 | -119 | -185 | 59 | -87 | -134 | -210 | 77 | -76 | -148 |
| On-budget | -568 | -494 | -470 | -503 | -202 | -37 | -84 | -170 | -216 | 18 | -102 | -193 | -228 | 2 | -84 | -212 |
| Off-budget | 155 | 175 | 177 | 183 | 25 | 83 | 15 | 51 | 32 | 82 | 12 | 60 | 23 | 85 | 14 | 61 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 378 | 297 | 302 | 331 | 165 | -43 | 73 | 112 | 156 | -77 | 111 | 123 | 189 | -59 | 78 | 140 |
| Cash decrease | -1 | 1 | 0 | 0 | 2 | -11 | -2 | -1 | 28 | -17 | -10 | 10 | 15 | -25 | 0 | 10 |
| Other ${ }^{2}$ | 35 | 21 | -9 | -12 | 10 | 8 | -1 | 8 | -1 | -6 | -10 | -0 | 0 | -4 | -8 | -0 |
| Cash operating balance, end of period | 36 | 36 | 35 | 35 | 22 | 33 | 36 | 37 | 8 | 25 | 35 | 25 | 10 | 35 | 35 | 25 |
| NIPA federal sector - Seasonall |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 1933 | 2159 | 2401 | 2528 | 2197 | 2228 | 2156 | 2321 | 2397 | 2428 | 2456 | 2487 | 2524 | 2538 | 2563 | 2593 |
| Expenditures | 2348 | 2503 | 2689 | 2855 | 2495 | 2525 | 2564 | 2610 | 2646 | 2729 | 2770 | 2804 | 2846 | 2872 | 2899 | 2933 |
| Consumption expenditures | 711 | 760 | 803 | 837 | 760 | 763 | 783 | 773 | 806 | 812 | 819 | 823 | 838 | 842 | 846 | 850 |
| Defense | 474 | 510 | 534 | 558 | 509 | 512 | 529 | 514 | 535 | 541 | 545 | 549 | 559 | 561 | 564 | 567 |
| Nondefense | 237 | 250 | 269 | 279 | 251 | 251 | 254 | 259 | 271 | 271 | 273 | 274 | 279 | 281 | 282 | 283 |
| Other spending | 1637 | 1742 | 1886 | 2018 | 1735 | 1762 | 1781 | 1837 | 1839 | 1917 | 1951 | 1980 | 2008 | 2030 | 2053 | 2083 |
| Current account surplus | -415 | -344 | -288 | -327 | -298 | -297 | -408 | -289 | -248 | -301 | -314 | -316 | -321 | -334 | -335 | -339 |
| Gross investment | 99 | 106 | 116 | 116 | 101 | 107 | 109 | 115 | 118 | 115 | 115 | 116 | 116 | 116 | 116 | 116 |
| Gross saving less gross investment ${ }^{3}$ | -421 | -352 | -302 | -337 | -302 | -307 | -418 | -304 | -266 | -314 | -325 | -328 | -332 | -344 | -344 | -347 |
| Fiscal indicators ${ }^{4}$ <br> High-employment (HEB) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| surplus/deficit | -380 | -338 | -307 | -341 | -285 | -295 | -415 | -295 | -271 | -325 | -335 | -338 | -338 | -347 | -344 | -343 |
| Change in HEB, percent of potential GDP | 0.7 | -0.5 | -0.4 | 0.1 | -0.6 | 0.0 | 0.9 | -1.0 | -0.2 | 0.4 | 0.0 | -0.0 | -0.0 | 0.0 | -0.1 | -0.0 |
| Fiscal impetus (FI) percent of GDP | 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 |
| Previous | 0.8 | 0.3 | 0.4 | 0.1 | 0.0 | 0.1 | 0.1 | -0.0 | 0.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
4. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2000) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate
[^7]
## Staff Projections of Federal Sector Accounts and Related Items

 (Billions of dollars except as noted)| Class II FOMC <br> Restricted (FR) |  | Change in Debt of the Domestic Nonfinancial Sectors <br> (Percent) |  |  |  |  | May 3, 2006 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Households |  |  |  |  |  |
| Period ${ }^{1}$ | Total | Total | Home mortgages | Consumer credit | Business | State and local governments | Federal government | Memo: <br> Nominal GDP |
| Year |  |  |  |  |  |  |  |  |
| 2000 | 4.8 | 8.6 | 8.2 | 10.8 | 9.3 | 1.3 | -8.0 | 4.6 |
| 2001 | 6.1 | 8.6 | 9.5 | 7.6 | 6.1 | 8.9 | -. 2 | 2.7 |
| 2002 | 6.9 | 9.7 | 11.9 | 4.7 | 2.7 | 11.1 | 7.6 | 3.6 |
| 2003 | 8.1 | 11.4 | 14.3 | 4.5 | 2.7 | 8.2 | 10.9 | 6.1 |
| 2004 | 8.7 | 11.1 | 13.5 | 4.4 | 5.9 | 7.6 | 9.0 | 6.8 |
| 2005 | 9.5 | 11.7 | 14.1 | 2.7 | 7.8 | 10.6 | 7.0 | 6.4 |
| 2006 | 7.2 | 7.9 | 9.2 | 3.3 | 7.3 | 3.8 | 6.7 | 6.5 |
| 2007 | 6.4 | 6.5 | 7.2 | 3.9 | 6.8 | 3.1 | 7.0 | 5.3 |
| Quarter |  |  |  |  |  |  |  |  |
| 2005:1 | 9.7 | 9.7 | 11.5 | 3.4 | 6.6 | 12.0 | 14.4 | 7.0 |
| 2 | 8.1 | 11.8 | 13.8 | 3.6 | 8.2 | 6.0 | . 1 | 6.0 |
| 3 | 9.6 | 12.4 | 14.9 | 5.0 | 7.5 | 13.1 | 5.1 | 7.6 |
| 4 | 9.5 | 11.0 | 13.3 | -1.1 | 8.2 | 9.6 | 7.8 | 5.2 |
| 2006:1 | 9.2 | 8.8 | 10.3 | 3.4 | 8.7 | 4.5 | 12.7 | 8.8 |
| 2 | 5.5 | 7.9 | 9.2 | 3.3 | 7.0 | 4.4 | -2.7 | 7.0 |
| 3 | 6.8 | 7.2 | 8.3 | 3.2 | 6.5 | 3.1 | 8.0 | 5.1 |
| 4 | 6.6 | 6.7 | 7.7 | 3.3 | 6.3 | 3.1 | 8.2 | 5.2 |
| 2007:1 | 7.7 | 6.5 | 7.3 | 3.5 | 6.5 | 3.3 | 14.5 | 5.4 |
| 2 | 4.9 | 6.4 | 7.1 | 3.7 | 6.7 | 3.2 | -1.1 | 5.5 |
| 3 | 5.9 | 6.3 | 7.0 | 4.1 | 6.6 | 2.8 | 4.9 | 5.3 |
| 4 | 6.6 | 6.2 | 6.8 | 4.1 | 6.5 | 2.8 | 9.0 | 5.1 |

Note. Quarterly data are at seasonally adjusted annual rates. 1. Data after 2005:Q4 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal
GDP growth, which is calculated from Q4 to Q4.

Class II FOMC
Flow of Funds Projections: Highlights
(Billions of dollars at seasonally adjusted annual rates except as noted)

| Category | 2004 | 2005 | 2006 | 2007 | 2005 |  | 2006 |  |  |  | 2007 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Domestic nonfinancial sectors <br> Net funds raised |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1792.6 | 1927.4 | 1523.5 | 1605.7 | 1924.9 | 2046.7 | 1829.9 | 1105.8 | 1565.0 | 1593.2 | 1967.9 | 1204.5 | 1514.0 | 1736.3 |
| Net equity issuance | -141.1 | -366.0 | -374.8 | -210.8 | -481.1 | -394.6 | -586.8 | -370.8 | -300.8 | -240.8 | -210.8 | -210.8 | -210.8 | -210.8 |
| Net debt issuance | 1933.7 | 2293.4 | 1898.3 | 1816.5 | 2406.0 | 2441.3 | 2416.7 | 1476.6 | 1865.8 | 1834.0 | 2178.7 | 1415.3 | 1724.8 | 1947.1 |
| Borrowing indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt (percent of GDP) ${ }^{1}$ | 197.0 | 202.2 | 205.1 | 207.8 | 202.1 | 204.3 | 204.7 | 205.0 | 205.6 | 206.4 | 207.3 | 207.8 | 207.9 | 208.6 |
| Borrowing (percent of GDP) | 16.5 | 18.4 | 14.2 | 12.9 | 19.1 | 19.1 | 18.5 | 11.1 | 13.9 | 13.5 | 15.8 | 10.1 | 12.2 | 13.6 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing ${ }^{2}$ | 1023.4 | 1203.4 | 905.9 | 804.7 | 1343.5 | 1234.3 | 1010.5 | 928.9 | 863.1 | 821.3 | 802.8 | 803.6 | 807.2 | 805.4 |
| Home mortgages | 898.7 | 1069.7 | 796.3 | 683.9 | 1207.4 | 1118.9 | 894.5 | 818.8 | 757.3 | 714.7 | 691.0 | 686.3 | 681.5 | 676.8 |
| Consumer credit | 88.8 | 58.4 | 72.9 | 88.5 | 108.2 | -24.9 | 73.6 | 73.1 | 71.5 | 73.4 | 79.6 | 85.1 | 93.5 | 95.8 |
| Debt/DPI (percent) ${ }^{3}$ | 112.8 | 120.5 | 124.2 | 124.7 | 122.0 | 122.7 | 124.1 | 124.4 | 124.4 | 124.6 | 124.5 | 124.5 | 124.7 | 124.9 |
| Business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Financing gap ${ }^{4}$ | 47.0 | -92.7 | 34.8 | 204.1 | -237.7 | -128.4 | -100.7 | 31.4 | 79.4 | 129.1 | 174.3 | 183.7 | 204.2 | 254.0 |
| Net equity issuance | -141.1 | -366.0 | -374.8 | -210.8 | -481.1 | -394.6 | -586.8 | -370.8 | -300.8 | -240.8 | -210.8 | -210.8 | -210.8 | -210.8 |
| Credit market borrowing | 430.2 | 605.8 | 608.3 | 604.1 | 601.5 | 673.7 | 725.2 | 594.8 | 560.6 | 552.6 | 583.8 | 607.9 | 609.5 | 615.0 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 118.2 | 177.3 | 71.2 | 58.8 | 229.1 | 174.2 | 84.4 | 82.8 | 58.8 | 58.8 | 62.8 | 62.8 | 54.8 | 54.8 |
| Current surplus ${ }^{5}$ | 181.3 | 206.3 | 194.5 | 205.8 | 208.3 | 195.3 | 185.0 | 199.4 | 195.0 | 198.4 | 201.5 | 204.6 | 206.4 | 210.7 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 361.9 | 306.9 | 312.8 | 348.9 | 231.9 | 359.0 | 596.6 | -129.9 | 383.3 | 401.3 | 729.3 | -58.9 | 253.3 | 472.0 |
| Net borrowing (n.s.a.) | 361.9 | 306.9 | 312.8 | 348.9 | 72.8 | 112.2 | 156.1 | -76.7 | 110.6 | 122.8 | 189.3 | -59.0 | 78.1 | 140.5 |
| Unified deficit (n.s.a.) | 400.7 | 319.7 | 307.3 | 336.9 | 69.0 | 119.3 | 183.7 | -99.6 | 90.1 | 133.1 | 204.7 | -87.9 | 69.7 | 150.4 |
| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^8]
## Class II FOMC—Restricted (FR)

## International Developments

The outlook for foreign economic activity remains robust, and the continued strength of global demand has contributed to rising commodity prices and tighter financial conditions abroad. Since the March FOMC meeting, prices of oil and of other commodities have increased sharply, and long-term interest rates have risen significantly in all of the major industrial countries. The dollar has depreciated broadly against other currencies during this period, apparently on market concerns about the exchange rate adjustments needed to reduce the large and growing U.S. current account deficit.

We estimate that foreign economic growth averaged 4 percent at an annual rate in the first quarter, the same pace recorded for the previous quarter. Foreign growth is projected to step down in the current quarter and to average $31 / 2$ percent for the rest of the forecast period. Our outlook for aggregate foreign output is little changed from the March Greenbook projection; although higher oil prices and firmer financial conditions are projected to exert a drag, this is offset by readings on recent activity that have been somewhat stronger than we expected. Foreign consumer price inflation was subdued in the first quarter, but it is expected to rise to a rate of $23 / 4$ percent for the rest of this year, mainly because of higher prices for energy and other commodities. Foreign inflation is expected to subside next year.

Summary of Staff Projections
(Percent change from end of previous period, s.a.a.r.)

| Indicator | 2005 |  | Projection |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H 1 | H 2 | 2006 |  |  |  |  |
|  |  |  | Q 1 | Q 2 | H 2 |  |  |
| Foreign output | 3.3 | 4.2 | 4.0 | 3.7 | 3.5 | 3.4 |  |
| March GB | 3.2 | 4.2 | 3.9 | 3.7 | 3.5 | 3.4 |  |
| Foreign CPI | 2.0 | 2.6 | 2.0 | 2.8 | 2.8 | 2.5 |  |
| March GB | 1.9 | 2.7 | 2.4 | 2.4 | 2.5 | 2.5 |  |

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

As spot oil prices soared to new highs, prices of futures contracts moved noticeably higher as well, and we marked up the projected path of oil prices by a substantial margin. Prices of nonfuel primary commodities also shot up in recent weeks, especially for some industrial metals. Nonfuel commodity prices are projected to increase further in the current quarter and to remain flat over the rest of the forecast period.

As a result of the declines in the dollar over the past few weeks, the projected level of the broad real dollar in the third quarter is now 2 percent lower than in the March Greenbook. Over the rest of the forecast period, we project that the dollar will depreciate at an annual rate of about 2 percent, slightly faster than envisioned in the March Greenbook.

We estimate that real net exports subtracted $3 / 4$ percentage point from U.S. real GDP growth in the first quarter. This subtraction is $1 / 4$ percentage point larger than previously projected, as incoming data on exports have been softer than expected. The contribution of net exports is projected to become positive in the current quarter, owing to a seasonal factor that depresses the volume of oil imports; for the remainder of the forecast period, net exports subtract a little more than $1 / 4$ percentage point from GDP growth on average. Beyond the first quarter, the projected contributions are slightly less negative than in the March Greenbook, largely because of the weaker path of the dollar. The current account deficit is projected to widen to about $\$ 1.1$ trillion, or nearly 8 percent of GDP, by the end of 2007. This projection is little changed from that in the previous Greenbook. A somewhat wider trade deficit resulting from higher oil prices is largely offset by stronger net investment income, as the lower dollar and higher oil prices raise the dollar value of U.S. earnings abroad.

## Oil Prices

The spot price of West Texas intermediate (WTI) crude oil closed at almost $\$ 75$ per barrel on May 2, an increase of roughly $\$ 14$ per barrel since the March Greenbook. Crude oil futures prices have moved up as well, albeit to a lesser extent for farther-dated contracts. The price of the futures contract for delivery in December 2012 settled at $\$ 68$ per barrel on May 2, up about $\$ 6$ per barrel since the March Greenbook.

Against a backdrop of continued strong global demand, actual and potential disruptions to oil supply appear to have been largely responsible for the recent price run-up. In Nigeria, more than 500,000 barrels per day of oil production have been off line since mid-February as a result of rebel attacks on oil facilities and workers. The outage has been larger and more persistent than initially expected, and there are few signs that the security situation there will improve anytime soon. In recent weeks, tensions with Iran over its nuclear program have increased markedly. In mid-April, Iran announced that it had processed enriched uranium, contrary to a U.N. resolution calling for Iran to suspend such actions or face possible sanctions. The potential loss of Iran's oil exports, which account for about 3 percent of world oil production, poses a serious upside risk to oil
prices. In a worst-case scenario, Iran could also attempt to block the Strait of Hormuz, through which 20 percent of world oil production is shipped. At the end of the intermeeting period, Bolivia announced plans to nationalize its natural gas industry, adding to price pressures in the energy sector.

In addition to these latest developments, several ongoing factors are limiting supply. In Venezuela, the government has continued its efforts to effectively re-nationalize the oil industry. In Iraq, violence and the lack of a well-functioning central government have continued to impede oil production. In addition, 324,000 barrels per day of production remain off line in the Gulf of Mexico because of lasting hurricane damage, although the Mars platform, with production capacity of 140,000 barrels per day, is expected to resume operations over the next two months.

News about supply appears to have exerted particularly large effects on prices as OPEC's low level of spare production capacity has greatly diminished the cartel's ability to compensate for disruptions. Because oil demand is relatively insensitive to price changes in the short run, even modest fluctuations in oil production can lead to large swings in oil prices.

In line with NYMEX futures prices, our projection calls for the spot price of WTI to rise to about $\$ 77$ per barrel in the fourth quarter and to edge down in 2007. Compared with the March Greenbook forecast, the current projection averages about $\$ 11$ per barrel higher over the remainder of the forecast period. The projected path of the oil import price has been revised in a similar fashion. We estimate that higher oil prices will increase the projected oil import bill by over $\$ 30$ billion this year and more next year.

## International Financial Markets

The trade-weighted exchange value of the dollar against the major foreign currencies has fallen more than $4 ½$ percent on balance since the March FOMC meeting. The dollar's depreciation was broad-based but was especially sharp against the currencies of commodity-exporting countries such as Canada and Australia. The dollar's tradeweighted exchange value against the currencies of the other important trading partners of the United States decreased $11 / 2$ percent on net, as the dollar depreciated 3 percent to 5 percent against several East Asian currencies and 7 percent against the Brazilian real, but was little changed against the Mexican peso and the Chinese renminbi.

Much of the dollar's move occurred during the second half of the intermeeting period. The dollar depreciated particularly sharply against several Asian currencies following the release of the G-7 communiqué, which stated that "greater exchange rate flexibility is desirable in emerging economies with large current-account surpluses, especially China, for necessary adjustments" in global imbalances to occur. Worries about foreign officials' intentions to diversify away from U.S. assets also seemed to weigh on the dollar.

These market developments underlie our downward revision to 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 remainder of the forecast period as concerns about the rising U.S. current account deficit continue to weigh on the exchange rate.

The Bank of Canada raised its target for the overnight rate 25 basis points, to 4 percent, on April 25, and market participants viewed the Bank’s accompanying statement as signaling that further policy tightening may be forthcoming. The European Central Bank, the Bank of Japan, and the Bank of England kept their policy stances unchanged over the intermeeting period. Ten-year nominal sovereign yields rose 22 to 30 basis points on balance in Japan, the United Kingdom, the euro area, and Canada. Yields on benchmark ten-year inflation-indexed bonds in Japan and the euro area rose almost as much as nominal yields did, as investors reportedly raised their assessment of prospects for economic activity and monetary policy tightening. Inflation expectations appear to have remained well contained in these economies, as long-term rates of inflation compensation rose only a little on balance, perhaps in part because the effects of sharp increases in dollar commodity prices were attenuated somewhat by currency appreciations. Equity price indexes rose 1 percent to 3 percent in the major foreign industrial economies.

Investor optimism appeared to buoy emerging-market assets. Sovereign bond spreads declined to new multiyear lows, despite the substantial increases in nominal and real yields in industrial economies. Equity indexes in the major emerging markets rose 6 percent to 13 percent on net over the intermeeting period.
. The Desk did not intervene during
the period for the accounts of the System or the Treasury.

## Advanced Foreign Economies

Recent economic indicators have been strong, on balance, and we estimate that real GDP growth in the advanced foreign economies picked up to 3 percent in the current quarter (from a pace of $23 / 4$ percent in the previous three quarters). Growth is expected to slow to around $21 / 2$ percent for the remainder of the forecast period as past and expected tightening of monetary policy, more restrictive financial conditions, higher energy prices, and some tightening of fiscal policy return growth nearer to potential rates. The average four-quarter change in consumer prices is expected to remain just below 2 percent this quarter, held up by recent energy price increases. Inflation should ebb during the second half of this year but it is expected to move up again in 2007, reflecting the effect on the average of the slated increase in the German value-added tax.

Japanese GDP is estimated to have grown just over 2 percent in the first quarter, as data on retail sales, car sales, and services all pointed to strong consumption growth, but investment indicators weakened. We expect real GDP to grow almost 3 percent in the current quarter as recent gains in household wealth support consumption spending and investment rebounds. Growth is projected to slow to just below 2 percent by the end of 2007 as these wealth effects play out, interest rates move up, and the recent strength in net exports abates. Strong output growth and higher oil prices should push the twelvemonth rate of inflation up further, from around $1 / 2$ percent this quarter to almost 1 percent later this year and next. We still assume that the Bank of Japan will begin to gradually raise interest rates in the fourth quarter of this year, and we now assume that policy rates will be increased 75 basis points by the end of the forecast period.

Euro-area real GDP rose an estimated $21 / 2$ percent in the first quarter and more recent indicators, such as sentiment and new orders, have largely been positive. We expect the economy to continue to grow at that pace in the current quarter before slowing later in 2006, as consumption continues to be held back by weak income and employment growth and as monetary tightening by the ECB damps activity. Our forecast for 2006 is slightly lower than in the March Greenbook, reflecting the effects of higher oil prices and higher long-term interest rates. Our forecast also incorporates some anticipatory effects of the 3 percentage point increase in the German value-added tax scheduled for 2007, which should shift some demand and production from early 2007 into late 2006. Higher energy prices have already begun to show up in headline inflation, with prices rising 2.4 percent in the twelve months ending in April. After edging down below 2 percent later this year, inflation will be pushed up to about $21 / 2$ percent in the first quarter of 2007, partly as a result of the German tax hike. We assume that the ECB will raise its official interest
rates another 75 basis points this year to head off inflation and to slow money and credit growth.

We estimate that the Canadian economy grew about $31 / 4$ percent in the first quarter of this year, as monthly GDP data through February indicate that domestic demand continued to expand robustly. The effects of past tightening by the Bank of Canada and one additional assumed tightening of 25 basis points this quarter should cause growth to slow to around 3 percent for most of the remainder of the forecast period. Recent increases in energy prices have led us to revise upward our forecast for headline inflation over the next year, but we project that inflation will fall from $21 / 2$ percent (twelve-month rate) in the current quarter to 2 percent in 2007, in part because of a reduction in the value-added tax.

Real GDP in the United Kingdom rose 2.6 percent at an annual rate in the first quarter, according to the preliminary release. Recent indicators suggest that domestic demand remains strong. We project that growth will pick up further in the current quarter and remain around 3 percent for the rest of the forecast period. We assume that the Bank of England will raise its main policy rate 25 basis points in early 2007 to keep headline inflation near the current rate of about 2 percent throughout the forecast period.

## Emerging Market Economies

We estimate that output growth in developing economies averaged $5 ½$ percent in the first quarter, and we expect growth to moderate to $43 / 4$ percent in the second quarter and remain at that pace for the rest of the forecast period. This projection reflects strong incoming data for China and favorable prospects for growth in the commodity-exporting economies as well as the restraining effects of higher oil prices.

Economic activity in emerging Asia remained quite strong in the first quarter, although the $71 / 4$ percent average growth rate was a step down from the 8 percent average pace during the three previous quarters. Chinese GDP apparently surged at a 13 percent annual rate, prompting the government to announce that it will impose new measures aimed at curbing investment. We expect these policy measures to help reduce Chinese GDP growth to about 7 percent in the second and third quarters, but growth is expected to pick up to $8 \frac{1}{4}$ percent next year. Growth in India is estimated at about 9 percent in the first quarter, but it is expected to moderate to $61 / 2$ percent next year, mainly because of higher oil prices and tighter monetary policy. Output growth in the rest of the region is expected to slow to about 5 percent in both 2006 and 2007, because of the projected slowing in the Chinese economy, higher oil prices, and less favorable financial conditions
stemming from currency appreciations and higher interest rates. At roughly 6 percent, the forecast for emerging Asia for both 2006 and 2007 is little changed from the March Greenbook, as the strong first-quarter Chinese data and an improvement to the outlook for oil-exporting Malaysia offsets the negative impact of higher oil prices elsewhere.

In Latin America, a recovery in Mexico and the effect of strong commodity prices on exports are estimated to have boosted regional output growth to just over 4 percent in the first quarter, and growth is expected to continue at near this pace for the rest of the year. GDP growth is expected to edge down in 2007. This forecast is little changed from the March Greenbook, as a downward revision to Argentina’s outlook is offset by higher growth in primary commodity exporters, including Venezuela, Colombia, and Chile. In Mexico, monetary policy easing over the past year, as well as a recovery in industrial production from last year's weakness, should boost GDP growth from 23/4 percent in 2005 to more than $31 / 2$ percent over the forecast period. In Brazil, output growth is expected to recover to $31 / 2$ percent this year and next, also in part reflecting favorable financial conditions.

Four-quarter inflation in the emerging economies is expected to increase from just over 3 percent in 2005 to $31 / 2$ percent in 2006 and to edge down in 2007. This pattern is largely a result of the pass-through of higher oil prices. In emerging Asia, inflation is expected to rise to just over 3 percent in 2006 and 2007, a move reflecting both the strong growth outlook as well as reduced fuel subsidies in some countries in response to budgetary pressures. In Latin America, inflation is expected to increase to around 4 percent in 2006 and 2007.

## Prices of Internationally Traded Goods

Core import prices, after increasing in the fourth quarter at an annual rate of $21 / 2$ percent, rose $13 / 4$ percent in the first quarter of this year. The first-quarter figure largely reflected a jump in core import prices in January; prices for core goods were unchanged in February and in March. As in the fourth quarter, much of the first quarter's increase in core import prices reflected price increases for nonfuel industrial supplies. Prices of finished goods have seen much smaller increases; in particular, prices of imported consumer goods fell in March.

For the second quarter of 2006, we project that core import price inflation will rise to $33 / 4$ percent, reflecting the effects of higher nonfuel commodity prices and the depreciation of the dollar. Commodity prices continued to move up in recent weeks,
particularly for metals, and they are projected to keep core import price inflation at $31 / 2$ percent for the second half of 2006. Furthermore, the dollar, which restrained core import prices as it strengthened in 2005, has declined so far this year and is projected to continue to decline. In 2007, core import prices decelerate as commodity prices level off despite some continued small boost from dollar depreciation.

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

| Indicator | 2005 |  | Projection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 | 2006 |  |  | 2007 |
|  |  |  | Q1 | Q2 | H2 |  |
| Exports |  |  |  |  |  |  |
| Core goods | 4.9 | 2.9 | 3.3 | 5.1 | 4.3 | 1.7 |
| March GB | 4.9 | 3.0 | 4.0 | 4.9 | 3.4 | 1.3 |
| Imports |  |  |  |  |  |  |
| Nonfuel core goods | 3.3 | 1.1 | 1.7 | 3.8 | 3.5 | 1.3 |
| March GB | 3.3 | 1.2 | 3.1 | 3.4 | 3.1 | 1.2 |
| Oil (dollars per barrel) | 46.30 | 55.40 | 55.12 | 64.73 | 71.03 | 70.65 |
| March GB | 46.30 | 55.40 | 55.13 | 55.64 | 59.41 | 60.76 |

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.

Compared with the previous Greenbook, higher commodity prices and a weaker dollar tend to raise our forecast for core import price inflation. However, first-quarter price data came in much lower than we had expected. All told, our projection of core import price inflation has risen 0.4 percentage point from the March Greenbook for the rest of this year and is little changed in 2007.

Core export prices also came in somewhat lower than we expected in the first quarter. Prices of core exports increased sharply in January, reflecting a surge in prices for exported nonagricultural industrial supplies, and then rose at a modest pace in February and March, as agricultural prices fell. Nevertheless, we project that core export price inflation will rise to 5 percent in the second quarter, driven up by the recent strength in the producer price indexes for petroleum products and intermediate materials excluding food and energy as well as in the prices of primary commodities, especially metals.

These higher input costs are expected to spill over into the second half of 2006, with core export prices projected to increase $41 / 4$ percent. Core export price inflation is expected to decline to $13 / 4$ percent in 2007, 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 is about $1 / 2$ percentage point higher on average, reflecting higher projected prices for intermediate materials and metals.

## Trade in Goods and Services

Real net exports made a negative contribution to real GDP growth of almost $11 / 2$ percentage points in the fourth quarter, and we estimate that they subtracted about $3 / 4$ percentage point in the first. Both exports and imports grew strongly in the first quarter, but the higher initial level of imports implies a decline in net exports, which accordingly subtracts from real GDP growth. A decline in reported oil imports makes the contribution of net exports positive in the second quarter, but thereafter net exports subtract a bit more than $1 / 4$ percentage point on average for the remainder of the forecast period. Apart from the first quarter, for which the estimated contribution has been revised down (that is, become more negative) on account of somewhat softer-thanexpected exports, these projections are on balance slightly more positive than in the March Greenbook, mainly reflecting the weaker path of the dollar.

Real imports of goods and services rose 12 percent at an annual rate in the fourth quarter, and they are estimated to have continued their strong growth in the first quarter. Although nominal imports retreated in February from January's elevated levels, and to a somewhat greater extent than we had predicted, the average for the first two months taken together was quite high. With the notable exception of chemical imports, which declined from their earlier, hurricane-elevated levels, nominal imports across a broad set of categories increased solidly in the two months. In addition, services imports were boosted by licensing payments related to the Winter Olympics. Our estimate for real import growth in the first quarter is slightly higher than in the March Greenbook, as the somewhat weaker-than-expected February data were offset by the surprisingly large adjustment for trade with U.S. territories in the advance first-quarter NIPA data.

Real import growth is expected to fall to 2 percent in the current quarter, as a quirky seasonal adjustment factor leads to a fall in reported oil imports and as the growth rate of core goods steps down to a pace more in line with the projected pace of U.S. growth and core import price inflation. Thereafter, we expect real import growth to average around
$51 / 4$ percent over the remainder of the forecast period. Our projection for core import growth reflects the effect of slowing U.S. growth that is offset somewhat by the deceleration of core import prices. Imports of computers and semiconductors should maintain firm growth; imports of services slow from the first quarter's strong pace but continue to grow steadily. In comparison with the March Greenbook, our projection is weaker on balance, partly reflecting the lower dollar.

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

| Indicator | 2005 |  | Projection |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H 1 | H 2 | 2006 |  |  |  |  |
|  |  |  | Q 1 | Q 2 | H 2 |  |  |
| Real exports | 9.1 | 3.8 | 12.7 | 6.0 | 5.6 | 5.8 |  |
| March GB | 9.1 | 3.8 | 15.0 | 5.7 | 5.1 | 4.9 |  |
| Real imports | 3.5 | 7.1 | 12.7 | 1.9 | 5.7 | 5.1 |  |
| March GB | 3.5 | 7.2 | 12.5 | 2.5 | 5.9 | 5.5 |  |

Note. Changes for years are measured as Q4/Q4; for half-years, Q2/Q4 or Q4/Q2.
Held back by hurricane-induced weakness early on, real exports of goods and services grew only about 5 percent at an annual rate in the fourth quarter. In the first quarter, we estimate that real export growth rebounded to $12 \frac{3}{4}$ percent. Nominal exports increased strongly in January and fell back only slightly in February, remaining at a high level. Exports of aircraft continued to grow strongly, and exports of industrial supplies recovered from their fourth-quarter weakness. Thus, for the first quarter, we project robust growth in exports of core goods, as well as a pick up in exports of services and computers. Since the March Greenbook, we have revised down our projection for overall export growth in the first quarter somewhat, primarily in response to the slightly-weaker-than-expected February data.

We expect real export growth to moderate after the first quarter, to about 6 percent in the second quarter and to 53/4 percent, on average, for the remainder of the forecast period. The growth of core goods exports is projected to decline in the second quarter to a pace more in line with foreign GDP growth and relative prices. Thereafter, growth slows further as the positive impetus of dollar depreciation in 2003-04 wanes and the appreciation of the dollar in 2005 exerts a drag, notwithstanding continued support from
solid foreign GDP growth. The slowing of core exports is partially balanced by an acceleration of services exports, which respond to exchange rate changes with a shorter lag than core exports and are boosted by the projected decline in the dollar. Exports of computers and semiconductors, which grew solidly in 2005, continue to expand steadily this year and next. Since the March Greenbook, our projection for overall export growth beyond the first quarter has been revised up, as exports of core goods and services are boosted by the weaker path of the dollar.

## Alternative Simulation

Although our benchmark forecast is for a relatively flat path of oil prices over the forecast period, it is possible that future supply disruptions could push prices considerably higher. To explore this possibility, we used SIGMA, the staff's forwardlooking multi-country model, to analyze the effects of an immediate and permanent rise in oil prices of 50 percent relative to baseline, implying oil prices of over $\$ 100$ per barrel over the forecast horizon. ${ }^{1}$

We assume that the oil shock occurs in the second quarter of 2006 and that both households and firms understand the nature of the shock. Real GDP growth falls about 0.3 percentage point below baseline in 2006 and nearly 0.2 percentage point below baseline in 2007. Consumer spending (relative to baseline) falls in response to the reduction in permanent income, while firms reduce investment as higher energy costs depress the productivity of capital. The core PCE inflation rate rises roughly 0.2 percentage point above baseline by the latter half of 2006 and remains 0.2 percentage point above baseline over the remainder of the forecast horizon. The rise in core inflation results from higher unit labor costs, as a decline in labor productivity is only gradually offset by falling real wages.

Rising energy costs also contribute to an immediate deterioration of the U.S. trade deficit equal to about 0.8 percentage point of GDP. Given that both firms and households have limited ability to substitute away from energy in the short run, the effects on the trade balance persist through the forecast period. At longer horizons, the trade deficit induced by the higher oil prices gradually narrows as the demand for energy contracts and as U.S. nonfuel imports fall as a result of the decline in U.S. private absorption.

[^9]
## Alternative Simulation:

Higher Oil Prices
(Percent change from previous period, annual rate)

| Indicator and simulation | 2006 |  | 2007 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | H 1 | H 2 | H 1 | H 2 |
| U.S. real GDP |  |  |  |  |
| Baseline | 4.5 | 3.1 | 3.0 | 3.0 |
| Permanent rise | 4.3 | 2.7 | 2.7 | 2.9 |
| U.S. PCE prices |  |  |  |  |
| excluding food and energy <br> Baseline | 2.3 | 2.1 | 2.0 | 1.9 |
| Permanent rise | 2.4 | 2.3 | 2.2 | 2.1 |
| U.S. Trade Balance |  |  |  |  |
| percent of GDP |  |  |  |  |
| Baseline | -6.2 | -6.5 | -6.6 | -6.5 |
| Permanent rise | -7.0 | -7.3 | -7.3 | -7.2 |

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 a Taylor rule.

## Evolution of the Staff Forecast

Current Account Balance


Foreign Real GDP


## Core Import Prices*



[^10]Class II FOMC
Restricted (FR)

| Measure and country | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | $\begin{array}{cc} \text { Projected } \\ 2006 \quad 2007 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REAL GDP (1) |  |  |  |  |  |  |  |  |  |
| Total foreign | 5.1 | 4.2 | 0.4 | 3.1 | 3.0 | 3.7 | 3.8 | 3.6 | 3.4 |
| Industrial Countries of which: | 4.4 | 3.6 | 0.9 | 2.6 | 1.8 | 2.3 | 2.7 | 2.7 | 2.5 |
| Canada | 5.9 | 4.1 | 1.3 | 3.6 | 1.7 | 3.3 | 2.9 | 3.0 | 3.1 |
| Japan | 0.2 | 3.3 | -1.5 | 2.0 | 2.6 | 0.5 | 4.3 | 2.4 | 2.0 |
| United Kingdom | 3.4 | 3.2 | 2.0 | 2.1 | 3.1 | 2.6 | 1.8 | 2.8 | 3.0 |
| Euro Area (2) | 4.1 | 3.2 | 1.0 | 1.2 | 1.0 | 1.6 | 1.8 | 2.2 | 1.5 |
| Germany | 3.5 | 2.3 | 1.1 | 0.2 | 0.2 | 0.5 | 1.6 | 2.5 | 0.9 |
| Developing Countries | 6.3 8.8 | 5.2 | $-0.4$ | 3.9 | 4.7 | 5.7 | 5. 3 | 5.0 | 4.8 |
| Asla Korea | 8.8 11.8 | 5.8 4.3 | 1.1 4.7 | 6.3 7.8 | 6.9 4.2 | 6.1 2.9 | 7.3 5.3 | 6.0 4.5 | 5.8 4.2 |
| China | 7.7 | 8.2 | 7.8 | 9.2 | 10.5 | 10.1 | 9.9 | 8.6 | 8.3 |
| Latin America | 4.4 | 4.4 | -1.3 | 1.5 | 2.3 | 5.2 | 3.1 | 4.0 | 3.7 |
| Mexico | 5.5 | 4.8 | $-1.3$ | 1.9 | 2.0 | 4.8 | 2.7 | 3.7 | 3.5 |
| Brazil | 3.4 | 3.8 | -1.0 | 4.1 | 0.9 | 4.7 | 1.5 | 3.5 | 3.5 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |
| Industrial Countries | 1.2 | 1.8 | 0.9 | 2.1 | 1.3 | 1.8 | 1.6 | 1.7 | 1.8 |
| Canada | 2.4 | 3.1 | 1.1 | 3.8 | 1.7 | 2.3 | 2.3 | 2.2 | 1.9 |
| Japan | -1.0 | -0.9 | -1.0 | -0.5 | -0.4 | 0.5 | -0.5 | 0.9 | 0.9 |
| United Kingdom (4) | 1.1 | 0.9 | 1.1 | 1.5 | 1.3 | 1.4 | 2.1 | 1.9 | 2.1 |
| Euro Area (2) | 1.5 | 2.5 | 2.1 | 2.3 | 2.0 | 2.3 | 2.3 | 1.9 | 2.0 |
| Germany | 1.1 | 1.7 | 1.4 | 1.2 | 1.1 | 2.1 | 2.2 | 1.5 | 2.5 |
| Developing Countries | 4.5 | 4.1 | 2.8 | 2.9 | 3.0 | 3.9 | 3.1 | 3.5 | 3.4 |
| Asia | 0.1 | 1.9 | 1.2 | 0.8 | 2.2 | 3.2 | 2.7 | 3.2 | 3.2 |
| Korea | 1.2 | 2.5 | 3.3 | 3.4 | 3.5 | 3.4 | 2.5 | 3.3 | 3.3 |
| China | -1.0 | 1.0 | -0.1 | -0.5 | 2.7 | 3.3 | 1.4 | 2.9 | 3.0 |
| Latin America | 12.5 | 8.4 | 5.3 | 6.4 | 4.9 | 5.7 | 3.8 | 4.1 | 3.9 |
| Mexico | 13.4 | 8.7 | 5.1 | 5.2 | 3.9 | 5.3 | 3.1 | 3.8 | 3.7 |
| Brazil | 8.4 | 6.4 | 7.5 | 10.7 | 11.5 | 7.2 | 6.1 | 4.9 | 4.5 |

[^11]| 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 | 2.6 | 4.0 | 4.5 | 4.0 | 4.0 | 3.7 | 3.5 | 3.5 | 3.4 | 3.5 | 3.5 | 3.5 |
| Industrial Countries of which: | 2.0 | 3.4 | 2.7 | 2.7 | 2.8 | 3.0 | 2.6 | 2.5 | 2. | 2.6 | 2.5 | 2.5 |
| Canada | 2.1 | 3.6 | 3.5 | 2.5 | 3.2 | 3.2 | 2.8 | 2.7 | 3.0 | 3.1 | 3.1 | 3.1 |
| Japan | 5.5 | 5.7 | 0.8 | 5.4 | 2.1 | 2.9 | 2.5 | 2.3 | 2.2 | 2.1 | 1.9 | $\frac{1}{3} .8$ |
| United Kingdom | ${ }_{1} 0.8$ | 2.1 | 2.1 | 2.3 | 2.6 | 3.0 | 2.9 | 2.9 | 3.0 | 3.0 | 3.1 | 3.1 |
| $\underset{\substack{\text { Euro Area (2) } \\ \text { Germany }}}{ }$ | 1.3 2.4 | 1.7 | 2.8 2.5 | 1.3 0.0 | 2.4 2.6 | 2.5 2.9 | 1.9 2.0 | 2.0 2.5 | 1.0 -0.8 | 1.7 1.7 | 1.7 1.4 | 1.7 1.4 |
| Developing Countries | 3.6 | 4.7 | 7.1 | 5.7 | 5.5 | 4.8 | 4.7 | 4.8 | 4.8 | 4.8 | 4.8 | 4.8 |
| Asia Korea | 5.3 | 7.8 | 7.8 | 8.1 | 7.2 | 5.5 | 5.5 | 5.6 | 5.8 | 5.8 | 5.8 | 5.8 |
| Korea China | 2.1 | 5.9 | 6.6 | 6.7 | 5.1 | 4.4 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 |
| China | 11.9 1.4 | 7.2 1.3 | 8.9 6.7 | 11.5 2.9 | 12.9 4.1 | 6.8 4.0 | 7.2 3.9 3.9 | 7.5 3.9 | 8.3 3.7 3.7 | 8.3 3.7 | 8.3 3.7 | 8.3 3.7 |
| Mexico | 0.6 | -0.7 | 8.7 | 2.4 | 3.8 | 3.7 | 3.7 | 3.7 | 3.5 | 3.5 | 3.5 | 3.5 |
| Brazil | 0.6 | 5.7 | -3.4 | 3.4 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |  |  |  |
| Industrial Countries | 1.5 | 1.5 | 1.8 | 1.6 | 1.9 | 1.9 | 1.7 | 1.7 | 1.9 | 1.8 | 1.8 | 1.8 |
| of which: | 2.1 | 1.9 | 2.7 | 2.3 | 2.5 | 2.5 | 2.0 | 2.2 |  | 1.9 | 2.0 |  |
| Japan | -0.2 | -0.1 | -0.2 | -0.5 | 0.4 | 0.6 | 0.9 | 0.9 | 0.7 | 0.8 | 0.8 | 0.9 |
| United Kingdom (4) | 1.7 | 2.0 | 2.4 | 2.1 | 2.0 | 1.9 | 1.7 | 1.9 | 2.0 | 2.0 | 2.1 | 2.1 |
| $\underset{\substack{\text { Euro Area } \\ \text { Germany }}}{ }(2)$ | 2.1 1.7 | 2.0 1.6 | 2.3 2.1 | 2.3 2.2 | 2.3 2.1 | 2.3 2.2 | 2.0 1.7 | 1.9 1.5 | 2.4 3.0 | 2.1 2.6 | 2.1 2.6 | 2.0 2.5 |
| Developing Countries | 3.5 | 3.3 | 3.0 | 3.1 | 3.1 | 3.1 | 3.2 | 3.5 | 3.8 | 3.8 | 3.6 | 3.4 |
| Asia | 2.9 | 2.4 | 2.3 | 2.7 | 2.5 | 2.6 | 2.8 | 3.2 | 3.8 | 3.7 | 3.4 | 3.2 |
| Korea | 3.1 | 3.0 | 2.4 | 2.5 | 2.4 | 2.3 | 2.6 | 3.3 | 3.8 | 4.1 | 3.7 | 3.3 |
| China | 2.7 | 1.8 | 1.3 | 1.4 | 1.2 | 1.5 | 2.1 | 2.9 | 3.6 | 3.6 | 3.2 | 3.0 |
| Latin America | 4.9 | 5.1 | 4.5 | 3.8 | 4.2 | 3.9 | 3.9 | ${ }_{3} .1$ | 3.9 | 4.0 | 4.0 |  |
| Mexico Brazil | 4.4 7.4 | 4.5 7.7 | 4.0 6.2 | 3.1 6.1 | 3.7 5.6 | 3.4 4.9 | 3.5 5.3 | 3.8 4.9 | 3.6 4.7 | 3.6 4.7 | 3.7 4.6 | 3.7 4.5 |

[^12]Class II FOMC
Restricted (FR)
OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

|  | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | $\begin{gathered} \text { Pre } \\ 2006 \end{gathered}$ | $\begin{aligned} & \text { jected } \\ & 2007 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NIPA REAL EXPORTS and IMPORTS |  |  |  |  |  |  |  |  |  |
|  | Percentage point contribution to GDP growth, Q4/Q4 |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -1.0 | -0.9 | -0.2 | -0.9 | -0.1 | -0.9 | -0.2 | -0.3 | -0.3 |
| Exports of G\&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 | $-1.1$ | -0.9 |
| Percentage change, Q4/Q4 |  |  |  |  |  |  |  |  |  |
| Exports of $G \& S$ | 5.6 | 6.5 | -11.9 | 3.8 | 6.0 | 6.1 | 6.4 | 7.4 | 5.8 |
| Services | 5.3 | 1.8 | -8.9 | 10.2 | 4.5 | 4.6 | 2.8 | 4.3 | 6.9 |
| Computers | 13.4 | 22.7 | -23.5 | $-1.1$ | 11.0 | 6.3 | 13.7 | 14.0 | 14.4 |
| Semiconductors | 34.6 | 27.6 | -34.6 | 10.1 | 38.8 | -6.1 | 17.5 | 15.1 | 17.0 |
| Other Goods 1/ | 3.3 | 5.9 | -10.2 | 0.7 | 4.5 | 7.8 | 7.2 | 8.1 | 4.3 |
| Imports of $G \& S$ | 12.1 | 11.2 | -7.6 | 9.7 | 5.1 | 10.6 | 5.3 | 6.5 | 5.1 |
| Services | 6.6 | 10.6 | -5.9 | 8.8 | 4.2 | 7.7 | 2.4 | 3.5 | 3.5 |
| Oil | -3.4 | 13.3 | 3.7 | 3.8 | 1.5 | 9.7 | 1.9 | -8.7 | 0.9 |
| Computers | 26.0 | 13.9 | $-13.6$ | 13.2 | 16.8 | 22.2 | 12.1 | 18.6 | 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 | 9.5 | 5.5 |
|  | Billions of Chained 2000 Dollars |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -296.2 | -379.5 | -399.1 | $-471.3$ | -521.4 | -601.3 | -633.1 | $-674.7$ | -698.5 |
| Exports of G\&S | 1008.2 | 1096.3 | 1036.7 | 1013.3 | 1031.2 | 1117.9 | 1195.3 | 1281.4 | 1354.3 |
| Imports of G\&S | 1304.4 | 1475.8 | 1435.8 | 1484.6 | 1552.6 | 1719.2 | 1828.3 | 1956.1 | 2052.9 |
| Billions of dollars |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | $-300.1$ | -416.0 | -389.5 | -475.2 | -519.7 | -668.1 | -805.0 | -965.6 | -1088.5 |
| Current Acct as Percent of GDP | -3.2 | -4.2 | -3.8 | -4.5 | -4.7 | -5.7 | -6.4 | -7.2 | -7.7 |
| Net Goods \& Services (BOP) | -263.4 | -378.3 | $-362.7$ | -421.2 | -494.8 | -617.6 | -723.6 | -842.8 | -920.4 |
| Investment Income, Net | 19.1 | 25.7 | 30.3 | 15.5 | 51.8 | 36.2 | 7.4 | -22.7 | -71.2 |
| Direct, Net | 78.2 | 94.9 | 115.9 | 99.8 | 121.8 | 127.9 | 129.9 | 147.5 | 180.1 |
| Portfolio, Net | -59.1 | -69.2 | -85.5 | -84.3 | -70.0 | -91.7 | -122.5 | -170.1 | -251.4 |
| Other Income \& Transfers, Net | -55.8 | $-63.5$ | -57.1 | -69.5 | -76.7 | -86.7 | -88.7 | -100.1 | -96.8 |

[^13]NIPA REAL EXPORTS and IMPORTS


[^14]NIPA REAL EXPORTS and IMPORTS


| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US CURRENT ACCOUNT BALANCE | -791.0 | -787.6 | -741.7 | -899.5 | -900.6 | -949.0 | -980.8 | -1031.9 | -1066.1 | -1070.1 | -1085.8 | -1132.0 |
| Current Account as \% of GDP | -6.5 | -6.4 | -5.9 | -7.0 | -6.9 | -7.2 | -7. 3 | -7.6 | -7.7 | -7.7 | -7.7 | -7.9 |
| Net Goods \& Services (BOP) | $-688.5$ | -690.9 | -725.6 | -789.5 | -792.7 | -826.3 | -859.0 | -892.9 | -924.0 | -909.9 | -910.7 | -937.1 |
| Investment Income, Net | 8.2 | -0.5 | 25.7 | -3.8 | -17.7 | -19.6 | -20.8 | -32.6 | -48.9 | $-65.6$ | -78.8 | -91.6 |
| Direct, Net | 113.5 | 113.9 | 155.4 | 136.7 | 126.8 | 139.9 | 157.1 | 166.1 | 171.3 | 175.8 | 183.3 | 190.2 |
| Portfolio, Net | -105.3 | -114.4 | -129.7 | -140.4 | -144.6 | -159.4 | -177.8 | -198.7 | -220.2 | -241.4 | -262.1 | -281.8 |
| Other Inc. \& Transfers, Ne | -110.6 | -96.2 | -41.8 | -106.2 | -90.1 | -103.1 | -101.1 | -106.4 | -93.2 | -94.6 | -96.3 | -103.3 |

[^15]
[^0]:    ${ }^{1}$ The annual revision to the data on retail sales indicates that consumer spending on goods was considerably weaker over the past two years than is currently estimated in the national income and product accounts. All else equal, the latest retail sales revisions imply that the saving rate was $3 / 4$ percentage point higher at the end of last year than is currently estimated by the BEA. If so, the growth in household spending should be less restrained by the level of the saving rate than we had previously thought. As a consequence, we have added 0.1 percentage point to the average growth in real PCE over the projection period.

[^1]:    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.
[^2]:    ${ }^{2}$ This gradualist Taylor rule is the same as that used in the March Greenbook. For the scenarios discussed in this section, simulation results for output and inflation are little changed if the gradualist Taylor rule is replaced with one that responds immediately to movements in resource utilization and inflation.

[^3]:    1. Level, except for two-quarter and four-quarter intervals.
    
[^4]:    1. Change from fourth quarter of previous year to fourth quarter of year indicated.
    2. Billions of chained (2000) dollars.
[^5]:    1. Change from fourth quarter of previous year to fourth quarter of year indicated.
[^6]:    4. Percent difference between actual and potential GDP; a negative number indicates that the economy is operating below potential. (In previous Annual values are for the fourth quarter of the year indicated.
    5. Percent change, annual rate.
    
    
[^7]:    aggregate demand stimulus.
    a--Actual

[^8]:    Note. Data after 2005:Q4 are staff projections.

    1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.
    2. Includes change in liabilities not shown in home mortgages and consumer credit.
    3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.
    4. For corporations, excess of capital expenditures over U.S. internal funds.
    5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers
    n.s.a. Not seasonally adjusted.
    2.6.4 FOF
[^9]:    ${ }^{1}$ The implications of SIGMA for the effects of oil shocks that are reported below are within the range of estimates derived from other macroeconomic models used at the Board (these models include the FRB/Global model, and variants of the FRB/US model with model-consistent expectations).

[^10]:    *Prices for merchandise imports excluding computers, semiconductors, oil, and natural gas

[^11]:    1. Foreign GDP aggregates calculated using shares of U.S. exports.
    2. Harmonized data for euro area from Eurostat.
    3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.
[^12]:    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.

[^13]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors.
[^14]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors
[^15]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors
