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## Part 1

## CURRENT ECONOMIC AND FINANCIAL CONDITIONS

## Summary and Outlook

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

## Summary and Outlook

## Domestic Developments

Against the backdrop of the midyear tax cuts and a very accommodative monetary policy, economic activity surged in the third quarter. The available indicators for the fourth quarter suggest that economic growth is continuing to expand at a solid pace. Although household spending seems to be rising only modestly after jumping sharply during the summer months, businesses appear to be shedding some of the caution that has characterized their behavior for the past three years. With sales, profits, and stock prices up, companies have started hiring again, capital spending is increasing, and the liquidation of inventories appears to be ending. In our view, this renewed willingness of the business sector to expand will be a key factor helping to sustain the economic recovery. All told, real GDP is projected to rise at an annual rate of $4-1 / 2$ percent in the current quarter and at a $5-1 / 4$ percent rate in 2004; we expect the level of real output by the end of next year to be nearly $3 / 4$ percent higher than forecast in the October Greenbook.

The increase in labor productivity this year has been stunning, and we have responded by raising our forecast of potential output. Even so, the margin of slack in this projection is narrower than we projected previously. From its current level of about 6 percent, the unemployment rate is projected to fall to $5-1 / 4$ percent by the end of next year. Given the prospect of further increases in resource utilization in 2005, we now assume that a modest tightening of monetary policy will begin early that year. The increase in the federal funds rate-as well as a shift in the stance of fiscal policy from stimulus to restraint-is sufficient to slow the rise in real GDP to 3-3/4 percent in 2005. Under these circumstances, the unemployment rate falls to 5 percent-our estimate of the NAIRU-by the end of the projection period, about the same as forecast in the October Greenbook.

Although the recent news on spending has been surprisingly strong, incoming information on inflation has been about in line with our expectations. Core PCE prices are forecast to rise at an annual rate of 1.2 percent in the current quarter-slightly less than projected in the October Greenbook-and to decelerate to a bit further next year, to a 1.1 percent pace. Core inflation remains steady at 1.1 percent in 2005. This favorable outlook for inflation reflects the persistence of a moderate, albeit diminishing, amount of slack into 2005 as well as continued strong gains in productivity.

## Key Background Factors

We continue to assume that the federal funds rate will remain at 1 percent through 2004. But with a higher degree of resource utilization projected for the end of next year, we now believe that monetary policy will need to tighten sooner and by a greater amount over the course of 2005 . We assume that by the end of 2005 the federal funds rate will have reached 2 percent, $1 / 2$ percentage point higher than assumed in the October Greenbook. Financial markets still
anticipate an earlier and more substantial tightening in monetary policy than we have assumed, although the difference is narrower than in our previous forecast.

We believe that investor expectations for the path of the funds rate will gradually become better aligned with our view, as incoming data demonstrate that the economy can grow faster than potential over the forecast period without an increase of inflationary pressures. The realignment in market expectations should damp the upward trend in long-term interest rates that would otherwise accompany the shift to a less accommodative stance of monetary policy. On balance, we think that Treasury yields will hold in a narrow range over the next two years and that yields on corporate bonds will drift down as economic recovery leads to a fall in risk spreads.

Equity prices have moved up about 2 percent on balance since the October Greenbook, and thus our forecast for the stock market jumps off from a slightly higher level. We assume that share prices after this quarter will increase at an annual rate of 6-1/2 percent, thereby maintaining rough parity-on a riskadjusted basis-with the yield on long-term bonds. After factoring in the effects of an assumed moderation in the rate of house price appreciation, we project that overall household wealth will grow a bit more slowly than income over the next two years.

Our assumptions for fiscal policy are little changed. Although seven of the thirteen appropriation bills for the current fiscal year have yet to be passed by the Congress, most of the wrangling appears to be over nonbudget issues. At this juncture, appropriations for 2004 seem to be shaping up about as we expected. One remaining uncertainty concerns the fate of the extended unemployment benefits program, which is scheduled to end in late December; we continue to expect that the House and the Senate will agree to extend the program through the end of next year. The recently enacted Medicare bill has little effect on our forecast because its major provisions kick in after 2005.

In recent months, the Pentagon has been a bit slower to spend appropriated defense funds than we had assumed would be the case, and we have lowered the path of defense spending by $\$ 6$ billion starting in the current quarter. That change aside, we continue to expect that tax cuts, increased military spending, and a modest increase in real nondefense discretionary outlays will provide an appreciable amount of economic stimulus next year: Gauged by the staff's measure of fiscal impetus, the stimulus to GDP growth is expected to be a little more than 1 percentage point in 2004, about the same as in 2003. Consistent with this assumption, we project that the unified budget deficit will increase from $\$ 374$ billion in fiscal year 2003 to $\$ 498$ billion in fiscal year 2004.

We continue to expect that fiscal policy will turn slightly restrictive in 2005. In particular, we assume that the tax provision permitting partial expensing of equipment investment will expire at the end of 2004 as scheduled and that the extended unemployment benefits program will lapse as well, given an unemployment rate approaching 5 percent. ${ }^{1}$ In addition, we expect defense spending to be flat in real terms and real nondefense spending to remain only on the modest uptrend observed in recent years. The unified budget deficit is expected to narrow to $\$ 359$ billion in fiscal year 2005.

The recent news on economic activity abroad has been a little better than we expected, and we have raised our estimates of near-term output growth for most of our major trading partners. We have also nudged up our forecast for foreign real GDP growth a bit to 3.7 percent in 2004; the projected increase for 2005 is unchanged at 3.4 percent. The real trade-weighted foreign exchange value of the dollar is down moderately, on balance, since the October Greenbook; as in our previous projection, we assume some modest further real depreciation between now and the end of 2005 .

The spot price of West Texas intermediate crude oil (WTI) is currently about $\$ 31$ per barrel, up about $\$ 1$ per barrel since the October Greenbook. Consistent with recent readings in futures markets, we project WTI to decline over the next two years as additional supplies from Iraq and non-OPEC producers become available. We forecast WTI to fall below $\$ 27$ per barrel by the end of next year and to drop another dollar per barrel over the course of 2005; these declines are similar to those incorporated into the October projection.

## Recent Developments and the Near-Term Outlook

According to the BEA's preliminary estimate, real GDP increased at an annual rate of $8-1 / 4$ percent in the third quarter-almost 2 percentage points more than we had projected in the October Greenbook - with the bulk of the surprise concentrated in business investment. In addition, a broad range of indicators suggests that firms are taking a more expansive view toward hiring, increasing capacity, and holding inventories. Although we do not expect the extraordinary performance of the economy in the third quarter to be repeated, we do expect the economic expansion to be well maintained. Real GDP is projected to rise $4-1 / 2$ percent at an annual rate in the current quarter, the same as in the October Greenbook. If this forecast for the fourth quarter is realized, economic growth in the second half of this year will average $6-1 / 4$ percent at an annual rate-a

[^1]
## Summary of the Near-Term Outlook

(Percent change at annual rate except as noted)

| Measure | 2003:Q4 |  | 2004:Q1 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Oct. GB | Dec. <br> GB | Oct. <br> GB | Dec. <br> GB |
| Real GDP | 4.4 | 4.4 | 5.2 | 5.3 |
| Private domestic final purchases | 2.7 | 3.5 | 5.1 | 5.4 |
| Personal consumption expenditures | 1.8 | 2.0 | 4.5 | 4.3 |
| Residential investment | 5.6 | 15.0 | -. 2 | 3.2 |
| Business fixed investment | 7.9 | 8.1 | 11.6 | 14.7 |
| Government outlays for consumption and investment | 4.7 | 3.2 | 3.8 | 4.9 |
|  | Contribution to growth (percentage points) |  |  |  |
| Inventory investment | 1.4 | 1.1 | . 6 | . 2 |
| Net exports | -. 3 | -. 4 | -. 5 | -. 5 |

pickup of about 4 percentage points from the pace in the first half of the year and well above our estimate of the growth rate of potential output.

In the household sector, we expect real consumer spending to rise 2 percent at an annual rate in the current quarter after having advanced at a $6-1 / 2$ percent rate in the third quarter. Recent quarter-to-quarter fluctuations reflect in part a seesaw pattern of sales of light motor vehicles: Generous incentives helped to push sales above 17-1/2 million units (annual rate) in the third quarter, but we project that sales will fall to a rate of around 16-1/2 million units in the current quarter in response to less-aggressive promotional efforts by manufacturers earlier in the fall. Consumer spending for non-motor-vehicle goods and services moved up modestly on balance in September and October as the initial impetus from the midyear tax cuts began to wane. Nonetheless, we expect rising employment and improving consumer sentiment to help real PCE excluding motor vehicles increase $3-1 / 2$ percent at an annual rate in the fourth quarter.

Activity in the housing market continues to be robust. With mortgage rates low and employment prospects improving, single-family housing starts jumped to a record high of 1.62 million units (annual rate) in October-a level that greatly exceeded our expectations. Permits also were strong in October, and we have interpreted these data as signaling a somewhat higher underlying level of singlefamily housing demand than we had previously thought. In contrast, the decline in multifamily starts in October was in line with our projections. All told, we now expect total housing starts to increase to 1.93 million units at an annual rate
in the fourth quarter and real residential investment to rise almost 15 percent at an annual rate.

In the business sector, data on orders and shipments of nondefense capital goods through October suggest that spending on equipment and software is rebounding faster than we had anticipated. After having risen at an annual rate of 24 percent in the third quarter, outlays on high-tech equipment appear poised to post a 17 percent gain this quarter. Spending on most other types of equipment appears to be posting substantial gains as well. Overall, we project total real $\mathrm{E} \& \mathrm{~S}$ spending to rise almost 11 percent at an annual rate in the current quarter.

Nonresidential construction appears to be bottoming out. Although vacancy rates for office buildings remain high and are likely to restrain investment for some time, construction activity appears to be rising slowly for other types of buildings. Moreover, higher natural gas prices are supporting an elevated pace of drilling activity. All told, we expect total real spending on nonresidential construction to be little changed in the current quarter.

In the federal sector, although spending associated with military operations in Iraq and other defense activities has picked up noticeably in recent weeks, the pickup has not been as large as we had expected given the level of appropriations. We now estimate that real defense outlays will increase only $6-1 / 2$ percent at an annual rate in the current quarter. Real nondefense spending is also rising rapidly in the fourth quarter, at a pace of about $7-1 / 2$ percent.
Owing to budgetary pressures, spending by state and local governments is likely to increase only a little this quarter.

We estimate that a strengthening of real activity abroad, past dollar depreciation, and continuing recovery in the high-tech sector are helping real exports to rise at an annual rate of about 12 percent, on average, in the second half of 2003. Spurred by the acceleration in U.S. activity, as well as by a reversal of some transitory influences that held down import volumes in the third quarter, real imports are projected to increase 11-1/4 percent at an annual rate in the current quarter. We expect net exports to arithmetically deduct a little less than $1 / 2$ percentage point from real GDP growth in the fourth quarter.

Core PCE prices are expected to increase 1.2 percent at an annual rate this quarter, down from 1.7 percent in the third quarter. Overall consumer price inflation this quarter is likely to be a touch more subdued than the rise in core prices: Although prices for a number of food items have risen sharply in recent weeks, the effect of these increases on the overall index of consumer prices is more than offset by a large decline in energy prices.

## The Longer-Term Outlook for the Economy

After having risen at a 6-1/4 percent annual rate in the second half of 2003, real GDP is projected to increase at a $5-1 / 2$ percent rate during the first half of 2004 and a rate of about 5 percent in the second half of the year. This forecast of continued strength reflects the influence of three familiar factors-expansionary fiscal policy, favorable financial conditions, and rapid gains in structural productivity. We also believe that the pace of activity next year will be supported by a further improvement in business confidence. We project that in 2005 the increase in real output will slow to 3-3/4 percent. Underlying that

| Projections of Real GDP <br> (Percent change at annual rate from end of <br> preceding period except as noted) |  |  |  |  |
| :---: | ---: | ---: | ---: | :---: |
| Measure | 2004 |  | 2005 |  |
|  | H 1 | H 2 |  |  |
| Real GDP | $\mathbf{5 . 4}$ | $\mathbf{5 . 1}$ | $\mathbf{3 . 8}$ |  |
| Previous | 5.2 | 5.0 | 4.0 |  |
| Final sales | 4.9 | 4.9 | 3.8 |  |
| Previous | 4.5 | 4.9 | 3.8 |  |
| PCE | 4.6 | 4.7 | 4.2 |  |
| Previous | 4.6 | 4.5 | 4.1 |  |
| Residential investment | 3.2 | .8 | -.4 |  |
| Previous | 1.4 | 2.3 | 1.1 |  |
| BFI | 14.3 | 15.1 | 7.2 |  |
| Previous | 12.8 | 15.7 | 7.6 |  |
| Government purchases | 3.5 | 1.6 | 2.1 |  |
| Previous | 2.9 | 1.5 | 2.1 |  |
| Exports | 9.3 | 11.7 | 10.1 |  |
| Previous | 8.9 | 11.5 | 9.9 |  |
| Imports | 10.5 | 10.1 | 9.0 |  |
| Previous | 10.3 | 9.9 | 9.1 |  |
|  | Contribution to growth |  |  |  |
| (percentage points) |  |  |  |  |
| Inventory change | .5 | .3 | .1 |  |
| Previous | .6 | .1 | .2 |  |
| Net exports | -.6 | -.3 | -.3 |  |
| Previous | -.6 | -.3 | -.4 |  |
|  |  |  |  |  |

slowdown are several factors, including the expiration of the partial-expensing provision, a waning of the stimulus to household spending from personal tax cuts, and a modest tightening of monetary policy.

Household spending. We expect that rapid gains in disposable income over the next two years will provide considerable support to consumer spending: Real disposable income, bolstered by a further drop in personal tax payments in 2004 as well as by significant increases in employment, is projected to rise $5-1 / 4$ percent in 2004 and $4-1 / 4$ percent in 2005 . We anticipate that wealth will be a relatively neutral factor in the outlook. Overall, we expect real PCE to increase more than 4-1/2 percent in 2004 and 4-1/4 percent in 2005.

Given our projection of continued sizable gains in income and little change in mortgage rates, we anticipate that the level of activity in the housing market will remain robust over the next two years. Single-family starts are projected to total 1.53 million units in 2004, a pace almost equal to that observed in the second half of this year. In 2005, as income growth moderates, we forecast singlefamily starts to edge down to 1.51 million units. Multifamily starts are projected at 340,000 units in both 2004 and 2005, the same as in 2003.

Business investment. We expect real investment in equipment and software to continue to rebound next year, with large increases projected for all major categories of spending. Capital outlays should be supported by the acceleration in business sales and output, further profit gains, and a continuation of very favorable financing conditions. The impending expiration of the partialexpensing allowance should also give firms a considerable incentive to pull forward purchases of new equipment into 2004. Moreover, we continue to believe that spending will be stimulated by increased confidence that a sustained recovery is under way. Altogether, we project that these factors will cause total real E\&S spending to rise 18 percent in 2004. We expect real E\&S outlays to increase only $7-1 / 2$ percent in 2005, in part because of the shift of spending into 2004.

Nonresidential construction spending is projected to accelerate gradually over the next two years as the ongoing recovery in output and hiring pushes up the demand for office, other commercial, and industrial space. Capital spending by public utilities is also likely to mount as rising electricity demand strains existing generation, transmission, and distribution capacity. However, these gains are likely to be offset partially by a fall-off in drilling activity as energy prices moderate. Overall, we project real expenditures on nonresidential investment to increase almost 3 percent in 2004 and 6-3/4 percent in 2005.

We believe that the recent unusual degree of caution about holding stocks is now beginning to fade and that inventory investment will gradually return to a
pace more in line with overall sales growth. As a result, we expect stockpiling to contribute a bit less than $1 / 2$ percentage point to the rise of real GDP in 2004; inventory investment is essentially a neutral factor in growth in 2005. Because firms are likely to remain focused on improving their inventory management, we do not expect any significant upturn in inventory-sales ratios over the next two years.

Government spending. With much of the buildup in Iraq-related military spending behind us, we expect that the growth of federal spending will slow markedly over the next two years: After having risen almost 8 percent this year, total real federal expenditures on consumption and investment should increase only $4-1 / 2$ percent in 2004 and 2 percent in 2005. The slowdown in defense spending accounts for essentially all of this deceleration; real nondefense spending is projected to grow steadily at about 3 percent per year.

As the economy improves, state and local tax receipts should recover further. Nonetheless, continuing budgetary stresses on these governments are likely to restrain spending for some time. In our forecast, real state and local purchases rise only 1-1/4 percent in 2004 and 2 percent in 2005, well below the trend of recent years.

Net exports. Given the anticipated further improvements in foreign economic activity, as well as the effects of past and assumed future dollar depreciation, we project that real exports will rise about 10 percent in both 2004 and 2005. With the domestic economy expanding robustly, real imports are expected to increase at the same pace as exports next year but to rise a shade more slowly in 2005 as the growth of U.S. activity slows. Altogether, net exports should arithmetically deduct nearly $1 / 2$ percentage point from the increase in U.S. real GDP in 2004 and a little more than $1 / 4$ percentage point in 2005. (The International Developments section provides more detail on the outlook for the external sector.)

## Aggregate Supply, the Labor Market, and Inflation

Given the projected trajectory for real output and our estimate that potential GDP will rise a little faster than 3-1/2 percent on average in 2004 and 2005, we expect that the output gap will have largely closed by the end of next year. This tightening of product markets, coupled with reduced business caution about hiring, should result in a decline in the unemployment rate to $5-1 / 4$ percent by the end of 2004. We project that in 2005 the unemployment rate will fall further and finish the year at 5 percent-our estimate of the NAIRU. Under these conditions of modest slack, we expect inflation to edge down a bit further: After increasing only 1.2 percent this year, core PCE prices are projected to increase 1.1 percent in both 2004 and 2005.

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

| Measure | $1973-$ <br> 95 | $1996-$ <br> 2001 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Structural labor productivity | 1.4 | 2.7 | 2.6 | 3.1 | 2.7 | 2.9 |
| $\quad$ Previous | 1.4 | 2.7 | 2.6 | 2.8 | 2.6 | 2.8 |
| Contributions ${ }^{1}$ |  |  |  |  |  |  |
| Capital deepening | .6 | 1.2 | .4 | .4 | .8 | 1.0 |
| $\quad$ Previous | .6 | 1.2 | .4 | .4 | .7 | 1.0 |
| Multifactor productivity | .6 | 1.2 | 2.0 | 2.4 | 1.6 | 1.6 |
| $\quad$ Previous | .6 | 1.2 | 2.0 | 2.1 | 1.6 | 1.6 |
| Labor composition | .3 | .3 | .3 | .3 | .3 | .3 |
| MEMO |  |  |  |  |  |  |
| Potential GDP | 2.9 | 3.4 | 3.5 | 3.9 | 3.5 | 3.7 |
| $\quad$ Previous | 2.9 | 3.4 | 3.5 | 3.6 | 3.4 | 3.6 |

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 | 2002 | 2003 | 2004 | 2005 |
| :--- | ---: | ---: | ---: | ---: |
| Output per hour, nonfarm business | 4.4 | 5.2 | 1.7 | .5 |
| $\quad$ Previous | 4.4 | 4.6 | 1.4 | .9 |
| Nonfarm private payroll employment | -.7 | .0 | 3.8 | 3.4 |
| $\quad$ Previous | -.7 | -.2 | 3.7 | 3.2 |
| Household survey employment | .3 | 1.2 | 2.7 | 2.1 |
| $\quad$ Previous | .3 | 1.0 | 2.8 | 2.1 |
| Labor force participation rate $^{1}$ | 66.5 | 66.2 | 66.7 | 67.1 |
| $\quad$ Previous | 66.5 | 66.3 | 66.7 | 67.0 |
| Civilian unemployment rate $^{1}$ | 5.9 | 6.0 | 5.3 | 5.0 |
| $\quad$ Previous | 5.9 | 6.2 | 5.4 | 5.1 |
| MEMO |  |  |  |  |
| GDP gap ${ }^{2}$ | 2.3 | 1.9 | .2 | .1 |
| $\quad$ Previous | 2.3 | 2.0 | .4 | .1 |

[^2]
## Inflation Projections

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

| Measure | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: |
| PCE chain-weighted price index | 1.8 | 1.7 | . 9 | 1.0 |
| Previous | 1.8 | 1.7 | . 8 | . 9 |
| Food and beverages | 1.4 | 2.4 | 1.5 | 1.5 |
| Previous | 1.4 | 2.2 | 1.4 | 1.4 |
| Energy | 7.0 | 7.9 | -5.9 | -1.1 |
| Previous | 7.0 | 8.7 | -6.4 | -1.1 |
| Excluding food and energy | 1.6 | 1.2 | 1.1 | 1.1 |
| Previous | 1.6 | 1.2 | 1.1 | 1.0 |
| Consumer price index | 2.2 | 2.0 | 1.0 | 1.3 |
| Previous | 2.2 | 2.0 | . 9 | 1.2 |
| Excluding food and energy | 2.1 | 1.4 | 1.5 | 1.5 |
| Previous | 2.1 | 1.4 | 1.5 | 1.4 |
| GDP chain-weighted price index | 1.3 | 1.5 | 1.0 | 1.2 |
| Previous | 1.3 | 1.5 | 1.0 | 1.1 |
| ECI for compensation of private <br> industry workers     <br>  3.2 4.1 3.5 3.5 |  |  |  |  |
| Previous | 3.2 | 3.8 | 3.4 | 3.4 |
| NFB compensation per hour | 2.8 | 2.7 | 3.1 | 3.4 |
| Previous | 2.8 | 3.3 | 3.0 | 3.2 |
| Prices of core non-oil merchandise imports | . 7 | 1.7 | 2.0 | . 8 |
| Previous | . 7 | 2.2 | 1.8 | 1.1 |

1. December to December.

Productivity and the labor market. As noted earlier, in this projection we have interpreted a small part of the dramatic surge in output per hour last quarter as a further sign that firms have continued to fundamentally increase the efficiency of their operations, thereby boosting structural productivity. However, some of the increase may have reflected a transitory effort to press existing labor resources to meet a surprising increase in demand. As the expansion proves more durable, we expect that businesses will become more willing to expand their workforces to relieve the pressure on existing resources. Indeed, the pickup in employment in recent months suggests that such a shift in attitudes may have already begun. We anticipate that monthly gains in payroll employment will increase from around 250,000 early next year to about 400,000 by the middle of 2004; hiring is expected to slow a bit in 2005 as the economic
expansion moderates. With firms adjusting the size of their workforces to more-sustainable levels, actual output per hour should grow less rapidly than its underlying structural rate.

Wages and prices. We believe that enough economic slack will persist on average over the next two years to put a little downward pressure on wages and prices. Continued gains in structural productivity as well as falling energy prices should also help to contain inflationary pressures. Taking all these considerations into account, we project that core PCE inflation will slip to 1.1 percent in 2004, down from 1.2 percent in 2003. With slack having essentially disappeared by early 2005 , core inflation is expected to hold steady at 1.1 percent. After increasing 1.7 percent this year, overall PCE prices are projected to increase only 0.9 percent next year and 1.0 percent in 2005 as prices for gasoline and natural gas decline. For hourly compensation, we anticipate that the employment cost index will increase about $3-1 / 2$ percent in both 2004 and 2005-a pace in line with modest labor market slack, low price inflation, and continued robust gains in structural labor productivity.

## Financial Flows and Conditions

Debt of the domestic nonfinancial sectors is estimated to have expanded about $8-1 / 2$ percent this year, the fastest annual pace since 1988. The large advance has been fueled by double-digit increases in federal and household debt. We expect debt growth to moderate to about 7-1/2 percent in 2004 and 6 percent in 2005, a contour similar to that in the October Greenbook.

In the household sector, the increases of both consumer credit and mortgage debt last quarter were more robust than we had anticipated. Looking ahead, given the upward revision to our forecast for housing activity, we have marked up our projection for household borrowing through next year. However, we still expect the pace of borrowing to trend down over the forecast period, as smaller increases in home values and a reduction in the volume of cash-out refinancing check the growth of mortgage debt.

Business borrowing has remained subdued in recent months, evidently because stronger profits and large cash holdings have provided the wherewithal to finance increased investment outlays. Over 2004 and 2005, we expect capital spending to rise more quickly than cash flow, causing businesses to turn more to external financing. Nonfinancial business debt is projected to rise $5-1 / 4$ percent next year and 6 percent in 2005, up from a 4-1/4 percent pace in 2003.

Federal debt is estimated to have risen 11 percent this year and is projected to expand even more rapidly next year, reflecting the larger budget deficit. In 2005, as the partial expensing provision lapses and tax revenues pick up rapidly
because of continuing economic recovery, we expect a marked slowdown in federal borrowing.

Our projection of state and local government borrowing is similar to our previous forecast. We expect this sector's debt, after increasing about $8-1 / 4$ percent this year, to rise $4-1 / 4$ percent in 2005. Although financing for new capital projects is anticipated to remain strong, advance refunding activity should decline as interest rates rise, and short-term borrowing should taper off with the improvement of the fiscal positions of these governments.

M2 is estimated to have expanded 5-1/2 percent in 2003. A decline in mortgage refinancing activity during 2004 and tighter monetary policy in 2005 cause M2 growth to increase more slowly than nominal income over the forecast period.

## Alternative Simulations

In this section, we consider several alternatives to the staff forecast that are generated using the FRB/US model. Two scenarios assess risks to aggregate demand. The first illustrates the possibility that a greater portion of the strength in third-quarter GDP will carry over into growth in the fourth quarter and beyond; the second scenario interprets the recent surge in household spending as resulting from temporary factors that will soon be reversed. The next simulation considers the risk that long-run inflation expectations will rise in an environment of rapid output growth and low interest rates. We then consider the possibility that the recent surge in productivity is signaling faster structural productivity growth, both in the recent past and in the future. In all of these simulations, the funds rate is assumed to follow its baseline path. In the final two scenarios, we consider alternative trajectories for the federal funds rate: first, that it follows the higher path implicit in financial futures markets and, second, that it remains flat at its current level.

Booming economy. Historically, even relatively shallow recessions have been followed by periods of growth that were substantially above trend; after allowing for the initial "jobless" period, the recovery in the early 1990s was no exception. In this scenario, consumption and business investment rise even more quickly than in the baseline, causing the output gap to shrink at a pace similar to that observed in the early-recovery phase following previous shallow recessions. As a consequence, real GDP growth is about $1 / 2$ percentage point faster than in the baseline in the current quarter and 1-1/4 percentage points faster in the first half of next year. Under these conditions, the unemployment rate comes down more sharply and reaches $4-1 / 4$ percent by the end of 2005, and core inflation edges up to 1.3 percent.

Weaker household spending. In this scenario, we consider the possibility that the recent surge in household spending proves temporary. In particular, we

## Alternative Simulations

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

| Measure | 2003 | 2004 |  |  |
| :--- | :---: | :---: | ---: | ---: |
|  | Q4 | H 1 | H 2 |  |
| Real GDP |  |  |  |  |
| Greenbook baseline | $\mathbf{4 . 4}$ | $\mathbf{5 . 4}$ | $\mathbf{5 . 1}$ | $\mathbf{3 . 8}$ |
| Booming economy | 5.0 | 6.6 | 5.8 | 4.2 |
| Weaker household spending | 4.1 | 4.2 | 4.7 | 3.7 |
| More inflation | 4.4 | 5.4 | 5.1 | 4.1 |
| Faster structural productivity growth | 4.5 | 5.9 | 5.6 | 4.2 |
| Market-based funds rate | 4.4 | 5.4 | 4.9 | 2.9 |
| Flat funds rate | 4.4 | 5.4 | 5.1 | 4.0 |
|  |  |  |  |  |
| Unemployment rate1 |  |  |  |  |
| Greenbook baseline | $\mathbf{6 . 0}$ | $\mathbf{5 . 8}$ | $\mathbf{5 . 3}$ | $\mathbf{5 . 0}$ |
| Booming economy | 6.0 | 5.5 | 4.8 | 4.3 |
| Weaker household spending | 6.0 | 6.0 | 5.7 | 5.5 |
| More inflation | 6.0 | 5.8 | 5.3 | 4.9 |
| Faster structural productivity growth | 6.0 | 6.0 | 5.6 | 5.6 |
| Market-based funds rate | 6.0 | 5.8 | 5.3 | 5.5 |
| Flat funds rate | 6.0 | 5.8 | 5.3 | 4.9 |
|  |  |  |  |  |
| PCE prices excluding food and energy |  |  |  |  |
| Greenbook baseline | $\mathbf{1 . 2}$ | $\mathbf{1 . 2}$ | $\mathbf{1 . 1}$ | $\mathbf{1 . 1}$ |
| Booming economy | 1.2 | 1.2 | 1.2 | 1.3 |
| Weaker household spending | 1.2 | 1.2 | 1.0 | .9 |
| More inflation | 1.2 | 1.2 | 1.2 | 1.9 |
| Faster structural productivity growth | 1.2 | 1.0 | .8 | .5 |
| Market-based funds rate | 1.2 | 1.2 | 1.1 | .9 |
| Flat funds rate | 1.2 | 1.2 | 1.1 | 1.1 |

1. Average for the final quarter of the period.
assume that the third-quarter spending jump reflected a faster response to the tax rebates than was estimated in constructing the baseline forecast. An implication of such a faster response is that the tax cut imposes a slight drag on consumer spending next year, rather than the baseline effect of adding $1 / 2$ percentage point to PCE growth. We also assume in this scenario that a large portion of the recent jump in residential investment represents an advance of construction activity in anticipation of the chance that mortgage rates might turn less favorable. As a result, by the end of next year residential investment drops back to its level in the second quarter of 2003. Under these conditions, real GDP increases 4-1/2 percent in 2004 and 3-3/4 percent in the following year, and the unemployment rate falls to only $5-1 / 2$ percent by late 2005 . In response to
more-persistent economic slack, core PCE inflation slips to just under 1 percent in 2005.

More inflation. Compared with the baseline forecast, the consensus outlook seems to envision a less vigorous recovery and a more pronounced tightening of monetary policy. As a result, there is a risk that, as real activity continues to expand rapidly and interest rates remain surprisingly low, the public may begin to mark up its expectations for long-run inflation. In this scenario, long-run inflation expectations begin to rise next spring-around the time futures quotes imply that monetary policy will begin to tighten - and by late 2005 they are a full percentage point above baseline. Prices respond gradually to the change in expectations, and by 2005 core inflation has reached almost 2 percent. Real GDP rises a little faster than in the baseline because of lower real interest rates, although the impetus to growth from this factor is somewhat offset by the contractionary effect on housing of higher nominal mortgage rates.

Faster structural productivity growth. Output per hour has once again surprised us with its strength. We revised up somewhat our estimate of structural productivity growth for 2003 as a result, but it may be stronger still. In this scenario, we consider the implications of assuming that structural productivity has been rising $1 / 2$ percentage point per year faster than in the baseline since 2000 and continues doing so through 2005. The resulting higher level and faster growth rate of potential output spur aggregate demand because of the improved prospects for future income and sales. With a greater portion of the recent strong productivity growth reflected in the trend, a smaller portion is implicitly the result of excessive caution in the hiring decisions of firms. Therefore, the rebound in employment growth is more restrained than in the baseline, and the unemployment rate comes down by less. With both greater labor market slack and faster productivity growth contributing to smaller increases in unit labor costs than in the baseline, core PCE inflation falls to $1 / 2$ percent in 2005.

Market-based funds rate. Quotes from futures markets are consistent with a federal funds rate that begins to rise in the spring of next year and exceeds $3-1 / 4$ percent by the end of 2005. According to the model simulation, adopting the market-based path for the funds rate has little effect on output next year, but in 2005 the increase in real GDP is less than 3 percent. The slowing in growth to below potential implies that the unemployment rate, after falling in 2004, begins to rise in 2005. Core inflation in 2005 edges below 1 percent in this scenario.

Flat funds rate. In this scenario, the federal funds rate is held at its current level through the end of 2005. Given the lags in the effects of monetary policy on the economy, and with the funds rate in the baseline rising only modestly
over the course of 2005, the increase in real GDP is just a little faster than in the baseline in that year, and inflation is unchanged.
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| Interval |  | Nominal GDP |  | Real GDP |  | GDP chain-weighted price index |  | Consumer price index ${ }^{1}$ |  | Unemployment rate ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 10/22/03 | 12/03/03 | 10/22/03 | 12/03/03 | 10/22/03 | 12/03/03 | 10/22/03 | 12/03/03 | 10/22/03 | 12/03/03 |
| ANNUAL |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  | 4.5 | 4.8 | 2.9 | 3.1 | 1.6 | 1.6 | 2.3 | 2.3 | 6.1 | 6.0 |
| 2004 |  | 6.1 | 6.6 | 5.0 | 5.4 | 1.1 | 1.1 | 1.1 | 1.2 | 5.8 | 5.7 |
| 2005 |  | 5.5 | 5.5 | 4.4 | 4.3 | 1.1 | 1.1 | 1.1 | 1.2 | 5.1 | 5.1 |
| QUARTERLY |  |  |  |  |  |  |  |  |  |  |  |
| 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 | 3.8 | 3.8 | 1.4 | 1.4 | 2.4 | 2.4 | 3.8 | 3.8 | 5.8 | 5.8 |
|  | Q2 | 4.3 | 4.3 | 3.3 | 3.3 | 1.0 | 1.0 | 0.7 | 0.7 | 6.2 | 6.2 |
|  | Q3 | 8.2 | 10.1 | 6.3 | 8.2 | 1.8 | 1.7 | 2.4 | 2.4 | 6.1 | 6.1 |
|  | Q4 | 5.2 | 5.5 | 4.4 | 4.4 | 0.8 | 1.1 | 1.2 | 1.3 | 6.2 | 6.0 |
| 2004 | Q1 | 6.3 | 6.6 | 5.2 | 5.3 | 1.1 | 1.2 | 0.7 | 1.0 | 6.0 | 6.0 |
|  | Q2 | 6.1 | 6.4 | 5.2 | 5.5 | 0.9 | 0.9 | 0.9 | 0.9 | 5.8 | 5.8 |
|  | Q3 | 6.1 | 6.3 | 5.1 | 5.3 | 1.0 | 0.9 | 1.0 | 1.0 | 5.7 | 5.5 |
|  | Q4 | 5.8 | 6.0 | 4.8 | 4.9 | 1.0 | 1.0 | 1.1 | 1.2 | 5.4 | 5.3 |
| 2005 | Q1 | 5.3 | 5.3 | 3.9 | 3.8 | 1.4 | 1.4 | 1.2 | 1.2 | 5.2 | 5.2 |
|  | Q2 | 5.2 | 5.1 | 4.2 | 4.0 | 1.0 | 1.1 | 1.2 | 1.3 | 5.1 | 5.1 |
|  | Q3 | 5.0 | 5.0 | 4.1 | 3.9 | 1.0 | 1.1 | 1.2 | 1.3 | 5.1 | 5.0 |
|  | Q4 | 5.0 | 4.8 | 4.0 | 3.7 | 0.9 | 1.0 | 1.3 | 1.4 | 5.1 | 5.0 |
| TWO-QUARTER ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |
| 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 | 4.1 | $4.1$ | 2.3 | $2.3$ | 1.7 | $1.7$ | 2.2 | $2.2$ | $0.3$ | 0.3 |
|  | Q4 | 6.7 | 7.8 | 5.3 | 6.3 | 1.3 | 1.4 | 1.7 | 1.8 | 0.0 | -0.2 |
| 2004 | Q2 | 6.2 | 6.5 | 5.2 | 5.4 | 1.0 | 1.0 | 0.8 | 0.9 | -0.4 | -0.2 |
|  | Q4 | 6.0 | 6.1 | 5.0 | 5.1 | 1.0 | 0.9 | 1.1 | 1.1 | -0.4 | -0.5 |
| 2005 | Q2 | 5.3 | 5.2 | 4.0 | 3.9 | 1.2 | 1.3 | 1.2 | 1.3 | -0.3 | -0.2 |
|  | Q4 | 5.0 | 4.9 | 4.0 | 3.8 | 0.9 | 1.1 | 1.2 | 1.3 | 0.0 | -0.1 |
| FOUR-QUARTER ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  | 5.4 | 5.9 | 3.8 | 4.3 | 1.5 | 1.5 | 2.0 | 2.0 | 0.3 | 0.1 |
| 2004 Q4 |  | 6.1 | 6.3 | 5.1 | 5.3 | 1.0 | 1.0 | 0.9 | 1.0 | -0.8 | -0.7 |
| 2005 | Q4 | 5.1 | 5.0 | 4.0 | 3.8 | 1.1 | 1.2 | 1.2 | 1.3 | -0.4 | -0.3 |

1. For all urban consumers.
2. Percent change from two quarters earlier; for unemployment rate, change in percentage points
3. Percent change from four quarters earlier; for unemployment rate, change in percentage points.

| Item | Units ${ }^{1}$ | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | $2003$ | $\begin{gathered} \text { Projected } \\ 2004 \end{gathered}$ | $2005$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Expenditures |  |  |  |  |  |  |  |  |  |  |
| Nominal GDP | Bill. \$ | 8318.4 | 8781.5 | 9274.3 | 9824.6 | 10082.2 | 10446.2 | 10942.7 | 11659.9 | 12301.5 |
| Real GDP | Bill. Ch. \$ | 8159.5 | 8508.9 | 8859.0 | 9191.4 | 9214.5 | 9439.9 | 9732.6 | 10256.3 | 10702.2 |
| Real GDP | \% change | 4.3 | 4.8 | 4.3 | 2.3 | 0.1 | 2.9 | 4.3 | 5.3 | 3.8 |
| Gross domestic purchases |  | 5.0 | 5.8 | 5.2 | 2.9 | 0.1 | 3.7 | 4.1 | 5.5 | 4.0 |
| Final sales |  | 3.9 | 4.7 | 4.2 | 2.6 | 1.6 | 1.7 | 4.4 | 4.9 | 3.8 |
| Priv. dom. final purchases |  | 5.1 | 6.3 | 5.2 | 3.7 | 0.9 | 2.3 | 4.4 | 5.7 | 4.3 |
| Personal cons. expenditures |  | 4.1 | 5.0 | 5.0 | 3.5 | 2.8 | 2.7 | 3.5 | 4.6 | 4.2 |
| Durables |  | 8.8 | 12.7 | 10.0 | 3.8 | 13.2 | 1.9 | 10.6 | 8.3 | 7.9 |
| Nondurables |  | 2.5 | 5.0 | 4.9 | 3.0 | 1.7 | 3.4 | 4.5 | 5.6 | 4.8 |
| Services |  | 3.9 | 3.6 | 4.0 | 3.8 | 1.3 | 2.5 | 1.7 | 3.4 | 3.2 |
| Business fixed investment |  | 11.8 | 12.3 | 6.6 | 6.2 | -9.3 | -1.7 | 6.0 | 14.7 | 7.2 |
| Equipment \& Software |  | 13.7 | 14.9 | 9.7 | 5.2 | -8.8 | 3.3 | 7.9 | 18.1 | 7.4 |
| Nonres. structures |  | 6.5 | 4.9 | -2.5 | 9.3 | -10.6 | -15.9 | 0.1 | 3.0 | 6.8 |
| Residential structures |  | 3.5 | 10.0 | 4.0 | -1.2 | 1.0 | 6.7 | 13.6 | 2.0 | -0.4 |
| Exports |  | 8.5 | 2.3 | 4.9 | 7.3 | -11.4 | 3.9 | 5.2 | 10.5 | 10.1 |
| Imports |  | 14.3 | 10.8 | 11.9 | 11.1 | -8.0 | 10.1 | 3.6 | 10.3 | 9.0 |
| Gov't. cons. \& investment |  | 2.4 | 2.7 | 4.5 | 1.3 | 5.1 | 3.6 | 3.3 | 2.5 | 2.1 |
| Federal |  | 0.1 | 0.6 | 4.0 | -1.2 | 7.5 | 7.5 | 7.7 | 4.5 | 2.0 |
| Defense |  | -1.4 | -0.8 | 4.4 | -2.5 | 7.4 | 9.3 | 10.2 | 5.0 | 1.5 |
| State \& local |  | 3.7 | 3.8 | 4.8 | 2.6 | 3.9 | 1.6 | 0.9 | 1.3 | 2.1 |
| Change in bus. inventories Nonfarm | Bill. Ch. \$ | 63.8 60.6 | 76.7 75.0 | 62.8 64.1 | 65.0 67.2 | -61.4 -63.2 | 5.2 4.1 | -2.6 -3.2 | 46.5 45.1 | 81.8 80.2 |
| Net exports |  | -113.3 | -221.1 | -320.5 | -398.8 | -415.9 | -488.5 | -528.8 | -571.8 | -618.1 |
| Nominal ${ }_{\text {GDP }}$ | \% change | 6.2 | 6.0 | 5.9 | 4.6 | 2.0 | 4.3 | 5.9 | 6.3 | 5.0 |
| GDP Gap ${ }^{2}$ | \% | -0.8 | -1.6 | -2.1 | -2.2 | 1.0 | 1.9 | 2.5 | 0.8 | 0.1 |
| Employment and Production |  |  |  |  |  |  |  |  |  |  |
|  |  | 122.8 | 125.9 | 129.0 | 131.8 | 131.8 | 130.4 | 130.1 | 132.7 | 137.2 |
| Unemployment rate | $\%$ | 4.9 | 4.5 | 4.2 | 4.0 | 4.8 | 5.8 | 6.0 | 5.7 | 5.1 |
| Industrial prod. index | \% change | 8.1 | 4.4 | 4.9 | 2.3 | -5.2 | 1.3 | 1.4 | 6.2 | 4.7 |
| Capacity util. rate - mfg. | $\%$ | 82.6 | 82.0 | 81.4 | 81.1 | 75.4 | 73.9 | 73.3 | 76.2 | 79.0 |
| Housing starts | Millions | 1.47 | 1.62 | 1.64 | 1.57 | 1.60 | 1.70 | 1.82 | 1.88 | 1.85 |
| Light motor vehicle sales |  | 15.07 | 15.41 | 16.78 | 17.24 | 17.02 | 16.70 | 16.55 | 17.21 | 17.66 |
| North Amer. produced |  | 13.14 | 13.39 | 14.30 | 14.38 | 13.94 | 13.42 | 13.23 | 13.79 | 14.16 |
| Other |  | 1.93 | 2.02 | 2.48 | 2.86 | 3.08 | 3.29 | 3.32 | 3.42 | 3.50 |
| Income and Saving |  |  |  |  |  |  |  |  |  |  |
| Nominal GNP | Bill. \$ | 8325.4 | 8778.1 | 9297.1 | 9848.0 | 10104.1 | 10436.7 | 10940.0 | 11674.1 | 12304.5 |
| Nominal GNP | \% change | 5.7 | 5.6 | 6.9 | 4.6 | 2.1 | 3.8 | 6.0 | 6.4 | 4.9 |
| Nominal personal income |  | 6.3 | 6.7 | 5.1 | 7.7 | 1.4 | 3.6 | 3.8 | 5.9 | 5.8 |
| Real disposable income |  | 3.8 | 5.0 | 2.4 | 4.8 | 0.3 | 5.2 | 3.1 | 5.2 | 4.3 |
| Personal saving rate | \% | 4.2 | 4.7 | 2.6 | 2.8 | 2.3 | 3.7 | 3.3 | 3.7 | 3.8 |
|  | \% change |  |  |  |  |  |  |  |  |  |
| Profit share of GNP | $\%$ | 10.0 | 8.9 | 8.7 | 8.0 | 7.2 | 7.5 | 8.6 | 9.5 | 8.9 |
| Excluding FR Banks |  | 9.7 | 8.6 | 8.4 | 7.7 | 7.0 | 7.3 | 8.4 | 9.4 | 8.7 |
| Federal surpl./deficit | Bill. \$ | -53.3 | 43.8 | 111.9 | 206.9 | 72.0 | -199.9 | -379.7 | -416.4 | -223.0 |
| State \& local surpl./def. |  | 31.0 | 40.7 | 38.3 | 18.0 | -31.3 | -51.5 | -24.1 | -3.1 | 7.2 |
| Ex. social ins. funds |  | 29.9 | 40.0 | 37.4 | 17.8 | -31.2 | -51.4 | -24.0 | -3.1 | 7.2 |
| Gross natl. saving rate | \% | 18.0 | 18.8 | 18.3 | 18.4 | 16.5 | 15.0 | 13.8 | 14.7 | 14.9 |
| Net natl. saving rate |  | 6.7 | 7.5 | 6.8 | 6.7 | 3.8 | 1.9 | 0.9 | 2.3 | 2.6 |
| Prices and Costs |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Gross Domestic Purchases chn.-wt. price index |  | 1.4 | 0.8 | 1.9 | 2.5 | 1.3 | 1.6 | 1.7 | 0.9 | 1.1 |
| PCE chn.-wt. price index |  | 1.5 | 1.1 | 2.0 | 2.5 | 1.5 | 1.8 | 1.7 | 0.9 | 1.0 |
| Ex. food and energy |  | 1.7 | 1.6 | 1.5 | 1.8 | 1.9 | 1.6 | 1.2 | 1.1 | 1.1 |
| CPI |  | 1.9 | 1.5 | 2.6 | 3.4 | 1.8 | 2.2 | 2.0 | 1.0 | 1.3 |
| Ex. food and energy |  | 2.2 | 2.3 | 2.0 | 2.6 | 2.7 | 2.1 | 1.4 | 1.5 | 1.5 |
| ECI, hourly compensation ${ }^{3}$ |  | 3.4 | 3.5 | 3.4 | 4.4 | 4.2 | 3.2 | 4.1 | 3.5 | 3.5 |
|  |  |  |  |  |  |  |  |  |  |  |
| Compensation per Hour |  | 3.4 | 5.3 | 4.2 | 7.2 | 2.7 | 2.8 | 2.7 | 3.1 | 3.4 |
| Unit labor cost |  | 1.2 | 2.3 | 1.4 | 4.9 | -0.5 | -1.6 | -2.3 | 1.3 | 2.9 |

[^3]Strictly Confidential <FR> Class II FOMC

REAL GROSS DOMESTIC PRODUCT AND RELATED ITEMS, QUARTERLY VALUES
(Seasonally adjusted, annual rate except as noted)


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

Strictly Confidential <FR> Class II FOMC

REAL GROSS DOMESTIC PRODUCT AND RELATED ITEMS, QUARTERLY VALUES
(Seasonally adjusted, annual rate except as noted)

| Item | Units | - - - - - - - - - - - - - - Projected - - - - - - - - - - - - - - - |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 2003 \\ \text { Q3 } \end{gathered}$ | $\begin{aligned} & 2003 \\ & Q 4 \end{aligned}$ | $\begin{aligned} & 2004 \\ & \text { Q1 } \end{aligned}$ | $\begin{gathered} 2004 \\ \text { Q2 } \end{gathered}$ | $\begin{gathered} 2004 \\ \text { Q3 } \end{gathered}$ | $\begin{gathered} 2004 \\ Q 4 \end{gathered}$ | $\begin{aligned} & 2005 \\ & \text { Q1 } \end{aligned}$ | $\begin{gathered} 2005 \\ \text { Q2 } \end{gathered}$ | $\begin{gathered} 2005 \\ \text { Q3 } \end{gathered}$ | $\begin{aligned} & 2005 \\ & \text { Q4 } \end{aligned}$ |
| EXPENDITURES |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GDP | Bill. \$ | 11065.4 | 11214.1 | 11394.3 | 11572.9 | 11750.5 | 11922.0 | 12077.3 | 12228.4 | 12377.6 | 12522.5 |
| Real GDP | Bill. Ch. \$ | 9821.6 | 9927.4 | 10056.8 | 10192.0 | 10325.5 | 10450.8 | 10549.3 | 10652.9 | 10754.4 | 10852.2 |
| Real GDP | \% change | 8.2 | 4.4 | 5.3 | 5.5 | 5.3 | 4.9 | 3.8 | 4.0 | 3.9 | 3.7 |
| Gross domestic purchases |  | 7.0 | 4.5 | 5.5 | 5.9 | 5.6 | 4.9 | 4.1 | 4.3 | 4.0 | 3.5 |
| Final sales |  | 8.0 | 3.2 | 5.1 | 4.7 | 4.6 | 5.2 | 2.8 | 4.0 | 4.1 | 4.3 |
| Priv. dom. final purchases |  | 8.2 | 3.5 | 5.4 | 5.9 | 5.6 | 5.8 | 3.3 | 4.8 | 4.7 | 4.5 |
| Personal cons. expenditures |  | 6.4 | 2.0 | 4.3 | 4.9 | 4.7 | 4.6 | 4.5 | 4.4 | 4.1 | 3.7 |
| Durables |  | 26.5 | -3.0 | 4.1 | 11.2 | 8.9 | 9.2 | 8.7 | 7.8 | 7.4 | 8.0 |
| Nondurables |  | 7.6 | 3.0 | 5.8 | 5.8 | 5.5 | 5.2 | 5.0 | 5.0 | 4.8 | 4.3 |
| Services |  | 2.1 | 2.6 | 3.5 | 3.3 | 3.5 | 3.4 | 3.4 | 3.4 | 3.2 | 2.6 |
| Business fixed investment |  | 14.0 | 8.1 | 14.7 | 13.8 | 14.1 | 16.1 | -3.0 | 10.2 | 10.9 | 11.6 |
| Equipment \& Software |  | 18.6 | 10.7 | 18.2 | 17.2 | 17.2 | 19.6 | -4.8 | 11.3 | 11.8 | 12.2 |
| Nonres. structures |  | -0.7 | -0.3 | 2.9 | 2.2 | 3.2 | 3.7 | 3.9 | 6.1 | 7.9 | 9.4 |
| Residential structures |  | 23.4 | 15.0 | 3.2 | 3.3 | 0.6 | 1.0 | 0.7 | -0.6 | -0.8 | -0.7 |
| Exports |  | 11.0 | 12.8 | 8.1 | 10.5 | 10.7 | 12.8 | 7.7 | 10.4 | 10.2 | 12.1 |
| Imports |  | 1.5 | 11.3 | 8.9 | 12.2 | 10.5 | 9.7 | 8.2 | 10.5 | 9.1 | 8.3 |
| Gov't. cons. \& investment |  | 1.3 | 3.2 | 4.9 | 2.0 | 1.5 | 1.7 | 2.1 | 1.8 | 2.0 | 2.4 |
| Federal |  | -0.4 | 6.8 | 11.9 | 3.5 | 1.4 | 1.5 | 2.3 | 1.6 | 1.6 | 2.6 |
| Defense |  | -1.6 | 6.4 | 15.4 | 3.8 | 0.8 | 0.7 | 1.9 | 0.9 | 0.9 | 2.3 |
| State \& local |  | 2.3 | 1.1 | 0.9 | 1.1 | 1.5 | 1.8 | 2.0 | 2.0 | 2.2 | 2.3 |
| Change in bus. inventories Nonfarm | Bill. Ch. \$ | -14.1 -14.4 | 16.6 14.9 | 22.4 21.2 | 42.8 41.5 | 62.9 | 57.7 56.2 | 88.3 86.7 | 89.2 87.5 | 83.2 81.6 | 66.5 64.8 |
| Net exports |  | -524.2 | -534.5 | -548.3 | -568.7 | -582.6 | -587.6 | -601.0 | -616.7 | -627.0 | -627.9 |
| Nominal GDP | \% change | 10.1 | 5.5 | 6.6 | 6.4 | 6.3 | 6.0 | 5.3 | 5.1 | 5.0 | 4.8 |
| GDP Gap ${ }^{1}$ |  | 2.1 | 1.9 | 1.5 | 1.0 | 0.6 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 |
| EMPLOYMENT AND PRODUCTION |  |  |  |  |  |  |  |  |  |  |  |
| Nonfarm payroll employment | Millions | 129.9 | 130.3 | 131.0 | 132.1 | 133.3 | 134.5 | 135.7 | 136.7 | 137.7 | 138.6 |
| Unemployment rate | \% | 6.1 | 6.0 | 6.0 | 5.8 | 5.5 | 5.3 | 5.2 | 5.1 | 5.0 | 5.0 |
| Industrial prod. index | \% change | 4.0 | 4.9 | 6.4 | 6.4 | 6.0 | 5.9 | 4.9 | 4.7 | 4.6 | 4.8 |
| Capacity util. rate - mfg. | $\%$ | 73.2 | 73.9 | 74.9 | 75.8 | 76.7 | 77.6 | 78.2 | 78.7 | 79.3 | 79.9 |
| Housing starts | Millions | 1.88 | 1.93 | 1.87 | 1.88 | 1.88 | 1.88 | 1.86 | 1.86 | 1.85 | 1.84 |
| Light motor vehicle sales |  | 17.55 | 16.60 | 16.79 | 17.19 | 17.36 | 17.48 | 17.53 | 17.61 | 17.65 | 17.83 |
| North Amer. produced |  | 14.18 | 13.37 | 13.45 | 13.80 | 13.90 | 14.00 | 14.05 | 14.13 | 14.15 | 14.30 |
| Other |  | 3.37 | 3.23 | 3.34 | 3.39 | 3.46 | 3.48 | 3.48 | 3.48 | 3.50 | 3.53 |
| INCOME AND SAVING |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GNP | Bill. \$ | 11063.3 | 11219.4 | 11407.7 | 11588.1 | 11765.1 | 11935.6 | 12088.8 | 12235.7 | 12378.2 | 12515.4 |
| Nominal GNP | \% change | 10.2 | 5.8 | 6.9 | 6.5 | 6.3 | 5.9 | 5.2 | 4.9 | 4.7 | 4.5 |
| Nominal personal income |  | 4.1 | 4.7 | 5.9 | 5.6 | 6.1 | 6.2 | 6.2 | 5.7 | 5.6 | 5.6 |
| Real disposable income |  | 7.4 | 1.1 | 6.7 | 4.4 | 4.8 | 4.8 | 4.1 | 4.4 | 4.3 | 4.3 |
| Personal saving rate | \% | 3.4 | 3.2 | 3.8 | 3.7 | 3.7 | 3.8 | 3.7 | 3.7 | 3.8 | 3.9 |
| Corp. profits, IVA \& CCAdj. | \% change | 58.6 | 9.6 | 21.0 | 12.0 | 5.9 | 1.0 | -7.7 | -3.2 | -4.0 | -5.8 |
| Profit share of GNP | \% | 9.1 | 9.2 | 9.5 | 9.6 | 9.6 | 9.5 | 9.2 | 9.0 | 8.8 | 8.6 |
| Excluding FR Banks |  | 8.9 | 9.0 | 9.3 | 9.4 | 9.4 | 9.3 | 9.0 | 8.8 | 8.6 | 8.4 |
| Federal surpl./deficit | Bill. \$ |  |  |  |  | -401.8 | -355.3 | -272.3 | -219.7 | -197.5 | -202.6 |
| State \& local surpl./def. |  | -9.7 | -3.8 | -9.2 | -2.4 | -4.6 | 3.7 | 5.2 | 6.3 | 7.5 | 9.8 |
| Ex. social ins. funds |  | -9.7 | -3.8 | -9.2 | -2.4 | -4.6 | 3.7 | 5.2 | 6.3 | 7.5 | 9.8 |
| Gross natl. saving rate | \% | 13.8 | 14.1 | 14.3 | 14.6 | 14.9 | 15.1 | 14.9 | 15.0 | 15.0 | 14.9 |
| Net natl. saving rate |  | 1.0 | 1.5 | 1.8 | 2.2 | 2.5 | 2.7 | 2.5 | 2.6 | 2.6 | 2.6 |
| PRICES AND COSTS |  |  |  |  |  |  |  |  |  |  |  |
| GDP chn.-wt. price index | \% change | 1.7 | 1.1 | 1.2 | 0.9 | 0.9 | 1.0 | 1.4 | 1.1 | 1.1 | 1.0 |
| Gross Domestic Purchases chn.-wt. price index |  | 1.9 | 1.1 | 1.2 | 0.8 | 0.8 | 0.9 | 1.3 | 1.0 | 1.0 | 1.0 |
| PCE chn.-wt. price index |  | 2.3 | 0.9 | 0.8 | 0.8 | 0.9 | 0.9 | 1.0 | 1.0 | 1.0 | 1.1 |
| Ex. food and energy |  | 1.7 | 1.2 | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| CPI |  | 2.4 | 1.3 | 1.0 | 0.9 | 1.0 | 1.2 | 1.2 | 1.3 | 1.3 | 1.4 |
| Ex. food and energy |  | 1.7 | 1.8 | 1.6 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| ECI, hourly compensation ${ }^{2}$ |  | 4.2 | 3.3 | 3.5 | 3.5 | 3.5 | 3.5 | 3.4 | 3.4 | 3.5 | 3.5 |
| Nonfarm business sector |  |  |  |  |  |  |  |  |  |  |  |
| Output per hour |  | 9.4 | 2.4 | 2.9 | 1.8 | 1.3 | 0.8 | 0.2 | 0.6 | 0.6 | 0.4 |
| Compensation per hour |  | 3.0 | 1.7 | 3.0 | 3.0 | 3.1 | 3.1 | 3.4 | 3.3 | 3.3 | 3.4 |
| Unit labor cost |  | -5.8 | -0.7 | 0.1 | 1.2 | 1.7 | 2.4 | 3.2 | 2.7 | 2.7 | 3.0 |

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Class II FOMC
CONTRIBUTIONS TO GROWTH IN REAL GROSS DOMESTIC PRODUCT AND RELATED ITEMS $\quad$ December 3,2003

| Item | $\begin{gathered} 2001 \\ \text { Q3 } \end{gathered}$ | $\begin{gathered} 2001 \\ \text { Q4 } \end{gathered}$ | $\begin{aligned} & 2002 \\ & \mathrm{Q1} \end{aligned}$ | $\begin{gathered} 2002 \\ \mathrm{Q} 2 \end{gathered}$ | $\begin{aligned} & 2002 \\ & \text { Q3 } \end{aligned}$ | $\begin{gathered} 2002 \\ \mathrm{Q4} \end{gathered}$ | $\begin{gathered} 2003 \\ \text { Q1 } \end{gathered}$ | Projected |  | $\begin{gathered} 01 Q 4 / \\ 00 Q 4 \end{gathered}$ |  Projected <br> $0294 /$ $0324 /$ <br> 0124 $02 Q 4$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | $\begin{aligned} & 2003 \\ & \mathrm{Q} 2 \end{aligned}$ | $\begin{aligned} & 2003 \\ & \text { Q3 } \end{aligned}$ |  |  |  |
| Real GDP | -0.3 | 2.7 | 5.0 | 1.3 | 4.0 | 1.4 | 1.4 | 3.3 | 8.2 | 0.1 | 2.9 | 4.3 |
| Gross dom. purchases | -0.1 | 3.0 | 5.8 | 2.7 | 4.0 | 3.0 | 0.6 | 4.6 | 7.4 | 0.2 | 3.9 | 4.3 |
| Final sales | -0.2 | 4.1 | 2.5 | -0.1 | 3.5 | 1.1 | 2.2 | 4.0 | 8.1 | 1.6 | 1.7 | 4.4 |
| Priv. dom. final purchases | 0.3 | 2.6 | 2.2 | 1.1 | 2.9 | 1.8 | 1.4 | 3.7 | 7.0 | 0.8 | 2.0 | 3.7 |
| Personal cons. expenditures | 1.0 | 4.1 | 2.2 | 1.2 | 2.9 | 1.2 | 1.4 | 2.7 | 4.5 | 1.9 | 1.9 | 2.5 |
| Durables | 0.4 | 2.5 | -0.6 | 0.2 | 1.7 | -0.7 | -0.2 | 1.8 | 2.0 | 1.0 | 0.2 | 0.8 |
| Nondurables | 0.3 | 0.7 | 1.6 | -0.0 | 0.2 | 1.0 | 1.2 | 0.3 | 1.6 | 0.3 | 0.7 | 0.9 |
| Services | 0.4 | 0.9 | 1.2 | 1.1 | 1.0 | 0.9 | 0.4 | 0.6 | 1.0 | 0.5 | 1.0 | 0.7 |
| Business fixed investment | -0.7 | -1.3 | -0.7 | -0.3 | -0.1 | 0.2 | -0.5 | 0.7 | 1.4 | -1.2 | -0.2 | 0.6 |
| Equipment \& Software | -0.8 | -0.2 | -0.2 | 0.3 | 0.5 | 0.5 | -0.4 | 0.6 | 1.4 | -0.8 | 0.3 | 0.6 |
| Nonres. structures | 0.1 | -1.1 | -0.4 | -0.5 | -0.6 | -0.3 | -0.1 | 0.1 | -0.0 | -0.4 | -0.5 | 0.0 |
| Residential structures | 0.0 | -0.2 | 0.6 | 0.1 | 0.1 | 0.4 | 0.5 | 0.3 | 1.0 | 0.0 | 0.3 | 0.6 |
| Net exports | -0.2 | -0.3 | -0.8 | -1.4 | -0.0 | -1.6 | 0.8 | -1.3 | 0.8 | -0.1 | -1.0 | -0.0 |
| Exports | -1.9 | -1.0 | 0.3 | 1.3 | 0.5 | -0.6 | -0.1 | -0.1 | 1.0 | -1. 3 | 0.4 | 0.5 |
| Imports | 1.7 | 0.7 | -1.1 | -2.7 | -0.5 | -1.0 | 0.9 | -1.2 | -0.2 | 1.2 | -1.3 | -0.5 |
| Government cons. \& invest. | -0.2 | 1.9 | 1.0 | 0.3 | 0.6 | 0.9 | 0.1 | 1.6 | 0.3 | 0.9 | 0.7 | 0.6 |
| Federal | 0.1 | 0.8 | 0.5 | 0.5 | 0.3 | 0.7 | 0.1 | 1.6 | -0.0 | 0.4 | 0.5 | 0.5 |
| Defense | 0.2 | 0.5 | 0.5 | 0.3 | 0.3 | 0.5 | -0.2 | 1.7 | -0.1 | 0.3 | 0.4 | 0.5 |
| Nondefense | -0.1 | 0.3 | 0.0 | 0.2 | -0.0 | 0.3 | 0.2 | -0.1 | 0.1 | 0.2 | 0.1 | 0.1 |
| State and local | -0.3 | 1.1 | 0.6 | -0.2 | 0.3 | 0.2 | 0.0 | -0.0 | 0.3 | 0.5 | 0.2 | 0.1 |
| Change in bus. inventories | -0.1 | -1.4 | 2.6 | 1.3 | 0.6 | 0.3 | -0.8 | -0.7 | 0.2 | -1.5 | 1.2 | -0.1 |
| Nonfarm | -0.3 | -1.4 | 2.5 | 1.5 | 0.7 | 0.2 | -0.9 | -0.7 | 0.1 | -1.6 | 1.2 | -0.1 |
| Farm | 0.2 | 0.1 | 0.1 | -0.2 | -0.1 | 0.1 | 0.1 | -0.1 | 0.1 | 0.0 | -0.0 | 0.1 |

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

| Item | $2003$ Q4 | -- 2004 Q1 | --- 2004 Q2 | -- 2004 23 | roject 2004 24 | -- 2005 Q1 | --- 2005 Q2 | --- 2005 Q3 | $\begin{aligned} & -- \\ & 2005 \\ & \text { Q4 } \end{aligned}$ | $\begin{gathered} ---- \\ 0394 / \\ 0294 \end{gathered}$ | $\begin{gathered} \text { jected } \\ 04 \mathrm{Q4/} \\ 03 \mathrm{Q} \end{gathered}$ | $\begin{gathered} ---- \\ 05 Q 4 / \\ 04 Q 4 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Real GDP | 4.4 | 5.3 | 5.5 | 5.3 | 4.9 | 3.8 | 4.0 | 3.9 | 3.7 | 4.3 | 5.3 | 3.8 |
| Gross dom. purchases | 4.7 | 5.8 | 6.2 | 5.8 | 5.1 | 4.2 | 4.5 | 4.2 | 3.7 | 4.3 | 5.7 | 4.1 |
| Final sales | 3.3 | 5.1 | 4.8 | 4.6 | 5.1 | 2.8 | 4.0 | 4.1 | 4.2 | 4.4 | 4.9 | 3.8 |
| Priv. dom. final purchases | 3.0 | 4.6 | 5.0 | 4.8 | 4.9 | 2.8 | 4.1 | 4.0 | 3.8 | 3.7 | 4.9 | 3.7 |
| Personal cons. expenditures | 1.4 | 3.0 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.6 | 2.5 | 3.2 | 2.9 |
| Durables | -0.3 | 0.3 | 0.9 | 0.7 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 | 0.8 | 0.7 | 0.6 |
| Nondurables | 0.6 | 1.2 | 1.2 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 | 0.9 | 1.1 | 1.0 |
| Services | 1.1 | 1.5 | 1.4 | 1.5 | 1.4 | 1.4 | 1.4 | 1.3 | 1.1 | 0.7 | 1.4 | 1.3 |
| Business fixed investment | 0.8 | 1.5 | 1.4 | 1.5 | 1.7 | -0.3 | 1.1 | 1.2 | 1.3 | 0.6 | 1.5 | 0.8 |
| Equipment \& Software | 0.8 | 1.4 | 1.4 | 1.4 | 1.6 | -0.4 | 1.0 | 1.0 | 1.0 | 0.6 | 1.5 | 0.7 |
| Nonres. structures | -0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.0 | 0.1 | 0.2 |
| Residential structures | 0.7 | 0.2 | 0.2 | 0.0 | 0.1 | 0.0 | -0.0 | -0.0 | -0.0 | 0.6 | 0.1 | -0.0 |
| Net exports | -0.3 | -0.5 | -0.7 | -0.4 | -0.1 | -0.4 | -0.5 | -0.3 | -0.0 | -0.0 | -0.4 | -0.3 |
| Exports | 1.2 | 0.8 | 1.0 | 1.0 | 1.2 | 0.8 | 1.0 | 1.0 | 1.2 | 0.5 | 1.0 | 1.0 |
| Imports | -1.5 | -1.2 | -1.7 | -1.5 | -1.4 | -1.2 | -1.5 | -1.3 | -1.2 | -0.5 | -1.5 | -1.3 |
| Government cons. \& invest. | 0.6 | 0.9 | 0.4 | 0.3 | 0.3 | 0.4 | 0.3 | 0.4 | 0.4 | 0.6 | 0.5 | 0.4 |
| Federal | 0.5 | 0.8 | 0.3 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.2 | 0.5 | 0.3 | 0.1 |
| Defense | 0.3 | 0.7 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.5 | 0.2 | 0.1 |
| Nondefense | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| State and local | 0.1 | 0.1 | 0.1 | 0.2 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 |
| Change in bus. inventories | 1.1 | 0.2 | 0.7 | 0.7 | -0.2 | 1.0 | 0.0 | -0.2 | -0.6 | -0.1 | 0.4 | 0.1 |
| Nonfarm | 1.1 | 0.2 | 0.7 | 0.7 | -0.2 | 1.1 | 0.0 | -0.2 | -0.6 | -0.1 | 0.4 | 0.1 |
| Farm | 0.0 | -0.0 | -0.0 | -0.0 | 0.0 | -0.0 | -0.0 | -0.0 | -0.0 | 0.1 | -0.0 | -0.0 |

Note: Components may not sum to totals because of rounding.
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| Item | Fiscal year |  |  |  | 2003 |  |  |  | 2004 |  |  |  | 2005 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2002^{\text {a }}$ | $2003{ }^{\text {a }}$ | 2004 | 2005 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 ${ }^{\text {a }}$ | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget |  |  |  |  | -Not seasonally adjusted |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{1}$ | 1853 | 1782 | 1819 | 2030 | 398 | 528 | 429 | 441 | 394 | 522 | 462 | 465 | 436 | 607 | 521 | 512 |
| Outlays ${ }^{1}$ | 2011 | 2157 | 2304 | 2399 | 543 | 544 | 534 | 581 | 584 | 576 | 563 | 608 | 600 | 594 | 597 | 619 |
| Surplus/deficit ${ }^{1}$ | -158 | -374 | -485 | -370 | -145 | -17 | -105 | -139 | -190 | -55 | -101 | -143 | -164 | 13 | -76 | -107 |
| On-budget | -315 | -535 | -650 | -559 | -169 | -91 | -113 | -180 | -227 | -129 | -114 | -187 | -206 | -69 | -97 | -158 |
| Off-budget | 157 | 161 | 165 | 190 | 24 | 75 | 9 | 40 | 37 | 75 | 13 | 44 | 42 | 83 | 21 | 51 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 221 | 374 | 518 | 387 | 64 | 106 | 108 | 123 | 173 | 87 | 135 | 126 | 157 | 25 | 78 | 83 |
| Cash decrease | -17 | 26 | -10 | 0 | 20 | -17 | -5 | 1 | 9 | -14 | -5 | 15 | 0 | -30 | 15 | 15 |
| Other ${ }^{2}$ | -46 | -25 | -23 | -17 | 62 | -73 | 2 | 16 | 9 | -18 | -29 | 2 | 7 | -9 | -17 | 9 |
| Cash operating balance, end of period | 61 | 35 | 45 | 45 | 13 | 30 | 35 | 34 | 26 | 40 | 45 | 30 | 30 | 60 | 45 | 30 |
| NIPA federal sector |  |  |  |  | Seasonally adjusted annual rates |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 1906 | 1848 | 1893 | 2144 | 1865 | 1871 | 1794 | 1876 | 1862 | 1891 | 1944 | 2011 | 2132 | 2195 | 2238 | 2259 |
| Expenditures | 2039 | 2192 | 2320 | 2405 | 2145 | 2262 | 2246 | 2274 | 2326 | 2336 | 2346 | 2367 | 2404 | 2415 | 2435 | 2462 |
| Consumption expenditures | 570 | 641 | 701 | 734 | 627 | 664 | 663 | 674 | 704 | 711 | 714 | 718 | 735 | 739 | 744 | 750 |
| Defense | 375 | 428 | 475 | 496 | 409 | 452 | 447 | 455 | 478 | 482 | 484 | 486 | 497 | 499 | 501 | 505 |
| Nondefense | 195 | 213 | 226 | 238 | 218 | 213 | 216 | 219 | 226 | 228 | 230 | 232 | 238 | 240 | 243 | 245 |
| Other spending | 1469 | 1552 | 1619 | 1671 | 1519 | 1597 | 1583 | 1600 | 1622 | 1625 | 1631 | 1648 | 1669 | 1676 | 1691 | 1712 |
| Current account surplus | -133 | -345 | -427 | -261 | -280 | -390 | -451 | -398 | -464 | -445 | -402 | -355 | -272 | -220 | -197 | -203 |
| Gross investment | 106 | 113 | 127 | 131 | 109 | 116 | 118 | 122 | 127 | 129 | 129 | 130 | 131 | 132 | 133 | 134 |
| Gross saving less gross investment ${ }^{3}$ | -138 | -352 | -444 | -278 | -284 | -400 | -462 | -411 | -481 | -463 | -419 | -372 | -289 | -236 | -213 | -219 |
| Fiscal indicators ${ }^{4}$ <br> High-employment (HEB) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| surplus/deficit | -73 | -262 | -395 | -274 | -188 | -296 | -384 | -337 | -425 | -425 | -396 | -363 | -284 | -235 | -215 | -221 |
| of potential GDP | 1.8 | 1.7 | 1.0 | -1.1 | 0.0 | 0.9 | 0.7 | -0.5 | 0.7 | -0.0 | -0.3 | -0.3 | -0.7 | -0.4 | -0.2 | 0.0 |
| Fiscal impetus (FI) percent of GDP | 1.1 | 1.1 | 1.1 | -0.3 | 0.0 | 0.7 | 0.2 | 0.4 | 0.3 | 0.2 | 0.1 | 0.2 | -0.5 | 0.0 | 0.0 | 0.1 |

 from the on-budget surplus and shown separately as off-budget, as classified under current law.
2. Other mean of thancing are checks issued less checks paid, accrued items, and changes in opernent 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.


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Class II FOMC

| Category |  |  |  |  |  |  |  |  | nally adj | ted annu | rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Calendar year |  |  |  | 2003 |  | 2004 |  |  |  | 2005 |  |  |  |
|  | 2002 | 2003 | 2004 | 2005 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Net funds raised by domestic nonfinancial sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Total | 1333.5 | 1640.7 | 1510.8 | 1463.3 | 1471.5 | 1414.3 | 1439.6 | 1867.1 | 1367.0 | 1369.3 | 1543.0 | 1695.3 | 1353.4 | 1261.6 |
| 2 Net equity issuance | -41.9 | -50.4 | -38.8 | -19.5 | -13.0 | -51.0 | -46.0 | -41.0 | -39.0 | -29.0 | -27.0 | -22.0 | -17.0 | -12.0 |
| 3 Net debt issuance | 1375.4 | 1691.1 | 1549.5 | 1482.8 | 1484.5 | 1465.3 | 1485.6 | 1908.1 | 1406.0 | 1398.3 | 1570.0 | 1717.3 | 1370.4 | 1273.6 |
| Borrowing sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nonfinancial business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 Financing gap ${ }^{1}$ | 80.7 | 8.6 | 30.1 | 232.1 | -25.7 | -5.1 | -19.1 | -0.9 | 43.0 | 97.5 | 177.1 | 225.4 | 255.5 | 270.6 |
| 5 Net equity issuance | -41.9 | -50.4 | -38.8 | -19.5 | -13.0 | -51.0 | -46.0 | -41.0 | -39.0 | -29.0 | -27.0 | -22.0 | -17.0 | -12.0 |
| 6 Credit market borrowing | 200.7 | 296.1 | 371.2 | 447.4 | 196.9 | 280.8 | 323.7 | 356.1 | 386.6 | 418.1 | 427.3 | 441.6 | 456.0 | 464.5 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 Net borrowing ${ }^{2}$ | 771.8 | 850.8 | 604.8 | 621.8 | 842.0 | 683.8 | 609.6 | 597.7 | 599.7 | 612.3 | 624.6 | 621.9 | 620.1 | 620.6 |
| 8 Home mortgages | 666.4 | 721.3 | 477.6 | 465.7 | 707.4 | 574.0 | 502.0 | 474.3 | 466.4 | 467.6 | 475.4 | 465.4 | 460.9 | 461.1 |
| 9 Consumer credit | 79.2 | 92.7 | 108.2 | 134.6 | 97.7 | 87.8 | 89.3 | 107.0 | 113.7 | 122.9 | 127.7 | 135.0 | 137.7 | 138.1 |
| $10 \mathrm{Debt} / \mathrm{DPI}\left(\right.$ percent) ${ }^{3}$ | 103.5 | 109.1 | 111.8 | 112.8 | 109.7 | 111.4 | 111.3 | 111.7 | 111.9 | 112.1 | 112.3 | 112.6 | 112.9 | 113.2 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 Net borrowing | 145.4 | 121.2 | 73.8 | 75.3 | 127.9 | 94.5 | 66.8 | 70.8 | 72.8 | 84.8 | 74.8 | 74.8 | 74.8 | 76.8 |
| 12 Current surplus ${ }^{4}$ | 127.7 | 155.7 | 185.3 | 200.8 | 152.5 | 191.8 | 177.7 | 186.7 | 184.6 | 192.2 | 195.4 | 199.1 | 202.6 | 206.1 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 Net borrowing | 257.5 | 423.0 | 499.7 | 335.8 | 317.7 | 406.2 | 485.5 | 883.5 | 346.9 | 283.0 | 443.2 | 579.0 | 219.4 | 111.7 |
| 14 Net borrowing (quarterly, n.s.a.) | 257.5 | 423.0 | 499.7 | 335.8 | 107.6 | 145.6 | 164.9 | 105.1 | 114.9 | 114.7 | 154.4 | 29.0 | 77.9 | 74.5 |
| 15 Unified deficit (quarterly, n.s.a.) | 230.6 | 422.8 | 472.6 | 325.7 | 104.5 | 156.8 | 179.3 | 61.1 | 100.5 | 131.8 | 161.8 | -9.9 | 75.4 | 98.4 |
| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 Funds supplied | 482.5 | 382.8 | 442.0 | 502.2 | -108.9 | 282.8 | 401.9 | 503.6 | 444.4 | 418.3 | 479.9 | 550.4 | 525.5 | 453.1 |
| Memo (percentage of GDP) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 Domestic nonfinancial debt ${ }^{5}$ | 191.3 | 197.1 | 199.7 | 201.7 | 197.9 | 198.7 | 199.0 | 199.7 | 200.3 | 200.4 | 201.0 | 201.8 | 202.5 | 202.7 |
| 18 Domestic nonfinancial borrowing | 13.2 | 15.5 | 13.4 | 12.1 | 13.5 | 13.1 | 13.1 | 16.6 | 12.0 | 11.8 | 13.1 | 14.1 | 11.1 | 10.2 |
| 19 Federal government ${ }^{6}$ | 2.5 | 3.9 | 4.3 | 2.8 | 2.9 | 3.6 | 4.3 | 7.7 | 3.0 | 2.4 | 3.7 | 4.8 | 1.8 | 0.9 |
| 20 Nonfederal | 10.7 | 11.6 | 9.1 | 9.4 | 10.6 | 9.5 | 8.8 | 8.9 | 9.1 | 9.4 | 9.4 | 9.4 | 9.4 | 9.3 |

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.

[^5](This page intentionally blank.)

## International Developments

Real GDP expanded at a stronger-than-expected pace in the third quarter in a number of foreign economies, especially in Asia. However, output growth was weaker than anticipated in our North American trading partners, particularly Mexico. Our estimate for average foreign growth in the third quarter, at a little above $31 / 2$ percent, is up only slightly from the previous Greenbook.

Incoming data for the current quarter are generally consistent with a more rapid strengthening of activity than we had anticipated previously. Accordingly, we have revised up our outlook for foreign growth in the fourth quarter by nearly $1 / 2$ percentage point, to over $33 / 4$ percent. We have nudged up forecasted growth in 2004 a bit as well to nearly $33 / 4$ percent. Growth in 2005 is projected to slow to just under $31 / 2$ percent, unchanged from the October Greenbook.

## Summary of Staff Projections

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

| Indicator | 2003 |  | Projection |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | Q3 | $\begin{gathered} \text { 2003: } \\ \text { Q4 } \end{gathered}$ | 2004 |  |  | 2005 |
|  |  |  |  | Q1 | Q2 | H2 |  |
| Foreign output | . 6 | 3.6 | 3.8 | 3.7 | 3.7 | 3.6 | 3.4 |
| October GB | . 7 | 3.5 | 3.4 | 3.5 | 3.6 | 3.6 | 3.4 |
| Foreign CPI | 2.0 | 1.4 | 2.7 | 2.5 | 1.9 | 1.9 | 1.9 |
| October GB | 2.0 | 1.3 | 2.2 | 2.0 | 1.9 | 2.0 | 1.9 |

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

We project foreign inflation to rise in the current quarter--given the recent runup in nonfuel primary commodity prices and increases in food prices in some countries--and then to fall back to about 2 percent by the second quarter of next year and beyond.

The trade-weighted foreign exchange value of the dollar declined $11 / 2$ percent, on balance, against the major foreign currencies over the intermeeting period. Stronger-than-expected U.S. data fueled some appreciation of the dollar early in the intermeeting period, but this movement was more than reversed later. Even though the dollar appreciated a bit against the currencies of our other important trading partners, our broad real index of the dollar fell on net over the period. We continue to project a modest depreciation of the dollar over the forecast period, with the broad real dollar slated to move along a path that is about 1 percent lower than in the October Greenbook.

The arithmetic contribution of net exports to real GDP growth during the third quarter has been revised upward to almost 0.9 percentage point from the
0.5 percentage point in the October Greenbook, largely because imports rebounded less in September from their August weakness than we had estimated. We anticipate that imports will continue to make up their lost ground in the current quarter and expand strongly next year, as the positive effects of U.S. activity on import growth more than offset the negative effects of dollar depreciation. Over the next two years, the contribution of net exports to U.S. growth, at about negative 0.4 percentage point per year, is roughly unchanged from the October Greenbook The U.S. current account deficit is projected to expand from about $\$ 540$ billion in the second half of this year to $\$ 625$ billion ( 5 percent of GDP) by the end of 2005.

## Oil Prices

The spot price of West Texas Intermediate (WTI) crude oil closed at $\$ 30.78$ per barrel on December 2, up about $\$ 1$ per barrel since the October Greenbook. The spot price increased to more than $\$ 33$ per barrel in mid-November in anticipation of a cut in OPEC production and in response to the terrorist bombings in Turkey and Iraq. It edged back down, however, amid reports that OPEC had not, in fact, significantly reduced output. Oil prices remain high, owing in part to the slow return of exports from Iraq, where security problems continue to prevent the reopening of the northern export pipeline. The arrest of Mikhail Khodorkovsky, the biggest shareholder and former CEO of Russia's largest oil company, will most likely have a minimal effect on Russian oil production in the near term but could hinder longer-term prospects because of potential adverse effects on foreign investment. Our current oil price projection, in line with quotes from futures markets, calls for the spot price of WTI to fall to about $\$ 26.50$ per barrel by the fourth quarter of 2004 and to $\$ 25.10$ per barrel by the fourth quarter of 2005, as production in Iraq and non-OPEC countries increases. Relative to the October Greenbook, this projection is about $\$ 0.25$ per barrel lower on average in 2004 and 2005.

## International Financial Markets

On balance over the intermeeting period, the dollar depreciated $1 \frac{1}{2}$ percent against the major foreign currencies on a trade-weighted basis but appreciated about $1 / 4$ percent against the currencies of our other important trading partners. During the first two weeks of the intermeeting period, the foreign exchange value of the dollar against the major foreign currencies rose following a string of better-than-expected U.S. economic data. Subsequently, however, the dollar lost ground--especially against the European currencies--amid unfavorable developments in Iraq, Afghanistan, and Turkey and the possibility of an escalation of trade frictions following the U.S. Administration's decision to impose import quotas on some Chinese textile products. In addition, concerns about the financing of the persistent U.S. current account deficit were heightened by release of the Treasury International Capital (TIC) data for

September, which showed a significant slowing in private foreign purchases of U.S. securities.

The dollar depreciated $21 / 2$ percent against the euro, 2 percent against sterling, and $3 / 4$ percent against the Canadian dollar over the period. In contrast, the dollar was little changed on net versus the yen. Japanese monetary authorities intervened on several days to counter upward pressures on the yen. The dollar gained almost $11 / 2$ percent on net vis-a-vis the Mexican peso, which was weighed down partly by an unexpected contraction in Mexican output in the third quarter. The dollar appreciated 2 percent against the Brazilian real, even though Brazilian share prices rose almost 16 percent and the country's EMBI+ spread declined 150 basis points over the period.

The broad real index of the dollar is now projected to be almost 1 percent lower this quarter than was the case in the October Greenbook. We project that by the fourth quarter of next year the broad real dollar will be about $13 / 4$ percent below its average for the current quarter. The need to finance the rising current account deficit, as well as an assumed decline of U.S. long-term interest rates next year, should continue to exert downward pressure on the dollar. The rate of dollar decline is projected to slow somewhat in 2005 as U.S. interest rates begin to move higher.

Foreign short-term market interest rates moved little on net over the intermeeting period, except in Australia and the United Kingdom, where central banks raised policy interest rates. Ten-year sovereign yields were little changed, on balance, in the United Kingdom and Canada, but edged up 10 to 15 basis points in the euro area and Japan. Broad equity indexes rose 3 percent to 8 percent in North America and Europe. However, equity prices in Japan declined slightly over the period, as share prices of export-oriented firms suffered from mounting perceptions that yen strength may hurt their earnings.
. The Desk did not intervene during the period for the accounts of the System or the Treasury.

## Foreign Industrial Countries

Indicators for the fourth quarter have come in stronger than we had anticipated for most foreign industrial countries. We now project that real GDP will increase about 3 percent in the fourth quarter, following growth of about $11 / 2$ percent in the third quarter. Growth is expected to continue at a pace of nearly 3 percent next year and in 2005, supported by rising exports and by solid domestic demand anchored by increasing business and consumer confidence.

Twelve-month headline inflation rates in most major foreign industrial countries are expected to decline or hold steady over the forecast period. Japanese deflation is expected to continue.

In Japan, real GDP growth is projected to pick up slightly in the fourth quarter, following faster-than-expected reported growth in the third quarter. Net exports, driven by the buoyant economies of emerging Asia--and global recovery more generally--are expected to make a sizable contribution to growth. Investment, a major contributor to economic activity in recent quarters, is expected to subside in coming quarters, consistent with recent readings on machinery orders. Japanese growth should moderate to about $13 / 4$ percent in 2004 and a bit further in 2005 as both exports and domestic demand slow.

For the euro area, third-quarter real GDP also surprised on the upside, expanding at a $11 / 2$ percent rate. Recent indicators and survey data suggest a further pickup in the fourth quarter, partly driven by a slowing in the rate of inventory depletion. Growth is expected to increase further next year, to $21 / 2$ percent, before slowing a bit toward the end of 2005. A rebound in domestic demand is likely to provide the main impetus for recovery in the euro area, but net exports should also make a slight positive contribution to growth as, notwithstanding the appreciation of the euro, rising global demand supports exports. With inflation expected to move below the 2 percent ceiling next year, the ECB is assumed to keep its policy rate unchanged in 2004.

In the United Kingdom, real GDP is expected to increase at an annual rate of 3 percent in the fourth quarter, supported by robust public spending and continued strength of consumption. Growth is expected to remain elevated in the first half of next year, bolstered by strong global demand, before easing somewhat over the remainder of the forecast period as consumption spending decelerates. We expect inflation to remain in the vicinity of the Bank of England's $21 / 2$ percent target. The Bank of England is expected to continue tightening policy rates.

In Canada, the economy grew at a rate a little above 1 percent in the third quarter, following a slight contraction in the second quarter that was related to the SARS epidemic. The overall rate of expansion in the third quarter was less than anticipated, as a large reduction in the rate of inventory accumulation took roughly 5 percentage points off growth. However, final domestic demand increased at a nearly 6 percent rate, led by consumer durables, residential construction, and machinery and equipment investment. Based on these factors and the outlook for the United States, we have revised up our growth forecast for Canada for the fourth quarter to about 4 percent. For 2004 and 2005, growth should decrease somewhat, as residential construction and consumption slow a
bit. The Bank of Canada is expected to leave its policy rate constant throughout 2004 before increasing rates gradually in 2005.

## Other Economies

We now estimate that the emerging Asian economies grew nearly 15 percent on average during the third quarter, surpassing the high expectations we had built into the October Greenbook. The region's robust expansion reflects both a more rapid recovery from SARS than we had anticipated and the flourishing high-tech sector. In consequence, we have revised upward our forecast for growth in the fourth quarter, bringing projected second-half growth in the region to more than 10 percent. Exports appear to be the main driver behind the rapid recovery, although, in China, state investment continues to make a substantial contribution to growth. Growth in emerging Asia is expected to slow to a more sustainable rate of $51 / 2$ percent over the next two years.

Industrial production in China rose 17 percent in October over its year-earlier level, and real GDP increased in the third quarter at the remarkable annual rate of 25 percent in Taiwan and nearly 30 percent in Hong Kong. Growth should slow some in these economies over the next two years but still be in a robust $5-8$ percent range. Growth has been fairly strong in the ASEAN economies as well (especially in Singapore) and is projected to range from 4 percent to 6 percent in the region over the next two years. After contracting in the first half of the year, Korean real GDP, led by exports, rose $43 / 4$ percent in the third quarter despite labor strikes and a typhoon. Growth should increase a touch going forward, but problems stemming from a high level of household debt remain a risk to the recovery in domestic demand.

In Mexico, contrary to expectations, real GDP declined $1 \frac{1}{2}$ percent at an annual rate in the third quarter, led by a contraction of 8 percent in the manufacturing sector. We continue to believe that a turnaround in the industrial sector in the United States will eventually feed a recovery in its Mexican counterpart as well. Therefore, we project that the Mexican economy will grow 5 percent next year and 4 percent in 2005. Supporting this outlook are the recent expansion of exports and the fact that business confidence has held up despite economic weakness. In Brazil, real GDP rose $11 / 2$ percent in the third quarter, as a 12 percent jump in industrial production was only partially offset by plummeting output in the agricultural sector. The continued loosening of monetary policy and strength of the external sector should help support a moderate pickup in activity, assuming the government's reform proposals remain on track.

We expect average inflation in the developing economies to come in at a subdued 3 percent this year and next and then fall a little to $23 / 4$ percent in 2005 .

The projection for the fourth quarter is somewhat higher than that in the October Greenbook, largely reflecting recent food price increases in some Asian countries.

## Prices of Internationally Traded Goods

Non-oil core import prices increased at an annual rate of $1 / 2$ percent in the third quarter and are projected to rise 1 percent in the fourth quarter and $21 / 4$ percent in the first half of 2004. These increases reflect the depreciation of the dollar, stronger commodity prices, and steady growth in foreign prices. Thereafter, we project more subdued increases, with prices rising in line with foreign inflation. With import prices continuing to come in below our expectations, we have marked down our projected increases in import prices in the near term.

Prices of core exports rose more than 1 percent in the third quarter of 2003 and are expected to increase another 3 percent in the fourth quarter, $13 / 4$ percentage points more than projected in the October Greenbook. The revision from the last Greenbook mainly reflects higher projected prices for investment goods and agricultural products. Over the remainder of the forecast period, core export price inflation is expected to average around 1 percent per year, in line with projected prices of U.S. domestic goods.

## Selected Trade Prices

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

| Trade category | 2003 |  | Projection |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $2003:$ | 2004 |  |  |  |  |
|  | H1 | Q3 | Q4 | Q1 | Q2 | H2 |  |  |
| Exports |  |  |  |  |  |  |  |  |
| Core goods | 3.4 | 1.1 | 2.9 | 1.3 | 1.2 | .5 | .9 |  |
| Imports |  |  |  |  |  |  |  |  |
| Non-oil core goods | 2.6 | .5 | 1.2 | 2.3 | 2.2 | 1.6 | .8 |  |
| Oil (dollars per barrel) | 26.46 | 28.06 | 28.05 | 27.39 | 26.27 | 24.30 | 22.64 |  |

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

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

## Trade in Goods and Services

September trade data indicated that the pronounced weakness in August imports and, to a lesser extent, exports was not long-lived. After contracting in August, both imports and exports moved up sharply in September. In consequence, the
nominal trade deficit widened in September, although less than we had anticipated in the October Greenbook. This has led us to revise up our estimate of the arithmetic contribution of real net exports to U.S. GDP growth from 0.5 percentage point to 0.9 percentage point in the third quarter. Net exports are expected to deduct 0.3 percentage point from U.S. growth in the current quarter, 0.4 percentage point in 2004, and 0.3 percentage point in 2005 , roughly unchanged from the October Greenbook.

After falling for three consecutive quarters, real exports of goods and services rebounded in the third quarter, growing 11 percent at an annual rate, about what we had estimated in the last Greenbook. In the fourth quarter, real exports of goods and services are projected to accelerate further. Merchandise exports should be the main contributor to this acceleration, as the growth of real services exports is projected to come down a bit from the third quarter's strong rebound from the negative effect of SARS. Factors supporting the acceleration in exports of core goods include the effects of past dollar depreciation and a pickup in growth abroad.

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

| Measure | 2003 |  | Projection |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | Q3 | $\begin{gathered} \text { 2003: } \\ \text { Q4 } \end{gathered}$ | 2004 |  |  | 2005 |
|  |  |  |  | Q1 | Q2 | H2 |  |
| Real exports | -1.1 | 11.0 | 12.8 | 8.1 | 10.5 | 11.7 | 10.1 |
| October GB | -1.1 | 11.6 | 11.6 | 7.6 | 10.2 | 11.5 | 9.9 |
| Real imports | 1.0 | 1.5 | 11.3 | 8.9 | 12.2 | 10.1 | 9.0 |
| October GB | 1.0 | 4.1 | 10.0 | 8.8 | 11.8 | 9.9 | 9.1 |

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

In 2004 and 2005, real exports of core goods, computers, semiconductors, and services are all expected to show continued solid growth. The projected strength in core exports stems from the acceleration of foreign activity and significant net stimulus from the dollar. In addition, because exports fell more in the recent global downturn than suggested by their historical relationship with exchange rates and foreign GDP, we have built in some further growth of exports over the forecast period to return them gradually to a more normal level. Total export growth in both 2004 and 2005 is slightly stronger than projected in the October Greenbook, primarily because of the lower path of the dollar.

The rise in the value of imports in September more than offset the substantial decrease in August, but the September increase was still less than we had anticipated in the last Greenbook. Real imports of goods and services grew $11 / 2$ percent at an annual rate in the third quarter, $21 / 2$ percentage points less than estimated in the October Greenbook. Our sense is that much of the shortfall in third-quarter growth of core imports, mainly in automotive products and to a lesser extent in consumer goods, was transitory--it reflects factors such as inventory adjustments and the power blackout. Thus, we continue to project that import growth will rebound in the fourth quarter, reaching a growth rate of over 11 percent.

We project real import growth to remain high in 2004, as the effects of strong GDP growth in the United States more than offset the emergence of some drag from the weaker dollar. Also, as we have noted in past Greenbooks, imports of core goods have fallen below what their traditional relationship with U.S. GDP and exchange rates would imply, but we expect some of this to be made up over the forecast period. In 2005, import growth should move down slightly as U.S. growth moderates. Imports of computers and semiconductors are expected to grow at double-digit rates, reflecting the forecast of a strong recovery in the high-tech sector. We project that the growth of services imports, having been boosted by the recovery of international travel, will settle down to about 4 percent in 2004 and 2005.

## Alternative Simulation

Recent data from the foreign economies are generally consistent with a more rapid expansion of activity than we had anticipated, raising the possibility that the recovery abroad could continue to exceed our expectations. Therefore, we used the FRB/Global model to consider the effects of an autonomous increase in foreign demand that would raise spending levels by 1 percent of GDP each year in major foreign economies in the absence of endogenous adjustment. The shock is phased in over eight quarters beginning in 2003:Q4. In a second simulation, this foreign demand shock is combined with the increase in U.S. autonomous demand described earlier in the "booming economy" scenario of the Domestic Developments section of this Greenbook.

In the first simulation, U.S. real GDP growth rises about 0.3 percentage point above baseline in 2004 and about 0.5 percentage point in 2005 . The rise in real GDP mainly reflects an increase in net exports due to higher foreign demand and a real dollar depreciation that induces substitution toward U.S.-produced goods. The dollar depreciates because interest rates in foreign economies rise relative to U.S. interest rates, as monetary policy in major foreign economies is assumed to follow a Taylor rule, while the U.S. nominal federal funds rate remains unchanged from its baseline value. The rise in core PCE prices relative to
baseline reflects both the effects of dollar depreciation on import prices and the increase in U.S. output.

The second simulation adds the U.S. aggregate demand shock considered earlier--an autonomous rise in investment and consumption demand--to the foreign demand shock. Given the extra stimulus from the U.S. domestic demand shock, U.S. GDP growth rises more sharply in this case, and there is slightly greater upward pressure on inflation.

## Alternative Simulation: More Expansionary Foreign Demand

(Percent change from previous period, annual rate)

| Indicator and simulation | 2003 | 2004 |  | 2005 |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H 2 | H 1 | H 2 | H 1 | H 2 |  |
| U.S. real GDP |  |  |  |  |  |  |
| Baseline | 6.3 | 5.4 | 5.1 | 3.9 | 3.8 |  |
| Foreign demand expansion only | 6.4 | 5.6 | 5.5 | 4.3 | 4.3 |  |
| U.S. and foreign demand expansion | 6.6 | 6.6 | 6.0 | 4.6 | 4.6 |  |
|  |  |  |  |  |  |  |
| U.S. PCE prices excl. food and energy |  |  |  |  |  |  |
| Baseline | 1.5 | 1.2 | 1.1 | 1.1 | 1.1 |  |
| Foreign demand expansion only | 1.5 | 1.2 | 1.2 | 1.3 | 1.4 |  |
| U.S. and foreign demand expansion | 1.5 | 1.2 | 1.2 | 1.4 | 1.6 |  |

Note. H1 is Q2/Q4; H2 is Q4/Q2. In these simulations, the nominal federal funds rate remains unchanged from baseline, and the monetary authorities in major foreign economies adjust their policy rates according to a Taylor rule.
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| Total foreign | 4.2 | 1.5 | 4.9 | 4.4 | 0.3 | 2.8 | 2.2 | 3.7 | 3.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Industrial Countries | 3.4 | 2.7 | 4.2 | 3.9 | 0.6 | 2.5 | 1.6 | 2.9 | 2.7 |
| of which: |  |  |  |  |  |  |  |  |  |
| Canada | 4.4 | 4.4 | 5.9 | 4.2 | 1.4 | 3.5 | 1.6 | 3.4 | 3.2 |
| Japan | 0.3 | -1.3 | -0.5 | 5.1 | -2.4 | 2.5 | 2.5 | 1.8 | 1.6 |
| United Kingdom | 3.4 | 2.8 | 3.3 | 2.9 | 1.9 | 2.0 | 2.3 | 3.0 | 2.5 |
| Euro Area (2) | 3.2 | 2.0 | 3.9 | 2.8 | 0.8 | 1.1 | 0.8 | 2.5 | 2.4 |
| Germany | 1.7 | 0.7 | 3.3 | 1.9 | 0.5 | 0.5 | 0.3 | 2.4 | 2.3 |
| Developing Countries | 5.4 | -0.3 | 6.1 | 5.3 | -0.3 | 3.1 | 3.0 | 4.9 | 4.4 |
| Asia | 5.0 | -2.2 | 8.6 | 6.1 | 0.9 | 5.6 | 4.9 | 5.6 | 5.3 |
| Korea | 3.4 | -5.2 | 13.8 | 5.1 | 4.2 | 7.0 | 1.3 | 5.2 | 5.2 |
| China | 8.7 | 9.5 | 4.1 | 8.0 | 7.5 | 8.0 | 9.9 | 8.3 | 7.7 |
| Latin America | 6.1 | 1.2 | 4.2 | 4.4 | $-1.4$ | 1.2 | 1.4 | 4.6 | 3.8 |
| Mexico | 6.8 | 2.9 | 5.4 | 4.8 | $-1.5$ | 2.0 | 1.3 | 5.1 | 4.1 |
| Brazil | 2.5 | -1.6 | 3.4 | 3.8 | -0.8 | 3.7 | -0.7 | 3.5 | 3.5 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |
| Industrial Countries | 1.5 | 1.0 | 1.2 | 1.8 | 1.0 | 2.2 | 1.3 | 1.4 | 1.3 |
| of which: |  |  |  |  |  |  |  |  |  |
| Canada | 1.0 | 1.1 | 2.4 | 3.1 | 1.1 | 3.8 | 1.5 | 1.9 | 1.7 |
| Japan | 2.1 | 0.7 | $-1.1$ | $-1.3$ | $-1.3$ | -0.4 | -0.5 | -0.3 | -0.2 |
| United Kingdom (4) | 2.7 | 2.5 | 2.2 | 2.1 | 2.0 | 2.6 | 2.6 | 2.4 | 2.5 |
| Euro Area (2) | 1.5 | 0.8 | 1.5 | 2.5 | 2.1 | 2.3 | 2.0 | 1.7 | 1.6 |
| Germany | 1.5 | 0.3 | 1.1 | 1.7 | 1.5 | 1.2 | 1.3 | 1.3 | 0.9 |
| Developing Countries | 6.8 | 9.0 | 4.6 | 4.1 | 2.8 | 3.1 | 2.9 | 3.0 | 2.8 |
| Asia | 2.7 | 4.4 | 0.1 | 1.8 | 1.1 | 0.8 | 1.9 | 2.3 | 2.2 |
| Korea | 4.9 | 5.8 | 1.2 | 2.5 | 3.3 | 3.4 | 3.4 | 2.9 | 3.0 |
| China | 0.8 | $-1.2$ | -1.0 | 0.9 | -0.1 | -0.5 | 2.1 | 2.3 | 1.7 |
| Latin America | 15.5 | 15.4 | 12.5 | 8.4 | 5.3 | 6.4 | 4.8 | 4.0 | 3.5 |
| Mexico | 17.0 | 17.3 | 13.4 | 8.7 | 5.1 | 5.3 | 3.9 | 3.6 | 3.1 |
| Brazil | 4.6 | 2.0 | 8.4 | 6.4 | 7.5 | 10.7 | 11.6 | 5.8 | 5.2 |

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

|  | 2003 |  |  |  | $\begin{aligned} & -\quad \text { Projected } \\ & 2004 \end{aligned}$ |  |  |  | 2005 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measure and country | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| REAL GDP (1) |  |  | -- | - Qu | erly | hange | at | annu | rate |  |  |  |
| Total foreign | 0.5 | 0.7 | 3.6 | 3.8 | 3.7 | 3.7 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 | 3.3 |
| Industrial Countries of which: | 1.3 | 0.3 | 1.6 | 3.1 | 2.9 | 2.9 | 2.8 | 2.8 | 2.8 | 2.7 | 2.7 | 2.7 |
| Canada | 2.0 | -0.7 | 1.1 | 4.1 | 3.6 | 3.5 | 3.4 | 3.3 | 3.3 | 3.2 | 3.2 | 3.2 |
| Japan | 1.9 | 3.5 | 2.2 | 2.5 | 2.1 | 1.8 | 1.7 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| United Kingdom | 0.7 | 2.4 | 3.0 | 3.2 | 3.2 | 3.1 | 2.8 | 2.7 | 2.7 | 2.6 | 2.4 | 2.4 |
| Euro Area (2) | -0.1 | -0.4 | 1.5 | 2.2 | 2.3 | 2.4 | 2.6 | 2.6 | 2.5 | 2.5 | 2.3 | 2.3 |
| Germany | $-1.0$ | -0.6 | 0.9 | 1.9 | 2.1 | 2.4 | 2.5 | 2.5 | 2.4 | 2.3 | 2.1 | 2.1 |
| Developing Countries | $-0.7$ | 1.3 | 6.7 | 5.0 | 4.9 | 4.9 | 4.9 | 4.9 | 4.5 | 4.5 | 4.3 | 4.3 |
| Asia | 2.8 | -4.5 | 14.9 | 7.3 | 5.6 | 5.7 | 5.6 | 5.6 | 5.6 | 5.5 | 5.1 | 5.0 |
| Korea | $-1.6$ | -2.7 | 4.7 | 5.0 | 5.3 | 5.2 | 5.2 | 5.2 | 5.5 | 5.5 | 5.0 | 5.0 |
| China | 16.3 | -2.9 | 17.5 | 10.0 | 8.5 | 8.5 | 8.2 | 8.2 | 8.0 | 8.0 | 7.5 | 7.5 |
| Latin America | -4.2 | 6.1 | 0.5 | 3.3 | 4.6 | 4.6 | 4.6 | 4.6 | 3.8 | 3.8 | 3.8 | 3.8 |
| Mexico | -1.6 | 4.9 | -1.4 | 3.4 | 5.1 | 5.1 | 5.1 | 5.1 | 4.1 | 4.1 | 4.1 | 4.1 |
| Brazil | $-3.3$ | -4.7 | 1.6 | 4.0 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |  |  |  |
| Industrial Countries of which: | 2.5 | 1.8 | 1.5 | 1.3 | 0.8 | 1.4 | 1.4 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 |
| Canada | 4.5 | 2.8 | 2.1 | 1.5 | 0.6 | 1.8 | 1.8 | 1.9 | 1.7 | 1.7 | 1.7 | 1.7 |
| Japan | -0.3 | -0.3 | -0.5 | -0.5 | -0. 5 | -0.5 | -0.3 | -0.3 | -0.3 | -0.3 | -0.2 | -0.2 |
| United Kingdom (4) | 2.9 | 2.9 | 2.9 | 2.6 | 2.3 | 2.5 | 2.5 | 2.4 | 2.3 | 2.4 | 2.4 | 2.5 |
| Euro Area (2) | 2.3 | 1.9 | 2.0 | 2.0 | 1.8 | 2.0 | 1.9 | 1.7 | 1.5 | 1.5 | 1.6 | 1.6 |
| Germany | 1.1 | 0.9 | 1.0 | 1.3 | 1.4 | 1.8 | 1.7 | 1.3 | 0.9 | 0.8 | 0.9 | 0.9 |
| Developing Countries | 3.6 | 3.1 | 2.7 | 2.9 | 2.8 | 3.0 | 3.3 | 3.0 | 2.8 | 2.8 | 2.8 | 2.8 |
| Asia | 1.3 | 1.2 | 1.2 | 1.9 | 2.0 | 2.5 | 2.8 | 2.3 | 2.1 | 2.2 | 2.2 | 2.2 |
| Korea | 4.1 | 3.3 | 3.2 | 3.4 | 2.9 | 3.1 | 3.4 | 2.9 | 3.0 | 3.0 | 3.0 | 3.0 |
| China | 0.5 | 0.6 | 0.9 | 2.1 | 2.5 | 3.1 | 3.1 | 2.3 | 1.8 | 1.8 | 1.8 | 1.7 |
| Latin America | 7.1 | 6.3 | 5.4 | 4.8 | 4.3 | 4.2 | 4.2 | 4.0 | 3.8 | 3.7 | 3.6 | 3.5 |
| Mexico | 5.5 | 4.7 | 4.1 | 3.9 | 4.0 | 4.0 | 3.9 | 3.6 | 3.4 | 3.3 | 3.2 | 3.1 |
| Brazil | 15.6 | 17.0 | 15.3 | 11.6 | 6.7 | 5.2 | 5.8 | 5.8 | 5.6 | 5.5 | 5.3 | 5.2 |

[^7]|  | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | ---- | $\begin{array}{r} \text { Projec } \\ 2004 \end{array}$ | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NIPA REAL EXPORTS and IMPORTS Percentage point contribution to GDP growth, Q4/Q4 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -0.8 | $-1.1$ | $-1.0$ | -0.8 | -0.1 | $-1.0$ | -0.0 | -0.4 | -0.3 |
| Exports of G\&S | 1.0 | 0.3 | 0.5 | 0.8 | -1.3 | 0.4 | 0.5 | 1.0 | 1.0 |
| Imports of G\&S | -1.7 | -1.3 | $-1.5$ | -1.5 | 1.2 | $-1.3$ | -0.5 | $-1.5$ | $-1.3$ |
| Percentage change, Q4/Q4 |  |  |  |  |  |  |  |  |  |
| Exports of $G \& S$ | 8.5 | 2.3 | 4.9 | 7.3 | -11.4 | 3.9 | 5.2 | 10.5 | 10.1 |
| Services | 1.4 | 2.9 | 3.2 | 4.8 | -9.2 | 11.4 | 4.2 | 7.3 | 5.9 |
| Computers | 25.8 | 8.1 | 13.4 | 23.0 | -23.4 | -2.1 | 13.0 | 37.3 | 31.0 |
| Semiconductors | 21.3 | 9.1 | 34.6 | 26.9 | -34.9 | 8.5 | 36.6 | 40.1 | 33.7 |
| Other Goods 1/ | 9.8 | 1.3 | 3.2 | 5.7 | -9.4 | 0.5 | 3.3 | 8.4 | 8.7 |
| Imports of G\&S | 14.3 | 10.8 | 11.9 | 11.1 | -8.0 | 10.1 | 3.6 | 10.3 | 9.0 |
| Services | 14.0 | 8.5 | 5.9 | 10.9 | -8.6 | 11.5 | 1.0 | 4.0 | 4.4 |
| Oil | 3.9 | 4.1 | -3.4 | 13.3 | 0.1 | 4.0 | 0.6 | 2.2 | 2.8 |
| Computers | 33.0 | 25.8 | 26.0 | 13.6 | -13.8 | 13.6 | 15.0 | 37.3 | 31.1 |
| Semiconductors | 32.9 | -8.7 | 34.2 | 22.5 | -51.4 | 9.3 | 6.3 | 40.2 | 33.7 |
| Other Goods 2/ | 12.7 | 11.5 | 12.7 | 10.4 | $-6.2$ | 10.1 | 3.8 | 10.3 | 8.4 |
| Billions of chained 1996 dollars |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services |  |  | $-320.5$ |  |  |  |  |  |  |
| Exports of G\&S | 981.5 | 1002.4 | 1036.3 | 1137.2 | 1076.1 | 1058.8 | 1078.4 | 1184.2 | 1305.7 |
| Imports of G\&S | 1094.8 | 1223.5 | 1356.8 | 1536.0 | 1492.0 | 1547.4 | 1607.2 | 1756.0 | 1923.8 |


| Billions of dollars |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US CURRENT ACCOUNT BALANCE | -127.7 | -204.7 | -290.8 | -411.5 | -393.7 | -480.9 | -547.1 | -565.2 | -610.0 |
| Current Acct as Percent of GDP | -1.5 | -2.3 | -3.1 | -4.2 | -3.9 | -4.6 | -5.0 | -4.8 | -5.0 |
| Net Goods \& Services (BOP) | -107.0 | $-163.2$ | -261.2 | -375.4 | -357.8 | -418.0 | $-488.7$ | -525.7 | -561.4 |
| Investment Income, Net | 25.1 | 11.5 | 22.3 | 24.2 | 15.7 | 1.3 | 12.9 | 29.3 | 18.1 |
| Direct, Net | 72.4 | 65.5 | 78.2 | 94.9 | 106.5 | 93.5 | 95.3 | 115.9 | 126.3 |
| Portfolio, Net | -47.3 | -54.1 | -55.9 | -70.7 | -90.8 | -92.2 | -82.4 | -86.6 | -108.2 |
| Other Income \& Transfers, Net | $-45.7$ | -53.0 | -52.0 | -60.3 | -51.6 | -64.1 | $-71.3$ | $-68.7$ | -66.7 |

[^8]Strictly Confidential (FR)
Class II FOMC
NIPA REAL EXPORTS and IMPORTS

|  |  | 2000 |  |  |  | 2001 |  |  |  | 2002 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NIPA REAL EXPORTS and IMPORTS |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percentage point contribution to GDP growth |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net | Goods \& Services | -1.1 | -1.0 | -0.7 | -0.2 | 0.5 | -0.4 | -0.2 | -0.3 | -0.7 | -1.4 | 0.0 | -1.6 |
|  | Exports of G\&S | 0.8 | 1.5 | 1.2 | -0.5 | -0.7 | -1.4 | -2.0 | -1.0 | 0.3 | 1.3 | 0.5 | -0.6 |
|  | Imports of G\&S | -1.9 | -2.5 | -1.9 | 0.3 | 1.2 | 1.0 | 1.7 | 0.7 | -1.1 | -2.7 | -0.4 | -1.0 |
| Percentage change from previous period, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Expo | orts of G\&S | 7.7 | 14.6 | 11.6 | -4.0 | -6.0 | -12.4 | -17.3 | -9.6 | 3.5 | 14.3 | 4.6 | -5.8 |
|  | Services | 10.2 | 11.2 | -5.9 | 4.4 | -6.0 | -2.5 | -13.9 | -13.8 | 21.7 | 10.7 | 5.9 | 8.0 |
|  | Computers | 33.5 | 45.9 | 28.8 | -8.8 | -7.3 | -41.7 | -22.8 | -17.6 | -21.1 | -0.5 | -0.8 | 17.9 |
|  | Semiconductors | 14.6 | 90.9 | 43.4 | -17.5 | -34.6 | -47.3 | -40.9 | -11.7 | 13.7 | 65.8 | 21.3 | -39.4 |
|  | Other Goods 1/ | 4.2 | 9.1 | 16.7 | -5.9 | -2.9 | -10.5 | -16.5 | -6.9 | -3.1 | 14.2 | 3.3 | -10.7 |
| Imports of G\&S |  | 14.7 | 18.6 | 13.8 | -1.6 | -7.9 | -6.8 | -11.8 | $-5.3$ | 8.5 | 22.2 | 3.3 | 7.4 |
|  |  | 20.7 | 9.6 | 15.1 | -0.5 | 0.3 | 8.5 | -23.2 | -16.5 | 35.7 | -2.1 | 3.1 | 13.0 |
|  | Oil | 28.6 | 40.4 | -2.3 | -6.5 | 23.3 | 7.2 | -26.9 | 3.9 | -19.0 | 34.5 | -13.3 | 24.1 |
|  | Computers | 2.5 | 40.4 | 27.9 | -9.5 | -21.6 | -24.5 | -18.7 | 14.6 | 52.4 | 5.6 | -4.4 | 8.2 |
|  | Semiconductors | 23.5 | 50.0 | 69.8 | -28.5 | -43.9 | -68.8 | -55.9 | -27.5 | 45.2 | 41.8 | -5.9 | -26.4 |
|  | Other Goods 2/ | 13.1 | 15.5 | 12.3 | 1.3 | -9.4 | -6.2 | -4.7 | -4.5 | 1.9 | 28.8 | 6.3 | 5.2 |
| Billions of chained 1996 dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Goods \& Services | -368.8 |  |  |  |  | -414.8 | -419.0 | -425.3 |  |  | -488.0 | -532.2 |
|  | Exports of G\&S | 1095.8 | 1133.9 | 1165.5 | 1153.7 | 1135.8 | 1098.8 | 1048.0 | 1021.8 | 1030.6 | 1065.5 | 1077.7 | 1061.6 |
|  | Imports of G\&S | 1464.6 | 1528.5 | 1578.6 | 1572.2 | 1540.3 | 1513.6 | 1467.0 | 1447.2 | 1477.1 | 1552.9 | 1565.7 | 1593.8 |


| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US CURRENT ACCOUNT BALANCE | -380.1 | -396.5 | -434.3 | -435.0 | -416.0 | -399.9 | -414.5 | -344.6 | -426.9 | -491.3 | -490.9 | -514.3 |
| Current Account as \% of GDP | -3.9 | -4.0 | -4.4 | -4.4 | -4.1 | -4.0 | -4.1 | -3.4 | -4.1 | -4.7 | -4.7 | -4.9 |
| Net Goods \& Services (BOP) | -346.9 | -364.5 | -391.8 | -398.4 | -373.8 | -357.8 | -356.2 | -343.5 | -360.2 | -419.5 | -427.9 | -464.5 |
| Investment Income, Net |  |  | 15.8 | 37.8 | 8.6 | 8.2 | -8.3 | 54.3 | 2.2 | -12.4 | -1.9 |  |
| Direct, Net | $84.5$ | 88.9 | 91.9 | 114.5 | 94.5 | 96.7 | 91.3 | 143.5 | 95.7 | 85.6 | 87.7 | 104.9 |
| Portfolio, Net | -64.5 | -65.7 | -76.1 | -76.6 | -86.0 | -88.4 | -99.6 | -89.2 | -93.5 | -98.1 | -89.6 | -87.7 |
| Other Inc. \& Transfers, Net | -53.1 | -55.2 | -58.3 | -74.5 | -50.8 | -50.3 | -50.0 | -55.4 | -68.9 | -59.3 | -61.1 | -67.1 |

[^9]Strictly Confidential (FR)
Class II FOMC
OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

|  |  | 2003 |  |  |  | $2004$ |  |  |  | 2005 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NIPA REAL EXPORTS and IMPORTS Percentage point contribution to GDP growth |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services Exports of G\&S Imports of G\&S |  | 0.8 | -1.3 | 0.9 | -0.3 | -0.4 | -0.7 | -0.4 | -0.1 | -0.4 | -0.5 | -0.3 | 0.0 |
|  |  | -0.1 | -0.1 | 1.0 | 1.2 | 0.8 | 1.0 | 1.0 | 1.2 | 0.8 | 1.0 | 1.0 | 1.2 |
|  |  | 0.9 | -1.2 | -0.2 | -1.5 | -1.2 | -1.7 | -1.5 | -1.4 | -1.2 | -1.5 | -1.3 | -1.2 |
| Percentage change from previous period, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of G\&S |  | -1.3 | -1.0 | 11.0 | 12.8 |  | 10.5 | 10.7 | 12.8 | 7.7 | 10.4 | 10.2 | 12.1 |
|  |  | -8.0 | 0.5 | 15.7 | 10.3 | 8.3 | 7.4 | 7.0 | 6.3 | 6.1 | 6.0 | 5.7 | 5.7 |
|  | Computers | -7.2 | -11.2 | 48.4 | 33.5 | 33.5 | 38.5 | 38.5 | 38.5 | 23.9 | 33.5 | 33.5 | 33.5 |
|  | Semiconductors | 44.8 | 30.7 | 35.2 | 36.3 | 36.3 | 41.4 | 41.4 | 41.4 | 26.4 | 36.2 | 36.2 | 36.2 |
|  | Other Goods 1/ | 0.2 | -2.9 | 5.2 | 11.4 | 4.5 | 8.4 | 8.6 | 12.3 | 5.8 | 8.9 | 8.6 | 11.6 |
| Imports of G\&S |  | -6.2 | 8.8 | 1.5 | 11.3 | 8.9 | 12.2 | 10.5 | 9.7 | 8.2 | 10.5 | 9.1 | 8.3 |
|  |  | -4.0 | -11.4 | 16.5 | 4.9 | 1.0 | 4.6 | 5.2 | 5.5 | 4.3 | 4.6 | 4.5 | 4.3 |
|  |  | -12.6 | 55.5 | -3.3 | -22.2 | -0.8 | 23.9 | 1.0 | -12.0 | 3.8 | 21.9 | -0.9 | -11.0 |
| Computers |  | -2.1 | 17.5 | 16.1 | 31.1 | 33.6 | 38.6 | 38.6 | 38.6 | 23.9 | 33.6 | 33.6 | 33.6 |
|  |  | $-1.0$ | 3.1 | -1.2 | 26.5 | 36.3 | 41.5 | 41.5 | 41.4 | 26.4 | 36.3 | 36.2 | 36.2 |
| Other Goods 2/ |  | -6.4 | 8.9 | -2.3 | 16.5 | 10.0 | 10.5 | 10.3 | 10.3 | 8.0 | 8.6 | 8.6 | 8.3 |
| Billions of chained 1996 dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net | Goods \& Services | -510.3 | -546.1 | -524.2 | -534.5 | -548.3 | -568.7 | -582.6 | -587.6 | -601.0 | -616.7 | -627.0 | -627.9 |
|  | Exports of G\&S | 1058.1 | 1055.5 | 1083.4 | 1116.6 | 1138.4 | 1167.3 | 1197.3 | 1233.9 | 1256.9 | 1288.2 | 1319.8 | 1357.9 |
|  | Imports of $G \& S$ | 1568.4 | 1601.7 | 1607.6 | 1651.1 | 1686.8 | 1736.0 | 1779.9 | 1821.5 | 1857.9 | 1904.9 | 1946.7 | 1985.9 |


| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US CURRENT ACCOUNT BALANCE | -554.8 | -555.1 | -541.1 | -537.6 | -554.2 | -560.2 | -572.7 | -573.5 | -595.7 | -602.6 | -617.0 | -624.8 |
| Current Account as \% of GDP | -5.2 | -5.1 | -4.9 | -4.8 | -4.9 | -4.8 | -4.9 | -4.8 | -4.9 | -4.9 | -5.0 | -5.0 |
| Net Goods \& Services (BOP) | -486.5 | -494.1 | $-483.3$ | -491.1 | -505.8 | -523.5 | -535.4 | -538.0 | -548.1 | -560.7 | -568.4 | -568.5 |
| Investment Income, Net | 6.3 | 11.9 | 12.9 | 20.4 | 28.5 | 30.3 | 29.6 | 28.7 | 26.6 | 22.3 | 15.6 | 8.0 |
| Direct, Net | 88.3 | 91.3 | 97.1 | 104.3 | 113.0 | 115.8 | 116.8 | 118.0 | 121.1 | 124.7 | 128.0 | 131.6 |
| Portfolio, Net | -82.0 | -79.4 | -84.2 | -84.0 | -84.5 | -85.5 | -87.2 | -89.3 | -94.5 | -102.4 | -112.4 | -123.6 |
| Other Inc. \& Transfers, Net | -74.6 | -73.0 | -70.7 | -66.9 | -76.9 | -66.9 | -66.9 | -64.2 | -74.2 | -64.2 | -64.2 | -64.3 |

[^10]
# Board of Governors of the Federal Reserve System <br> Division of Research and Statistics 

|  | Division of Research and Statistics |
| :--- | :--- |
| Date: | December 5, 2003 |
| To: | Members of the FOMC |
| From: | The Division of Research and Statistics |
| Subject: | Part 1 - Errata |

On pages I-2 and I-3 of Part 1, the correct figures for the staff forecast of the unified budget deficit are $\$ 485$ billion in fiscal year 2004 and $\$ 370$ billion in fiscal year 2005. In addition, attached is a corrected version of the flow of funds Greensheets.

| Strictly Confidential (FR) Class II FOMC |  |  | Change in Debt of the Domestic Nonfinancial Sectors $\quad$ December 3, 2003 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period ${ }^{1}$ | Total | Federal government | Nonfederal |  |  |  | Business | State and local governments | Memo: Nominal GDP |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Home mortgages | Consumer credit |  |  |  |
| Year |  |  |  |  |  |  |  |  |  |
| 1998 | 6.9 | -1.4 | 9.6 | 8.1 | 8.8 | 6.5 | 12.1 | 6.3 | 6.0 |
| 1999 | 6.4 | -1.9 | 8.9 | 8.3 | 9.0 | 8.4 | 10.7 | 3.4 | 5.9 |
| 2000 | 4.9 | -8.0 | 8.4 | 8.6 | 8.3 | 10.7 | 9.7 | 1.3 | 4.6 |
| 2001 | 6.2 | -0.2 | 7.6 | 8.7 | 9.8 | 7.3 | 6.3 | 8.9 | 2.0 |
| 2002 | 7.1 | 7.6 | 7.0 | 10.0 | 12.4 | 4.3 | 2.9 | 11.2 | 4.3 |
| 2003 | 8.5 | 11.0 | 8.0 | 11.2 | 13.3 | 5.5 | 4.2 | 8.3 | 5.9 |
| 2004 | 7.6 | 12.9 | 6.4 | 7.5 | 8.1 | 6.3 | 5.2 | 5.4 | 6.3 |
| 2005 | 6.1 | 7.6 | 5.8 | 5.9 | 5.8 | 6.9 | 5.9 | 4.3 | 5.0 |
| Quarter |  |  |  |  |  |  |  |  |  |
| 2003:1 | 6.1 | 2.2 | 7.0 | 10.0 | 11.8 | 4.9 | 3.7 | 5.2 | 3.8 |
| 2 | 12.1 | 24.3 | 9.6 | 11.8 | 14.3 | 4.6 | 6.2 | 12.8 | 4.3 |
| 3 | 7.9 | 8.2 | 7.8 | 11.6 | 13.4 | 6.8 | 3.0 | 8.7 | 10.1 |
| 4 | 6.9 | 8.0 | 6.7 | 9.5 | 11.2 | 5.3 | 3.5 | 5.3 | 5.5 |
| 2004:1 | 7.6 | 12.9 | 6.5 | 8.4 | 9.6 | 5.5 | 4.4 | 4.8 | 6.6 |
| 2 | 8.7 | 19.4 | 6.3 | 7.5 | 8.3 | 6.2 | 4.8 | 5.5 | 6.4 |
| 3 | 6.9 | 9.8 | 6.2 | 6.8 | 7.2 | 6.4 | 5.6 | 5.3 | 6.3 |
| 4 | 6.2 | 7.3 | 6.0 | 6.4 | 6.5 | 6.6 | 5.6 | 5.5 | 6.0 |
| 2005:1 | 6.6 | 9.9 | 5.8 | 6.2 | 6.1 | 6.7 | 5.6 | 4.5 | 5.3 |
| 2 | 6.9 | 12.1 | 5.7 | 5.9 | 5.7 | 6.8 | 5.8 | 4.3 | 5.1 |
| 3 | 5.4 | 4.6 | 5.6 | 5.7 | 5.5 | 6.7 | 5.8 | 4.2 | 5.0 |
| 4 | 5.1 | 3.0 | 5.6 | 5.5 | 5.2 | 6.6 | 6.0 | 4.0 | 4.8 |

[^11]Strictly Confidential (FR)
Class II FOMC

| Category |  |  |  |  |  |  |  |  | nally ad | ted ann | rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Calendar year |  |  |  | 2003 |  | 2004 |  |  |  | 2005 |  |  |  |
|  | 2002 | 2003 | 2004 | 2005 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Net funds raised by domestic nonfinancial sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Total | 1333.5 | 1708.2 | 1655.9 | 1465.1 | 1664.3 | 1491.8 | 1677.5 | 1937.9 | 1563.6 | 1444.5 | 1559.4 | 1677.9 | 1340.8 | 1282.2 |
| 2 Net equity issuance | -41.9 | -54.7 | -39.5 | -15.0 | -41.3 | -40.0 | -31.0 | -42.0 | -45.0 | -40.0 | -30.0 | -20.0 | -10.0 | 0.0 |
| 3 Net debt issuance | 1375.4 | 1763.0 | 1695.4 | 1480.1 | 1705.6 | 1531.8 | 1708.5 | 1979.9 | 1608.6 | 1484.5 | 1589.4 | 1697.9 | 1350.8 | 1282.2 |
| Borrowing sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nonfinancial business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 Financing gap ${ }^{1}$ | 80.7 | 9.1 | 32.5 | 251.1 | -32.1 | 3.4 | -14.4 | 1.2 | 46.5 | 96.6 | 191.2 | 244.6 | 276.3 | 292.3 |
| 5 Net equity issuance | -41.9 | -54.7 | -39.5 | -15.0 | -41.3 | -40.0 | -31.0 | -42.0 | -45.0 | -40.0 | -30.0 | -20.0 | -10.0 | 0.0 |
| 6 Credit market borrowing | 200.7 | 296.1 | 386.3 | 464.1 | 218.6 | 259.2 | 328.2 | 358.2 | 428.3 | 430.2 | 438.8 | 459.8 | 468.6 | 489.1 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 Net borrowing ${ }^{2}$ | 771.8 | 947.2 | 704.5 | 598.1 | 1037.4 | 874.1 | 786.7 | 724.5 | 668.7 | 638.1 | 622.9 | 602.5 | 589.8 | 577.1 |
| 8 Home mortgages | 666.4 | 804.1 | 556.7 | 427.6 | 866.5 | 745.9 | 656.4 | 580.8 | 515.0 | 474.5 | 455.7 | 431.3 | 417.9 | 405.6 |
| 9 Consumer credit | 79.2 | 106.4 | 128.8 | 148.9 | 133.9 | 106.3 | 112.0 | 127.4 | 134.1 | 141.7 | 145.7 | 149.6 | 150.3 | 150.1 |
| $10 \mathrm{Debt} / \mathrm{DPI}\left(\right.$ percent) ${ }^{3}$ | 103.5 | 109.5 | 113.2 | 114.5 | 109.7 | 112.0 | 112.5 | 113.2 | 113.7 | 113.9 | 114.3 | 114.5 | 114.6 | 114.7 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 Net borrowing | 145.4 | 119.2 | 83.8 | 71.3 | 131.9 | 82.5 | 74.8 | 86.8 | 84.8 | 88.8 | 74.8 | 70.8 | 70.8 | 68.8 |
| 12 Current surplus ${ }^{4}$ | 127.7 | 158.4 | 186.7 | 204.5 | 173.9 | 181.4 | 177.9 | 186.5 | 186.1 | 196.3 | 199.6 | 202.6 | 205.8 | 209.9 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 Net borrowing | 257.5 | 400.4 | 520.8 | 344.0 | 317.7 | 315.9 | 518.8 | 810.3 | 426.8 | 327.4 | 452.9 | 564.8 | 221.7 | 147.1 |
| 14 Net borrowing (quarterly, n.s.a.) | 257.5 | 400.4 | 520.8 | 344.0 | 107.6 | 123.0 | 173.3 | 86.9 | 134.9 | 125.9 | 156.8 | 25.5 | 78.4 | 83.4 |
| 15 Unified deficit (quarterly, n.s.a.) | 230.6 | 405.2 | 488.5 | 334.0 | 104.5 | 139.1 | 190.4 | 54.5 | 100.6 | 142.9 | 164.2 | -13.5 | 76.0 | 107.3 |
| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 Funds supplied | 482.5 | 436.3 | 433.4 | 509.4 | 56.0 | 331.9 | 412.5 | 455.8 | 475.8 | 389.6 | 523.5 | 533.2 | 567.8 | 413.4 |
| Memo (percentage of GDP) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 Domestic nonfinancial debt ${ }^{5}$ | 191.3 | 196.9 | 199.7 | 202.2 | 197.3 | 198.3 | 198.7 | 199.7 | 200.5 | 200.8 | 201.4 | 202.3 | 202.9 | 203.2 |
| 18 Domestic nonfinancial borrowing | 13.2 | 16.1 | 14.5 | 12.0 | 15.4 | 13.7 | 15.0 | 17.1 | 13.7 | 12.5 | 13.2 | 13.9 | 10.9 | 10.2 |
| 19 Federal government ${ }^{6}$ | 2.5 | 3.7 | 4.5 | 2.8 | 2.9 | 2.8 | 4.6 | 7.0 | 3.6 | 2.7 | 3.7 | 4.6 | 1.8 | 1.2 |
| 20 Nonfederal | 10.7 | 12.5 | 10.1 | 9.2 | 12.5 | 10.8 | 10.4 | 10.1 | 10.1 | 9.7 | 9.4 | 9.3 | 9.1 | 9.1 |

[^12]
[^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. Several of the provisions affecting personal taxes in the Jobs and Growth Tax Relief Reconciliation Act of 2003-the larger child tax credit, the reduced marriage penalty, the expanded 10 percent income tax bracket, and the increased alternative minimum tax exemption-also are slated to expire at the end of 2004. However, we have assumed that those provisions will be extended.
[^2]:    1. Percent, average for the fourth quarter.
    2. Percent difference between potential and actual GDP in the fourth quarter of the year indicated. A positive number indicates that the economy is operating below potential.
[^3]:    1. Changes are from fourth quarter to fourth quarter.
    2. Percent difference between potential and actual. A positive number indicates that the economy is operating below potential.
    3. Private-industry workers.
[^4]:    Note. Quarterly data are at seasonally adjusted annual rates.

    1. Data after 2003:Q2 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
[^5]:    Note. Data after 2003:Q2 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.
    3. Average debt levels in the period (computed as the average of period-end debt positions)
    divided by disposable personal income.
    2.6.4 FOF
[^6]:    . Foreign GDP aggregates calculated using shares of U.S. exports.
    2. Harmonized data for euro area from Eurostat.
    4. CPI excluding mortgage interest payments, which is the targeted inflation rate.

[^7]:    1. Foreign GDP aggregates calculated using shares of U.S. exports.

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

[^8]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors.
[^9]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors
[^10]:    1. Merchandise exports excluding computers and semiconductors.
    2. Merchandise imports excluding oil, computers, and semiconductors
[^11]:    Note. Quarterly data are at seasonally adjusted annual rates.

    1. Data after 2003:Q2 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
[^12]:    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)
    6. 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:Q2 are staff projections.
    Note. Data after 2003:Q2 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
