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## Part 1

## CURRENT ECONOMIC AND FINANCIAL CONDITIONS

## Summary and Outlook

## Summary and Outlook

## Domestic Developments

The latest data contain hints that the pace of economic activity may be firming. Private payrolls were about flat in April and May after declining since last summer, and activity in the factory sector appears to have stabilized last month following declines over the preceding three months. Consumer sentiment has rebounded considerably, on net, from the depressed levels of early spring, and inflation-adjusted sales at retail establishments in May more than reversed the drop posted in April. Moreover, low mortgage rates are supporting a high level of residential construction and have stimulated considerable refinancing activity.

That said, businesses appear to remain exceptionally cautious. Companies are keeping a tight rein on inventories and are reportedly waiting for moredefinitive signs that a sustained acceleration in demand is under way before committing to major new investment projects or substantial increases in payrolls. Given the mixed tenor of the incoming data and anecdotes, it is simply too soon to assert with confidence that the economy is emerging from the soft patch.

After increasing at a $1-1 / 2$ percent annual rate in the first half of the year, real GDP is expected to grow at a $4-1 / 4$ percent annual rate in the second half, about $1 / 3$ percentage point more than in the April Greenbook. The recently enacted fiscal package is more expansionary than the one we had incorporated in our April projection, especially in the near term. Stock and bond markets have rallied impressively over the intermeeting period, driven importantly by an expectation that monetary policy will remain accommodative for considerably longer than previously thought. Moreover, the recent depreciation of the dollar seems likely to shift demand away from foreign-produced goods and services and toward domestic products.

These positive influences have led us to raise our 2004 real GDP projection to 5-1/4 percent. Although such a rapid pace of economic growth would be a far cry from recent experience, it reflects our view that the powerful sources of macroeconomic stimulus will lead to a more durable step-up in the pace of final demand and that business spending and hiring will gain momentum by the turn of the year. But the rapid expansion we are projecting for next year also reflects importantly our above-consensus forecast for the growth of potential output - and the latest data have done little to dissuade us from our optimistic outlook for the supply side of the economy. As a consequence, even the substantial gains in real activity that we are projecting for next year are insufficient to eliminate the excess capacity in the economy. We project that the unemployment rate, after peaking at 6-1/4 percent later this year, will drop to only about 5-1/2 percent by the end of next year.

Consumer price inflation remains very low. Although the core CPI increased 0.3 percent in May, it had been unchanged in the preceding two months, and the twelve-month change was $1-1 / 2$ percent, almost 1 percentage point below the pace of a year ago. Slack in resource utilization is expected to put further downward pressure on price inflation over the next year and a half. Following this year's deceleration of about $1 / 2$ percentage point, core PCE inflation edges down a bit further next year, to just under 1 percent.

## Key Background Factors

The recently enacted Jobs and Growth Tax Relief Reconciliation Act is expected to provide considerable fiscal stimulus in the second half of this year and in 2004. ${ }^{1}$ Although the tax-cut legislation included many of the provisions that we were anticipating in recent Greenbooks, it included some additional features that made it more stimulative this year and next. Most notably, the bill's provisions for dividend and capital gains tax cuts, the expansion of temporary partial expensing, and grants to state governments were not part of our assumptions in the April Greenbook. In addition, the quicker-than-anticipated enactment of the law allows lower tax withholding to begin this summer, a quarter sooner than we expected. The new law also provides for an "advance refund" of the increase in the child tax credit, and checks are expected to be mailed in July and August.

These new cuts, together with earlier tax cuts and increased spending on national defense and homeland security, should provide substantial fiscal stimulus over the projection interval. We estimate that discretionary federal fiscal policy will boost the growth of real aggregate demand about $1-1 / 4$ percentage points this year and next. ${ }^{2}$ Although tight budgets are leading state and local governments to cut spending and-increasingly-to raise taxes, we estimate that state and local fiscal contraction offsets only a small part-on the order of 0.2 percentage point per year-of the sizable federal stimulus.

We now expect a federal deficit of $\$ 390$ billion in the current fiscal year, up $\$ 65$ billion from our April projection, mainly because of the tax legislation. For 2004, the deficit projection is $\$ 425$ billion, up about $\$ 15$ billion from the April

[^1]Greenbook as the stronger economy only partly offsets the effects of the new tax legislation.

We have assumed a slightly easier stance of monetary policy than in our previous forecast. In the money market, the expected path for the funds rate has been revised down substantially more and is now in better alignment with the staff assumption. In response, a broad array of long-term interest rates have moved down $1 / 2$ to $3 / 4$ percentage point since the time of the April Greenbook. Looking ahead, we expect Treasury yields and mortgage rates to move up a bit from recent levels as the economy improves and markets shift their focus to possible increases in the funds rate beyond the forecast period. However, yields on Baa-rated corporate bonds are projected to edge down a bit further over the forecast period with the improvement in economic conditions.

The current level of equity prices is about 10 percent higher than assumed in the April Greenbook, and we have raised the near-term path for the stock market commensurately. In our projection, we assume that broad indexes of stock prices will rise at an annual rate of about 6 percent in nominal terms, a pace that equates the risk-adjusted return on equities to that on long-dated Treasury securities. The rate of increase in equity prices that equalizes returns is slightly lower than in the previous projection, reflecting the reduction in Treasury yields.

The real trade-weighted foreign exchange value of the dollar has moved down about 3 percent since the April Greenbook. In our projection, we continue to assume some modest additional depreciation, as in previous Greenbooks. Incoming data on foreign economic activity have been weak, and as a consequence, we have marked down trade-weighted foreign growth this year by about $3 / 4$ percentage point, to $1-1 / 2$ percent. We anticipate that growth abroad will pick up next year to about $3-1 / 2$ percent.

Crude oil prices have moved back up somewhat since the April Greenbook, in part because of expectations that Iraqi oil exports will take longer to return to pre-war levels than had been anticipated. The spot price of West Texas intermediate (WTI) is up about $\$ 5$ per barrel from the time of the last Greenbook, and we expect it to average nearly $\$ 30$ per barrel in the third quarter. In our projection, prices move down in line with futures markets, falling to a bit below $\$ 25$ per barrel by the end of 2004 , about $\$ 1$ per barrel higher than in the April Greenbook.

## Recent Developments and the Near-Term Outlook

The latest readings from the industrial sector are somewhat more encouraging than those from earlier in the year. In particular, manufacturing production rose 0.2 percent in May after falling, on net, in the first four months of the year. Moreover, surveys of purchasing managers by the ISM and regional groups

## Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

| Measure | 2003:Q2 |  | 2003:Q3 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Apr. GB | June GB | Apr. GB | June GB |
| Real GDP | 2.0 | 1.5 | 3.4 | 3.8 |
| Private domestic final purchases | 2.6 | 1.9 | 2.9 | 3.7 |
| Personal consumption expenditures | 2.5 | 2.1 | 2.9 | 3.8 |
| Residential investment | -1.5 | -3.9 | 1.4 | 1.8 |
| Business fixed investment | 5.6 | 3.2 | 3.3 | 3.7 |
| Government outlays for consumption and investment | 7.5 | 7.0 | 5.3 | 5.2 |
|  | Contribution to growth (percentage points) |  |  |  |
| Inventory investment | -1.0 | -. 5 | . 2 | -. 5 |
| Net exports | -. 7 | -. 9 | -. 3 | . 1 |

suggest an increase in orders and thus further modest increases in production in the next few months.

Private payroll employment was about flat in April and May. However, the data on initial claims for unemployment insurance through early June remain at a level historically associated with falling employment, making it unclear whether the labor market has begun a transition to stronger job growth. In the near term, we are forecasting small private payroll gains of around 25,000 to 50,000 in June and July along with small increases in hours worked.

Real personal consumption expenditures are expected to rise at an annual rate of about 2 percent in the current quarter, about the same as in the first quarter. Boosted by incentives, sales of light motor vehicles appear to be on track for a current-quarter pace of about 16-1/4 million units at an annual rate, up somewhat from the first-quarter pace of 15-3/4 million units. The latest data on retail sales indicate that, after falling in April, spending on goods other than motor vehicles bounced back in real terms in May. Although consumer confidence as measured by the Michigan survey retreated a bit in early June, it remained above the depressed levels of February and March.

Residential construction activity appears to have slipped a bit in the current quarter from its recent high levels. Housing starts in April and May were below their first-quarter average, perhaps reflecting the unusually wet weather in many parts of the country. Nevertheless, home sales in April were up a bit from the
first quarter, and the Mortgage Bankers Association reports that lending for home purchases continues to be strong.

We anticipate an increase of 7 percent at an annual rate in spending on equipment and software in the second quarter, following a decline of similar magnitude in the first. Smoothing through the recent fluctuations, we read the latest data on nominal computer shipments as moving up, implying a large increase in real terms. However, orders and shipments for other categories have shown no particular direction in recent months. Indicators for nonresidential construction spending have been downbeat, and we have revised down sharply our current-quarter forecast to show a decline of nearly 8 percent at an annual rate.

In the April Greenbook, we assumed that real federal expenditures on consumption and gross investment, pushed up by spending for the war in Iraq, would rise at an annual rate of 20 percent in the current quarter. The incoming data on federal spending have so far been consistent with this assumption, and federal spending thus continues to contribute almost $1-1 / 2$ percentage points to current-quarter GDP growth. State and local spending is expected to post a decline in the current quarter because of ongoing budget pressures.

The April trade report indicated that spending on international travel dropped off sharply, likely as a result of global political uncertainties and SARS. Though we project that reduced travel will hold down service imports for the current quarter, we nonetheless anticipate that imports overall will move up following the first-quarter decline, as goods imports are expected to post an increase. Exports, importantly affected by the decline in travel, look set to register their third consecutive quarterly decline. We expect net exports to reduce current-quarter GDP growth almost 1 percentage point after making a positive contribution of about the same magnitude in the first quarter.

Recent reports on consumer prices have, on net, come in below our expectations. We thus expect the core PCE price index to increase 1 percent at an annual rate in the current quarter, about $1 / 2$ percentage point less than projected in the April Greenbook. Consumer energy prices have been falling in the current quarter, reflecting the unwinding of the pre-war run-up in crude oil prices. As a consequence, overall PCE prices are expected to rise only about $1 / 2$ percent at an annual rate this quarter.

## The Longer-Term Outlook for the Economy

As noted above, because of improved financial conditions and greater fiscal stimulus, we have revised up output growth beginning in the second half of this year. Taken by themselves, these changes in conditioning assumptions could have justified an even larger upward revision than we have incorporated. The

## Projections of Real GDP

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

| Measure | 2003 |  | 2004 |
| :---: | ---: | ---: | ---: |
|  | H 1 | H 2 |  |
| Real GDP | $\mathbf{1 . 5}$ | $\mathbf{4 . 2}$ | $\mathbf{5 . 3}$ |
| Previous | 1.8 | 3.9 | 4.8 |
| Final sales | 2.1 | 4.5 | 4.5 |
| Previous | 2.5 | 3.4 | 4.2 |
| PCE | 2.0 | 4.2 | 4.6 |
| Previous | 1.9 | 3.3 | 4.6 |
| Residential investment | 3.2 | 3.5 | 4.7 |
| Previous | 4.8 | 1.6 | 3.8 |
| BFI | -1.3 | 4.5 | 14.3 |
| Previous | .6 | 4.4 | 11.2 |
| Government purchases | 3.7 | 3.5 | .8 |
| Previous | 4.2 | 3.7 | 1.1 |
| Exports | -1.6 | 8.6 | 9.6 |
| Previous | .6 | 9.3 | 9.0 |
| Imports | -.6 | 4.3 | 10.4 |
| Previous | -.1 | 6.9 | 10.0 |
|  | Contribution to growth, |  |  |
| Prenta | percentage points |  |  |
| Inventory change | -.5 | -.3 | .8 |
| Previous | -.7 | .4 | .5 |
| Net exports | -.1 | .2 | -.6 |
| Previous | .1 | -.1 | -.5 |

smaller markup in our forecast reflects our concern that business caution will dissipate less quickly than we had previously forecast. We have assumed that this greater caution will restrain business spending somewhat and will reduce the stimulative effects that financial conditions and tax incentives have on investment. Still, with inventories lean, interest rates low, fiscal policy stimulative, underlying productivity growth strong, and the dollar falling, we view conditions as conducive to robust growth in economic activity over the next year and a half.

Household spending. Growth in consumer spending is forecast to pick up smartly, from an annual rate of 2 percent in the first half of the year to $4-1 / 4$ percent in the second. The recently enacted tax act is expected to make a major contribution to this acceleration. Indeed, households will begin to see tangible benefits from the tax cuts in the summer, as new withholding schedules go into effect and the child-tax-credit advance-rebate checks arrive. We estimate that tax cuts will contribute about 1-1/4 percentage points to consumer spending growth in the second half of this year. A number of other factors support an acceleration in consumer spending both this year and next, including steady gains in real income that are supported by strong productivity growth and the waning of the effects of past stock-market declines. For 2004, we are looking for a rise in consumer spending of about 4-1/2 percent.

As noted earlier, housing starts have recently been off a bit from the very high levels reached in late 2002 and early this year. We expect single-family starts to move up from their current-quarter pace of 1.38 million units to 1.45 million units by the end of the year, boosted by the recent declines in mortgage interest rates and more-rapid gains in income. With the economy picking up further next year, we are forecasting single-family starts to average 1.49 million units. Although multifamily starts are also forecast to rebound in the second half from their low current-quarter level, high vacancy rates and softness in rents are expected to limit the improvement in this segment of the market.

Business spending. Underlying conditions appear conducive to a rebound in business investment. In particular, financing costs are low and tax incentives are temporarily putting capital equipment on sale. Furthermore, an acceleration in final sales stemming from the tax cuts and improved financial conditions should also serve to stimulate new investment. In our forecast, these fundamentals combine with the lifting of some of the gloom that has beset business managers to produce a significant acceleration in investment.

The new tax legislation included two important changes to the partial-expensing program that we had not anticipated in the April Greenbook: The proportion of equipment purchases eligible for immediate expensing was raised from 30 percent to 50 percent, and the deadline for acquisition was extended from September 11, 2004, to December 31, 2004. Moreover, firms' cost of equity financing was likely reduced by the cuts in dividend and capital gains taxation that were also part of the recent legislation. These tax-law changes account for
the bulk of our upward revision to the growth of equipment and software spending next year. ${ }^{3}$

The latest data on nonresidential construction activity have led us to pare our projection for the second half of this year. For 2004, however, we expect business construction spending to revive somewhat because of accelerator effects and low financing costs. Also, high natural gas prices in spot and futures markets are expected to spur additional drilling activity.

We anticipate a substantial inventory drawdown in the second half of this year as businesses cautiously adjust output in response to the surge in final sales. After that, however, we expect inventory investment to move up, putting stockbuilding into better alignment with sales growth. This step-up in inventory investment is forecast to contribute 0.8 percentage point to GDP growth next year.

Government spending. Real outlays for defense, pushed up by war-related spending, are anticipated to rise about 11 percent this year; next year, they should drop back a bit. Real nondefense outlays, boosted by spending for homeland security, are projected to increase 6 percent this year. Next year, they increase about 3-1/2 percent. At the state and local level, ongoing budget pressures are likely to hold down spending, and we are projecting real outlays to edge up this year and to rise just 1-1/2 percent in 2004. The increases for each year are $1 / 2$ percentage point smaller than in the April Greenbook.

Net exports. Because of the dollar's depreciation, a recovery of travel-related services, and the projected pickup in foreign growth, export growth is expected to step up significantly in the second half of the year, to an annual rate of about $8-1 / 2$ percent. It should move up a bit further next year, as the recovery in foreign growth firms. We expect imports, restrained by the weaker dollar, to expand at a $4-1 / 4$ percent annual rate in the second half of this year but to rise 10-1/2 percent in 2004 as U.S. real activity strengthens further. Imports and exports are expected to rise at about the same pace next year; nonetheless, net exports subtract $1 / 2$ percentage point from the increase in GDP because imports are considerably larger than exports. (The International Developments section provides more detail on the outlook for the external sector.)

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## Aggregate Supply, the Labor Market, and Prospects for Inflation

Our estimates of structural productivity and potential output growth are little changed from the April Greenbook. With actual growth in output currently trailing our estimate of potential, the slack in resource utilization has continued to widen. We expect that the pickup in growth in the second half of this year and in 2004 will be sufficient to allow the output and unemployment gaps to narrow through next year. We project that, by the end of next year, the unemployment rate will fall to 5.4 percent, 0.2 percentage point lower than projected in the April Greenbook.

Productivity and the labor market. Our current estimate is that labor productivity in the nonfarm business sector increased at an annual rate of 2-3/4 percent in the first half of the year. This rapid growth reflects, in part, the robust pace of structural productivity growth. However, we also think that hours and employment have been held back by ongoing caution on the part of firms because of uncertainty about future economic growth.

In the third quarter, firms are expected to remain cautious, limiting the gains in employment and yielding another large gain in productivity. But later this year, firms should have the confidence to begin hiring in earnest. As hiring picks up, productivity growth is forecast to fall short of its underlying structural pace. We project that next year's monthly job gains will average more than 350,000 per

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

| Measure | $1973-$ <br> 95 | $1996-$ <br> 99 | 2000 | 2001 | 2002 | 2003 | 2004 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Structural labor productivity | 1.4 | 2.5 | 2.6 | 1.8 | 2.3 | 2.2 | 2.3 |
| $\quad$ Previous | 1.4 | 2.5 | 2.6 | 1.8 | 2.3 | 2.2 | 2.3 |
| Contributions $^{1}$ |  |  |  |  |  |  |  |
| Capital deepening $^{\text {Previous }}$ | .6 | 1.3 | 1.2 | .5 | .4 | .3 | .6 |
| Multifactor productivity | .6 | 1.3 | 1.2 | .5 | .4 | .3 | .6 |
| $\quad$ Previous | .6 | 1.0 | 1.1 | 1.1 | 1.7 | 1.6 | 1.4 |
| Labor composition | .6 | 1.0 | 1.1 | 1.1 | 1.7 | 1.6 | 1.4 |
| MEMO | .3 | .3 | .3 | .3 | .3 | .3 | .3 |
| Potential GDP |  |  |  |  |  |  |  |
| $\quad$ Previous | 2.9 | 3.5 | 3.7 | 2.9 | 3.3 | 3.1 | 3.2 |

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

1. Percentage points.

# The Outlook for the Labor Market 

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

| Measure | 2001 | 2002 | 2003 | 2004 |
| :--- | ---: | ---: | ---: | ---: |
| Output per hour, nonfarm business | 1.9 | 4.1 | 2.6 | 1.5 |
| $\quad$ Previous | 1.9 | 4.0 | 2.0 | 1.5 |
| Nonfarm private payroll employment | -1.7 | -.7 | .5 | 4.1 |
| $\quad$ Previous | -1.4 | -.5 | .2 | 3.5 |
| Household employment survey | -.8 | .3 | 1.3 | 2.9 |
| $\quad$ Previous | -.8 | .3 | 1.3 | 2.6 |
| Labor force participation rate $^{1}$ | 66.8 | 66.5 | 66.4 | 66.9 |
| $\quad$ Previous | 66.8 | 66.5 | 66.4 | 67.0 |
| Civilian unemployment rate $^{1}$ | 5.6 | 5.9 | 6.1 | 5.4 |
| $\quad$ Previous | 5.6 | 5.9 | 6.1 | 5.6 |

1. Percent, average for the fourth quarter.
month, which should be sufficient to engender a steady decline in the unemployment rate.

Prices. We expect core consumer price inflation to edge up in the second half of the year. An important reason for this projection is that we do not expect the sharp drops in the prices of tobacco, apparel, and motor vehicles to be repeated. For the year as a whole, we have revised up our outlook for energy prices from a small decline to an increase of about 4 percent, consistent with higher spot and futures prices for crude oil and natural gas. As a result, although we have revised down our outlook for core PCE inflation this year by $1 / 4$ percentage point, to 1 percent, overall PCE inflation, at $1-1 / 4$ percent, is the same as in the April Greenbook.

We forecast core PCE inflation to edge down a bit further next year, as continued slack in labor and product markets puts further downward pressure on inflation. The overall PCE price index is expected to increase a bit less than the core measure next year, reflecting falling energy prices.

## Inflation Projections

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

| Measure | 2001 | 2002 | 2003 | 2004 |
| :--- | ---: | ---: | ---: | ---: |
| PCE chain-weighted price index | 1.5 | 1.8 | 1.3 | .8 |
| $\quad$ Previous | 1.5 | 1.8 | 1.3 | 1.0 |
| Food and beverages | 3.1 | 1.4 | 1.9 | 1.4 |
| Previous | 3.1 | 1.4 | 1.9 | 1.5 |
| Energy | -10.3 | 7.0 | 3.9 | -2.9 |
| $\quad$ Previous | -10.3 | 7.0 | -.5 | -.4 |
| Excluding food and energy | 1.9 | 1.6 | 1.0 | .9 |
| $\quad$ Previous | 1.9 | 1.6 | 1.2 | 1.0 |
| Consumer price index | 1.8 | 2.2 | 1.7 | 1.2 |
| $\quad$ Previous | 1.8 | 2.2 | 1.6 | 1.4 |
| Excluding food and energy | 2.7 | 2.1 | 1.5 | 1.4 |
| $\quad$ Previous | 2.7 | 2.1 | 1.7 | 1.5 |
| GDP chain-weighted price index | 2.0 | 1.3 | 1.2 | 1.1 |
| $\quad$ Previous | 2.0 | 1.3 | 1.5 | 1.2 |
| ECI for compensation of private |  |  |  |  |
| $\quad$ industry workers ${ }^{1}$ | 4.2 | 3.2 | 3.7 | 3.1 |
| Previous | 4.2 | 3.2 | 3.7 | 3.1 |
| NFB compensation per hour | 1.4 | 3.1 | 3.4 | 2.7 |
| Previous | 1.4 | 3.2 | 3.1 | 2.7 |
| Prices of core non-oil |  |  |  |  |
| merchandise imports | -2.9 | .7 | 3.7 | 1.1 |
| Previous | -2.9 | .7 | 3.3 | 1.3 |

1. December to December.

## Financial Flows and Conditions

The debt of the nonfinancial sector has been rising rapidly of late. We have revised up our forecast of debt growth over the second half of this year, as we expect the drop in long-term interest rates to spur heavier borrowing for a while. On balance, we project that total nonfinancial debt will expand 8 percent this year-which would be the fastest annual pace since 1988-before tapering down to roughly 7 percent next year.

Federal debt is expected to grow about 12-1/2 percent this year-an upward revision of $2-1 / 2$ percentage points from the last forecast - and 10 percent in 2004. The pattern of borrowing within the current year is choppy, owing
entirely to the Treasury's maneuvering to remain under the debt ceiling; these actions have no effect on borrowing for the year as a whole.

After jumping 12 percent in 2002, state and local government debt should expand at about the same pace this year before slowing sharply in 2004. This projection has significantly more borrowing in the second half of 2003 than did the last Greenbook; the greater borrowing is driven mainly by stronger advance refunding activity in response to the drop in long-term rates and by taxable issuance to shore up state pension funds. We anticipate that next year, the improvement in state and local government budgets and a smaller volume of advance refundings will temper debt growth.

Businesses have been tapping the bond market in volume but have continued to use much of the proceeds to pay down existing debt. We expect that firms' net financing needs will remain modest in the near term but will increase next year as investment spending picks up more rapidly than internal funds. All told, we project that nonfinancial business debt will grow 4-1/4 percent this year and 5 percent in 2004, up from 3 percent in 2002.

We have revised up our projection of household borrowing and now anticipate that total household debt will expand 9 percent this year and then moderate to a 7 percent rise in 2004. The upward revision mainly reflects the recent decline in mortgage rates. We project that almost half of all home mortgages will be refinanced this year, with the associated cash-outs boosting mortgage balances. We have also nudged up the growth of consumer credit this year, but the projected growth is still relatively slow, as we expect households to continue substituting toward mortgage debt.

M2 is projected to expand $7-1 / 2$ percent in 2003. This increase is significantly faster than that of nominal income owing to a gradual adjustment to falling interest rates. Next year, with declines in interest rates behind us, M2 is expected to expand about in line with nominal income.

## Alternative Simulations

In this section, we use simulations of the FRB/US model to illustrate several risks to the staff forecast. The first three scenarios primarily concern possible alternative developments affecting aggregate demand-a faster abatement of the pessimism now restraining business investment, a more muted response of households and firms to the new tax cuts, and a further rally in stock and bond markets. The next two scenarios focus on the supply side and consider the implications of slower structural productivity growth and a lower NAIRU. In all these scenarios, we assume that the federal funds rate follows the baseline path. Finally, we consider three alternative paths for the federal funds rate.

| Alternative Scenarios <br> (Percent change, annual rate, from end of preceding period, except as noted) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Measure | 2003 |  |  | 2004 |  |
|  | Q1 | Q2 | H2 | H1 | H2 |
| Real GDP |  |  |  |  |  |
| Greenbook Baseline | 1.6 | 1.5 | 4.2 | 5.3 | 5.4 |
| Stronger investment | 1.6 | 1.5 | 5.5 | 5.9 | 6.1 |
| Weaker response to fiscal policy | 1.6 | 1.5 | 3.5 | 4.7 | 4.9 |
| Financial-market rebound | 1.6 | 1.5 | 4.6 | 6.0 | 6.0 |
| Slower productivity growth | 1.6 | 1.5 | 3.8 | 4.7 | 4.8 |
| Low NAIRU | 1.6 | 1.6 | 4.3 | 5.4 | 5.5 |
| Lower funds rate | 1.6 | 1.5 | 4.3 | 5.5 | 5.6 |
| Higher funds rate | 1.6 | 1.5 | 4.1 | 5.1 | 5.1 |
| Market-based funds rate | 1.6 | 1.5 | 4.2 | 5.4 | 5.5 |
| Civilian unemployment rate ${ }^{1}$ |  |  |  |  |  |
| Greenbook Baseline | 5.8 | 6.1 | 6.1 | 5.9 | 5.4 |
| Stronger investment | 5.8 | 6.1 | 5.9 | 5.5 | 4.8 |
| Weaker response to fiscal policy | 5.8 | 6.1 | 6.3 | 6.2 | 5.8 |
| Financial-market rebound | 5.8 | 6.1 | 6.1 | 5.7 | 5.0 |
| Slower productivity growth | 5.8 | 6.1 | 6.0 | 5.7 | 5.0 |
| Low NAIRU | 5.8 | 6.1 | 6.1 | 5.9 | 5.3 |
| Lower funds rate | 5.8 | 6.1 | 6.1 | 5.9 | 5.2 |
| Higher funds rate | 5.8 | 6.1 | 6.2 | 6.0 | 5.5 |
| Market-based funds rate | 5.8 | 6.1 | 6.1 | 5.9 | 5.3 |
| PCE prices excluding food and energy |  |  |  |  |  |
| Greenbook Baseline | . 8 | 1.0 | 1.2 | 1.0 | . 9 |
| Stronger investment | . 8 | 1.0 | 1.2 | 1.0 | . 9 |
| Weaker response to fiscal policy | . 8 | 1.0 | 1.2 | 1.0 | . 8 |
| Financial-market rebound | . 8 | 1.0 | 1.2 | 1.0 | . 9 |
| Slower productivity growth | . 8 | 1.0 | 1.3 | 1.3 | 1.4 |
| Low NAIRU | . 8 | . 9 | 1.1 | . 8 | . 6 |
| Lower funds rate | . 8 | 1.0 | 1.2 | 1.1 | . 9 |
| Higher funds rate | . 8 | 1.0 | 1.2 | 1.0 | . 8 |
| Market-based funds rate | . 8 | 1.0 | 1.2 | 1.0 | . 9 |

1. Average for the final quarter of the period.

Stronger investment. In the baseline, business pessimism about the outlook abates slowly, so firms remain cautious about stockbuilding and capital spending despite low interest rates, tax incentives, and a gradual strengthening in real activity. However, business sentiment may improve more quickly than we have assumed. Moreover, there is considerable uncertainty about the effects of tax incentives on capital spending. In this scenario, real outlays on
equipment and software come immediately back into close alignment with the predictions of the models we track. In addition, we assume a larger degree of response in investment to the recently enacted tax incentives. Stockbuilding is also much stronger as firms keep inventory-sales ratios roughly flat at current levels rather than letting them decline as in the staff projection. The resulting boost to aggregate demand raises real GDP growth more than 1 percentage point in the second half of this year and about $3 / 4$ percentage point in 2004, pushing the unemployment rate below 5 percent by the end of next year. However, inflation is little changed despite the pickup in real activity because increased capital spending boosts potential GDP.

Weaker response to fiscal policy. Expansionary fiscal policy is a major reason that the staff projects a considerable acceleration in real activity later this year. However, we may have overestimated the response of households and firms to the new tax act. In this scenario, households are assumed to be more concerned about shoring up their financial positions than they are in the baseline, and they are also more doubtful about the permanence of the tax cuts. As a result, they save the bulk of the tax rebate and are only half as responsive to the other tax provisions. On the business side, concerns about excess capacity eliminate any direct stimulus from the expansion of the partial expensing provision and the lower dividend and capital gains taxes included in the new law. Consequently, real GDP growth is more than $1 / 2$ percentage point below baseline in the second half of this year and in 2004, and the unemployment rate remains close to 6 percent through the end of next year. Inflation is a touch lower as a result.

Financial-market rebound. Despite the recent rally in stock and bond markets, risk premiums on private bonds and corporate equity remain elevated relative to historical norms and are expected to remain so through next year. In this scenario, these premiums are assumed to dissipate more quickly than in the baseline. In particular, risk spreads on investment-grade corporate bonds relative to Treasuries are assumed to return to their long-run average by the fall and to remain there through the end of 2004. Relative to baseline, the spread is 60 basis points narrower in the near term but only 20 basis points narrower by the end of next year. We also assume a permanent reduction of 60 basis points in the equity premium, which increases equity prices by 15 percent. As a consequence, spending by households and businesses is higher, and real GDP expands more than $1 / 2$ percentage point faster in 2004 than in the baseline; the unemployment rate falls to 5 percent by the end of next year. However, the decrease in slack is too modest and too delayed to have any appreciable effect on inflation until after 2004.

Slower productivity growth. Although we believe that we have been cautious in translating the recent gains in output per hour into past and future structural productivity, we may nonetheless have overestimated the degree to which
underlying conditions have improved. To illustrate this risk, in this scenario we assume that structural productivity between 2000 and the end of the projection period rises $1 / 2$ percentage point per year more slowly than in the baseline. Thus, in this scenario, the economy not only starts out with less slack in product markets but also faces a lower long-run potential growth rate. Given the weaker outlook for gains in personal income and corporate profits, both consumption and investment grow more slowly than in baseline. As a result, growth in real GDP falls by more than potential. Nonetheless, the unemployment rate declines more rapidly than in the baseline so as to gradually bring slack in labor markets into better alignment with this scenario's smaller output gap. ${ }^{4}$ Core inflation moves up relative to baseline, both because slower growth of productivity translates into more rapid increases in unit labor costs and because product markets have less slack.

Low NAIRU. This scenario considers the possibility that the staff's estimate of the NAIRU is too high and, as an alternative, assumes that the NAIRU is currently-and has been for some time- $4-1 / 4$ percent. The lower NAIRU puts significant downward pressure on prices, and core inflation is $1 / 4$ percentage point below baseline by the end of 2004. The implied higher level of the real funds rate in 2004 mostly offsets the stimulus to GDP from the higher level of potential output.

Alternative funds rate paths. We also consider the implications of three alternative paths for the federal funds rate: 25 basis points higher than in the baseline, 25 basis points lower, and the funds rate path implied by fed funds futures contracts.

[^3](This page intentionally blank.)

| Interval |  | Nominal GDP |  | Real GDP |  | GDP chain-weighted price index |  | Consumer price index ${ }^{1}$ |  | Unemployment rate ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 04/30/03 | 06/18/03 | 04/30/03 | 06/18/03 | 04/30/03 | 06/18/03 | 04/30/03 | 06/18/03 | 04/30/03 | 06/18/03 |
| ANNUAL |  |  |  |  |  |  |  |  |  |  |  |
| 2000 |  | 5.9 | 5.9 | 3.8 | 3.8 | 2.1 | 2.1 | 3.4 | 3.4 | 4.0 | 4.0 |
| 2001 |  | 2.6 | 2.6 | 0.3 | 0.3 | 2.4 | 2.4 | 2.8 | 2.8 | 4.8 | 4.8 |
| 2002 |  | 3.6 | 3.6 | 2.4 | 2.4 | 1.1 | 1.1 | 1.6 | 1.6 | 5.8 | 5.8 |
| 2003 |  | 3.9 | 3.8 | 2.3 | 2.3 | 1.6 | 1.5 | 2.1 | 2.2 | 6.0 | 6.1 |
| 2004 |  | 5.6 | 5.9 | 4.3 | 4.8 | 1.2 | 1.1 | 1.3 | 1.1 | 5.9 | 5.8 |
| QUARTERLY |  |  |  |  |  |  |  |  |  |  |  |
| 2001 | Q1 | 3.0 | 3.0 | -0.6 | -0.6 | 3.7 | 3.7 | 4.0 | 4.0 | 4.2 | 4.2 |
|  | Q2 | 0.9 | 0.9 | -1. 6 | -1. 6 | 2.5 | 2.5 | 3.2 | 3.2 | 4.4 | 4.4 |
|  | Q3 | 1.9 | 1.9 | -0.3 | -0.3 | 2.2 | 2.2 | 0.9 | 0.9 | 4.8 | 4.8 |
|  | 24 | 2.2 | 2.2 | 2.7 | 2.7 | -0.5 | -0. 5 | -0.7 | -0.7 | 5.6 | 5.6 |
| 2002 | Q1 | 6.5 | 6.5 | 5.0 | 5.0 | 1.3 | 1.3 | 1.4 | 1.4 | 5.6 | 5.6 |
|  | Q2 | 2.5 | 2.5 | 1.3 | 1.3 | 1.2 | 1.2 | 3.4 | 3.4 | 5.9 | 5.9 |
|  | Q3 | 5.1 | 5.1 | 4.0 | 4.0 | 1.0 | 1.0 | 2.2 | 2.2 | 5.8 | 5.8 |
|  | Q4 | 3.2 | 3.2 | 1.4 | 1.4 | 1.8 | 1.8 | 2.0 | 2.0 | 5.9 | 5.9 |
| 2003 | Q1 | 4.3 | 4.1 | 1.6 | 1.6 | 2.6 | 2.5 | 3.8 | 3.8 | 5.8 | 5.8 |
|  | Q2 | 3.1 | 2.4 | 2.0 | 1.5 | 1.0 | 0.9 | 0.3 | 0.6 | 6.0 | 6.1 |
|  | Q3 | 4.5 | 4.3 | 3.4 | 3.8 | 1.1 | 0.4 | 0.7 | 1.4 | 6.1 | 6.2 |
|  | 24 | 5.5 | 5.7 | 4.3 | 4.6 | 1.2 | 1.1 | 1.5 | 1.0 | 6.1 | 6.1 |
| 2004 | Q1 | 6.3 | 6.8 | 4.7 | 5.3 | 1.6 | 1.5 | 1.5 | 1.1 | 6.1 | 6.0 |
|  | Q2 | 6.0 | 6.4 | 4.8 | 5.3 | 1.2 | 1.0 | 1.4 | 1.2 | 6.0 | 5.9 |
|  | Q3 | 6.0 | 6.4 | 4.8 | 5.4 | 1.1 | 1.0 | 1.4 | 1.2 | 5.9 | 5.7 |
|  | Q4 | 5.9 | 6.4 | 4.8 | 5.4 | 1.1 | 0.9 | 1.4 | 1.1 | 5.6 | 5.4 |
| TWO-QUARTER ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |
| 2001 | Q2 | $1.9$ | $1.9$ | $-1.1$ | $-1.1$ | $3.1$ | $3.1$ | $3.5$ | $3.5$ | $0.5$ | $0.5$ |
|  | Q4 | 2.1 | 2.1 | 1.2 | 1.2 | 0.8 | 0.8 | 0.2 | 0.2 | 1.2 | $1.2$ |
| 2002 | Q2 | 4.5 | 4.5 | 3.1 | 3.1 | 1.3 | 1.3 | 2.4 | 2.4 | 0.3 | 0.3 |
|  | Q4 | 4.1 | 4.1 | 2.7 | 2.7 | 1.4 | 1.4 | 2.1 | 2.1 | 0.0 | 0.0 |
| 2003 | Q2 | 3.7 | 3.3 | 1.8 | 1.5 | 1.8 | 1.7 | 2.1 | 2.2 | 0.1 | 0.2 |
|  | Q4 | 5.0 | 5.0 | 3.9 | 4.2 | 1.1 | 0.8 | 1.1 | 1.2 | 0.1 | 0.0 |
| 2004 | Q2 | 6.1 | 6.6 | 4.7 | 5.3 | 1.4 | 1.3 | 1.5 | 1.2 | -0.1 | -0.2 |
|  | 24 | 5.9 | 6.4 | 4.8 | 5.4 | 1.1 | 1.0 | 1.4 | 1.2 | -0.4 | -0.5 |
| FOUR-QUARTER ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |
| 2000 Q4 |  | 4.6 | 4.6 | 2.3 | 2.3 | 2.3 | 2.3 | 3.4 | 3.4 | -0.2 | -0.2 |
| 2001 Q4 |  | 2.0 | 2.0 | 0.1 | 0.1 | 2.0 | 2.0 | 1.8 | 1.8 | 1.7 | 1.7 |
| 2002 Q4 |  | 4.3 | 4.3 | 2.9 | 2.9 | 1.3 | 1.3 | 2.2 | 2.2 | 0.3 | 0.3 |
| 2003 Q4 |  | 4.3 | 4.1 | 2.8 | 2.9 | 1.5 | 1.2 | 1.6 | 1.7 | 0.2 | 0.2 |
| 2004 | Q4 | 6.0 | 6.5 | 4.8 | 5.3 | 1.2 | 1.1 | 1.4 | 1.2 | -0.5 | -0.8 |

[^4]

1. Changes are from fourth quarter to fourth quarter.
2. Private-industry workers.

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[^5]Strictly Confidential <FR> Class II FOMC
real gross domestic product and related items, quarterly values (Seasonally adjusted, annual rate except as noted)

| Item | Units |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 2002 \\ \text { Q3 } \end{gathered}$ | $\begin{gathered} 2002 \\ 04 \end{gathered}$ | $\begin{gathered} 2003 \\ \mathrm{Q1} \end{gathered}$ | $\begin{gathered} 2003 \\ \mathrm{Q} 2 \end{gathered}$ | $\begin{gathered} 2003 \\ 03 \end{gathered}$ | $\begin{gathered} 2003 \\ 04 \end{gathered}$ | $\begin{gathered} 2004 \\ \mathrm{Q} 1 \end{gathered}$ | $\begin{gathered} 2004 \\ \mathrm{Q} 2 \end{gathered}$ | $\begin{gathered} 2004 \\ 23 \end{gathered}$ | $\begin{gathered} 2004 \\ Q 4 \end{gathered}$ |
| EXPENDITURES |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GDP | Bill. \$ | 10506.2 | 10588.8 | 10696.5 | 10760.9 | 10873.8 | 11025.9 | 11209.3 | 11385.5 | 11564.6 | 11744.1 |
| Real GDP | Bill. Ch. \$ | 9485.6 | 9518.2 | 9556.0 | 9591.6 | 9681.6 | 9791.2 | 9917.7 | 10047.5 | 10180.8 | 10314.7 |
| Real GDP | \% change | 4.0 | 1.4 | 1.6 | 1.5 | 3.8 | 4.6 | 5.3 | 5.3 | 5.4 | 5.4 |
| Gross domestic purchases |  | 3.9 | 2.9 | 0.8 | 2.3 | 3.5 | 4.1 | 5.6 | 5.9 | 5.8 | 5.3 |
| Final sales |  | 3.4 | 1.1 | 2.2 | 2.0 | 4.3 | 4.6 | 3.7 | 4.2 | 4.5 | 5.6 |
| Priv. dom. final purchases |  | 3.4 | 2.2 | 1.5 | 1.9 | 3.7 | 4.7 | 4.9 | 5.6 | 6.0 | 6.6 |
| Personal cons. expenditures |  | 4.2 | 1.7 | 2.0 | 2.1 | 3.8 | 4.6 | 4.3 | 4.3 | 4.7 | 5.0 |
| Durables |  | 22.8 | -8.2 | -1.7 | 11.3 | 10.0 | 9.1 | 7.3 | 6.6 | 6.6 | 8.5 |
| Nondurables |  | 1.0 | 5.1 | 6.2 | 0.4 | 5.3 | 5.2 | 4.2 | 4.4 | 5.1 | 5.0 |
| Services |  | 2.3 | 2.2 | 0.7 | 1.2 | 2.0 | 3.5 | 3.8 | 3.8 | 4.2 | 4.4 |
| Business fixed investment |  | -0.8 | 2.3 | -5.7 | 3.2 | 3.7 | 5.3 | 9.5 | 15.3 | 15.5 | 17.2 |
| Equipment \& Software |  | 6.7 | 6.2 | -6.7 | 6.8 | 6.1 | 7.7 | 10.7 | 19.0 | 18.4 | 21.4 |
| Nonres. structures |  | -21.4 | -9.9 | -2.3 | -7.7 | -4.3 | -2.7 | 5.2 | 2.8 | 5.6 | 2.6 |
| Residential structures |  | 1.1 | 9.4 | 10.8 | -3.9 | 1.8 | 5.1 | 3.6 | 5.2 | 4.3 | 5.9 |
| Exports |  | 4.6 | -5.8 | -1.2 | -2.0 | 6.7 | 10.6 | 7.1 | 9.5 | 9.7 | 12.2 |
| Imports |  | 3.3 | 7.4 | -6.2 | 5.3 | 3.5 | 5.1 | 8.9 | 12.0 | 11.3 | 9.5 |
| Gov't. cons. \& investment |  | 2.9 | 4.6 | 0.5 | 7.0 | 5.2 | 1.8 | 0.7 | 1.0 | 0.5 | 1.0 |
| Federal |  | 4.3 | 11.0 | 0.9 | 22.2 | 12.8 | 3.2 | 0.1 | 0.2 | -1.5 | -0.1 |
| Defense |  | 6.9 | 11.0 | -3.4 | 32.7 | 17.4 | 2.3 | -2.6 | -1.2 | -3.7 | -1.8 |
| State \& local |  | 2.2 | 1.2 | 0.3 | -0.8 | 0.8 | 0.9 | 1.2 | 1.5 | 1.7 | 1.7 |
| Change in bus. inventories | Bill. Ch. \$ | 18.8 | 25.8 | 9.1 | -3.4 | -16.4 | -17.4 | 23.8 | 55.1 | 79.7 | 74.3 |
| Nonfarm |  | 20.8 | 26.5 | 7.6 | -5. 5 | -18.5 | -19.9 | 22.5 | 53.9 | 78.5 | 73.0 |
| Net exports |  | -488.0 | -532.2 | -509.9 | -535.5 | -532.0 | -524.6 | -540.8 | -563.0 | -582.4 | -588.6 |
| Nominal GDP | \% change | 5.1 | 3.2 | 4.1 | 2.4 | 4.3 | 5.7 | 6.8 | 6.4 | 6.4 | 6.4 |
| EMPLOYMENT AND PRODUCTION |  |  |  |  |  |  |  |  |  |  |  |
| Nonfarm payroll employment | Millions | 130.2 | 130.3 | 130.2 | 130.1 | 130.2 | 130.9 | 132.0 | 133.2 | 134.3 | 135.4 |
| Unemployment rate | \% | 5.8 | 5.9 | 5.8 | 6.1 | 6.2 | 6.1 | 6.0 | 5.9 | 5.7 | 5.4 |
| Industrial prod. index | \% change | 3.4 | -3.4 | 0.3 | -3.0 | 4.0 | 5.9 | 7.7 | 7.3 | 7.7 | 7.0 |
| Capacity util. rate - mfg. | \% | 74.3 | 73.5 | 73.2 | 72.6 | 73.2 | 74.2 | 75.5 | 76.8 | 78.1 | 79.2 |
| Housing starts | Millions | 1.70 | 1.74 | 1.74 | 1.70 | 1.80 | 1.81 | 1.82 | 1.84 | 1.86 | 1.88 |
| Light motor vehicle sales |  | 17.63 | 16.50 | 15.84 | 16.23 | 16.84 | 17.13 | 17.19 | 17.26 | 17.34 | 17.52 |
| North Amer. produced |  | 14.27 | 13.25 | 12.45 | 12.90 | 13.46 | 13.64 | 13.66 | 13.71 | 13.70 | 13.88 |
| Other |  | 3.35 | 3.24 | 3.38 | 3.32 | 3.39 | 3.49 | 3.53 | 3.55 | 3.64 | 3.64 |
| INCOME AND SAVING |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GNP | Bill. \$ | 10495.3 | 10579.7 | 10679.0 | 10752.2 | 10875.2 | 11030.3 | 11211.7 | 11386.1 | 11563.1 | 11740.2 |
| Nominal GNP | \% change | 5.5 | 3.3 | 3.8 | 2.8 | 4.7 | 5.8 | 6.7 | 6.4 | 6.4 | 6.3 |
| Nominal personal income |  | 2.0 | 3.7 | 3.9 | 3.6 | 3.8 | 5.1 | 5.9 | 5.7 | 5.5 | 5.6 |
| Real disposable income |  | 1.8 | 2.4 | 2.3 | 2.5 | 8.4 | 1.1 | 7.1 | 4.4 | 4.3 | 4.4 |
| Personal saving rate | \% | 3.5 | 3.8 | 3.9 | 3.9 | 5.0 | 4.2 | 4.9 | 5.0 | 4.9 | 4.8 |
| Corp. profits, IVA \& CCAdj. | \% change | -6.9 | 13.7 | 2.7 | 5.2 | 11.1 | 10.1 | 6.5 | 9.2 | 11.5 | 11.6 |
| Profit share of GNP |  | 7.3 | 7.5 | 7.5 | 7.5 | 7.7 | 7.7 | 7.7 | 7.8 | 7.9 | 8.0 |
| Excluding FR Banks |  | 7.1 | 7.3 | 7.3 | 7.4 | 7.5 | 7.5 | 7.5 | 7.6 | 7.7 | 7.8 |
| Federal surpl./deficit | Bill. \$ | -210.5 | -247.7 | -261.8 | -296.8 | -460.4 | -405.8 | -413.7 | -389.4 | -348.5 | -324.1 |
| State \& local surpl./def. |  | -54.7 | -50.6 | -66.9 | -57.4 | -25.7 | -6.1 | -15.6 | -7. 3 | -9.5 | -1.3 |
| Ex. social ins. funds |  | -54.6 | -50.5 | -66.8 | -57.3 | -25.6 | -6.0 | -15.5 | -7. 2 | -9.4 | -1.2 |
| Gross natl. saving rate | \% | 14.6 | 14.6 | 14.3 | 14.3 | 14.1 | 14.3 | 14.7 | 15.0 | 15.3 | 15.5 |
| Net natl. saving rate |  | 1.4 | 1.5 | 1.0 | 1.1 | 0.9 | 1.1 | 1.6 | 2.0 | 2.3 | 2.6 |
| PRICES AND COSTS |  |  |  |  |  |  |  |  |  |  |  |
| GDP chn.-wt. price index Gross Domestic Purchases chn.-wt. price index | \% change | 1.0 | 1.8 | 2.5 | 0.9 | 0.4 | 1.1 | 1.5 | 1.0 | 1.0 | 0.9 |
|  |  | 1.2 | 1.8 | 3.6 | 0.5 | 1.0 | 0.8 | 1.3 | 0.9 | 0.9 | 0.9 |
| PCE chn.-wt. price index |  | 1.7 | 1.8 | 2.7 | 0.6 | 1.0 | 0.8 | 0.9 | 0.9 | 0.8 | 0.8 |
| Ex. food and energy |  | 1.8 | 1.5 | 0.8 | 1.0 | 1.2 | 1.2 | 1.1 | 1.0 | 0.9 | 0.8 |
| CPI <br> Ex. food and energy |  | 2.2 | 2.0 | 3.8 | 0.6 | 1.4 | 1.0 | 1.1 | 1.2 | 1.2 | 1.1 |
|  |  | 2.1 | 1.7 | 1.3 | 1.0 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 |
| ECI, hourly compensation ${ }^{1}$ |  | 2.5 | 3.0 | 5.5 | 3.2 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour |  | 5.5 | 0.7 | 2.3 | 3.3 | 2.8 | 1.9 | 1.3 | 1.5 | 1.7 | 1.7 |
| Compensation per hour |  | 1.8 | 3.9 | 3.4 | 4.3 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 |
| Unit labor cost |  | -3.4 | 3.2 | 1.1 | 1.0 | 0.2 | 1.0 | 1.5 | 1.2 | 0.9 | 0.8 |

1. Private-industry workers.

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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 2000 \\ \text { Q3 } \end{gathered}$ | $\begin{gathered} 2000 \\ \text { Q4 } \end{gathered}$ | $\begin{gathered} 2001 \\ \text { Q1 } \end{gathered}$ | $\begin{gathered} 2001 \\ \mathrm{Q} 2 \end{gathered}$ | $\begin{gathered} 2001 \\ 03 \end{gathered}$ | $\begin{gathered} 2001 \\ 24 \end{gathered}$ | $\begin{gathered} 2002 \\ \mathrm{Q} 1 \end{gathered}$ | $\begin{gathered} 2002 \\ \mathrm{Q} 2 \end{gathered}$ | $\begin{aligned} & 2002 \\ & \mathrm{Q} 3 \end{aligned}$ | $\begin{gathered} 0024 / \\ 9924 \end{gathered}$ | $\begin{gathered} 0124 / \\ 0024 \end{gathered}$ | $\begin{gathered} 0204 / \\ 0194 \end{gathered}$ |
| Real GDP | 0.6 | 1.1 | -0.6 | -1.6 | -0.3 | 2.7 | 5.0 | 1.3 | 4.0 | 2.3 | 0.1 | 2.9 |
| Gross dom. purchases | 1.3 | 1.3 | -1.1 | -1.2 | -0.1 | 3.0 | 5.8 | 2.7 | 4.0 | 3.0 | 0.2 | 3.9 |
| Final sales | 1.7 | 1.2 | 2.7 | -0. 5 | -0.2 | 4.1 | 2.5 | -0.1 | 3.5 | 2.6 | 1.6 | 1.7 |
| Priv. dom. final purchases | 2.6 | 1.0 | 1.2 | -1.0 | 0.3 | 2.6 | 2.2 | 1.1 | 2.9 | 3.1 | 0.8 | 2.0 |
| Personal cons. expenditures | 2.5 | 1.4 | 1.5 | 0.9 | 1.0 | 4.1 | 2.2 | 1.2 | 2.9 | 2.4 | 1.9 | 1.9 |
| Durables | 0.6 | -0.4 | 0.9 | 0.4 | 0.4 | 2.5 | -0.6 | 0.2 | 1.7 | 0.3 | 1.0 | 0.2 |
| Nondurables | 0.4 | 0.5 | 0.5 | -0.1 | 0.3 | 0.7 | 1.6 | -0.0 | 0.2 | 0.6 | 0.3 | 0.7 |
| Services | 1.5 | 1.3 | 0.2 | 0.6 | 0.4 | 0.9 | 1.2 | 1.1 | 1.0 | 1.5 | 0.5 | 1.0 |
| Business fixed investment | 0.5 | -0.4 | -0.7 | -1.9 | -0.7 | -1.3 | -0.7 | -0.3 | -0.1 | 0.8 | -1.2 | -0.2 |
| Equipment \& Software | 0.1 | -0.5 | -0.6 | -1.6 | -0.8 | -0.2 | -0.2 | 0.3 | 0.5 | 0.5 | -0.8 | 0.3 |
| Nonres. structures | 0.4 | 0.1 | -0.1 | -0.3 | 0.1 | -1.1 | -0.4 | -0.5 | -0.6 | 0.3 | -0.4 | -0.5 |
| Residential structures | -0.4 | 0.0 | 0.3 | -0.0 | 0.0 | -0.2 | 0.6 | 0.1 | 0.1 | -0.1 | 0.0 | 0.3 |
| Net exports | -0.7 | -0.2 | 0.5 | -0.4 | -0.2 | -0.3 | -0.8 | -1.4 | -0.0 | -0.8 | -0.1 | -1.0 |
| Exports | 1.3 | -0.5 | -0.7 | -1.4 | -1.9 | -1.0 | 0.3 | 1.3 | 0.5 | 0.8 | -1.3 | 0.4 |
| Imports | -2.0 | 0.2 | 1.2 | 1.0 | 1.7 | 0.7 | -1.1 | -2.7 | -0.5 | -1.5 | 1.2 | -1.3 |
| Government cons. \& invest. | -0.2 | 0.5 | 1.0 | 1.0 | -0.2 | 1.9 | 1.0 | 0.3 | 0.6 | 0.2 | 0.9 | 0.7 |
| Federal | -0.5 | 0.1 | 0.5 | 0.4 | 0.1 | 0.8 | 0.5 | 0.5 | 0.3 | -0.1 | 0.4 | 0.5 |
| Defense | -0.2 | 0.2 | 0.3 | 0.1 | 0.2 | 0.5 | 0.5 | 0.3 | 0.3 | -0.1 | 0.3 | 0.4 |
| Nondefense | -0.2 | -0.1 | 0.2 | 0.3 | -0.1 | 0.3 | 0.0 | 0.2 | -0.0 | 0.0 | 0.2 | 0.1 |
| State and local | 0.3 | 0.4 | 0.5 | 0.6 | -0.3 | 1.1 | 0.6 | -0.2 | 0.3 | 0.3 | 0.5 | 0.2 |
| Change in bus. inventories | -1.1 | -0.1 | -3.3 | -1.1 | -0.1 | -1.4 | 2.6 | 1.3 | 0.6 | -0.3 | -1.5 | 1.2 |
| Nonfarm | -1.0 | -0.3 | -3.4 | -0.8 | -0.3 | -1.4 | 2.5 | 1.5 | 0.7 | -0.4 | -1.6 | 1.2 |
| Farm | -0.2 | 0.2 | 0.2 | -0.3 | 0.2 | 0.1 | 0.1 | -0.2 | -0.1 | 0.1 | 0.0 | -0.0 |

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

| Strictly Confidential <FR> Class II FOMC | CONTRIBUTIONS |  | ROWTH | real G | DOMES | PRODU | ID REL | ITEMS |  |  | Jun | 2003 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | $\begin{gathered} 2002 \\ \text { Q4 } \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Q1 } \end{gathered}$ | $\begin{aligned} & 2003 \\ & \mathrm{Q} 2 \end{aligned}$ | $\begin{gathered} 2003 \\ \text { Q3 } \end{gathered}$ | $\begin{gathered} 2003 \\ \mathbf{Q 4} \end{gathered}$ | $\begin{gathered} 2004 \\ \mathrm{Q1} \end{gathered}$ | $\begin{gathered} 2004 \\ \mathrm{Q} 2 \end{gathered}$ | $\begin{gathered} 2004 \\ \text { Q3 } \end{gathered}$ | $\begin{gathered} 2004 \\ \mathrm{Q} 4 \end{gathered}$ | $\begin{gathered} 0204 / \\ 0124 \end{gathered}$ | $\begin{gathered} 0324 / \\ 0294 \end{gathered}$ | $\begin{gathered} 0424 / \\ 0324 \end{gathered}$ |
| Real GDP | 1.4 | 1.6 | 1.5 | 3.8 | 4.6 | 5.3 | 5.3 | 5.4 | 5.4 | 2.9 | 2.9 | 5.3 |
| Gross dom. purchases | 3.0 | 0.8 | 2.4 | 3.7 | 4.3 | 5.8 | 6.1 | 6.1 | 5.6 | 3.9 | 2.8 | 5.9 |
| Final sales | 1.1 | 2.2 | 2.0 | 4.3 | 4.6 | 3.7 | 4.2 | 4.5 | 5.6 | 1.7 | 3.3 | 4.5 |
| Priv. dom. final purchases | 1.8 | 1.3 | 1.6 | 3.2 | 4.0 | 4.2 | 4.8 | 5.1 | 5.5 | 2.0 | 2.5 | 4.9 |
| Personal cons. expenditures | 1.2 | 1.4 | 1.4 | 2.7 | 3.2 | 3.0 | 3.0 | 3.3 | 3.5 | 1.9 | 2.2 | 3.2 |
| Durables | -0.7 | -0.1 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.5 | 0.7 | 0.2 | 0.6 | 0.6 |
| Nondurables | 1.0 | 1.2 | 0.1 | 1.1 | 1.1 | 0.9 | 0.9 | 1.0 | 1.0 | 0.7 | 0.9 | 0.9 |
| Services | 0.9 | 0.3 | 0.5 | 0.8 | 1.5 | 1.6 | 1.6 | 1.8 | 1.8 | 1.0 | 0.8 | 1.7 |
| Business fixed investment | 0.2 | -0.6 | 0.3 | 0.4 | 0.5 | 0.9 | 1.5 | 1.6 | 1.7 | -0.2 | 0.2 | 1.5 |
| Equipment \& Software | 0.5 | -0.6 | 0.5 | 0.5 | 0.6 | 0.8 | 1.4 | 1.4 | 1.7 | 0.3 | 0.3 | 1.4 |
| Nonres. structures | -0.3 | -0.1 | -0.2 | -0.1 | -0.1 | 0.1 | 0.1 | 0.1 | 0.1 | -0.5 | -0.1 | 0.1 |
| Residential structures | 0.4 | 0.5 | -0.2 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.2 |
| Net exports | -1.6 | 0.8 | -0.9 | 0.1 | 0.3 | -0.6 | -0.8 | -0.6 | -0.2 | -1.0 | 0.1 | -0.5 |
| Exports | -0.6 | -0.1 | -0.2 | 0.6 | 1.0 | 0.7 | 0.9 | 0.9 | 1.2 | 0.4 | 0.3 | 0.9 |
| Imports | -1.0 | 0.9 | -0.7 | -0.5 | -0.7 | -1.2 | -1.7 | -1. 6 | -1.4 | -1.3 | -0.3 | -1. 5 |
| Government cons. \& invest. | 0.9 | 0.1 | 1.3 | 1.0 | 0.4 | 0.2 | 0.2 | 0.1 | 0.2 | 0.7 | 0.7 | 0.2 |
| Federal | 0.7 | 0.1 | 1.4 | 0.9 | 0.2 | 0.0 | 0.0 | -0.1 | 0.0 | 0.5 | 0.6 | -0.0 |
| Defense | 0.5 | -0.2 | 1.3 | 0.8 | 0.1 | -0.1 | -0.1 | -0.2 | -0.1 | 0.4 | 0.5 | -0.1 |
| Nondefense | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| State and local | 0.2 | 0.0 | -0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.2 |
| Change in bus. inventories | 0.3 | -0.6 | -0.5 | -0.5 | -0.0 | 1.5 | 1.1 | 0.9 | -0.2 | 1.2 | -0.4 | 0.8 |
| Nonfarm | 0.2 | -0.7 | -0.5 | -0.5 | -0.0 | 1.6 | 1.1 | 0.9 | -0.2 | 1.2 | -0.4 | 0.9 |
| Farm | 0.1 | 0.1 | 0.0 | -0.0 | 0.0 | -0.0 | -0.0 | -0.0 | 0.0 | -0.0 | 0.0 | -0.0 |

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

| Item | Fiscal year |  |  |  | 2002 |  |  |  | 2003 |  |  |  | 2004 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2001{ }^{\text {a }}$ | $2002^{\text {a }}$ | 2003 | 2004 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 ${ }^{\text {a }}$ | Q4 ${ }^{\text {a }}$ | Q1 ${ }^{\text {a }}$ | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget ${ }^{1}$ ( $\quad$ - Not seasonally adjus |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{2}$ | 1991 | 1853 | 1780 | 1843 | 413 | 523 | 452 | 428 | 398 | 522 | 432 | 445 | 420 | 516 | 462 | 469 |
| Outlays ${ }^{2}$ | 1864 | 2011 | 2171 | 2268 | 509 | 507 | 493 | 536 | 542 | 542 | 551 | 580 | 574 | 566 | 548 | 582 |
| Surplus/deficit ${ }^{2}$ | 127 | -158 | -392 | -425 | -97 | 16 | -41 | -108 | -144 | -20 | -119 | -134 | -155 | -50 | -86 | -113 |
| On-budget | -33 | -317 | -559 | -608 | -127 | -58 | -52 | -161 | -168 | -95 | -134 | -179 | -197 | -130 | -103 | -160 |
| Off-budget | 161 | 160 | 167 | 183 | 30 | 73 | 11 | 53 | 24 | 75 | 14 | 44 | 42 | 80 | 17 | 47 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | -90 | 221 | 419 | 437 | 51 | 21 | 89 | 97 | 64 | 118 | 141 | 133 | 121 | 104 | 79 | 88 |
| Cash decrease | 8 | -17 | 5 | 11 | 38 | -26 | -21 | 28 | 20 | -26 | -16 | -2 | 28 | -30 | 15 | 15 |
| Other ${ }^{3}$ | -45 | -46 | -33 | -23 | 8 | -11 | -27 | -16 | 61 | -71 | -6 | 4 | 5 | -24 | -8 | 10 |
| Cash operating balance, end of period | 44 | 61 | 56 | 45 | 14 | 40 | 61 | 33 | 13 | 40 | 56 | 58 | 30 | 60 | 45 | 30 |
| NIPA federal sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 2024 | 1906 | 1854 | 1894 | 1885 | 1884 | 1864 | 1870 | 1879 | 1885 | 1782 | 1865 | 1862 | 1903 | 1945 | 1986 |
| Expenditures | 1909 | 2039 | 2172 | 2283 | 2031 | 2079 | 2075 | 2117 | 2145 | 2182 | 2242 | 2271 | 2276 | 2292 | 2294 | 2310 |
| Consumption expenditures | 517 | 570 | 642 | 692 | 566 | 581 | 590 | 609 | 627 | 657 | 676 | 682 | 694 | 696 | 695 | 697 |
| Defense | 337 | 375 | 426 | 459 | 372 | 383 | 389 | 403 | 409 | 437 | 454 | 457 | 461 | 461 | 458 | 458 |
| Nondefense | 180 | 195 | 217 | 233 | 194 | 199 | 201 | 206 | 218 | 220 | 222 | 226 | 233 | 235 | 237 | 239 |
| Other spending | 1392 | 1469 | 1529 | 1591 | 1464 | 1498 | 1485 | 1508 | 1518 | 1525 | 1566 | 1589 | 1582 | 1596 | 1599 | 1613 |
| Current account surplus | 115 | -133 | -318 | -389 | -146 | -196 | -211 | -248 | -266 | -297 | -460 | -406 | -414 | -389 | -348 | -324 |
| Gross investment | 98 | 106 | 115 | 125 | 106 | 107 | 108 | 108 | 109 | 118 | 124 | 126 | 125 | 125 | 124 | 124 |
| Gross saving less gross investment ${ }^{4}$ | 116 | -138 | -327 | -404 | -151 | -201 | -216 | -252 | -270 | -309 | -478 | -423 | -429 | -404 | -361 | -335 |
| Fiscal indicators ${ }^{5}$ <br> High-employment (HEB) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| surplus/deficit | 115 | -80 | -263 | -380 | -100 | -137 | -158 | -182 | -193 | -245 | -432 | -379 | -396 | -386 | -360 | -352 |
| Change in HEB, percent of potential GDP | 0.1 | 1.9 | 1.6 | 0.9 | 1.7 | 0.3 | 0.2 | 0.2 | 0.1 | 0.5 | 1.7 | -0.5 | 0.1 | -0.1 | -0.3 | -0.1 |
| Fiscal impetus (FI) percent of GDP | 0.6 | 1.1 | 1.3 | 1.2 | 0.1 | 0.4 | 0.1 | 0.3 | 0.0 | 0.4 | 0.9 | 0.5 | 0.1 | 0.1 | 0.1 | 0.2 |

[^7]June 18, 2003

| Strictly Confidential (FR) Class II FOMC |  |  | Change in Debt of the Domestic Nonfinancial Sectors(Percent)$\quad$ June 18, 2003 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period ${ }^{1}$ | Total | Federal government | Nonfederal |  |  |  | Business | State and local governments | Memo: Nominal GDP |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Home mortgages | Consumer credit |  |  |  |
| Year |  |  |  |  |  |  |  |  |  |
| 1997 | 5.5 | 0.6 | 7.2 | 6.4 | 6.7 | 4.7 | 9.0 | 4.0 | 6.2 |
| 1998 | 6.9 | -1.4 | 9.6 | 8.1 | 8.8 | 5.9 | 12.1 | 6.3 | 6.0 |
| 1999 | 6.4 | -1.9 | 8.8 | 8.3 | 9.0 | 7.4 | 10.6 | 3.4 | 5.9 |
| 2000 | 4.9 | -8.0 | 8.4 | 8.5 | 8.3 | 10.2 | 9.7 | 1.3 | 4.6 |
| 2001 | 6.2 | -0.2 | 7.7 | 8.7 | 9.8 | 6.8 | 6.5 | 8.9 | 2.0 |
| 2002 | 7.2 | 7.6 | 7.1 | 10.0 | 12.4 | 3.5 | 3.0 | 11.7 | 4.3 |
| 2003 | 8.2 | 12.5 | 7.3 | 9.0 | 10.9 | 4.2 | 4.3 | 12.0 | 4.1 |
| 2004 | 6.7 | 9.6 | 6.1 | 6.9 | 8.0 | 4.4 | 4.9 | 6.4 | 6.5 |
| Quarter |  |  |  |  |  |  |  |  |  |
| 2002:1 | 5.0 | 1.2 | 5.9 | 9.2 | 10.3 | 4.9 | 2.3 | 5.3 | 6.5 |
| 2 | 8.4 | 15.5 | 6.9 | 8.9 | 11.0 | 5.3 | 3.4 | 14.0 | 2.5 |
| 3 | 6.6 | 7.5 | 6.4 | 9.6 | 12.7 | 4.0 | 1.9 | 10.6 | 5.1 |
| 4 | 8.0 | 5.5 | 8.5 | 10.9 | 13.5 | -0.2 | 4.3 | 15.0 | 3.2 |
| 2003:1 | 6.5 | 2.2 | 7.4 | 10.0 | 12.0 | 4.3 | 3.7 | 10.1 | 4.1 |
| 2 | 10.5 | 25.0 | 7.5 | 9.4 | 11.5 | 4.7 | 3.9 | 14.2 | 2.4 |
| 3 | 8.0 | 12.2 | 7.1 | 8.1 | 9.8 | 3.2 | 4.7 | 12.9 | 4.3 |
| 4 | 6.8 | 8.6 | 6.4 | 7.3 | 8.7 | 4.3 | 4.8 | 8.9 | 5.7 |
| 2004:1 | 6.3 | 7.8 | 6.0 | 7.1 | 8.4 | 4.3 | 4.4 | 7.2 | 6.8 |
| 2 | 8.6 | 20.6 | 5.9 | 6.8 | 7.9 | 4.3 | 4.7 | 6.3 | 6.4 |
| 3 | 5.7 | 5.1 | 5.8 | 6.5 | 7.4 | 4.3 | 4.9 | 5.9 | 6.4 |
| 4 | 5.6 | 3.8 | 6.0 | 6.5 | 7.4 | 4.6 | 5.4 | 5.6 | 6.4 |

Note. Quarterly data are at seasonally adjusted annual rates. 1. Data after 2003:Q1 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.
2.6.3 FOF
Strictly Confidential (FR)
Class II FOMC

| Category |  |  |  |  |  |  |  |  | nally adj | ted annu | rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Calendar year |  |  |  | 2002 |  | 2003 |  |  |  | 2004 |  |  |  |
|  | 2001 | 2002 | 2003 | 2004 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Net funds raised by domestic nonfinancial sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Total | 1087.2 | 1344.9 | 1636.2 | 1459.4 | 1172.2 | 1584.9 | 1277.1 | 2127.5 | 1686.9 | 1453.3 | 1377.8 | 1918.6 | 1274.0 | 1267.2 |
| 2 Net equity issuance | -47.4 | -40.5 | -59.6 | -41.5 | -140.3 | -27.9 | -62.0 | -86.4 | -44.0 | -46.0 | -39.0 | -37.0 | -45.0 | -45.0 |
| 3 Net debt issuance | 1134.6 | 1385.4 | 1695.8 | 1500.9 | 1312.5 | 1612.8 | 1339.1 | 2213.9 | 1730.9 | 1499.3 | 1416.8 | 1955.6 | 1319.0 | 1312.2 |
| Borrowing sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nonfinancial business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 Financing gap ${ }^{1}$ | 141.4 | 80.7 | 56.6 | 130.8 | 90.2 | 95.2 | 77.6 | 76.8 | 40.9 | 31.1 | 76.1 | 123.1 | 155.3 | 168.9 |
| 5 Net equity issuance | -47.4 | -40.5 | -59.6 | -41.5 | -140.3 | -27.9 | -62.0 | -86.4 | -44.0 | -46.0 | -39.0 | -37.0 | -45.0 | -45.0 |
| 6 Credit market borrowing | 420.8 | 208.4 | 308.2 | 367.5 | 134.4 | 303.7 | 263.6 | 277.7 | 339.0 | 352.2 | 325.4 | 351.4 | 377.1 | 416.0 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 Net borrowing ${ }^{2}$ | 613.7 | 768.0 | 760.6 | 636.9 | 768.5 | 900.8 | 849.2 | 812.7 | 720.2 | 660.2 | 654.0 | 641.9 | 617.5 | 634.3 |
| 8 Home mortgages | 480.2 | 667.1 | 659.7 | 535.7 | 718.1 | 790.6 | 723.3 | 718.2 | 627.2 | 570.2 | 561.2 | 543.2 | 515.2 | 523.2 |
| 9 Consumer credit | 108.7 | 60.1 | 73.8 | 81.2 | 69.1 | -2.9 | 75.7 | 83.4 | 57.6 | 78.7 | 78.1 | 80.0 | 80.1 | 86.6 |
| 10 Debt/DPI (percent) ${ }^{3}$ | 99.8 | 103.3 | 107.8 | 110.1 | 103.5 | 105.0 | 106.4 | 108.2 | 108.1 | 109.6 | 109.5 | 109.9 | 110.4 | 110.7 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 Net borrowing | 105.7 | 151.4 | 174.1 | 103.8 | 143.9 | 209.8 | 146.3 | 210.9 | 198.3 | 140.8 | 116.8 | 104.8 | 98.8 | 94.8 |
| 12 Current surplus ${ }^{4}$ | 140.6 | 128.1 | 143.3 | 182.4 | 126.1 | 128.3 | 108.7 | 125.7 | 158.8 | 180.1 | 172.4 | 182.6 | 182.3 | 192.4 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 Net borrowing | -5.6 | 257.5 | 455.7 | 392.7 | 265.7 | 198.5 | 79.9 | 912.6 | 473.4 | 346.0 | 320.6 | 857.5 | 225.6 | 167.2 |
| 14 Net borrowing (quarterly, n.s.a.) | -5.6 | 257.5 | 455.7 | 392.7 | 89.4 | 96.2 | 63.5 | 117.7 | 141.4 | 133.1 | 121.0 | 104.0 | 79.4 | 88.4 |
| 15 Unified deficit (quarterly, n.s.a.) | -94.3 | 231.2 | 417.6 | 403.8 | 41.5 | 108.7 | 143.9 | 20.0 | 119.4 | 134.3 | 154.5 | 50.0 | 86.0 | 113.3 |
| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 Funds supplied | 289.4 | 487.8 | 482.2 | 396.7 | 749.1 | 558.5 | 586.6 | 441.3 | 460.3 | 440.6 | 406.1 | 369.7 | 411.4 | 399.7 |
| Memo (percentage of GDP) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 Domestic nonfinancial debt ${ }^{5}$ | 185.8 | 191.4 | 198.7 | 201.6 | 191.5 | 193.4 | 194.9 | 197.9 | 200.4 | 201.3 | 201.2 | 201.8 | 202.2 | 202.0 |
| 18 Domestic nonfinancial borrowing | 11.3 | 13.3 | 15.6 | 13.1 | 12.5 | 15.2 | 12.5 | 20.6 | 15.9 | 13.6 | 12.6 | 17.2 | 11.4 | 11.2 |
| 19 Federal government ${ }^{6}$ | -0.1 | 2.5 | 4.2 | 3.4 | 2.5 | 1.9 | 0.7 | 8.5 | 4.4 | 3.1 | 2.9 | 7.5 | 2.0 | 1.4 |
| 20 Nonfederal | 11.3 | 10.8 | 11.5 | 9.7 | 10.0 | 13.4 | 11.8 | 12.1 | 11.6 | 10.5 | 9.8 | 9.6 | 9.5 | 9.8 |

[^8](This page intentionally blank.)

## International Developments

Data on foreign GDP in the first quarter came in surprisingly weak, and early indicators for the current quarter are signaling continued sluggishness in economic activity abroad. Based on these readings, as well as the likely contractionary effect on foreign net exports of the ongoing depreciation of the dollar, we marked down our forecast for the pace of near-term growth in foreign economies.

Later this year and next, foreign growth is projected to pick up, largely because of the robust recovery forecast for the United States. In addition, some impediments to stronger economic activity in foreign countries are expected to diminish. Oil prices are projected to decline, and the negative effects of SARS are assumed to wane. Capital markets are also positioned to provide support for stronger economic activity, with longer-term interest rates low and global stock prices up from earlier lows. However, if the U.S. recovery fails to materialize as projected, foreign growth in 2004 is likely to remain weak, especially given the limited prospects for fiscal stimulus, particularly in the euro area and Japan.

Foreign inflation is declining sharply in the current quarter, reflecting the drop in the price of oil following the Iraq war and, in some areas, currency appreciation. We project that inflation will remain subdued over the forecast period, as excess capacity abroad persists.

## Summary of Staff Projections

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

| Indicator | 2002 | 2003: |  | Projection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2003 |  |  |  |  |
|  |  |  | Q2 | H 2 |  |  |
| Foreign output | 2.8 | .4 | .8 | 2.6 | 3.4 |  |
| Previous GB | 2.9 | 2.2 | 1.5 | 3.0 | 3.5 |  |
| Foreign CPI | 2.6 | 4.0 | 1.0 | 1.9 | 1.9 |  |
| Previous GB | 2.6 | 3.7 | .9 | 2.0 | 1.9 |  |

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

The broad nominal exchange value of the dollar has declined another 2 percent on balance since the previous FOMC meeting. With the financing pressures exerted by the U.S. current account deficit expected to continue weighing on the dollar, we project some slight, further depreciation of the dollar over the forecast period.
U.S. net exports are expected to make a small positive arithmetic contribution to U.S. GDP growth in the second half of this year, in part reflecting the effect of the lower dollar. In 2004, however, net exports are projected to subtract $1 / 2$ percentage point from growth, as the U.S. recovery boosts import growth.

## Oil Prices

After reaching a low of less than $\$ 26$ per barrel in late April, the spot price of West Texas intermediate (WTI) crude oil rose in May and June, contrary to futures prices and our projection in the previous Greenbook, as it became apparent that Iraqi exports would return to the market more slowly than had been anticipated at the conclusion of the war. Other factors supporting the oil price include the terrorist attack in Saudi Arabia in mid-May, low oil inventories in OECD countries, and above-normal demand for oil in Japan, where nuclear reactors have been closed for safety investigations. The spot price of WTI closed on June 17 at $\$ 31.07$ per barrel. Our projection for oil prices, in line with recent quotes in the crude oil futures market, calls for the spot price of WTI to fall from its current level to less than $\$ 28$ per barrel by the end of this year, about $\$ 3$ per barrel higher than in the previous Greenbook, and to about $\$ 24.50$ per barrel by the end of 2004, nearly $\$ 1$ higher.

## International Financial Markets

The foreign exchange value of the dollar depreciated further during the intermeeting period, extending its decline from early last year amid ongoing market concerns about the sustainability of the U.S. current account deficit. In addition, remarks from Treasury Secretary Snow in mid-May, which were seen as a step toward reassessing the Administration's expressed desire for a "strong dollar" by acknowledging the economic benefits of some dollar depreciation, also seemed to give the dollar some downward impetus. Long-term interest rate differentials moved against the dollar as well, with declines in the yields on U.S. government securities during the period outstripping declines in yields on comparable government securities of nearly all other industrial countries.

The dollar depreciated against all the other major currencies during the intermeeting period, declining about 3-1/2 percent on a weighted average basis against those currencies. The dollar also moved lower against most of the currencies of our other important trading partners. A key exception is the Mexican peso, which depreciated 3-1/2 percent against the dollar on concerns about slowing economic activity in Mexico. On balance, our index of the dollar's value against the currencies of our other important trading partners was unchanged over the intermeeting period.

Incorporating market developments since the close of the April Greenbook forecast puts the value of the staff's broad real index for the dollar in the third
quarter about $3-1 / 2$ percent below its level in the previous projection. We project that the dollar will move down another 1-1/4 percent over the remainder of the forecast period. We see this outlook as striking a balance between opposing pressures. Strong U.S. growth compared with that of our trading partners may raise relative rates of return in the United States, attract capital inflows, and tend to put upward pressure on the dollar. At the same time the widening U.S. current account deficit will require investors to add substantially to already large holdings of U.S. external liabilities and may exert downward pressure on the dollar. In view of the ultimate need for external adjustment, we adopted a forecast that keeps a downward tilt to the future path for the dollar. In the alternative simulation presented later, we explore the possibility that the dollar might decline more sharply.

Interest rates moved lower during the intermeeting period both in reaction to and in anticipation of policy moves by central banks. The European Central Bank (ECB) reduced its policy interest rates 50 basis points in early June. Central banks in Sweden, Denmark, and New Zealand also cut rates during the period. The Bank of Japan raised its target range for the quantity of deposits held at the central bank by financial institutions. And although the Bank of Canada did not move its policy rate during the intermeeting period, market expectations for its policy path have come down. Data releases signaling weak economic activity, along with easier monetary policy stances and the sizeable declines in U.S. Treasury rates, helped drive yields on longer-term foreign government securities substantially lower, although they have rebounded some in the past few days. On balance, the yield on the ten-year government bond in Canada dropped 70 basis points, and comparable yields on government securities in most of the rest of the industrial countries declined between 40 and 50 basis points; the Japanese government bond yield moved down another 6 basis points on net.

The declines in interest rates boosted share prices, which generally advanced between 5 and 10 percent in the industrial countries and somewhat more on average in emerging-market countries. Share prices in the Southeast Asian economies profited also from a waning of the threat posed by SARS to economic growth in the region. Emerging-market sovereign bond yield spreads narrowed about 50 basis points on average over the intermeeting period.

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

## Foreign Industrial Countries

National accounts data and recent indicators suggest that growth in the foreign industrial countries is weaker than had been anticipated at the time of the previous Greenbook. First-quarter real GDP came in lower than expected, with net exports declining in all major foreign industrial countries. Survey data for the current quarter suggest modest growth for the major foreign industrial countries, and we expect growth to pick up only slightly in the second half of the year. We anticipate that activity will gain momentum in 2004, with growth reaching 2-1/2 percent.

Twelve-month headline inflation rates in most major foreign industrial countries fell in recent months, helped by earlier oil price declines and local currency appreciations. Canadian inflation dropped to 3 percent in April, after having been above the target ceiling for the previous six months, and euro-area inflation fell to less than 2 percent in May, for the first time in ten months. We expect a further decline in inflation for all major foreign industrial countries through early 2004, as output remains below potential in most countries and oil prices decline from current levels. In Japan, deflation is expected to continue over the forecast period.

Japan's real GDP growth slowed to a revised 0.6 percent (s.a.a.r.) in the first quarter, with advances in business fixed investment and private consumption mostly offset by negative contributions from public investment and net exports. Recent indicators suggest continued sluggish growth over the near term, and we expect growth of only $1 / 4$ percent for the year as a whole. The impact of SARS in several of Japan's trading partners is expected to depress Japanese exports this quarter and next. Consumption is projected to be roughly flat this year amid high unemployment, and business investment is expected to weaken somewhat in coming quarters, as firms in the export sector become more cautious about spending on new capital. We project that growth will increase to 1 percent in 2004, as the global recovery spurs exports and an expected stabilization in labor market conditions supports consumption. Fiscal policy is assumed to be roughly neutral over the forecast period: Reduced supplemental budget spending will largely offset tax cuts in the 2003 fiscal budget.

Euro-area real GDP was unchanged in the first quarter, with contractions in Germany, Italy, Finland, and the Netherlands. Business and consumer confidence indicators have been weak, with Germany suffering a large fall in consumer confidence in May. We expect Germany to remain in recession for the remainder of this year, and the euro area as a whole to exhibit only modest growth, with net exports curtailed by the appreciation of the euro. With inflation now below 2 percent and expected to remain there, we project that the ECB will ease again before the end of the year. This stimulus, in combination with the
projected global recovery, should push euro-area growth toward potential by the end of the forecast period.

British real GDP grew 0.6 percent (s.a.a.r.) in the first quarter, with a sharp deceleration in consumer spending from the robust pace of last year. Recent data on housing prices are showing some deceleration and suggest that consumption growth will remain moderate. However, accommodative monetary policy, fiscal stimulus, and the depreciation of the pound on a trade-weighted basis over the past half year should support a recovery in business investment and net exports and help push growth to 2-1/2 percent in 2004.

Canadian real GDP grew 2.4 percent (s.a.a.r.) in the first quarter, as consumption and residential construction continued to grow robustly. In the current quarter, growth appears to be slowing, as SARS damps economic activity, the rate of inventory accumulation declines, and weak U.S. growth and an appreciated Canadian dollar hinder Canadian exports. By the end of this year, however, and throughout 2004, we expect growth to exceed 3 percent, as SARS effects dissipate and the U.S. economy expands rapidly. We expect the Bank of Canada to hold policy rates constant over the forecast period as inflation remains within the Bank's target range.

## Other Countries

Our near-term outlook for the developing Asian economies continues to be dominated by the effects of SARS. These effects have shown up so far primarily in tourism, business travel, and retail sales. Merchandise trade may also be affected in coming months, as various reports suggest that orders have recently fallen. In light of recent data, which have come in weaker than we had expected, we project no growth in the developing Asian economies in this quarter and subpar growth in the next. However, we expect those economies to rebound by the fourth quarter of this year, with growth at 5 percent (s.a.a.r.), as the negative economic effects of SARS dissipate and stimulative fiscal policy and higher U.S. growth provide a boost.

Growth in China, which is estimated to have slowed to a 6 percent pace in the first half of this year, is projected to bounce back by the end of this year to 8 percent and to continue at this rate in 2004, supported by external demand. In Taiwan, where the SARS outbreak intensified last month, growth this year is projected to come in at only 1-1/4 percent. Boosted by stronger demand abroad, particularly for high-tech goods, growth returns to a robust pace in 2004. Weaker-than-expected data for the rest of developing Asia, including Hong Kong, Korea, and the ASEAN economies, have softened the near-term outlook for economic activity in these economies, but stronger external demand and some fiscal stimulus should help raise growth to more than 5 percent next year.

GDP contracted in Mexico in the first quarter, and indicators for the second quarter are showing further weakness. We are projecting GDP to increase at an annual rate of nearly 3 percent in the second half of the year and to accelerate to 5 percent next year, mostly because of the improved economic conditions projected for the United States. Recent data suggest that the Brazilian economy remains weak, but lower credit spreads and greater financial stability after last year's turmoil lead us to believe that at least modest growth will be registered this year and next. Argentine data suggest that a mild economic recovery is in place, although the level of activity remains quite low. Venezuela is still in critical condition.

We expect average inflation in the developing countries to be little more than 3 percent this year. We forecast inflation to decline slightly next year, in line with projected declines in oil prices.

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

| Trade category | 2002 | $\begin{gathered} 2003: \\ \text { Q1 } \end{gathered}$ | Projection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2003 |  | 2004 |
|  |  |  | Q2 | H2 |  |
| Exports |  |  |  |  |  |
| Core goods | 2.1 | 4.6 | . 9 | . 5 | 1.1 |
| Imports |  |  |  |  |  |
| Non-oil core goods | . 7 | 5.6 | 2.0 | 3.6 | 1.1 |
| Oil (dollars per barrel) | 25.75 | 30.77 | 26.43 | 24.95 | 22.05 |

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.

## Prices of Internationally Traded Goods

After having jumped 5.6 percent at an annual rate in the first quarter, prices of imported core goods are estimated to be rising at a rate of 2 percent in the current quarter. Recent swings in core import inflation largely reflect gyrations in prices of imported natural gas, which spiked in March; prices of imported core goods excluding natural gas and all fuels have been steadier, rising 2 percent (a.r.) last quarter and an estimated 3 percent in the current quarter, reflecting the ongoing decline in the value of the dollar.

We expect that the decline in the dollar will boost import price inflation in the third quarter, but thereafter import prices should increase at a more subdued pace as the effect of the dollar's fall becomes more fully incorporated and energy prices decline.

Prices of core export goods have moved of late in a pattern similar to that of core import prices, surging in the first quarter, as increases in energy costs boosted prices of industrial supplies, and slowing in the current quarter, as energy prices have retreated. Over the remainder of the forecast period, core export price inflation is expected to remain subdued, in line with projected U.S. domestic goods prices.

## Trade in Goods and Services

Since the previous Greenbook, we have revised down substantially our expectation for real exports of goods and services in the second quarter and now estimate them to be declining at an annual rate of 2 percent, following a 1.2 percent (revised) decline in the first quarter. The second-quarter decrease constitutes the third consecutive quarter of contraction in exports and reflects both the continued weakness of foreign economies and the disruptions associated with SARS and the Iraq war. Whereas exports of core goods appear to be growing at a rate of about $3 / 4$ percent this quarter, exports of services have dropped significantly, extending their first-quarter decline, owing to a falloff in travel-related services through April.

We project that real exports of goods and services will turn around in the second half of 2003, reaching an annualized growth rate of about $8-1 / 2$ percent, and will accelerate a bit further in 2004. Exports of core goods, which are projected to increase about 7 percent in the second half of this year and 8 percent in 2004, reflect the weaker dollar and the projected pickup in foreign GDP. Exports of services are also projected to increase at an annual rate of 7 percent in the second half of this year, consistent with a recovery of travel-related activity. In 2004, exports of services are projected to rise 5-3/4 percent. In addition, exports of computers and semiconductors should recover from the high-tech slump and resume growth more in line with historical experience.

Following a sharp reduction in the first quarter, real imports of goods and services are estimated to be rising moderately in the current quarter, with solid growth in goods imports restrained by substantial declines in imports of services, especially travel services.

## Staff Projections for Trade in Goods and Services

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

| Measure |  | Projection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $2003:$ |  |  |  |
|  |  |  | 2003 |  |  |
|  |  |  | Q2 | H 2 |  |
| Real exports | 3.9 | -1.2 | -2.0 | 8.6 | 9.6 |
| Previous $G B$ | 3.9 | -2.1 | 3.5 | 9.3 | 9.0 |
| Real imports | 10.1 | -6.2 | 5.3 | 4.3 | 10.4 |
| Previous $G B$ | 10.1 | -6.8 | 7.2 | 6.9 | 10.0 |

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

Real imports of goods and services are projected to rise at an annual rate of $4-1 / 4$ percent in the second half of this year, with imported core goods rising about 5-1/2 percent, restrained by the weaker dollar. Imports of services continue to fall in the second half as a recovery in travel is more than offset by the negative impulse from the depreciation of the dollar. In 2004, total import growth is projected to pick up to a rate of 10 percent, and core goods imports should rise about as fast, as the expected strengthening of U.S. economic activity over the forecast period outweighs the relative price effects of the lower dollar. As in the case of exports, imports of computers and semiconductors are projected to grow steadily over the forecast period.

## Alternative Simulation

We are projecting a small decline in the foreign exchange value of the dollar over the forecast period, but the financing burden of the large and growing U.S. current account deficit may prompt a sharper decline in the dollar's value. In our alternative simulation, we use the FRB/Global model to assess the effects of a rise in the risk premium on the dollar in foreign exchange markets that would generate a larger depreciation. The shock is assumed to occur in 2003:Q3 and has been scaled so that the real value of our broad dollar index would decline 10 percent in that quarter in the absence of endogenous adjustments in long-term interest rates. This depreciation stimulates net exports, boosting U.S. GDP growth about 0.3 percentage point in 2003: H 2 , relative to baseline, and 0.5 percentage point in 2004. Core PCE inflation rises about 0.2 percentage point above baseline in the second half of 2003 and 0.6 percentage point in 2004, mainly because of the direct effect of higher prices for imported goods and services.

## Alternative Simulation: 10 Percent Depreciation of the Broad Real Dollar

(Percent change from previous period, annual rate)

| Indicator and simulation | 2003 |  | 2004 |  |
| :--- | :---: | :---: | :---: | :---: |
|  | H 1 | H 2 | H 1 | H 2 |
| U.S. real GDP |  |  |  |  |
| Baseline | 1.5 | 4.2 | 5.3 | 5.4 |
| Dollar depreciation | 1.5 | 4.5 | 5.8 | 6.0 |
|  |  |  |  |  |
| U.S. PCE prices excl. food and energy |  |  |  |  |
| Baseline | .9 | 1.2 | 1.0 | .9 |
| Dollar depreciation | .9 | 1.4 | 1.7 | 1.3 |

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.
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| Strictly Confidential (FR) <br> Class II FOMC <br> OUTLOOK FOR FOREIGN | REAL GD | AND rcent, | NSUMER | RICES | SELEC | D COU | RIES | June | 2003 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Pro | ted |
| Measure and country | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
| REAL GDP (1) |  |  |  |  |  |  |  |  |  |
| Total foreign | 4.0 | 4.2 | 1.6 | 4.9 | 4.4 | 0.3 | 2.8 | 1.6 | 3.4 |
| Industrial Countries of which: | 2.7 | 3.5 | 2.7 | 4.2 | 3.8 | 0.7 | 2.6 | 1.4 | 2.5 |
| Canada | 2.7 | 4.4 | 4.4 | 5.9 | 4.2 | 1.4 | 3.5 | 2.3 | 3.2 |
| Japan | 3.3 | 0.3 | -1.3 | -0.5 | 5.1 | -2.4 | 2.4 | 0.2 | 1.0 |
| United Kingdom | 2.8 | 3.7 | 2.6 | 3.2 | 2.2 | 1.9 | 2.2 | 1.3 | 2.5 |
| Euro Area (2) | 1.7 | 3.1 | 2.0 | 3.8 | 2.7 | 0.6 | 1.2 | 0.5 | 2.0 |
| Germany |  |  |  | 3.3 |  |  |  | -0.5 | 1.4 |
| Developing Countries | 6.2 | 5.3 | -0.3 | 6.1 | 5.3 | -0.3 | 3.1 | 1.9 | 4.8 |
| Asia | 6.6 | 5.0 | -2.1 | 8.6 | 6.2 | 0.9 | 5.5 | 2.9 | 5.7 |
| Korea | 6.4 | 3.4 | -5.2 | 13.8 | 5.1 | 4.2 | 7.0 | 3.1 | 5.4 |
| China | 5.3 | 8.7 | 9.5 | 4.1 | 8.0 | 7.5 | 8.0 | 6.7 | 8.1 |
| Latin America | 6.3 | 6.1 | 1.2 | 4.2 | 4.5 | -1.4 | 1.1 | 0.9 | 4.4 |
| Mexico | 7.1 | 6.8 | 2.9 | 5.4 | 4.8 | -1.5 | 2.0 | 1.0 | 5.0 |
| Brazil | 5.2 | 2.3 | -1.7 | 3.5 | 4.0 | -0.7 | 3.4 | 1.8 | 3.0 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |
| ```Industrial Countries``` of which: | 1.5 | 1.5 | 1.0 | 1.2 | 1.8 | 1.0 | 2.2 | 1.4 | 1.2 |
| Canada | 2.0 | 1.0 | 1.1 | 2.4 | 3.1 | 1.1 | 3.8 | 2.3 | 2.1 |
| Japan | 0.2 | 2.1 | 0.7 | -1.1 | -1.3 | -1.3 | -0.4 | -0.7 | -0.8 |
| United Kingdom (4) | 3.2 | 2.7 | 2.5 | 2.2 | 2.1 | 2.0 | 2.6 | 2.7 | 2.4 |
| Euro Area (2) | 1.9 | 1.5 | 0.8 | 1.5 | 2.5 | 2.1 | 2.3 | 1.3 | 1.2 |
| Germany | 1.3 | 1.5 | 0.3 | 1.1 | 1.7 | 1.5 | 1.2 | 0.4 | 0.3 |
| Developing Countries | 11.1 | 6.8 | 9.0 | 4.6 | 4.1 | 2.8 | 3.1 | 3.2 | 2.7 |
| Asia | 4.8 | 2.7 | 4.4 | 0.1 | 1.8 | 1.0 | 0.7 | 1.9 | 1.8 |
| Korea | 5.0 | 4.9 | 5.8 | 1.2 | 2.5 | 3.3 | 3.4 | 3.3 | 2.7 |
| China | 6.8 | 0.9 | -1.2 | -0.9 | 0.8 | $-0.2$ | -0.7 | 1.5 | 1.2 |
| Latin America | 25.8 | 15.5 | 15.4 | 12.5 | 8.4 | 5.3 | 6.4 | 5.0 | 4.2 |
| Mexico | 28.0 | 17.0 | 17.3 | 13.4 | 8.7 | 5.1 | 5.3 | 3.9 | 3.6 |
| Brazil | 9.6 | 4.6 | 2.0 | 8.4 | 6.4 | 7.5 | 10.7 | 13.2 | 7.7 |


| Measure and country | 2002 |  |  |  | 2003 |  |  |  | 2004 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| REAL GDP (1) ------------------ Quarterly changes at an annual rate |  |  |  |  |  |  |  |  |  |  |  |  |
| Total foreign | 3.2 | 3.7 | 2.8 | 1.4 | 0.4 | 0.8 | 2.1 | 3.1 | 3.3 | 3.4 | 3.4 | 3.5 |
| Industrial Countries of which: | 3.2 | 3.3 | 2.5 | 1.4 | 1.3 | 0.8 | 1.5 | 2.1 | 2.3 | 2.4 | 2.6 | 2.7 |
| Canada | 5.8 | 3.8 | 2.7 | 1.6 | 2.4 | 1.0 | 2.5 | 3.3 | 3.2 | 3.1 | 3.2 | 3.3 |
| Japan | 0.1 | 5.4 | 2.6 | 1.5 | 0.6 | -0.3 | -0.1 | 0.5 | 0.7 | 1.0 | 1.1 | 1.1 |
| United Kingdom | 0.5 | 2.4 | 4.3 | 1.5 | 0.6 | 1.2 | 1.8 | 1.7 | 2.3 | 2.3 | 2.4 | 2.7 |
| Euro Area (2) | 1.7 | 1.6 | 1.3 | 0.3 | 0.0 | 0.4 | 0.5 | 1.0 | 1.5 | 1.9 | 2.3 | 2.5 |
| Germany | 1.2 | 0.6 | 1.2 | -0.1 | -0.9 | -0.5 | -0.5 | -0.0 | 0.7 | 1.2 | 1.6 | 1.9 |
| Developing Countries | 3.3 | 4.3 | 3.4 | 1.4 | -1.0 | 0.9 | 3.1 | 4.5 | 4.8 | 4.9 | 4.8 | 4.8 |
| Asia | 6.4 | 7.1 | 3.4 | 5.3 | 2.5 | -0.0 | 3.8 | 5.1 | 5.5 | 5.8 | 5.8 | 5.7 |
| Korea | 10.5 | 5.4 | 3.9 | 8.3 | -1.4 | 2.5 | 5.1 | 6.2 | 5.4 | 5.4 | 5.4 | 5.4 |
| China | 8.5 | 9.3 | 7.5 | 6.8 | 16.3 | -3.0 | 6.5 | 8.0 | 8.0 | 8.0 | 8.2 | 8.2 |
| Latin America | 1.1 | 2.0 | 3.2 | -1.7 | -4.3 | 1.4 | 2.4 | 4.2 | 4.5 | 4.5 | 4.2 | 4.2 |
| Mexico | 2.0 | 3.6 | 2.4 | -0.1 | -2.0 | 0.5 | 1.7 | 4.0 | 5.2 | 5.2 | 4.8 | 4.8 |
| Brazil | 7.6 | -0.8 | 4.1 | 2.9 | -0.2 | 2.0 | 2.5 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |  |  |  |
| Industrial Countries of which: | 1.2 | 1.0 | 1.4 | 2.2 | 2.5 | 2.0 | 1.7 | 1.4 | 0.8 | 1.2 | 1.2 | 1.2 |
| Canada | 1.6 | 1.3 | 2.3 | 3.8 | 4.5 | 3.2 | 2.7 | 2.3 | 1.3 | 2.2 | 2.1 | 2.1 |
| Japan | -1.5 | -1.1 | -0.9 | -0.4 | -0.3 | -0.4 | $-0.6$ | -0.7 | -0.8 | -0.8 | -0.8 | -0.8 |
| United Kingdom (4) | 2.4 | 1.9 | 2.0 | 2.6 | 2.9 | 3.0 | 3.0 | 2.7 | 2.3 | 2.5 | 2.4 | 2.4 |
| Euro Area (2) Germany | 2.6 2.0 | 2.1 1.2 | 2.1 1.1 | 2.3 1.2 | 2.3 1.1 | 1.9 0.9 | 1.8 0.7 | 1.3 0.4 | 0.9 -0.2 | 1.0 0.0 | 1.1 0.2 | 1.2 0.3 |
| Developing Countries | 2.7 | 2.6 | 2.8 | 3.1 | 3.6 | 3.3 | 3.2 | 3.2 | 2.8 | 2.8 | 2.8 | 2.7 |
| Asia | 0.8 | 0.6 | 0.5 | 0.7 | 1.4 | 1.4 | 1.6 | 1.9 | 1.6 | 1.7 | 1.8 | 1.8 |
| Korea | 2.6 | 2.6 | 2.5 | 3.4 | 4.1 | 3.4 | 3.5 | 3.3 | 2.7 | 2.7 | 2.7 | 2.7 |
| China | -0.6 | -1.1 | -0.8 | -0.7 | 0.5 | 0.8 | 1.0 | 1.5 | 0.8 | 1.0 | 1.2 | 1.2 |
| Latin America | 5.2 | 5.4 | 6.0 | 6.4 | 7.1 | 6.4 | 5.6 | 5.0 | 4.6 | 4.5 | 4.4 | 4.2 |
| Mexico | 4.8 | 4.8 | 5.2 | 5.3 | 5.5 | 4.8 | 4.1 | 3.9 | 4.0 | 3.9 | 3.8 | 3.6 |
| Brazil | 7.7 | 7.9 | 7.7 | 10.7 | 15.6 | 17.2 | 16.6 | 13.2 | 8.5 | 7.4 | 7.6 | 7.7 |

[^9]OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

|  | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | $\begin{array}{r} \text { Pr } \\ 2003 \end{array}$ | $\begin{aligned} & \text { ected } \\ & 2004 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NIPA REAL EXPORTS and IMPORTS Percentage point contribution to GDP growth, Q4/Q4 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -0.2 | -0.8 | -1.1 | -1.0 | -0.8 | -0.1 | -1.0 |  |  |
| Exports of G\&S | 1.1 | 1.0 | 0.3 | 0.5 | 0.8 | -1.3 | 0.4 | 0.3 | 0.9 |
| Imports of G\&S | $-1.3$ | -1.7 | $-1.3$ | $-1.5$ | $-1.5$ | 1.2 | $-1.3$ | -0.3 | $-1.5$ |
| Percentage change, Q4/Q4 |  |  |  |  |  |  |  |  |  |
| Exports of G\&S | 9.8 | 8.5 | 2.3 | 4.9 | 7.3 | -11.4 | 3.9 | 3.4 | 9.6 |
| Services | 8.9 | 1.4 | 2.9 | 3.2 | 4.8 | -9.2 | 11.4 | $-1.6$ | 5.7 |
| Computers | 21.6 | 25.8 | 8.1 | 13.4 | 23.0 | -23.4 | -2.1 | 12.3 | 33.5 |
| Semiconductors | 44.6 | 21.3 | 9.1 | 34.6 | 26.9 | -34.9 | 8.5 | 33.4 | 36.3 |
| Other Goods 1/ | 7.3 | 9.8 | 1.3 | 3.2 | 5.7 | -9.4 | 0.5 | 3.6 | 8.2 |
| Imports of G\&S | 11.2 | 14.3 | 10.8 | 11.9 | 11.1 | -8.0 | 10.1 | 1.8 | 10.4 |
| Services | 5.3 | 14.0 | 8.5 | 5.9 | 10.9 | -8.6 | 11.5 | -6. 8 | 5.4 |
| Oil | 7.8 | 3.9 | 4.1 | -3.4 | 13.3 | 0.1 | 4.0 | -1.2 | 4.2 |
| Computers | 17.8 | 33.0 | 25.8 | 26.0 | 13.6 | -13.8 | 13.6 | 16.8 | 33.6 |
| Semiconductors | 56.7 | 32.9 | -8.7 | 34.2 | 22.5 | -51.4 | 9.3 | 21.1 | 36.3 |
| Other Goods 2/ | 10.4 | 12.7 | 11.5 | 12.7 | 10.4 | -6.2 | 10.1 | 2.8 | 10.0 |
| Billions of chained 1996 dollars |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -89.0 | $-113.3$ | -221.1 | $-320.5$ | -398.8 | -415.9 | $-488.5$ | $-525.5$ | -568.7 |
| Exports of G\&S | 874.2 | 981.5 | 1002.4 | 1036.3 | 1137.2 | 1076.1 | 1058.8 | 1069.9 | 1157.7 |
| Imports of G\&S | 963.1 | 1094.8 | 1223.5 | 1356.8 | 1536.0 | 1492.0 | 1547.4 | 1595.4 | 1726.4 |


| Billions of dollars |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US CURRENT ACCOUNT BALANCE | -118.8 | -127.7 | -200.0 | -291.8 | -402. 4 | -392.9 | -485.9 | -558.1 | -583.7 |
| Current Acct as Percent of GDP | -1.5 | -1.5 | -2.3 | -3.1 | -4.1 | -3.9 | -4.6 | -5.1 | -5.1 |
| Net Goods \& Services (BOP) | -102.9 | -107.0 | -163.2 | -261.2 | -370.7 | -357.8 | -418.0 | -492.3 | -525.4 |
| Investment Income, Net | 28.6 | 25.1 | 12.7 | 23.9 | 27.6 | 20.5 | -5.4 | 0.0 | 4.5 |
| Direct, Net | 69.4 | 72.4 | 65.5 | 75.0 | 88.9 | 102.6 | 77.9 | 79.0 | 85.7 |
| Portfolio, Net | -40.8 | -47.3 | -52.9 | -51.1 | -61.2 | -82.1 | -83.4 | -79.0 | -81.2 |
| Other Income \& Transfers, Net | -44.6 | $-45.7$ | -49.6 | -54.5 | -59.3 | $-55.6$ | -62.5 | $-65.8$ | -62.9 |

[^10]|  | 2002 |  |  |  | 2003 ------- Proj |  |  |  | 2004 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NIPA REAL EXPORTS and IMPORTS Percentage point contribution to GDP growth |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services Exports of G\&S Imports of G\&S | -0.7 | -1. 4 | 0.0 | -1.6 | 0.8 | -0.9 | 0.1 | 0.3 | -0.5 | -0.7 | -0.6 | -0.2 |
|  | 0.3 | 1.3 | 0.5 | -0.6 | -0.1 | -0.2 | 0.6 | 1.0 | 0.7 | 0.9 | 0.9 | 1.2 |
|  | -1.1 | -2.7 | -0.4 | -1.0 | 0.9 | -0.7 | -0.5 | -0.7 | -1.2 | -1.6 | -1.6 | -1.3 |
| Percentage change from previous period, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of G\&S | 3.5 | 14.3 | 4.6 | -5.8 | -1.2 | -2.0 | 6.7 | 10.6 | 7.1 | 9.5 | 9.7 | 12.2 |
| Services | 21.7 | 10.7 | 5.9 | 8.0 | -7.7 | -11.0 | 6.9 | 7.0 | 5.9 | 5.5 | 5.5 | 5.7 |
| Computers | -21.1 | -0.5 | -0.8 | 17.9 | -7.4 | -2.0 | 31.0 | 33.5 | 33.5 | 33.5 | 33.5 | 33.5 |
| Semiconductors | 13.7 | 65.8 | 21.3 | -39.4 | 45.2 | 31.3 | 21.7 | 36.3 | 36.3 | 36.3 | 36.3 | 36.2 |
| Other Goods 1/ | -3.1 | 14.2 | 3.3 | -10.7 | 0.2 | 0.8 | 4.2 | 9.4 | 4.2 | 8.2 | 8.5 | 12.2 |
| Imports of G\&S | 8.5 | 22.2 | 3.3 | 7.4 | -6.2 | 5.3 | 3.5 | 5.1 | 8.9 | 12.0 | 11.3 | 9.5 |
| ServicesOil | 35.7 | -2.1 | 3.1 | 13.0 | -4.1 | -18.9 | -4.6 | 1.5 | 3.2 | 5.8 | 6.4 | 6.3 |
|  | -19.0 | 34.5 | -13.3 | 24.1 | -12.5 | 41.7 | -0.9 | -22.6 | -0.3 | 29.8 | 10.4 | -17.4 |
| Computers | 52.4 | 5.6 | -4.4 | 8.2 | -1.9 | 14.8 | 23.9 | 33.6 | 33.6 | 33.6 | 33.6 | 33.6 |
|  | 45.2 | 41.8 | -5.9 | -26.4 | -1.3 | 21.7 | 31.3 | 36.3 | 36.3 | 36.3 | 36.3 | 36.3 |
| Other Goods 2/ | 1.9 | 28.8 | 6.3 | 5.2 | -6.3 | 7.2 | 4.1 | 7.0 | 9.0 | 9.9 | 10.4 | 10.7 |
| Billions of chained 1996 dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services Exports of G\&S Imports of $\mathrm{G} \& \mathrm{~S}$ | -446.6 | -487.4 | -488.0 | -532.2 | -509.9 | -535.5 | -532.0 | -524.6 | -540.8 | -563.0 | -582.4 | -588.6 |
|  | 1030.6 | 1065.5 | 1077.7 | 1061.6 | 1058.5 | 1053.2 | 1070.3 | 1097.6 | 1116.5 | 1142.1 | 1169.0 | 1203.1 |
|  | 1477.1 | 1552.9 | 1565.7 | 1593.8 | 1568.4 | 1588.7 | 1602.3 | 1622.2 | 1657.3 | 1705.1 | 1751.4 | 1791.7 |
| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -427.9 | -492.5 | -492.2 | -531.0 | -562.2 | -559.4 | -562.7 | -548.0 | -557.0 | -577.0 | -596.3 | -604.7 |
| Current Account as \% of GDP | -4.1 | -4.7 | -4.7 | -5.0 | -5.3 | -5.2 | -5.2 | -5.0 | -5.0 | -5.1 | -5.2 | -5.1 |
| Net Goods \& Services (BOP) | -360.2 | -419.5 | -427.9 | -464.5 | -486.4 | -489.4 | -502.7 | -490.8 | -501.8 | -520.1 | -537.2 | -542.4 |
| Investment Income, Net | 2.5 | -14.7 | -5.8 | -3.7 | -12.4 | -3.6 | 6.5 | 9.5 | 7.5 | 5.8 | 3.6 | 1.2 |
| Direct, Net | 88.1 | 75.0 | 74.5 | 74.2 | 68.3 | 75.5 | 84.6 | 87.6 | 86.8 | 85.9 | 85.3 | 84.8 |
| Portfolio, Net | -85.5 | -89.7 | -80.4 | -77.9 | -80.7 | -79.0 | -78.0 | -78.1 | -79.2 | -80.2 | -81.7 | -83.6 |
| Other Inc. \& Transfers, Net | -70.2 | -58.3 | -58.5 | -62.9 | -63.5 | -66.5 | -66.5 | -66.7 | -62.7 | -62.7 | -62.7 | -63.5 |

[^11]
[^0]:    ${ }^{1}$ In some cases, original copies needed to be photocopied before being scanned into electronic format. All scanned images were deskewed (to remove the effects of printer- and scanner-introduced tilting) and lightly cleaned (to remove dark spots caused by staple holes, hole punches, and other blemishes caused after initial printing).
    ${ }^{2}$ A two-step process was used. An advanced optical character recognition computer program (OCR) first created electronic text from the document image. Where the OCR results were inconclusive, staff checked and corrected the text as necessary. Please note that the numbers and text in charts and tables were not reliably recognized by the OCR process and were not checked or corrected by staff.

[^1]:    1. The main provisions of the act are to pull forward to this year the marginal tax-rate cuts that were scheduled for 2004 and 2006; to allow for marriage-penalty relief and a boost to the child tax credit in 2003 and 2004; to reduce taxation of dividends and capital gains; and to expand and extend the partial-expensing provision for equipment investment that was enacted last year. The act also includes $\$ 20$ billion in grants to state governments spread over this year and next.
    2. In estimating the implications of the new tax law for aggregate demand, we have assumed that the provisions of the law that expire at the end of next year-notably the child tax credit and marriage-penalty relief-will be extended, and that households assume that these provisions will be extended in making their spending plans.
[^2]:    3. Because of the extension of temporary partial expensing to the end of 2004, we eliminated the drop-off in E\&S spending growth in the fourth quarter of next year that had been a feature of our previous forecast. However, if the partial-expensing provision is allowed to expire as scheduled, the drag on equipment spending in 2005 could be considerable.
[^3]:    4. Although the historical output gap in this scenario is significantly lower at the start of the simulation than in the baseline, the unemployment rate is unchanged. Thus, with the lower structural productivity growth in this scenario, the unemployment rate is currently less well aligned with product market slack. In the simulation, this initial tension is gradually resolved through stronger growth in employment. As a result, the unemployment rate falls relative to baseline despite weaker growth in real GDP.
[^4]:    1. For all urban consumers.
    2. Level, except as noted.
    3. Percent change from two quarters earlier; for unemployment rate, change in percentage points.
    4. Percent change from four quarters earlier; for unemployment rate, change in percentage points.
[^5]:    1. Private-industry workers
[^6]:    Note. Components may not sum to totals because of rounding

[^7]:    
    
    and shown separately as off-budget, as classified under current law.
    4. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
    
     taxes in chained (1996) 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.

[^8]:    4. NIPA surplus less changes in retirement fund assets plus consumption of fixed capital.
    5. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP. 6. Excludes government-insured mortgage pool securities.

    Note. Data after 2003:Q1 are staff projections.

    1. For corporations: Excess of capital expenditures over U.S. internal funds. 2. Includes change in liabilities not shown in lines 8 and 9.
    2. Average debt levels in the period (computed as the average of period-end debt positions)
    divided by disposable personal income.
    2.6.4 FOF
[^9]:    1. 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.

[^10]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors.
[^11]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors.
