## 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

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

## Summary and Outlook

## Domestic Developments

The time profile of economic activity during the first half of 2005 appears to have been a little different than we anticipated in the April Greenbook: We now estimate that real GDP rose at an annual rate of close to 4 percent in the first quarter and is increasing 3 percent in the second quarter-the reverse of the pattern in the April Greenbook. Nonetheless, the incoming data have supported our view that the soft economic readings of late winter were not signaling a pronounced cooling in the pace of the expansion. Housing activity remains exceptionally robust, and although business investment and consumer expenditures have not regained the exuberance they displayed in the second half of 2004, they appear to have passed through the doldrums that were evident earlier this year. Indeed, orders and shipments of capital goods ticked up in April after two weak months. And although consumer spending-especially on items other than motor vehicles-remained sluggish in the spring, the recent rebound in confidence and rising household wealth bode well for the period ahead. In the manufacturing sector, production picked up in May after a string of lackluster months, and the labor market reports for April and May, taken together, suggest that employment remains on a path of moderate expansion.

We expect the economy to enter the second half of 2005 with a modest head of steam. Long-term interest rates remain low-in fact, they have fallen a bit, on net, since late April—and both house prices and equity values have risen more than we had anticipated. However, the restraint from high energy costs is likely to be greater than we had previously projected, and we have taken on board the stronger dollar. On balance, these developments have not altered the outlook in a material way, and we continue to expect real GDP to increase $33 / 4$ percent in the second half of 2005 and $31 / 2$ percent in 2006. This forecast is virtually the same as the one in the April Greenbook.

The incoming data on prices have been mixed. At the finished level, core CPI inflation slowed appreciably in April and May and was to the low side of our expectations, but these favorable developments do not appear to have carried over to the PCE measure. At earlier stages of processing, the upward pressure on prices of non-energy intermediate materials appears to be subsiding, and some commodity prices have fallen noticeably. Looking ahead, the higher energy prices will raise headline consumer price inflation in the near term and will also nudge up core prices in coming quarters. And with the unemployment rate moving down to 5.1 percent in May and expected to remain there through the end of 2006, slack in resource utilization may exert a bit less restraint on inflation than we had previously thought. Taking all these factors into account, we have
added a couple of tenths to the projection for core PCE price inflation, which now stands at 2.1 percent in 2005 and 1.9 percent in 2006.

## Key Background Factors

We have made a small upward adjustment to our path for the federal funds rate over the second half of this year and now assume that it will rise to $31 / 2$ percent by year-end, a quarter point above the level in the April Greenbook. We continue to assume that the funds rate will reach $33 / 4$ percent by the end of 2006. Futures quotes suggest that financial market participants have shaded down their views of the funds rate expected to prevail beyond mid-2006, leaving no material difference between the market's expectation and ours from that point forward. The nominal ten-year Treasury rate fell sharply through early June, but it has since reversed a good part of the decline and now stands about 20 basis points below the level at the time of the April Greenbook. Long-term interest rates are anticipated to drift up a bit over the next year and a half as higher short-term rates work their way through the term structure. The term premiums now embedded in bond yields appear to be narrow by historical norms; we assume that they will remain around current levels over the forecast period, consistent with the favorable macroeconomic outcomes in our projection. However, movements in term premiums are difficult to predict, and in an alternative simulation we explore the consequences of a return to more-typical levels.

Investors have apparently taken comfort from the relatively low readings on core inflation and from data indicating that the economy remains on a moderate growth track. Broad equity price indexes are currently about 5 percent above the level we had anticipated in the April Greenbook; we have raised the starting point for share prices by this amount and continue to assume that they will increase at a rate of $61 / 2$ percent per year over the forecast period, which would roughly maintain risk-adjusted parity with the yield on long-term bonds. Although house prices, as measured by the OFHEO repeattransactions index, posted another substantial rise in the first quarter, we continue to expect these increases to slow appreciably in coming quarters. Our current forecast has house prices rising $71 / 4$ percent over the four quarters of 2005 and 3 percent in 2006, after an increase of nearly 12 percent in 2004.

On the fiscal front, we have slashed our projections for the federal unified budget deficit to $\$ 329$ billion in fiscal year 2005 and $\$ 338$ billion in 2006; our previous forecast had deficits in the area of $\$ 370$ billion in both years. The downward revision is attributable primarily to strong incoming data for nonwithheld individual income taxes-which are
mainly payments on 2004 liabilities-and we have boosted our forecast of the effective tax rate (roughly speaking, the ratio of taxes to NIPA personal income) going forward.

We have made no significant changes to our fiscal policy assumptions. In particular, we continue to assume that real spending for operations in Iraq and Afghanistan will remain at current levels through 2006 and that other defense spending will rise about 3 percent per year in real terms. On the tax side, we assume that AMT relief and the credit for research and experimentation-both of which are scheduled to expire at the end of 2005 -will be extended. We also assume that mandatory spending will evolve in line with current law, which includes the implementation of the Medicare drug benefit in 2006. On this set of assumptions, federal fiscal policy will provide stimulus of roughly $1 / 4$ percent of GDP in both 2005 and 2006; fiscal stimulus over the preceding three years had been on the order of 1 percent per year.

In light of recent developments in the foreign exchange markets, we have raised our projection for the broad real dollar in the third quarter about 2 percent, but we still expect to see some slight depreciation over the next year and a half. Our outlook for economic activity abroad is very close to that in the April Greenbook, with foreign GDP expected to grow a little under $31 / 2$ percent in both 2005 and 2006.

Although the spot price of West Texas intermediate (WTI) crude oil dipped below \$50 per barrel in May, it has since surged and now stands at $\$ 59$ per barrel. Futures quotes have also moved up. The recent increase in prices seems to be attributable to renewed concerns about the adequacy and reliability of supply against a backdrop of continued strong world demand and a lack of spare capacity among OPEC members. Consistent with futures prices, we now expect WTI to move up to $\$ 61$ per barrel by the fourth quarter of 2005 and to move down just a little in 2006. In the April Greenbook, WTI was expected to average $\$ 54.50$ per barrel in the fourth quarter of 2005 and a bit less than $\$ 53$ per barrel in the fourth quarter of 2006.

## Recent Developments and the Near-Term Outlook

Coming on the heels of an upwardly revised increase in real GDP of nearly 4 percent at an annual rate in the first quarter, second-quarter real GDP is now estimated to have risen 3 percent, $1 / 2$ percentage point less than in the April Greenbook. Defense spendingwhich we had expected to post a double-digit increase-now seems to have risen only a little, and inventory investment-especially in the motor vehicle sector-appears to have

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

| Measure | 2005:Q1 |  | 2005:Q2 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Apr. GB | June GB | Apr. <br> GB | June GB |
| Real GDP | 3.1 | 3.9 | 3.6 | 3.0 |
| Private domestic final purchases | 3.8 | 4.2 | 3.7 | 4.2 |
| Personal consumption expenditures | 3.5 | 3.6 | 3.2 | 3.1 |
| Residential investment | 5.7 | 10.2 | 3.6 | 11.4 |
| Business fixed investment | 4.7 | 4.5 | 7.2 | 7.6 |
| Government outlays for consumption and investment | . 6 | . 1 | 4.0 | 1.7 |
|  | Contribution to growth (percentage points) |  |  |  |
| Inventory investment | 1.0 | . 9 | -. 9 | -1.5 |
| Net exports | -1.3 | -. 6 | . 6 | . 6 |

slowed more sharply than we had expected. On the other hand, housing activity has been considerably stronger.

In the labor market, payroll employment has continued to expand at a moderate-albeit uneven-pace. Smoothing through the choppiness, private nonfarm payrolls rose about 150,000 over the three months ending in May, gains roughly comparable to the average ones over the preceding half-year. Given the recent readings on initial claims, we are looking for a similar increase in payrolls in June. We also expect the unemployment rate to remain at 5.1 percent.

Output in the manufacturing sector is estimated to have increased at an annual rate of about 2 percent in the second quarter, after having risen about 4 percent in the first quarter. The slowing was partly due to a decline in motor vehicle production as the manufacturers held down assemblies in April and May to help reduce inventory overhangs. Output outside the motor vehicle sector was also soft early in the quarter, although it picked up noticeably in May. With motor vehicle assemblies having moved up appreciably and the advance indicators pointing to modest increases elsewhere, we are anticipating a moderate gain in overall factory IP in June.

Consumer spending appears to have been somewhat subdued in the second quarter, held down by high energy prices. We project that, all in all, real consumer outlays have increased about 3 percent at an annual rate, supported by a bounceback in spending on motor vehicles after a weak first quarter. Data on retail sales and consumer prices through May imply only a small rise this quarter in real expenditures on goods other than motor vehicles, while outlays on services in April-the latest available data-were damped by a weather-related drop in spending on energy services and sluggish expenditures elsewhere. However, the prospects for June are brighter: Light vehicles reportedly are selling briskly in response to GM's large discounts, chain store reports point to gains in retail sales, and the preliminary June reading from the Michigan Survey showed a sizable improvement in consumer confidence.

Housing activity continues to boom. Single-family starts averaged more than 1.65 million units at an annual rate in April and May, not much below the sizzling firstquarter pace, and home sales increased again in April; in view of the strength in permits, we expect starts to remain robust in June. Partly because the steep rise in starts in the first quarter is still feeding through to expenditures, real residential investment should post another double-digit gain this quarter.

Real spending on equipment and software appears to have risen at an annual rate of $81 / 4$ percent in the second quarter, a bit faster pace than that in the first quarter. Real outlays in the high-tech category appear to be rising briskly as the result of another substantial increase in real computer investment. And a faster pace of aircraft deliveries should provide a lift to business purchases of transportation equipment even as spending on medium and heavy trucks eases a bit after two exceptionally strong quarters. Moreover, we expect to see a pickup in investment outside the high-tech and transportation areas. Shipments for this broad category advanced in April after falling over the two preceding months, and sizable backlogs of unfilled orders point to further increases in shipments in May and June; we also saw a surge in imports of these types of capital goods in April.

We expect real investment in nonresidential structures to rise at an annual rate of 5 percent this quarter. Spending on drilling and mining structures is poised to reaccelerate after a first-quarter lull, and the increases in construction in March and April lead us to anticipate a small gain for structures outside drilling and mining as well.

After factoring in the information from the Monthly Treasury Statements for April and May and daily data for June, we have lowered our projection for growth in real defense spending this quarter to 3 percent, compared with a projected rise of $11 \frac{1}{2}$ percent in the April Greenbook; we continue to anticipate a small rise in real nondefense purchases. In the state and local sector, the incoming data on employment and construction also point to a small advance in real spending in the current quarter.

We now estimate that net exports subtracted a bit more than $1 / 2$ percentage point from real GDP growth in the first quarter; this amount is considerably smaller than the $11 / 4$ percentage point drag that we estimated in the April Greenbook, and it accounts for the lion's share of our upward revision to real GDP growth in the first quarter. We expect the external sector to contribute roughly $1 / 2$ percentage point to growth in the current quarter: Exports continue to grow solidly while imports decelerate after a big rise in the first quarter.

A marked slowing in the rate of inventory investment is expected to shave $11 / 2$ percentage points from real growth this quarter. About two-thirds of the downswing is associated with a drawdown of motor vehicle stocks, but we also think that stocks outside the motor vehicle sector will accumulate less rapidly than they did in the first quarter, consistent with the relatively modest increase in the book value of manufacturing and trade stocks in April.

Our translation of the data for the consumer price index through May suggests that core PCE prices are rising at an annual rate of $21 / 4$ percent in the second quarter, the same rate as in the first quarter. However, with PCE energy prices likely to have registered an increase of more than 25 percent this quarter, our forecast has total PCE prices rising $33 / 4$ percent.

## The Longer-Run Outlook for the Economy

As in recent Greenbooks, our projection is conditioned on further increases in the federal funds rate, while fiscal policy is anticipated to provide much less stimulus than it did between 2002 and 2004. But these retarding influences are counterbalanced by an abatement of energy-related headwinds after the next few quarters and continued low long-term interest rates. On balance, we expect real GDP growth to pick up to an annual rate of $33 / 4$ percent in the second half of 2005 and to slow only a little-to $31 / 2$ percent-in 2006; the projected average pace of growth over the next six quarters is just a touch faster than potential.

| Projections of Real GDP (Percent change at annual rate from end of preceding period except as noted) |  |  |  |
| :---: | :---: | :---: | :---: |
| Measure | 2005 |  | 2006 |
|  | H1 | H2 |  |
| Real GDP | 3.4 | 3.7 | 3.4 |
| Previous | 3.4 | 3.7 | 3.5 |
| Final sales | 3.8 | 3.7 | 3.4 |
| Previous | 3.4 | 4.0 | 3.5 |
| PCE | 3.3 | 3.4 | 3.6 |
| Previous | 3.4 | 3.6 | 3.4 |
| Residential investment | 10.8 | -1.0 | . 2 |
| Previous | 4.6 | 1.8 | . 4 |
| BFI | 6.0 | 10.4 | 8.1 |
| Previous | 6.0 | 10.1 | 8.7 |
| Government purchases | . 9 | 2.9 | 2.2 |
| Previous | 2.3 | 2.5 | 2.2 |
| Exports | 8.8 | 8.0 | 6.2 |
| Previous | 8.0 | 8.5 | 6.7 |
| Imports | 5.8 | 6.7 | 6.6 |
| Previous | 7.3 | 6.9 | 6.4 |
|  | Contribution to growth (percentage points) |  |  |
| Inventory change | -. 3 | . 0 | . 0 |
| Previous | . 0 | -. 2 | . 0 |
| Net exports | -. 0 | -. 3 | -. 4 |
| Previous | -. 3 | -. 2 | -. 3 |

Household spending. Although consumption has exhibited some softness lately, we expect spending to firm in the third quarter and to rise at an annual rate of $31 / 2$ percent over the next year and a half. Real income is expected to post solid gains over this period as the ongoing improvement in the job market bolsters wages and salaries, the hit to real income growth from rising energy prices wanes, and transfers get a boost in 2006 from the implementation of the Medicare prescription drug benefit. In light of the higher trajectory for household net worth in this Greenbook, we now expect wealth to add nearly
$3 / 4$ percentage point to real PCE growth in 2005, although the impetus is likely to subside as we move into 2006.

Given the robust incoming data on starts and sales, the favorable outlook for employment and income, and mortgage rates that remain low, housing activity seems likely to retain considerable vigor through 2006. Indeed, we continue to expect single-family starts to total 1.65 million units in 2005 and to ease off only a little in 2006. Multifamily starts are projected at 350,000 units in both 2005 and 2006, the same as in 2004.

Business investment. Investment in equipment and software appears to be regaining some momentum after a lackluster first quarter, and we expect spending to grow at a respectable clip from here on. The reasons are familiar and include the favorable prospects for sales, supportive financial market conditions, and the ongoing need to replace or upgrade aging equipment and software. In total, real E\&S spending is forecast to rise at an annual rate of 10 percent between now and the end of 2006, with solid gains for the high-tech sector and moderate increases for other types of equipment.

We are also forecasting a discernable improvement in nonresidential construction. Vacancy rates have come down in recent quarters, and as long as business activity and hiring expand as we are anticipating, construction should pick up a bit from the depressed levels of the past few years. Indeed, outlays on manufacturing structures are already moving up. Spending on drilling and mining structures is expected to rise rapidly through mid-2006, but-given our forecast of energy prices-to flatten out after that.

After several quarters of substantial accumulation, inventories seem to be at comfortable levels, and the pace of stockbuilding should slow. If our assessment is correct, that process has already begun; we expect it to continue in coming quarters, with inventory investment running at a level that keeps inventory-sales ratios on a downward trend that is driven by ongoing improvements in supply-chain and logistics management.

Government spending. We expect that real federal outlays will rise at an annual rate of about 4 percent, on average, in the second half of 2005 and 2 percent in 2006. Defense spending, which has fallen short of expectations in recent quarters, is projected to quicken in the second half of 2005 before settling onto a path of slower growth next year. We also anticipate that nondefense purchases will continue to post small real increases. As has occurred at the federal level, many states and localities are experiencing
substantial revenue inflows, which should help to lift real growth in purchases to a little more than 2 percent in the second half of 2005 and $2 \frac{1}{2}$ percent in 2006.

Net exports. The higher assumed path for the dollar has led us to lower the projected growth of real exports to 8 percent in the second half of 2005 and $61 / 4$ percent in 2006, $1 / 2$ percentage point less in each period than forecast in the April Greenbook. Meanwhile, real imports are expected to rise roughly $61 / 2$ percent per year over the next year and a half. All in all, the external sector is expected to deduct $1 / 4$ percentage point, on average, from real GDP growth in the second half of 2005 and nearly $1 / 2$ percentage point in 2006. (The International Developments section provides more detail on the outlook for the external sector.)

## Aggregate Supply, the Labor Market, and Inflation

We have made some minor changes to our estimates of growth in structural labor productivity and potential GDP over the forecast period. Structural productivity is now assumed to grow 3.0 percent in 2005 and 3.1 percent in 2006, while potential GDP grows 3.2 percent and 3.4 percent in those years. ${ }^{1}$ With actual GDP projected to increase a tad faster than potential through next year, the output gap is expected to narrow only slightly, from about 1 percent of GDP currently to $3 / 4$ percent of GDP in the fourth quarter of 2006 .

The incoming labor market data point to less slack than is suggested by the output gap. The 5.1 percent reading for the unemployment rate in May is just a shade above our estimated NAIRU of 5 percent. In addition, the participation rate has ticked up over the past couple of months and is only a little below our estimate of its longer-run trend. In putting together our price projection, we balanced these divergent signals and assumed that a small remaining margin of slack in resource utilization will exert a modest amount of restraint on inflation in 2005 and 2006. Of course, the estimates of the NAIRU and potential GDP that underlie our measures of slack are subject to considerable uncertainty, but model simulations suggest that small errors in these estimates would have only limited consequences for inflation over the relatively brief period of our forecast. For example, according to our rules of thumb, lowering the NAIRU to $41 / 2$ percent would, all

[^0]
## Decomposition of Structural Labor Productivity

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

| Measure | $1974-$ <br> 95 | $1996-$ <br> 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Structural labor productivity | $\mathbf{1 . 5}$ | $\mathbf{2 . 7}$ | $\mathbf{3 . 3}$ | 3.7 | 3.5 | $\mathbf{3 . 0}$ | $\mathbf{3 . 1}$ |
| $\quad$ Previous | 1.5 | 2.7 | 3.3 | 3.7 | 3.4 | 2.9 | 3.1 |
| Contributions $^{1}$ |  |  |  |  |  |  |  |
| Capital deepening $_{\quad \text { Previous }}$ | .7 | 1.3 | .6 | .7 | .9 | 1.1 | 1.1 |
| Multifactor productivity | .7 | 1.3 | .6 | .7 | .8 | 1.0 | 1.1 |
| $\quad$ Previous | .5 | 1.1 | 2.4 | 2.8 | 2.4 | 1.7 | 1.7 |
| Labor composition | .5 | 1.1 | 2.4 | 2.8 | 2.4 | 1.7 | 1.7 |
| MEMO | .3 | .3 | .3 | .3 | .3 | .3 | .2 |
| Potential GDP |  |  |  |  |  |  |  |
| $\quad$ Previous | 3.0 | 3.4 | 3.4 | 3.6 | 3.5 | 3.2 | 3.4 |

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

1. Percentage points.
else being equal, trim a tenth of a percentage point from the inflation forecast for 2005 and $1 / 4$ percentage point from the forecast for 2006; assuming a $51 / 2$ percent NAIRU would have the opposite effect.

Productivity and the labor market. We expect payroll employment to rise about 170,000 per month, on average, in the second half of 2005 before slowing to an average pace of 140,000 per month as output growth moderates a bit in 2006. This pace of hiring should be sufficient to hold the unemployment rate at 5.1 percent through the end of 2006, 0.2 percentage point below the level in the April Greenbook. Labor force participation is also expected to hold steady after having moved up over the past couple of months. We continue to expect productivity in the nonfarm business sector to rise a bit more than $21 / 2$ percent per year; this rate of increase would be about $1 / 2$ percentage point below its underlying structural pace and would essentially close the gap between actual and structural productivity by the end of 2006.

Wages and prices. The projection for core PCE price inflation is slightly above that in the April Greenbook. One reason is that, although the recent data for the CPI have come in a bit below our expectations, core PCE inflation seems to be running a little higher.

| The Outlook for the Labor Market (Percent change, Q4 to Q4, except as noted) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Measure | 2003 | 2004 | 2005 | 2006 |
| Output per hour, nonfarm business Previous | 5.4 5.5 | 2.8 2.8 | 2.5 2.2 | 2.6 |
| Nonfarm private payroll employment Previous | -. 1 | $\begin{aligned} & 1.8 \\ & 1.8 \end{aligned}$ | 1.7 | 1.3 |
| Household survey employment Previous | 1.2 1.2 | 1.3 | 1.4 1.1 | 1.2 |
| Labor force participation rate ${ }^{1}$ Previous | $\begin{aligned} & 66.1 \\ & 66.1 \end{aligned}$ | $66.0$ | $\begin{aligned} & 66.0 \\ & 65.9 \end{aligned}$ | $\begin{aligned} & 66.0 \\ & 65.9 \end{aligned}$ |
| Civilian unemployment rate ${ }^{1}$ Previous | $\begin{aligned} & 5.9 \\ & 5.9 \end{aligned}$ | 5.4 5.4 | 5.1 5.3 | 5.1 5.3 |
| $\begin{aligned} & \text { MEMO } \\ & \text { GDP gap }{ }^{2} \\ & \quad \text { Previous } \end{aligned}$ | 1.4 1.4 | 1.1 1.3 | .7 1.0 | .7 .9 |
| 1. Percent, average for the fourth quarte <br> 2. Percent difference between potential of the year indicated. A positive number i operating below potential. | actua dicates | GDP <br> hat the | he fou onomy | quarter |

In addition, we have factored in the sharper upswing in energy prices and the lower unemployment rate. At the same time, the stronger dollar in this Greenbook and softer prices for core intermediate materials should put some restraint on prices increases.

We are assuming that the outsized increases in the $\mathrm{P} \& \mathrm{C}$ measure of hourly compensation over the past two quarters are not providing a strong signal about the underlying trend in compensation. These data are volatile and subject to revision, and a good deal of the increase in the fourth quarter of 2004 appears to reflect a bulge in stock option exercises that should not have a large effect on price inflation. Moreover, the employment cost index (ECI), which does not include realizations of stock options, decelerated noticeably during the same period.

Our forecast has the ECI rising 4 percent this year and $43 / 4$ percent in 2006-the rise being supported by the tightening of the labor market, the pass-through of the productivity gains of recent years, and the lagged effects of the pickup in overall price inflation in 2004 and 2005. The P\&C measure of hourly compensation is also expected to increase in the neighborhood of 4 percent in 2005 and 5 percent in 2006.

## Inflation Projections

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

| Measure | 2003 | 2004 | 2005 | 2006 |
| :---: | :---: | :---: | :---: | :---: |
| PCE chain-weighted price index | 1.7 | 2.6 | 2.5 | 1.7 |
| $\quad$ Previous | 1.7 | 2.6 | 2.1 | 1.6 |
| Food and beverages | 2.7 | 2.9 | 2.2 | 2.2 |
| Previous | 2.7 | 2.9 | 1.9 | 2.1 |
| Energy | 7.2 | 18.5 | 9.9 | -1.4 |
| $\quad$ Previous | 7.2 | 18.5 | 4.5 | -1.3 |
| Excluding food and energy | 1.2 | 1.6 | 2.1 | 1.9 |
| $\quad 1.2$ | 1.6 | 1.9 | 1.7 |  |
| Previous | 1.9 | 3.4 | 2.9 | 2.0 |
| Consumer price index | 1.9 | 3.4 | 2.5 | 1.8 |
| $\quad$ Previous | 1.2 | 2.1 | 2.4 | 2.3 |
| Excluding food and energy | 1.2 | 2.1 | 2.4 | 2.1 |
| $\quad$ Previous | 1.7 | 2.4 | 2.3 | 1.9 |
| GDP chain-weighted price index | 1.7 | 2.4 | 2.1 | 1.8 |
| Previous |  |  |  |  |
| ECI for compensation of private | 4.0 | 3.8 | 4.0 | 4.8 |
| $\quad$ industry workers ${ }^{1}$ | 4.0 | 3.8 | 4.5 | 4.6 |
| Previous | 5.3 | 5.9 | 4.0 | 5.0 |
| NFB compensation per hour | 5.3 | 4.3 | 4.4 | 4.7 |
| Previous | 1.6 | 3.7 | 2.6 | .5 |
| Prices of core nonfuel imports | 1.6 | 3.7 | 3.1 | .6 |
| Previous |  |  |  |  |

1. December to December.

All told, we now expect core PCE prices to rise 2.1 percent in 2005 and 1.9 percent in 2006, 0.2 percentage point more in each year than was projected in the April Greenbook. As before, the deceleration in 2006 largely reflects the tailing off of the indirect effects of the higher energy prices and the waning of increases in import prices. Overall PCE inflation is expected to total 2.5 percent in 2005 before easing to 1.7 percent in 2006.

## Financial Flows and Conditions

After having increased $81 / 2$ percent in 2004, domestic nonfinancial debt is projected to expand a bit less than 8 percent this year and $61 / 2$ percent in 2006. The projection calls for slower debt growth than last year for households, state and local governments, and the federal government, which more than offsets an uptick in business borrowing.

Household debt is expected to increase $81 / 2$ percent this year and about $61 / 2$ percent next year, after having risen about 11 percent in 2004. Mortgage borrowing is projected to slow as the pace of home-price appreciation cools, while consumer debt should continue to expand at a moderate pace.

Buoyed by a turnaround in short-term borrowing, nonfinancial business debt rose $51 / 2$ percent last year; we expect it to increase nearly $61 / 2$ percent, on average, in 2005 and 2006. The projected pickup mainly reflects the increased need to finance capital expenditures as profits level off; robust acquisition and share buyback activity should also provide some impetus to borrowing. However, demand for external finance is tempered by the unusually large stock of liquid assets that firms have accumulated over the past few years and by cash from tax-favored repatriation of earnings from abroad.

Federal debt, which grew 9 percent last year, is expected to increase at a pace that averages about $71 / 2$ percent over this year and 2006, a rate consistent with the smaller budget deficits we are projecting. State and local debt growth is projected to be nearly 8 percent this year and then to fall back to about 4 percent in 2006 as opportunities for advance refunding diminish.

After having expanded $5 \frac{1}{4}$ percent in 2004, M2 is projected to increase only 2 percent this year and $33 / 4$ percent during 2006. We look for money demand to expand considerably less than nominal income over the forecast period because of the rising opportunity costs associated with policy tightening.

## House Prices and the Economic Outlook

The rapid rise in real estate values since the mid-1990s has prompted concerns that house prices may have become significantly misaligned with fundamentals. In our baseline forecast, the market is projected to merely cool, with prices expected to rise another 5 percent by the end of next year. But a larger and more rapid correction in real estate values is certainly well within any reasonable confidence interval. To illustrate some of the possible macroeconomic consequences of a downturn in this market, we assume that nominal house prices decline 10 percent by late 2006 and an additional 5 percent in 2007; in real terms, this decline would cumulate to 20 percent, an amount that by some staff estimates would roughly eliminate the current overvaluation. Such a drop would be

## Predicted Effect of a 10 Percent Decline in House Prices

 from Current Levels by Late 2006, Followed by a Further 5 Percent Decline in 2007(Percentage point difference from baseline in the fourth-quarter average except as noted)

| Simulation assumption and measure | 2005 | 2006 | 2007 |
| :---: | :---: | :---: | :---: |
| Standard spending response |  |  |  |
| No monetary accommodation |  |  |  |
| Change in real GDP ${ }^{1}$ | . 0 | -. 2 | -. 4 |
| Unemployment rate | . 0 | . 1 | . 3 |
| Core PCE inflation ${ }^{1}$ | . 0 | . 0 | -. 1 |
| Personal saving rate | . 0 | . 3 | . 7 |
| Federal funds rate | . 0 | . 0 | . 0 |
| Taylor rule |  |  |  |
| Change in real GDP ${ }^{1}$ | . 0 | -. 2 | -. 1 |
| Unemployment rate | . 0 | . 1 | . 2 |
| Core PCE inflation ${ }^{1}$ | . 0 | . 0 | . 0 |
| Personal saving rate | . 0 | . 2 | . 5 |
| Federal funds rate | . 0 | -. 2 | -. 4 |
| Heightened spending response |  |  |  |
| No monetary accommodation |  |  |  |
| Change in real GDP ${ }^{1}$ | -. 2 | -1.1 | -. 7 |
| Unemployment rate | . 1 | . 6 | 1.2 |
| Core PCE inflation ${ }^{1}$ | . 0 | -. 1 | -. 4 |
| Personal saving rate | . 2 | 1.3 | 1.9 |
| Federal funds rate | . 0 | . 0 | . 0 |
| Taylor rule |  |  |  |
| Change in real GDP ${ }^{1}$ | -. 2 | -. 8 | . 3 |
| Unemployment rate | . 1 | . 5 | . 5 |
| Core PCE inflation ${ }^{1}$ | . 0 | . 0 | -. 1 |
| Personal saving rate | . 2 | . 9 | . 8 |
| Federal funds rate | -. 2 | -1.1 | -1.2 |

Note. In the staff baseline projection, the OFHEO repeat transactions price index increases 5 percent from its current level by the end of 2006; for illustrative purposes, we assume that an extension of the baseline would show a further 2 percent increase in 2007. Thus, in the simulations, the stated declines in house prices from current levels mean that the prices are 15 percent below baseline by the end of 2006 and 22 percent below baseline by the end of 2007. For definitions of spending responses, see text.

1. Percentage point difference from baseline; change in GDP and inflation measured from the fourth quarter of the previous year through the fourth quarter of the year indicated.
larger and faster in real terms than the worst slump of the past thirty years, which occurred in the early 1980s. ${ }^{2}$

The simulated drop in real estate values would reduce household net worth almost $\$ 3$ trillion by late next year relative to our baseline forecast and thus would cut into consumer spending and residential investment. Based on the size of the wealth effect built into our staff models, a loss of this magnitude would raise the steady-state personal saving rate 1 percentage point above its baseline value, when interest rates and other factors are held unchanged. Because the reduction in wealth relative to baseline occurs gradually, and households adjust their spending slowly in response to changes in wealth, the assumed slump in real estate values would likely have only small macroeconomic effects through next year: Assuming no monetary policy offset, FRB/US simulations suggest that real GDP growth would be $1 / 4$ percentage point below baseline in 2006, and changes in unemployment and inflation would be minimal. The simulated macroeconomic effects become somewhat more noticeable in 2007, when real GDP growth falls about $1 / 2$ percentage point below baseline and the unemployment rate rises $1 / 4$ percentage point above baseline by the end of the year; this additional slack would have only a small effect on inflation. Of course, even these modest consequences of a housing market slump could be mitigated by an accommodative monetary policy response: Under the Taylor rule, for example, the funds rate would be cut gradually by almost $1 / 2$ percentage point relative to baseline, and this increased monetary stimulus would be enough to keep real GDP growth largely unchanged in 2007.

These fairly benign simulation results can be questioned on several counts. First, the precise magnitude of the wealth effect is uncertain; some estimates of the historical sensitivity of consumption to changes in real estate wealth are almost twice as large as the estimate built into FRB/US. Second, this sensitivity may have increased in recent years: Innovations in mortgage finance have made it easier to tap equity in homes, and this easing of financial constraints may have interacted with higher real estate values to boost spending more than the standard wealth effect would imply; presumably this equity-extraction effect would operate in the opposite direction were house prices to fall. Third, a major housing market slump might make households more uncertain about their future financial situations, thereby sparking an outsized decline in consumer confidence and weakening aggregate spending beyond the model's predictions.

[^1]Some combination of these factors might well enlarge the response of the saving rate to the fall in house prices; in the "heightened spending response" simulation, we have assumed that the saving rate rises an additional $1 \frac{1}{4}$ percentage points, bringing the total increase in the saving rate (relative to baseline) to almost 2 percentage points by the end of 2007. ${ }^{3}$ When such a magnified consumption response is incorporated into the FRB/US simulations, the housing market correction lowers real GDP growth almost 1 percentage point, on average, in 2006 and 2007 relative to baseline, assuming no monetary offset. Under these conditions, the unemployment rate would be $1 \frac{1}{4}$ percentage points above baseline by late 2007, and inflation would slow more noticeably. A more accommodative monetary policy could moderate this more severe contraction: Again under the Taylor rule, a phased-in cut in the funds rate of $1 \frac{1}{4}$ percentage points relative to baseline would allow real GDP to begin to recover in 2007, but the unemployment rate at the end of that year would still be $1 / 2$ percentage point above baseline.

## Alternative Simulations

A housing market correction is not the only risk to the outlook, and in this section we evaluate several other alternatives to the staff forecast using simulations of the FRB/US model. Our first scenario considers the possibility that we have understated the strength of aggregate demand. The next two scenarios involve opposing risks to the inflation outlook-that structural productivity gains may be larger than we expect and that labor cost pressures may be more intense. Turning to financial markets, a fourth scenario addresses the risk that the term premiums embedded in bond yields will rise to levels more in line with historical norms. In all these simulations, the funds rate follows the baseline path. Finally, we consider a scenario in which monetary policy tightens more rapidly than in the baseline.

Stronger demand. Aggregate spending may grow more rapidly than we project for any number of reasons: The housing market could remain red-hot; business investment might rebound more briskly; and the dollar might depreciate sharply, boosting net exports. Such events—should they occur—would imply that the economy's equilibrium real funds rate is higher than is implicit in the staff projection. In this scenario, we boost aggregate spending by enough to bring the implicit equilibrium real rate close to its historical average, which is more than 1 percentage point above its baseline value. Under these circumstances, real GDP grows $41 / 2$ percent at an annual rate, on average, over the

[^2]| Alternative Scenarios <br> (Percent change, annual rate, from end of preceding period, except as noted) |  |  |  |
| :---: | :---: | :---: | :---: |
| Measure and scenario | 2005 |  | 2006 |
|  | H1 | H2 |  |
| Real GDP |  |  |  |
| Baseline | 3.4 | 3.7 | 3.4 |
| Stronger demand | 3.4 | 4.6 | 4.4 |
| Stronger compensation pressures | 3.4 | 3.8 | 3.4 |
| Faster productivity growth | 3.4 | 4.1 | 4.3 |
| Higher bond premiums | 3.4 | 3.4 | 2.2 |
| Faster tightening | 3.4 | 3.7 | 3.1 |
| Civilian unemployment rate ${ }^{1}$ |  |  |  |
| Baseline | 5.1 | 5.1 | 5.1 |
| Stronger demand | 5.1 | 4.9 | 4.4 |
| Stronger compensation pressures | 5.1 | 5.1 | 5.1 |
| Faster productivity growth | 5.1 | 5.2 | 5.2 |
| Higher bond premiums | 5.1 | 5.1 | 5.7 |
| Faster tightening | 5.1 | 5.1 | 5.2 |
| PCE prices excluding food and energy |  |  |  |
| Baseline | 2.2 | 2.0 | 1.9 |
| Stronger demand | 2.2 | 2.0 | 2.0 |
| Stronger compensation pressures | 2.2 | 2.7 | 3.1 |
| Faster productivity growth | 2.2 | 1.9 | 1.5 |
| Higher bond premiums | 2.2 | 1.9 | 1.7 |
| Faster tightening | 2.2 | 2.0 | 1.8 |

1. Average for the final quarter of the period.
remainder of this year and next, pulling the unemployment rate below $41 / 2$ percent by late 2006. Inflation ticks up relative to baseline in 2006 and would rise further in 2007 in the absence of a monetary offset.

Stronger compensation pressures. In the baseline projection, we heavily discounted the large increase in compensation per hour in late 2004. In this scenario, we assume that hourly compensation continues to grow at last year's 6 percent pace in the second half of 2005 and in 2006-roughly a percentage point faster than in the baseline. Importantly, we also assume that firms have sufficient pricing power to protect their profit margins despite the faster rise in labor costs and thus are able to return the markup to baseline by late next year. Under these conditions, core PCE inflation rises to 3 percent in 2006. Because the pickup in inflation leads market participants to expect that monetary policy
will eventually need to tighten, it pushes up bond yields even though the nominal funds rate is unchanged from baseline. As a result, real activity is little changed despite a fall in the real funds rate.

Faster productivity growth. The baseline forecast incorporates a step-down in structural multifactor productivity growth, from $2 \frac{1}{2}$ percent in 2004 to $13 / 4$ percent per year in 2005 and 2006. However, we may have underestimated the ongoing pace of technological innovation and its contribution to future gains in output per hour. This scenario assumes that structural productivity continues rising at its 2004 pace this year and next. The better productivity performance implies a brighter outlook for household income and corporate profits and thus stronger gains in consumer spending and business investment. Assuming that financial market participants already share this view of the economy's growth potential, the change does not imply any major revision to asset prices. Under these conditions, real GDP rises at a pace of $41 / 4$ percent on average in the second half of this year and in 2006-about in line with the associated higher rate of growth of potential output. The unemployment rate is little changed from baseline, but with unit labor costs growing more slowly in this scenario, core inflation moves down to $11 / 2$ percent in 2006.

Higher bond premiums. The yield curve has flattened substantially over the past year, in large part because of a precipitous drop in far-forward rates that has pushed estimated term premiums to an unusually low level. In this scenario, far-forward rates retrace all of this decline, adding 80 basis points to the yield on 10-year Treasury notes; yields on private bonds rise by larger amounts as the economy weakens and risk spreads widen. These higher interest rates restrain consumption and investment, causing real GDP growth to slow to $2 \frac{1}{4}$ percent by 2006. The unemployment rate rises to $53 / 4$ percent by late next year, and inflation falls to $13 / 4$ percent.

Faster tightening. In this scenario, monetary policy tightens more quickly than we have assumed in the baseline, with the funds rate rising 25 basis points at each of the next four FOMC meetings and then remaining at 4 percent. In the model, investors interpret the faster tightening as signaling a longer-run path for the funds rate that is a little higher than that built into baseline expectations, and so bond yields are about 15 basis points above baseline in 2006. Real GDP rises $1 / 4$ percentage point less in 2006 than in the baseline. However, if investors were to view the faster tightening as only a brief departure from the expected future path of the funds rate, bond rate and output effects would be even smaller.

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

| Measure | 2005 | 2006 |
| :---: | :---: | :---: |
| Real GDP <br> (percent change, Q4 to Q4) |  |  |
| Projection | 3.6 | 3.4 |
| Confidence interval |  |  |
| Greenbook forecast errors ${ }^{1}$ | 2.2-5.0 | 1.5-5.3 |
| FRB/US stochastic simulations | 2.9-4.2 | 2.0-5.1 |
| Civilian unemployment rate (percent, Q4) |  |  |
| Projection | 5.1 | 5.1 |
| Confidence interval |  |  |
| Greenbook forecast errors ${ }^{1}$ | 4.7-5.6 | 4.3-5.9 |
| FRB/US stochastic simulations | 4.8-5.4 | 4.2-5.9 |
| PCE prices excluding food and energy (percent change, Q4 to Q4) |  |  |
| Projection | 2.1 | 1.9 |
| Confidence interval |  |  |
| Greenbook forecast errors ${ }^{2}$ | 1.7-2.6 | 1.1-2.6 |
| FRB/US stochastic simulations | 1.9-2.3 | 1.2-2.6 |

Note. Shocks underlying stochastic simulations are randomly drawn from the 1978-2004 set of model equation residuals.

1. 1978-2004.
2. 1981-2004.

## Forecast Confidence Intervals and Alternative Scenarios

## Confidence Intervals Based on FRB/US Stochastic Simulations

| Greenbook baseline | Saster productivity |
| :--- | :--- | :--- |
| Stronger demand | Higher bond premiums |
| Stronger compensation pressures | Faster tightening |
| $\longleftarrow$ | Falling house prices, standard spending response (no monetary accommodation) |
| Falling house prices, heightened spending response (no monetary accommodation) |  |

Real GDP


Unemployment Rate


PCE Prices excluding Food and Energy


Strictly Confidential <FR> Class II FOMC

| Interval |  | Nominal GDP |  | Real GDP |  | PCE price index |  | Core PCE price index |  | Unemployment rate ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 4/28/05 | 6/22/05 | 4/28/05 | 6/22/05 | 4/28/05 | 6/22/05 | 4/28/05 | 6/22/05 | 4/28/05 | 6/22/05 |
| ANNUAL |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  | 3.5 | 3.5 | 1.9 | 1.9 | 1.4 | 1.4 | 1.8 | 1.8 | 5.8 | 5.8 |
| 2003 |  | 4.9 | 4.9 | 3.0 | 3.0 | 1.9 | 1.9 | 1.3 | 1.3 | 6.0 | 6.0 |
| 2004 |  | 6.6 | 6.6 | 4.4 | 4.4 | 2.2 | 2.2 | 1.5 | 1.5 | 5.5 | 5.5 |
| 2005 |  | 6.0 | 6.1 | 3.6 | 3.7 | 2.3 | 2.5 | 1.8 | 1.9 | 5.3 | 5.2 |
| 2006 |  | 5.4 | 5.5 | 3.6 | 3.5 | 1.7 | 2.0 | 1.8 | 1.9 | 5.3 | 5.1 |
| QUARTERLY |  |  |  |  |  |  |  |  |  |  |  |
| 2003 | Q1 | 4.9 | 4.9 | 1.9 | 1.9 | 3.2 | 3.2 | 1.5 | 1.5 | 5.8 | 5.8 |
|  | Q2 | 5.3 | 5.3 | 4.1 | 4.1 | 0.7 | 0.7 | 1.1 | 1.1 | 6.1 | 6.1 |
|  | Q3 | 8.8 | 8.8 | 7.4 | 7.4 | 1.6 | 1.6 | 0.9 | 0.9 | 6.1 | 6.1 |
|  | Q4 | 5.7 | 5.7 | 4.2 | 4.2 | 1.2 | 1.2 | 1.3 | 1.3 | 5.9 | 5.9 |
| 2004 | Q1 | 7.4 | 7.4 | 4.5 | 4.5 | 3.3 | 3.3 | 2.1 | 2.1 | 5.6 | 5.6 |
|  | Q2 | 6.6 | 6.6 | 3.3 | 3.3 | 3.1 | 3.1 | 1.7 | 1.7 | 5.6 | 5.6 |
|  | Q3 | 5.5 | 5.5 | 4.0 | 4.0 | 1.3 | 1.3 | 0.9 | 0.9 | 5.5 | 5.5 |
|  | Q4 | 6.2 | 6.2 | 3.8 | 3.8 | 2.7 | 2.7 | 1.7 | 1.7 | 5.4 | 5.4 |
| 2005 | Q1 | 6.5 | 7.1 | 3.1 | 3.9 | 2.1 | 2.1 | 2.2 | 2.2 | 5.3 | 5.3 |
|  | Q2 | 6.3 | 5.6 | 3.6 | 3.0 | 3.2 | 3.7 | 1.9 | 2.2 | 5.3 | 5.1 |
|  | Q3 | 5.0 | 5.4 | 3.7 | 3.8 | 1.4 | 2.4 | 1.9 | 2.1 | 5.3 | 5.1 |
|  | Q4 | 5.3 | 5.6 | 3.7 | 3.7 | 1.6 | 2.0 | 1.8 | 2.0 | 5.3 | 5.1 |
| 2006 | Q1 | 5.7 | 5.8 | 3.6 | 3.5 | 1.6 | 1.8 | 1.8 | 1.9 | 5.3 | 5.1 |
|  | Q2 | 5.3 | 5.3 | 3.5 | 3.4 | 1.6 | 1.7 | 1.7 | 1.9 | 5.3 | 5.1 |
|  | Q3 | 5.3 | 5.3 | 3.5 | 3.4 | 1.6 | 1.7 | 1.7 | 1.8 | 5.3 | 5.1 |
|  | Q4 | 5.3 | 5.2 | 3.5 | 3.3 | 1.6 | 1.7 | 1.7 | 1.8 | 5.3 | 5.1 |
| TWO-QUARTER ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |
| 2003 | Q2 | $5.1$ | $5.1$ | 3.0 | 3.0 | 2.0 | $2.0$ | 1.3 | 1.3 | 0.2 | 0.2 |
|  | Q4 | 7.2 | 7.2 | 5.8 | 5.8 | 1.4 | 1.4 | 1.1 | 1.1 | -0.2 | -0.2 |
| 2004 | Q2 | 7.0 | 7.0 | 3.9 | 3.9 | 3.2 | 3.2 | 1.9 | 1.9 | -0.3 | -0.3 |
|  | Q4 | 5.9 | 5.9 | 3.9 | 3.9 | 2.0 | 2.0 | 1.3 | 1.3 | -0.2 | -0.2 |
| 2005 | Q2 | 6.4 | 6.4 | 3.4 | 3.4 | 2.6 | 2.9 | 2.1 | 2.2 | -0.1 | -0.3 |
|  | Q4 | 5.1 | 5.5 | 3.7 | 3.7 | 1.5 | 2.2 | 1.8 | 2.0 | 0.0 | 0.0 |
| 2006 | Q2 | 5.5 | 5.5 | 3.5 | 3.5 | 1.6 | 1.8 | 1.8 | 1.9 | 0.0 | 0.0 |
|  | Q4 | 5.3 | 5.2 | 3.5 | 3.3 | 1.6 | 1.7 | 1.7 | 1.8 | 0.0 | 0.0 |
| FOUR-QUARTER ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |
| 2002 Q4 |  | 3.8 | 3.8 | 2.3 | 2.3 | 1.8 | 1.8 | 1.5 | 1.5 | 0.4 | 0.4 |
| 2003 Q4 |  | 6.2 | 6.2 | 4.4 | 4.4 | 1.7 | 1.7 | 1.2 | 1.2 | 0.0 | 0.0 |
| 2004 Q4 |  | 6.4 | 6.4 | 3.9 | 3.9 | 2.6 | 2.6 | 1.6 | 1.6 | -0.5 | -0.5 |
| 2005 Q4 |  | 5.8 | 5.9 | 3.6 | 3.6 | 2.1 | 2.5 | 1.9 | 2.1 | -0.1 | -0.3 |
| 2006 | Q4 | 5.4 | 5.4 | 3.5 | 3.4 | 1.6 | 1.7 | 1.7 | 1.9 | -0.0 | -0.0 |

1. Level, except as noted.
2. Percent change from two quarters earlier; for unemployment rate, change in percentage points.
3. Percent change from four quarters earlier; for unemployment rate, change in percentage points.

4. Changes are from fourth quarter to fourth quarter.
. Percent difference between potential and actual. A positive number indicates that the economy is operating below potential.
5. Private-industry workers.

| Item | Units | $\begin{aligned} & 2002 \\ & \text { Q1 } \end{aligned}$ | $\begin{gathered} 2002 \\ \text { Q2 } \end{gathered}$ | $\begin{gathered} 2002 \\ \text { Q3 } \end{gathered}$ | $\begin{aligned} & 2002 \\ & Q 4 \end{aligned}$ | $\begin{aligned} & 2003 \\ & \text { Q1 } \end{aligned}$ | $\begin{gathered} 2003 \\ \text { Q2 } \end{gathered}$ | $\begin{aligned} & 2003 \\ & \text { Q3 } \end{aligned}$ | $\begin{aligned} & 2003 \\ & \text { Q4 } \end{aligned}$ | $\begin{aligned} & 2004 \\ & \text { Q1 } \end{aligned}$ | $\begin{gathered} 2004 \\ \text { Q2 } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Expenditures |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GDP | Bill. \$ | 10338.2 | 10445.7 | 10546.5 | 10617.5 | 10744.6 | 10884.0 | 11116.7 | 11270.9 | 11472.6 | 11657.5 |
| Real GDP | Bill. Ch. \$ | 9993.5 | 10052.6 | 10117.3 | 10135.9 | 10184.4 | 10287.4 | 10472.8 | 10580.7 | 10697.5 | 10784.7 |
| Real GDP | \% change | 3.4 | 2.4 | 2.6 | 0.7 | 1.9 | 4.1 | 7.4 | 4.2 | 4.5 | 3.3 |
| Gross domestic purchases |  | 4.4 | 2.8 | 2.9 | 2.4 | 1.7 | 4.4 | 6.4 | 4.7 | 5.0 | 4.2 |
| Final sales |  | 0.3 | 1.8 | 2.0 | 0.7 | 2.4 | 5.2 | 6.8 | 3.7 | 3.3 | 2.5 |
| Priv. dom. final purchases |  | 0.7 | 1.7 | 2.4 | 1.9 | 2.6 | 5.1 | 7.2 | 4.8 | 4.2 | 3.7 |
| Personal cons. expenditures |  | 1.8 | 2.8 | 2.9 | 2.5 | 2.7 | 3.9 | 5.0 | 3.6 | 4.1 | 1.6 |
| Durables |  | -8.5 | 4.4 | 14.0 | -2.4 | -0.1 | 20.6 | 16.5 | 3.9 | 2.2 | -0.3 |
| Nondurables |  | 3.8 | 0.8 | -0.6 | 5.3 | 5.0 | 1.6 | 6.9 | 5.1 | 6.7 | 0.1 |
| Services |  | 3.3 | 3.5 | 2.4 | 2.2 | 2.1 | 1.8 | 1.9 | 2.8 | 3.3 | 2.7 |
| Business fixed investment |  | -9.7 | -9.6 | -1.1 | -3.2 | -0.1 | 11.8 | 15.7 | 11.0 | 4.2 | 12.5 |
| Equipment \& Software |  | -6.3 | -4.5 | 4.6 | -2.0 | 4.5 | 11.0 | 21.7 | 12.0 | 8.0 | 14.2 |
| Nonres. structures |  | -18.5 | -22.6 | -16.0 | -6.6 | -13.0 | 14.5 | -1.3 | 7.9 | -7.6 | 6.9 |
| Residential structures |  | 9.3 | 11.3 | 2.8 | 4.2 | 7.5 | 9.1 | 22.4 | 9.6 | 5.0 | 16.5 |
| Exports |  | 4.7 | 11.0 | 3.1 | -4.2 | -1.5 | -1.6 | 11.3 | 17.5 | 7.3 | 7.3 |
| Imports |  | 12.5 | 11.4 | 5.4 | 9.6 | -2.0 | 2.5 | 2.8 | 17.1 | 10.6 | 12.6 |
| Gov't. cons. \& investment |  | 4.7 | 4.4 | 2.1 | 4.0 | 0.2 | 7.2 | 0.1 | 1.6 | 2.5 | 2.2 |
| Federal |  | 8.2 | 12.8 | 2.9 | 9.1 | 0.3 | 22.1 | -3.3 | 4.8 | 7.1 | 2.7 |
| Defense |  | 5.8 | 11.5 | 3.4 | 13.5 | -2.7 | 38.4 | -7.7 | 11.6 | 10.6 | 1.9 |
| State \& local |  | 2.9 | 0.3 | 1.7 | 1.4 | 0.1 | -0.4 | 2.2 | -0.1 | -0.0 | 1.9 |
| Change in bus. inventories | Bill. Ch. \$ | -7.4 | 7.9 |  |  |  | -17.6 |  | 8.6 | 40.0 | 61.1 |
| Nonfarm |  | -11.9 | 16.1 | 24.6 | 25.3 | 9.6 | -15.7 | -2.7 | 4.6 | 34.5 | 58.8 |
| Net exports |  | -444.9 | -458.1 | -469.8 | -515.4 | -511.7 | -525.2 | -508.7 | -528.3 | -550.1 | -580.3 |
| Nominal ${ }_{1}$ GDP | \% change | 4.5 | 4.2 | 3.9 | 2.7 | 4.9 | 5.3 | 8.8 | 5.7 | 7.4 | 6.6 |
| GDP Gap ${ }^{1}$ | \% | 1.1 | 1.4 | 1.5 | 2.2 | 2.6 | 2.5 | 1.6 | 1.4 | 1.2 | 1.3 |
| Employment and Production |  |  |  |  |  |  |  |  |  |  |  |
| Nonfarm payroll employment | Millions | 130.5 | 130.3 | 130.3 | 130.3 | 130.1 | 129.8 | 129.9 | 130.2 | 130.5 | 131.3 |
| Unemployment rate | \% | 5.7 | 5.8 | 5.7 | 5.9 | 5.8 | 6.1 | 6.1 | 5.9 | 5.6 | 5.6 |
| Industrial prod. index | \% change | 2.3 | 4.4 | 1.7 | -2.3 | -0.7 | -4.0 | 4.1 | 5.7 | 5.6 | 4.3 |
| Capacity util. rate - mfg. |  | 73.0 | 73.6 | 74.0 | 73.5 | 73.5 | 73.0 | 73.7 | 74.8 | 75.6 | 76.5 |
| Housing starts | Millions | 1.72 | 1.68 | 1.70 | 1.74 | 1.74 | 1.75 | 1.89 | 2.04 | 1.93 | 1.92 |
| Light motor vehicle sales |  | 16.57 | 16.50 | 17.37 | 16.57 | 16.09 | 16.39 | 17.24 | 16.82 | 16.51 | 16.54 |
| North Amer. produced |  | 13.26 | 13.29 | 14.06 | 13.28 | 12.72 | 13.11 | 13.90 | 13.58 | 13.26 | 13.15 |
| Other |  | 3.31 | 3.22 | 3.32 | 3.29 | 3.37 | 3.28 | 3.34 | 3.24 | 3.26 | 3.39 |
| Income and Saving |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GNP | Bill. \$ | 10361.7 | 10461.6 | 10571.7 | 10661.2 | 10781.3 | 10929.0 | 11168.3 | 11358.1 | 11546.1 | 11693.6 |
| Nominal GNP | \% change | 2.4 | 3.9 | 4.3 | 3.4 | 4.6 | 5.6 | 9.0 | 7.0 | 6.8 | 5.2 |
| Nominal personal income |  | 2.2 | 4.3 | -0.1 | 1.1 | 3.8 | 4.7 | 4.6 | 5.3 | 5.0 | 6.4 |
| Real disposable income |  | 10.8 | 2.7 | -1.7 | 0.2 | 1.8 | 4.3 | 8.2 | 1.4 | 2.4 | 2.8 |
| Personal saving rate | \% | 2.7 | 2.7 | 1.6 | 1.2 | 1.0 | 1.1 | 1.9 | 1.3 | 1.0 | 1.3 |
| Corp. profits, IVA \& CCAdj. | \% change | 24.9 | 15.2 | 3.6 | 19.1 | -1.4 | 36.7 | 32.0 | 30.2 | 13.6 | 2.9 |
| Profit share of GNP | \% | 8.1 | 8.3 | 8.3 | 8.6 | 8.5 | 9.0 | 9.5 | 9.9 | 10.1 | 10.0 |
| Excluding FR Banks |  | 7.9 | 8.1 | 8.1 | 8.4 | 8.3 | 8.8 | 9.3 | 9.8 | 9.9 | 9.9 |
| Federal surpl./deficit | Bill. \$ | -208.5 | -251.6 | -255.1 | -302.7 | -281.6 | -364.4 | -433.0 | -379.2 | -391.0 | -380.0 |
| State \& local surpl./def. |  | -28.8 | -23.6 | -21.3 | -26.3 | -49.0 | -5.7 | 6.5 | 35.3 | 11.8 | 18.3 |
| Ex. social ins. funds |  | -30.8 | -25.3 | -22.8 | -27.6 | -50.1 | -6.7 | 5.4 | 34.1 | 10.6 | 16.9 |
| Gross natl. saving rate | \% | 15.0 | 14.6 | 13.7 | 13.2 | 12.8 | 13.1 | 13.6 | 14.3 | 13.6 | 13.8 |
| Net natl. saving rate |  | 2.9 | 2.5 | 1.5 | 0.9 | 0.4 | 0.9 | 1.6 | 2.5 | 2.1 | 2.3 |
| Prices and Costs |  |  |  |  |  |  |  |  |  |  |  |
| GDP chn.-wt. price index | \% change | 1.4 | 1.5 | 1.7 | 2.0 | 2.7 | 1.1 | 1.4 | 1.6 | 2.8 | 3.2 |
| Gross Domestic Purchases chn.-wt. price index |  | 1.2 | 2.5 | 1.8 | 1.9 | 3.7 | 0.4 | 1.7 | 1.4 | 3.4 | 3.5 |
| PCE chn.-wt. price index |  | 0.9 | 2.9 | 2.0 | 1.4 | 3.2 | 0.7 | 1.6 | 1.2 | 3.3 | 3.1 |
| Ex. food and energy |  | 1.2 | 2.0 | 2.0 | 0.9 | 1.5 | 1.1 | 0.9 | 1.3 | 2.1 | 1.7 |
| CPI |  | 1.6 | 3.2 | 2.0 | 2.2 | 4.0 | 0.4 | 2.2 | 0.9 | 4.0 | 4.4 |
| Ex. food and energy |  | 2.4 | 2.1 | 2.1 | 1.7 | 1.3 | 0.8 | 1.7 | 1.0 | 1.9 | 2.5 |
| ECI, hourly compensation ${ }^{2}$ |  | 3.3 | 4.4 | 2.5 | 3.3 | 5.5 | 3.4 | 4.4 | 3.4 | 4.6 | 3.8 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour |  | 7.0 | 1.1 | 4.5 | 1.4 | 3.4 | 7.2 | 8.6 | 2.7 | 3.8 | 4.1 |
| Compensation per hour |  | 5.5 | 3.6 | 1.2 | 1.1 | 5.7 | 5.7 | 5.7 | 4.0 | 2.1 | 6.0 |
| Unit labor cost |  | -1.5 | 2.5 | -3.1 | -0.3 | 2.2 | -1.3 | -2.6 | 1.3 | -1.6 | 1.8 |

1. Percent difference between potential and actual. A positive number indicates that the economy is operating below potential. 2. Private-industry workers.

2. Percent difference between potential and actual. A positive number indicates that the economy is operating below potential. 2. Private-industry workers.
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CONTRIBUTIONS TO GROWTH IN REAL GROSS DOMESTIC PRODUCT AND RELATED ITEMS $\quad$ June 22,2005

| Item | $\begin{gathered} 2002 \\ \mathrm{Q} 3 \end{gathered}$ | $\begin{gathered} 2002 \\ Q 4 \end{gathered}$ | $\begin{aligned} & 2003 \\ & \mathrm{Q} 1 \end{aligned}$ | $\begin{gathered} 2003 \\ \mathrm{Q} 2 \end{gathered}$ | $\begin{gathered} 2003 \\ \mathrm{Q} 3 \end{gathered}$ | $\begin{gathered} 2003 \\ \mathbf{Q 4} \end{gathered}$ | $\begin{aligned} & 2004 \\ & \mathrm{Q} 1 \end{aligned}$ | $\begin{gathered} 2004 \\ \mathrm{Q} 2 \end{gathered}$ | $\begin{gathered} 2004 \\ \text { Q3 } \end{gathered}$ | $\begin{gathered} 02 Q 4 / \\ 0124 \end{gathered}$ | $\begin{gathered} 0324 / \\ 0224 \end{gathered}$ | $\begin{gathered} 04 Q 4 / \\ 0324 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP | 2.6 | 0.7 | 1.9 | 4.1 | 7.4 | 4.2 | 4.5 | 3.3 | 4.0 | 2.3 | 4.4 | 3.9 |
| Gross dom. purchases | 3.0 | 2.4 | 1.8 | 4.6 | 6.8 | 4.9 | 5.3 | 4.4 | 4.1 | 3.2 | 4.5 | 4.7 |
| Final sales | 2.0 | 0.7 | 2.4 | 5.1 | 6.8 | 3.7 | 3.3 | 2.5 | 5.0 | 1.2 | 4.5 | 3.6 |
| Priv. dom. final purchases | 2.1 | 1.6 | 2.2 | 4.3 | 6.2 | 4.1 | 3.6 | 3.2 | 4.9 | 1.4 | 4.2 | 4.1 |
| Personal cons. expenditures | 2.0 | 1.7 | 1.8 | 2.7 | 3.6 | 2.5 | 2.9 | 1.1 | 3.6 | 1.8 | 2.7 | 2.6 |
| Durables | 1.2 | -0.2 | -0.0 | 1.6 | 1.4 | 0.3 | 0.2 | -0.0 | 1.4 | 0.1 | 0.8 | 0.5 |
| Nondurables | -0.1 | 1.0 | 1.0 | 0.3 | 1.4 | 1.0 | 1.3 | 0.0 | 0.9 | 0.5 | 0.9 | 0.9 |
| Services | 1.0 | 0.9 | 0.9 | 0.8 | 0.8 | 1.2 | 1.4 | 1.1 | 1.3 | 1.2 | 0.9 | 1.3 |
| Business fixed investment | -0.1 | -0.3 | -0.0 | 1.1 | 1.5 | 1.1 | 0.4 | 1.2 | 1.3 | -0.6 | 0.9 | 1.1 |
| Equipment \& Software | 0.3 | -0.2 | 0.3 | 0.8 | 1.5 | 0.9 | 0.6 | 1.1 | 1.3 | -0.2 | 0.9 | 1.1 |
| Nonres. structures | -0.5 | -0.2 | -0.3 | 0.3 | -0.0 | 0.2 | -0.2 | 0.2 | -0.0 | -0.5 | 0.0 | -0.0 |
| Residential structures | 0.1 | 0.2 | 0.4 | 0.4 | 1.1 | 0.5 | 0.3 | 0.9 | 0.1 | 0.3 | 0.6 | 0.4 |
| Net exports | -0.4 | -1.7 | 0.1 | -0.5 | 0.6 | -0.7 | -0.8 | -1.1 | -0.1 | -0.9 | -0.1 | -0.8 |
| Exports | 0.3 | -0.4 | -0.2 | -0.2 | 1.0 | 1.6 | 0.7 | 0.7 | 0.6 | 0.3 | 0.6 | 0.6 |
| Imports | -0.7 | -1.3 | 0.3 | -0.3 | -0.4 | -2.2 | -1.5 | -1.8 | -0.7 | -1.3 | -0.7 | -1.4 |
| Government cons. \& invest. | 0.4 | 0.8 | 0.1 | 1.4 | 0.0 | 0.3 | 0.5 | 0.4 | 0.1 | 0.7 | 0.4 | 0.3 |
| Federal | 0.2 | 0.6 | 0.0 | 1.4 | -0.2 | 0.3 | 0.5 | 0.2 | 0.3 | 0.5 | 0.4 | 0.3 |
| Defense | 0.1 | 0.5 | -0.1 | 1.5 | -0.4 | 0.5 | 0.5 | 0.1 | 0.5 | 0.3 | 0.4 | 0.2 |
| Nondefense | 0.1 | 0.0 | 0.2 | -0.1 | 0.1 | -0.2 | 0.0 | 0.1 | -0.1 | 0.2 | -0.0 | 0.0 |
| State and local | 0.2 | 0.2 | 0.0 | -0.1 | 0.3 | -0.0 | 0.0 | 0.2 | -0.2 | 0.2 | 0.1 | 0.0 |
| Change in bus. inventories | 0.6 | 0.1 | -0.5 | -1.0 | 0.6 | 0.5 | 1.2 | 0.8 | -1.0 | 1.1 | -0.1 | 0.4 |
| Nonfarm | 0.4 | 0.1 | -0.5 | -0.9 | 0.5 | 0.3 | 1.1 | 0.9 | -1.0 | 1.0 | -0.2 | 0.4 |
| Farm | 0.2 | 0.0 | 0.1 | -0.1 | 0.1 | 0.2 | 0.1 | -0.1 | 0.1 | 0.0 | 0.1 | -0.0 |

Note: Components may not sum to totals because of rounding.
CONTRIBUTIONS TO GROWTH IN REAL GROSS DOMESTIC PRODUCT AND RELATED ITEMS $\quad$ June 22, 2005

Note: Components may not sum to totals because of rounding.
Strictly Confidential (FR) Class II FOMC

| Item | Fiscal year |  |  |  | 2004 |  |  |  | 2005 |  |  |  | 2006 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2003{ }^{\text {a }}$ | $2004{ }^{\text {a }}$ | 2005 | 2006 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 ${ }^{\text {a }}$ | Q4 ${ }^{\text {a }}$ | Q1 ${ }^{\text {a }}$ | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{1}$ | 1782 | 1880 | 2128 | 2262 | 410 | 550 | 479 | 487 | 452 | 664 | 525 | 522 | 478 | 706 | 556 | 544 |
| Outlays ${ }^{1}$ | 2159 | 2293 | 2457 | 2600 | 581 | 576 | 565 | 605 | 628 | 611 | 612 | 637 | 673 | 650 | 640 | 672 |
| Surplus/deficit ${ }^{1}$ | -377 | -413 | -329 | -338 | -171 | -26 | -86 | -118 | -177 | 53 | -87 | -115 | -195 | 56 | -84 | -128 |
| On-budget | -538 | -568 | -496 | -514 | -194 | -99 | -96 | -171 | -202 | -24 | -99 | -158 | -232 | -27 | -97 | -173 |
| Off-budget | 161 | 155 | 167 | 176 | 23 | 73 | 10 | 53 | 25 | 77 | 12 | 43 | 37 | 83 | 13 | 45 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 374 | 378 | 318 | 361 | 136 | 41 | 83 | 102 | 165 | -44 | 95 | 124 | 171 | -27 | 92 | 118 |
| Cash decrease | 26 | -1 | 8 | -7 | 12 | -23 | 8 | 12 | 2 | -10 | 5 | -5 | 23 | -25 | 0 | 10 |
| Other ${ }^{2}$ | -22 | 36 | 3 | -16 | 23 | 8 | -6 | 4 | 10 | 2 | -13 | -4 | 0 | -4 | -8 | -0 |
| Cash operating balance, end of period | 35 | 36 | 28 | 35 | 21 | 45 | 36 | 25 | 22 | 33 | 28 | 33 | 10 | 35 | 35 | 25 |
| NIPA federal sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 1863 | 1933 | 2175 | 2329 | 1915 | 1949 | 1966 | 2057 | 2183 | 2218 | 2240 | 2266 | 2319 | 2349 | 2380 | 2411 |
| Expenditures | 2209 | 2314 | 2453 | 2632 | 2306 | 2329 | 2341 | 2389 | 2454 | 2471 | 2497 | 2539 | 2640 | 2659 | 2690 | 2709 |
| Consumption expenditures | 646 | 694 | 737 | 782 | 691 | 700 | 713 | 714 | 737 | 744 | 755 | 765 | 782 | 788 | 794 | 801 |
| Defense | 425 | 469 | 502 | 538 | 465 | 474 | 487 | 484 | 501 | 506 | 516 | 525 | 537 | 542 | 547 | 553 |
| Nondefense | 221 | 225 | 235 | 245 | 226 | 227 | 226 | 230 | 236 | 238 | 239 | 240 | 245 | 246 | 247 | 249 |
| Other spending | 1563 | 1620 | 1715 | 1850 | 1615 | 1629 | 1628 | 1675 | 1717 | 1727 | 1742 | 1774 | 1859 | 1871 | 1895 | 1908 |
| Current account surplus | -345 | -381 | -278 | -303 | -391 | -380 | -375 | -332 | -271 | -254 | -257 | -273 | -322 | -310 | -310 | -298 |
| Gross investment | 92 | 102 | 109 | 116 | 102 | 104 | 104 | 111 | 105 | 109 | 112 | 114 | 115 | 116 | 118 | 119 |
| Gross saving less gross investment ${ }^{3}$ | -347 | -391 | -291 | -318 | -402 | -391 | -386 | -348 | -280 | -266 | -270 | -287 | -336 | -324 | -324 | -312 |
| Fiscal indicators ${ }^{4}$ <br> High-employment (HEB) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| surplus/deficit | -274 | -347 | -262 | -297 | -360 | -352 | -349 | -313 | -252 | -237 | -245 | -265 | -315 | -304 | -304 | -291 |
| Change in HEB, percent of potential GDP | 1.2 | 0.5 | -0.9 | 0.2 | 0.2 | -0.1 | -0.1 | -0.3 | -0.5 | -0.1 | 0.0 | 0.1 | 0.4 | -0.1 | -0.0 | -0.1 |
| Fiscal impetus (FI) percent of GDP | 0.9 | 0.8 | 0.3 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 |

 projection of the FY 2005 surplus to be in the vicinity of - $\$ 350$ billion. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law.
3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises. NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (2000) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus.

## Staff Projections of Federal Sector Accounts and Related Items

June 22, 2005

| Strictly Confidential (FR) Class II FOMC |  |  | Change in Debt of the Domestic Nonfinancial Sectors <br> (Percent) <br> June 22, 2005 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period ${ }^{1}$ | Total | Federal government | Nonfederal |  |  |  |  |  | Memo: <br> Nominal GDP |
|  |  |  | Total | Total | Households |  | Business | State and local governments |  |
|  |  |  |  |  | Home mortgages | Consumer credit |  |  |  |
| Year |  |  |  |  |  |  |  |  |  |
| 1999 | 6.4 | -1.9 | 8.9 | 8.3 | 9.2 | 7.9 | 10.7 | 3.4 | 6.3 |
| 2000 | 4.8 | -8.0 | 8.3 | 8.7 | 8.3 | 10.8 | 9.4 | 1.3 | 4.6 |
| 2001 | 6.2 | -0.2 | 7.6 | 8.8 | 9.6 | 8.1 | 6.1 | 8.9 | 2.7 |
| 2002 | 6.9 | 7.6 | 6.7 | 9.6 | 11.9 | 4.5 | 2.7 | 11.1 | 3.8 |
| 2003 | 8.1 | 10.9 | 7.5 | 10.1 | 12.5 | 4.7 | 4.3 | 8.2 | 6.2 |
| 2004 | 8.6 | 9.0 | 8.5 | 11.2 | 13.6 | 4.6 | 5.5 | 7.4 | 6.4 |
| 2005 | 7.8 | 7.7 | 7.8 | 8.6 | 9.8 | 4.7 | 6.7 | 7.7 | 5.9 |
| 2006 | 6.5 | 7.5 | 6.3 | 6.7 | 7.3 | 4.9 | 6.1 | 4.3 | 5.4 |
| Quarter |  |  |  |  |  |  |  |  |  |
| 2004:1 | 9.3 | 12.0 | 8.7 | 11.8 | 13.9 | 5.6 | 4.6 | 10.3 | 7.4 |
| 2 | 7.7 | 10.7 | 7.0 | 10.3 | 12.1 | 2.8 | 3.7 | 3.4 | 6.6 |
| 3 | 8.2 | 4.8 | 8.9 | 11.4 | 14.3 | 5.8 | 5.7 | 9.4 | 5.5 |
| 4 | 8.2 | 7.2 | 8.4 | 9.4 | 11.4 | 3.9 | 7.7 | 5.6 | 6.2 |
| 2005:1 | 10.0 | 13.8 | 9.1 | 9.3 | 10.6 | 4.6 | 7.4 | 16.2 | 7.1 |
| 2 | 6.3 | 2.0 | 7.2 | 8.5 | 9.9 | 4.0 | 6.1 | 4.7 | 5.6 |
| 3 | 6.8 | 5.4 | 7.1 | 8.1 | 9.1 | 5.1 | 6.3 | 4.6 | 5.4 |
| 4 | 7.2 | 9.0 | 6.8 | 7.4 | 8.3 | 4.7 | 6.4 | 4.4 | 5.6 |
| 2006:1 | 7.6 | 13.3 | 6.3 | 6.9 | 7.6 | 4.8 | 6.0 | 4.4 | 5.8 |
| 2 | 5.6 | 3.3 | 6.2 | 6.6 | 7.2 | 4.8 | 6.0 | 4.3 | 5.3 |
| 3 | 5.8 | 4.7 | 6.1 | 6.3 | 6.8 | 4.9 | 6.1 | 4.1 | 5.3 |
| 4 | 6.3 | 7.8 | 5.9 | 6.2 | 6.7 | 4.9 | 5.9 | 4.0 | 5.2 |

[^3]Strictly Confidential (FR)
Class II FOMC

| Strictly Confidential (FR) Class II FOMC |  | Flow of Funds Projections: Highlights <br> (Billions of dollars at seasonally adjusted annual rates except as noted) |  |  |  |  |  |  |  |  |  |  | June 22, 2005 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | 2003 | 2004 | 2005 | 2006 | 2004 |  | 2005 |  |  |  | 2006 |  |  |  |
|  |  |  |  |  | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Net funds raised by domestic nonfinancial sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Total | 1609.8 | 1760.9 | 1632.8 | 1552.6 | 1696.3 | 1760.0 | 2185.4 | 1287.1 | 1452.5 | 1606.2 | 1799.0 | 1365.9 | 1449.8 | 1595.6 |
| 2 Net equity issuance | -57.8 | -157.0 | -241.0 | -135.0 | -203.2 | -183.2 | -226.0 | -264.0 | -249.0 | -225.0 | -179.0 | -131.0 | -115.0 | -115.0 |
| 3 Net debt issuance | 1667.5 | 1918.0 | 1873.8 | 1687.6 | 1899.5 | 1943.2 | 2411.4 | 1551.1 | 1701.5 | 1831.2 | 1978.0 | 1496.9 | 1564.8 | 1710.6 |
| Borrowing sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nonfinancial business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 Financing gap ${ }^{1}$ | -14.1 | 27.8 | -1.5 | 116.9 | -27.7 | 131.8 | 122.4 | 41.4 | -99.4 | -70.5 | -24.2 | 140.2 | 161.0 | 190.8 |
| 5 Net equity issuance | -57.8 | -157.0 | -241.0 | -135.0 | -203.2 | -183.2 | -226.0 | -264.0 | -249.0 | -225.0 | -179.0 | -131.0 | -115.0 | -115.0 |
| 6 Credit market borrowing | 307.3 | 411.2 | 524.4 | 512.7 | 433.1 | 594.2 | 577.0 | 488.4 | 505.9 | 526.4 | 498.8 | 511.7 | 525.7 | 514.5 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 Net borrowing ${ }^{2}$ | 846.5 | 1029.8 | 881.6 | 743.7 | 1107.8 | 943.8 | 956.3 | 890.2 | 868.3 | 811.4 | 768.9 | 745.2 | 730.3 | 730.5 |
| 8 Home mortgages | 736.4 | 904.2 | 743.4 | 603.7 | 1017.0 | 838.2 | 801.7 | 770.7 | 724.0 | 677.3 | 630.6 | 607.2 | 588.5 | 588.5 |
| 9 Consumer credit | 92.7 | 93.7 | 100.3 | 110.9 | 121.0 | 81.9 | 98.9 | 85.6 | 112.0 | 104.5 | 108.7 | 108.8 | 112.6 | 113.3 |
| 10 Debt/DPI (percent) ${ }^{3}$ | 107.8 | 112.8 | 117.6 | 118.7 | 114.4 | 113.7 | 116.3 | 117.3 | 118.4 | 118.8 | 118.6 | 118.7 | 118.8 | 118.9 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 Net borrowing | 117.8 | 115.1 | 128.3 | 76.8 | 151.9 | 93.2 | 271.9 | 81.6 | 81.8 | 77.8 | 78.8 | 78.8 | 74.8 | 74.8 |
| 12 Current surplus ${ }^{4}$ | 176.2 | 204.2 | 188.4 | 196.5 | 198.4 | 226.4 | 192.9 | 190.6 | 180.1 | 189.8 | 193.7 | 193.3 | 196.8 | 202.2 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 Net borrowing | 396.0 | 361.9 | 339.5 | 354.4 | 206.7 | 312.1 | 606.2 | 91.0 | 245.4 | 415.6 | 631.4 | 161.3 | 234.0 | 390.8 |
| 14 Net borrowing (n.s.a.) | 396.0 | 361.9 | 339.5 | 354.4 | 83.3 | 102.1 | 164.7 | -44.4 | 95.2 | 124.1 | 171.0 | -26.8 | 92.4 | 117.9 |
| 15 Unified deficit (n.s.a.) | 399.1 | 400.7 | 325.6 | 350.7 | 85.7 | 118.1 | 176.6 | -52.8 | 86.9 | 115.0 | 194.7 | -55.8 | 84.0 | 127.8 |
| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 Funds supplied | 476.4 | 825.6 | 630.7 | 588.7 | 423.3 | 1010.4 | 1092.6 | 432.4 | 454.3 | 543.5 | 664.9 | 527.4 | 620.1 | 542.4 |
| Memo (percentage of GDP) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 Domestic nonfinancial debt ${ }^{5}$ | 194.4 | 197.7 | 201.6 | 204.6 | 198.4 | 199.5 | 200.5 | 201.8 | 202.4 | 203.1 | 204.0 | 204.7 | 205.0 | 205.5 |
| 18 Domestic nonfinancial borrowing | 15.2 | 16.3 | 15.0 | 12.8 | 16.1 | 16.2 | 19.8 | 12.5 | 13.6 | 14.4 | 15.3 | 11.5 | 11.8 | 12.8 |
| 19 Federal government ${ }^{6}$ | 3.6 | 3.1 | 2.7 | 2.7 | 1.7 | 2.6 | 5.0 | 0.7 | 2.0 | 3.3 | 4.9 | 1.2 | 1.8 | 2.9 |
| 20 Nonfederal | 11.6 | 13.3 | 12.3 | 10.1 | 14.3 | 13.6 | 14.8 | 11.8 | 11.6 | 11.1 | 10.4 | 10.2 | 10.1 | 9.9 |

[^4](This page intentionally blank.)

## International Developments

The dollar appreciated substantially against most major foreign currencies over the intermeeting period; it was little changed on average against the currencies of our other important trading partners. Accordingly, our projected path of the broad real dollar starts out in the third quarter about 2 percent higher than anticipated in the April Greenbook. Thereafter, the dollar depreciates in real terms at an annual rate of roughly $11 / 4$ percent, a touch less than in the previous Greenbook.

Notwithstanding the appreciation of the dollar, the spot price of West Texas intermediate (WTI) crude oil has increased $\$ 7$ per barrel since the April Greenbook to around $\$ 59$ per barrel. Moreover, later-dated futures contracts have also risen sharply, as market participants expect today's tight market conditions to persist. After dipping in May, prices of nonfuel primary commodities have moved back up in recent weeks, but in line with futures markets we expect them to trend down moderately over the forecast period.

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

| Indicator | 2004 |  | 2005 | Projection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H 1 | H 2 | Q 1 | 2005 |  |  |
|  |  |  |  | Q 2 | H 2 |  |
| Foreign output | 4.2 | 3.1 | 2.7 | 3.2 | 3.5 | 3.3 |
| April GB | 4.2 | 2.9 | 3.0 | 3.4 | 3.5 | 3.3 |
| Foreign CPI | 2.8 | 2.7 | 1.3 | 2.3 | 2.6 | 2.4 |
| April GB | 2.8 | 2.7 | 1.2 | 2.6 | 2.6 | 2.4 |

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

Average foreign economic growth, which slowed in the first quarter to $23 / 4$ percent at an annual rate, is estimated to have rebounded to a $31 / 4$ percent pace in the second quarter. The softness in the first quarter largely reflects disappointing performance in the emerging market economies, but recent indicators for these economies have been more positive. Going forward, foreign economic growth is projected to pick up a bit, averaging nearly $31 / 2$ percent for the remainder of the forecast period. This pace is little changed from the April Greenbook, as the stimulus to foreign economies provided by the stronger dollar and more supportive financial conditions is offset by restraint from higher oil prices. After dipping in the first quarter, foreign CPI inflation is estimated to have increased to $2 \frac{1}{4}$ percent in the second quarter, and we expect it to remain at about that
rate thereafter as upward pressures from diminishing slack are offset by waning effects of higher oil prices.

Since the April Greenbook, we have received U.S. trade data for March and April. The March data led us to trim our estimate of the amount net exports subtracted from real GDP growth in the first quarter, from $11 / 4$ percentage points to just over $1 / 2$ percentage point. The April trade deficit subsequently came in a touch wider than expected but not enough to alter our projection that net exports will add about $1 / 2$ percentage point to GDP growth in the current quarter, partly because of a plunge in oil imports due to a peculiar seasonal adjustment factor. Going forward, the contribution from net exports is projected to turn negative again, subtracting about $1 / 4$ percentage point from GDP growth in the remainder of this year and nearly $1 / 2$ percentage point in 2006, as the lagged effects of the previous large decline in the dollar wear off. These subtractions from growth are slightly larger than those in the April Greenbook because of the higher level of the dollar in this projection.

According to data that were published last week, the U.S. current account deficit in the first quarter stood at $\$ 780$ billion ( 6.4 percent of GDP), up from the revised $\$ 753$ billion deficit registered in the fourth quarter of last year. We project that because of the stronger dollar, higher oil prices, and larger net payments of investment income, the current account deficit will reach $\$ 960$ billion ( 7.2 percent of GDP) by the fourth quarter of 2006, somewhat more than we had written down in the April Greenbook.

## Oil Prices

The spot price of WTI crude oil closed at $\$ 58.90$ per barrel on June 21, up about $\$ 7$ per barrel since the April Greenbook. Futures contracts have also moved up considerably. The far-dated futures contract (for delivery in December 2011) closed at $\$ 54.31$ per barrel on June 21, up about $\$ 6$ per barrel. The growth of oil demand has remained strong, consistent with the staff's assessment of global economic activity. Moreover, recent events have reinforced concerns about future oil supplies: Iraq cut the amount of oil it will export over the second half of the year; because of sabotage and declines at its main fields, Iraq has produced less oil thus far in 2005 than during the same period in 2004. Venezuela has levied additional taxes and royalties on foreign firms. In Russia, which provided most of the growth in non-OPEC oil supply from 1998 to 2004, production has remained below its peak level in September. These supply developments are of particular concern as OPEC has little spare production capacity.

In line with NYMEX futures prices, the spot price of WTI is projected to edge up through December, averaging nearly $\$ 61$ per barrel in 2005:Q4. The spot price is projected to then fall roughly $\$ 2$ per barrel, to average $\$ 59$ per barrel in 2006:Q4. Relative to the oil price projection in the April Greenbook, the current projection is about $\$ 6.20$ per barrel higher in the second half of 2005 and about $\$ 6.50$ per barrel higher in 2006. Our projected path of the price of imported oil is also higher relative to the April Greenbook projection, averaging $\$ 8.15$ per barrel higher in the second half of this year and $\$ 7.75$ per barrel higher next year. The upward revision to the price of imported oil is a bit greater than that for the spot price of WTI, in line with a recent narrowing of the price spread between light, sweet crude oil and heavier, more sulfurous crude oil.

## International Financial Markets

The trade-weighted exchange value of the dollar against the major foreign currencies rose 3 percent on balance over the intermeeting period, as the dollar appreciated $61 / 2$ percent against the euro, $3^{11 / 2}$ percent against sterling and the yen, but depreciated $11 / 2$ percent against the Canadian dollar. The dollar strengthened on average as market expectations for growth in the foreign industrial countries weakened relative to prospects for the United States. In addition, a large share of the dollar's appreciation against the euro over the period came after the rejection of the proposed European Union constitution by French and Dutch voters in late May and early June. Several weaker-than-expected data releases in the euro area, as well as comments by some European Central Bank officials late in the period that signalled possible consideration of a policy rate cut, likely also weighed on the euro. The exchange value of the dollar against the currencies of our other important trading partners was, on the whole, essentially unchanged over the period.

Based on these intermeeting developments, we have increased the projected value of the broad real dollar in the third quarter 2 percent relative to the April Greenbook. However, we project that the broad real dollar will depreciate over the remainder of the forecast period at an annual rate of roughly $11 / 4$ percent, a touch slower than in the previous forecast, reflecting the slight upward revision to U.S. inflation. Our projection is predicated on the view that investor concerns about the financing burden of the large and growing U.S. current account deficit will persist. We do not include a change in China's exchange rate regime during the forecast period in our projection, so such a change constitutes an obvious risk to our forecast.

There were no changes in the monetary policy stances of the major industrial countries during the intermeeting period. However, market expectations of future short-term
interest rates in several major currencies appeared to shift substantially, as shown by movements in three-month eurocurrency futures. Euro, sterling, and Canadian dollar rates one-year ahead dropped about 40 basis points. Ten-year sovereign yields declined 25 basis points in the euro area and the United Kingdom, slightly more than they did in the United States. Despite the increase in crude oil prices, headline equity indexes rose in all major industrial countries over the period, led by a $71 / 2$ percent increase in the euro area. Announcements by several major corporations of better-than-expected earnings contributed to the increases, and euro-area stock prices were likely also boosted by the weakness of the euro.

In emerging markets, the focus continued to be on China's exchange rate policy. Nondeliverable forward exchange rates changed little since early May and showed the renminbi 5 percent firmer against the dollar at a one-year horizon. Latin American sovereign bond spreads over Treasuries declined over the period.

The Desk did not intervene during
the period for the accounts of the System or the Treasury.

## Foreign Industrial Countries

We estimate that real GDP growth in the foreign industrial countries slipped back to an annual rate of just above 2 percent in the second quarter from 2.3 percent in the first quarter. Growth shot up in the first quarter in both Japan and Germany, but we do not think that this pace of expansion has been sustained. Going forward, we have marked up our growth outlook a touch for the remainder of the year, largely because of the recent appreciation of the dollar, although this stimulus is offset in part by the effects of higher oil prices. We now expect growth to move up to roughly $21 / 2$ percent in the second half of this year and to change little in 2006. Twelve-month headline inflation in the foreign industrial countries is projected to remain near $1 \frac{1}{2}$ percent over the forecast period.

In Japan, real GDP surged 4.9 percent at an annual rate in the first quarter, driven in part by rapid inventory accumulation. We expect second-quarter growth slowed to $11 / 2$ percent as inventories unwound and growth in consumption and investment moderated, while exports, especially to China, remained subdued. Growth is projected to firm a bit by the end of the forecast period, as improving labor market conditions help to support household spending. Twelve-month CPI inflation is projected to turn positive on a sustained basis in 2006, and we have penciled in a small rise in short-term market
interest rates in the second half of that year, when we assume that the Bank of Japan will begin its exit from quantitative easing.

In the euro area, GDP growth averaged 2 percent in the first quarter, accounted for almost entirely by a contraction of imports. We expect growth to slow to $11 / 4$ percent in the second quarter, as an improvement in domestic demand is more than offset by some pickup in imports. In Germany, first-quarter GDP was reported to have jumped more than 4 percent (annual rate), a gain that was exaggerated by inadequate adjustment for working days and boosted by transitory strength in industrial production. Measures of business and consumer confidence in the euro area declined in April and May, and retail sales fell in April. Based on the recent depreciation of the euro and the strength of corporate balance sheets, which should support capital spending, the pace of growth is projected to edge up above $1 \frac{1}{2}$ percent in the second half of this year and in 2006. We project twelve-month inflation to stay at or below 2 percent over the forecast period. Market participants appear to have marked down their outlook for growth in the euro area and now no longer expect the ECB to tighten monetary policy this year, revisions that bring market expectations closer to the staff's assumptions.

We expect GDP in the United Kingdom, after rising 2 percent (annual rate) in the first quarter, to expand about $2 \frac{1}{2}$ percent in the second quarter and to maintain that pace for the rest of the forecast period. Consumption growth remained muted in the first quarter and investment contracted, while government expenditures expanded at a moderate pace and net exports made a sizeable contribution. House prices were roughly unchanged in April and May. We project consumption growth to firm starting in the second quarter, consistent with some strengthening in retail sales in April and May, and investment to pick up, whereas growth in government spending is expected to slow. The Bank of England is assumed to keep rates on hold for the remainder of the forecast period. We project that inflation will remain around the target rate of 2 percent.

In Canada, output is forecast to grow $23 / 4$ percent in the current quarter, up from $2 \frac{1}{4}$ percent in the first quarter. Continued strong final domestic demand, boosted in part by government spending, and waning negative contributions from net exports and inventories are projected to push up growth to around $31 / 2$ percent late this year before it moderates a bit in 2006. We assume a further substantial tightening of monetary policy over the forecast period starting in the second half of this year, consistent with keeping inflation around the 2 percent midpoint of the Bank of Canada's inflation target range.

## Other Countries

We estimate that real GDP growth in the emerging-market economies slowed to about $31 / 4$ percent in the first quarter, as growth in both emerging Asia and Latin America fell back from strong fourth-quarter rates. Growth is projected to pick up in the current quarter, to $43 / 4$ percent, and to maintain about that pace over the remainder of the forecast period. Consumer price inflation is projected to decline from 4 percent in 2004 to about $31 / 2$ percent this year and next. The decline reflects a fall in food prices in China early this year as well as the effects of tight monetary policy in Mexico and Brazil; next year, the waning effects of higher oil prices should also contribute to lower inflation.

In emerging Asia, real GDP growth is estimated to have slowed to $41 / 2$ percent in the first quarter, reflecting a steep fall in output in the volatile biomedical sector in Singapore, a sharp decline in inventory investment in Korea, and a decline in Thai GDP that was partly a result of the tsunami. Our forecast calls for some rebound in activity in the current quarter, as recent production data for Singapore suggest that the first-quarter contraction has already largely been reversed, while inventory investment should stabilize in Korea. Going forward, we expect growth to average about $51 / 2$ percent in the second half of this year, before easing back to 5 percent next year. Growth in Korea is expected to lag somewhat behind the rest of the region.

Activity in China, which accelerated in the first quarter, appears to have slowed recently, and we have marked down our estimate of second-quarter growth to 8 percent from 10 percent in the April Greenbook. The slowdown is probably due to the effects of measures taken last year to rein in unsustainably high investment growth. We forecast Chinese growth to moderate further to about $71 / 2$ percent by the end of this year. We project growth in India to average around 6 percent over the forecast period, similar to last year's pace.

In Latin America, real GDP grew only 2 percent in the first quarter, as tight monetary policy in Mexico and Brazil weighed on activity in those countries. The sluggish outcome in Mexico also seems to reflect a seasonal adjustment problem related to the timing of Easter this year; output is expected to rebound in the second quarter, supported by U.S. manufacturing demand for Mexican exports. Growth in the region is projected to average about 4 percent over the rest of the forecast period, with activity supported by still-high commodities prices (including oil in several countries) and solid U.S. growth. We project that Brazilian growth will come in under 2 percent this year and $2 \frac{1}{2}$ percent
next year, down a little from the April Greenbook, with domestic demand remaining weak.

## Prices of Internationally Traded Goods

After a $43 / 4$ percent (annual rate) increase in the first quarter of 2005, core import prices are projected to rise $2 \frac{1}{2}$ percent in the second quarter, a touch lower than in the April Greenbook and in line with the April and May BLS import price data. So far in the second quarter, material-intensive goods have continued to see steady price increases, driven largely by the run-up in commodity prices early this year; prices of finished goods have decelerated after advancing rapidly in the fourth quarter of 2004 and the first quarter of 2005 .

## Staff Projections of Selected Trade Prices

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

| Trade category | 2004 |  | 2005 | Projection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 | Q1 | 2005 |  | 2006 |
|  |  |  |  | Q2 | H2 |  |
| Exports |  |  |  |  |  |  |
| Core goods | 6.9 | 3.4 | 6.0 | 5.1 | 2.8 | 2.0 |
| April GB | 6.9 | 3.4 | 6.0 | 4.5 | 2.7 | 2.7 |
| Imports |  |  |  |  |  |  |
| Non-oil core goods | 5.2 | 3.3 | 4.8 | 2.6 | 1.9 | . 6 |
| April GB | 5.2 | 3.3 | 4.7 | 3.0 | 2.3 | . 7 |
| Oil (dollars per barrel) | 34.55 | 40.91 | 39.89 | 46.90 | 54.97 | 54.29 |
| April GB | 34.55 | 40.91 | 39.87 | 43.20 | 46.90 | 46.86 |

Note. Prices for core exports and non-oil core imports, which exclude computers and semiconductors, are on a NIPA chain-weighted basis.

The price of imported oil for multiquarter periods is the price for the final quarter of the period.

We project that core import price inflation will moderate further, to 2 percent, in the second half of 2005. The stepdown from earlier this year reflects the recent appreciation of the dollar, the effects of which offset continued upward pressures from previous runups in nonfuel commodity prices. In 2006, the impetus from the prior runup in commodity prices vanishes, and with only modest changes projected in the dollar, core import price inflation drops below 1 percent. Compared with the previous Greenbook, projected core import price inflation is down a bit this year, because of the downward
revision to the path of nonfuel primary commodity prices and the stronger dollar, and is about unchanged next year.

We continue to assume that the expiration of the Multi-Fiber Arrangement, by allowing expanded imports from lowest-cost producers, will slightly restrain overall core import prices during the forecast period. However, this restraint, already assumed to be modest, would be more limited still in the event of further U.S. trade actions.

After increasing 6 percent (annual rate) in the first quarter of 2005, core export prices are projected to increase 5 percent in the second quarter, consistent with BLS-reported prices for April and May. During these months, prices for agricultural products and nonagricultural industrial supplies were up more than 15 percent and 9 percent, respectively. Prices for capital goods (excluding computers and semiconductors) and consumer goods were both up about $11 / 2$ percent. For the rest of 2005 and 2006, core export price inflation is projected to trend gradually down toward 2 percent as prices for nonfuel intermediate materials and agricultural exports slowly decelerate.

## Trade in Goods and Services

Since the April Greenbook, we have received monthly nominal trade data for March and April. In March, nominal imports of goods and services fell back surprisingly sharply; declines were widespread across major categories, with the retreats in consumer goods and automotive products particularly marked. As a consequence, we have lowered our estimate of growth of real imports in the first quarter to 10 percent (annual rate), about $33 / 4$ percentage points lower than in the April Greenbook. We estimate that real imports of core goods rose $113 / 4$ percent at an annual rate, much lower than in the April Greenbook, but still above what would be consistent with the evolution of U.S. activity and the dollar. No special factors appear to explain this strength.

In April, nominal imports rebounded to a new record high, as imports of capital goods surged and consumer goods rebounded from the weakness in March. Nevertheless, we expect the growth of real imports to slow dramatically for the quarter as a whole, to around $13 / 4$ percent. This deceleration results in part from a projected steep drop in the volume of oil imports, mainly reflecting quirky seasonal adjustment factors. In addition, after two very strong quarters, core import growth steps down to a pace more in line with the projected path of relative prices and U.S. GDP; the slowing of U.S. growth from the first quarter restrains core imports as well. The growth of imported services is also
projected to slow after a strong first quarter, despite the stronger dollar, but imports of computers and semiconductors, in aggregate, accelerate slightly.

In the second half of 2005 and in 2006, real import growth is projected to pick up to about $63 / 4$ percent (annual rate) on average as imports of oil bounce back. Imports of core goods accelerate through the forecast period as price inflation in this category slows, restrained by the stronger path of the dollar and lower commodity prices. Imports of computers and semiconductors are projected to rise steadily, whereas growth of imported services eases, restrained by higher prices for services imports. Compared with the April Greenbook, our current projection of overall real import growth (excluding the first quarter) is marginally stronger, on average. We have marked up the projected growth of imported core goods and services, on average, in response to a lower path of prices for these categories, consistent with the stronger dollar.

## Summary of Staff Projections for Trade in Goods and Services

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

| Indicator | 2004 |  | 2005 | Projection |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | H 1 | H 2 | Q 1 | 2005 |  | 2006 |
|  |  |  |  | Q 2 | H 2 |  |
| Real exports | 7.3 | 4.6 | 9.1 | 8.5 | 8.0 | 6.2 |
| April GB | 7.3 | 4.6 | 7.9 | 8.2 | 8.5 | 6.7 |
| Real imports | 11.6 | 7.9 | 9.9 | 1.8 | 6.7 | 6.6 |
| April GB | 11.6 | 7.9 | 13.7 | 1.2 | 6.9 | 6.4 |

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

In March, nominal exports rebounded, more than retracing February's decline. This gain was more than accounted for by strong exports of services and capital goods. We estimate that real exports of goods and services rose at an annual rate of 9 percent in the first quarter, 1 percentage point stronger than projected in the April Greenbook. Real exports of services were much stronger than we had expected, whereas core goods, semiconductors, and computers were weaker.

In April, nominal exports of goods and services were again strong, particularly industrial supplies and capital goods (especially aircraft). As some of this strength is judged to be transitory, for the current quarter as a whole, we expect growth of real exports to slow a touch, to $81 / 2$ percent. Restrained by the stronger dollar, the growth of services slows to a
more sustainable rate, and the growth of core goods exports is reduced by the unwinding of technical factors that boosted these sales in the first quarter. Real exports of computers and semiconductors are expected to pick up after weak performance in recent quarters. In the second half of this year, growth in real exports of goods and services slows further to 8 percent. Exports of core goods continue apace, supported by stronger foreign growth and lagged effects of the dollar's previous sharp depreciation. The dollar's more recent strengthening, however, slows the growth of exported services, which react more quickly than core goods to changes in exchange rates. Exports of computers also slow from the rapid expansion in the first half. By 2006, the diminishing effects of past dollar weakening damps growth in exports of core goods as well as services. Our current projection for export growth is generally a touch lower than the forecast in the April Greenbook, reflecting the response of core goods and services to the stronger path of the dollar.

## Alternative Simulations

Our baseline forecast projects tepid growth in Europe and Japan. In our first two alternative simulations, we used the FRB/Global model to consider the implications for the United States of even weaker growth in those regions which may also be accompanied by a pronounced weakening of their currencies. The deceleration in output may stem from a further weakening of consumer and business confidence or a cooling of the housing market in those European countries that have experienced particularly rapid house price appreciation. In contrast, a third simulation examines the implications of a broadly based depreciation of the dollar.

In our first scenario, we simulated the effects of a progressive decline in autonomous consumption and investment spending in the euro area, the United Kingdom, and Japan. The shocks begin in 2005:Q3. It is assumed that spending would decline $2 \frac{1}{2}$ percent of baseline GDP by the end of 2006 in the absence of endogenous adjustment. Although such a scenario, by itself, entails some decline in the value of these economies' currencies, we also considered a second scenario that intensifies the magnitude of foreign currency depreciation by incorporating additional risk premium shocks.

In the first scenario, the fall in activity in Europe and Japan reduces U.S. real net exports directly through weaker foreign spending and indirectly through a modest appreciation of the dollar. As a result, U.S. GDP growth contracts 0.2 percentage point relative to baseline in the second half of this year and about 0.3 percentage point in 2006. Core PCE inflation declines nearly 0.2 percentage point below baseline in 2006. The fall in the core

PCE price index reflects several factors, including lower import prices due to dollar appreciation, the effects of lower aggregate demand on domestic prices, and a fall in oil prices due to weaker world activity.

In the second scenario, the foreign demand shock is accompanied by additional riskpremium shocks that induce the euro, pound, and yen to depreciate about 13 percent on balance against the dollar by the end of the forecast period (compared with about 5 percent in the first scenario). The larger appreciation of the dollar induces a more pronounced contraction in U.S. GDP growth than in the first scenario, with U.S. output growth falling around 0.7 percentage point below baseline next year. Core PCE inflation also falls more than in the first scenario, mainly because of a larger drop in import prices. In addition, the larger dollar appreciation induces a noticeable deterioration of the trade balance, with the deficit rising about 0.2 percent of GDP by the end of next year and about 0.4 percent of GDP by the end of 2007 .

These scenarios provide a plausible backdrop for dollar appreciation over the forecast period. However, the persistently large U.S. trade deficit raises the risk of sizeable downward pressure on the dollar. Accordingly, in a third and distinct scenario, we considered the effects of an adverse risk-premium shock that would induce the dollar to depreciate 10 percent against all major foreign currencies in the absence of endogenous movements in interest rates. This shock boosts U.S. real net exports and results in U.S. real GDP growth rising about 0.3 percentage point above baseline in the second half of this year and nearly 0.7 percentage point next year. Core PCE inflation rises about 0.3 percentage point above baseline in the second half of this year because of higher import prices and by a somewhat smaller amount next year. The trade balance initially deteriorates because of J-curve effects, but it improves about 0.3 percent of GDP relative to baseline by the end of 2006 and shows some additional improvement beyond the forecast period.

## Alternative Scenarios

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

| Indicator and simulation | 2005 |  | 2006 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | H 1 | H 2 | H 1 | H 2 |
| U.S. real GDP |  |  |  |  |
| Baseline | 3.4 | 3.7 | 3.5 | 3.3 |
| Weaker foreign demand | 3.4 | 3.6 | 3.3 | 2.9 |
| $\quad$ With additional dollar appreciation | 3.4 | 3.4 | 2.9 | 2.6 |
| Dollar depreciation | 3.4 | 4.0 | 4.2 | 3.9 |
|  |  |  |  |  |
| U.S. PCE prices |  |  |  |  |
| excluding food and energy | 2.2 | 2.0 | 1.9 | 1.8 |
| Baseline | 2.2 | 2.0 | 1.8 | 1.6 |
| Weaker foreign demand | 2.2 | 1.9 | 1.7 | 1.5 |
| $\quad$ With additional dollar appreciation | 2.2 | 2.3 | 2.0 | 1.9 |
| Dollar depreciation |  |  |  |  |
| U.S. trade balance |  |  |  |  |
| (percent share of GDP) | -5.7 | -5.9 | -6.0 | -5.9 |
| Baseline | -5.7 | -5.9 | -6.0 | -5.9 |
| Weaker foreign demand | -5.7 | -5.7 | -6.0 | -6.1 |
| $\quad$ With additional dollar appreciation | -5.7 | -6.0 | -5.9 | -5.6 |
| Dollar depreciation |  |  |  |  |

Note. H1 is Q2/Q4; H2 is Q4/Q2. In these simulations, the nominal federal funds rate remains unchanged from baseline, and the monetary authorities in major foreign economies adjust their policy rates according to a Taylor rule.
Restricted (FR)
Class II FOMC
COUNTRIES Q4)
PR
GDP AND CONSUMER
(Percent, Q4 to
 (Percent, Q4 to Q4)

| Measure and country | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | $\begin{array}{r} \text { Pro } \\ 2005 \end{array}$ | $\begin{aligned} & \text { cted } \\ & 2006 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REAL GDP (1) |  |  |  |  |  |  |  |  |  |
| Total foreign | 1.5 | 5.0 | 4.2 | 0.3 | 3.0 | 2.9 | 3.6 | 3.2 | 3.3 |
| Industrial Countries of which: | 2.7 | 4.4 | 3.5 | 0.8 | 2.5 | 1.7 | 2.4 | 2.4 | 2.5 |
| Canada | 4.4 | 5.9 | 4.1 | 1.3 | 3.6 | 1.7 | 3.3 | 3.0 | 3.3 |
| Japan | -1.1 | 0.2 | 3.2 | -2.0 | 1.5 | 2.2 | 0.9 | 2.3 | 1.7 |
| United Kingdom | 2.8 | 3.3 | 3.0 | 2.2 | 1.9 | 2.7 | 2.9 | 2.3 | 2.4 |
| Euro Area (2) | 1.8 | 4.0 | 3.0 | 0.9 | 1.2 | 0.9 | 1.5 | 1.6 | 1.7 |
| Germany | 0.7 | 3.5 | 2.3 | 1.0 | 0.4 | 0.3 | 0.5 | 1.8 | 1.3 |
| Developing Countries | -0.3 | 6.0 | 5.3 | -0.5 | 3.6 | 4.5 | 5.5 | 4.4 | 4.5 |
| Asia | -2.0 | 8.5 | 5.8 | 1.1 | 5.8 | 6.5 | 5.9 | 5.3 | 5.1 |
| Korea | -5.5 | 11.5 | 4.5 | 4.6 | 7.8 | 4.2 | 3.0 | 2.9 | 3.9 |
| China | 9.7 | 7.1 | 7.7 | 7.0 | 8.3 | 10.0 | 9.5 | 9.1 | 7.5 |
| Latin America | 1.2 | 4.4 | 4.5 | -1.3 | 1.5 | 2.4 | 5.1 | 3.3 | 4.0 |
| Mexico | 2.9 | 5.5 | 4.8 | -1.3 | 2.0 | 2.1 | 4.8 | 3.4 | 4.1 |
| Brazil | -1.7 | 3.4 | 3.9 | -0.9 | 4.2 | 0.8 | 4.6 | 1.8 | 2.5 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |
| Industrial Countries of which: | 0.9 | 1.1 | 1.7 | 0.9 | 2.1 | 1.3 | 1.8 | 1.2 | 1.5 |
| Canada | 1.1 | 2.4 | 3.1 | 1.1 | 3.8 | 1.7 | 2.3 | 1.7 | 2.0 |
| Japan | 0.7 | -1.1 | -1.2 | -1.3 | -0.5 | -0.5 | 0.4 | -0.6 | 0.2 |
| United Kingdom (4) | 1.4 | 1. 2 | 1.0 | 1.0 | 1. 6 | 1.3 | 1.4 | 2.2 | 1.8 |
| Euro Area (2) | 0.9 | 1.5 | 2.5 | 2.1 | 2.3 | 2.0 | 2.3 | 1.9 | 1.7 |
| Germany | 0.3 | 1.1 | 1.7 | 1.5 | 1.2 | 1.2 | 2.1 | 1.1 | 1.5 |
| Developing Countries | 9.0 | 4.6 | 4.1 | 2.8 | 2.9 | 3.1 | 3.9 | 3.3 | 3.6 |
| Asia | 4.9 | 0.1 | 1.9 | 1.2 | 0.8 | 2.2 | 3.2 | 2.9 | 3.2 |
| Korea | 5.8 | 1.2 | 2.5 | 3.3 | 3.4 | 3.5 | 3.4 | 3.6 | 4.2 |
| China | -1.2 | -1.0 | 1.0 | -0.1 | -0.5 | 2.7 | 3.3 | 2.1 | 3.0 |
| Latin America | 15.4 | 12.5 | 8.4 | 5.3 | 6.4 | 5.0 | 5.6 | 4.1 | 4.4 |
| Mexico | 17.3 | 13.5 | 8.7 | 5.1 | 5.3 | 3.9 | 5.3 | 3.5 | 4.0 |
| Brazil | 2.0 | 8.4 | 6.4 | 7.5 | 10.7 | 11.5 | 7.2 | 6.9 | 5.0 |

[^5]|  | 2004 |  |  |  | ------------- 2005 |  |  |  | 2006 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measure and country | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| REAL GDP (1) | - | --- | --- | - Q | rly | ange | at | ann | rate |  |  |  |
| Total foreign | 4.8 | 3.7 | 2.9 | 3.2 | 2.7 | 3.2 | 3.4 | 3.5 | 3.4 | 3.3 | 3.3 | 3.4 |
| Industrial Countries of which: | 3.0 | 3.0 | 1.9 | 1.6 | 2.3 | 2.1 | 2.5 | 2.6 | 2.6 | 2.5 | 2.5 | 2.6 |
| Canada | 2.6 | 5.0 | 3.5 | 2.1 | 2.3 | 2.7 | 3.4 | 3.6 | 3.6 | 3.1 | 3.3 | 3.3 |
| Japan | 5.2 | -0.6 | -1.0 | 0.2 | 4.9 | 1.4 | 1.4 | 1.4 | 1.5 | 1.6 | 1.7 | 1.8 |
| United Kingdom | 2.7 | 3.9 | 2.2 | 2.8 | 2.0 | 2.4 | 2.4 | 2.4 | 2.3 | 2.4 | 2.4 | 2.5 |
| Euro Area (2) | 2.6 | 1.7 | 1.1 | 0.6 | 2.0 | 1.3 | 1.6 | 1. 6 | 1.6 | 1.7 | 1.7 | 1.7 |
| Germany | 1.7 | 0.8 | -0.2 | -0. 5 | 4.2 | 0.7 | 1.1 | 1.3 | 1.2 | 1.3 | 1.3 | 1.4 |
| Developing Countries | 7.3 | 4.5 | 4.3 | 5.7 | 3.3 | 4.7 | 4.8 | 4.7 | 4.5 | 4.5 | 4.5 | 4.5 |
| Asia | 8.1 | 4.4 | 5.3 | 6.0 | 4.5 | 5.6 | 5.5 | 5.5 | 5.1 | 5.1 | 5.1 | 5.1 |
| Korea | 2.6 | 2.4 | 3.3 | 3.8 | 1.4 | 2.9 | 3.5 | 3.8 | 3.8 | 3.8 | 4.0 | 4.0 |
| China | 13.9 | 2.8 | 10.1 | 11.7 | 13.0 | 8.0 | 8.0 | 7.5 | 7.5 | 7.5 | 7.5 | 7.5 |
| Latin America | 6.6 | 4.6 | 4.0 | 5.3 | 2.0 | 3.6 | 3.9 | 3.9 | 4.0 | 4.0 | 4.0 | 4.0 |
| Mexico | 5.8 | 4.2 | 4.0 | 5.4 | 1.7 | 3.7 | 4.0 | 4.0 | 4.1 | 4.1 | 4.1 | 4.1 |
| Brazil | 7.5 | 4.3 | 5.1 | 1.7 | 1.3 | 2.0 | 2.0 | 2.0 | 2.5 | 2.5 | 2.5 | 2.5 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | quar | er | nges |  |  |  |  |
| Industrial Countries of which: | 0.9 | 1.5 | 1.5 | 1.8 | 1.4 | 1.3 | 1.4 | 1.2 | 1.5 | 1.4 | 1.5 | 1.5 |
| Canada | 0.9 | 2.2 | 2.0 | 2.3 | 2.1 | 1.7 | 1.9 | 1.7 | 2.0 | 2.0 | 2.0 | 2.0 |
| Japan | -0.3 | -0.2 | -0.1 | 0.4 | -0.4 | -0.4 | -0.2 | -0.6 | -0.0 | 0.1 | 0.2 | 0.2 |
| United Kingdom (4) | 1.2 | 1.4 | 1.3 | 1.4 | 1.7 | 2.0 | 2.1 | 2.2 | 2.1 | 1.9 | 1.9 | 1.8 |
| Euro Area (2) | 1.7 | 2.3 | 2.3 | 2.3 | 2.0 | 2.0 | 2.0 | 1.9 | 2.0 | 1.7 | 1.7 | 1.7 |
| Germany | 1.0 | 1.9 | 2.0 | 2.1 | 1.7 | 1.4 | 1.3 | 1.1 | 1.6 | 1.5 | 1.5 | 1.5 |
| Developing Countries | 3.1 | 3. 6 | 4.5 | 3.9 | 3.5 | 3.4 | 3.1 | 3.3 | 3.6 | 3.7 | 3.7 | 3.6 |
| Asia | 2.4 | 3.3 | 4.2 | 3.2 | 2.9 | 2.5 | 2.3 | 2.9 | 3.1 | 3.4 | 3.3 | 3.2 |
| Korea | 3.2 | 3.4 | 4.3 | 3.4 | 3.1 | 3.1 | 2.7 | 3.6 | 4.2 | 4.5 | 4.5 | 4.2 |
| China | 3.0 | 4.3 | 5.2 | 3.3 | 2.8 | 1.7 | 1.5 | 2.1 | 2.3 | 3.0 | 3.0 | 3.0 |
| Latin America | 4.7 | 4.6 | 5.2 | 5.6 | 4.9 | 5.1 | 4.7 | 4.1 | 4.6 | 4.4 | 4.4 | 4.4 |
| Mexico | 4.3 | 4.3 | 4.8 | 5.3 | 4.4 | 4.6 | 4.2 | 3.5 | 4.1 | 4.0 | 4.1 | 4.0 |
| Brazil | 6.8 | 5.5 | 6.8 | 7.2 | 7.4 | 7.9 | 7.1 | 6.9 | 6.2 | 5.4 | 5.2 | 5.0 |

[^6]Restricted (FR)
Class II FOMC
OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

|  | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | $\begin{array}{r} \text { Pr } \\ 2005 \end{array}$ | $\begin{aligned} & \text { cted } \\ & 2006 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NIPA REAL EXPORTS and IMPORTS Percentage point contribution to GDP growth, Q4/Q4 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | $-1.1$ | $-1.0$ | -0.9 | -0.2 | -0.9 | -0.1 | -0.8 | -0.1 | -0.4 |
| Exports of G\&S | 0.3 | 0.6 | 0.7 | -1.3 | 0.3 | 0.6 | 0.6 | 0.8 | 0.7 |
| Imports of G\&S | $-1.4$ | $-1.6$ | $-1.6$ | 1.1 | $-1.3$ | -0.7 | $-1.4$ | $-1.0$ | $-1.1$ |
| Percentage change, Q4/Q4 |  |  |  |  |  |  |  |  |  |
| Exports of G\&S | 2.6 | 5.6 | 6.5 | $-11.9$ | 3.5 | 6.1 | 5.9 | 8.4 | 6.2 |
| Services | 4.4 | 5.3 | 1.8 | -8.9 | 9.8 | 3.8 | 4.4 | 7.4 | 5.2 |
| Computers | 7.3 | 13.4 | 22.7 | $-23.5$ | $-1.0$ | 11.2 | 5.9 | 18.0 | 14.4 |
| Semiconductors | 9.5 | 34.6 | 27.6 | -34.6 | 9.9 | 38.8 | -5.8 | 18.2 | 29.2 |
| Other Goods 1/ | 1.2 | 3.3 | 5.9 | -10.2 | 0.4 | 5.0 | 7.5 | 7.8 | 5.1 |
| Imports of G\&S | 11.0 | 12.1 | 11.2 | $-7.6$ | 9.7 | 4.9 | 9.8 | 6.2 | 6.6 |
| Services | 10.4 | 6.6 | 10.6 | -5.9 | 8.9 | 3.7 | 2.2 | 6.5 | 5.0 |
| Oil | 4.1 | -3.4 | 13.3 | 3.7 | 4.3 | 1.7 | 10.3 | -5.4 | 1. 4 |
| Computers | 26.4 | 26.0 | 13.9 | $-13.6$ | 13.4 | 16.9 | 22.3 | 13.4 | 17.5 |
| Semiconductors | $-7.7$ | 34.2 | 22.8 | $-51.1$ | 10.0 | 0.3 | 9.2 | 17.5 | 29.2 |
| Other Goods 2/ | 11.2 | 12.9 | 10.5 | -6.5 | 9.9 | 4.9 | 10.6 | 7.6 | 7.0 |
| Billions of Chained 2000 Dollars |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services |  | -296.2 |  |  | -472.1 | -518.5 |  |  |  |
| Exports of G\&S | 966.5 | 1008.2 | 1096.3 | 1036.7 | 1012.3 | 1031.8 | 1120.3 | 1200.0 | 1281.3 |
| Imports of G\&S | 1170.3 | 1304.4 | 1475.8 | 1435.8 | 1484.4 | 1550.2 | 1704.0 | 1830.5 | 1944.6 |
| Billions of dollars |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -214.1 | -300.1 | -416.0 | -389.5 | $-475.2$ | -519.7 | -668.1 | -814.8 | -927.2 |
| Current Acct as Percent of GDP | $-2.4$ | $-3.2$ | -4.2 | -3.8 | -4.5 | -4.7 | -5.7 | $-6.5$ | -7.1 |
| Net Goods \& Services (BOP) | $-165.0$ | -263.4 | $-378.3$ | $-362.7$ | -421.2 | -494.8 | $-617.6$ | $-720.7$ | -783.5 |
| Investment Income, Net |  |  |  | 30.3 | 15.5 | 51.8 | 36.2 | 12.2 | $-34.8$ |
| Direct, Net | 65.5 | 78.2 | 94.9 | 115.9 | 99.8 | 121.8 | 127.9 | 140.3 | 153.4 |
| Portfolio, Net | -56.7 | -59.1 | -69.2 | -85.5 | -84.3 | -70.0 | -91.7 | -128.2 | -188.3 |
| Other Income \& Transfers, Net | -57.9 | -55.8 | $-63.5$ | -57.1 | -69.5 | -76.7 | -86.7 | -106.3 | -108.8 |

[^7]Restricted (FR)
Class II FOMC
NIPA REAL EXPORTS and IMPORTS

|  | 2001 |  |  |  | 2002 |  |  |  | 2003 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NIPA REAL EXPORTS and IMPORTS |  |  |  |  |  |  |  |  |  |  |  |  |
| Percentage point contribution to GDP growth |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services Exports of $G \& S$ Imports of $\mathrm{G} \& \mathrm{~S}$ | -0.0 | 0.5 | -0.6 | -0.7 | -1.1 | -0.5 | -0.4 | -1.7 | 0.1 | -0. 5 | 0.6 | -0.7 |
|  | -0.6 | -1.4 | -2.0 | -1.1 | 0.4 | 1.0 | 0.3 | -0.4 | -0.2 | -0.2 | 1.0 | 1.6 |
|  |  | 1.9 | 1.5 | 0.5 | -1.5 | -1.4 | -0.7 | -1.3 | 0.3 | -0.3 | -0.4 | -2.2 |
| Percentage change from previous period, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of $\mathrm{G} \& \mathrm{~S}$Services | -5.3 | -12.7 | -18.2 | -10.8 | 4.7 | 11.0 | 3.1 | -4.2 | -1.5 | -1.6 | 11.3 | 17.5 |
|  | -5.0 | -0.7 | -13.7 | -15.3 | 21.7 | 4.5 | 3.5 | 10.4 | -12.7 | -3.4 | 14.1 | 20.6 |
| Computers | -9.8 | -35.7 | -24.9 | -21.3 | -20.4 | 11.9 | -3.8 | 12.3 | -4.5 | -3.4 | 38.2 | 19.8 |
| Semiconductors | -30.0 | -54.0 | -45.3 | 3.7 | 24.9 | 38.8 | 11.4 | -24.4 | 40.9 | 28.0 | 40.8 | 45.9 |
| Other Goods 1/ | -2.5 | -11.5 | -17.6 | -8.6 | -2.1 | 12.6 | 2.8 | -10.3 | 2.4 | -2.4 | 6.6 | 13.9 |
| Imports of G\&S | -3.7 | -12.6 | -10.3 | -3.4 | 12.5 | 11.4 | 5.4 | 9.6 | -2.0 | 2.5 | 2.8 | 17.1 |
| Services | -5.0 | 12.8 | -18.3 | -10.4 | 24.7 | -5.8 | 2.8 | 16.6 | -2.6 | -9.4 | 17.9 | 11.1 |
|  | 63.6 | -33.8 | -28.2 | 48.9 | -5.6 | -17.6 | -10.7 | 70.0 | -6.1 | -2.7 | 0.6 | 16.5 |
| Oil | -22.6 | -23.3 | -13.4 | 8.4 | 50.2 | 7.2 | 2.6 | 0.2 | 7.0 | 15.9 | 12.0 | 34.2 |
| Computers | -43.9 | -70.1 | -55.4 | -23.7 | 42.3 | 33.9 | -6.7 | -17.6 | -4.0 | 2.4 | -1.5 | 4.4 |
| Other Goods 2/ | -5.5 | -10.6 | -3.7 | -5.9 | 8.3 | 19.4 | 8.5 | 4.2 | -1.8 | 5.5 | -0.9 | 17.9 |
| Billions of Chained 2000 Dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of $\mathrm{G} \& S$Imports of $\mathrm{G} \& \mathrm{~S}$ | $1097.2$ | $1060.6$ | 1008.7 | $980.3$ | $991.6$ | $1017.8$ | $1025.5$ | $1014.5$ | $1010.6$ | $1006.5$ | $1033.8$ | $1076.2$ |
|  | 1495.4 | 1445.8 | 1407.1 | 1394.9 | 1436.5 | 1475.9 | 1495.3 | 1529.8 | 1522.3 | 1531.7 | 1542.5 |  |
| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -430.4 | -393.6 | -371.4 | -362.4 | -440.4 | -477.1 | -480.3 | -503.0 | -546.6 | -515.2 | -515.9 | -501.0 |
| Current Account as \% of GDP | -4.3 | -3.9 | -3.7 | -3.5 | -4.3 | -4.6 | -4.6 | -4.7 | -5.1 | -4.7 | -4.6 | -4.4 |
| Net Goods \& Services (BOP) | -389.0 | -355.8 | -357.1 | -349.0 | -372.7 | -413.8 | -430.3 | -467.9 | -499.3 | -491.4 | -490.8 | -497.7 |
| Investment Income, Net | 24.7 | 31.3 | 3.3 | 62.1 | 11.4 | 1.8 | 14.1 | 34.5 | 29.3 | 50.6 | 50.9 | 76.5 |
| Direct, Net | 106.2 | 116.1 | 95.0 | 146.2 | 100.5 | 91.4 | 95.0 | 112.2 | 102.3 | 117.4 | 119.9 | 147.8 |
| Portfolio, Net | -81.5 | -84.7 | -91.7 | -84.2 | -89.2 | -89.6 | -80.9 | -77.7 | -72.9 | -66.8 | -69.0 | -71.3 |
| Other Inc. \& Transfers, Net | -66.0 | -69.1 | -17.6 | -75.5 | -79.0 | -65.1 | -64.2 | -69.6 | -76.6 | -74.4 | -76.0 | -79.7 |

[^8]I-47
[Last Page]
NIPA REAL EXPORTS and IMPORTS
OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

|  | 2004 |  |  |  | 2005 |  |  |  | 2006 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NIPA REAL EXPORTS and IMPORTS |  |  |  |  |  |  |  |  |  |  |  |  |
| Percentage point contribution to GDP growth |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -0. 8 | -1.1 | -0.1 | -1. 4 | -0.6 | 0.6 | -0.1 | -0.4 | -0.6 | -0.1 | -0.4 | -0.6 |
| Exports of G\&S | 0.7 | 0.7 | 0.6 | 0.3 | 0.9 | 0.8 | 0.8 | 0.9 | 0.6 | 0.7 | 0.6 | 0.8 |
| Imports of G\&S | -1.5 | -1.8 | -0.7 | -1.7 | -1.5 | -0.3 | -0.9 | -1.2 | -1.2 | -0.7 | -1.0 | -1.4 |
| Percentage change from previous period, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of G\&S | 7.3 | 7.3 | 6.0 | 3.2 | 9.1 | 8.5 | 7.5 | 8.5 | 5.3 | 6.3 | 6.2 | 7.2 |
| Services | 3.4 | 10.2 | -1.8 | 6.2 | 13.4 | 6.2 | 5.2 | 5.2 | 5.0 | 5.2 | 5.3 | 5.4 |
| Computers | -8.3 | -1.8 | 22.4 | 14.0 | 13.1 | 31.1 | 14.3 | 14.3 | 14.4 | 14.4 | 14.4 | 14.4 |
| Semiconductors | 12.5 | -10.1 | -20.7 | -1.7 | -12.6 | 33.7 | 29.3 | 29.3 | 29.2 | 29.2 | 29.2 | 29.2 |
| Other Goods 1/ | 10.1 | 7.7 | 11.1 | 1.5 | 8.2 | 7.1 | 7.1 | 8.7 | 3.8 | 5.2 | 5.0 | 6.6 |
| Imports of G\&S | 10.6 | 12.6 | 4.6 | 11.4 | 9.9 | 1.8 | 5.7 | 7.7 | 7.3 | 4.4 | 6.4 | 8.4 |
| Services | 1.2 | 10.6 | 2.8 | -5.2 | 7.8 | 5.0 | 6.6 | 6.5 | 5.8 | 5.0 | 4.7 | 4.5 |
| Oil | 39.1 | -33.1 | 2.0 | 56.1 | 3.3 | -26.1 | -3.8 | 9.1 | 6.0 | -13.8 | -0.6 | 16.5 |
| Computers | 12.8 | 38.6 | 29.9 | 10.1 | 11.6 | 7.8 | 17.2 | 17.3 | 17.5 | 17.5 | 17.5 | 17.5 |
| Semiconductors | 42.2 | 21.2 | 7.4 | -23.2 | -7.8 | 24.0 | 28.9 | 29.3 | 29.2 | 29.2 | 29.2 | 29.2 |
| Other Goods 2/ | 8.9 | 19.7 | 3.7 | 10.6 | 11.8 | 5.9 | 6.1 | 6.7 | 6.8 | 6.9 | 7.0 | 7.0 |
| Billions of Chained 2000 Dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -550.1 | -580.3 | $-583.2$ | -621.1 | $-638.2$ | -622.4 | -625.9 | $-635.4$ | $-652.5$ | -654.0 | -664.8 | -682.1 |
| Exports of $\mathrm{G} \& \mathrm{~S}$ | 1095.4 | 1114.8 | 1131.1 | 1140.0 | 1165.0 | 1188.9 | 1210.6 | 1235.6 | 1251.7 | 1270.8 | 1290.0 | 1312.6 |
| Imports of $\mathrm{G} \& \mathrm{~S}$ | 1645.5 | 1695.1 | 1714.3 | 1761.2 | 1803.2 | 1811.4 | 1836.5 | 1871.0 | 1904.1 | 1924.8 | 1954.8 | 1994.8 |
| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -584.4 | -666.5 | -667.9 | -753.4 | -780.2 | -784.8 | -829.0 | -865.1 | -905.7 | -908.9 | -934.1 | -960.0 |
| Current Account as \% of GDP | -5.1 | -5.7 | -5.7 | -6.3 | -6.4 | -6.3 | -6.6 | -6.8 | -7.0 | -7.0 | -7.1 | -7.2 |
| Net Goods \& Services (BOP) | -555.4 | -608.2 | -629.9 | -676.9 | -687.0 | -701.5 | -737.6 | -756.6 | -776.2 | -774.9 | -783.3 | -799.7 |
| Investment Income, Net | 65.8 | 29.6 | 30.8 | 18.8 | 20.7 | 18.0 | 11.7 | -1.7 | -12.6 | -27.0 | -41.7 | -58.1 |
| Direct, Net | 140.3 | 116.3 | 121.4 | 133.7 | 125.2 | 138.5 | 148.6 | 149.2 | 151.2 | 150.7 | 153.9 | 158.0 |
| Portfolio, Net | -74.6 | -86.7 | -90.6 | -114.9 | -104.4 | -120.5 | -136.9 | -150.9 | -163.7 | -177.7 | -195.6 | -216.1 |
| Other Inc. \& Transfers, Net | -94.7 | -88.0 | -68.8 | -95.3 | -113.9 | -101.3 | -103.1 | -106.8 | -116.9 | -107.0 | -109.1 | -102.3 |

[^9]
[^0]:    ${ }^{1}$ We also lowered our estimate of potential GDP growth in 2004 from 3.7 percent to 3.5 percent. This change was motivated by the emergence of unusually large overprediction errors in our Okun's Law models in recent quarters, which suggested that our estimate of either the NAIRU or potential GDP was too high. We read the incoming data as, on balance, being more consistent with a lower estimate of potential GDP. We implemented this adjustment by reducing the estimated gap between the growth of hours in the nonfarm business sector and total hours worked in the economy-one of the technical factors in our accounting for potential output. We did not alter our estimates of multifactor productivity growth.

[^1]:    ${ }^{2}$ Reliable data on house prices are available only back to the mid-1970s. Real house prices-as measured by the ratio of the OFHEO repeat-transaction price index to the PCE price index-fell about 9 percent between mid-1979 and late 1982, a time of skyrocketing mortgage rates and high unemployment.

[^2]:    ${ }^{3}$ We estimate that an increase of $11 / 4$ percentage points in the saving rate would be consistent, for example, with a sustained retreat in consumer confidence back to its 2002 lows.

[^3]:    Note. Quarterly data are at seasonally adjusted annual rates.

    1. Data after 2005:Q1 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.
    2.6.3 FOF
[^4]:    Note. Data after 2005:Q1 are staff projections.
     6. Excludes government-insured mortgage pool securities.
    4. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.
    5. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP
    6. n.s.a. Not seasonally adjusted.

[^5]:    1. Foreign GDP aggregates calculated using shares of U.S. exports.
    2. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.
[^6]:    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.

[^7]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors.
[^8]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors
[^9]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors
