## Prefatory Note

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

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## Part 1

## CURRENT ECONOMIC AND FINANCIAL CONDITIONS

## Summary and Outlook

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

## Summary and Outlook

## Domestic Developments

Since the August Greenbook, most near-term spending indicators have come in close to our expectations. Indeed, we estimate that the increase in real GDP averaged about 3-1/2 percent in the second and third quarters, roughly in line with our previous forecast. However, some other news that we have received has been less encouraging about the near-term prospects for the economy. Real disposable income in the first half of the year was revised down a good bit. Moreover, employment gains have been subpar over the past three months. In the business sector, inventories have moved up to levels that reportedly are more consistent with sales, suggesting that stockbuilding should provide little impetus to production increases in the fourth quarter. We have also seen signs that business investment in high-tech gear will be less robust than we had previously estimated. Taken together, these indicators have led us to revise down the projected increase in real GDP in the fourth quarter to 4 percent, about $1 / 2$ percentage point below our August projection.

Overall, we interpret the recent information as pointing both to a lower level of economic activity at the end of this year and to more-subdued prospects for growth in the longer term than we had anticipated in August. The unusually low level of the saving rate in the near term is likely to restrain consumption spending over the projection period. In addition, the recent softness in the high-tech sector has led us to temper our high-tech investment outlook next year. Absent an adjustment to our funds rate assumption, only a little progress would have been made in narrowing the output gap by the end of the forecast period, which has now been extended to 2006. That circumstance prompted us to build in less monetary policy tightening than we had assumed in the August Greenbook. With this revised policy assumption, we project real GDP to increase over the forecast period at an average rate of a bit less than 4 percent - a pace that is sufficient to close the utilization gap by the end of the period.

We are projecting the federal funds rate to rise to $2-1 / 4$ percent by the fourth quarter of 2005 and to $2-3 / 4$ percent by the fourth quarter of 2006 . One reason we think monetary policy can remain accommodative for so long is the projected large drag from the external sector. Under our baseline assumptions of moderate growth abroad and only a small depreciation of the real foreign exchange value of the dollar, the negative contribution from net exports remains sizable over the next two years. Another reason for the assumed shallow trajectory of the federal funds rate is low inflation. Recent price data have been fairly benign, and we are projecting core PCE prices to rise at a 1 percent rate in the current quarter and at a $1-1 / 2$ percent pace in the fourth quarter. We continue to believe that core inflation will gradually diminish over the forecast period, reflecting
low levels of resource utilization, strong growth in structural productivity, and falling energy prices.

## Key Background Factors

As implied above, we have assumed that the federal funds rate will rise 75 basis points by the fourth quarter of next year and 125 basis points by the fourth quarter of 2006. During the period since the August Greenbook, market participants revised down their expected path for the funds rate in 2005 and 2006, but they still expect a federal funds rate that is nearly 75 basis points above our assumed level by the end of the projection period. Long-term interest rates have fallen about 30 basis points since we closed the August Greenbook, with the bulk of this change coming in response to the weak employment report on the Friday before the last FOMC meeting. We have lowered the starting point for long-term rates in this forecast to reflect the decline since the August Greenbook. In addition, we anticipate that market participants will eventually come to share our expectation of a more gradual policy tightening, implying that long rates will decline a bit further over the next year and then level off rather than rising as they otherwise would during a tightening episode.

Broad indexes of equity prices have risen more than 3 percent since the August Greenbook. Because we had been expecting a considerably smaller increase, we have nudged up our projected path for stock prices a bit more than 2 percent. As in our previous forecast, equity values are assumed to rise at a $6-1 / 2$ percent pace over the forecast period, roughly maintaining risk-adjusted parity with the projected yield on longterm Treasury securities.

Home prices, another major influence on household net worth, increased much more rapidly in the first half of this year than we had estimated at the time of the August Greenbook. Although we continue to project that house price gains will slow over the forecast period, the projected deceleration is now a bit more gradual than we had assumed in August. As a result, home prices in this forecast have been revised up about $3-1 / 2$ percent by the end of 2005 and are expected to rise an additional 3 percent in 2006.

We expect that federal fiscal policy will exert a slight drag on economic activity in 2005 but will provide a small boost in the following year. As in the previous Greenbook, we assume that the personal tax provisions of the Jobs and Growth Tax Relief Reconciliation Act of 2003-the larger child tax credit, smaller marriage penalty, expanded 10 percent bracket, and increased exemption from the alternative minimum tax-will be extended
throughout the forecast period. We also continue to expect that the partial-expensing allowance for business equipment investment will be allowed to expire at the end of this year. In 2006, voluntary prescription drug coverage will become available to Medicare beneficiaries, costing the federal government an estimated $\$ 34$ billion in the first year. ${ }^{1}$ All told, the staff's measure of fiscal impetus to GDP growth swings from a boost of 1 percentage point this year to a drag of about $1 / 4$ percentage point next year, before shifting back to a stimulus of $1 / 4$ percentage point in 2006 . We expect the federal budget deficit to be about $\$ 421$ billion this fiscal year, $\$ 363$ billion in fiscal 2005, and $\$ 351$ billion in fiscal 2006.

The projected path of the real trade-weighted exchange value of the dollar starts out a bit lower than in the August Greenbook, and we expect modest further depreciation going forward. The assumed rate of decline is a bit steeper than in August. Our forecast for the dollar reflects the more gradual tightening of U.S. monetary policy as well as a more pronounced widening of the current account deficit in the near term. Our outlook for foreign GDP growth is little changed: We anticipate that foreign output growth will slow to 3-1/2 percent next year and to 3-1/4 percent in 2006.

The spot price of West Texas intermediate (WTI) crude oil moved above $\$ 48$ per barrel in mid-August but has since fallen back to about $\$ 44$ per barrel, close to the level at the time of the August Greenbook. The International Energy Agency's recent upward adjustment to its estimate of global oil consumption, coming on top of previous upward revisions, has apparently reinforced market sentiment that surplus production capacity in the world is currently fairly small, making prices quite sensitive to news of potential supply disruptions in Venezuela, Russia, Iraq, and most recently, in the Gulf of Mexico. However, over time, high global production and rising inventories are expected to bring prices down. Consistent with futures quotes, we project the price of WTI to move down slowly to $\$ 36$ per barrel by the fourth quarter of 2006.

## Recent Developments and the Near-Term Outlook

Data on spending, hiring, and production suggest that the economy is regaining its footing after having stumbled at the end of the second quarter. As noted above, we

[^0]Summary of the Near-Term Outlook
(Percent change at annual rate except as noted)

| Measure | 2004:Q3 |  | 2004:Q4 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Aug. <br> GB | Sept. GB | Aug. GB | Sept. GB |
| Real GDP | 3.9 | 3.6 | 4.7 | 4.1 |
| Private domestic final purchases | 4.8 | 4.2 | 5.2 | 4.8 |
| Personal consumption expenditures | 4.1 | 3.7 | 4.4 | 4.1 |
| Residential investment | -1.2 | -. 8 | -4.9 | -. 5 |
| Business fixed investment | 13.4 | 10.9 | 17.0 | 12.6 |
| Government outlays for consumption and investment | 2.5 | 3.9 | 1.8 | 1.2 |
|  | Contribution to growth (percentage points) |  |  |  |
| Inventory investment | -. 4 | -. 7 | . 6 | . 2 |
| Net exports | -. 2 | -. 0 | -. 7 | -. 4 |

project real GDP to increase at annual rates of 3-1/2 percent in the third quarter and 4 percent in the fourth quarter.

In the labor market, firms appear to be exhibiting greater caution in their hiring than they did in the spring: Over the past three months, payrolls have risen only about 100,000 per month on average. For the remainder of the year, we anticipate that private payrolls will rise a bit more rapidly-roughly 200,000 per month-as economic activity firms. This pickup, which should be sufficient to begin to ease households' discouragement about limited job prospects, is expected to keep the unemployment rate at $5-1 / 2$ percent for the rest of the year.

Manufacturing production climbed 0.5 percent in August. Motor vehicle assemblies rebounded from their decline over the preceding three months, and manufacturing activity excluding motor vehicles and parts moved up again. However, because incoming news on the high-tech sector has been less favorable and motor vehicle inventories remain elevated, we have revised down our forecast for factory production in the second half, from an annual rate of 6-3/4 percent in the August Greenbook to a pace of 6 percent in this projection. The rate of factory utilization rises to just 77-1/2 percent by the end of the year, still about 2-1/2 percentage points below its 1972-2003 average.

Following the second-quarter slowdown, consumer spending jumped in July and appears to have held fairly steady in August. Although sales of light vehicles dropped back a bit last month, purchases of other types of goods posted a solid gain. On the basis of this information, we expect real consumer expenditures to rebound from their $1-1 / 2$ percent pace in the second quarter to a $3-3 / 4$ percent pace this quarter. Income is likely to spike up in the fourth quarter because of the one-time Microsoft dividend payout. However, we expect this event to have little effect on real PCE, which should rise 4 percent in the fourth quarter, roughly in line with underlying income gains.

New housing units were started at a very rapid pace in July, consistent with our view that the June dip was an aberration in an otherwise strong housing market. Although we expect real residential investment to be little changed this quarter, the level of activity remains quite high, and the decline in mortgage rates during the summer should help to support construction in coming months. Spending is likely to get a further boost as homeowners in the southeast rebuild and repair after Hurricanes Charley and Frances, though we expect this effect to be small.

We project real spending on equipment and software will increase at an annual rate of 13-3/4 percent in the second half. However, this robust growth masks diverging trends among the various types of investment goods. Demand for high-tech items has softened recently, judging from shipments data through July as well as more-forward-looking indicators such as orders and company reports. In contrast, tight conditions in the market for freight transport have spurred demand for medium and heavy trucks and for railroad rolling stock. In addition, data on orders and shipments of other types of capital goods were quite strong in June and July. This strength may have been driven, in part, by the impending expiration of partial expensing, a factor that we expect to become even more important next quarter.

After several years of weakness, construction of nonresidential structures was on a favorable trajectory heading into the third quarter, with a solid second-quarter gain followed by a further increase in July. Although market fundamentals remain lackluster, the positive tone of the construction data and continued increases in drilling and mining activity have led us to write down an increase of 5-3/4 percent (annual rate) in this sector in the second half.

For the federal sector, we project that real spending is rising 8 percent at an annual rate in the current quarter, pushed higher by a rapid climb in defense outlays. In the fourth
quarter, federal spending is expected to be about flat, as defense outlays fall back a little and nondefense consumption and investment posts another moderate increase. At the state and local level, recent data on employment and construction outlays, as well as the strengthening fiscal positions of most states, point to a further increase in spending in the second half of the year.

The approaching expiration of the partial-expensing allowances should spur imports of business equipment as well as exports of the components used in overseas production of such equipment. This effect, combined with the continuing influence of past dollar depreciation, should push up export growth to an annual rate of $9-1 / 2$ percent in the second half of the year. Despite the partial-expensing effect, the gain in imports is projected to step down to about 7-3/4 percent in the second half after outsized increases earlier this year. Nonetheless, because the level of imports is much higher than the level of exports, these increases are expected to damp GDP growth about $1 / 4$ percentage point in the second half.

We believe that the softening of final demand in the second quarter may have caught businesses a bit off guard, leading to an unexpected, but probably not unwelcome, restocking of inventories. With many firms having replenished inventories last quarter, we do not expect firms to step up the pace of stockbuilding further. In addition, automakers are showing a willingness to raise incentives in order to clear out vehicle stocks. All told, we expect inventory investment to be a small drag on GDP growth in the second half of the year.

Small increases in core consumer prices in June and July support our view that the spurt of price inflation earlier in the year overstated the underlying deterioration in the inflation picture. We now project that core PCE price inflation will average $1-1 / 4$ percent this quarter and next. Energy prices, which retreated in July and appear to have slid further in August, are likely to continue declining through the fourth quarter. However, food prices are still advancing at a moderate pace, and we are looking for overall PCE inflation also to average 1-1/4 percent in the second half.

## The Longer-Term Outlook for the Economy

The subpar pace of economic activity around midyear, combined with the resulting reduction in our projected growth of consumer and business spending in the second half, leaves the level of real GDP this year and next below that which we had projected in the

| Projections of Real GDP <br> (Percent change at annual rate from end of preceding period except as noted) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Measure | 2004 |  | 2005 | 2006 |
|  | H1 | H2 |  |  |
| Real GDP | 3.9 | 3.8 | 3.8 | 4.0 |
| Previous | 3.8 | 4.3 | 3.6 |  |
| Final sales | 2.9 | 4.1 | 4.0 | 4.0 |
| Previous | 3.1 | 4.3 | 3.8 |  |
| PCE | 2.8 | 3.9 | 3.9 | 4.1 |
| Previous | 2.6 | 4.3 | 3.9 | . . . |
| Residential investment | 10.5 | -. 6 | 2.5 | 3.9 |
| Previous | 10.6 | -3.1 | . 0 |  |
| BFI | 8.0 | 11.8 | 9.4 | 9.9 |
| Previous | 6.8 | 15.2 | 9.9 |  |
| Government purchases | 2.4 | 2.5 | 2.4 | 2.7 |
| Previous | 2.5 | 2.1 | 2.2 |  |
| Exports | 7.3 | 9.6 | 7.2 | 6.4 |
| Previous | 9.8 | 10.0 | 7.6 |  |
| Imports | 11.6 | 7.8 | 6.8 | 8.6 |
| Previous | 10.0 | 9.7 | 7.8 |  |
|  | Contribution to growth (percentage points) |  |  |  |
| Inventory change | 1.0 | -. 3 | -. 2 | . 0 |
| Previous | . 7 | . 1 | -. 1 |  |
| Net exports | -. 9 | -. 2 | -. 3 | -. 7 |
| Previous | -. 5 | -. 4 | -. 4 | . . |

... Not applicable.

August Greenbook. However, although we project a wider output gap in the near term, we still expect it to be eliminated by the end of the projection period-now 2006.

Turning to the details of this forecast, we have marked up slightly the growth of real output in 2005 because the monetary policy tightening in this forecast is assumed to be more gradual than in our previous projection. We believe that an improving labor market and the slight decline in long rates that accompanies our assumed path of the federal
funds rate should provide a counterbalance to the swing in fiscal policy from considerable stimulus to modest restraint. Consequently, we project real GDP to rise 3-3/4 percent in 2005, close to this year's pace. In 2006, when fiscal policy swings from being restrictive to providing a slight stimulus, the increase in real activity is projected to edge up to 4 percent.

Household spending. Our forecast calls for real consumer spending to pick up to a pace of nearly 4 percent next year. Although the recent low level of the saving rate damps consumer spending, this effect is countered by an improving labor market and the associated gains in wages and salaries, as well as by the effects of recent house price gains on household wealth. In 2006, further gains in labor income and the initiation of transfers to Medicare prescription-drug beneficiaries should generate a robust increase in disposable personal income. Because consumers tend to respond gradually to sharp income movements, we forecast that real PCE growth will move up only a bit, to just over 4 percent.

We expect housing markets to remain strong because of rising incomes and mortgage rates that decline $1 / 4$ percentage point by the middle of next year and stay at that lower level through 2006. Our projection calls for housing starts in the single-family sector to average about 1.6 million units both next year and the year after, in line with this year's record pace. The rate of starts of multifamily dwellings is also expected to be unchanged from the rate posted this year: 350,000 per year in 2005 and 2006.

Business spending. With the partial-expensing tax provisions set to expire at year-end, we think the incentive is strong for businesses to pull equipment investment from next year into this year. Accordingly, we expect large increases in outlays over the next several months to be followed by small outright decreases early next year. Still, supported by a favorable financing environment, ample stocks of liquid assets, and the ongoing need to replace aging or obsolete equipment and software, we expect investment spending to grow robustly once the tax-related swings are behind us. However, although interest rates are lower, we have tempered the expansion in the high-tech sector a bit in this projection: Incoming data and anecdotal reports suggest that prospects in this sector are less upbeat than we had previously believed.

In response to the expansion in hiring and business activity, business construction is expected to rise 5 percent on average in 2005 and 2006. Building construction is
projected to increase in both years, but drilling of oil and gas wells should flatten out and then decline, as crude oil and natural gas prices move down over the forecast period.

The pace of inventory investment is likely to step down next year because businesses will not need to repeat this year's inventory re-stocking, a development that takes about $1 / 4$ percentage point off real GDP growth. With inventories now better positioned relative to sales, we look for inventory stocks to expand a bit less rapidly than sales in the long run, as firms continue to discover ways to get by with lower stock-to-sales ratios. In 2006, inventories should be a neutral influence on GDP growth.

Government spending. We project that real federal spending, which is rising $4-1 / 2$ percent this year in large part because of operations in Iraq, will increase only $2-1 / 4$ percent in 2005 and 2-1/2 percent in 2006. With many state and local governments currently experiencing improving budget situations, we anticipate that real outlays in this sector will increase 2-1/2 percent next year and 2-3/4 percent in 2006.

Net Exports. We expect the external sector to remain a sizable drag on real GDP growth over the next two years. The waning effects of past dollar depreciation, along with the projected slowing of foreign economic growth, have led us to project a slowdown in export growth from 8-1/2 percent this year to $6-1 / 2$ percent in 2006. Import growth is projected to step down to $6-3 / 4$ percent in 2005 from this year's $9-3 / 4$ percent pace. However, by 2006, with little restraint from a falling dollar-combined with domestic GDP growth that exceeds foreign GDP growth—import growth picks up to 8-1/2 percent. As a consequence, the already yawning current account deficit widens to a record 6-1/2 percent of nominal GDP by the end of the forecast period. (The International Developments section provides more detail on the outlook for the external sector.)

## Aggregate Supply, the Labor Market, and Inflation

We have trimmed our assumptions for potential GDP growth in this forecast, reflecting downward revisions to investment and thus to capital deepening. We have made no changes to structural multifactor productivity or to any other components of potential GDP. We now assume that potential GDP will rise 3.3 percent in 2005 and 3.4 percent in 2006. By the end of this year, the level of actual output is projected to be $1-1 / 4$ percent below potential output, a wider gap than in the August Greenbook. Because actual GDP growth is projected to outstrip potential over the subsequent two years, we expect the output gap to be nearly eliminated by the end of the forecast period.

## Decomposition of Structural Labor Productivity

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

| Measure | $1974-$ <br> 95 | $1996-$ <br> 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| :--- | ---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Structural labor productivity | $\mathbf{1 . 5}$ | $\mathbf{2 . 7}$ | $\mathbf{3 . 2}$ | $\mathbf{3 . 7}$ | $\mathbf{3 . 0}$ | $\mathbf{2 . 7}$ | $\mathbf{2 . 8}$ |
| $\quad$ Previous | 1.5 | 2.7 | 3.2 | 3.7 | 3.1 | 2.8 | $\ldots$ |
| Contributions $^{1}$ |  |  |  |  |  |  |  |
| Capital deepening $^{\text {Previous }}$ | .7 | 1.4 | .6 | .6 | .8 | .9 | 1.0 |
| $\quad$Multifactor productivity | .7 | 1.4 | .6 | .6 | .8 | 1.0 | $\ldots$ |
| $\quad$ Previous | .5 | 1.1 | 2.4 | 2.8 | 2.0 | 1.6 | 1.5 |
| Labor composition | .5 | 1.1 | 2.4 | 2.8 | 2.0 | 1.6 | $\ldots$ |
| MEMO | .3 | .3 | .3 | .3 | .3 | .3 | .3 |
| Potential GDP |  |  |  |  |  |  |  |
| $\quad$ Previous | 3.0 | 3.4 | 3.4 | 3.8 | 3.4 | 3.3 | 3.4 |

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

1. Percentage points.
. . . Not applicable.
The Outlook for the Labor Market
(Percent change, Q4 to Q4, except as noted)

| Measure | 2003 | 2004 | 2005 | 2006 |
| :--- | ---: | ---: | ---: | :---: |
| Output per hour, nonfarm business | 5.6 | 2.2 | 1.8 | 2.6 |
| $\quad$ Previous | 5.6 | 2.2 | 1.9 | $\ldots$ |
| Nonfarm private payroll employment | -.2 | 1.9 | 2.5 | 2.2 |
| $\quad$ Previous | -.2 | 2.6 | 2.2 | $\ldots$ |
| Household survey employment | 1.2 | 1.4 | 1.8 | 1.7 |
| $\quad$ Previous | 1.2 | 1.5 | 1.7 | $\ldots$ |
| Labor force participation rate $^{1}$ | 66.1 | 66.2 | 66.5 | 66.6 |
| $\quad$ Previous | 66.1 | 66.2 | 66.5 | $\ldots$ |
| Civilian unemployment rate $^{1}$ | 5.9 | 5.5 | 5.3 | 5.1 |
| $\quad$ Previous | 5.9 | 5.5 | 5.3 | $\ldots$ |
| MEMO $_{\text {GDP gap }}{ }^{2}$ |  |  |  |  |
| $\quad$ Previous | 1.7 | 1.2 | .7 | .1 |

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.
. . . Not applicable.

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

| Measure | 2003 | 2004 | 2005 | 2006 |
| :---: | :---: | :---: | :---: | :---: |
| PCE chain-weighted price index | 1.7 | 2.2 | 1.3 | 1.3 |
| $\quad$ Previous | 1.7 | 2.4 | 1.2 | $\ldots$ |
| Food and beverages | 2.7 | 2.8 | 1.9 | 1.7 |
| $\quad$ Previous | 2.7 | 2.7 | 1.8 | $\ldots$ |
| Energy | 7.2 | 11.0 | -2.4 | -1.4 |
| $\quad$ Previous | 7.2 | 10.8 | -4.1 | $\ldots$ |
| Excluding food and energy | 1.2 | 1.6 | 1.4 | 1.3 |
| $\quad 1.2$ | 1.8 | 1.5 | $\ldots$ |  |
| Previous | 1.9 | 2.8 | 1.5 | 1.5 |
| Consumer price index | 1.9 | 2.9 | 1.4 | $\ldots$ |
| $\quad$ Previous | 1.2 | 2.0 | 1.8 | 1.7 |
| Excluding food and energy | 1.2 | 2.2 | 1.9 | $\ldots$ |
| $\quad$ Previous | 1.7 | 2.0 | 1.7 | 1.6 |
| GDP chain-weighted price index | 1.7 | 2.0 | 1.7 | $\ldots$ |
| $\quad$ Previous |  |  |  |  |
| ECI for compensation of private | 4.0 | 4.1 | 4.1 | 4.2 |
| industry workers ${ }^{1}$ | 4.0 | 4.1 | 4.0 | $\ldots$ |
| Previous | 5.4 | 3.6 | 4.1 | 4.2 |
| NFB compensation per hour | 5.3 | 4.1 | 4.0 | $\ldots$ |
| Previous | 1.6 | 3.7 | .2 | .1 |
| Prices of core nonfuel imports | 1.6 | 3.5 | -.3 | $\ldots$ |
| Previous |  |  |  |  |

1. December to December.
... Not applicable.
Productivity and the labor market. We believe that, after the current period of belowaverage employment gains, employers will need to hire workers at a robust pace early next year. We anticipate monthly payroll gains on the order of 290,000 jobs in the first part of 2005-and increases in output per hour well below the rise in structural labor productivity-before payroll increases settle in at a more sustainable pace. As labor market conditions improve, we expect individuals who are currently out of the labor force to be drawn back. Thus, the rapid job gains will have a muted effect on the unemployment rate, which should hold fairly steady next year before falling to near 5 percent by the end of our projection period.

Prices and labor costs. The rise in the core PCE price index is expected to slow from $1-1 / 2$ percent this year to $1-1 / 4$ percent in 2006. We expect the downward pressure on inflation from the underutilization of resources to persist for most of the forecast period, and continued rapid growth in structural productivity also should work to restrain price increases. In addition, the passthrough of declining energy prices should contribute to the disinflation trend. On the compensation side, we anticipate that increases in the employment cost index will run a little above 4 percent next year and in 2006. Although labor market slack is lessening and employees are capturing a portion of past productivity gains, these effects are roughly offset by lower price inflation.

## Financial Flows and Conditions

Growth of total domestic nonfinancial debt this year has been marked up to 8-1/4 percent-on par with last year's pace-reflecting upward revisions to estimated borrowing in the first half of the year and some additional borrowing projected for the second half of the year. We project debt growth to moderate to an annual pace of about 7 percent in 2005 and 2006 as a result of an anticipated slowdown in household and government borrowing that more than offsets a pickup in business borrowing.

Household debt continued to expand at a rapid pace in the first half of this year, boosted by hefty mortgage borrowing. We expect the growth of mortgage debt to taper down over the forecast period as home price appreciation moderates from its recent torrid pace and the volume of cash-out refinancing continues to edge lower. By contrast, the growth of consumer credit is projected to move up somewhat from its recent pace, reflecting a pickup in consumer spending on durable goods and a greater reliance on consumer credit over mortgage debt compared with recent years. Overall, household debt is projected to rise 9-3/4 percent this year and then to increase a somewhat more modest 7-3/4 percent in 2005 and 7-1/2 percent in 2006.

Nonfinancial businesses relied on brisk growth in profits and a moderate amount of borrowing in the first half of the year to fund a notable increase in capital expenditures and to retire substantial amounts of equity through cash-financed mergers and share repurchases. With these equity retirements, the net funds raised in credit and equity markets in the first half was modest, consistent with a financing gap of roughly zero. Going forward, capital expenditures are projected to advance rapidly, while internal funds level out, leading to a faster pace of business borrowing. We anticipate that
nonfinancial business debt will increase at a 6-1/2 percent pace in both 2005 and 2006, up from the $4-1 / 2$ percent pace in the first half of this year.

Federal debt is expected to expand $10-1 / 2$ percent this year, an increase that is a bit smaller than last year's. We anticipate that federal debt growth will moderate next year in response to the projected improvement in the federal deficit and then will pick up somewhat in 2006 as the Medicare prescription-drug plan goes into effect and interest payments on federal debt rise. Borrowing by state and local governments is projected to expand 7-1/4 percent this year-a bit below last year's pace-and then to grow $4-1 / 2$ percent in 2005 and 4 percent in 2006. Borrowing should slow as state and local government finances continue to improve and as the opportunities to advance-refund outstanding debt become more limited under our outlook for only small further declines in long-term rates.

The combination of the effects of tighter monetary policy on opportunity costs and the slower pace of nominal income is expected to slow M2 growth from about 6-3/4 percent in the first half of 2004 to a projected pace of 2 percent for the second half. Opportunity costs are expected to increase slowly through 2006. Consequently, projected M2 growth-at $2-1 / 2$ percent in 2005 and 3-1/4 percent in 2006-will be significantly outpaced by growth in nominal income.

## Alternative Simulations

In this section, we evaluate alternatives to the staff forecast using simulations of the FRB/US model. The first scenario concerns the risk that the current low level of interest rates will produce a more vigorous economic expansion than in the baseline. In the second simulation, we consider the implications of a more pronounced rise in the saving rate. Our third scenario also addresses a demand-side risk - the chance that we have underestimated the disruptive effect of the recent rise in oil prices. We then consider two scenarios that involve opposing risks to the baseline inflation outlook-a lower level of potential output and a stronger decline in the price markup. In all these simulations the federal funds rate is held at baseline. The final scenario assumes that the funds rate follows a path consistent with current readings from the futures market.

Surging demand. Even though the real funds rate remains low relative to its average over the past forty years, the staff projects the output gap to narrow only slowly and not to close until late 2006. One interpretation of this outlook is that the stimulus typically expected from such an accommodative monetary stance is muted by an equilibrium real

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

| Measure and scenario | 2004 |  | 2005 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 2006 |  |  |  |  |
|  | H1 | H2 | H1 | H2 |  |
| Real GDP |  |  |  |  |  |
| Baseline | $\mathbf{3 . 9}$ | $\mathbf{3 . 8}$ | $\mathbf{3 . 7}$ | $\mathbf{3 . 9}$ | $\mathbf{4 . 0}$ |
| Surging demand | 3.9 | 4.8 | 4.6 | 4.4 | 4.1 |
| Higher saving rate | 3.9 | 3.4 | 2.8 | 2.6 | 2.4 |
| Near-term weakness | 3.9 | 2.5 | 3.2 | 4.3 | 4.4 |
| Less room to grow | 3.9 | 3.9 | 3.8 | 4.0 | 4.1 |
| Lower markup | 3.9 | 3.9 | 3.8 | 3.9 | 3.7 |
| Market-based funds rate | 3.9 | 3.7 | 3.6 | 3.6 | 3.5 |
| Civilian unemployment rate |  |  |  |  |  |
| Baseline | $\mathbf{5 . 6}$ | $\mathbf{5 . 5}$ | $\mathbf{5 . 4}$ | $\mathbf{5 . 3}$ | $\mathbf{5 . 1}$ |
| Surging demand | 5.6 | 5.3 | 5.0 | 4.7 | 4.5 |
| Higher saving rate | 5.6 | 5.6 | 5.7 | 5.9 | 6.6 |
| Near-term weakness | 5.6 | 5.7 | 5.9 | 5.7 | 5.1 |
| Less room to grow | 5.6 | 5.3 | 5.1 | 5.0 | 4.6 |
| Lower markup | 5.6 | 5.5 | 5.3 | 5.2 | 5.1 |
| Market-based funds rate | 5.6 | 5.5 | 5.4 | 5.4 | 5.5 |
| PCE prices |  |  |  |  |  |
| excluding food and energy |  |  |  |  |  |
| Baseline | $\mathbf{1 . 9}$ | $\mathbf{1 . 2}$ | $\mathbf{1 . 5}$ | $\mathbf{1 . 4}$ | $\mathbf{1 . 3}$ |
| Surging demand | 1.9 | 1.2 | 1.6 | 1.5 | 1.5 |
| Higher saving rate | 1.9 | 1.2 | 1.5 | 1.3 | .9 |
| Near-term weakness | 1.9 | 1.2 | 1.4 | 1.3 | 1.2 |
| Less room to grow | 1.9 | 1.3 | 1.7 | 1.7 | 1.8 |
| Lower markup | 1.9 | .8 | 1.0 | .8 | 1.0 |
| Market-based funds rate | 1.9 | 1.2 | 1.5 | 1.3 | 1.2 |

1. Average for the final quarter of the period.
funds rate that is being held down relative to historical norms. In this scenario, we assume that the forces holding down the equilibrium real rate dissipate rapidly. The surge in demand resulting from the greater effective monetary stimulus causes economic slack to disappear much more rapidly than it does in the baseline projection. All told, real GDP grows nearly 4-3/4 percent at an annual rate in the second half of this year and about $4-1 / 2$ percent in 2005, before moderating to 4 percent in 2006; the unemployment rate falls to $4-1 / 2$ percent by the end of 2006 . The swing to tight labor and product markets offsets the restraint on aggregate prices in the baseline from falling oil prices and
decelerating non-oil import prices, causing core PCE inflation to remain stable at $1-1 / 2$ percent.

Rising saving rate. In the staff projection, the personal saving rate gradually increases as interest rates rise and consumption comes into better alignment with income and wealth, but it remains low relative to historical norms. In light of some of the mixed signals in the household sector in recent months, there is a risk that the recovery in personal saving may prove to be more pronounced than we are projecting. In this scenario, consumer spending slows enough to raise the saving rate to 4 percent in 2006about $1-1 / 2$ percentage points above baseline. Under these conditions, real GDP increases only 2-3/4 percent in 2005 and 2-1/2 percent in the following year, causing the unemployment rate to climb above $6-1 / 2$ percent by late 2006. This increase in slack causes core inflation to fall below 1 percent in 2006.

Weaker near-term activity. Although we believe that this year's run-up in oil prices is significantly restraining real activity, we may have underestimated its adverse effects in two ways. First, during some past episodes of spiking oil prices, households have cut back their spending noticeably more than our models would predict, suggesting the possibility of a nonlinear response. Second, uncertainty about the economic fallout from higher oil prices may for a time heighten business caution about hiring and investment. In this scenario, consumer spending over the second half of this year and the first half of 2005 grows almost 1 percentage point more slowly than in the baseline forecast. Hiring and capital spending are also weaker over the same period, with payroll gains of only 125,000 per month on average and a pace of $\mathrm{E} \& \mathrm{~S}$ spending that is 4 percentage points below baseline. However, this near-term weakness is only temporary because household and business confidence gradually recovers over the second half of next year and in 2006 as oil prices decline. Under these conditions, real GDP rises at an annual rate of less than 2-1/2 percent over the second half of this year and 3-1/4 percent in the first half of 2005 but thereafter picks up to an annual rate of almost $4-1 / 2$ percent. With real output first rising more slowly than potential but later outpacing it significantly, the unemployment rate climbs to 6 percent by the middle of next year but then falls to 5 percent by the end of 2006. Because of increased slack, core inflation is a touch lower in 2005 and 2006.

Less room to grow. We believe that the economy currently has a significant amount of slack, which we expect to disappear only gradually over the next two years. In this scenario, we take a less optimistic view of the supply side than in the baseline and assume that structural developments in the labor market have kept the NAIRU at

5-1/2 percent over the past few years. In addition, we assume that some of the decline in the labor force participation rate since 2001 has been permanent, implying that over the next two years the labor force will grow only half as fast as in the baseline. If the real funds rate were held unchanged, the downward revision to the historical (and prospective) level of potential output would have little or no implications for future aggregate spending. ${ }^{2}$ But the alternative supply-side conditions also imply greater pressure on resource use now and in the future, and so more inflation, which modestly lowers real interest rates because the nominal funds rate is held unchanged at baseline. Thus, real GDP is a little stronger in this scenario, the unemployment rate falls to $4-1 / 2$ percent by late 2006, and core PCE inflation increases to $1-3 / 4$ percent in 2006.

Lower markup. The markup of prices over unit labor costs is currently high by historical standards, and over the next two years we project it to fall roughly one-third of the way back to its 1970-2003 average. However, there is a risk that the markup could erode at a faster pace, and in this scenario we assume that the markup returns to its average level by late 2006 through a combination of larger nominal wage gains and smaller price increases. As a result, core PCE inflation averages less than 1 percent over the next two years. The swing toward labor income and away from capital income provides a small initial boost to aggregate spending, but this increase is more than offset later by a higher level of real interest rates.

Market-based funds rate. Quotes from futures markets are consistent with a more pronounced tightening in monetary policy than that incorporated into the staff outlook; specifically, market-based expectations of the funds rate are 45 basis points above baseline by the end of 2005 and nearly 75 basis points above by the end of 2006. The higher level of the funds rate has only a small effect on real activity and inflation next year, but the effects of tighter policy are quite noticeable in 2006-real GDP rises only $3-1 / 2$ percent, the unemployment rate ends the year at $5-1 / 2$ percent, and core inflation edges down to $1-1 / 4$ percent.

[^1]Selected Greenbook Projections and 70 Percent
Confidence Intervals Derived from Historical Forecast Errors and FRB/US Simulations

| Measure | 2004 | 2005 | 2006 |
| :---: | :---: | :---: | :---: |
| Real GDP <br> (percent change, Q4 to Q4) |  |  |  |
|  |  |  |  |
| Projection | 3.9 | 3.8 | 4.0 |
| Confidence interval |  |  |  |
| Greenbook forecast errors ${ }^{1}$ | 2.9-4.8 | 1.8-5.8 | 2.3-5.8 |
| FRB/US stochastic simulations | 3.2-4.5 | 2.4-5.6 | 2.3-6.0 |
| Civilian unemployment rate (percent, Q4) |  |  |  |
| Projection | 5.5 | 5.3 | 5.1 |
| Confidence interval |  |  |  |
| Greenbook forecast errors ${ }^{1}$ | 5.2-5.8 | 4.5-6.1 | 3.9-6.3 |
| FRB/US stochastic simulations | 5.2-5.8 | 4.5-6.1 | 3.9-6.1 |
| PCE prices excluding food and energy (percent change, Q4 to Q4) |  |  |  |
| Projection | 1.6 | 1.4 | 1.3 |
| Confidence interval |  |  |  |
| Greenbook forecast errors ${ }^{2}$ | 1.3-1.9 | .6-2.2 | .3-2.4 |
| FRB/US stochastic simulations | 1.3-1.8 | .7-2.2 | .5-2.2 |

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

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

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

| Greenbook baseline | Surging demand <br>  <br> Rising saving rate | Less room to grow |
| :--- | :--- | :--- |
| Weaker near-term activity |  | Market-based funds rate |

Real GDP


Unemployment Rate


PCE Prices excluding Food and Energy


| Interval |  | Nominal GDP |  | Real GDP |  | GDP chain-weighted price index |  | Consumer price index ${ }^{1}$ |  | Unemployment rate ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 08/05/04 | 09/15/04 | 08/05/04 | 09/15/04 | 08/05/04 | 09/15/04 | 08/05/04 | 09/15/04 | 08/05/04 | 09/15/04 |
| ANNUAL |  |  |  |  |  |  |  |  |  |  |  |
| 2002 |  | 3.5 | 3.5 | 1.9 | 1.9 | 1.7 | 1.7 | 1.6 | 1.6 | 5.8 | 5.8 |
| 2003 |  | 4.9 | 4.9 | 3.0 | 3.0 | 1.8 | 1.8 | 2.3 | 2.3 | 6.0 | 6.0 |
| 2004 |  | 6.5 | 6.4 | 4.4 | 4.4 | 2.0 | 2.0 | 2.6 | 2.5 | 5.6 | 5.5 |
| 2005 |  | 5.5 | 5.5 | 3.9 | 3.8 | 1.6 | 1.6 | 1.7 | 1.7 | 5.4 | 5.4 |
| 2006 |  |  | 5.7 |  | 4.0 |  | 1.6 |  | 1.5 |  | 5.2 |
| QUARTERLY |  |  |  |  |  |  |  |  |  |  |  |
| 2003 | Q1 | 4.9 | 4.9 | 1.9 | 1.9 | 2.7 | 2.7 | 3.8 | 3.8 | 5.8 | 5.8 |
|  | Q2 | 5.3 | 5.3 | 4.1 | 4.1 | 1.1 | 1.1 | 0.7 | 0.7 | 6.1 | 6.1 |
|  | Q3 | 8.8 | 8.8 | 7.4 | 7.4 | 1.4 | 1.4 | 2.4 | 2.4 | 6.1 | 6.1 |
|  | 24 | 5.7 | 5.7 | 4.2 | 4.2 | 1.6 | 1.6 | 0.7 | 0.7 | 5.9 | 5.9 |
| 2004 | Q1 | 7.4 | 7.4 | 4.5 | 4.5 | 2.8 | 2.8 | 3.5 | 3.5 | 5.6 | 5.6 |
|  | Q2 | 6.4 | 6.6 | 3.1 | 3.3 | 3.2 | 3.2 | 4.8 | 4.8 | 5.6 | 5.6 |
|  | Q3 | 4.9 | 4.5 | 3.9 | 3.6 | 0.9 | 0.8 | 2.1 | 1.8 | 5.6 | 5.5 |
|  | 24 | 6.0 | 5.2 | 4.7 | 4.1 | 1.2 | 1.1 | 1.3 | 1.1 | 5.5 | 5.5 |
| 2005 | Q1 | 5.9 | 5.8 | 3.9 | 3.7 | 1.9 | 2.1 | 1.2 | 1.6 | 5.4 | 5.4 |
|  | Q2 | 5.2 | 5.5 | 3.6 | 3.8 | 1.6 | 1.7 | 1.5 | 1.5 | 5.4 | 5.4 |
|  | Q3 | 5.2 | 5.5 | 3.6 | 3.9 | 1.6 | 1.5 | 1.5 | 1.5 | 5.4 | 5.4 |
|  | Q4 | 5.1 | 5.5 | 3.6 | 3.9 | $1.5$ | 1.5 | 1.6 | 1.5 | 5.3 | 5.3 |
| 2006 | Q1 |  | 6.0 |  | 4.0 |  | 1.9 |  | 1.5 |  | 5.3 |
|  | Q2 |  | 5.6 |  | 4.0 |  | 1.5 |  | 1.5 |  | 5.2 |
|  | Q3 |  | 5.6 |  | 4.0 |  | 1.5 |  | 1.5 |  | 5.2 |
|  | Q4 |  | 5.5 |  | 4.0 |  | 1.4 |  | 1.5 |  | 5.1 |
| TWO-QUARTER ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |
| 2003 | Q2 | 5.1 | 5.1 | 3.0 | 3.0 | 1.9 | 1.9 | 2.2 | 2.2 | 0.2 | 0.2 |
|  | Q4 | 7.2 | 7.2 | 5.8 | 5.8 | 1.5 | 1.5 | 1.5 | 1.5 | -0.2 | -0.2 |
| 2004 | Q2 | $6.9$ | $7.0$ | $3.8$ | $3.9$ | $3.0$ | $3.0$ | $4.2$ | $4.2$ | $-0.3$ | $-0.3$ |
|  | Q4 | 5.4 | 4.8 | 4.3 | 3.8 | 1.0 | $1.0$ | 1.7 | 1.5 | -0.1 | -0.1 |
| 2005 | Q2 | 5.6 | 5.7 | 3.7 | 3.7 | 1.8 | 1.9 | 1.3 | 1.6 | -0.1 | -0.1 |
|  | Q4 | 5.2 | 5.5 | 3.6 | 3.9 | 1.5 | 1.5 | 1.6 | 1.5 | -0.1 | -0.1 |
| 2006 | Q2 |  | 5.8 |  | 4.0 |  | 1.7 |  | 1.5 |  | $-0.1$ |
|  | Q4 |  | 5.5 |  | 4.0 |  | 1.4 |  | 1.5 |  | $-0.1$ |
| FOUR-QUARTER ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |
| 2002 Q4 |  | 3.8 | 3.8 | 2.3 | 2.3 | 1.6 | 1.6 | 2.2 | 2.2 | 0.3 | 0.3 |
| 2003 Q4 |  | 6.2 | 6.2 | 4.4 | 4.4 | 1.7 | 1.7 | 1.9 | 1.9 | 0.0 | 0.0 |
| 2004 Q4 |  | 6.1 | 5.9 | 4.1 | 3.9 | 2.0 | 2.0 | 2.9 | 2.8 | -0.4 | -0.4 |
| $\begin{array}{ll}2005 & \text { Q4 } \\ 2006 & \text { Q4 }\end{array}$ |  | 5.4 | 5.6 | 3.6 | 3.8 | 1.7 | 1.7 | 1.4 | 1.5 | -0.1 | -0.1 |
|  |  |  | 5.7 |  | 4.0 |  | 1.6 |  | 1.5 |  | -0.2 |

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

Strictly Confidential <FR> Class II FOMC
real gross domestic product and related items, annual values
(Seasonally adjusted annual rate)

| Item | Units ${ }^{1}$ | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | $\begin{gathered} ---- \\ 2004 \end{gathered}$ | $\begin{gathered} \text { Projected } \\ 2005 \end{gathered}$ | $\begin{gathered} --- \\ 2006 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Expenditures |  |  |  |  |  |  |  |  |  |  |
| Nominal GDP | Bill. \$ | 8747.0 | 9268.4 | 9817.0 | 10128.0 | 10487.0 | 11004.0 | 11713.1 | 12354.4 | 13053.1 |
| Real GDP | Bill. Ch. \$ | 9066.9 | 9470.3 | 9817.0 | 9890.7 | 10074.8 | 10381.3 | 10837.6 | 11248.3 | 11695.6 |
| Real GDP | \% change | 4.5 | 4.7 | 2.2 | 0.2 | 2.3 | 4.4 | 3.9 | 3.8 | 4.0 |
| Gross domestic purchases |  | 5.5 | 5.5 | 3.0 | 0.4 | 3.1 | 4.3 | 4.2 | 3.9 | 4.5 |
| Final sales |  | 4.8 | 4.2 | 2.9 | 1.5 | 1.2 | 4.5 | 3.5 | 4.0 | 4.0 |
| Priv. dom. final purchases |  | 6.4 | 5.3 | 4.3 | 1.0 | 1.7 | 4.9 | 4.2 | 4.5 | 4.8 |
| Personal cons. expenditures |  | 5.4 | 4.9 | 4.1 | 2.8 | 2.5 | 3.8 | 3.4 | 3.9 | 4.1 |
| Durables |  | 14.4 | 7.3 | 4.7 | 10.8 | 1.5 | 9.9 | 4.9 | 6.9 | 5.9 |
| Nondurables |  | 4.7 | 4.9 | 3.0 | 1.9 | 2.3 | 4.6 | 3.5 | 4.2 | 4.8 |
| Services |  | 3.8 | 4.4 | 4.5 | 1.6 | 2.9 | 2.2 | 3.0 | 3.2 | 3.4 |
| Business fixed investment |  | 10.9 | 7.7 | 7.8 | -9.6 | -6.0 | 9.4 | 9.9 | 9.4 | 9.9 |
| Equipment \& Software |  | 13.5 | 10.8 | 7.5 | -9.0 | -2.2 | 12.1 | 12.2 | 10.5 | 11.8 |
| Nonres. structures |  | 4.0 | -0.9 | 8.8 | -11.1 | -16.1 | 1.5 | 2.5 | 6.0 | 3.9 |
| Residential structures |  | 10.3 | 3.6 | -1.8 | 1.4 | 6.9 | 12.0 | 4.8 | 2.5 | 3.9 |
| Exports |  | 2.6 | 5.6 | 6.5 | -11.9 | 3.5 | 6.1 | 8.4 | 7.2 | 6.4 |
| Imports |  | 11.0 | 12.1 | 11.2 | -7.6 | 9.7 | 4.9 | 9.7 | 6.8 | 8.6 |
| Gov't. cons. \& investment |  | 3.3 | 4.2 | 0.4 | 5.0 | 3.8 | 2.2 | 2.5 | 2.4 | 2.7 |
| Federal |  | 0.1 | 4.2 | -2.2 | 6.4 | 8.2 | 5.5 | 4.5 | 2.2 | 2.5 |
| Defense |  | -1.2 | 4.3 | -3.5 | 6.5 | 8.5 | 8.5 | 5.1 | 2.2 | 2.6 |
| State \& local |  | 5.1 | 4.2 | 1.7 | 4.2 | 1.6 | 0.4 | 1.3 | 2.5 | 2.8 |
| Change in bus. inventories Nonfarm | Bill. Ch. \$ | $\begin{aligned} & 72.6 \\ & 71.2 \end{aligned}$ | 68.9 71.5 | 56.5 57.8 | -31.7 -31.8 | 11.7 13.5 | -0.8 -1.1 | 44.6 42.5 | 35.9 34.9 | 22.4 21.2 |
| Net exports |  | -203.8 | -296.2 | -379.5 | -399.1 | -472.1 | -518.5 | -576.2 | -609.7 | -679.4 |
| Nominal ${ }_{2}$ GDP | \% change | 5.7 | 6.3 | 4.6 | 2.7 | 3.8 | 6.2 | 5.9 | 5.6 | 5.7 |
| GDP $\mathrm{Gap}^{2}$ |  | -1.5 | -2.4 | -2.5 | 0.2 | 1.6 | 2.2 | 1.4 | 0.9 | 0.3 |
| Employment and Production |  |  |  |  |  |  |  |  |  |  |
| Nonfarm payroll employment | Millions | 125.9 | 129.0 | 131.8 | 131.8 | 130.3 | 129.9 | 131.3 | 134.0 | 136.6 |
| Unemployment rate | \% | 4.5 | 4.2 | 4.0 | 4.7 | 5.8 | 6.0 | 5.5 | 5.4 | 5.2 |
| Industrial prod. index | \% change | 4.4 | 4.9 | 2.3 | -5.2 | 1.3 | 1.5 | 5.5 | 4.8 | 4.5 |
| Capacity util. rate - mfg. |  | 82.0 | 81.4 | 81.1 | 75.4 | 73.9 | 73.4 | 76.4 | 78.8 | 80.6 |
| Housing starts | Millions | 1.62 | 1.64 | 1.57 | 1.60 | 1.70 | 1.85 | 1.95 | 1.95 | 1.96 |
| Light motor vehicle sales |  | 15.52 | 16.90 | 17.35 | 17.12 | 16.79 | 16.62 | 16.73 | 17.47 | 18.02 |
| North Amer. produced |  | 13.48 | 14.41 | 14.48 | 14.04 | 13.49 | 13.32 | 13.36 | 13.95 | 14.45 |
| Other |  | 2.03 | 2.49 | 2.87 | 3.08 | 3.30 | 3.31 | 3.37 | 3.52 | 3.57 |
| Income and Saving |  |  |  |  |  |  |  |  |  |  |
| Nominal GNP | Bill. \$ | 8768.3 | 9302.2 | 9855.9 | 10171.6 | 10514.1 | 11059.2 | 11749.6 | 12351.7 | 13014.9 |
| Nominal GNP | \% change | 5.5 | 6.5 | 4.7 | 2.9 | 3.5 | 6.5 | 5.2 | 5.4 | 5.3 |
| Nominal personal income |  | 7.0 | 5.5 | 7.1 | 2.2 | 1.9 | 4.6 | 6.6 | 5.3 | 6.6 |
| Real disposable income |  | 5.6 | 2.8 | 4.4 | 1.2 | 2.9 | 3.9 | 4.3 | 3.4 | 5.1 |
| Personal saving rate | \% | 4.3 | 2.4 | 2.3 | 1.8 | 2.0 | 1.4 | 1.4 | 1.5 | 2.6 |
| Corp. profits, IVA \& CCAdj. | \% change | -10.0 | 9.6 | -8.6 | -0.2 | 15.4 | 23.3 | 4.3 | 1.0 | -0.5 |
| Profit share of GNP | \% | 9.1 | 9.2 | 8.3 | 7.5 | 8.3 | 9.2 | 9.9 | 9.6 | 9.2 |
| Excluding FR Banks |  | 8.9 | 8.9 | 8.0 | 7.3 | 8.1 | 9.1 | 9.7 | 9.4 | 9.0 |
| Federal surpl./deficit | Bill. \$ | 38.8 | 103.6 | 189.5 | 46.7 | -254.5 | -364.5 | -378.0 | -255.8 | -325.2 |
| State \& local surpl./def. |  | 52.0 | 50.4 | 50.0 | 4.8 | -25.0 | -3.2 | 9.5 | 13.1 | 19.1 |
| Ex. social ins. funds |  | 50.3 | 48.7 | 47.9 | 2.2 | -26.6 | -4.3 | 8.2 | 11.6 | 17.6 |
| Gross natl. saving rate | \% | 18.2 | 18.0 | 18.0 | 16.3 | 14.1 | 13.5 | 13.6 | 13.9 | 14.0 |
| Net natl. saving rate |  | 7.4 | 6.9 | 6.7 | 4.2 | 2.0 | 1.4 | 2.0 | 2.4 | 2.6 |
| Prices and Costs |  |  |  |  |  |  |  |  |  |  |
| GDP chn.-wt. price index Gross Domestic Purchases chn.-wt. price index | \% change | 1.1 | 1.6 | 2.2 | 2.4 | 1.6 | 1.7 | 2.0 | 1.7 | 1.6 |
|  |  | 0.7 | 2.0 | 2.4 | 1.6 | 1.8 | 1.8 | 2.5 | 1.4 | 1.3 |
| PCE chn.-wt. price index |  | 0.9 | 2.1 | 2.3 | 1.7 | 1.8 | 1.7 | 2.2 | 1.3 | 1.3 |
| Ex. food and energy |  | 1.4 | 1.6 | 1.5 | 2.2 | 1.5 | 1.2 | 1.6 | 1.4 | 1.3 |
| CPI |  | 1.5 | 2.6 | 3.4 | 1.8 | 2.2 | 1.9 | 2.8 | 1.5 | 1.5 |
| Ex. food and energy |  | 2.3 | 2.0 | 2.6 | 2.7 | 2.0 | 1.2 | 2.0 | 1.8 | 1.7 |
| ECI, hourly compensation ${ }^{3}$ |  | 3.5 | 3.4 | 4.4 | 4.2 | 3.2 | 4.0 | 4.1 | 4.1 | 4.2 |
| Nonfarm business sector Output per hour |  | 2.7 | 3.4 | 2.1 | 3.3 | 3.5 | 5.6 | 2.2 | 1.8 | 2.6 |
| Compensation per Hour |  | 5.5 | 5.2 | 6.4 | 3.5 | 2.9 | 5.4 | 3.6 | 4.1 | 4.2 |
| Unit labor cost |  | 2.7 | 1.7 | 4.3 | 0.3 | -0.6 | -0.2 | 1.3 | 2.2 | 1.5 |

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.

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 - - - - - - - - - - - - - - - |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} 2004 \\ \text { Q3 } \end{gathered}$ | $\begin{aligned} & 2004 \\ & Q 4 \end{aligned}$ | $\begin{aligned} & 2005 \\ & Q 1 \end{aligned}$ | $\begin{gathered} 2005 \\ \mathbf{Q 2} \end{gathered}$ | $\begin{gathered} 2005 \\ 03 \end{gathered}$ | $\begin{gathered} 2005 \\ 84 \end{gathered}$ | $\begin{gathered} 2006 \\ Q 1 \end{gathered}$ | $\begin{aligned} & 2006 \\ & Q 2 \end{aligned}$ | $\begin{gathered} 2006 \\ Q 3 \end{gathered}$ | $\begin{aligned} & 2006 \\ & 04 \end{aligned}$ |
| EXPENDITURES |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GDP | Bill. \$ | 11785.7 | 11936.5 | 12106.6 | 12270.3 | 12436.4 | 12604.2 | 12788.5 | 12964.4 | 13141.1 | 13318.4 |
| Real GDP | Bill. Ch. \$ | 10879.7 | 10989.3 | 11089.0 | 11193.1 | 11301.2 | 11409.9 | 11523.1 | 11637.2 | 11752.7 | 11869.4 |
| Real GDP | \% change | 3.6 | 4.1 | 3.7 | 3.8 | 3.9 | 3.9 | 4.0 | 4.0 | 4.0 | 4.0 |
| Gross domestic purchases |  | 3.5 | 4.3 | 3.7 | 3.6 | 4.1 | 4.3 | 4.7 | 4.1 | 4.4 | 4.5 |
| Final sales |  | 4.4 | 3.9 | 2.9 | 4.7 | 4.4 | 4.0 | 3.7 | 4.5 | 4.0 | 3.8 |
| Priv. dom. final purchases |  | 4.2 | 4.8 | 3.2 | 5.0 | 5.0 | 4.9 | 4.8 | 4.9 | 4.8 | 4.7 |
| Personal cons. expenditures |  | 3.7 | 4.1 | 4.0 | 4.0 | 3.9 | 3.9 | 4.1 | 4.1 | 4.1 | 4.1 |
| Durables |  | 12.4 | 5.4 | 7.4 | 6.9 | 6.4 | 6.8 | 6.0 | 6.1 | 5.5 | 6.1 |
| Nondurables |  | 3.2 | 3.9 | 4.0 | 4.3 | 4.3 | 4.2 | 4.8 | 4.8 | 4.8 | 4.8 |
| Services |  | 2.2 | 3.9 | 3.3 | 3.2 | 3.1 | 3.2 | 3.5 | 3.4 | 3.5 | 3.4 |
| Business fixed investment |  | 10.9 | 12.6 | -0.1 | 12.7 | 13.0 | 12.7 | 10.1 | 10.1 | 10.0 | 9.6 |
| Equipment \& Software |  | 12.9 | 14.5 | -1.4 | 15.1 | 14.8 | 14.2 | 11.6 | 11.9 | 12.0 | 11.6 |
| Nonres. structures |  | 4.7 | 6.7 | 4.0 | 5.1 | 7.1 | 7.8 | 5.0 | 4.1 | 3.6 | 3.0 |
| Residential structures |  | -0.8 | -0.5 | 0.2 | 3.3 | 4.1 | 2.5 | 3.7 | 5.4 | 4.2 | 2.2 |
| Exports |  | 8.6 | 10.6 | 5.5 | 7.5 | 7.4 | 8.5 | 5.2 | 6.4 | 6.3 | 7.7 |
| Imports |  | 5.9 | 9.7 | 5.1 | 5.1 | 7.5 | 9.6 | 9.6 | 6.2 | 8.4 | 10.1 |
| Gov't. cons. \& investment |  | 3.9 | 1.2 | 2.0 | 2.5 | 2.5 | 2.5 | 2.5 | 2.6 | 2.6 | 2.9 |
| Federal |  | 8.0 | 0.5 | 1.7 | 2.8 | 2.3 | 2.0 | 2.1 | 2.4 | 2.3 | 3.1 |
| Defense |  | 9.2 | -0.7 | 2.2 | 2.3 | 2.3 | 1.9 | 2.0 | 2.4 | 2.4 | 3.5 |
| State \& local |  | 1.6 | 1.7 | 2.2 | 2.4 | 2.5 | 2.7 | 2.8 | 2.8 | 2.8 | 2.8 |
| Change in bus. inventories | Bill. Ch. \$ | 35.9 | 40.5 | 61.4 | 36.5 | 24.8 | 21.0 | 29.9 | 17.8 | 17.9 | 23.8 |
| Nonfarm |  | 36.2 | 39.8 | 60.4 | 35.4 | 23.7 | 19.9 | 28.7 | 16.7 | 16.8 | 22.7 |
| Net exports |  | -581.5 | -592.7 | -599.0 | -599.7 | -611.2 | -628.8 | -656.5 | -665.9 | -685.8 | -709.6 |
| Nominal ${ }_{1}$ GDP | \% change | 4.5 | 5.2 | 5.8 | 5.5 | 5.5 | 5.5 | 6.0 | 5.6 | 5.6 | 5.5 |
| GDP Gap ${ }^{1}$ |  | 1.4 | 1.2 | 1.1 | 1.0 | 0.9 | 0.7 | 0.6 | 0.4 | 0.2 | 0.1 |
| EMPLOYMENT AND PRODUCTION |  |  |  |  |  |  |  |  |  |  |  |
| Nonfarm payroll employment | Millions | 131.5 | 132.1 | 132.9 | 133.7 | 134.4 | 135.0 | 135.7 | 136.3 | 137.0 | 137.6 |
| Unemployment rate |  | 5.5 | 5.5 | 5.4 | 5.4 | 5.4 | 5.3 | 5.3 | 5.2 | 5.2 | 5.1 |
| Industrial prod. index | \% change | 4.0 | 6.5 | 5.1 | 4.9 | 4.9 | 4.5 | 4.9 | 4.4 | 4.3 | 4.6 |
| Capacity util. rate - mfg. |  | 76.8 | 77.5 | 78.0 | 78.6 | 79.1 | 79.5 | 80.1 | 80.5 | 80.8 | 81.2 |
| Housing starts | Millions | 1.98 | 1.94 | 1.94 | 1.95 | 1.95 | 1.95 | 1.96 | 1.96 | 1.97 | 1.97 |
| Light motor vehicle sales |  | 16.89 | 16.98 | 17.14 | 17.37 | 17.60 | 17.76 | 17.89 | 18.01 | 18.03 | 18.15 |
| North Amer. produced |  | 13.57 | 13.48 | 13.64 | 13.86 | 14.08 | 14.22 | 14.35 | 14.45 | 14.45 | 14.55 |
| Other |  | 3.32 | 3.50 | 3.50 | 3.51 | 3.52 | 3.54 | 3.54 | 3.56 | 3.58 | 3.60 |
| INCOME AND SAVING |  |  |  |  |  |  |  |  |  |  |  |
| Nominal GNP | Bill. \$ | 11815.1 | 11943.5 | 12112.7 | 12268.2 | 12431.5 | 12594.2 | 12765.4 | 12933.1 | 13099.5 | 13261.7 |
| Nominal GNP | \% change | 4.2 | 4.4 | 5.8 | 5.2 | 5.4 | 5.3 | 5.5 | 5.4 | 5.2 | 5.0 |
| Nominal personal income |  | 3.8 | 11.5 | 2.4 | 6.3 | 6.3 | 6.3 | 7.9 | 6.3 | 6.2 | 6.0 |
| Real disposable income |  | 2.4 | 10.0 | -0.3 | 4.6 | 4.6 | 4.6 | 6.2 | 4.9 | 4.7 | 4.5 |
| Personal saving rate | \% | 0.9 | 2.3 | 1.3 | 1.4 | 1.6 | 1.8 | 2.3 | 2.5 | 2.7 | 2.8 |
| Corp. profits, IVA \& CCAdj. Profit share of GNP | \% change | -15.0 9.5 | 20.8 9.9 | 3.6 9.8 | -1.8 9.6 | 1.3 9.5 | 1.0 9.4 | 1.5 9.4 | 0.6 9.2 | -0.7 9.1 | -3.2 8.9 |
| Excluding FR Banks |  | 9.3 | 9.7 | 9.6 | 9.5 | 9.4 | 9.3 | 9.2 | 9.1 | 9.0 | 8.8 |
| Federal surpl./deficit | Bill. \$ | -385.9 | -352.9 | -278.7 | -255.6 | -240.5 | -248.6 | -313.0 | -321.3 | -330.6 | -336.0 |
| State \& local surpl./def. |  | -3.2 | 13.0 | 13.0 | 10.3 | 12.9 | 16.2 | 17.2 | 17.7 | 19.1 | 22.5 |
| Ex. social ins. funds |  | -4.6 | 11.5 | 11.5 | 8.8 | 11.4 | 14.7 | 15.7 | 16.2 | 17.6 | 21.0 |
| Gross natl. saving rate | \% | 13.4 | 13.6 | 13.7 | 13.8 | 13.9 | 14.0 | 13.9 | 14.1 | 14.1 | 14.0 |
| Net natl. saving rate |  | 1.3 | 2.1 | 2.3 | 2.4 | 2.5 | 2.6 | 2.5 | 2.7 | 2.7 | 2.6 |
| PRICES AND Costs |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Gross Domestic Purchases chn.-wt. price index |  | 1.6 | 1.4 | 1.8 | 1.4 | 1.3 | 1.3 | 1.6 | 1.2 | 1.2 | 1.2 |
| PCE chn.-wt. price index |  | 1.3 | 1.2 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 | 1.2 | 1.3 | 1.3 |
| Ex. food and energy |  | 1.0 | 1.5 | 1.5 | 1.5 | 1.4 | 1.4 | 1.3 | 1.3 | 1.3 | 1.3 |
| CPI |  | 1.8 | 1.1 | 1.6 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| Ex. food and energy |  | 1.5 | 1.8 | 1.9 | 1.9 | 1.8 | 1.8 | 1.7 | 1.7 | 1.7 | 1.7 |
| ECI, hourly compensation          <br> Nonfarm business sector  4.0 4.0 4.0 4.0 4.1 4.1 4.1 4.1 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Compensation per hour |  | 4.2 | 4.0 | 4.2 | 4.1 | 4.1 | 4.1 | 4.2 | 4.1 | 4.2 | 4.2 |
| Unit labor cost |  | 3.6 | 2.0 | 3.1 | 2.4 | 1.8 | 1.6 | 1.6 | 1.5 | 1.5 | 1.5 |

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

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

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

| Item | Fiscal year |  |  |  | 2004 |  |  |  | 2005 |  |  |  | 2006 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2003{ }^{\text {a }}$ | 2004 | 2005 | 2006 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget $\quad$ Not seas |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{1}$ | 1782 | 1875 | 2053 | 2214 | 410 | 550 | 475 | 468 | 445 | 630 | 511 | 516 | 482 | 675 | 542 | 530 |
| Outlays ${ }^{1}$ | 2156 | 2296 | 2417 | 2565 | 580 | 576 | 569 | 607 | 607 | 600 | 603 | 624 | 662 | 644 | 635 | 668 |
| Surplus/deficit ${ }^{1}$ | -374 | -421 | -363 | -351 | -171 | -26 | -94 | -139 | -162 | 30 | -92 | -108 | -180 | 30 | -93 | -138 |
| On-budget | -535 | -575 | -534 | -543 | -193 | -99 | -103 | -181 | -198 | -49 | -106 | -153 | -222 | -57 | -111 | -188 |
| Off-budget | 161 | 155 | 170 | 192 | 23 | 73 | 9 | 42 | 36 | 78 | 15 | 45 | 42 | 88 | 18 | 50 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 374 | 389 | 373 | 358 | 136 | 41 | 94 | 148 | 136 | -5 | 94 | 88 | 180 | 3 | 87 | 123 |
| Cash decrease | 26 | -5 | -5 | 0 | 12 | -23 | 4 | -6 | 2 | -15 | 15 | 15 | 0 | -30 | 15 | 15 |
| Other ${ }^{2}$ | -25 | 37 | -5 | -7 | 23 | 8 | -4 | -3 | 24 | -9 | -17 | 5 | 0 | -4 | -8 | -0 |
| Cash operating balance, end of period | 35 | 40 | 45 | 45 | 21 | 45 | 40 | 47 | 45 | 60 | 45 | 30 | 30 | 60 | 45 | 30 |
| NIPA federal sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 1863 | 1931 | 2151 | 2311 | 1915 | 1947 | 1964 | 2022 | 2151 | 2192 | 2239 | 2266 | 2308 | 2323 | 2345 | 2370 |
| Expenditures | 2209 | 2316 | 2433 | 2614 | 2306 | 2329 | 2349 | 2375 | 2430 | 2447 | 2479 | 2515 | 2621 | 2645 | 2676 | 2706 |
| Consumption expenditures | 646 | 694 | 735 | 772 | 691 | 700 | 715 | 718 | 734 | 741 | 748 | 754 | 771 | 778 | 785 | 793 |
| Defense | 425 | 468 | 496 | 520 | 465 | 474 | 483 | 484 | 495 | 500 | 504 | 508 | 519 | 524 | 529 | 535 |
| Nondefense | 221 | 226 | 239 | 251 | 226 | 226 | 231 | 234 | 239 | 242 | 243 | 245 | 252 | 253 | 255 | 257 |
| Other spending | 1563 | 1622 | 1698 | 1842 | 1615 | 1629 | 1635 | 1657 | 1696 | 1706 | 1732 | 1761 | 1850 | 1867 | 1892 | 1913 |
| Current account surplus | -345 | -385 | -282 | -303 | -391 | -382 | -386 | -353 | -279 | -256 | -241 | -249 | -313 | -321 | -331 | -336 |
| Gross investment | 92 | 103 | 110 | 114 | 102 | 105 | 108 | 108 | 109 | 110 | 112 | 113 | 114 | 115 | 116 | 117 |
| Gross saving less gross investment ${ }^{3}$ | -347 | -395 | -296 | -318 | -402 | -394 | -401 | -367 | -293 | -270 | -255 | -263 | -327 | -336 | -345 | -351 |
| Fiscal indicators ${ }^{4}$ <br> High-employment (HEB) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| surplus/deficit | -270 | -345 | -260 | -302 | -354 | -348 | -356 | -326 | -254 | -235 | -226 | -238 | -308 | -322 | -338 | -349 |
| Change in HEB, percent of potential GDP | 1.2 | 0.5 | -0.8 | 0.2 | 0.2 | -0.1 | 0.0 | -0.3 | -0.6 | -0.2 | -0.1 | 0.1 | 0.5 | 0.1 | 0.1 | 0.1 |
| Fiscal impetus (FI) percent of GDP | 1.0 | 1.0 | -0.2 | 0.3 | 0.3 | 0.1 | 0.2 | 0.1 | -0.4 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 | 0.1 |

1. OMB's July 2004 baseline surplus estimates are $-\$ 444$ billion in FY 2004, $-\$ 292$ billion in FY 2005, and - $\$ 234$ billion in FY 2006, and surplus estimates under enactment of its proposed policies are receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown
separately as off-budget, as classified under current law.
2. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
3. HEB is gross saving less gross investment (NIPA) of the federal government in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionar
changes in federal spending and taxes in chained (2000) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate aggregate demand stimulus.
a--Actual
September 15, 2004


[^2] 1. Data after 2004: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
Strictly Confidential (FR)
Class II FOMC

| Strictly Confidential (FR) Class II FOMC |  | Flow of Funds Projections: Highlights <br> (Billions of dollars at seasonally adjusted annual rates except as noted) |  |  |  |  |  |  |  |  |  | September 15, 2004 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Category | 2003 | 2004 | 2005 | 2006 | 2004 |  | 2005 |  |  |  | 2006 |  |  |  |
|  |  |  |  |  | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Net funds raised by domestic nonfinancial sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Total | 1615.2 | 1677.4 | 1564.0 | 1733.9 | 1552.3 | 1608.0 | 1642.3 | 1524.5 | 1531.4 | 1557.7 | 1976.9 | 1629.3 | 1565.7 | 1763.8 |
| 2 Net equity issuance | -57.8 | -153.5 | -124.0 | -71.0 | -174.0 | -198.0 | -216.0 | -110.0 | -89.0 | -81.0 | -71.0 | -71.0 | -71.0 | -71.0 |
| 3 Net debt issuance | 1672.9 | 1830.9 | 1688.0 | 1804.9 | 1726.3 | 1806.0 | 1858.3 | 1634.5 | 1620.4 | 1638.7 | 2047.9 | 1700.3 | 1636.7 | 1834.8 |
| Borrowing sectors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nonfinancial business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 Financing gap ${ }^{1}$ | -18.7 | 47.4 | 157.2 | 205.6 | 14.1 | 179.3 | 133.0 | 144.3 | 167.1 | 184.4 | 193.7 | 188.0 | 206.3 | 234.4 |
| 5 Net equity issuance | -57.8 | -153.5 | -124.0 | -71.0 | -174.0 | -198.0 | -216.0 | -110.0 | -89.0 | -81.0 | -71.0 | -71.0 | -71.0 | -71.0 |
| 6 Credit market borrowing | 302.5 | 397.5 | 503.9 | 533.7 | 450.8 | 450.0 | 493.3 | 504.8 | 504.7 | 512.7 | 517.8 | 528.9 | 537.1 | 551.0 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 Net borrowing ${ }^{2}$ | 856.6 | 901.1 | 793.3 | 808.5 | 844.4 | 809.5 | 802.1 | 790.1 | 786.1 | 795.1 | 799.9 | 804.5 | 809.1 | 820.6 |
| 8 Home mortgages | 756.1 | 757.7 | 637.0 | 644.0 | 720.0 | 668.6 | 654.6 | 635.9 | 626.5 | 631.2 | 635.9 | 640.5 | 645.2 | 654.6 |
| 9 Consumer credit | 83.0 | 95.0 | 130.1 | 138.5 | 97.0 | 113.7 | 120.6 | 127.7 | 133.9 | 138.3 | 138.2 | 138.1 | 137.9 | 140.0 |
| 10 Debt/DPI (percent) ${ }^{3}$ | 108.0 | 112.5 | 116.1 | 117.4 | 114.0 | 113.3 | 115.3 | 115.8 | 116.3 | 116.8 | 116.8 | 117.2 | 117.5 | 117.9 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 Net borrowing | 117.8 | 114.4 | 77.8 | 69.8 | 183.0 | 51.7 | 78.8 | 78.8 | 78.8 | 74.8 | 70.8 | 70.8 | 70.8 | 66.8 |
| 12 Current surplus ${ }^{4}$ | 176.2 | 170.5 | 173.2 | 184.7 | 152.6 | 169.8 | 171.0 | 169.7 | 173.6 | 178.3 | 180.7 | 182.6 | 185.4 | 190.2 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 Net borrowing | 396.0 | 417.9 | 313.0 | 392.9 | 248.1 | 494.8 | 484.2 | 260.9 | 250.9 | 256.1 | 659.4 | 296.1 | 219.7 | 396.4 |
| 14 Net borrowing (n.s.a.) | 396.0 | 417.9 | 313.0 | 392.9 | 93.7 | 147.7 | 135.9 | -5.3 | 94.4 | 88.1 | 179.7 | 3.5 | 86.6 | 123.1 |
| 15 Unified deficit (n.s.a.) | 396.2 | 429.6 | 332.4 | 380.9 | 94.2 | 139.0 | 162.2 | -29.7 | 91.9 | 108.0 | 180.2 | -30.5 | 93.2 | 138.1 |
| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 16 Funds supplied | 476.4 | 686.6 | 545.2 | 570.2 | 391.1 | 482.8 | 620.7 | 474.5 | 575.1 | 510.6 | 660.2 | 511.0 | 600.2 | 509.5 |
| Memo (percentage of GDP) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 Domestic nonfinancial debt ${ }^{5}$ | 194.6 | 198.0 | 201.9 | 204.5 | 198.9 | 200.0 | 201.0 | 201.9 | 202.5 | 203.0 | 203.7 | 204.5 | 205.0 | 205.5 |
| 18 Domestic nonfinancial borrowing | 15.2 | 15.6 | 13.7 | 13.8 | 14.6 | 15.1 | 15.3 | 13.3 | 13.0 | 13.0 | 16.0 | 13.1 | 12.5 | 13.8 |
| 19 Federal government ${ }^{6}$ | 3.6 | 3.6 | 2.5 | 3.0 | 2.1 | 4.1 | 4.0 | 2.1 | 2.0 | 2.0 | 5.2 | 2.3 | 1.7 | 3.0 |
| 20 Nonfederal | 11.6 | 12.1 | 11.1 | 10.8 | 12.5 | 11.0 | 11.4 | 11.2 | 11.0 | 11.0 | 10.9 | 10.8 | 10.8 | 10.8 |

[^3](This page intentionally blank.)

## International Developments

Strong global demand and ongoing concerns about oil supply have kept oil prices high, but so far we have seen limited effects of elevated oil prices on economic activity abroad. Although our estimates of second-quarter GDP were revised down for several countries and more recent indicators have been mixed, taken together they still point to solid growth in the third quarter at about the pace we had anticipated in the August Greenbook. The trade-weighted average of foreign growth stepped down from 4.6 percent in the first quarter to 3.8 percent in the second quarter; growth is projected to edge down further over the forecast period to $3 \frac{1}{4}$ percent in the extension of our forecast to 2006.

Our forecast for high-tech exporters in Asia has been marked down a bit from the previous Greenbook to reflect a somewhat weaker projection for demand for high-tech products. We also expect some negative effects of higher oil prices on oil-importing countries, particularly in Asia. Some offset from positive terms-of-trade effects is likely for oil exporters, notably Mexico. High energy prices have contributed to increased foreign headline inflation this year, but to date we have seen little effect on core consumer prices. We continue to expect that headline inflation will ease in coming quarters as oil and other commodity prices decline somewhat and as excess capacity persists in many countries.

## Summary of Staff Projections

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

| Indicator | 2003 |  | $\begin{gathered} \text { 2004: } \\ \text { H1 } \end{gathered}$ | Projection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 |  | $\begin{gathered} \text { 2004: } \\ \text { H2 } \end{gathered}$ | 2005 | 2006 |
| Foreign output | 1.0 | 4.6 | 4.2 | 3.6 | 3.4 | 3.3 |
| Previous GB | 1.0 | 4.6 | 4.2 | 3.5 | 3.5 |  |
| Foreign CPI | 2.0 | 2.1 | 2.8 | 2.8 | 2.2 | 2.1 |
| Previous GB | 2.0 | 2.1 | 2.8 | 2.6 | 2.1 |  |

Note. Changes for years are measured as Q4/Q4; for half-years, Q2/Q4 or Q4/Q2.
. . . Not applicable.

The exchange value of the dollar has fluctuated in recent weeks but on balance is little changed from the time of the August FOMC meeting. The broad real dollar index is projected to decline at an annual rate of $11 / 2$ percent, slightly faster than in the August Greenbook. Our projection for the dollar has been influenced by the revised staff
assumptions regarding the path of U.S. monetary policy and an expectation that projected further deterioration in the current account balance will exert additional downward pressure on the dollar.

Net exports subtracted more than 1 percentage point from U.S. GDP growth in the second quarter, primarily reflecting a surge in imports. The negative contribution is projected to be much smaller in the second half of this year, as imports slow and exports pick up. For 2005, we expect the negative contribution to remain relatively small as imports are temporarily held down by the expiration of partial-expensing provisions for capital goods. By the end of 2006, however, the negative net export contribution increases to nearly $3 / 4$ percentage point, as the waning of the effects of previous dollar depreciation results in both an increase in U.S. import demand and a step-down in the growth of real exports.

The U.S. current account deficit reached $\$ 665$ billion in the second quarter and is projected to increase to more than $\$ 740$ billion, or $61 / 4$ percent of GDP, by year-end. After a slight pause in 2005, the current account deficit is projected to widen more rapidly the following year, reaching nearly $\$ 900$ billion by the fourth quarter of 2006, a record $61 / 2$ percent of GDP. Given the recent attention paid to U.S. external balances by foreign exchange markets, we note that a risk to our forecast is that market sentiment could turn when the more pronounced trend in the current account deficit becomes clear, and we include the possibility of a sharp dollar depreciation in our alternative simulations.

## Oil Prices

Oil prices remained highly volatile over the intermeeting period. After averaging more than $\$ 40$ per barrel in July, the spot price of West Texas intermediate (WTI) surged to a record nominal high of $\$ 48.70$ per barrel on August 19. The spot price of WTI fell to about $\$ 42$ per barrel by the end of August but has since moved back to around $\$ 44$ per barrel. Since the August Greenbook, the International Energy Agency once again revised up its estimate of world oil consumption. With world oil consumption approaching world production capacity, market participants have become increasingly concerned that producers may be unable to meet consumption needs if there are additional disruptions to supply. In consequence, oil prices have been very sensitive to news of inventory changes and possible supply disruptions, including developments in Iraq, Russia, and Venezuela, as well as hurricanes that have curtailed production in the Gulf of Mexico. OPEC's

September 15 decision to increase production targets by 1 million barrels per day evoked little market reaction because actual production already exceeds the new targets.

Despite these fluctuations in oil prices, both the spot and futures prices of WTI, and hence our oil price projection, are little changed from the August Greenbook. The current projection calls for the spot price of WTI to remain above $\$ 40$ per barrel through the first half of next year and then to decline to about $\$ 39$ per barrel by the end of 2005 and to about $\$ 36$ per barrel by the end of 2006. Even with the recent upward revisions to world oil demand, world oil production still appears to be running ahead of consumption. Thus, over time, inventories should build further and prices should ease, assuming that there are no additional major disruptions to supply.

## International Financial Markets

The traded-weighted exchange value of the dollar, as measured by the staff's major currencies index, was little changed on net over the intermeeting period. The dollar appreciated moderately late on August 10 after the FOMC's decision to raise the target for the federal funds rate 25 basis points, but it depreciated broadly after the August 13 release of the larger-than-expected U.S. trade deficit for June. That decline was more than reversed later in the month as market participants reportedly viewed the concurrent declines in oil prices as reaffirming the prospects for U.S. economic activity and for further tightening by the FOMC. Late in the intermeeting period, the dollar depreciated against the Canadian currency on a series of stronger-than-expected data releases from Canada and expectations for policy tightening by the Bank of Canada.

On net, the dollar also changed little on a trade-weighted basis against the currencies of our other important trading partners. A $11 / 4$ percent appreciation against the Mexican peso was offset by a 4 percent depreciation against the Brazilian real and small declines against the currencies of several East Asian emerging-market economies.

Taking into account developments since the last Greenbook, we have adjusted the starting point of the broad real dollar exchange rate path down a touch. We have also increased slightly the rate of dollar depreciation. This projection for the dollar incorporates the revised staff assumptions regarding the path of future U.S. monetary policy and our outlook for the U.S. current account deficit; the extension of our forecast has the ratio of the current account deficit to GDP rising nearly one percentage point by the end of 2006. The increasing rate at which foreign investors will need to finance the current account imbalance is expected to exert additional downward pressure on the
dollar, although we do not pretend to know just when the pressure will emerge, nor, in the event, do we necessarily expect the adjustment of the dollar to be smooth. Compared with the August Greenbook, the broad real dollar index is about 1 percent lower in the fourth quarter. We project the dollar to decline $23 / 4$ percent over the next two years.

Short-term interest rates and benchmark government bond yields were little changed in most countries, with the main exception being Canada, where three-month rates rose 35 basis points in anticipation of tightening by the Bank of Canada. Share prices in most major industrial economies increased between 2 percent and 6 percent on balance, rising steadily over the intermeeting period even as oil prices fluctuated substantially, as investors reportedly took comfort in indications that the global expansion remains on track. Share prices in several East Asian economies recorded increases between 5 percent and 10 percent. Brazil's stock market gained about 3 percent, and Brazil's EMBI+ spread declined almost 90 basis points, as the outlook for fiscal reform in that country was bolstered by a court decision favorable to the government.
. The Desk did not intervene during
the period for the accounts of the System or the Treasury.

## Foreign Industrial Countries

We estimate that growth in the foreign industrial countries will edge down to an annual rate of a bit below 3 percent in the third quarter. We expect growth to continue to ease over the remainder of the forecast period to $23 / 4$ percent in 2005 and $2 \frac{1}{2}$ percent in 2006. However, this step-down in activity for the industrial country aggregate reflects somewhat disparate patterns for the major foreign industrial countries. For Canada and the United Kingdom, we expect a moderate slowing from robust growth in the first half of this year, whereas we expect a modest pickup in growth in Japan after its current soft patch. We expect little change in the lackluster pace of euro area growth. After ticking up in the third quarter, in part reflecting higher energy prices, twelve-month headline inflation rates in the foreign industrial countries should inch down.

For Japan's economy, indicators suggest that sluggish growth in the second quarterrevised down to only 1.3 percent - has continued in the third quarter. Household expenditures and exports fell in July, unemployment rose, machinery orders dropped, and industrial production moved sideways. The recent softness in activity likely reflects the negative effect of elevated oil prices as well as uncertainty about the prospects for

Japanese exports to China. We expect growth in Japan to regain its footing by the end of the year and to proceed at a pace of about 2 percent thereafter, as oil prices moderate and the Chinese economy resumes solid growth. Deflation has proved to be stubborn, but we expect twelve-month CPI inflation to turn positive in the second half of next year. We have penciled in a slight rise in policy rates in 2006, as the BOJ is expected to begin exiting from quantitative easing.

Despite some positive orders and production data in July, euro-area sentiment has fallen in recent months and the German trade balance slid in July from its recent strong level. In part based on these data, we project growth in GDP to remain near its second-quarter rate of about 2 percent (just above its rate of potential) in 2005 and 2006. Net exports are projected to weaken, while private consumption and investment begin to revive from their recent sluggish pace. We project that twelve-month inflation, boosted by higher oil and administered prices, will stay above the ECB's 2 percent target through early next year. However, we assume that the ECB will hold off tightening policy until early 2005 when domestic demand is projected to be more robust.

We expect GDP growth in the United Kingdom to subside from its strong second-quarter pace to just above 3 percent in the third quarter. Consumption and investment are expected to expand more slowly, partly in response to rising interest rates and a deceleration of house prices, signs of which have started to appear. With this slowing projected to continue over the forecast period, real GDP growth steps down to around $21 / 4$ percent by 2006. We assume that the Bank of England will continue its gradual tightening of monetary policy and keep inflation from moving above the 2 percent target rate.

After an especially strong second quarter, we expect third-quarter GDP growth in Canada to slow to just below 4 percent, as export growth moderates from the blistering pace of the first half and growth of domestic demand remains steady. We expect a gradual further deceleration of real GDP growth to around 3 percent by 2006. The Bank of Canada raised its key policy rate on September 8 , citing mounting inflationary pressures that were, in part, caused by high oil prices. We assume further tightening by the end of the year, consistent with keeping core inflation around the 2 percent midpoint of the Bank's inflation target range. Headline inflation is expected to peak around $21 / 2$ percent in the fourth quarter.

## Other Countries

We estimate that output growth in the developing economies will average around $41 / 2$ percent over the forecast period. High oil prices are projected to have a mixed effect on output, boosting growth in oil producers, including Mexico, Russia, and members of OPEC, and weighing on growth in Asia. Although this forecast is little changed in the aggregate from the August Greenbook, it reflects a somewhat weaker projection for developing Asia, primarily as a result of the lower forecast for high-tech demand, along with expectations of greater strength in other developing regions.

In emerging Asia, output growth is expected to pick up in the third quarter as recent investment figures suggest Chinese growth will bounce back from the policy-induced slowdown in the second quarter. We also predict some bounceback in Korea and Taiwan from notably weak performances in the second quarter. For 2005 and 2006, we expect output in emerging Asia to grow at just below 5 percent. Chinese growth should recover to about $81 / 4$ percent by 2006 based on the continued assumption that Chinese authorities will partially unwind the quantitative controls targeted toward investment that were imposed earlier this year. For the rest of emerging Asia, we have tempered our expectations for output performance given projections of weaker global demand for hightech exports. Notwithstanding the support that Mexican economic activity will receive from oil exports, we expect Mexican GDP growth to dip in the second half before recovering to average around $4 \frac{1}{4}$ percent in 2005 and 2006, in line with U.S. demand for Mexican exports.

Driven largely by increases in food and fuel prices, consumer prices in emerging-market economies have accelerated this year. In response to indications of a pickup in inflation, the Central Bank of Mexico tightened its policy instrument, the corto, on August 27. We expect average four-quarter inflation in the developing economies to peak at $4 \frac{1}{2}$ percent in the third quarter and then to decline slowly to 3 percent by 2006, as food and fuel prices are expected to recede.

## Prices of Internationally Traded Goods

In the first half of this year, prices of imported core goods rose $51 / 4$ percent (a.r.), driven largely by the direct effects of higher primary commodity prices. Prices for other categories of imports registered smaller increases. Based on monthly survey data from the BLS on trade prices through August, prices of imported core goods are estimated to decelerate a bit in the third quarter, rising 3 percent, about the same as expected in the August Greenbook. In the fourth quarter, import prices of core goods are projected to
post a similar increase. Next year, prices of imported core goods are projected to decelerate to just $1 / 2$ percent (a.r.), in part driven by the expiration of the Multi-Fiber Agreement (MFA), which is expected to depress prices of imported apparel. The projection for 2005 is half a percentage point higher than in the August Greenbook, in part owing to a somewhat stronger path for commodity prices. In 2006, with exchange rate effects being quite limited, prices of imported core goods are expected to be essentially unchanged; a positive contribution from foreign inflation offsets the continuing effects of the expiration of the MFA.

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

| Trade category | 2003 |  | $\begin{gathered} \text { 2004: } \\ \text { H1 } \end{gathered}$ | Projection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 |  | $\begin{gathered} \text { 2004: } \\ \text { H2 } \end{gathered}$ | 2005 | 2006 |
| Exports Core goods | 3.5 | 3.3 | 6.9 | 1.7 | 1.9 | 2.0 |
| Imports <br> Non-oil core goods Oil (dollars per barrel) | $\begin{gathered} 2.4 \\ 26.42 \end{gathered}$ | $\begin{gathered} 1.1 \\ 27.74 \end{gathered}$ | $\begin{gathered} 5.2 \\ 34.55 \end{gathered}$ | $\begin{gathered} 2.9 \\ 39.45 \end{gathered}$ | $\begin{gathered} .6 \\ 35.78 \end{gathered}$ | $\begin{gathered} .1 \\ 33.34 \end{gathered}$ |

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

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

After increasing almost 7 percent (a.r.) in the first half of this year, prices of exported core goods are estimated to be flat in the third quarter, held down by falling prices for agricultural products, but to pick up in the fourth quarter as agricultural prices stabilize. In 2005 and 2006, prices of exported core goods are projected to continue rising at a rate of about 2 percent. The projection for 2005 is $1 / 2$ percentage point higher than in the last Greenbook, reflecting stronger producer price inflation and slightly higher agricultural export prices.

## Trade in Goods and Services

In the second quarter, an unexpected surge in imports in June together with data revisions for previous months underpinned a 13 percent increase at an annual rate in real imports of goods and services, a rate more than 3 percentage points higher than anticipated in the
last Greenbook. Imports fell back in July, however, and for the third quarter as a whole, we expect more modest growth of 6 percent (a.r.), a little lower than in the August Greenbook.

For the entire second half of this year, imports should expand about $73 / 4$ percent (a.r.), as the growth of imports of both core goods and services retreats from a very strong first half. We expect total real import growth to slow further to about $63 / 4$ percent in 2005 , in part reflecting the softer outlook for demand for high-tech products. Also influencing the contour of the forecast is the effect of the partial-expensing provisions on imports of capital goods; this boosts imports in the second half of this year, creates a drag in 2005, and then provides a boost again in 2006 as the effect ceases. Total real import growth increases to $81 / 2$ percent in 2006, with core imports also boosted by somewhat higher U.S. GDP expansion, as well as by a continuing decline in import price inflation. Our projection for import growth in 2005 is somewhat lower than in the August Greenbook, reflecting the assumed greater depreciation of the dollar and the downward revision to our outlook for trade in computers and semiconductors.

Growth in real exports of goods and services remained at a $7 \frac{1}{4}$ percent (a.r.) pace in the second quarter-about 5 percentage points lower than we projected in the August Greenbook-dragged down by a surprisingly weak June and downward revisions to previously published data for May. Preliminary export data for July came in much stronger, however, and for the third quarter, we estimate that real exports of goods and services accelerated to growth of around $81 / 2$ percent (a.r.), a little less than in the August Greenbook.

For the entire second half of this year, exports should expand about $91 / 2$ percent (a.r.). To some extent, this reflects a pickup in exports of core goods, computers, and semiconductors as anticipation of the expiration of partial-expensing provisions boosts exports of intermediate goods used in capital goods that are in turn sent back to the United States. The growth of total real exports steps down a bit to a pace of $7 \frac{1}{4}$ percent in 2005 and $61 / 2$ percent in 2006. This slowing owes to a lessening of the boost to core exports and services resulting from previous dollar depreciation as well as somewhat lower growth in foreign GDP. Export growth in 2005 is a touch lower than in the August Greenbook, reflecting the revision to our outlook for high-tech trade.

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

| Measure | 2003 |  | $\begin{gathered} \text { 2004: } \\ \text { H1 } \end{gathered}$ | Projection |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 |  | $\begin{gathered} \text { 2004: } \\ \text { H2 } \end{gathered}$ | 2005 | 2006 |
| Real exports | -1.6 | 14.3 | 7.3 | 9.6 | 7.2 | 6.4 |
| Previous GB | -1.6 | 14.3 | 9.8 | 10.0 | 7.6 |  |
| Real imports | . 2 | 9.7 | 11.6 | 7.8 | 6.8 | 8.6 |
| Previous GB | . 2 | 9.7 | 10.0 | 9.7 | 7.8 |  |

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

## Alternative Simulations

The effects of rising interest rates on U.S. external debt service payments and the fading of the effects of dollar depreciation on net exports have led us to project a rapid widening in the current account deficit to unprecedented levels over the forecast period. This widening follows several years in which the deficit remained in a fairly narrow range of roughly 4 percent to 5 percent of GDP. Given the recent foreign exchange market attention to the U.S. external balances, a risk to our forecast is that sentiment on the dollar could turn sour abruptly when the pace at which the current account deficit is expanding becomes even more evident.

In our alternative simulations, we use the FRB/Global model to assess the effects of a rise in the risk premium on the dollar in foreign exchange markets that would generate a large and sharp dollar depreciation. The shock has been scaled so that the real value of our broad dollar index would fall 30 percent in the absence of endogenous adjustments in long-term interest rates, and is phased in over only two quarters beginning in 2005:Q1. The size and timing of this shock are somewhat arbitrary. A dollar depreciation of this magnitude occurred over a three-year period in the mid-1980s after the current account deficit reached a then-record level. We have penciled in a faster depreciation in our alternative simulations to highlight the risk that foreign exchange markets may react much more quickly to the large deficit.

## Alternative Simulations:

30 Percent Depreciation of the Broad Real Dollar
(Percent change from previous period, annual rate)

| Indicator and simulation | 2004 |  | 2005 |  | 2006 |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H 1 | H 2 | H 1 | H 2 | H 1 | H 2 |  |
| U.S. real GDP |  |  |  |  |  |  |  |
| Baseline | 3.9 | 3.8 | 3.7 | 3.9 | 4.0 | 4.0 |  |
| Depreciation: Fixed funds rate | 3.9 | 3.8 | 4.1 | 6.4 | 7.0 | 6.7 |  |
| Depreciation: Taylor rule | 3.9 | 3.8 | 4.1 | 5.8 | 5.6 | 4.8 |  |
| U.S. PCE prices |  |  |  |  |  |  |  |
| excluding food and energy |  |  |  |  |  |  |  |
| Baseline | 1.9 | 1.2 | 1.5 | 1.4 | 1.3 | 1.3 |  |
| Depreciation: Fixed funds rate | 1.9 | 1.2 | 2.4 | 1.9 | 2.0 | 2.1 |  |
| Depreciation: Taylor rule | 1.9 | 1.2 | 2.4 | 1.8 | 1.8 | 1.8 |  |

[^4]We have simulated this shock under two different technical assumptions about U.S. monetary policy. The first is our standard procedure that holds the nominal federal funds rate unchanged from baseline. As can be seen in the table, the boost to net exports raises U.S. GDP growth $2 \frac{1}{2}$ percentage points relative to baseline in the second half of 2005 and nearly 3 percentage points relative to baseline in 2006. Core PCE inflation rises $3 / 4$ percentage point above baseline in 2005, mainly because of the direct effect of higher prices for imported goods and services. Inflation stays $3 / 4$ percentage point above baseline in 2006, reflecting the effects of increased capacity utilization on domestic prices. Because such a large and sustained increase in U.S. growth and inflation would very likely engender a monetary policy response, we also show simulation results under the assumption that the federal funds rate follows a Taylor rule. In this simulation, the funds rate rises 160 basis points above baseline by the end of 2005 and 220 basis points above baseline by the end of 2006. As can be seen in the table, the initial effects of the shock on output and inflation are similar regardless of the monetary policy response. However, over time the more active monetary policy does succeed in damping the effects on both output and inflation relative to the case with a fixed federal funds rate.

The effects of the depreciation on the U.S. economy are strongly expansionary because there is a direct shifting of global demand to U.S.-produced goods and services. The effects on foreign economies are correspondingly contractionary, and in many cases
foreign monetary policies are constrained by the zero bound on nominal interest rates. The shock does not incorporate any potential effects on the U.S. economy through confidence of businesses or consumers or through higher risk premiums on private domestic asset prices. To the extent that a dollar depreciation were associated with a loss of confidence in U.S. economic prospects, the stimulative impact on U.S. output would be reduced.
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Strictly Confidential (FR)
Class II FOMC

| Strictly Confidential (FR) <br> Class II FOMC <br> OUTLOOK FOR FOREIGN REAL GDP AND CONSUMER PRICES: SELECTED COUNTRIES <br> (Percent, Q4 to Q4) <br> September 15, 2004 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | --- | - jec | ---- |
| Measure and country | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 |
| REAL GDP (1) |  |  |  |  |  |  |  |  |  |
| Total foreign | 1.5 | 5.0 | 4.3 | 0.3 | 3.0 | 2.8 | 3.9 | 3.4 | 3.3 |
| Industrial Countries of which: | 2.7 | 4.4 | 3.6 | 0.7 | 2.7 | 1.9 | 3.0 | 2.7 | 2.5 |
| Canada | 4.4 | 5.9 | 4.1 | 1.4 | 3.8 | 1.7 | 3.7 | 3.4 | 3.1 |
| Japan | $-1.2$ | 0.4 | 3.9 | -2.2 | 1.8 | 3.5 | 2.7 | 1.9 | 2.0 |
| United Kingdom | 2.8 | 3.3 | 3.0 | 2.2 | 1.9 | 2.9 | 3.2 | 2.6 | 2.2 |
| Euro Area (2) | 2.0 | 3.9 | 2.7 | 0.7 | 1.1 | 0.7 | 2.0 | 2.0 | 1.9 |
| Germany | 0.7 | 3.3 | 1.9 | 0.5 | 0.5 | 0.0 | 1.5 | 1.5 | 1.4 |
| Developing Countries | -0.3 | 6.1 | 5.3 | -0.3 | 3.4 | 4.2 | 5.2 | 4.5 | 4.4 |
| Asia | -2.2 | 8.6 | 5.9 | 0.9 | 5.8 | 6.0 | 5.8 | 4.9 | 4.9 |
| Korea | -5.4 | 11.4 | 4.5 | 4.7 | 7.7 | 4.1 | 3.3 | 4.6 | 4.7 |
| China | 9.8 | 7.0 | 7.6 | 6.9 | 8.3 | 10.0 | 7.9 | 7.4 | 8.2 |
| Latin America | 1.2 | 4.2 | 4.4 | -1.3 | 1.4 | 2.2 | 4.6 | 4.2 | 3.9 |
| Mexico | 2.9 | 5.4 | 4.8 | -1.2 | 1.9 | 2.0 | 4.6 | 4.4 | 4.2 |
| Brazil | $-1.6$ | 3.4 | 3.8 | -0.8 | 3.8 | -0.1 | 5.0 | 3.0 | 3.0 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Canada 1.1 2.4 3.1 1.1 3.8 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{llllllllllllllll}\text { Euro Area (2) } & 0.8 & 1.5 & 2.5 & 2.1 & 2.3 & 2.0 & 2.1 & 1.9 & 1.6\end{array}$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Developing Countries | 9.0 | 4.6 | 4.1 | 2.8 | 2.9 | 3.0 | 4.2 | 3.2 | 3.0 |
| Asia | 4.4 | 0.1 | 1.8 | 1.1 | 0.6 | 2.1 | 3.8 | 2.5 | 2.3 |
| Korea | 5.8 | 1.2 | 2.6 | 3.4 | 3.4 | 3.5 | 4.5 | 3.9 | 2.7 |
| China | -1.2 | -1.0 | 0.9 | -0.1 | -0.6 | 2.6 | 4.4 | 2.1 | 2.1 |
| Latin America | 15.4 | 12.5 | 8.4 | 5.3 | 6.4 | 4.9 | 5.0 | 4.2 | 3.9 |
| Mexico | 17.3 | 13.5 | 8.7 | 5.1 | 5.3 | 3.9 | 4.6 | 3.9 | 3.7 |
| Brazil | 2.0 | 8.4 | 6.4 | 7.5 | 10.7 | 11.5 | 7.1 | 5.2 | 4.7 |

[^5]Strictly Confidential (FR)
Class II FOMC
OUTLOOK FOR FOREIGN REAL GDP AND CONSUMER PRICES: SELECTED COUNTRIES
(Percent changes)

| Measure and country | 2004 |  |  |  | Projected 2005 |  |  |  | 2006 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| REAL GDP (1) ------------------ Quarterly changes at an annual rate |  |  |  |  |  |  |  |  |  |  |  |  |
| Total foreign | 4.6 | 3.8 | 3.6 | 3.5 | 3.5 | 3.4 | 3.4 | 3.4 | 3.3 | 3.3 | 3.2 | 3.2 |
| Industrial Countries of which: | 3.4 | 3.1 | 2.7 | 2.9 | 2.8 | 2.7 | 2.7 | 2.7 | 2.6 | 2.5 | 2.5 | 2.5 |
| Canada | 3.0 | 4.3 | 3.8 | 3.7 | 3.5 | 3.4 | 3.3 | 3.3 | 3.2 | 3.1 | 3.0 | 3.0 |
| Japan | 6.4 | 1.3 | 1.0 | 2.2 | 2.0 | 1.8 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| United Kingdom | 2.9 | 3.8 | 3.1 | 3.0 | 2.9 | 2.7 | 2.5 | 2.5 | 2.2 | 2.2 | 2.2 | 2.2 |
| Euro Area (2) | 2.3 | 2.0 | 1.8 | 1.9 | 2.0 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| Germany | 1.7 | 1.9 | 1.0 | 1.2 | 1.4 | 1.5 | 1.5 | 1.5 | 1.5 | 1.4 | 1.4 | 1.4 |
| Developing Countries | 6.4 7.6 | 4.8 | 4.8 5.6 | 4.6 5.4 | 4.6 | 4.5 | 4.4 | 4.4 | 4.4 4.9 | 4.4 4.9 | 4.4 4.9 | 4.4 4.9 |
| Asia Korea | 7.6 3.0 | 4.8 2.3 | 5.6 3.8 | 5.4 4.2 | 4.9 4.5 | 4.9 4.5 | 4.8 4.8 | 4.8 4.7 | 4.9 4.8 | 4.9 4.8 | 4.9 4.8 | 4.9 4.8 |
| China | 14.4 | 2.8 | 7.3 | 7.3 | 7.3 | 7.3 | 7.5 | 7.5 | 8.2 | 8.2 | 8.2 | 8.2 |
| Latin America | 5.7 | 4.9 | 4.2 | 3.8 | 4.3 | 4.1 | 4.1 | 4.1 | 4.0 | 3.9 | 3.9 | 3.9 |
| Mexico | 5.5 | 4.9 | 4.3 | 3.8 | 4.6 | 4.3 | 4.3 | 4.3 | 4.3 | 4.2 | 4.2 | 4.2 |
| Brazil | 7.2 | 6.1 | 3.5 | 3.5 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |  |  |  |
| Industrial Countries | 0.8 | 1.5 | 1.6 | 1.6 | 1.6 | 1.5 | 1.5 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 |
| Canada | 0.9 | 2.2 | 2.4 | 2.5 | 2.4 | 2.1 | 1.9 | 1.8 | 1.8 | 1.9 | 1.9 | 1.9 |
| Japan | -0.3 | -0.2 | -0.1 | -0.1 | -0.1 | -0.0 | 0.2 | 0.3 | 0.3 | 0.4 | 0.4 | 0.5 |
| United Kingdom (4) | 1.2 | 1.4 | 1.4 | 1.3 | 1.3 | 1.6 | 1.6 | 1.7 | 1.8 | 1.9 | 2.0 | 2.0 |
| Euro Area (2) | 1.7 | 2.3 | 2.3 | 2.1 | 2.3 | 2.0 | 1.9 | 1.9 | 1.8 | 1.7 | 1.7 | 1.6 |
| Germany | 1.0 | 1.9 | 2.0 | 1.9 | 2.0 | 1.6 | 1.5 | 1.4 | 1.2 | 1.0 | 0.9 | 0.7 |
| Developing Countries | 3.0 | 3.6 | 4.5 | 4.2 | 4.1 | 3.8 | 3.3 | 3.2 | 3.1 | 3.0 | 3.0 | 3.0 |
| Asia | 2.2 | 3.3 | 4.2 | 3.8 | 3.8 | 3.1 | 2.5 | 2.5 | 2.4 | 2.4 | 2.3 | 2.3 |
| Korea | 3.3 | 3.4 | 4.6 | 4.5 | 4.7 | 5.2 | 4.3 | 3.9 | 3.4 | 3.1 | 2.9 | 2.7 |
| China | 2.8 | 4.4 | 5.3 | 4.4 | 4.2 | 2.9 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| Latin America | 4.7 | 4.5 | 5.0 | 5.0 | 4.7 | 4.8 | 4.4 | 4.2 | 4.1 | 4.0 | 4.0 | 3.9 |
| Mexico | 4.3 | 4.3 | 4.7 | 4.6 | 4.3 | 4.4 | 4.1 | 3.9 | 3.8 | 3.7 | 3.7 | 3.7 |
| Brazil | 6.8 | 5.5 | 6.9 | 7.1 | 6.6 | 6.3 | 5.4 | 5.2 | 5.1 | 5.1 | 4.8 | 4.7 |

[^6]OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

|  | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | $\begin{gathered} \text { Project } \\ 2005 \end{gathered}$ | 2006 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NIPA REAL EXPORTS and IMPORTS Percentage point contribution to GDP growth, Q4/Q4 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -1.1 | $-1.0$ | -0.9 | -0.2 | -0.9 | -0.1 | -0.6 | -0.3 | -0.7 |
| Exports of G\&S | 0.3 | 0.6 | 0.7 | -1.3 | 0.3 | 0.6 | 0.8 | 0.7 | 0.7 |
| Imports of G\&S | $-1.4$ | -1.6 | $-1.6$ | 1.1 | -1.3 | -0.7 | -1.4 | -1.1 |  |
| Percentage change, Q4/Q4 |  |  |  |  |  |  |  |  |  |
| Exports of $G \& S$ | 2.6 | 5.6 | 6.5 | -11.9 | 3.5 | 6.1 | 8.4 | 7.2 | 6.4 |
| Services | 4.4 | 5.3 | 1.8 | -8.9 | 9.8 | 3.8 | 6.4 | 6.2 | 5.8 |
| Computers | 7.3 | 13.4 | 22.7 | -23.5 | -1.0 | 11.2 | 8.8 | 13.0 | 14.4 |
| Semiconductors | 9.5 | 34.6 | 27.6 | -34.6 | 9.9 | 38.8 | 10.5 | 26.1 | 29.1 |
| Other Goods 1/ | 1.2 | 3.3 | 5.9 | -10.2 | 0.4 | 5.0 | 9.4 | 6.2 | 5.0 |
| Imports of $G \& S$ | 11.0 | 12.1 | 11.2 | $-7.6$ | 9.7 | 4.9 | 9.7 | 6.8 | 8.6 |
| Services | 10.4 | 6.5 | 10.7 | -5.9 | 8.9 | 3.7 | 4.7 | 4.7 | 5.0 |
| Oil | 4.2 | -3.4 | 13.3 | 3.7 | 4.2 | 1.8 | 0.6 | 1.0 | 2.4 |
| Computers | 26.4 | 26.0 | 13.9 | -13.6 | 13.4 | 16.9 | 27.8 | 13.1 | 17.5 |
| Semiconductors | -7.7 | 34.2 | 22.8 | -51.1 | 10.0 | 0.3 | 33.5 | 24.3 | 29.1 |
| Other Goods 2/ | 11.2 | 12.9 | 10.5 | -6.5 | 9.9 | 4.9 | 10.6 | 7.3 | 9.2 |
| Billions of Chained 2000 Dollars |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services |  | $-296.2$ | $-379.5$ |  |  |  |  |  |  |
| Exports of G\&S | 966.5 | 1008.2 | 1096.3 | 1036.7 | 1012.4 | 1031.8 | 1128.8 | 1215.9 | 1297.9 |
| Imports of G\&S | 1170.3 | 1304.5 | 1475.8 | 1435.8 | 1484.4 | 1550.2 | 1705.0 | 1825.5 | 1977.4 |


| Billions of dollars |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| US CURRENT ACCOUNT BALANCE | -209.6 | -296.8 | -413.5 | $-385.7$ | -473.9 | -530.7 | -674.1 | -758.4 | -840.0 |
| Current Acct as Percent of GDP | -2.4 | -3.2 | -4.2 | -3.8 | -4.5 | -4.8 | -5.7 | -6.1 | -6. 4 |
| Net Goods \& Services (BOP) | -164.9 | -263. 3 | -378.4 | $-362.7$ | -421.7 | -496.5 | -607.6 | -650.5 | -696.6 |
| Investment Income, Net | 8.3 | 18.4 | 25.3 | 28.7 | 12.6 | 38.8 | 16.9 | -22.7 | $-58.1$ |
| Direct, Net | 65.5 | 78.2 | 94.9 | 115.9 | 100.8 | 118.9 | 124.1 | 132.4 | 139.9 |
| Portfolio, Net | -57.2 | -59.8 | -69.7 | -87.2 | -88.2 | -80.1 | -107.2 | -155.1 | -198.0 |
| Other Income \& Transfers, Net | -53.0 | -52.0 | $-60.4$ | -51.7 | -64.8 | -72.9 | -83.4 | -85.3 | -85.3 |

[^7]September 15, 2004
NIPA REAL EXPORTS and IMPORTS $\qquad$
$\because$
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OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS
September 15, 2004


[^0]:    ${ }^{1}$ The federal government will be paying 75 percent of the expense of the new program, with the remainder expected to be covered by premiums. The government will also provide additional subsidies to low-income participants and to companies that continue to provide private coverage, but these added costs will be partly offset by reduced Medicaid spending.

[^1]:    ${ }^{2}$ To be sure, a lower level of potential implies a lower level of permanent income and corporate earnings and, hence, lower consumption and investment in the future. However, the fact that the historical levels of real GDP and the real funds rate are unrevised despite a narrower output gap implies that the past stance of monetary policy must have been more stimulative than previously estimated-a result that is equivalent to saying that the equilibrium real rate $\left(\mathrm{R}^{*}\right)$ must have been higher in recent years than previously thought. Assuming that it persists over the projection period, the higher level of $\mathrm{R}^{*}$ in turn implies that the baseline path for the real funds rate will provide more stimulus-enough to offset the contractionary effects of the less favorable prospects for future income and earnings.

[^2]:    Note. Quarterly data are at seasonally adjusted annual rates.

[^3]:    Note. Data after 2004:Q2 are staff projections.

    1. For corporations: Excess of capital expenditu
    2. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.
    3. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.
    
    n.s.a. Not seasonally adjusted.
    4. For corporations: Excess of capital expenditures over U.S. internal funds.
    5. Includes change in liabilities not shown in lines 8 and 9 .
    6. Average debt levels in the period (computed as the average of period-end debt positions)
    divided by disposable personal income.
    7. For corporations: Excess of capital expenditures over U.S. internal funds.
    8. Includes change in liabilities not shown in lines 8 and 9 .
    9. Average debt levels in the period (computed as the average of period-end debt positions)
    divided by disposable personal income.
    10. For corporations: Excess of capital expenditures over U.S. internal funds.
    11. Includes change in liabilities not shown in lines 8 and 9 .
    12. Average debt levels in the period (computed as the average of period-end debt positions)
    divided by disposable personal income.
    2.6.4 FOF
[^4]:    Note. H1 is Q2/Q4; H2 is Q4/Q2. In the "Fixed funds rate" simulations, the nominal federal funds rate remains unchanged from baseline. In the "Taylor rule" simulations, the federal funds rate follows a Taylor rule. In all simulations, the monetary authorities in major foreign economies adjust their policy rates according to a Taylor rule.

[^5]:    1. Foreign GDP aggregates calculated using shares of U.S. exports. ーNल்ナ்
[^6]:    1. Foreign GDP aggregates calculated using shares of U.S. exports.

    Foreign GDP aggregates calculated using shares of U.S. exports
    Harmonized data for euro area from Eurostat.
    3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.

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