## 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

Economic activity appears to have expanded at an annual rate of 5-1/4 percent in the first quarter-a considerably faster pace than the one we wrote down in the March Greenbook. Much of the unexpected strength in the first quarter occurred in consumer and federal spending; in addition, the external sector apparently was a smaller-than-anticipated restraint on output. Although we have few hard data in hand for the second quarter, the most recent employment report-which showed more improvement in the labor market than earlier appeared to be the case-and forward-looking indicators such as equipment orders suggest another appreciable real GDP advance in the current quarter.

We view recent developments as broadly consistent with the basic story that we have been telling for some time. With growth in real GDP supported by considerable monetary and fiscal policy stimulus, we have been expecting businesses to shed some of the caution they have been exhibiting in investment and hiring. The recent data-especially from the labor market-provide new evidence that this process is under way. For 2004 as a whole, we expect real GDP to rise 5 percent, the same pace as in the March Greenbook. We continue to expect growth to slow in 2005, as fiscal policy switches from stimulus to restraint and as monetary policy becomes less accommodative. As a result of a higher assumed path for long-term interest rates, we have marked down our projection a bit. We now forecast real GDP to rise at an annual rate of 3-3/4 percent, about $1 / 4$ percentage point below the pace projected in the March Greenbook.

We have been surprised by the recent increases in core consumer prices. Some of the pickup is likely due to the inherent noisiness of the data; indeed, some of the categories that posted large gains this quarter showed unusually small increases earlier. But we have interpreted the incoming data as also indicating a somewhat higher underlying inflation trend than we had been assuming. Looking beyond the near term, we are forecasting inflation to remain subdued in light of the expected slack in resource utilization and the strong structural productivity growth. Thus, after increasing at an annual rate of 1.6 percent in the first half of this year, core PCE inflation is projected to slow to a 1.2 percent pace over the balance of the forecast period- 0.2 percentage point faster than in the March Greenbook.

## Key Background Factors

The stronger-than-expected data on economic activity and prices have led financial market participants to expect an earlier, and more substantial, policy tightening than they did at the time of the March Greenbook. Reflecting this revision in the market's outlook, long-term interest rates have climbed as much as $3 / 4$ percentage point since the previous Greenbook. We, too, have revised our path for the federal funds rate, though by considerably less than the change
in market expectations. We have moved the onset of tightening to the fourth quarter of this year from the first quarter of 2005 and now assume that the funds rate will reach $2-1 / 4$ percent by the end of next year, 25 basis points above the March Greenbook assumption. With inflation remaining relatively subdued in our forecast, we anticipate that the market's expected path for the funds rate-which currently climbs above 3 percent by the end of 2005-will move down toward our path. This shift in expectations will work to counter the rise in long-term interest rates that would otherwise accompany a tightening of policy, and we assume that long rates will hold close to their current levels through the end of 2005 .

Broad equity-price indexes are up about $1-1 / 2$ percent from the last Greenbook, as strong earnings reports have more than offset the negative effect of higher interest rates on share prices. We assume that equity prices will increase at an average annual rate of $6-1 / 2$ percent, roughly maintaining risk-adjusted parity with the projected yield on long-term Treasury securities.

Our fiscal policy assumptions are unchanged from the last Greenbook. In particular, we continue to assume that real spending related to Iraq will step up this fiscal year to a level consistent with last year's appropriations and that, for fiscal 2005, the Administration will request a supplemental appropriation that is sufficient to keep real Iraq-related outlays constant at about 2004 levels. This level of spending seems sufficient to finance the recently announced extended troop deployments, although, more generally, the increased volatility of the situation in Iraq poses an upside risk to federal spending. ${ }^{1}$

Overall, we continue to assume that fiscal policy will substantially boost aggregate demand this year before turning slightly restrictive next year with the expiration of partial-expensing allowances for business investment. Consistent with these assumptions, we expect federal budget deficits of $\$ 449$ billion in fiscal 2004 and $\$ 358$ billion in fiscal 2005, $\$ 24$ billion and $\$ 19$ billion, respectively, lower than forecast in the last Greenbook. The recent information on final tax payments and refunds had a small effect on our projection, as receipts have been coming in just a little stronger than we had expected.

Our projection of foreign GDP growth is little changed from the last Greenbook. We continue to expect that, on a trade-weighted basis, foreign GDP will increase about 3-3/4 percent this year and 3-1/2 percent next year. The foreign

[^0]exchange value of the dollar has appreciated since the March Greenbook, and we have raised our assumption for the real trade-weighted dollar in the current quarter about 1 percent. We assume that the value of the dollar will edge down over the forecast period, albeit at a slightly slower pace than projected in the March Greenbook.

The spot price of West Texas intermediate (WTI) crude oil is currently around $\$ 37$ per barrel, about $\$ 0.50$ per barrel higher than its average in March. Oil prices are being supported by strong world oil demand, a cut in OPEC's production target, and uncertainty about supplies in the Middle East and Venezuela. We anticipate that, over time, prices will decline as non-OPEC production moves up. In line with readings from futures markets, the price of WTI crude is projected to fall to around $\$ 31$ per barrel by the end of 2005-a level that, nonetheless, is still about $\$ 1.30$ per barrel above our March forecast.

## Recent Developments and the Near-Term Outlook

The available data suggest that real GDP grew at an annual rate of 5.2 percent in the first quarter, $3 / 4$ percentage point higher than our estimate in the March Greenbook. We project that real GDP will grow 4.6 percent this quarter.

The labor market has shown signs of improvement. Private payroll employment increased at an average monthly rate of about 160,000 in the first quarter, a significant step-up from the 60,000 average in the fourth quarter. Although private payroll employment surged 277,000 in March, we believe that to forecast continued gains of this magnitude in the coming months would be reading too much into one monthly report. Instead, we project further modest improvement, with private payroll gains averaging 175,000 per month in the current quarter.

After a gain of 6 percent in the first quarter, factory production is projected to rise at an annual rate of $5-1 / 2$ percent in the second quarter. The decrease is due to a reduction in assemblies of light vehicles. Elsewhere in the manufacturing sector, output is projected to grow at an annual rate of 6 percent, about $1 / 2$ percentage point above the rate in the first quarter, in part because growth of high-tech production is projected to step up from its already-robust pace in the first quarter.

Inventories of motor vehicles built up noticeably in the first quarter because of both a hike in production and a softening of sales. In the current quarter, those stocks will likely be drawn down as automakers cut back on production and

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

| Measure | 2004:Q1 |  | 2004:Q2 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Mar. GB | Apr. <br> GB | Mar. <br> GB | Apr. <br> GB |
| Real GDP | 4.4 | 5.2 | 4.9 | 4.6 |
| Private domestic final purchases | 4.2 | 4.3 | 6.1 | 6.4 |
| Personal consumption expenditures | 3.4 | 4.0 | 4.8 | 5.1 |
| Residential investment | 4.1 | 3.8 | 6.9 | 8.4 |
| Business fixed investment | 10.1 | 6.9 | 14.7 | 14.2 |
| Government outlays for consumption and investment | 2.9 | 3.6 | 3.1 | 1.9 |
|  | Contribution to growth (percentage points) |  |  |  |
| Inventory investment | . 7 | 1.0 | -. 5 | -. 8 |
| Net exports | -. 5 | -. 2 | -. 4 | -. 4 |

sweeten incentives to boost sales. Sales of light vehicles are projected to average almost 17 million units in the second quarter, up about $1 / 2$ million units from the first-quarter level. In terms of contribution to real GDP growth, we expect motor vehicle production to subtract about 1 percentage point in the current quarter.

Regarding the components of final demand, we estimate that real consumer spending rose at an annual rate of 4 percent in the first quarter. When we exclude the weak spending on motor vehicles, we estimate that real consumer outlays rose at an annual rate of a little more than 5 percent in the first quarter, about $3 / 4$ percentage point higher than we had projected in the last Greenbook. With growth in disposable income projected to be robust, we expect another solid advance this quarter.

Housing activity remained strong in the first quarter. Single-family starts came in at an annual rate of 1.56 million units-below the blistering pace seen at the end of 2003 but still at a very high level. Multifamily starts remained at their year-end level of 380,000 units. We expect total starts in the current quarter to drop off only a bit from the first-quarter level, as the recent rise in mortgage interest rates is not likely to show through in a material way until the second half of this year. We also expect overall outlays for residential investment in the second quarter to be boosted by increases in real estate commissions and spending on home improvements.

In the business sector, real spending on equipment and software is estimated to have risen at an annual rate of around 12 percent in the first quarter. Strength was widespread as investment in high-tech capital continued to recover and spending on other capital equipment (excluding transportation) rose briskly. Supported by the favorable fundamentals in this sector-namely, the continued gains in business output and corporate cash flow and the low user cost of capital-as well by a further lifting of business caution, E\&S should post another large gain in the current quarter. In contrast, nonresidential investment continues to be weak, with monthly construction data indicating another decline in the first quarter. Vacancy rates in most sectors remain high, and spending should remain subdued this quarter.

In the federal sector, real defense spending in the first quarter jumped at an estimated annual rate of almost 15 percent, after being generally level in the second half of last year. We anticipate another small increase this quarter, as defense spending continues to ramp up to the level implied by last year's budget request. Rebounding from a surprising decline in the fourth quarter, real nondefense spending is assumed to have increased 7-3/4 percent at an annual rate in the first quarter; we expect it to return to its underlying pace of about 3-1/4 percent annual growth this quarter. At the state and local level, although budgetary pressures have eased, real spending is projected to be about flat over the first half of this year.

After persistent declines over the past few years, inventories outside motor vehicles were little changed in the first quarter. We expect a sizable pickup in inventory investment this quarter as businesses start to gain greater confidence in the strength of the expansion.

Based on data through February, our estimate is that net exports exerted only a small drag on real GDP in the first quarter, as growth of both imports and exports dropped sharply from the elevated pace in the fourth quarter. We assume that both imports and exports will rebound in the current quarter, with the contribution of imports exceeding that of exports by enough to knock $1 / 2$ percentage point off the growth of real GDP.

The core consumer price index rose at an annual rate of 1.9 percent in the first quarter, about $1 / 2$ percentage point higher than we had projected last Greenbook. The pickup in core inflation was due, in large part, to an unexpected flattening of goods prices after sizable declines last year. In particular, apparel prices turned up last quarter as did the prices for new and used vehicles, but some firming was evident for a variety of other goods as well. The higher goods price inflation reflects, in part, the recent run-up in the prices of non-oil imports, energy, and other commodities.

Using our usual translation procedures, we estimate that the core PCE price index for the first quarter increased 1.6 percent. The higher level of prices observed at the end of the first quarter should show through to higher second-quarter inflation as well, with core PCE prices expected to increase 1.6 percent, about $1 / 2$ percentage point more than in the last Greenbook. Overall PCE prices rose at an annual rate of 3 percent in the first quarter, but they are projected to slow to a pace of around 2 percent in the current quarter as the rate of increase in food and energy prices moderates.

## The Longer-Term Outlook for the Economy

Our longer-term forecast has been lowered a bit since the last Greenbook, in large part because of the higher path of long-term interest rates. That said, the basic contour remains the same. Supported by strong fundamentals-favorable financial conditions, expansionary fiscal policy, and continued robust gains in structural productivity-real GDP is expected to grow about 5 percent in the second half of this year. Next year, as fiscal policy becomes slightly restrictive and monetary policy less accommodative, growth slows to about 3-3/4 percent.

Household spending. Fueled by large increases in disposable income, real consumer spending is expected to rise about $4-1 / 2$ percent in 2004 and 4 percent in 2005. The deceleration between this year and next can be traced to the waning effects on consumption of both last year's tax cuts and the recent increases in household wealth.

The outlook for the housing sector remains favorable. Although the recent run-up in mortgage rates is expected to restrain the level of housing starts later this year and next, this effect should be partly offset by the stronger labor market and the continued gains in real income growth. Single-family starts are projected to average 1.54 million units in 2004, a bit above the 2003 average, and to fall off to 1.50 million units in 2005. We anticipate a similarly modest decline in multifamily construction, a sector that has shown surprising strength given the elevated level of vacancies. Multifamily starts are expected to average 350,000 units in 2004-roughly the level observed over the past three years-and to step down to 330,000 units in 2005.

Business investment. Business investment in equipment and software is projected to grow about 17 percent in 2004, supported by an acceleration in business output, continued favorable financing conditions, robust profits, and the year-end expiration of partial expensing. We expect the growth of real E\&S spending to slow in 2005 to around $8-1 / 2$ percent, in large part because of a payback for the investment that will be pulled forward into 2004.

| Projections of Real GDP (Percent change at annual rate from end of preceding period except as noted) |  |  |  |
| :---: | :---: | :---: | :---: |
| Measure | 2004 |  | 2005 |
|  | H1 | H2 |  |
| Real GDP | 4.9 | 5.1 | 3.8 |
| Previous | 4.7 | 5.3 | 4.0 |
| Final sales | 4.8 | 4.7 | 3.6 |
| Previous | 4.5 | 5.0 | 3.9 |
| PCE | 4.5 | 4.3 | 4.0 |
| Previous | 4.1 | 4.3 | 4.0 |
| Residential investment | 6.1 | -2.9 | -1.2 |
| Previous | 5.5 | -. 2 | -. 4 |
| BFI | 10.5 | 16.6 | 7.8 |
| Previous | 12.4 | 16.7 | 8.8 |
| Government purchases | 2.7 | 1.7 | 2.1 |
| Previous | 3.0 | 1.7 | 2.1 |
| Exports | 6.9 | 11.7 | 9.1 |
| Previous | 8.2 | 13.2 | 10.8 |
| Imports | 6.8 | 9.2 | 8.6 |
| Previous | 8.8 | 9.3 | 9.0 |
|  | Contribution to growth (percentage points) |  |  |
| Inventory change | . 1 | . 4 | . 2 |
| Previous | . 1 | . 3 | . 1 |
| Net exports | -. 3 | -. 2 | -. 3 |
| Previous | -. 5 | -. 1 | -. 2 |

After three years of declines, nonresidential construction spending is projected to edge up about 1-1/4 percent in 2004. Real spending on office buildings and industrial facilities is expected to be about flat as vacancy rates continue to be elevated, while the high level of energy prices is expected to boost spending on drilling and mining about 7 percent. We expect growth in nonresidential construction spending to pick up next year to a pace of 5 percent. Increases in employment and business output raise demand for office and industrial space, but this rise is partially offset by a deceleration in spending on drilling and mining as energy prices moderate.

Inventory investment. Given the ongoing robust economic activity and the low ratio of stock to sales in many industries, we continue to expect firms to accumulate inventories in coming quarters to gradually return their stockbuilding to a pace consistent with ongoing sales growth. Inventory investment is projected to contribute about $1 / 4$ percentage point to the rise in real GDP this year and a bit less in 2005.

Government spending. Largely as a result of a step-up in spending related to Iraq, real federal expenditures on consumption and investment are projected to increase at a $7-3 / 4$ percent annual rate in the first half of this year. Spending growth is expected to fall to about 2 percent thereafter, as real spending for Iraq levels off and as the growth of spending on homeland security moderates.

Despite the improving budget situation in many states, we continue to expect states to rebuild rainy-day funds and cash balances rather than to ramp up spending. For 2004, state and local expenditures are projected to grow only about $3 / 4$ percent. As tax revenues continue to recover, spending in 2005 is projected to grow about 2-1/4 percent, just a little under the average of the last decade.

Net exports. Supported by solid growth abroad and the effects of past dollar depreciation, real exports are expected to increase at an annual rate of $11-3 / 4$ percent in the second half of 2004 and 9 percent in 2005. Real imports are also expected to grow briskly, but at a rate somewhat below that of real exports. On net, the external sector is projected to make arithmetic deductions from real GDP growth of about $1 / 4$ percentage point in the second half of 2004 and a bit more in 2005-close to the effects projected in the March Greenbook. (The International Developments section provides a more-extensive discussion of the outlook for the external sector.)

## Aggregate Supply, the Labor Market, and Inflation

Our estimates of structural productivity and potential output growth are essentially unchanged from the March Greenbook. We expect structural productivity to grow 3-1/4 percent in 2004 and 3 percent next year and potential output to increase at an annual rate of $3-1 / 2$ percent over the projection period. The path of the output gap is little changed from the last Greenbook, falling from 2-1/4 percent at the end of 2003 to about $3 / 4$ percent of real GDP by the end of 2005 .

Productivity and the labor market. The strong March employment report lends support to our view that the gradual recovery in the labor market observed over the past half-year is at least continuing, if not accelerating. We project that employment growth will increase throughout the year, with average monthly

# Decomposition of Structural Labor Productivity 

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

| Measure | $\begin{gathered} 1974- \\ 95 \end{gathered}$ | $\begin{aligned} & 1996- \\ & 2001 \end{aligned}$ | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Structural labor productivity | 1.5 | 2.7 | 3.3 | 3.8 | 3.2 | 3.0 |
| Previous | 1.5 | 2.7 | 3.3 | 3.8 | 3.3 | 3.1 |
| Contributions ${ }^{1}$ |  |  |  |  |  |  |
| Capital deepening | . 7 | 1.4 | . 6 | . 7 | . 9 | 1.1 |
| Previous | . 7 | 1.4 | . 6 | . 7 | 1.0 | 1.2 |
| Multifactor productivity | . 5 | 1.1 | 2.4 | 2.9 | 2.1 | 1.7 |
| Previous | . 5 | 1.1 | 2.4 | 2.9 | 2.1 | 1.7 |
| Labor composition | . 3 | . 3 | . 3 | . 3 | . 3 | . 3 |
| Memo |  |  |  |  |  |  |
| Potential GDP | 3.0 | 3.4 | 3.6 | 4.1 | 3.6 | 3.6 |
| Previous | 3.0 | 3.4 | 3.6 | 4.1 | 3.7 | 3.7 |

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 shown.

1. Percentage points.
increases in private payrolls reaching about 300,000 by the end of 2004. Hiring is expected to slow a bit in 2005 as the economic expansion moderates. The unemployment rate is expected to decline gradually to 5.2 percent by the end of 2005 , still above our estimate of the NAIRU. With businesses increasing their workforces to more-sustainable levels, the growth rate of actual output per hour is projected to fall to a pace that is lower than the underlying structural rate of productivity growth.

Prices and wages. As discussed above, the recent data on prices suggest that the underlying rate of inflation is somewhat higher than we thought. Looking back over last year, we now think that we may have taken a bit too much signal from that period's price deceleration. As a result, we have boosted our projection of underlying price inflation 0.2 percentage point. Nonetheless, given the slack resource utilization, smaller projected increases in non-oil import prices, and the waning effects of indirect energy prices, we continue to expect inflation to be subdued over the forecast period. All told, we are projecting core PCE prices to rise 1.4 percent in 2004 and 1.2 percent in 2005.

The upward revision in our projection of price inflation has led us to boost the growth of labor compensation. We now project that the employment cost index

## The Outlook for the Labor Market

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

| Measure | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: |
| Output per hour, nonfarm business | 4.3 | 5.4 | 2.7 | 1.6 |
| $\quad$ Previous | 4.3 | 5.3 | 3.0 | 1.6 |
| Nonfarm private payroll employment | -.9 | -.2 | 2.3 | 2.5 |
| $\quad$ Previous | -.9 | -.2 | 2.0 | 2.8 |
| Household survey employment | .3 | 1.2 | 1.7 | 1.9 |
| $\quad$ Previous | .3 | 1.2 | 1.9 | 1.8 |
| Labor force participation rate ${ }^{1}$ | 66.5 | 66.1 | 66.4 | 66.6 |
| $\quad$ Previous | 66.5 | 66.1 | 66.5 | 66.7 |
| Civilian unemployment rate $^{1}$ | 5.9 | 5.9 | 5.4 | 5.2 |
| $\quad$ Previous | 5.9 | 5.9 | 5.5 | 5.2 |
| MEMO |  |  |  |  |
| GDP gap ${ }^{2}$ | 2.4 | 2.2 | .9 | .7 |
| Previous | 2.4 | 2.2 | 1.0 | .7 |

1. Percent, average for the fourth quarter.
2. Percent difference between potential and actual GDP in the fourth quarter of the year indicated. A positive number indicates that the economy is operating below potential.
will increase 3.7 percent this year and 3.9 percent next year, compared with 3.6 percent and 3.7 percent, respectively, in the last Greenbook.

## Financial Flows and Conditions

Domestic nonfinancial debt is projected to expand 8 percent this year-about the same pace as in 2003-before tapering down to a 6-3/4 percent increase in 2005. This contour is similar to that in the previous Greenbook, as we continue to project that a slower pace of government and household borrowing next year will more than offset a pickup in business borrowing.

We anticipate that household debt growth will step down from last year's pace of $10-1 / 2$ percent to $8-3 / 4$ percent this year and $7-1 / 4$ percent in 2005 . This deceleration is a bit more pronounced than in the March Greenbook, mainly because of the higher path for mortgage rates, which damps both loan originations related to home purchases and cash-out refinancing activity. All told, we expect the growth of home mortgage debt to slow from the pace of 12-1/2 percent recorded in 2003 to less than 8 percent in 2005. In contrast, we project that the growth of consumer credit will trend up from last year's pace of

| Inflation Projections |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| (Percent change, Q4 to Q4, except as noted) |  |  |  |  |
| Measure | 2002 | 2003 | 2004 | 2005 |
| PCE chain-weighted price index | 1.8 | 1.5 | 1.5 | 1.1 |
| Previous | 1.8 | 1.4 | 1.1 | .9 |
| Food and beverages | 1.4 | 2.6 | 1.8 | 1.6 |
| Previous | 1.4 | 2.6 | 1.6 | 1.4 |
| Energy | 7.9 | 7.8 | 1.7 | -2.7 |
| $\quad$ Previous | 7.9 | 7.8 | .7 | -2.8 |
| Excluding food and energy | 1.6 | 1.0 | 1.4 | 1.2 |
| $\quad$ Previous | 1.6 | .9 | 1.1 | 1.0 |
| Consumer price index | 2.2 | 1.9 | 1.8 | 1.3 |
| Previous | 2.2 | 1.9 | 1.4 | 1.1 |
| Excluding food and energy | 2.0 | 1.2 | 1.7 | 1.6 |
| $\quad$ Previous | 2.0 | 1.2 | 1.4 | 1.4 |
| GDP chain-weighted price index | 1.4 | 1.6 | 1.3 | 1.3 |
| Previous | 1.4 | 1.6 | 1.0 | 1.1 |
| ECI for compensation of private |  |  |  |  |
| industry workers ${ }^{1}$ | 3.2 | 4.0 | 3.7 | 3.9 |
| Previous | 3.2 | 4.0 | 3.6 | 3.7 |
| NFB compensation per hour | 1.8 | 4.0 | 3.6 | 3.8 |
| Previous | 1.8 | 3.6 | 3.3 | 3.6 |
| Prices of core non-oil |  |  |  |  |
| merchandise imports | .5 | 1.8 | 4.5 | .4 |
| Previous | .5 | 1.8 | 4.2 | .5 |
| I |  |  |  |  |

1. December to December.
$5-1 / 4$ percent to $6-1 / 2$ percent in 2005. This pickup is consistent with the projected rise in spending on durable goods and with some reduction in the use of mortgage credit to finance household purchases.

As in the previous Greenbook, borrowing by nonfinancial businesses is projected to pick up noticeably this year and next, with most of the impetus from the anticipated rise in capital spending. Also, in 2005, the expiration of the partial-expensing provision should increase business tax payments-and thus lower internally generated funds-which will likely contribute to greater financing needs. With businesses projected to be building inventories this year and next, we expect some shift back toward funding with bank loans and commercial paper after the sharp runoffs in recent years.

Our forecast for federal sector borrowing follows the anticipated contour of the deficit. We expect federal debt to grow 11-3/4 percent this year-a little faster than last year's 11 percent pace-and then to increase at a slower pace of $7-1 / 2$ percent in 2005. The rate of borrowing by state and local governments is projected to moderate this year and next as a result of this sector's improving fiscal situation and higher interest rates, which should damp advance-refunding activity.

After having contracted in the fourth quarter of 2003, M2 is estimated to have grown at a pace more in accord with nominal income so far this year. We project M2 to rise 5-1/2 percent for the year as a whole. It should grow just 3 percent in 2005-considerably less than the pace of nominal income-in response to the higher opportunity costs induced by the assumed tightening of monetary policy.

## Alternative Simulations

In this section we evaluate several risks to the forecast using simulations of the FRB/US model. In light of the recent surprising news on consumer prices, the first four scenarios explore alternatives to the outlook for inflation. The next two simulations primarily concern risks to the real side of the economy. In all these simulations, the federal funds rate is held at baseline. The final scenario assumes that the funds rate follows a path consistent with current readings from the futures market.

Higher underlying inflation. The up-and-down movements of core PCE price inflation over the past two years have made it difficult to pin down with much certainty the underlying rate of inflation. The Greenbook baseline assumes that the underlying trend in core PCE inflation is between the low rate of increase seen last year and the higher rate experienced more recently. An alternative interpretation is that the small price increases of last year were an aberration and that the underlying trend has in fact been roughly stable since 2002 at a level consistent with the $1-1 / 2$ percent rate of core PCE inflation registered in 2002 and now expected over the first half of this year. Under these circumstances, inflation remains close to this pace from the second half of this year through the end of 2005, with only minor effects on economic activity.

High NAIRU. In the previous scenario, inflation is higher than in the baseline, but prices do not accelerate in 2005-a stability that reflects in part the influence of continuing economic slack. An alternative view is that we have underestimated the NAIRU and that the margin of underutilized resources is smaller than in the staff baseline. One possible reason is the protracted rise in the share of unemployment that is long term. Although we are assuming in the

## Alternative Scenarios

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

| Measure | $\begin{gathered} \text { 2003: } \\ \text { H2 } \end{gathered}$ | 2004 |  | 2005 |
| :---: | :---: | :---: | :---: | :---: |
|  |  | H1 | H2 |  |
| Real GDP |  |  |  |  |
| Baseline | 6.2 | 4.9 | 5.1 | 3.8 |
| Higher underlying inflation | 6.2 | 4.9 | 5.1 | 3.9 |
| High NAIRU | 6.2 | 4.9 | 5.1 | 3.7 |
| Inflation reversal | 6.2 | 4.9 | 5.1 | 3.7 |
| Declining markup | 6.2 | 5.0 | 5.3 | 4.0 |
| Cautious firms | 6.2 | 4.3 | 4.6 | 3.4 |
| Surging demand | 6.2 | 5.0 | 5.9 | 4.7 |
| Market-based funds rate | 6.2 | 4.9 | 5.0 | 3.4 |
| Civilian unemployment rate ${ }^{1}$ |  |  |  |  |
| Baseline | 5.9 | 5.6 | 5.4 | 5.2 |
| Higher underlying inflation | 5.9 | 5.6 | 5.4 | 5.1 |
| High NAIRU | 5.9 | 5.6 | 5.4 | 5.2 |
| Inflation reversal | 5.9 | 5.6 | 5.4 | 5.2 |
| Declining markup | 5.9 | 5.6 | 5.3 | 5.0 |
| Cautious firms | 5.9 | 5.8 | 6.0 | 6.0 |
| Surging demand | 5.9 | 5.6 | 5.2 | 4.5 |
| Market-based funds rate | 5.9 | 5.6 | 5.4 | 5.4 |
| PCE prices excluding food and energy |  |  |  |  |
| Baseline | 1.1 | 1.6 | 1.2 | 1.2 |
| Higher underlying inflation | 1.1 | 1.6 | 1.6 | 1.5 |
| High NAIRU | 1.1 | 1.7 | 1.7 | 1.8 |
| Inflation reversal | 1.1 | 1.3 | . 9 | 1.0 |
| Declining markup | 1.1 | 1.2 | . 6 | . 5 |
| Cautious firms | 1.1 | 1.6 | 1.1 | 1.0 |
| Surging demand | 1.1 | 1.6 | 1.2 | 1.3 |
| Market-base funds rate | 1.1 | 1.6 | 1.2 | 1.1 |

1. Average for the final quarter of the period.
baseline that this rise will prove transitory, it may instead be more persistent if there have been structural changes that will limit re-employment prospects in workers' previous occupations, industries, or geographical areas. To illustrate the effect of this and other upside risks to our estimate of the NAIRU, we build upon the previous scenario by assuming that the NAIRU is 5-3/4 percent rather than the baseline value of roughly 5 percent. A tight labor market boosts the rate of inflation to 1-3/4 percent next year and would likely push it up further in 2006. On the view that financial markets would gradually come to expect the
higher inflation to lead to a tighter future stance of monetary policy, both nominal and real bond rates rise modestly relative to baseline, restraining real activity a bit.

Inflation reversal. The "higher underlying inflation" scenario views recent inflation data in a less-favorable light than does the Greenbook baseline. The "inflation reversal" scenario takes a more optimistic view and assumes that the inflation surprises since the March Greenbook are entirely noise that will be reversed later this year. Given that the current baseline projection of the unemployment rate is essentially unchanged from the time of the last Greenbook, core prices in 2005 rise at the same 1 percent pace we projected then, with minor effects on real output.

Declining markup. Despite a substantial deceleration in output per hour, the baseline projection of profitability-as measured by the markup of prices over unit labor costs-declines only modestly from its current elevated level. In this scenario we build on the conditions of the "inflation reversal" simulation and assume that intensified competition among firms leads to a more-pronounced decline in the markup. In labor markets, firms bid up wages more rapidly to attract and retain workers, so that by 2005 compensation per hour is rising $1 / 2$ percentage point faster than in the baseline. In product markets, increased competition limits the size of price increases relative to baseline and causes core PCE inflation to slow to only $1 / 2$ percent in 2005 . With price inflation coming in surprisingly low, policy is expected to tighten less rapidly. As a result, both nominal and real long-term interest rates are lower than in the baseline and stimulate real activity, causing the unemployment rate to edge down to 5 percent by the end of next year.

Cautious firms. Although recent developments suggest that the caution restraining firms' hiring and investment decisions is waning, the evidence is not yet decisive. This scenario assumes that such caution has, in fact, not abated and will instead be an important factor restraining hiring and investment outlays into 2005. Specifically, real outlays for equipment and software, rather than rising 17 percent this year, increase only 14 percent. Stockbuilding is also less vigorous, so that the fall in the inventory-sales ratio over this year and next is close to the large declines seen over the past two years, in contrast to the baseline's modest decrease. A cautious outlook also spurs firms, through various actions that are unsustainable in the long run, to economize further on new hires, boosting the rise in output per hour to 3-1/4 percent this year- $1 / 2$ percentage point faster than in the baseline. Under these conditions, real GDP advances only 4-1/2 percent this year and 3-1/2 percent next year. Less-robust output growth combines with larger productivity gains to push the unemployment rate up to 6 percent later this year and in 2005. In response to increased slack, inflation drops to 1 percent next year.

Surging demand. The Greenbook baseline projects the level of real activity to be $3 / 4$ percent below potential late in 2005, even though the real funds rate over the projection period is about 2-1/2 percentage points below its average of the past forty years. One way to characterize this outlook is that the stimulus to spending from a low funds rate is being muted by an equilibrium real rate of interest (a summary measure of the net effect of the medium-term forces influencing aggregate demand) that also has been, and will be for a while, low by historical standards. In this scenario, we instead assume that the restraining factors that have been holding down the equilibrium real rate fade away rapidly; accordingly, the magnitude of monetary stimulus is greater than in the baseline. Consistent with this assumption, real GDP advances at a rate of 6 percent in the second half of this year and $4-3 / 4$ percent next year. By the end of 2005, this faster output growth is sufficient to bring the unemployment rate down to $4-1 / 2$ percent and to cause inflation to be slightly higher than baseline.

Market-based funds rate. Quotes from futures markets are consistent with a federal funds rate that begins to rise in the second half of this year and exceeds 3 percent by late 2005. Relative to baseline, adopting the market-based path for the funds rate limits the increase of real GDP in 2005 to $3-1 / 2$ percent. The unemployment rate is a touch higher as a result, and inflation is a bit lower.

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

| Measure | 2004 | 2005 |
| :---: | :---: | :---: |
| Real GDP (percent change, Q4 to Q4) |  |  |
| Projection | 5.0 | 3.8 |
| Confidence interval |  |  |
| Greenbook forecast errors ${ }^{1}$ | 3.6-6.4 | 1.8-5.7 |
| FRB/US stochastic simulations | 3.9-6.2 | $2.3-5.5$ |
| Civilian unemployment rate (percent, Q4) |  |  |
| Projection | 5.4 | 5.2 |
| Confidence interval |  |  |
| Greenbook forecast errors ${ }^{1}$ | 5.0-5.9 | 4.4-6.0 |
| FRB/US stochastic simulations | 4.9-5.9 | 4.1-6.1 |
| PCE prices excluding food and energy (percent change, Q4 to Q4) |  |  |
| Projection | 1.4 | 1.2 |
| Confidence interval |  |  |
| Greenbook forecast errors ${ }^{2}$ | 1.0-1.8 | .4-2.1 |
| FRB/US stochastic simulations | .9-1.9 | .5-2.0 |

NOTE. Shocks underlying stochastic simulations are randomly drawn from the 1978-
2003 set of model equation residuals.

1. 1978-2003.
2. 1981-2003.

Forecast Confidence Intervals and Alternative Scenarios
Confidence Intervals Based on FRB/US Stochastic Simulations

|  | Greenbook baseline |  | Declining markup |
| :---: | :---: | :---: | :---: |
|  | Higher underlying inflation |  | Cautious firms |
|  | High NAIRU |  | Surging demand |
|  | Inflation reversal |  | Market-based funds rate |

Real GDP


Unemployment Rate


PCE Prices Excluding Food and Energy

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| Interval |  | Nominal GDP |  | Real GDP |  | GDP chain-weighted price index |  | Consumer price index ${ }^{1}$ |  | Unemployment rate ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 03/11/04 | 04/28/04 | 03/11/04 | 04/28/04 | 03/11/04 | 04/28/04 | 03/11/04 | 04/28/04 | 03/11/04 | 04/28/04 |
| ANNUAL |  |  |  |  |  |  |  |  |  |  |  |
| 2001 |  | 2.9 | 2.9 | 0.5 | 0.5 | 2.4 | 2.4 | 2.8 | 2.8 | 4.7 | 4.7 |
| 2002 |  | 3.8 | 3.8 | 2.2 | 2.2 | 1.5 | 1.5 | 1.6 | 1.6 | 5.8 | 5.8 |
| 2003 |  | 4.8 | 4.8 | 3.1 | 3.1 | 1.7 | 1.7 | 2.3 | 2.3 | 6.0 | 6.0 |
| 2004 |  | 6.3 | 6.7 | 5.0 | 5.1 | 1.3 | 1.5 | 1.6 | 1.9 | 5.5 | 5.5 |
| 2005 |  | 5.5 | 5.4 | 4.5 | 4.3 | 1.0 | 1.1 | 0.9 | 1.2 | 5.3 | 5.3 |
| QUARTERLY |  |  |  |  |  |  |  |  |  |  |  |
| 2002 | Q1 | 5.4 | 5.4 | 4.7 | 4.7 | 1.1 | 1.1 | 1.4 | 1.4 | 5.7 | 5.7 |
|  | Q2 | 3.9 | 3.9 | 1.9 | 1.9 | 1.5 | 1.5 | 3.4 | 3.4 | 5.8 | 5.8 |
|  | Q3 | 4.4 | 4.4 | 3.4 | 3.4 | 1.5 | 1.5 | 2.2 | 2.2 | 5.7 | 5.7 |
|  | Q4 | 3.1 | 3.1 | 1.3 | 1.3 | 1.7 | 1.7 | 2.0 | 2.0 | 5.9 | 5.9 |
| 2003 | Q1 | 4.3 | 4.3 | 2.0 | 2.0 | 2.3 | 2.3 | 3.8 | 3.8 | 5.8 | 5.8 |
|  | Q2 | 4.2 | 4.2 | 3.1 | 3.1 | 1.1 | 1.1 | 0.7 | 0.7 | 6.1 | 6.1 |
|  | Q3 | 10.0 | 10.0 | 8.2 | 8.2 | 1.6 | 1.6 | 2.4 | 2.4 | 6.1 | 6.1 |
|  | Q4 | 5.3 | 5.7 | 4.0 | 4.1 | 1.3 | 1.5 | 0.7 | 0.7 | 5.9 | 5.9 |
| 2004 | Q1 | 6.6 | 7.6 | 4.4 | 5.2 | 2.1 | 2.3 | 3.3 | 3.5 | 5.6 | 5.6 |
|  | Q2 | 5.8 | 6.2 | 4.9 | 4.6 | 0.9 | 1.6 | 1.4 | 2.2 | 5.6 | 5.6 |
|  | Q3 | 5.7 | 5.7 | 5.3 | 5.1 | 0.4 | 0.6 | 0.2 | 0.6 | 5.5 | 5.5 |
|  | Q4 | 6.0 | 5.8 | 5.3 | 5.1 | 0.7 | 0.7 | 0.7 | 0.9 | 5.5 | 5.4 |
| 2005 | Q1 | 5.5 | 5.5 | 4.1 | 4.0 | 1.3 | 1.4 | 1.0 | 1.2 | 5.4 | 5.3 |
|  | Q2 | 5.1 | 5.1 | 4.0 | 3.8 | 1.1 | 1.2 | 1.1 | 1.3 | 5.3 | 5.3 |
|  | Q3 | 5.1 | 4.9 | 4.0 | 3.7 | 1.1 | 1.2 | 1.1 | 1.4 | 5.3 | 5.2 |
|  | Q4 | 5.0 | 4.9 | 3.9 | 3.6 | 1.1 | 1.2 | 1.2 | 1.4 | 5.2 | 5.2 |
| TWO-QUARTER ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |
| 2002 | Q2 | 4.7 | 4.7 | 3.3 | 3.3 | 1.3 | 1.3 | 2.4 | 2.4 | 0.2 | 0.2 |
|  | Q4 | 3.8 | 3.8 | 2.3 | 2.3 | 1.6 | 1.6 | 2.1 | 2.1 | 0.1 | 0.1 |
| 2003 | Q2 | 4.2 | 4.2 | 2.5 | $2.5$ | 1.7 | $1.7$ | 2.2 | 2.2 | 0.2 | 0.2 |
|  | Q4 | 7.6 | 7.8 | 6.1 | 6.2 | 1.5 | 1.6 | 1.5 | 1.5 | -0.2 | -0.2 |
| 2004 | Q2 | 6.2 | 6.9 | 4.7 | 4.9 | 1.5 | 1.9 | 2.3 | 2.9 | -0.3 | -0.3 |
|  | Q4 | 5.9 | 5.7 | 5.3 | 5.1 | 0.5 | 0.6 | 0.5 | 0.8 | -0.1 | -0.2 |
| 2005 | Q2 | 5.3 | 5.3 | 4.1 | 3.9 | 1.2 | 1.3 | 1.0 | 1.3 | -0.2 | -0.1 |
|  | Q4 | 5.0 | 4.9 | 3.9 | 3.6 | 1.1 | 1.2 | 1.2 | 1.4 | -0.1 | -0.1 |
| FOUR-QUARTER ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |
| 2001 | Q4 | 2.4 | 2.4 | -0.0 | -0.0 | 2.4 | 2.4 | 1.8 | 1.8 | 1.7 | 1.7 |
| 2002 | Q4 | 4.2 | 4.2 | 2.8 | 2.8 | 1.4 | 1.4 | 2.2 | 2.2 | 0.3 | 0.3 |
| 2003 | Q4 | 5.9 | 6.0 | 4.3 | 4.3 | 1.6 | 1.6 | 1.9 | 1.9 | -0.0 | -0.0 |
| 2004 | Q4 | 6.0 | 6.3 | 5.0 | 5.0 | 1.0 | 1.3 | 1.4 | 1.8 | -0.4 | -0.5 |
| 2005 | Q4 | 5.2 | 5.1 | 4.0 | 3.8 | 1.1 | 1.3 | 1.1 | 1.3 | -0.3 | -0.2 |

1. For all urban consumers.
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.

| Item | Units ${ }^{1}$ | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | $\begin{gathered} -\quad \text { Proj } \\ 2004 \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Expenditures |  |  |  |  |  |  |  |  |  |  |
| Nominal GDP | Bill. \$ | 8304.3 | 8747.0 | 9268.4 | 9817.0 | 10100.8 | 10480.8 | 10985.5 | 11725.1 | 12363.5 |
| Real GDP | Bill. Ch. \$ | 8703.5 | 9066.9 | 9470.3 | 9817.0 | 9866.6 | 10083.0 | 10397.7 | 10928.6 | 11395.2 |
| Real GDP | \% change | 4.3 | 4.5 | 4.7 | 2.2 | -0.0 | 2.8 | 4.3 | 5.0 | 3.8 |
| Gross domestic purchases |  | 5.1 | 5.5 | 5.5 | 3.0 | 0.1 | 3.6 | 4.2 | 5.0 | 3.9 |
| Final sales |  | 3.7 | 4.8 | 4.2 | 2.9 | 1.1 | 1.8 | 4.4 | 4.7 | 3.6 |
| Priv. dom. final purchases |  | 5.2 | 6.4 | 5.3 | 4.3 | 0.8 | 2.3 | 4.7 | 5.3 | 4.1 |
| Personal cons. expenditures |  | 4.3 | 5.4 | 4.9 | 4.1 | 2.7 | 2.7 | 4.0 | 4.4 | 4.0 |
| Durables |  | 9.9 | 14.4 | 7.3 | 4.7 | 9.4 | 1.8 | 11.1 | 6.5 | 6.6 |
| Nondurables |  | 2.5 | 4.7 | 4.9 | 3.0 | 1.7 | 2.8 | 4.9 | 5.7 | 5.0 |
| Services |  | 4.0 | 3.8 | 4.4 | 4.5 | 1.8 | 2.9 | 2.2 | 3.4 | 3.0 |
| Business fixed investment |  | 11.4 | 10.9 | 7.7 | 7.8 | -10.2 | -2.8 | 7.4 | 13.5 | 7.8 |
| Equipment \& Software |  | 13.8 | 13.5 | 10.8 | 7.5 | -9.4 | 1.6 | 10.0 | 17.2 | 8.6 |
| Nonres. structures |  | 4.6 | 4.0 | -0.9 | 8.8 | -12.4 | -14.9 | -0.9 | 1.3 | 5.0 |
| Residential structures |  | 3.1 | 10.3 | 3.6 | -1.8 | 1.7 | 7.1 | 9.5 | 1.5 | -1.2 |
| Exports |  | 8.3 | 2.6 | 5.6 | 6.5 | -11.5 | 3.3 | 6.4 | 9.3 | 9.1 |
| Imports |  | 14.3 | 11.0 | 12.1 | 11.2 | -7.4 | 9.4 | 4.5 | 8.0 | 8.6 |
| Gov't. cons. \& investment |  | 1.2 | 3.3 | 4.2 | 0.4 | 3.6 | 4.5 | 2.1 | 2.2 | 2.1 |
| Federal |  | -0.5 | 0.1 | 4.2 | -2.2 | 6.3 | 10.1 | 5.9 | 4.8 | 1.8 |
| Defense |  | -1.5 | -1.2 | 4.3 | -3.5 | 6.6 | 10.9 | 8.0 | 5.0 | 1.6 |
| State \& local |  | 2.2 | 5.1 | 4.2 | 1.7 | 2.3 | 1.6 | 0.1 | 0.7 | 2.2 |
| Change in bus. inventories | Bill. Ch. \$ | 71.2 | 72.6 | 68.9 | 56.5 | -36.0 | 5.7 | -0.8 | 27.4 | 70.7 |
| Nonfarm |  | 68.5 | 71.2 | 71.5 | 57.8 | -36.3 | 9.3 | 0.5 | 27.8 | 70.1 |
| Net exports |  | -104.6 | -203.7 | -296.2 | -379.5 | -398.1 | -470.6 | -508.9 | -534.2 | -571.2 |
| Nominal ${ }_{2}$ GDP | \% change | 5.9 | 5.7 | 6.3 | 4.6 | 2.4 | 4.2 | 6.0 | 6.3 | 5.1 |
| GDP Gap ${ }^{2}$ |  | -0.8 | -1.5 | -2.3 | -2.3 | 0.6 | 1.9 | 2.6 | 1.4 | 0.7 |
| Employment and Production |  |  |  |  |  |  |  |  |  |  |
| Nonfarm payroll employment | Millions | 122.8 | 125.9 | 129.0 | 131.8 | 131.8 | 130.3 | 129.9 | 131.3 | 134.5 |
| Unemployment rate | \% | 4.9 | 4.5 | 4.2 | 4.0 | 4.7 | 5.8 | 6.0 | 5.5 | 5.3 |
| Industrial prod. index | \% change | 8.1 | 4.4 | 4.9 | 2.3 | -5.2 | 1.3 | 1.5 | 5.1 | 4.0 |
| Capacity util. rate - mfg. | \% | 82.6 | 82.0 | 81.4 | 81.1 | 75.4 | 73.9 | 73.4 | 75.9 | 77.8 |
| Housing starts | Millions | 1.47 | 1.62 | 1.64 | 1.57 | 1.60 | 1.70 | 1.85 | 1.89 | 1.83 |
| Light motor vehicle sales |  | 15.13 | 15.52 | 16.90 | 17.36 | 17.12 | 16.79 | 16.65 | 16.98 | 17.36 |
| North Amer. produced |  | 13.19 | 13.48 | 14.41 | 14.48 | 14.04 | 13.50 | 13.34 | 13.59 | 13.87 |
| Other |  | 1.95 | 2.03 | 2.49 | 2.87 | 3.08 | 3.30 | 3.31 | 3.39 | 3.50 |
| Income and Saving |  |  |  |  |  |  |  |  |  |  |
| Nominal GNP | Bill. \$ | 8337.3 | 8768.3 | 9302.2 | 9855.9 | 10135.9 | 10502.3 | 11031.6 | 11806.2 | 12421.2 |
| Nominal GNP | \% change | 5.8 | 5.5 | 6.5 | 4.7 | 2.6 | 3.8 | 6.3 | 6.3 | 4.8 |
| Nominal personal income |  | 6.4 | 7.0 | 5.5 | 7.1 | 2.4 | 2.4 | 4.3 | 6.0 | 5.8 |
| Real disposable income |  | 4.3 | 5.6 | 2.8 | 4.4 | 1.3 | 3.5 | 3.6 | 4.9 | 4.2 |
| Personal saving rate | \% | 3.6 | 4.3 | 2.4 | 2.3 | 1.7 | 2.3 | 2.0 | 2.0 | 2.5 |
| Corp. profits, IVA \& CCAdj. | \% change | 9.1 | -10.0 | 9.6 | -8.6 | 8.7 | 8.3 | 29.0 | 8.8 | -3.6 |
| Profit share of GNP | \% | 10.4 | 9.1 | 9.2 | 8.3 | 7.6 | 8.6 | 9.7 | 10.9 | 10.3 |
| Excluding FR Banks |  | 10.1 | 8.9 | 8.9 | 8.0 | 7.3 | 8.4 | 9.5 | 10.8 | 10.1 |
| Federal surpl./deficit | Bill. \$ | -55.8 | 38.8 | 103.6 | 189.5 | 50.5 | -240.0 | -414.5 | -440.4 | -304.4 |
| State \& local surpl./def. |  | 39.1 | 52.0 | 50.4 | 50.0 | 17.3 | -3.2 | -0.6 | 1.6 | 8.2 |
| Ex. social ins. funds |  | 38.0 | 50.3 | 48.7 | 47.9 | 14.0 | -6.6 | -4.0 | -1.9 | 4.6 |
| Gross natl. saving rate | \% | 17.5 | 18.2 | 18.0 | 18.0 | 16.4 | 14.7 | 13.4 | 14.3 | 14.7 |
| Net natl. saving rate |  | 6.6 | 7.4 | 6.9 | 6.7 | 4.4 | 2.7 | 1.7 | 3.1 | 3.4 |
| Prices and Costs |  |  |  |  |  |  |  |  |  |  |
| GDP chn.-wt. price index Gross Domestic Purchases chn.-wt. price index | \% change | 1.5 | 1.1 | 1.6 | 2.2 | 2.4 | 1.4 | 1.6 | 1.3 | 1.3 |
|  |  | 1.0 | 0.7 | 2.0 | 2.4 | 1.6 | 1.7 | 1.7 | 1.5 | 1.1 |
| PCE chn.-wt. price index |  | 1.3 | 0.9 | 2.1 | 2.3 | 1.6 | 1.8 | 1.5 | 1.5 | 1.1 |
| Ex. food and energy |  | 1.4 | 1.4 | 1.6 | 1.5 | 2.1 | 1.6 | 1.0 | 1.4 | 1.2 |
| CPI |  | 1.9 | 1.5 | 2.6 | 3.4 | 1.8 | 2.2 | 1.9 | 1.8 | 1.3 |
| Ex. food and energy |  | 2.2 | 2.3 | 2.0 | 2.6 | 2.7 | 2.0 | 1.2 | 1.7 | 1.6 |
| ECI, hourly compensation ${ }^{3}$ |  | 3.4 | 3.5 | 3.4 | 4.4 | 4.2 | 3.2 | 4.0 | 3.7 | 3.9 |
| Nonfarm business sector Output per hour |  | 2.0 | 2.8 | 3.2 | 2.1 | 2.9 | 4.3 | 5.4 | 2.7 | 1.6 |
| Compensation per Hour |  | 4.0 | 5.7 | 4.9 | 6.5 | 3.8 | 1.8 | 4.0 | 3.6 | 3.8 |
| Unit labor cost |  | 2.0 | 2.7 | 1.6 | 4.3 | 0.8 | -2.4 | -1.3 | 0.9 | 2.2 |

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

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1. 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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REAL GROSS DOMESTIC PRODUCT AND RELATED ITEMS, QUARTERLY VALUES
April 28, 2004 (Seasonally adjusted, annual rate except as noted)


1. 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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Class II FOMC
CONTRIBUTIONS TO GROWTH IN REAL GROSS DOMESTIC PRODUCT AND RELATED ITEMS $\quad$ April 28, 2004

Note: Components may not sum to totals because of rounding.

| Strictly Confidential <FR> <br> Class II FOMC <br> Item | CONTRIBUTIONS TO GROWTH IN REAL GROSS DOMESTIC PRODUCT AND RELATED ItEMS |  |  |  |  |  |  |  |  |  | April 28, 2004 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | - - - - - - - - - - - Projected - - - - - - - - - - - |  |  |  |  |  |  |  |  | - - Projected - - |  |  |
|  | $\begin{gathered} 2003 \\ \text { Q4 } \end{gathered}$ | $\begin{gathered} 2004 \\ \text { Q1 } \end{gathered}$ | $\begin{gathered} 2004 \\ \mathrm{Q} 2 \end{gathered}$ | $\begin{gathered} 2004 \\ \text { Q3 } \end{gathered}$ | $\begin{gathered} 2004 \\ \text { Q4 } \end{gathered}$ | $\begin{gathered} 2005 \\ \text { Q1 } \end{gathered}$ | $\begin{gathered} 2005 \\ 02 \end{gathered}$ | $\begin{gathered} 2005 \\ \text { Q3 } \end{gathered}$ | $\begin{gathered} 2005 \\ \text { Q4 } \end{gathered}$ | $\begin{gathered} 0324 / \\ 0224 \end{gathered}$ | $\begin{gathered} 04 \mathrm{Q4/} \\ 03 \mathrm{Q} 4 \end{gathered}$ | $\begin{aligned} & 05 \mathrm{Q4} / \\ & 04 \mathrm{Q4} \end{aligned}$ |
| Real GDP | 4.1 | 5.2 | 4.6 | 5.1 | 5.1 | 4.0 | 3.8 | 3.7 | 3.6 | 4.3 | 5.0 | 3.8 |
| Gross dom. purchases | 4.5 | 5.4 | 5.0 | 5.4 | 5.1 | 4.3 | 4.4 | 4.0 | 3.8 | 4.3 | 5.2 | 4.1 |
| Final sales | 3.4 | 4.2 | 5.3 | 4.6 | 4.8 | 2.6 | 3.7 | 3.9 | 4.1 | 4.4 | 4.7 | 3.6 |
| Priv. dom. final purchases | 3.8 | 3.8 | 5.4 | 4.6 | 4.5 | 2.6 | 3.8 | 3.9 | 3.9 | 4.0 | 4.6 | 3.6 |
| Personal cons. expenditures | 2.3 | 2.8 | 3.6 | 3.1 | 3.0 | 2.8 | 2.8 | 2.7 | 2.7 | 2.8 | 3.1 | 2.8 |
| Durables | 0.1 | -0.2 | 1.0 | 0.7 | 0.7 | 0.5 | 0.6 | 0.5 | 0.5 | 0.9 | 0.6 | 0.5 |
| Nondurables | 1.1 | 1.4 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.1 | 1.0 |
| Services | 1.2 | 1.7 | 1.4 | 1.3 | 1.3 | 1.3 | 1.2 | 1.2 | 1.2 | 0.9 | 1.4 | 1.2 |
| Business fixed investment |  |  |  |  |  |  |  |  |  | 0.7 | 1.4 | 0.8 |
| Equipment \& Software | 1.1 | 0.9 | 1.3 | 1.5 | 1.6 | -0.2 | 1.0 | 1.0 | 1.0 | 0.8 | 1.4 | 0.7 |
| Nonres. structures | -0.0 | -0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -0.0 | 0.0 | 0.1 |
| Residential structures | 0.4 | 0.2 | 0.4 | -0.1 | -0.2 | -0.1 | -0.1 | -0.0 | -0.0 | 0.5 | 0.1 | -0.1 |
| Net exports | -0.3 | -0.2 | -0.4 | -0.3 | -0.0 | -0.3 | -0.5 | -0.3 | -0.1 | -0.0 | -0.2 | -0.3 |
| Exports | 1.8 | 0.3 | 1.1 | 1.1 | 1.2 | 0.8 | 0.9 | 0.9 | 1.1 | 0.6 | 0.9 | 0.9 |
| Imports | -2.1 | -0.4 | -1.5 | -1.4 | -1.2 | -1.1 | -1.5 | -1.3 | -1.2 | -0.6 | -1.2 | -1.3 |
| Government cons. \& invest. | -0.0 | 0.7 | 0.4 | 0.3 | 0.3 | 0.3 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Federal | 0.1 | 0.8 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.4 | 0.3 | 0.1 |
| Defense | 0.1 | 0.6 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 |
| Nondefense | -0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 |
| State and local | -0.1 | -0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.0 | 0.1 | 0.3 |
| Change in bus. inventories | 0.7 | 1.0 | -0.8 | 0.5 | 0.3 | 1.4 | 0.2 | -0.2 | -0.5 | -0.1 | 0.3 | 0.2 |
| Nonfarm | $0.6$ | 0.9 | -0.7 | 0.4 | 0.3 | 1.4 | 0.2 | -0.2 | -0.5 | -0.1 | 0.2 | 0.2 |
| Farm | 0.1 | 0.1 | -0.1 | 0.1 | 0.0 | -0.0 | -0.0 | -0.0 | -0.0 | 0.1 | 0.0 | -0.0 |

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

| Item | Fiscal year |  |  |  | 2003 |  |  |  | 2004 |  |  |  | 2005 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2002^{\text {a }}$ | $2003{ }^{\text {a }}$ | 2004 | 2005 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 ${ }^{\text {a }}$ | Q4 ${ }^{\text {a }}$ | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget $\quad$ Not seasonally adj |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{1}$ | 1853 | 1782 | 1844 | 2041 | 398 | 528 | 429 | 441 | 410 | 531 | 463 | 470 | 442 | 617 | 512 | 513 |
| Outlays ${ }^{1}$ | 2011 | 2158 | 2293 | 2399 | 543 | 544 | 534 | 569 | 580 | 578 | 565 | 605 | 602 | 594 | 598 | 619 |
| Surplus/deficit ${ }^{1}$ | -158 | -375 | -449 | -358 | -145 | -17 | -105 | -129 | -171 | -48 | -102 | -135 | -160 | 22 | -85 | -106 |
| On-budget | -317 | -536 | -606 | -539 | -169 | -91 | -113 | -178 | -193 | -122 | -113 | -177 | -198 | -60 | -104 | -154 |
| Off-budget | 160 | 161 | 157 | 182 | 24 | 75 | 9 | 50 | 23 | 74 | 11 | 42 | 39 | 82 | 18 | 48 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 221 | 374 | 468 | 379 | 64 | 106 | 108 | 119 | 136 | 80 | 134 | 122 | 152 | 17 | 88 | 82 |
| Cash decrease | -17 | 26 | -6 | -4 | 20 | -17 | -5 | 2 | 12 | -28 | 9 | 11 | 0 | -30 | 15 | 15 |
| Other ${ }^{2}$ | -46 | -24 | -13 | -17 | 62 | -73 | 2 | 8 | 23 | -4 | -41 | 2 | 7 | -9 | -17 | 9 |
| Cash operating balance, end of period | 61 | 35 | 41 | 45 | 13 | 30 | 35 | 33 | 21 | 49 | 41 | 30 | 30 | 60 | 45 | 30 |
| NIPA federal sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 1895 | 1844 | 1899 | 2115 | 1864 | 1864 | 1789 | 1881 | 1877 | 1898 | 1942 | 2004 | 2104 | 2158 | 2196 | 2219 |
| Expenditures | 2062 | 2228 | 2346 | 2448 | 2184 | 2289 | 2284 | 2299 | 2349 | 2363 | 2374 | 2399 | 2450 | 2461 | 2481 | 2506 |
| Consumption expenditures | 573 | 649 | 703 | 738 | 636 | 669 | 672 | 675 | 706 | 714 | 718 | 723 | 738 | 743 | 747 | 752 |
| Defense | 370 | 426 | 470 | 491 | 409 | 448 | 444 | 450 | 472 | 477 | 480 | 482 | 491 | 494 | 497 | 500 |
| Nondefense | 202 | 223 | 233 | 247 | 227 | 221 | 229 | 225 | 234 | 236 | 239 | 241 | 247 | 248 | 250 | 252 |
| Other spending | 1489 | 1579 | 1643 | 1710 | 1548 | 1620 | 1612 | 1625 | 1643 | 1649 | 1656 | 1676 | 1712 | 1718 | 1734 | 1754 |
| Current account surplus | -167 | -384 | -447 | -333 | -320 | -425 | -495 | -418 | -473 | -464 | -432 | -395 | -347 | -303 | -286 | -287 |
| Gross investment | 87 | 92 | 101 | 105 | 87 | 96 | 97 | 97 | 101 | 103 | 104 | 104 | 105 | 105 | 106 | 107 |
| Gross saving less gross investment ${ }^{3}$ | -165 | -386 | -455 | -342 | -318 | -430 | -501 | -423 | -482 | -474 | -442 | -405 | -356 | -312 | -296 | -297 |
| Fiscal indicators ${ }^{4}$ <br> High-employment (HEB) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| surplus/deficit | -107 | -301 | -399 | -318 | -230 | -332 | -424 | -347 | -423 | -425 | -401 | -374 | -331 | -290 | -275 | -276 |
| Change in HEB, percent of potential GDP | 1.9 | 1.7 | 0.7 | -0.8 | 0.1 | 0.9 | 0.8 | -0.7 | 0.6 | -0.0 | -0.2 | -0.3 | -0.4 | -0.4 | -0.2 | -0.0 |
| Fiscal impetus (FI) percent of GDP | 1.0 | 1.2 | 1.0 | -0.2 | 0.1 | 0.5 | 0.4 | 0.3 | 0.4 | 0.1 | 0.1 | 0.2 | -0.4 | 0.0 | 0.0 | 0.0 |

[^1]| Strictly Confidential (FR) Class II FOMC |  |  | Change in Debt of the Domestic Nonfinancial Sectors(Percent) $\quad$ April 28, 2004 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period ${ }^{1}$ | Total | Federal government | Nonfederal |  |  |  | Business | State and local governments | Memo: Nominal GDP |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Home mortgages | Consumer credit |  |  |  |
| Year |  |  |  |  |  |  |  |  |  |
| 1998 | 6.9 | -1.4 | 9.7 | 8.2 | 8.6 | 7.3 | 12.2 | 6.3 | 5.7 |
| 1999 | 6.3 | -1.9 | 8.8 | 8.2 | 9.1 | 7.8 | 10.6 | 3.4 | 6.3 |
| 2000 | 4.9 | -8.0 | 8.4 | 8.7 | 8.3 | 10.7 | 9.5 | 1.3 | 4.6 |
| 2001 | 6.3 | -0.2 | 7.7 | 9.1 | 10.0 | 8.0 | 6.0 | 8.9 | 2.4 |
| 2002 | 7.1 | 7.6 | 7.0 | 10.0 | 12.5 | 4.4 | 2.8 | 11.1 | 4.2 |
| 2003 | 8.1 | 10.9 | 7.5 | 10.4 | 12.5 | 5.2 | 3.9 | 8.2 | 6.0 |
| 2004 | 8.0 | 11.7 | 7.1 | 8.8 | 10.1 | 5.8 | 5.3 | 5.9 | 6.3 |
| 2005 | 6.7 | 7.5 | 6.6 | 7.3 | 7.7 | 6.5 | 6.2 | 4.0 | 5.1 |
| Quarter |  |  |  |  |  |  |  |  |  |
| 2003:1 | 6.6 | 4.5 | 7.0 | 9.9 | 12.1 | 4.2 | 3.8 | 5.7 | 4.3 |
| 2 | 11.3 | 20.4 | 9.4 | 11.8 | 13.8 | 6.1 | 5.9 | 12.3 | 4.2 |
| 3 | 7.0 | 8.2 | 6.8 | 9.9 | 11.5 | 6.1 | 3.1 | 6.1 | 10.0 |
| 4 | 6.5 | 9.0 | 6.0 | 8.3 | 10.5 | 3.9 | 2.7 | 7.9 | 5.7 |
| 2004:1 | 8.2 | 11.6 | 7.5 | 9.0 | 10.8 | 4.4 | 5.3 | 8.4 | 7.6 |
| 2 | 8.3 | 14.9 | 6.8 | 9.0 | 10.4 | 6.0 | 4.5 | 3.7 | 6.2 |
| 3 | 7.4 | 9.6 | 6.9 | 8.4 | 9.4 | 6.1 | 5.3 | 5.1 | 5.7 |
| 4 | 7.1 | 8.7 | 6.8 | 7.6 | 8.3 | 6.2 | 5.8 | 5.8 | 5.8 |
| 2005:1 | 7.6 | 11.8 | 6.7 | 7.3 | 7.8 | 6.2 | 6.3 | 4.8 | 5.5 |
| 2 | 6.7 | 7.9 | 6.4 | 7.2 | 7.6 | 6.4 | 6.0 | 3.8 | 5.1 |
| 3 | 6.1 | 4.9 | 6.3 | 7.1 | 7.5 | 6.4 | 5.9 | 3.7 | 4.9 |
| 4 | 5.9 | 4.7 | 6.2 | 6.8 | 7.1 | 6.3 | 6.0 | 3.7 | 4.9 |

[^2]Strictly Confidential (FR)
Class II FOMC

| Category | 2002 | 2003 | 2004 | 2005 | 2003 |  | 2004 |  |  |  | 2005 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Net funds raised by domestic nonfinancial sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Total | 1331.7 | 1615.5 | 1691.2 | 1551.1 | 1474.9 | 1361.6 | 1770.0 | 1808.4 | 1634.7 | 1551.6 | 1708.5 | 1589.6 | 1453.2 | 1453.3 |
| 2 Net equity issuance | -41.6 | -57.3 | -92.8 | -79.0 | -44.9 | -67.0 | -68.0 | -78.0 | -85.0 | -140.0 | -135.0 | -65.0 | -63.0 | -53.0 |
| 3 Net debt issuance | 1373.3 | 1672.8 | 1783.9 | 1630.1 | 1519.8 | 1428.6 | 1838.0 | 1886.4 | 1719.7 | 1691.6 | 1843.5 | 1654.6 | 1516.2 | 1506.3 |
| Borrowing sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nonfinancial business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 Financing gap ${ }^{1}$ | 37.9 | -36.9 | -63.8 | 136.5 | -77.9 | -60.2 | -84.2 | -105.0 | -58.6 | -7.4 | 81.6 | 132.1 | 163.2 | 169.2 |
| 5 Net equity issuance | -41.6 | -57.3 | -92.8 | -79.0 | -44.9 | -67.0 | -68.0 | -78.0 | -85.0 | -140.0 | -135.0 | -65.0 | -63.0 | -53.0 |
| 6 Credit market borrowing | 196.2 | 278.1 | 394.1 | 482.0 | 225.6 | 194.7 | 390.9 | 338.5 | 399.5 | 447.6 | 487.5 | 477.9 | 473.9 | 488.7 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 Net borrowing ${ }^{2}$ | 775.7 | 879.9 | 826.5 | 742.3 | 885.1 | 758.9 | 847.9 | 869.6 | 823.3 | 765.1 | 744.3 | 746.8 | 747.6 | 730.3 |
| 8 Home mortgages | 673.9 | 758.1 | 685.8 | 578.7 | 743.0 | 696.5 | 734.7 | 726.5 | 673.1 | 608.8 | 586.2 | 583.3 | 581.6 | 563.7 |
| 9 Consumer credit | 81.4 | 101.6 | 118.5 | 139.6 | 121.6 | 77.9 | 90.4 | 123.3 | 128.1 | 132.2 | 134.2 | 139.5 | 142.1 | 142.6 |
| 10 Debt/DPI (percent) ${ }^{3}$ | 103.2 | 109.0 | 112.8 | 115.3 | 109.1 | 111.3 | 111.7 | 112.5 | 113.3 | 114.0 | 114.5 | 115.0 | 115.6 | 116.2 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 Net borrowing | 143.9 | 118.7 | 92.0 | 66.8 | 91.6 | 121.6 | 131.8 | 58.8 | 82.8 | 94.8 | 78.8 | 62.8 | 62.8 | 62.8 |
| 12 Current surplus ${ }^{4}$ | 170.1 | 178.6 | 155.4 | 166.9 | 199.3 | 190.5 | 156.9 | 155.3 | 151.1 | 158.2 | 162.3 | 163.3 | 168.6 | 173.4 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 Net borrowing | 257.5 | 396.0 | 471.3 | 339.1 | 317.5 | 353.4 | 467.4 | 619.5 | 414.1 | 384.2 | 532.9 | 367.1 | 231.9 | 224.5 |
| 14 Net borrowing (n.s.a.) | 257.5 | 396.0 | 471.3 | 339.1 | 107.6 | 118.6 | 135.9 | 79.9 | 133.5 | 122.0 | 152.2 | 16.8 | 88.0 | 82.1 |
| 15 Unified deficit (n.s.a.) | 230.6 | 394.7 | 454.8 | 329.0 | 104.5 | 128.7 | 170.8 | 47.7 | 101.5 | 134.8 | 159.7 | -22.2 | 85.5 | 106.1 |
| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 Funds supplied | 482.5 | 479.9 | 568.2 | 492.4 | 152.6 | 391.0 | 1011.3 | 255.4 | 519.1 | 487.0 | 570.6 | 440.3 | 533.9 | 424.9 |
| Memo (percentage of GDP) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 Domestic nonfinancial debt ${ }^{5}$ | 190.7 | 196.0 | 198.6 | 202.2 | 196.3 | 197.1 | 197.2 | 198.3 | 199.4 | 200.1 | 201.1 | 202.2 | 202.9 | 203.5 |
| 18 Domestic nonfinancial borrowing | 13.1 | 15.2 | 15.2 | 13.2 | 13.7 | 12.7 | 16.0 | 16.2 | 14.6 | 14.1 | 15.2 | 13.5 | 12.2 | 12.0 |
| 19 Federal government ${ }^{6}$ | 2.5 | 3.6 | 4.0 | 2.7 | 2.9 | 3.1 | 4.1 | 5.3 | 3.5 | 3.2 | 4.4 | 3.0 | 1.9 | 1.8 |
| 20 Nonfederal | 10.6 | 11.6 | 11.2 | 10.4 | 10.8 | 9.5 | 11.9 | 10.9 | 11.1 | 10.9 | 10.8 | 10.5 | 10.3 | 10.2 |

[^3]April 28, 2004
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## International Developments

We have not made substantial changes to our outlook for either foreign economic activity or U.S. external trade since the March Greenbook. Foreign economic growth is still estimated to have slowed in the first quarter from its rapid rate in the second half of last year, although recent data indicate that growth was slightly stronger than we projected last time; a surge in activity in several emerging Asian economies appears to have more than offset weaker-thanexpected growth in some industrial economies. We continue to project that aggregate foreign economic growth will edge down over the forecast period as the pace of expansion in the developing economies continues to moderate. As in the March Greenbook, foreign CPI inflation is projected to move down over the forecast period from the somewhat elevated pace set in the first quarter.

## Summary of Staff Projections

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

| Indicator | 2003 |  | Projection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H 1 |  | H 2 | 2004 |  |  |
|  |  |  | Q 1 | Q 2 | H 2 |  |
| Foreign output | .9 | 4.5 | 3.9 | 3.9 | 3.6 | 3.5 |
| March GB | .8 | 4.4 | 3.7 | 3.8 | 3.8 | 3.5 |
| Foreign CPI | 2.0 | 2.1 | 2.5 | 2.2 | 2.1 | 2.0 |
| March GB | 1.9 | 2.2 | 2.8 | 2.0 | 1.9 | 1.9 |

Note. Changes for years are measured as Q4/Q4; for half-years, Q2/Q4 or Q4/Q2.
The major currencies index of the dollar rose $13 / 4$ percent over the intermeeting period. Short- and long-term nominal interest rate differentials moved in favor of dollar-denominated assets on indications that U.S. economic growth (and possibly inflation) will be higher than was anticipated earlier by market participants-and will also run ahead of activity in the major foreign industrial countries. The dollar appreciated against the currencies of several of our other important trading partners as well. Our forecast for the dollar begins at this higher level. Additionally, we have reduced a bit the projected rate of depreciation of the dollar to reflect the staff's assumption that policy rates in the United States will move up sooner than was incorporated in the March Greenbook.

Early in the intermeeting period, oil prices dipped briefly from multi-year highs on reports that U.S. inventories of crude oil were larger than markets had expected. However, prices rebounded in April as OPEC affirmed a previously announced cut in scheduled production, unrest in the Middle East flared up, and global demand for oil continued to be strong. Prices of non-fuel primary
commodities, such as food, metals, and lumber, continued to rise over the intermeeting period. Although the paths we currently project for crude oil and commodity prices remain downward-sloping, in line with quotes from futures markets, they lie above the paths projected in the March Greenbook. Following very rapid increases in the first quarter, core import and export prices are expected to decelerate going forward.

After reaching double-digit percentage growth rates late last year, U.S. exports and imports of real goods and services are estimated to have grown quite slowly in the first quarter. We project that growth of exports and imports will rebound this quarter and will average 10 percent and 9 percent, respectively, over the remainder of the forecast period. Because the level of imports substantially exceeds that of exports, net exports are still projected to make negative arithmetic contributions to output growth of $1 / 4$ percent of GDP this year and slightly more next year. The current account deficit is projected to increase but to remain near 5 percent as a share of GDP.

## Oil Prices

The spot price of West Texas Intermediate (WTI) crude oil closed at $\$ 37.25$ per barrel on April 27, up about $\$ 0.50$ from its average in March. After reaching a thirteen-year high of more than $\$ 38$ per barrel on March 18, the spot price fell to less than $\$ 35$ per barrel at the beginning of April on a reported increase in U.S. crude oil inventories. Oil prices subsequently rebounded, in part because of the increasing unrest in the Middle East. Oil prices are also being supported by strong world oil demand, OPEC's decision to cut its production target 1 million barrels per day, and concerns about the reliability of Venezuelan oil supplies. The projected path of oil prices, in line with recent quotes from futures markets, calls for the spot price of WTI to decline to about $\$ 34$ per barrel by the fourth quarter of 2004 and about $\$ 31$ per barrel by the fourth quarter of 2005. This projected moderate decline in oil prices is consistent with expected increases in non-OPEC oil production. Relative to the March Greenbook, the path of WTI is projected to be about $\$ 1.25$ per barrel higher in the second half of this year and in 2005.

## International Financial Markets

With growing investor confidence in the sustainability of the economic expansion in the United States, the dollar appreciated about $13 / 4$ percent on a trade-weighted basis against the major foreign currencies over the intermeeting period. Stronger-than-expected U.S. data, particularly the March employment report, and upbeat statements by Federal Reserve officials led short- and long-term interest rates to rise more sharply in the United States than abroad and supported the dollar. Over the intermeeting period, the dollar appreciated 3 percent against the euro and $21 / 2$ percent versus the Canadian dollar. In
contrast, the dollar depreciated almost 1 percent on net vis-à-vis the yen in highly volatile trading. It depreciated 6 percent against the yen during the second half of March in response to some stronger-than-expected Japanese data releases and an apparent cessation of intervention activity by the Japanese Ministry of Finance; in April, the dollar almost fully regained the earlier loss against the yen. The Japanese monetary authorities have not intervened in foreign exchange markets since March 16, the day of the FOMC meeting.

Over the intermeeting period, the dollar appreciated $1 / 2$ percent on a tradeweighted basis relative to the currencies of our other important trading partners. The dollar appreciated 3 percent against the Mexican peso, as short-term peso interest rates declined almost 90 basis points. Mexico's central bank surprised market participants with an intermeeting tightening move on April 27, prompting a mild backup in Cetes rates. In contrast, the dollar depreciated moderately against the currencies of several emerging Asian economies, declining $11 / 2$ percent against the Korean won and 1 percent against the Taiwan dollar.

Because of these market developments, we raised our forecast of the broad real index of the dollar 1 percent in the second quarter of 2004 relative to the March Greenbook. We project that this index will edge down over the forecast period, consistent with the need to finance the large and growing U.S. current account deficit. The pace of decline is slightly slower than we projected in the March Greenbook, reflecting the higher path of U.S. policy interest rates.

The European Central Bank, the Bank of England, and the Bank of Japan did not alter their respective monetary policy stances over the intermeeting period. On April 13, the Bank of Canada lowered its target overnight rate 25 basis points, to 2 percent, a move that had been widely expected by market participants. The paths of near-term expected short-term interest rates nevertheless moved up substantially over the period for the euro, sterling, and the Canadian dollar. Market participants expect that the Bank of England will raise its target repo rate 25 basis points as soon as May 6, the next meeting of the Monetary Policy Committee. Medium- and long-term sovereign yields moved up in the foreign industrial countries, but less than in the United States. Over the intermeeting period, ten-year benchmark yields rose about 25 basis points in Germany and Japan, 35 basis points in the United Kingdom, and 45 basis points in Canada, but almost 65 basis points in the United States.
. The Desk did not intervene over the period for the accounts of the System or the Treasury.

## Foreign Industrial Countries

Foreign industrial real GDP growth is estimated to have moderated to $2 \frac{1}{2}$ percent in first quarter following an expansion of activity of slightly more than $31 / 2$ percent in the fourth quarter, as growth in Canada, Japan, and the United Kingdom eased from the relatively robust increases of late last year. Average growth is expected to continue at roughly the same pace through the end of 2005, with accelerations in economic activity in Canada and the euro area offsetting moderations in Japan and the United Kingdom. Twelve-month headline inflation rates are expected to remain at about $11 / 4$ percent on average; in Japan, deflation is projected to end in 2005.

In Japan, real GDP growth is projected to slow to about $2 \frac{1}{2}$ percent in 2004 and $21 / 4$ percent in 2005, following robust expansion of more than $31 / 2$ percent in 2003 that was boosted by a surge in exports to developing Asia and a related investment boom. With the pace of economic activity in emerging Asia forecast to moderate, Japanese exports are likely to grow more slowly in response. We also expect a decline in the rapid pace of Japanese investment, as indicated by recent weakness in machinery orders. Even so, we anticipate that aggregate demand will be strong enough to push consumer price inflation just into positive territory by 2005. That said, we assume that the Bank of Japan will maintain its policy of quantitative ease throughout the forecast period.

After growing less than $1 \frac{1}{2}$ percent (a.r.)in the second half of 2003, euro-area economic activity should pick up to a growth rate of nearly 2 percent in 2004 and 2005. We project recoveries of investment growth, aided by improving corporate balance sheets, and-eventually - of consumption growth, and we judge that the recent depreciation of the euro against the dollar and the yen should assist export growth. We assume that the ECB will leave policy rates unchanged through the middle of 2005, as inflation remains below the 2 percent target ceiling, and tighten policy a bit in the second half of 2005.

Growth in the United Kingdom moderated to about $21 / 2$ percent in the first quarter and is projected to remain near that pace over the forecast period. Although fiscal policy is expected to remain stimulative and investment growth to pick up, consumption growth is projected to ease as house price increases slow. The Bank of England is assumed to tighten policy both in the near term and later on in the forecast period. The Bank's tightening path is expected to prevent inflation from exceeding its 2 percent target rate.

In Canada, growth apparently weakened in the first quarter of this year from its rapid pace at the end of 2003, but it is projected to pick up over the remainder of the forecast period. Stronger growth of domestic demand, supported by the recent easing moves of the Bank of Canada, is expected to be offset somewhat in
the near term by the lingering negative effects on exports of the 16 percent rise in 2003 of the real effective value of the Canadian dollar. As the adverse effects of the exchange rate appreciation fade and strong growth in the United States increases demand for Canadian products, export growth is expected to recover toward the end of this year and into the beginning of next year. We expect the Bank of Canada to begin removing monetary stimulus early in 2005. Inflation is forecast to remain moderate through 2005.

## Other Countries

In developing Asia, data released since the March Greenbook have been very strong. Asian activity continued to be boosted by the boom in China and by the robust expansion in global high-tech demand. We have raised our forecast of Asian growth in 2004 from about 6 percent to nearly 7 percent, mainly because of stronger current data. We continue to expect, however, that growth will slow over the forecast period, to about $51 / 4$ percent in 2005.

Spurred by very strong investment, Chinese real GDP is estimated to have risen more than 15 percent (s.a.a.r.) in the first quarter. Concerned about overinvestment in some sectors, Chinese authorities tightened monetary policy in two steps over the intermeeting period and also took further measures to restrain investment spending. We expect Chinese growth to slow from a pace of about 14 percent in the first half of this year to about $71 / 2$ percent over the rest of the forecast period. Inflation has picked up since late last year, reflecting higher prices for food and imported commodities, but it should slow somewhat over the forecast period as commodity prices stop rising. We maintain our working assumption that China will keep its current exchange rate arrangement at least through 2005.

Korean output grew at a rate of more than 11 percent late last year, but the strength remains largely concentrated in exports and export-related investment. Consumption growth was quite weak, constrained by high consumer debt burdens. Korean GDP growth is projected to average more than 5 percent both this year and next. Growth in other Asian economies is expected to be in the range of $41 / 2$ percent to $61 / 2$ percent this year (revised up about 1 percentage point since the March Greenbook), with most economies slowing a bit by 2005.

Growth in Latin America is expected to average about 4 percent both this year and next, with gains in output in Mexico, stimulated by continued expansion in the U.S. industrial sector, running ahead of those in South America. Mexico's economy is projected to expand $41 / 2$ percent this year and slightly less next year; this forecast is a little lower than that in the March Greenbook to reflect recent production data.

## Prices of Internationally Traded Goods

In the first quarter of 2004, based on BLS data through March, prices of imported core goods are estimated to have risen $71 / 4$ percent (a.r.), about 1 percentage point more than projected in the March Greenbook. This first-quarter estimate is the largest change in the price index since the fourth quarter of 1988. Import prices in the commodity-intensive sectors of food and non-oil industrial supplies increased at annual rates of roughly 10 percent and 25 percent, respectively. Prices in other categories of core goods did not increase as much. We project that core import prices will increase at an annual rate of about $31 / 2$ percent over the remainder of 2004 as upward pressures from past dollar changes and commodity price runups diminish. In 2005, responding to subdued inflation abroad and the projected declines in prices for primary commodities, core import price inflation should moderate to less than $1 / 2$ percent.

Selected Trade Prices
(Percent change from end of previous period except as noted; s.a.a.r.)

| Trade category | 2003 |  | 2004 | Projection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 | Q1 | 2004 |  | 2005 |
|  |  |  |  | Q2 | H2 |  |
| Exports Core goods | 3.5 | 3.2 | 8.4 | 5.5 | . 9 | . 5 |
| Imports <br> Non-oil core goods Oil (dollars per barrel) | $\begin{gathered} 2.5 \\ 26.46 \end{gathered}$ | $\begin{gathered} 1.1 \\ 27.75 \end{gathered}$ | $\begin{gathered} 7.2 \\ 31.37 \end{gathered}$ | $\begin{gathered} 3.2 \\ 33.45 \end{gathered}$ | $\begin{gathered} 3.7 \\ 31.32 \end{gathered}$ | $\begin{gathered} .4 \\ 28.45 \end{gathered}$ |

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 multi-quarter periods is the price for the final quarter of the period.

We estimate that the prices of exported core goods rose about $81 / 2$ percent in the first quarter of 2004 because of higher prices for agricultural products, especially soybeans, as well as for petroleum products and intermediate materials. This estimate is $13 / 4$ percentage points higher than was projected in the March Greenbook. For the second quarter, we project that export prices will increase about $51 / 2$ percent as a result of yet higher prices for agricultural exports and intermediate materials. After the second quarter, core export price inflation is projected to drop.

## Trade in Goods and Services

After rising at a red-hot pace of about 20 percent (a.r.) in the fourth quarter of 2003, real exports of goods and services are estimated to have increased at a rate of about $23 / 4$ percent in the first quarter, slightly below our March forecast. This downward revision reflects softer nominal export data through February than we had expected. The sharp slowdown from the fourth quarter can be attributed to the unwinding of exceptionally strong growth late last year, as well as moderation in foreign GDP growth, a tendency of real core exports (even on a seasonally adjusted basis) to grow more slowly in the first quarter, and the bans on U.S. beef and poultry exports imposed in late-2003 and earlier this year by our trading partners.

| Summary of Staff Projections for Trade in Goods and Services <br> (Percent change from end of previous period, s.a.a.r.) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measure | 2003 |  | Projection |  |  |  |
|  | H1 | H2 | 2004 |  |  | 2005 |
|  |  |  | Q1 | Q2 | H2 |  |
| Real exports | -1.5 | 15.1 | 2.7 | 11.2 | 11.7 | 9.1 |
| March GB | -1.5 | 15.1 | 4.6 | 11.9 | 13.2 | 10.8 |
| Real imports | 0.9 | 8.3 | 3.1 | 10.7 | 9.2 | 8.6 |
| March GB | 0.9 | 8.1 | 6.6 | 11.1 | 9.3 | 9.0 |

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

In the current quarter, growth of real exports of goods and services is projected to rebound to more than 11 percent (a.r.). About half of this growth reflects a pickup in exports of core goods, supported by solid growth abroad and the effects of past dollar depreciation. Exports of computers and semiconductors are projected to resume growing robustly as the global expansion in the high-tech sector continues. Real exports of services should likewise rebound.

Over the remainder of the forecast period, growth in real exports of goods and services is projected to continue to be strong. However, compared with the March Greenbook, we have marked down the projected growth rate of core goods exports about 2 percentage points on average, based largely on our assessment that core goods exports are not as far below the long-run level implied by foreign growth and relative prices as previously believed. A small part of this downward revision is based on the higher projected paths for both the dollar and core export prices.

Having surged ahead at an annual rate of 16 percent in the fourth quarter of 2003, real imports of goods and services are estimated to have grown only 3 percent in the first quarter. The sharp slowdown in import growth appears to have been widespread. As with export growth, the first-quarter weakness in import growth may reflect largely a cooling off from the strong showing in the fourth quarter of last year, but also some restraint exerted by higher import prices. In the current quarter, real imports of goods and services are projected to grow nearly 11 percent. For both core goods and services, robust U.S. GDP growth should remain supportive. Imports of computers are projected to accelerate quickly as the recovery in the high-tech sector continues.

We project real imports of goods and services to grow 9 percent in the second half of 2004 but to decelerate slightly in 2005, in line with a projected tempering of growth in the United States. This deceleration of imports is moderated by the effects on demand of lower import price inflation.

## Alternative Simulation

We project that foreign activity will continue to grow moderately over the forecast period. However, a more buoyant expansion abroad is possible. In our alternative simulation, we use the FRB/Global model to assess the effects of an autonomous increase in foreign demand that would raise spending 1 percent of GDP in the euro area and 2 percent of GDP in other major foreign industrial economies in the absence of endogenous adjustment. Beginning in the current quarter, the shock is phased in gradually over six quarters.

Alternative Simulation:
A more buoyant expansion abroad

| (Percent change from previous period at annual rates) |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Indicator |  | 2004 |  | 2005 |  |
|  | H 1 | H 2 | H 1 | H 2 |  |
| U.S. Real GDP |  |  |  |  |  |
| Baseline | 4.9 | 5.1 | 3.9 | 3.6 |  |
| Foreign growth shock scenario | 5.1 | 5.4 | 4.2 | 3.8 |  |
| U.S. PCE prices excl. food and energy |  |  |  |  |  |
| $\quad$ Baseline | 1.6 | 1.2 | 1.2 | 1.2 |  |
| Foreign growth shock scenario | 1.6 | 1.3 | 1.3 | 1.4 |  |

Note. H 1 is $\mathrm{Q} 2 / \mathrm{Q} 4 ; \mathrm{H} 2$ is $\mathrm{Q} 4 / \mathrm{Q} 2$. 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.

The shock stimulates U.S. real net exports directly through higher foreign demand for U.S.-produced goods and indirectly through a modest dollar
depreciation that induces substitution toward U.S.-produced goods. As a result, U.S. GDP growth rises 0.3 percentage point relative to baseline in 2004:H2 and 0.2 percentage point in $2005: \mathrm{H} 2$. Core PCE inflation increases slightly above baseline in 2004:H2 and a bit more in 2005:H2, reflecting both a rise in import prices associated with the dollar depreciation and the effects of stronger aggregate demand on domestic prices. In 2005, the U.S. current account deficit (not shown) declines 0.3 percentage point of GDP relative to baseline.
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| $\begin{aligned} & \text { Strictly Confidential (FR) } \\ & \text { Class II FOMC OUTLOOK FOR FOREIGN } \end{aligned}$ | REAL GD | AND rent, | NSUMER <br> Q4 to | RICES ) | SELEC | ED COU | TRIES | April 28, 2004 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measure and country | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | $\begin{array}{r} \text { Pro } \\ 2004 \end{array}$ | $\begin{aligned} & \text { cted } \\ & 2005 \end{aligned}$ |
| REAL GDP (1) |  |  |  |  |  |  |  |  |  |
| Total foreign | 4.2 | 1.5 | 4.9 | 4.3 | 0.3 | 2.8 | 2.7 | 3.8 | 3.5 |
| Industrial Countries of which: | 3.4 | 2.7 | 4.4 | 3.7 | 0.6 | 2.5 | 1.8 | 2.7 | 2.8 |
| Canada | 4.4 | 4.4 | 5.9 | 4.2 | 1.4 | 3.5 | 1.6 | 3.1 | 3.5 |
| Japan | 0.4 | $-1.2$ | 0.4 | 3.8 | -2.3 | 1.7 | 3.6 | 2.6 | 2.3 |
| United Kingdom | 3.4 | 2.8 | 3.3 | 2.9 | 1.9 | 1.9 | 2.7 | 2.8 | 2.6 |
| Euro Area (2) | 3.2 | 2.0 | 3.9 | 2.7 | 0.8 | 1.1 | 0.6 | 1.9 | 1.9 |
| Germany | 1.7 | 0.7 | 3.3 | 1.9 | 0.5 | 0.5 | 0.0 | 1.7 | 1.6 |
| Developing Countries | 5.3 | -0.3 | 5.9 | 5.2 | $-0.2$ | 3.4 | 4.0 | 5.3 | 4.5 |
| Asia | 4.9 | -2.2 | 8.2 | 6.1 | 1.1 | 5.8 | 5.9 | 6.9 | 5.3 |
| Korea | 3.1 | -5.4 | 11.4 | 4.5 | 4.7 | 7.7 | 4.1 | 5.5 | 5.2 |
| China | 8.7 | 9.5 | 4.1 | 8.0 | 7.5 | 8.0 | 9.9 | 10.9 | 7.3 |
| Latin America | 6.1 | 1.2 | 4.2 | 4.4 | -1.3 | 1.3 | 2.2 | 4.1 | 3.8 |
| Mexico | 6.8 | 2.9 | 5.4 | 4.8 | -1.3 | 1.8 | 2.0 | 4.4 | 4.0 |
| Brazil | 2.3 | $-1.7$ | 3.5 | 3.8 | -0.8 | 3.7 | $-0.2$ | 2.6 | 3.0 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |
| Industrial Countries of which: | 1.5 | 0.9 | 1.1 | 1.7 | 0.9 | 2.1 | 1.3 | 1.2 | 1.4 |
| Canada | 1.0 | 1.1 | 2.4 | 3.1 | 1.1 | 3.8 | 1.7 | 1.6 | 1.7 |
| Japan | 2.1 | 0.7 | -1.1 | -1.2 | $-1.3$ | -0.5 | -0.4 | -0.0 | 0.2 |
| United Kingdom (4) | 1.7 | 1.4 | 1.2 | 1.0 | 1.0 | 1.6 | 1.3 | 1.6 | 2.0 |
| Euro Area (2) | 1.5 | 0.8 | 1.5 | 2.5 | 2.1 | 2.3 | 1.9 | 1.6 | 1.5 |
| Germany | 1.5 | 0.3 | 1.1 | 1.7 | 1.5 | 1.2 | 1.2 | 1.0 | 0.9 |
| Developing Countries | 6.8 | 9.0 | 4.6 | 4.1 | 2.8 | 2.9 | 3.0 | 3.4 | 2.7 |
| Asia | 2.7 | 4.4 | 0.1 | 1.8 | 1.1 | 0.7 | 2.1 | 2.8 | 2.1 |
| Korea | 5.0 | 5.8 | 1.2 | 2.6 | 3.4 | 3.4 | 3.5 | 3.7 | 3.2 |
| China | 0.8 | $-1.2$ | -1.0 | 0.9 | -0.1 | -0.6 | 2.6 | 2.9 | 1.6 |
| Latin America | 15.5 | 15.4 | 12.5 | 8.4 | 5.3 | 6.5 | 4.9 | 4.3 | 3.5 |
| Mexico | 17.0 | 17.3 | 13.4 | 8.7 | 5.1 | 5.3 | 4.0 | 3.8 | 3.1 |
| Brazil | 4.6 | 2.0 | 8.4 | 6.4 | 7.5 | 10.7 | 11.5 | 6.2 | 5.2 |

[^4]Strictly
Class II
FOMC

| Measure and country | 2003 |  |  |  | 2004 |  |  |  | 2005 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| REAL GDP (1) ------------------- Quarterly changes at an annual rat |  |  |  |  |  |  |  |  |  |  |  |  |
| Total foreign | 1.2 | 0.5 | 4.3 | 4.7 | 3.9 | 3.9 | 3.6 | 3.6 | 3.6 | 3.5 | 3.4 | 3.4 |
| Industrial Countries | 1.6 | 0.1 | 1.9 | 3.6 | 2.4 | 2.8 | 2.8 | 2.8 | 2.9 | 2.8 | 2.8 | 2.8 |
| Of Which: | 2.5 | -1.0 | 1.3 | 3.8 | 2.6 | 3.3 | 3.3 | 3.3 | 3.6 | 3.6 | 3.5 | 3.5 |
| Japan | 2.2 | 3.5 | 2.5 | 6.4 | 3.0 | 2.8 | 2.3 | 2.2 | 2.2 | 2.3 | 2.4 | 2.4 |
| United Kingdom | 1.1 | 2.4 | 3.4 | 3.7 | 2.6 | 2.8 | 2.9 | 2.9 | 2.8 | 2.7 | 2.5 | 2.5 |
| $\underset{\substack{\text { Euro Area } \\ \text { Germany }}}{ }$ | -0.1 -1.0 | -0.4 -0.6 | 1.5 0.8 | 1.2 0.9 | ${ }_{1}^{1.6}$ | 1.9 1.7 | 2.0 1.7 | 2.1 1.9 | 2.0 1.8 | 1.9 1.6 | 1.9 1.6 | 1.8 1.5 |
| Developing Countries | 0.7 | 1.1 | 8.1 | 6.5 | 6.1 | 5.4 | 4.9 | 4.8 | 4.6 | 4.5 | 4.4 | 4.3 |
| Asia | 3.3 | -3.0 | 16.0 | 8.1 | 9.1 | 7.1 | 5.8 | 5.7 | 5.5 | 5.4 | 5.1 | 5.11 |
| Korea | -1.1 | -0.2 | 6.7 | 11.3 | 6.0 | ${ }^{5} \cdot 4$ | 5.4 | 5.3 | 5.3 | 5.2 | 5.2 | 5.3 |
| Latin America | 16.3 -2.4 | -2.9 4.6 | 19.6 1.2 | 7.9 5 | 15.5 3.8 | 13.3 4.2 | 7.6 | 7.4 | 7.4 3.9 | 7.4 3.8 | 7.2 3.8 | 7.2 3.8 |
| Mexico | -0.3 | 3.1 | 0.2 | 4.9 | 4.2 | 4.6 | 4.6 | 4.4 | 4.2 | 4.0 | 4.0 | 4.0 |
| Brazil | -3.2 | -3.7 | 0.4 | 6.1 | 2.0 | 2.5 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |  |  |  |
| Industrial Countries | 2.4 | 1.7 | 1.4 | 1.3 | 0.8 | 1.3 | 1.3 | 1.2 | 1.2 | 1.3 | 1.3 | 1.4 |
| of which: |  |  |  | 1.7 | 0.9 | 1.7 | 1.7 |  |  |  |  |  |
| Japan | -0.3 | -0.2 | -0.5 | -0.4 | -0.2 | -0.3 | -0.1 | -0.0 | -0.1 | 0.1 | 0.2 | 0.2 |
| United Kingdom (4) | 1.5 | 1.3 | 1.4 | 1.3 | 1.2 | 1.8 | 1.8 | 1.6 | 1.7 | 1.7 | 1.9 | 2.0 |
| Euro Area (2) | 2.3 1.1 | 1.9 0.9 | 2.0 1.0 | 1.9 1.2 | 1.6 1.0 | 1.9 1.4 | 1.9 1.2 | 1.6 1.0 | 1.6 | 1.5 0.9 | 1.5 0.9 | 1.5 0.9 |
| Developing Countries | 3.4 | 3.0 | 2.6 | 3.0 | 3.0 | 3.4 | 3.7 | 3.4 | 3.2 | 3.0 | 2.8 | 2.7 |
| Asia | 1.2 | 1.1 | 1.1 | 2.1 | 2.2 | 2.8 | 3.3 | 2.8 | 2.7 | 2.4 | 2.2 | 2.1 |
| Korea | 4.1 | 3.3 | 3.2 | 3.5 | 3.3 | 3.9 | 4.2 | 3.7 | 3.7 | 3.6 | 3.4 | 3.2 |
| China | 0.4 | 0.7 | 0.9 | 2.6 | 2.8 | 3.5 | 3.8 | 2.9 | 2.6 | 2.1 | 1.8 | 1.6 |
| Latin America | 7.1 | 6.4 | 5.4 | 4.9 | 4.7 | 4.6 | 4.5 | 4.3 | 3.8 | 3.7 | 3.7 | 3.5 |
| Mexico Brazil | 5.5 | 4.7 | 4.1 | 4.0 | 4.3 | 4.3 | 4.1 | 3.8 | 3.3 | 3.2 | 3.2 | 3.1 |
| Brazil | 15.7 | 17.0 | 15.3 | 11.5 | 6.8 | 5.4 | 6.1 | 6.2 | 5.7 | 5.5 | 5.3 | 5.2 |

[^5][^6]April 28, 2004


| Billions of dollars |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US CURRENT ACCOUNT BALANCE | -127.7 | -204.7 | -290.8 | -411.5 | -393.7 | -480.9 | -541.6 | -564.1 | -621.4 |
| Current Acct as Percent of GDP | -1.5 | -2.3 | -3.1 | -4.2 | -3.9 | -4.6 | -4.9 | -4.8 | -5.0 |
| Net Goods \& Services (BOP) | -107.0 | -163.2 | -261.2 | -375.4 | -357.8 | -418.0 | -489.9 | -539.0 | -572. 5 |
| Investment Income, Net | 25.1 | 11.5 | 22.3 | 24.2 | 15.7 | 1.3 | 21.9 | 60.9 | 37.6 |
| Direct, Net | 72.4 | 65.5 | 78.2 | 94.9 | 106.5 | 93.5 | 104.0 | 157.0 | 163.7 |
| Portfolio, Net | -47.3 | -54.1 | -55.9 | -70.7 | -90.8 | -92.2 | -82.1 | -96.0 | -126.1 |
| Other Income \& Transfers, Net | $-45.7$ | -53.0 | -52.0 | -60.3 | -51.6 | -64.1 | -73.6 | -86.0 | -86.6 |

[^7]NIPA REAL EXPORTS and IMPORTS

|  |  | 2000 |  |  |  | 2001 |  |  |  | 2002 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 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 | -1. 5 | -1.0 | -0.9 | -0.1 | 0.5 | -0.2 | -0.4 | -0.5 | -0.7 | -1.3 | -0.2 | -1.5 |
|  | Exports of G\&S | 0.7 | 1.3 | 1.1 | -0.3 | -0.5 | -1.5 | -2.0 | -1.0 | 0.4 | 0.8 | 0.4 | -0.4 |
|  | Imports of G\&S | -2.2 | -2.3 | -2.0 | 0.2 | 1.0 | 1.3 | 1.6 | 0.5 | -1.1 | -2.1 | -0.6 | -1.1 |
| Percentage change from previous period, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of G\&S |  | 6.6 | 12.3 | 10.7 | -2.7 | -4.5 | -13.4 | -17.7 | -9.8 | 4.4 | 8.7 | 4.3 | -3.7 |
|  | Services | 1.4 | 8.4 | -6.6 | 4.5 | -2.0 | -0.6 | -14.7 | -15.0 | 22.9 | 1.6 | 4.4 | 9.4 |
|  | Computers | 32.7 | 47.0 | 30.1 | -10.7 | -7.7 | -40.8 | -20.1 | -18.6 | -22.2 | 3.2 | 4.6 | 14.6 |
|  | Semiconductors | 24.2 | 73.7 | 35.0 | -8.9 | -29.5 | -54.1 | -45.7 | 2.3 | 26.6 | 40.5 | 11.8 | -27.1 |
|  | Other Goods 1/ | 5.9 | 7.5 | 16.0 | -4.5 | -2.7 | -12.1 | -16.6 | -7.4 | -2.8 | 10.8 | 3.7 | -9.0 |
| Imports of G\&S |  | 16.7 | 16.5 | 14.1 | -1.6 | -6.2 | -8.6 | -10.8 | -3.8 | 8.4 | 17.1 | 4.1 | 8.2 |
| ServicesOil |  | 20.9 | 10.6 | 14.3 | -1.8 | -3.2 | 12.5 | -18.1 | -6.9 | 19.3 | -3.7 | 0.7 | 12.1 |
|  |  | 28.5 | 40.6 | -2.6 | -6.4 | 23.3 | 7.1 | -26.8 | 3.7 | -19.3 | 35.3 | -10.9 | 18.9 |
| Oil ${ }^{\text {Computers }}$ |  | -2.2 | 44.9 | 35.4 | -12.3 | -25.7 | -20.5 | -10.9 | 9.3 | 38.4 | 11.5 | 6.5 | 0.9 |
| Computers |  | 25.0 | 45.4 | 71.1 | -26.9 | -43.5 | -70.4 | -55.4 | -24.6 | 44.5 | 34.6 | -6.5 | -20.3 |
| Other Goods 2/ |  | 16.4 | 12.2 | 12.2 | 1.8 | -6.1 | -10.0 | -4.8 | -4.0 | 5.9 | 21.4 | 7.0 | 7.5 |
| Billions of Chained 2000 Dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net | Goods \& Services | -350.6 | -374.5 | -395.6 | -397.2 | -385.9 | -391.7 | -401.3 | -413.4 | -431.2 | -467.6 | -471.9 | -511.5 |
|  | Exports of G\&S | 1060.9 | 1092.0 | 1120.0 | 1112.3 | 1099.6 | 1060.9 | 1010.6 | 984.8 | 995.4 | 1016.5 | 1027.3 | 1017.5 |
|  | Imports of G\&S | 1411.5 | 1466.5 | 1515.6 | 1509.5 | 1485.5 | 1452.7 | 1411.9 | 1398.2 | 1426.7 | 1484.1 | 1499.2 | 1529.0 |


| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US CURRENT ACCOUNT BALANCE | -380.1 | -396.5 | -434.3 | -435.0 | -416.0 | -399.9 | -414.5 | -344.6 | -426.9 | -491.3 | -490.9 | -514.3 |
| Current Account as \% of GDP | -3.9 | -4.0 | -4.4 | -4.4 | -4.1 | -4.0 | -4.1 | -3.4 | -4.1 | -4.7 | -4.7 | -4.8 |
| Net Goods \& Services (BOP) | -346.9 | -364.5 | -391.8 | -398.4 | -373.8 | -357.8 | -356.2 | -343.5 | -360.2 | -419.5 | -427.9 | -464.5 |
| Investment Income, Net |  |  |  | 37.8 | 8.6 | 8.2 | -8.3 | 54.3 | 2.2 | -12.4 | -1.9 | 17.2 |
| Direct, Net | $84.5$ | 88.9 | 91.9 | 114.5 | 94.5 | 96.7 | 91.3 | 143.5 | 95.7 | 85.6 | 87.7 | 104.9 |
| Portfolio, Net | -64.5 | -65.7 | -76.1 | -76.6 | -86.0 | -88.4 | -99.6 | -89.2 | -93.5 | -98.1 | -89.6 | -87.7 |
| Other Inc. \& Transfers, Net | -53.1 | -55.2 | -58.3 | -74.5 | -50.8 | -50.3 | -50.0 | -55.4 | -68.9 | -59.3 | -61.1 | -67.1 |

[^8]OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

|  |  | 2003 |  |  |  | 2004 |  |  |  | 2005 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 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 | -1.3 | 0.8 | -0.3 | -0.2 | -0.4 | -0.3 | -0.0 | -0.3 | -0.5 | -0.3 | -0.1 |
|  | Exports of G\&S | -0.2 | -0.1 | 0.9 | 1.8 | 0.3 | 1.1 | 1.1 | 1.2 | 0.8 | 0.9 | 0.9 | 1.1 |
|  | Imports of G\&S | 1.0 | -1.2 | -0.1 | -2.1 | -0.4 | -1.5 | -1.4 | -1.2 | -1.1 | -1.5 | -1.3 | -1.2 |
| Percentage change from previous period, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of G\&S |  | -2.0 | -1.1 | 9.9 | 20.5 | 2.7 | 11.2 | 11.0 | 12.4 | 7.5 | 9.4 | 9.1 | 10.5 |
|  | Services | -10.2 | 0.3 | 12.7 | 18.8 | 2.9 | 8.5 | 7.7 | 7.3 | 6.7 | 6.2 | 5.9 | 5.6 |
|  | Computers | -7.4 | -11.2 | 48.7 | 25.7 | 0.0 | 38.6 | 38.6 | 38.6 | 23.9 | 33.6 | 33.6 | 33.6 |
|  | Semiconductors | 44.1 | 30.1 | 35.2 | 46.4 | 6.1 | 41.2 | 41.2 | 41.2 | 26.3 | 36.1 | 36.1 | 36.1 |
|  | Other Goods 1/ | 0.1 | -3.0 | 4.8 | 19.3 | 2.5 | 8.9 | 8.9 | 11.3 | 5.4 | 7.3 | 6.8 | 9.1 |
|  |  | -6.8 | 9.1 | 0.8 |  | 3.1 | 10.7 | 9.8 | 8.6 | 7.5 | 10.2 | 8.5 | 8.2 |
| Services Oil |  | -7.6 | -10.9 | 13.5 | 7.5 | 4.7 | 6.6 | 7.3 | 7.2 | 5.6 | 4.9 | 4.7 | 4.6 |
|  |  | -12.7 | 55.8 | -3.2 | -17.0 | 6.5 | 8.7 | 2.8 | -13.1 | 1.0 | 20.7 | -3.6 | -12.4 |
| Oil ${ }_{\text {Computers }}$ |  | -0.4 | 18.9 | 15.8 | 36.8 | 18.1 | 38.6 | 38.6 | 38.6 | 23.9 | 33.5 | 33.5 | 33.5 |
| Computers |  | -0.4 | 3.1 | -1.5 | 0.5 | 51.8 | 41.1 | 41.1 | 41.1 | 26.2 | 36.0 | 36.0 | 36.0 |
| SemiconductorsOther Goods $2 /$ |  | -6.4 | 9.1 | -2.5 | 22.8 | 0.3 | 9.4 | 8.8 | 9.2 | 7.1 | 8.0 | 8.3 | 8.7 |
| Billions of Chained 2000 Dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net | Goods \& Services | $-490.1$ | -526.0 | -505.2 | -515.2 | $-520.0$ | -532.1 | -541.8 | $-543.0$ | $-552.9$ | -569.0 | $-579.2$ |  |
|  | Exports of G\&S | 1012.4 | 1009.6 | 1033.7 | 1083.1 | 1090.5 | 1119.7 | 1149.2 | 1183.3 | 1204.9 | 1232.2 | 1259.2 | 1291.0 |
|  | Imports of G\&S | 1502.5 | 1535.7 | 1538.9 | 1598.3 | 1610.5 | 1651.8 | 1691.0 | 1726.3 | 1757.8 | 1801.2 | 1838.4 | 1874.7 |


| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US CURRENT ACCOUNT BALANCE | -556.6 | -559.4 | -541.2 | -509.1 | -552.3 | -550.4 | -572.3 | -581.3 | -602.6 | $-611.4$ | -628.3 | -643.2 |
| Current Account as \% of GDP | -5.2 | -5.2 | -4.9 | -4.5 | -4.8 | -4.7 | -4.8 | -4.9 | -5.0 | -5.0 | -5.1 | -5.1 |
| Net Goods \& Services (BOP) | -486.2 | -496.4 | -486.6 | -490.5 | -518.7 | -535.6 | -548.9 | -552.9 | -560.6 | -571.9 | -578.1 | -579.2 |
| Investment Income, Net |  |  |  | 55.4 | 59.7 |  | 60.1 | 55.5 |  | 44.3 | 34.0 | 20.5 |
| Direct, Net | 86.6 | $87.2$ | 98.7 | 143.3 | 151.3 | $162.4$ | 156.7 | 157.6 | 161.6 | 164.0 | 165.2 | 164.0 |
| Portfolio, Net | -82.0 | -76.6 | -81.6 | -88.0 | -91.6 | -94.0 | -96.5 | -102.0 | -109.9 | -119.7 | -131.2 | -143.5 |
| Other Inc. \& Transfers, Net | -75.1 | -73.5 | -71.6 | -74.0 | -93.3 | -83.2 | -83.5 | -84.0 | -93.7 | -83.8 | -84.2 | -84.6 |

[^9]
[^0]:    1. Our assumption on Iraq-related spending is not predicated upon any specific military scenario (and, in any case, it is very difficult to determine how changes in troop deployment or in the situation on the ground will affect costs). Rather, we view our assumption of constant real spending as roughly consistent with the range of military and reconstruction options currently being discussed.
[^1]:    1. OMB's February 2004 baseline surplus estimates are $-\$ 527$ billion in FY 2004 and $-\$ 393$ billion in FY 2005 and surplus estimates under enactment of its proposed policies (which do not include
    additional funding for Iraq) are $-\$ 521$ billion and $-\$ 364$ billion, respectively. CBO's March 2004 baseline surplus estimates are - $\$ 477$ billion in FY 2004 and $\$ 363$ billion in FY 2005 . 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, and changes in other financial assets and liabilities.
    2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.
    3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
    
     taxes in chained (2000) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus.
    a--Actual
[^2]:    Note. Quarterly data are at seasonally adjusted annual rates. 1. Data after 2003:Q4 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.
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[^3]:    Note. Data after 2003:Q4 are staff projections.
    4. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.
    
    n.s.a. Not seasonally adjusted.

[^4]:    1. Foreign GDP aggregates calculated using shares of U.S exports
    2. Harmonized data for euro area from Eurostat.
    3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.
    4. CPI excluding mortgage interest payments, which is the targeted inflation rate.
[^5]:    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

[^6]:    Strictly Confidential (FR)
    Class II FOMC

[^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
