## 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.

Please note that some material may have been redacted from this document if that material was received on a confidential basis. Redacted material is indicated by occasional gaps in the text or by gray boxes around non-text content. All redacted passages are exempt from disclosure under applicable provisions of the Freedom of Information Act.

## 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

Class II FOMC—Restricted (FR)

## Domestic Developments

Although the incoming data suggest that economic activity moved into the summer on a stronger note than we had previously recognized, conditions in financial markets have deteriorated markedly further, on balance, since we closed our last projection in early August. The evidence on the effect of the recent financial turbulence on real activity is only beginning to trickle in, but our best guess is that it will impose appreciable restraint on economic growth in coming months, particularly in the housing sector. After sifting through the available information, we continue to estimate that the growth of real GDP has been fairly solid in the current quarter, running at an annual rate of about $21 / 2$ percent. In contrast, we have marked down our fourth-quarter forecast to an annual rate of 1 percent, roughly $1 / 2$ percentage point less than our August forecast.

With aggregate demand projected to have somewhat less thrust heading into next year than we had anticipated earlier and with recent readings on inflation coming in a bit below our expectations, we have conditioned this forecast on a lower path for the federal funds rate relative to the August Greenbook. Still, the change to our monetary policy assumptions provides only a partial cushion to the factors that have led us to mark down our forecast for real activity. In particular, we anticipate that, even with lower interest rates, softer demand for homes amid a reduction in the availability of mortgage credit will likely severely curtail construction activity through the middle of next year. Moreover, lower housing wealth, slower gains in employment and income, and some hit to confidence seem likely to restrain consumer spending next year. Despite the recent difficulties in some corporate credit markets, overall financial conditions confronting nonfinancial businesses do not appear to have been seriously impaired to date. But going forward, we do expect some spillover to commercial construction, and more generally, we expect businesses to be a bit more cautious about capital spending. As a result, we now expect that real GDP will rise $13 / 4$ percent next year, down $1 / 4$ percentage point from the August Greenbook, and then increase $2 \frac{1}{4}$ percent in 2009. Accordingly, the unemployment rate is projected to move up to about 5 percent by 2009, a little above our downward revised estimate of the NAIRU.

Incoming data on consumer price inflation have been slightly to the low side of our previous forecast. This news, in combination with the easing of pressures on resource utilization in this forecast, has led us to trim our core PCE inflation forecast 0.1 percentage point, to 1.9 percent, in each year of the projection. Headline PCE inflation, which was boosted by sizable increases in energy and food prices earlier this
year, is expected to slow from close to 3 percent this year to $13 / 4$ percent in 2008 and 2009.

## Key Background Factors

As noted above, our forecast incorporates a federal funds rate path that is lower than we had assumed in the August Greenbook. In particular, in constructing our forecast, we assume that the Committee will reduce the target funds rate by 25 basis points at both this meeting and the October meeting and then will hold the target rate at $43 / 4$ percent for the rest of the forecast period, 50 basis points below the path assumed in August. Financial market participants have lowered their expected path for the federal funds rate as well, with futures quotes suggesting that investors now expect a funds rate of less than $41 / 2$ percent at the turn of the year and about 4 percent by the middle of 2008. Reflecting the revision to the market's outlook for monetary policy, along with some further flight to quality that has pushed term premiums even lower, long-term Treasury yields have fallen about 40 basis points since the August Greenbook. We are assuming that Treasury bond rates will drift up over the forecast period as the flight to quality unwinds and as market participants revise up their expectations towards the policy path incorporated in our baseline forecast.

Yield spreads on investment-grade and speculative-grade corporate bonds and on fixedrate mortgages for prime borrowers have moved up only a little from the higher levels already in place when we closed the August Greenbook. However, spreads for prime jumbo mortgages have widened substantially amid a tightening of underwriting standards, and mortgage lending to nonprime borrowers appears moribund. Conditions in short-term funding markets also have deteriorated sharply over the intermeeting period, and some tightening of commercial mortgage lending appears to be in train as well. On balance, the stresses in credit markets are now considerably more pronounced than they were at the time of the August Greenbook. While we expect mortgage markets to return to more normal conditions only gradually over the next year, we anticipate that most other financial markets will sort themselves out in reasonably short order.

Although equity markets have been volatile, the Wilshire 5000 index currently stands less than $1 / 2$ percent below the level we had assumed in the last Greenbook. We have nudged down our starting level for stock prices accordingly, and in line with our usual procedure, assume that prices will increase at an annual rate of $61 / 2$ percent, sufficient to maintain risk-adjusted parity with the yield on long-term Treasury securities. Regarding house prices, despite a small upside surprise in the latest reading on the OFHEO repeat-sales

## Key Background Factors Underlying the Baseline Staff Projection

Federal Funds Rate


## Equity Prices




Crude Oil Prices

Long-Term Interest Rates


House Prices


Note. The projection period begins in 2007:Q3.

Broad Real Dollar


Note. In each panel, shading represents the projection period.
index, we have lowered our projection because of the significantly weaker outlook for housing markets in this forecast. We expect house prices to edge down in the second half of this year and then to fall more than 2 percent per year in 2008 and 2009.

We have altered our fiscal assumptions only slightly since the August Greenbook. In response to reports that the Administration will request a larger-than-expected supplemental appropriations bill to fund military activities in Iraq and Afghanistan in fiscal 2008, we are now assuming that increases in real defense spending will pick up a bit next year before slowing in 2009. We continue to anticipate that real nondefense spending will be flat in 2008 but that it will rise slightly in 2009, closer to its historical norm. On the tax side, we still assume that relief from the alternative minimum tax will be extended throughout the forecast period. Altogether, federal fiscal policy is expected to provide an impetus to real GDP growth of about $1 / 4$ percentage point this year and next-just a touch more than in the August Greenbook-before turning more neutral in 2009. Our outlook for the federal budget deficit is little changed from the last Greenbook; we anticipate that the deficit will narrow to $\$ 161$ billion in fiscal 2007 but then widen to $\$ 226$ billion in fiscal 2008 and $\$ 255$ billion in fiscal 2009 as increases in outlays pick up and the rise in receipts slows.

The foreign exchange value of the dollar has edged down since the August Greenbook. Looking forward, we continue to assume that the real trade-weighted value of the dollar will decline at an annual rate of a little less than 2 percent in both 2008 and 2009. After rising at a solid $4 \frac{1}{4}$ percent annual rate in the first half of the year, foreign GDP growth is expected to slow to a $31 / 4$ percent pace in the second half and then to roughly maintain that rate of growth in 2008 and 2009. This deceleration is more pronounced than in the August Greenbook, reflecting weaker-than-expected incoming readings on foreign economic activity, the markdown in domestic growth, and our expectation that the recent financial market turmoil will crimp activity abroad.

The spot price of West Texas intermediate (WTI) crude oil stands at about $\$ 78$ per barrel, slightly higher than its level at the time of the previous Greenbook. Throughout much of August, spot prices declined as market participants apparently expected recent financial market developments to curb global oil demand. However, larger-than-expected domestic inventory draws pushed the spot price of WTI back up. Far-dated futures quotes, and thus our forecast of longer-term oil prices, are down slightly since early August, likely reflecting demand concerns. Based on these futures quotes, we are assuming that the spot price of WTI will edge down to $\$ 70$ per barrel by the end of 2009.

## Recent Developments and the Near-Term Outlook

The state of the economy prior to the recent financial turmoil now appears to have been somewhat stronger than we had anticipated in the August Greenbook. In particular, we now estimate that real GDP increased at an annual rate of $33 / 4$ percent in the second quarter— $1 / 4$ percentage point above our previous forecast—and most of the data for July either matched or exceeded our expectations. That said, the limited information we have for August suggests that the deterioration in financial market conditions is beginning to show through to some segments of real activity. On the assumption that these effects will become more noticeable in coming months, we have marked down our forecast for the remainder of the year. Moreover, a sharp cutback in motor vehicle production schedules has led us to trim an additional $1 / 4$ percentage point from output growth next quarter. As a result, we now project that real GDP growth will slow from an annual rate of $21 / 2$ percent in the current quarter to a pace of just 1 percent in the fourth quarter.

Labor demand appears to be ebbing. Private payroll employment rose just 24,000 in August, and the levels for June and July were revised down. All told, the August employment report brought the three-month moving average of employment change to 72,000, a marked step-down from the first half of the year, albeit only a little lower than our expectations at the time of the August Greenbook. Given the weak pace of activity that we now anticipate for the fourth quarter, we have lowered our employment projection for the remainder of the year; we expect an increase in private payrolls of 50,000 in September and essentially no net job gains in the last three months of the year. Reflecting this downshift in labor demand, we anticipate that the unemployment rate will move up to 4.7 percent in the fourth quarter.

Output in the manufacturing sector rose briskly around midyear, as most industries outside motor vehicles posted robust gains in June and July. In the motor vehicle sector, production was maintained at a high level through July despite sagging sales, and, as a consequence, inventories moved up to an elevated level. In response, automakers have revised down their production schedules for September, and their initial plans show a marked further step-down in assemblies in the fourth quarter. In addition to the direct and indirect effects of these reductions in motor vehicle production, we anticipate that gains in factory output in coming months will be restrained as producers of construction supplies and their upstream suppliers curtail production in response to flagging demand. Overall, we look for manufacturing output to edge up $1 / 2$ percent in the fourth quarter after rising at an annual rate of 4 percent in the third quarter.

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

| Measure | 2007:Q2 |  |  | $2007: Q 3$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |$\left.⿻ \begin{array}{|c}2007: Q 4\end{array}\right]$

Real consumer spending entered the second half of the year on a favorable note and is projected to increase at an annual rate of $21 / 2$ percent this quarter. Real expenditures on goods rose briskly in July despite a second month of disappointing motor vehicle sales. In August, auto sales bounced back to a rate of $161 / 4$ million units, well above the JuneJuly average pace. However, consumer sentiment dropped in August amid downbeat news reports on economic and financial developments. Reflecting this deterioration in sentiment and the slower income growth that will accompany the softer labor market, fourth-quarter PCE growth slows to just below an annual rate of 2 percent.

Housing demand appears to have deteriorated further since the last Greenbook. Although sales of new and existing homes in July came in close to our expectations, forwardlooking indicators-such as pending home sales and homebuying sentiment-suggest that worsening conditions in the mortgage markets will lead to substantially weaker sales in the months ahead. Builders cut single-family housing starts a further $71 / 4$ percent in July, but the inventory of unsold new homes remains elevated. Given this supply imbalance and our expectation of continued weakness in demand, we anticipate that builders will slash production further in coming months. Single-family starts are projected to drop from an average level of 1.17 million units in the second quarter to just under 900,000 units early next year. In all, we project that real residential investment will contract at annual rates of 21 percent in the third quarter and 28 percent in the fourth quarter.

In the business sector, real spending on equipment and software rose at a relatively modest 4 percent pace in the second quarter after declining, on net, in the preceding two quarters. Indicators for the third quarter are mixed. Orders and shipments of capital goods rose in July, and indicators of business sentiment-though a bit lower in Augustremain in a generally favorable range. However, business spending on motor vehicles apparently fell again in July and August. Moreover, concerns about financial market volatility and the overall state of the economy may be persuading some firms to postpone capital expenditures right now. Combining these various signals, we estimate that real spending on $E \& S$ is rising at a $23 / 4$ percent pace in the current quarter. In the fourth quarter, we look for spending in this sector to pick up to a $43 / 4$ percent pace. Although the drag from motor vehicle expenditures is expected to fade, we anticipate that outlays for equipment other than transportation will decelerate further next quarter.

After a strong upswing over the past several quarters, investment in nonresidential structures is expected to eke out only a small gain in the third quarter and to rise modestly in the fourth quarter. Drilling and mining outlays, which surged in the second quarter, are expected to turn down in the second half of the year. For buildings, vacancy rates remain fairly low, and architectural billings have held up well. We have trimmed our projection for spending in this category for the second half of this year in light of the likely fallout from the tighter conditions in commercial mortgage markets, though we still expect modest gains in activity.

In the federal government sector, real outlays for consumption and gross investment rose at an annual rate of 6 percent in the second quarter, primarily due to a brisk increase in defense outlays. Defense spending surged again in July, leading us to expect that total federal purchases will rise at a 6 percent pace again this quarter. The increase in federal purchases is projected to slow to a $41 / 2$ percent pace in the fourth quarter as the rise in defense spending eases back somewhat. In the state and local sector, real purchases rose at a solid 3 percent annual rate in the second quarter. Given the difficulty of adjusting for seasonal patterns in education hiring during the summer months, we are expecting the implausibly low estimates of education employment in July and August either to be revised upward or to be followed by a bounce-back in employment in coming months. Nonetheless, we have not discounted these data entirely, and we expect spending to decelerate to a $1 \frac{1}{4}$ percent pace in the current quarter. We project state and local purchases will rise about $2 \frac{1}{4}$ percent in the fourth quarter.

Net exports are estimated to have added $11 / 4$ percentage points to real GDP growth in the second quarter, as real exports rose at an annual rate of $73 / 4$ percent and imports turned down. Although solid growth of activity abroad and the depreciation of the dollar are anticipated to keep exports on a strong upward trajectory in the second half of the year, import growth is expected to move back into positive territory, and we expect the contribution of net exports to GDP growth to substantially diminish.

As noted earlier, motor vehicle inventories have been accumulating at a rapid pace so far this quarter, but stocks should turn back down in coming months as automakers cut production. Excluding motor vehicles, inventories appeared to have been well aligned with sales in most sectors at the end of July. Given the expected deterioration in final sales in the second half, we are projecting some backup in non-auto inventory investment. However, our projection calls for firms to make prompt production adjustments, and we are not expecting any serious inventory overhang to emerge. In all, we anticipate that real nonfarm inventory investment will account for about $1 / 2$ percentage point of real GDP growth in the third quarter and a little less than that in the fourth quarter.

The core PCE price index rose at an annual rate of only $11 / 4$ percent in the second quarter, held down, in part, by a smaller-than-usual increase in prices of nonmarket services and a sizable decline in apparel prices. We expect these developments to be largely transitory and look for core PCE prices to rise at an annual rate of about 2 percent in the second half of this year. Overall PCE prices are projected to decelerate to an average pace of about 2 percent in the second half, as energy prices level off and as the effect of higher grain costs on consumer food prices diminishes.

## The Longer-Term Outlook

Although the assumed path for the federal funds rate is less restrictive than in the August Greenbook, that policy adjustment provides only a partial offset to the other factors that have led us to revise down our forecast. In particular, the downward adjustment we have made to our home sales projection over the next few quarters in response to the recent developments in mortgage markets, and the implications of that adjustment for construction and house prices, impart a significant additional drag on real GDP growth next year. In addition, we have built in negative effects on consumer and business spending to account for some reduction in access to credit and a somewhat outsized hit to sentiment. All told, we now forecast that real GDP growth will rise just $13 / 4$ percent next year, $1 / 4$ percentage point less than in the August Greenbook. With credit markets having

## Projections of Real GDP

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

| Measure | 2007 |  |  | 2008 |
| :---: | ---: | :---: | :---: | :---: |
|  | H 1 | H 2009 |  |  |
| Real GDP | $\mathbf{2 . 1}$ | $\mathbf{1 . 8}$ | $\mathbf{1 . 7}$ | $\mathbf{2 . 2}$ |
| Previous | $\mathbf{2 . 0}$ | $\mathbf{1 . 9}$ | $\mathbf{2 . 0}$ | $\ldots$ |
| Final sales | 2.4 | 1.4 | 1.7 | 2.1 |
| Previous | 2.3 | 1.5 | 2.1 | $\ldots$ |
| PCE | 2.6 | 2.2 | 1.8 | 2.1 |
| Previous | 2.5 | 2.0 | 2.0 | $\ldots$ |
| Residential investment | -14.4 | -24.7 | -7.4 | 2.5 |
| Previous | -13.4 | -20.5 | -4.0 | $\ldots$ |
| BFI | 6.2 | 2.7 | 1.9 | 3.1 |
| Previous | 5.8 | 3.4 | 3.1 | $\ldots$ |
| Government purchases | 1.8 | 3.0 | 1.7 | 1.0 |
| Previous | 2.0 | 3.0 | 1.5 | $\ldots$ |
| Exports | 4.4 | 9.6 | 5.8 | 5.9 |
| Previous | 3.3 | 6.2 | 5.8 | $\ldots$ |
| Imports | .6 | 4.6 | 2.7 | 4.4 |
| Previous | .7 | 2.7 | 3.0 | $\ldots$ |
|  | Contribution to growth |  |  |  |
| Inventory change | (percentage points) |  |  |  |
| Previous | -.3 | .4 | -.0 | .1 |
| Net exports | -.2 | .4 | -.1 | $\ldots$ |
| Previous | .4 | .3 | .2 | -.0 |

... Not applicable.
largely recovered by the end of next year, we are projecting real GDP growth to improve to $2 \frac{1}{4}$ percent in 2009, a touch above its potential rate of growth. The subpar pace of activity over the next year and a half is projected to push the unemployment rate up to nearly 5 percent by 2009, a shade above the staff's revised estimate of the NAIRU.

Household spending. Real consumer spending is projected to increase $13 / 4$ percent in 2008, a pace that is about $1 / 4$ percentage point below our forecast in the August Greenbook and well below the expected pace of real income growth next year. In part,
our projection for modest gains in consumer spending reflects the effect of the sharp deceleration in house prices along with the waning effects of previous equity wealth gains. We also expect several other factors to restrain the growth of real PCE next year. First, we anticipate that households will find it more expensive and difficult to finance spending through borrowing. Second, rising debt service costs from upcoming payment resets on variable-rate mortgages should sap the purchasing power of some households next year. Finally, the recent souring of sentiment, which we expect to persist for a while, is likely to induce a general caution in households' willingness to spend. For 2009, we look for the increase in consumption expenditures to move back up to about 2 percent. With consumption growth falling short of the gains in disposable personal income over the next two years, the saving rate is projected to rise from less than 1 percent in the second half of this year to about $13 / 4$ percent in 2009.

We continue to assume that residential investment will drop sharply through the first half of next year and then begin to stage a slow recovery. However, compared with the August Greenbook, the trough in activity around the middle of next year is now expected to be deeper. Nonprime mortgage issuance, which was already showing signs of heightened distress before the last Greenbook, has slowed to a trickle, and the recent problems have spilled over to the prime-rate jumbo mortgage market. ${ }^{1}$ The weaker demand implied by these developments, along with the persistently high stock of unsold homes, has led us to sharply curtail our projection for starts of single-family dwellings over the forecast period. We now expect single-family starts to fall to an annual rate of about 900,000 units in the first half of 2008 and then to move gradually back up to a pace above 1 million units by the middle of 2009. Consistent with our starts forecast, real residential investment is projected to continue to fall at double-digit rates through mid2008 before edging up at a $21 / 4$ percent rate in the second half of 2008 and $21 / 2$ percent in 2009.

Business investment. In an environment of slowing sales, business spending on capital goods is expanding at a below-average pace this year. Next year, we anticipate that

[^0]growth will move still lower in response to a further weakening in the growth of final sales and real output. We also expect businesses to scale back spending plans a touch now that the financing conditions they face are a little less accommodative than in recent years. Business construction spending, which rose at a good clip in the first half of this year, is also expected to post only modest gains going forward. This step-down reflects the partial unwinding of the recent jump in outlays for drilling and mining, subdued gains in both business output and employment, and a backup in interest rates on commercial mortgages.

Despite the sluggish pace of final demand that we expect next year, we are not anticipating a pronounced inventory cycle. Rather, we expect businesses to curb production enough early next year to prevent the ratio of inventories to sales from rising. Indeed, over the next two years, we expect increases in inventory stocks to be outstripped by sales gains, leading to the gradual decline in the ratio of stocks to sales that we would expect to accompany continued improvements in inventory practices. As a result, we expect inventory investment to be a neutral influence on growth in both 2008 and 2009.

Government spending. Real federal expenditures on consumption and investment are projected to slow to an annual rate of $211 / 4$ percent in 2008 and 1 percent in 2009. Most of the deceleration in federal spending over this period is in defense purchases. At the state and local level, outlays for consumption and investment are projected to decelerate appreciably in 2008 and 2009. We expect budgetary pressures to emerge as a result of smaller increases in revenues-reflecting decelerations in income, sales, and house prices—along with further rapid increases in Medicaid transfers.

Net exports. Supported by solid growth abroad and the effects of past and prospective dollar depreciation, real exports are expected to increase nearly 6 percent in 2008 and 2009. Real import growth, which slowed considerably this year, is expected to pick up over the forecast period, but to only a moderate pace. All told, the external sector makes a small positive contribution to GDP growth in 2008, which diminishes to a roughly neutral influence in 2009. (The International Developments section provides more detail on the outlook for the external sector.)

## Aggregate Supply, the Labor Market, and Inflation

In this projection, we have reduced our estimate of the NAIRU. (For a discussion of the evidence supporting this change, see the nearby box.) We now assume that the NAIRU fell to 4.8 percent by 2006, 0.2 percentage point lower than previously estimated, and

## Our Revised Estimate of the NAIRU

In this forecast, we have lowered our estimate of the NAIRU from 5 percent to 4.8 percent. In previous projections, we estimated that the NAIRU had decreased gradually from 5.8 percent in 1988 to 5 percent in 2003 and then held steady at that level thereafter. We have extended the decline, with the NAIRU falling to 4.8 percent by 2006. Going forward, we assume that the NAIRU will remain at 4.8 percent over the projection period.

Considerable uncertainty surrounds any estimate of the NAIRU. Indications have been accumulating for some time that the NAIRU may be lower than our previous estimate, and we frequently included that possibility as an alternative simulation in the Greenbook. We now believe that the evidence is sufficient to tilt the balance toward a lower assumption.

Several factors contributed to our decision. First, our bank of models for core prices and hourly compensation have, on balance, predicted slightly higher inflation over the past several years than has actually occurred. Although any of several factors could have accounted for the models' overpredictions, a lower NAIRU is one possible contributor. Second, other labor market indicators suggest-on balance-that labor market conditions are roughly the same as they were in the first half of 1997, a period when we think the labor market was roughly in equilibrium. As a result, we now think that the NAIRU must be closer to the unemployment rate than we judged previously.

Finally, we think ongoing changes in the labor market could account for an extension of the decline in the NAIRU in recent years. For example, disability rolls have continued to rise, increasing Internet job search capabilities have likely reduced the costs of matching employers and employees, and the real value of the minimum wage declined over this period. Of course, identifying a complete set of the structural influences on the NAIRU is quite difficult, and one can point to developments in labor markets that might put upward pressure on the NAIRU. On the whole, however, we see the recent structural changes in labor markets as suggesting that the NAIRU has continued to fall since the late 1990s, but perhaps at a slower rate than previously.

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

| Measure | $\begin{array}{\|c\|} \hline 1974- \\ 95 \end{array}$ | $\begin{array}{\|c\|c} 1996 \\ 2000 \end{array}$ | $\begin{array}{\|c\|} \hline 2001- \\ 03 \end{array}$ | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Structural labor productivity | 1.5 | 2.5 | 3.1 | 2.4 | 2.0 | 2.0 | 1.9 | 1.8 | 1.8 |
| Previous | 1.5 | 2.5 | 3.1 | 2.4 | 2.0 | 2.0 | 1.9 | 1.8 |  |
| Contributions ${ }^{1}$ |  |  |  |  |  |  |  |  |  |
| Capital deepening | . 7 | 1.4 | . 7 | . 6 | . 6 | . 7 | . 6 | . 6 | . 5 |
| Previous | . 7 | 1.4 | . 7 | . 6 | . 6 | . 7 | . 6 | . 6 |  |
| Multifactor productivity | . 5 | . 7 | 2.1 | 1.5 | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| Previous | . 5 | . 7 | 2.1 | 1.5 | 1.1 | 1.1 | 1.1 | 1.1 |  |
| Labor composition | . 3 | . 3 | . 3 | . 3 | . 3 | . 2 | . 2 | . 2 | . 1 |
| Memo |  |  |  |  |  |  |  |  |  |
| Potential GDP | 3.0 | 3.3 | 3.0 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 | 2.1 |
| Previous | 3.0 | 3.3 | 3.0 | 2.3 | 2.2 | 2.2 | 2.2 | 2.2 |  |

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

1. Percentage points.
. . . Not applicable.
remains at that level going forward. Because this change implies that the level of employment, and thus production, can now be higher without putting upward pressure on inflation, we have also raised our estimate of the level of potential output. The upward revision to the level of potential output is phased in gradually and, by the end of 2006, has cumulated to $1 / 4$ percent, implying that the output gap is smaller by that amount in the first half of this year than we thought previously. However, we have not changed our assumptions about the growth of potential going forward and continue to assume a trend rate of expansion in the economy of a little over 2 percent. The higher level of potential output in this forecast and the downward adjustments that we have made to actual GDP result in a lower average level of resource utilization in this forecast. Indeed, the GDP gap is effectively zero at the end of this year, and in 2009, we expect the level of actual output to fall short of potential by $1 / 4$ percentage point.

Productivity and the labor market. As noted earlier, we expect employment to essentially flatten out in coming months, when activity is projected to be especially weak. With the growth of real output expected to pick up some as we move into 2008, private

## The Outlook for the Labor Market

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

| Measure | 2006 | 2007 | 2008 | 2009 |
| :--- | ---: | ---: | ---: | :---: |
| Output per hour, nonfarm business | .9 | 1.9 | 1.7 | 1.9 |
| $\quad$ Previous | .9 | 1.7 | 2.0 | $\ldots$ |
| Nonfarm private payroll employment | 1.8 | 1.0 | .5 | .8 |
| $\quad$ Previous | 1.8 | 1.0 | .6 | $\ldots$ |
| Household survey employment | 2.1 | .6 | .6 | .8 |
| $\quad$ Previous | 2.1 | .6 | .7 | $\ldots$ |
| Labor force participation rate $^{1}$ | 66.3 | 66.0 | 65.8 | 65.6 |
| $\quad$ Previous | 66.3 | 66.0 | 65.8 | $\ldots$ |
| Civilian unemployment rate $^{1}$ | 4.5 | 4.7 | 4.9 | 4.9 |
| $\quad$ Previous | 4.5 | 4.7 | 4.8 | $\ldots$ |
| MEMO $^{\text {GDP gap }}{ }^{2}$ |  |  |  |  |
| $\quad$ Previous | .4 | .2 | -.3 | -.2 |

1. Percent, average for the fourth quarter.
2. Actual less potential GDP in the fourth quarter of the year indicated as a percent of potential GDP. A negative number thus indicates that the economy is operating below potential.
. . . Not applicable.
payroll increases rise to a pace of 50,000 per month that year. In 2009, when economic growth is expected to move back in line with potential growth, we expect private payroll gains to gradually increase to about 75,000 per month, closer in line with the underlying trend. The sluggish pace of job creation over the next year or so is projected to push the unemployment rate up to nearly 5 percent over the forecast period. ${ }^{2}$

As in recent Greenbooks, the level of productivity is currently running below our estimate of the structural level, reflecting the surprisingly strong pace of employment growth over the first half of the year. We had been attributing the size of that shortfall to an unusually marked cyclical slowing in productivity. However, evidence of a more pronounced slowing in employment growth this quarter shrinks the size of this gap, and in both 2008 and 2009, labor productivity is projected to rise at about its trend rate.

[^1]
## Inflation Projections

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

| Measure | 2006 | 2007 | 2008 | 2009 |
| :---: | ---: | :---: | :---: | :---: |
| PCE chain-weighted price index | 1.9 | 2.9 | 1.7 | 1.8 |
| Previous | 1.9 | 3.0 | 1.8 | $\ldots$ |
| Food and beverages | 2.3 | 4.2 | 2.2 | 2.1 |
| Previous | 2.3 | 4.0 | 2.2 | $\ldots$ |
| Energy | -4.0 | 14.7 | -2.6 | -.9 |
| Previous | -4.0 | 14.6 | -1.6 | $\ldots$ |
| Excluding food and energy | 2.3 | 1.9 | 1.9 | 1.9 |
| Previous | 2.3 | 2.0 | 2.0 | $\ldots$ |
| Consumer price index | 1.9 | 3.6 | 1.7 | 1.8 |
| Previous | 1.9 | 3.5 | 1.9 | $\ldots$ |
| Excluding food and energy | 2.7 | 2.3 | 2.1 | 2.1 |
| Previous | 2.7 | 2.2 | 2.2 | $\ldots$ |
| GDP chain-weighted price index | 2.7 | 2.5 | 2.1 | 2.1 |
| Previous | 2.7 | 2.6 | 2.2 | $\ldots$ |
| ECI for compensation of private |  |  |  |  |
| industry workers ${ }^{1}$ | 3.2 | 3.4 | 3.7 | 3.6 |
| Previous | 3.2 | 3.4 | 3.9 | $\ldots$ |
| Compensation per hour, |  |  |  |  |
| nonfarm business sector | 5.0 | 4.7 | 4.4 | 4.2 |
| Previous | 5.1 | 4.2 | 4.7 | $\ldots$ |
| Prices of core nonfuel imports | 2.4 | 2.9 | 1.2 | 1.0 |
| Previous | 2.4 | 3.4 | 1.6 | $\ldots$ |

1. December to December.
. . . Not applicable.
Prices and labor costs. We now view both product and labor market conditions as being less tight over the course of the projection period than we did in the August Greenbook. This reduction in resource utilization implies less upward pressure on core consumer price inflation and has led us to shave 0.1 percentage point from our core PCE price inflation projection in both 2008 and 2009.

Despite these downward revisions, the overall contour of the inflation projection is similar to that of previous Greenbooks, with the rise in the core PCE price index expected to hold steady at just below 2 percent throughout the forecast period. As noted earlier, we believe that the slow pace of inflation earlier this year will prove to be transitory. However, the diminishing pressure from resource utilization should help to keep core
inflation from rising next year; in addition, we expect that the upward pressure from the pass-through of earlier increases in energy prices and core import prices will dissipate over the forecast period. Headline PCE inflation is expected to slow from about 3 percent this year to $13 / 4$ percent in 2008 and 2009 as food prices decelerate and energy prices turn down.

We have also lowered our forecast of the growth of labor compensation slightly. The labor market is less tight in this projection, and the recent developments in financial markets and their likely effects on financial-sector profits suggest nonproduction bonuses will drop back somewhat from their levels of the past few years. After rising $43 / 4$ percent this year, $\mathrm{P} \& \mathrm{C}$ compensation per hour is expected to decelerate to $41 / 2$ percent in 2008, down about $1 / 4$ percentage point compared with our previous projection, and then slow to $41 / 4$ percent in 2009. The employment cost index is projected to rise at an average pace of a little over $31 / 2$ percent per year over the projection period, also a little less than in the last Greenbook.

## Financial Flows and Conditions

After having expanded at an annual rate of $71 / 2$ percent in the first half of the year, domestic nonfinancial debt is expected to increase at a 6 percent pace in the second half and about 5 percent in 2008 and 2009. The deceleration in total nonfinancial debt reflects a projected slowdown in borrowing across all major sectors of the economy excluding the federal government.

Household debt growth has moderated over the past year, as mortgage interest rates have moved up and as house price appreciation and home sales have slowed. As noted above, we anticipate that house prices will decline over the forecast period and that home sales will fall further before posting a modest recovery in 2009. Against this backdrop, we anticipate that tighter standards and terms on mortgage loans will persist for at least some borrowers for an extended period. We also assume that lenders will trim the availability of consumer credit. With these factors weighing on borrowing, we expect household debt growth to slow to $43 / 4$ percent at an annual rate in the second half of this year and to $31 / 2$ percent in 2008 and 2009, which would imply the slowest annual rate of growth in real terms since 1991.

Despite this summer's higher credit spreads and the difficulties in the leveraged loan and commercial paper markets, nonfinancial business debt is estimated to have expanded at an $81 / 4$ percent annual rate in the third quarter, only a little less than the LBO-fueled pace
posted during the first half of the year. Net issuance of corporate bonds and commercial paper has slowed considerably this quarter, but banks issued a large volume of commercial and industrial loans as some firms relied on banks for credit they would typically obtain in financial markets. Looking ahead, we expect the demand for funds to finance LBOs and share repurchases to subside substantially in the fourth quarter and over the next two years. All told, nonfinancial business debt is projected to decelerate to an annual rate of 7 percent in the fourth quarter and to about $61 / 4$ percent in 2008 and 2009.

Debt of the federal government is expected to expand $41 / 4$ percent this year and 5 percent over the next two years, on average, reflecting a projected widening in the unified budget deficit. At the same time, state and local government debt growth is projected to slow from 10 percent this year to an average pace of $61 / 2$ percent over the next two years, as interest rates remain above recent lows and the contribution from advance refunding diminishes.

We now estimate that M2 expanded at an annual rate of 5 percent in the third quarter, quite a bit faster than nominal GDP, reflecting a surge of inflows into liquid deposits and retail money funds as investors evidently sought refuge during the recent financial market turmoil. We expect M2 growth to slow to an average pace of $41 / 2$ percent over the next two years, a bit above nominal GDP growth, as opportunity costs drift down over the projection period.

## Alternative Simulations

In this section, we evaluate alternatives to the staff forecast using simulations of the FRB/US model. The first scenario assumes that the downturn in production and prices in the housing market will prove more severe than in the baseline. The second scenario builds on the first and examines the additional possibility that the sensitivity of household spending to housing wealth is larger than we allow for in the baseline. In the third scenario, we consider the possibility that, given their enormous exposure to developments in capital markets and limited capital, banks may restrict the supply of credit to businesses and households. The next two scenarios consider upside risks to our forecast of real activity: first, the possibility that financial market stress will dissipate quickly and that the effects we have built into the forecast will not come to pass; and second, the risk that the underlying strength in demand turns out to be greater than anticipated. The sixth and seventh simulations consider opposing risks to inflation: In the former, we assume that firms maintain markups near recent levels rather than allowing them to fall as in the

## Alternative Scenarios

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

| Measure and scenario | 2007 |  | 2008 |  | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | H1 | H2 | H1 | H2 |  |
| Real GDP |  |  |  |  |  |
| Greenbook baseline | 2.1 | 1.8 | 1.5 | 1.9 | 2.2 |
| Greater housing correction | 2.1 | 1.8 | 1.3 | 1.6 | 2.0 |
| With larger wealth effect | 2.1 | 1.7 | 1.0 | 1.3 | 1.9 |
| Bank capital crunch | 2.1 | 1.2 | -1.2 | 2.6 | 2.9 |
| Faster rebound | 2.1 | 2.3 | 2.2 | 2.2 | 2.1 |
| With stronger demand | 2.1 | 2.3 | 2.7 | 2.7 | 2.7 |
| More cost pass-through | 2.1 | 1.8 | 1.3 | 1.6 | 1.9 |
| Greater wage restraint | 2.1 | 1.7 | 1.3 | 1.9 | 2.6 |
| Market-based federal funds rate | 2.1 | 1.8 | 1.7 | 2.3 | 2.7 |
| Unemployment rate ${ }^{1}$ |  |  |  |  |  |
| Greenbook baseline | 4.5 | 4.7 | 4.8 | 4.9 | 4.9 |
| Greater housing correction | 4.5 | 4.7 | 4.8 | 5.0 | 5.1 |
| With larger wealth effect | 4.5 | 4.7 | 4.9 | 5.1 | 5.3 |
| Bank capital crunch | 4.5 | 4.8 | 5.3 | 5.4 | 5.2 |
| Faster rebound | 4.5 | 4.6 | 4.6 | 4.6 | 4.6 |
| With stronger demand | 4.5 | 4.6 | 4.5 | 4.5 | 4.2 |
| More cost pass-through | 4.5 | 4.7 | 4.8 | 5.0 | 5.1 |
| Greater wage restraint | 4.5 | 4.7 | 4.8 | 5.0 | 4.8 |
| Market-based federal funds rate | 4.5 | 4.7 | 4.8 | 4.8 | 4.6 |
| Core PCE inflation |  |  |  |  |  |
| Greenbook baseline | 1.9 | 2.0 | 2.0 | 1.9 | 1.9 |
| Greater housing correction | 1.9 | 2.0 | 2.0 | 1.9 | 1.9 |
| With larger wealth effect | 1.9 | 2.0 | 2.0 | 1.9 | 1.8 |
| Bank capital crunch | 1.9 | 2.0 | 2.0 | 1.8 | 1.8 |
| Faster rebound | 1.9 | 2.0 | 2.0 | 1.9 | 1.9 |
| With stronger demand | 1.9 | 2.0 | 2.0 | 1.9 | 2.0 |
| More cost pass-through | 1.9 | 2.2 | 2.4 | 2.3 | 2.5 |
| Greater wage restraint | 1.9 | 1.8 | 1.5 | 1.4 | 1.3 |
| Market-based federal funds rate | 1.9 | 2.0 | 2.1 | 2.0 | 2.1 |
| Federal funds rate ${ }^{1}$ |  |  |  |  |  |
| Greenbook baseline | 5.3 | 4.9 | 4.8 | 4.8 | 4.8 |
| Greater housing correction | 5.3 | 4.9 | 4.7 | 4.5 | 4.3 |
| With larger wealth effect | 5.3 | 4.9 | 4.6 | 4.3 | 3.9 |
| Bank capital crunch | 5.3 | 4.7 | 3.3 | 3.4 | 4.5 |
| Faster rebound | 5.3 | 5.1 | 5.3 | 5.5 | 5.3 |
| With stronger demand | 5.3 | 5.1 | 5.6 | 6.0 | 6.5 |
| More cost pass-through | 5.3 | 4.9 | 4.9 | 5.0 | 5.1 |
| Greater wage restraint | 5.3 | 4.8 | 4.5 | 4.1 | 4.1 |
| Market-based federal funds rate | 5.3 | 4.7 | 4.2 | 4.0 | 4.1 |

1. Percent, average for the final quarter of the period.
baseline, and in the latter, we explore the implications of greater wage restraint arising as a result of the more uncertain economic environment. We evaluate each of these scenarios under the assumption that monetary policy responds to the change in the outlook as suggested by an estimated version of the Taylor rule. In the final scenario, we assume that monetary policy follows a path implied by quotes from the futures market.

Greater housing correction. The baseline forecast for the housing market assumes a steep decline in activity until the middle of next year and a return to modest growth thereafter. However, the weakness in demand for housing may persist longer, particularly if certain groups of borrowers remain shut out of mortgage markets longer than we expect. Moreover, in an environment of persistently weak housing demand and rising foreclosure rates, home prices may decline more than in the baseline. In this scenario, we assume that subprime mortgage originations remain close to zero for the entire projection, reducing the level of residential investment by 5 percent by the end of 2009. In addition, we assume that nominal house prices decline by 20 percent over the next two years, lowering household net worth $\$ 31 / 2$ trillion relative to baseline and eliminating the current overvaluation in the housing market that is suggested by some of the models we follow. The reductions in employment and income implied by the further falloff in construction activity, combined with the loss in wealth, directly damp consumer spending and indirectly depress business investment. As a result, real GDP rises only $11 / 2$ percent next year and 2 percent in 2009, causing the unemployment rate to rise above 5 percent in 2009. In response to weaker real activity, the federal funds rate falls to $41 / 4$ percent by the second half of 2009.

Greater housing correction with larger wealth effect. The previous scenario maintains the staff's estimate that the long-run response of consumption to a change in the value of households' real estate holdings is close to 4 cents to the dollar. However, estimates of wealth effects are inherently imprecise, and some analysts have suggested that the sensitivity of household spending to a fall in housing wealth may be greater than we assume. This simulation combines the declines in house prices and residential investment of the previous scenario with a real estate wealth effect that is twice as large as the staff's estimate; it also assumes a somewhat faster response of household spending to changes in wealth. In this case, real GDP increases only $1 \frac{1}{4}$ percent in 2008 and less than 2 percent in 2009, and the unemployment rate rises to $51 / 4$ percent by the end of the projection period despite monetary policy actions that reduce the federal funds rate below 4 percent by that time.

Bank capital crunch. In the wake of the recent financial market turbulence, several large depositories will almost certainly see their balance sheets expand sharply in the coming months. In the baseline, we assume that these institutions will be able to meet such commitments and simultaneously service the loan demands of their other customers without too much difficulty. However, balance sheet pressures on these institutions could prove to be more severe than we anticipate: For example, even if banks do not run up against regulatory capital requirements, they might need to curtail their regular lending to households and businesses markedly in order to avoid being downgraded by the rating agencies. Although the magnitude of the resultant fallout for the real economy is highly uncertain, we assume that the emergence of a bank capital crunch directly depresses the level of aggregate spending by $\$ 200$ billion by the middle of next year-a decline roughly consistent with the unusual weakness in private spending seen during the "headwinds" period of the early 1990s. Actual spending and production fall even more relative to baseline because of follow-on effects that include declining payroll employment, falling profits, and a rise in risk spreads on private securities and loans over comparable Treasury yields. As a result, the economy slips into recession during the fourth quarter and stays there through the middle of next year. Real activity thereafter begins to recover, reflecting a cut in the federal funds rate to $31 / 4$ percent and an assumed improvement in the functioning of credit markets. All told, real GDP rises faster than its potential over the second half of next year and in 2009. The unemployment rate peaks at $51 ⁄ 2$ percent late next year and then slowly declines. Because the recession is brief and the monetary easing acts to keep long-run inflation expectations stable, inflation is only a touch below baseline in 2009.

Faster rebound. We have included in the baseline projection some effects from the financial market turmoil that work through unconventional channels. In the baseline, we have assumed some significant impairment in mortgage markets and some hit to consumer and business sentiment, both of which depress aggregate spending. However, in this scenario, consumer sentiment is assumed to rebound from its recent weak readings, and jumbo mortgage loans quickly become available again on previous terms. In addition, subprime mortgage originations return faster to our estimate of trend than assumed in the baseline, though they still are not assumed to regain earlier levels. Finally, business fixed investment is not unusually subdued but proceeds at a pace in line with its fundamentals. All told, real GDP grows at its trend in 2008 and 2009, and the unemployment rate holds steady at the current level. The federal funds rate rises to $51 / 2$ percent by late 2008 and edges down thereafter.

Faster rebound with stronger demand. Not only may we be overestimating the fallout from recent financial market disruptions, but we also may be underestimating the underlying strength in aggregate demand. For example, we have been projecting for some time a rise in the saving rate which has yet to materialize. This scenario builds on the previous simulation by additionally assuming that households are more willing to spend, so that the saving rate remains near its current level of 1 percent this year and next. As a consequence, real GDP growth expands over the next two years at a $23 / 4$ percent rate, and the unemployment rate declines to $411 / 4$ percent. In response to the developing resource pressures, the federal funds rate rises to $61 / 2$ percent by the middle of 2009.

More cost pass-through. In the baseline projection, firms are not able to fully pass on their cost increases, causing the price markup to decline noticeably. However, firms may prove more successful at protecting their profit margins than we anticipate, and in this scenario, output prices rise in line with the growth of structural unit labor costs. Consequently, core inflation averages $2 ½$ percent in 2008 and 2009. Higher inflation leads to tighter monetary policy; as a result, real activity is weaker late next year and in 2009.

Greater wage restraint. The baseline projection features a rising share of income accruing to labor, reflecting real wage growth of about $2^{1 ⁄ 2}$ percent in 2008 and 2009. However, in the current environment of heightened economic uncertainty, workers may be reluctant to push for real wage increases exceeding, or even in line with, productivity growth. In this scenario, we assume that real wages rise roughly $3 / 4$ percentage point less per year than in the baseline. Firms are able to pass on the lower costs while maintaining their current markups. Core inflation declines steadily, to $1 \frac{1}{4}$ percent in 2009. Lower income reduces real GDP growth to $11 / 2$ percent next year, but the stimulus from monetary easing in response to lower inflation boosts growth in 2009 to $2^{1 ⁄ 2}$ percent.

Market-based federal funds rate. Quotes from futures markets imply a path for the federal funds rate that runs close to $3 / 4$ percentage point below the staff's assumed path in both 2008 and 2009. Conditional on our reading of the forces bearing on the economy, the increased stimulus from such a lower path would boost real GDP growth to about $23 / 4$ percent in 2009 and cause inflation to be about $1 / 4$ percentage point above baseline.

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

| Measure | 2007 | 2008 | 2009 |
| :---: | :---: | :---: | :---: |
| Real GDP <br> (percent change, Q4 to Q4) |  |  |  |
| Projection | 2.0 | 1.7 | 2.2 |
| Confidence interval |  |  |  |
| Greenbook forecast errors | 1.2-2.7 | .1-3.3 | .4-3.9 |
| FRB/US stochastic simulations | 1.4-2.5 | .5-3.0 | .7-3.7 |
| Civilian unemployment rate (percent, Q4) |  |  |  |
| Projection | 4.7 | 4.9 | 4.9 |
| Confidence interval |  |  |  |
| Greenbook forecast errors | 4.5-4.9 | 4.2-5.6 | 3.7-6.1 |
| FRB/US stochastic simulations | 4.6-4.8 | 4.5-5.3 | 4.3-5.4 |
| PCE prices excluding food and energy (percent change, Q4 to Q4) |  |  |  |
| Projection | 1.9 | 1.9 | 1.9 |
| Confidence interval |  |  |  |
| Greenbook forecast errors | 1.6-2.2 | 1.2-2.6 | .8-3.0 |
| FRB/US stochastic simulations | 1.8-2.1 | 1.5-2.5 | 1.3-2.6 |
| Federal funds rate (percent, Q4) |  |  |  |
| Projection | 4.9 | 4.8 | 4.8 |
| Confidence interval |  |  |  |
| FRB/US stochastic simulations | 4.5-5.2 | 3.6-6.1 | 3.3-6.5 |

Note. Shocks underlying FRB/US stochastic simulations are randomly drawn from the 1986-2005 set of model equation residuals. Intervals derived from Greenbook forecast errors are based on the 1986-2005 set of Greenbook historical errors.

## Class II FOMC - Restricted (FR)

## Forecast Confidence Intervals and Alternative Scenarios under the Assumption that Monetary Policy Follows an Estimated Taylor Rule

Confidence Intervals based on FRB/US Stochastic Simulations

| Greenbook baseline | Bank capital crunch | $\square$ More cost pass-through |
| :---: | :---: | :---: |
| Greater housing correction (GHC) | $\square$ Faster rebound | - Greater wage restraint |
| $\square$ GHC with larger wealth effect | $\square$ Faster rebound with stronger demand | Market-based federal funds rate |

## Real GDP



PCE Prices excluding Food and Energy


Unemployment Rate


Federal Funds Rate


## Evolution of the Staff Forecast

Change in Real GDP


Unemployment Rate


## Change in PCE Prices excluding Food and Energy


Class II FOMC
Restricted (FR)


1. Level, except for two-quarter and four-quarter intervals.



| 항 | N | $\overrightarrow{\mathrm{N}}: \stackrel{m}{\mathrm{~N}}:$ | $\overrightarrow{\mathrm{a}}: \stackrel{0}{\mathrm{n}}$ | $\cdots$ n | $\overrightarrow{\mathrm{r}}: \underset{\sim}{\circ}: \underset{\sim}{\mathrm{r}}$ | $\begin{aligned} & 0 \\ & \underset{i}{\prime}: \infty \\ & \text { n } \end{aligned}$ | $0: 0-90$ | $\infty:-$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \bar{\infty} \\ & \underset{\sim}{\circ} \end{aligned}$ | No | 군 | $\infty 09$ | $\underset{i}{+} \underset{+}{\circ}$ | g- | $\underset{\sim}{n} \underset{\sim}{\sim}$ | Nin Nơ તi | N®入ー |
| $\begin{aligned} & \text { No } \\ & \text { Nin } \end{aligned}$ | $\bigcirc 9$ | $90 m ?$ | $\begin{aligned} & \forall \\ & \cdots \cdots \cdots \\ & i n \\ & \hline i n \end{aligned}$ |  | noon oo． <br> $\dot{\forall} \dot{\sim} \times \underset{\sim}{r}$ | $\underset{\sim}{N} \underset{\sim}{N} \underset{\sim}{\infty}$ | ナn $+\infty 6$－ <br>  | $\bigcirc \sim \wedge m$ |
| $\begin{aligned} & \overline{0} \\ & \stackrel{\circ}{0} \\ & \hline \end{aligned}$ | $\begin{aligned} & \circ \\ & \cdots \\ & \text { i } \end{aligned}$ | $00 . t$ $\dot{m}$ N | $ナ ナ \bullet \bullet \bullet$ $\dot{\min } \dot{\mathrm{r}} \mathrm{i}$ | $\begin{array}{cc} \infty \\ \underset{\sim}{\infty} & \infty \\ \underset{\sim}{n} \end{array}$ | Nサツnmm ウゥ ヘ ヘ さ |  | いいヘのペ ヘヘウi•i－ | ¢ ¢ ¢ |
| $\begin{aligned} & n \\ & \stackrel{n}{8} \\ & \hline \end{aligned}$ | in | のの mm ヘi ゥim | $\stackrel{\infty}{\infty} \stackrel{\sim}{\mathrm{N}} \stackrel{\bullet}{-} \stackrel{+}{\mathrm{r}}$ | $\underset{\bullet}{*}$ | $\vec{n} \vec{r} \vec{r}$ | $\frac{\infty}{0} \frac{\infty}{0} \stackrel{0}{r}-$ |  | nmゅ？ |
| $\underset{\substack{\mathrm{O}}}{\stackrel{y}{8}}$ | $\vec{m} \vec{m}$ | $\cdots \cdots \stackrel{m}{\infty} \underset{\sim}{\infty}$ | Nronn мinimi | $\underset{0}{0}$ |  |  | $\text { N. } \operatorname{Hin} \underset{\sim}{n}$ | $\stackrel{\text { が }}{\substack{\text { d }}}$ |
| $\stackrel{\rightharpoonup}{0}$ | $\stackrel{N}{\mathrm{~m}}$ |  | $\rightarrow t m a n$ $\dot{\operatorname{rin}} \infty \dot{\sim}$ | 클 |  | $\begin{aligned} & \text { の } \\ & \stackrel{n}{n} \\ & \stackrel{\infty}{n} \\ & i+\infty \end{aligned}$ | Yinnot | $\pm \pm \pm \bigcirc$ |
| $\begin{aligned} & \text { 강 } \\ & \text { N-N } \end{aligned}$ | $9$ | $\infty, \ldots$ |  | $\bigcirc$ |  | $\underset{\text { ה }}{\text { ה }} \boldsymbol{\infty}$ |  | Nை |
| $\begin{aligned} & \bar{\circ} \\ & \text { 앙 } \end{aligned}$ | ก | $\because \because$ | $\stackrel{\infty}{\infty}_{\infty}^{\infty} \stackrel{\infty}{0} 9$ | $\underset{-}{\star} \underset{\sim}{\star}$ | OOOO－T oig |  |  | NNNO m？ |
| $\underset{=}{\underset{y}{0}}$ | $\begin{aligned} & \text { Real GDP } \\ & \text { Previous } \end{aligned}$ |  |  |  |  |  |  |  |

[^2]

1. Change from fourth quarter of previous year to fourth quarter of year indicated.
Class II FOMC
Restricted (FR)
September 12, 2007

| Item | 2007 |  |  |  | 2008 |  |  |  | 2009 |  |  |  | $2007{ }^{1}$ | $2008{ }^{1}$ | $2009{ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |  |  |  |
| GDP chain-wt. price index | 4.2 | 2.7 | . 8 | 2.3 | 2.1 | 2.1 | 2.1 | 2.0 | 2.2 | 2.1 | 2.0 | 2.0 | 2.5 | 2.1 | 2.1 |
| Previous | 4.2 | 2.7 | 1.4 | 2.1 | 2.2 | 2.3 | 2.3 | 2.2 | . . | . . |  |  | 2.6 | 2.2 | . . . |
| PCE chain-wt. price index | 3.5 | 4.2 | 1.6 | 2.4 | 1.5 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 2.9 | 1.7 | 1.8 |
| Previous | 3.5 | 4.3 | 2.2 | 2.0 | 1.7 | 1.9 | 1.9 | 1.9 | . . | . . | . . | . . | 3.0 | 1.8 | . . |
| Energy | 16.1 | 51.3 | -6.9 | 5.8 | -6.7 | -2.1 | -. 6 | -. 8 | -. 9 | -. 8 | -. 8 | -. 9 | 14.7 | -2.6 | -. 9 |
| Previous | 16.1 | 51.5 | . 1 | -1.9 | -4.2 | -1.7 | -. 3 | -. 2 | . . . | . . . | . . . | . . . | 14.6 | -1.6 | . . . |
| Food | 4.8 | 4.7 | 4.2 | 2.9 | 2.4 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 4.2 | 2.2 | 2.1 |
| Previous | 4.8 | 4.7 | 3.8 | 2.8 | 2.4 | 2.3 | 2.2 | 2.2 | ... | . . |  |  | 4.0 | 2.2 | . . |
| Ex. food \& energy | 2.4 | 1.3 | 1.9 | 2.1 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 |
| Previous | 2.4 | 1.4 | 2.0 | 2.2 | 2.1 | 2.1 | 2.0 | 2.0 | . . | . . | . . | . . | 2.0 | 2.0 | . . |
| CPI | 3.8 | 6.0 | 1.9 | 2.6 | 1.4 | 1.8 | 1.9 | 1.8 | 1.8 | 1.8 | 1.8 | 1.8 | 3.6 | 1.7 | 1.8 |
| Previous | 3.8 | 6.0 | 2.4 | 2.0 | 1.7 | 1.9 | 2.0 | 2.0 | . . | . . | . . | . . | 3.5 | 1.9 | . . |
| Ex. food \& energy | 2.3 | 1.9 | 2.6 | 2.3 | 2.2 | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 | 2.3 | 2.1 | 2.1 |
| Previous | 2.3 | 1.9 | 2.4 | 2.4 | 2.3 | 2.3 | 2.2 | 2.2 |  |  |  |  | 2.2 | 2.2 |  |
| ECI, hourly compensation ${ }^{2}$ | 2.3 | 3.5 | 3.8 | 3.8 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.6 | 3.6 | 3.6 | 3.4 | 3.7 | 3.6 |
| Previous ${ }^{2}$ | 2.3 | 3.5 | 3.8 | 3.8 | 3.9 | 3.9 | 3.9 | 3.9 |  |  |  |  | 3.4 | 3.9 |  |
| Nonfarm business sector Output per hour |  |  |  |  |  |  |  |  | 1.9 | 1.8 | 1.9 | 1.9 | 1.9 | 1.7 | 1.9 |
| Previous | . 7 | 2.0 | 3.4 2.3 | 1.6 | 1.9 | 1.8 | 1.8 2.0 | 2.1 | 1.9 | 1.8 | 1.9 | 1.9 | 1.7 | 2.0 | 1.9 |
| Compensation per hour | 5.9 | 4.1 | 5.0 | 3.9 | 3.9 | 4.5 | 4.6 | 4.5 | 4.3 | 4.3 | 4.2 | 4.2 | 4.7 | 4.4 | 4.2 |
| Previous | 3.6 | 4.0 | 4.3 | 4.6 | 4.7 | 4.7 | 4.7 | 4.7 | . . | . . |  | . . | 4.2 | 4.7 | . . |
| Unit labor costs | 5.2 | 1.8 | 1.5 | 2.4 | 2.5 | 2.7 | 2.7 | 2.5 | 2.4 | 2.4 | 2.3 | 2.2 | 2.7 | 2.6 | 2.3 |
| Previous | 2.9 | 2.0 | 1.9 | 3.0 | 2.8 | 2.7 | 2.7 | 2.5 | . . . | . . |  | . . . | 2.4 | 2.7 |  |

[^3]Class II FOMC
Restricted（FR）
September 12， 2007

|  | ¢ | $\bigcirc \underset{\sim}{\circ}: \stackrel{N}{i}$ | $\underset{\sim}{\infty}: \underset{\sim}{n}: \underset{\infty}{+}$ | $\because$ | $\stackrel{m}{\square} \underset{\sim}{0}: 9$ | $0$ | $\underset{\sim}{\underset{\sim}{N}}$ | $-9$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{\bar{\infty}}{\underset{\sim}{8}}$ | $\infty \underset{\forall}{\infty} \underset{\sim}{\infty} \underset{i}{ }$ | તNતNへo | NO |  | + | $\underset{\sim}{\infty} \underset{1}{\infty} \underset{1}{\top}$ | $\underset{\sim}{0} \underset{\sim}{\infty} .$ |
|  | $\begin{aligned} & \stackrel{\rightharpoonup}{O} \\ & \hat{N} \end{aligned}$ | $\underset{\sim}{\Im} \underset{\sim}{\sim} \underset{\sim}{+}$ | Nmm＊mt． ヘヘヘヘ $\dot{\infty} \dot{\infty}$ | $\underset{-1}{0}$ | $\stackrel{n}{\forall} \underset{\sim}{*} n^{n} n^{\infty}$ | $\stackrel{\sigma}{0} \stackrel{0}{=}$ | $\frac{\pi_{1}}{N_{1}}$ | $\underset{\sim}{\dot{n}}$ |
| $\begin{aligned} & \text { a } \\ & \underset{i}{2} \\ & \hline \end{aligned}$ | $\pm$ | $\because \underset{\sim}{\sigma}: ~ \underset{i}{ }$ | $\begin{array}{l:l} \infty & \vdots \\ \mathrm{N} & \vdots \dot{\infty} \\ \hline \infty \end{array}$ | $\underset{-}{-}$ | $\underset{\forall}{\mathrm{N}} \mathrm{~N}: \stackrel{9}{\sim}$ | $\stackrel{0}{\circ}$ | $\underset{\sim}{m}$ | $-9$ |
|  | $\approx$ | $\because \underset{\sim}{9}: \stackrel{Y}{i}$ | $\stackrel{\infty}{\infty}: \stackrel{0}{\mathrm{~N}}: \stackrel{n}{\infty}$ | $\cdots$ | $\underset{\sim}{n}: \underset{\sim}{\sim}:$ | $\stackrel{0}{0} \underset{0}{0}$ | $\underset{\sim}{M}$ | $\ddot{\eta}^{9}$ |
|  | $\underset{O}{\mathrm{O}}$ | $\because \underset{\sim}{9}: ?$ | $\stackrel{N}{\mathrm{~N}}: \underset{\infty}{0}: \underset{\infty}{\mathrm{N}}$ | $\cdots$ | $\underset{\sim}{\bigoplus} \underset{\sim}{\star}: \infty$ | $\stackrel{0}{0}$ | $\underset{\sim}{\infty} \underset{\sim}{n}$ | $\underset{\underset{\sim}{0}}{\infty} .$ |
|  | $\approx$ | $\cdots \underset{\dagger}{\square}: ?$ | $\vec{m}: m: \vec{\infty}$ | $\cdots$ | $\underset{\sim}{n} \underset{\sim}{0}: \stackrel{N}{\square}$ | $\overbrace{1}^{0} \underbrace{\infty}_{0}$ | $\underset{\sim}{\underset{1}{N}}$ | $\underset{\sim}{\underset{\sim}{0}}$ |
| $\begin{aligned} & \infty \\ & \underset{\sim}{\infty} \\ & \hline \end{aligned}$ | $\pm$ | $\cdots \underset{\forall}{\sim} \underset{\sim}{\infty} \underset{i}{ }$ | oonron nirivio | $\cdots$ |  | no | $\underset{1}{N}$ | $\underset{\sim}{0}{ }_{\square}^{\infty} .$ |
|  | $\underset{\sigma}{\infty}$ | $\underset{\forall}{\top} \underset{\sim}{\infty} \underset{i}{N}$ | ＋nnn No． ヘヘヘヘポ் | $\cdots$ | mino Ni | $\underset{i}{O}=$ | $\underset{\substack{\infty \\ \hline}}{\stackrel{\rightharpoonup}{1}}$ | $\underset{\sim}{m}$ |
|  | $\approx$ | $\stackrel{N}{\underset{\sim}{j} \underset{\dot{j}}{\infty} \rightarrow ? ~}$ | $\underset{\sim}{n} \underset{\sim}{\circ}$ | No. |  | $\underset{\sim}{i}$ |  | $\underset{\sim}{r}-$ |
|  | $\cdots$ | $-\underset{\sim}{\dot{\gamma}} \bigcirc \cdots$ | $\underset{\sim}{0} \underset{\sim}{\mathrm{~m}} \underset{\sim}{\circ}$ | No. | $\stackrel{n}{n} \underset{\sim}{n} 9$ | $\underset{i}{0} \dot{=}$ | $\stackrel{N}{N}_{1}^{0}$ | $\underset{\sim}{\infty}-$ |
| $\stackrel{\hat{e}}{\hat{e}}$ | $\pm$ |  |  | $\begin{array}{ll} \text { y } \\ -10 \end{array}$ | $\underset{n}{\mathrm{n}} \mathrm{~N}$ | $\stackrel{\sim}{i}$ | ${\underset{1}{N}}_{\substack{1}}$ | $\dot{n} \dot{\sim}$ |
|  | $\vartheta$ |  |  | $\begin{aligned} & n \\ & \rightarrow \\ & i n \end{aligned}$ | $n \neq 0 \rightarrow \infty$ | $\underset{i}{O} \underset{=}{ }$ | ${\underset{N}{N}}^{N}$ | $\stackrel{\infty}{\infty} \underset{\sim}{\infty}$ |
|  | $\mathrm{O}$ | $\forall \underset{\sim}{\sim} \underset{\sim}{n}+!$ | maの＋Nー． мへウ rio $\dot{\infty}$ | $\because 0$ | $\overbrace{0} \sim_{i} \infty_{i} n$ | $\stackrel{\sim}{\sim} \stackrel{\infty}{=}$ | ${\underset{1}{\mathrm{~J}}}^{ \pm \infty}$ | $\underset{ \pm}{0} 9$ |
|  | $\cdots$ | $n \underset{\sim}{n} \underset{\sim}{n}-n$ | $\text { ت } \underset{\sim}{\infty} \underset{\sim}{\infty} \underset{\sim}{\infty}$ | $\because \underset{\sim}{\bullet}$ | の $\quad \rightarrow 0$ O－ <br> $\dot{\sim} \dot{\operatorname{con}}-$ | $\stackrel{\forall}{\forall} \underset{=}{\underset{=}{i}}$ | $\frac{2}{2}$ | $\underset{\sim}{\infty} \underset{\sim}{i}$ |
|  | 霏 |  |  |  |  |  |  |  |

[^4]| Item | Fiscal year |  |  |  | 2007 |  |  |  | 2008 |  |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2006{ }^{\text {a }}$ | 2007 | 2008 | 2009 | Q1 ${ }^{\text {a }}$ | Q2 ${ }^{\text {a }}$ | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Unified budget $\quad$ _ Not seasonally adjus ce_ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts ${ }^{1}$ | 2407 | 2569 | 2670 | 2769 | 547 | 824 | 623 | 606 | 558 | 851 | 655 | 642 | 569 | 875 | 682 | 655 |
| Outlays ${ }^{1}$ | 2655 | 2729 | 2896 | 3024 | 725 | 687 | 663 | 724 | 734 | 722 | 716 | 758 | 766 | 754 | 746 | 787 |
| Surplus/deficit ${ }^{1}$ | -248 | -161 | -226 | -255 | -178 | 137 | -40 | -118 | -176 | 129 | -61 | -115 | -197 | 121 | -64 | -131 |
| Previous | -248 | -165 | -225 | n.a. | -178 | 137 | -44 | -112 | -177 | 127 | -63 | -116 | n.a. | n.a. | n.a. | n.a. |
| On-budget | -435 | -352 | -430 | -472 | -212 | 53 | -56 | -187 | -202 | 35 | -76 | -189 | -224 | 21 | -80 | -210 |
| Off-budget | 186 | 191 | 204 | 217 | 34 | 85 | 16 | 69 | 26 | 94 | 15 | 74 | 27 | 101 | 16 | 79 |
| Means of financing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Borrowing | 237 | 189 | 196 | 273 | 152 | -110 | 88 | 80 | 148 | -98 | 66 | 110 | 187 | -92 | 68 | 126 |
| Cash decrease | -16 | -18 | 35 | 0 | 25 | -19 | -45 | 40 | 21 | -26 | 0 | 10 | 15 | -25 | 0 | 10 |
| Other ${ }^{2}$ | 28 | -10 | -5 | -18 | 1 | -8 | -3 | -2 | 6 | -5 | -5 | -5 | -5 | -5 | -5 | -5 |
| Cash operating balance, end of period | 52 | 70 | 35 | 35 | 6 | 25 | 70 | 30 | 9 | 35 | 35 | 25 | 10 | 35 | 35 | 25 |
| NIPA federal sector |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Receipts | 2437 | 2643 | 2755 | 2850 | 2620 | 2683 | 2705 | 2727 | 2743 | 2764 | 2786 | 2809 | 2835 | 2863 | 2892 | 2922 |
| Expenditures | 2685 | 2846 | 3022 | 3177 | 2838 | 2877 | 2927 | 2950 | 3020 | 3044 | 3074 | 3115 | 3169 | 3199 | 3225 | 3255 |
| Consumption expenditures | 798 | 843 | 901 | 941 | 830 | 850 | 865 | 879 | 900 | 909 | 917 | 924 | 939 | 946 | 953 | 960 |
| Defense | 533 | 570 | 615 | 644 | 556 | 574 | 587 | 598 | 613 | 621 | 628 | 633 | 643 | 647 | 652 | 656 |
| Nondefense | 266 | 273 | 286 | 297 | 274 | 276 | 278 | 281 | 286 | 288 | 289 | 291 | 296 | 299 | 301 | 304 |
| Other spending | 1887 | 2004 | 2121 | 2236 | 2008 | 2027 | 2062 | 2072 | 2120 | 2135 | 2157 | 2191 | 2230 | 2253 | 2272 | 2295 |
| Current account surplus | -248 | -204 | -267 | -327 | -219 | -194 | -222 | -223 | -277 | -280 | -288 | -307 | -334 | -336 | -333 | -333 |
| Gross investment | 117 | 121 | 128 | 131 | 117 | 119 | 123 | 125 | 127 | 128 | 130 | 130 | 131 | 132 | 132 | 133 |
| Gross saving less gross investment ${ }^{3}$ | -262 | -215 | -281 | -341 | -227 | -203 | -234 | -237 | -291 | -294 | -302 | -320 | -347 | -349 | -346 | -345 |
| Fiscal indicators ${ }^{4}$ <br> High-employment (HEB) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| surplus/deficit | -284 | -237 | -284 | -328 | -241 | -225 | -259 | -251 | -295 | -293 | -295 | -309 | -334 | -336 | -333 | -334 |
| Change in HEB, percent of potential GDP | -0.5 | -0.4 | 0.3 | 0.2 | 0.1 | -0.1 | 0.2 | -0.1 | 0.3 | -0.0 | -0.0 | 0.1 | 0.1 | -0.0 | -0.0 | -0.0 |
| Fiscal impetus (FI), percent of GDP | 0.3 | 0.2 | 0.3 | 0.1 | -0.0 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Previous | 0.3 | 0.2 | 0.2 | n.a. | -0.0 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | n.a. | n.a. | n.a. | n.a. |

3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
4. 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 discretionary changes in federal spending and taxes in chained (2000) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. Also, for FI and the change in HEB, positive values indicate
[^5]| Class II FOMC <br> Restricted (FR) |  | Change in Debt of the Domestic Nonfinancial Sectors (Percent) |  |  |  |  | September 12, 2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Households |  |  |  |  |  |
| Period ${ }^{1}$ | Total | Total | Home mortgages | Consumer credit | Business | State and local governments | Federal government | Nominal GDP |
| Year |  |  |  |  |  |  |  |  |
| 2002 | 7.3 | 10.8 | 13.3 | 5.7 | 2.5 | 11.0 | 7.6 | 3.6 |
| 2003 | 8.1 | 11.5 | 14.2 | 5.2 | 2.6 | 8.3 | 10.9 | 5.9 |
| 2004 | 8.9 | 11.4 | 13.9 | 5.5 | 5.8 | 7.4 | 9.0 | 6.5 |
| 2005 | 9.0 | 10.5 | 12.3 | 4.3 | 7.7 | 10.2 | 7.0 | 6.3 |
| 2006 | 8.7 | 10.0 | 10.9 | 4.6 | 9.6 | 8.2 | 3.9 | 5.4 |
| 2007 | 6.9 | 6.0 | 6.2 | 4.4 | 9.0 | 10.1 | 4.3 | 4.5 |
| 2008 | 4.8 | 3.5 | 3.4 | 2.9 | 6.3 | 7.2 | 4.4 | 3.8 |
| 2009 | 4.9 | 3.5 | 3.5 | 2.8 | 6.1 | 6.3 | 5.4 | 4.3 |
| Quarter |  |  |  |  |  |  |  |  |
| 2007:1 | 7.9 | 7.1 | 7.7 | 4.9 | 8.9 | 11.1 | 6.7 | 4.9 |
| 2 | 7.1 | 7.1 | 7.3 | 5.0 | 10.6 | 11.9 | -1.4 | 6.5 |
| 3 | 6.7 | 5.1 | 5.1 | 4.0 | 8.3 | 8.7 | 7.4 | 3.5 |
| 4 | 5.4 | 4.3 | 4.2 | 3.5 | 7.0 | 7.1 | 4.4 | 3.2 |
| 2008:1 | 5.2 | 3.8 | 3.7 | 3.2 | 6.1 | 7.3 | 6.1 | 3.5 |
| 2 | 4.0 | 3.5 | 3.4 | 2.9 | 6.4 | 7.2 | -. 4 | 3.8 |
| 3 | 4.8 | 3.3 | 3.2 | 2.8 | 6.1 | 6.9 | 5.3 | 3.9 |
| 4 | 4.8 | 3.2 | 3.0 | 2.7 | 5.9 | 6.8 | 6.5 | 4.0 |
| 2009:1 | 5.3 | 3.4 | 3.3 | 2.7 | 6.0 | 6.3 | 8.7 | 4.3 |
| 2 | 3.9 | 3.5 | 3.4 | 2.7 | 6.0 | 6.2 | . 1 | 4.3 |
| 3 | 4.8 | 3.5 | 3.5 | 2.7 | 5.9 | 6.1 | 5.3 | 4.3 |
| 4 | 5.1 | 3.6 | 3.6 | 2.8 | 5.9 | 6.0 | 7.3 | 4.2 |

Note. Quarterly data are at seasonally adjusted annual rates.
GDP growth, which is calculated from Q4 to Q4.
Class II FOMC
Flow of Funds Projections: Highlights

| Class II FOMC <br> Restricted (FR) | Flow of Funds Projections: Highlights <br> (Billions of dollars at seasonally adjusted annual rates except as noted) |  |  |  |  |  |  |  |  |  | September 12, 2007 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2007 |  | 2008 |  |  |  | 2009 |  |  |  |
| Category | 2006 | 2007 | 2008 | 2009 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Domestic nonfinancial sectors Net funds raised |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total | 1678.9 | 1297.7 | 1125.4 | 1303.8 | 1203.8 | 983.9 | 1161.5 | 868.1 | 1217.9 | 1253.9 | 1445.5 | 1012.8 | 1311.6 | 1445.4 |
| Net equity issuance | -614.1 | -700.3 | -352.0 | -272.0 | -806.4 | -652.0 | -432.0 | -392.0 | -292.0 | -292.0 | -272.0 | -272.0 | -272.0 | -272.0 |
| Net debt issuance | 2293.0 | 1998.0 | 1477.4 | 1575.8 | 2010.2 | 1635.9 | 1593.5 | 1260.1 | 1509.9 | 1545.9 | 1717.5 | 1284.8 | 1583.6 | 1717.4 |
| Borrowing indicators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt (percent of GDP) ${ }^{1}$ | 209.6 | 215.9 | 220.3 | 221.7 | 217.1 | 218.6 | 219.6 | 220.1 | 220.4 | 220.9 | 221.3 | 221.6 | 221.7 | 222.1 |
| Borrowing (percent of GDP) | 17.4 | 14.5 | 10.3 | 10.6 | 14.5 | 11.7 | 11.3 | 8.8 | 10.5 | 10.6 | 11.7 | 8.7 | 10.6 | 11.3 |
| Households |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing ${ }^{2}$ | 1165.7 | 771.9 | 475.6 | 500.6 | 676.4 | 577.9 | 515.7 | 482.2 | 460.2 | 444.4 | 476.9 | 493.0 | 508.0 | 524.7 |
| Home mortgages | 958.4 | 605.2 | 348.0 | 375.4 | 514.4 | 429.4 | 382.2 | 353.9 | 335.1 | 320.9 | 353.9 | 368.1 | 382.2 | 397.3 |
| Consumer credit | 105.6 | 107.0 | 73.9 | 71.8 | 98.5 | 87.0 | 80.5 | 74.7 | 71.3 | 69.1 | 69.1 | 71.6 | 72.4 | 74.0 |
| Debt/DPI (percent) ${ }^{3}$ | 127.6 | 130.2 | 130.8 | 129.5 | 130.7 | 131.4 | 131.2 | 131.1 | 130.8 | 130.4 | 129.7 | 129.5 | 129.3 | 129.2 |
| Business |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Financing gap ${ }^{4}$ | 186.6 | 225.6 | 272.3 | 309.6 | 217.5 | 241.9 | 273.1 | 261.3 | 265.3 | 289.3 | 309.3 | 297.1 | 300.2 | 331.9 |
| Net equity issuance | -614.1 | -700.3 | -352.0 | -272.0 | -806.4 | -652.0 | -432.0 | -392.0 | -292.0 | -292.0 | -272.0 | -272.0 | -272.0 | -272.0 |
| Credit market borrowing | 791.6 | 813.6 | 616.4 | 636.5 | 784.2 | 682.3 | 605.4 | 638.4 | 617.2 | 604.8 | 627.1 | 638.1 | 640.2 | 640.6 |
| State and local governments |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 152.4 | 201.9 | 159.7 | 149.7 | 184.9 | 153.7 | 161.7 | 161.7 | 157.7 | 157.7 | 149.7 | 149.7 | 149.7 | 149.7 |
| Current surplus ${ }^{5}$ | 243.8 | 199.0 | 185.9 | 185.6 | 186.1 | 191.6 | 187.2 | 186.5 | 184.7 | 185.2 | 182.4 | 185.5 | 186.6 | 188.0 |
| Federal government |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net borrowing | 183.4 | 210.5 | 225.6 | 289.0 | 364.8 | 221.9 | 310.7 | -22.2 | 274.9 | 339.0 | 463.8 | 4.0 | 285.7 | 402.4 |
| Net borrowing (n.s.a.) | 183.4 | 210.5 | 225.6 | 289.0 | 88.2 | 80.5 | 148.3 | -98.1 | 65.7 | 109.7 | 186.6 | -91.6 | 68.4 | 125.6 |
| Unified deficit (n.s.a.) | 209.2 | 198.5 | 223.3 | 271.0 | 39.9 | 118.0 | 175.8 | -128.9 | 61.2 | 115.2 | 197.1 | -121.1 | 63.9 | 131.1 |
| Depository institutions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Funds supplied | 693.7 | 597.6 | 334.7 | 536.2 | 995.8 | 183.5 | 280.5 | 388.4 | 386.0 | 283.8 | 572.2 | 566.7 | 552.6 | 453.1 |

[^6](This page intentionally blank.)

## Class II FOMC-Restricted (FR)

## International Developments

As in the United States, financial markets abroad became further stressed during the intermeeting period. Demand for liquidity surged in money markets, positions in assetbacked commercial paper were wound down, and equity prices fluctuated widely. At the same time, indicators of economic activity in Canada and Japan came in weak, suggesting that, even before the heightening of financial turmoil, economic growth in some industrial countries was moderating more rapidly than we had anticipated. In contrast, indications are that economic growth in emerging-market economies remained strong, and financial markets in these countries appear to have been less disrupted.

Overall, we see foreign economic activity among our trading partners continuing to expand solidly over the forecast horizon, but growth will be somewhat slower than in our August forecast. The downward revision is concentrated among the industrial economies and mostly reflects our response to indicators of weaker economic activity, as well as the markdown in U.S. growth. We have also built into the outlook some negative effect of the financial turmoil abroad. However, this estimate is necessarily tenuous, as we have received few readings on activity since the financial market disruptions intensified. Accordingly, more adverse effects from the financial turmoil pose an important risk to our forecast.

The nominal trade-weighted exchange value of the dollar is down slightly since the August FOMC meeting, reflecting declines against the major foreign currencies. Going forward, we continue to expect some further depreciation of the dollar over the forecast period.

We estimate that real net exports added more than $3 / 4$ percentage point to U.S. GDP growth in the third quarter, somewhat more than in the August Greenbook projection. For the remainder of the forecast period, we expect the contribution from net exports to decline, as export growth moderates and import growth edges up from its slow pace in recent quarters. We project the U.S. current account deficit to widen from an estimated $\$ 780$ billion in the third quarter to more than $\$ 800$ billion by the end of 2009 , but to diminish slightly as a ratio to GDP from its current level of $5 \frac{1}{2}$ percent. The projected deficit is a bit smaller than in the previous Greenbook, reflecting an improved outlook for both trade and investment income balances.

## Summary of Staff Projections

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

| Indicator | 2006 | $\begin{gathered} \text { 2007: } \\ \text { H1 } \end{gathered}$ | Projection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2007 |  | 2008 | 2009 |
|  |  |  | Q3 | Q4 |  |  |
| Foreign output August GB | 3.9 | 4.3 | 3.4 | 3.1 | 3.2 | 3.2 |
|  | 3.9 | 4.1 | 3.6 | 3.5 | 3.4 | $\ldots$ |
| Foreign CPI August GB | 2.1 | 2.9 | 4.1 | 2.3 | 2.3 | 2.3 |
|  | 2.1 | 2.9 | 3.1 | 2.3 | 2.3 | ... |
|  | Contribution to growth (percentage points) |  |  |  |  |  |
| U.S. net exports August GB | 0.4 | 0.4 | 0.8 | -0.2 | 0.2 | 0.0 |
|  | 0.4 | 0.3 | 0.5 | -0.1 | 0.2 | ... |

Note. Changes for years measured as Q4/Q4; half-year is measured as Q2/Q4.
... Not applicable.

## Oil Prices

The spot price of West Texas intermediate (WTI) crude oil closed at $\$ 78.24$ per barrel on September 11, up about $\$ 2$ since the time of the August Greenbook. In contrast, WTI futures prices for delivery in 2008 and beyond fell a bit. Given the path of futures prices, we project that the price of imported oil, which includes a mix of grades and petroleum products, will rise from $\$ 70$ per barrel in the current quarter to $\$ 72$ in the fourth quarter and then fall to about $\$ 66$ by the end of the forecast period. Relative to the August Greenbook, this projection is about $\$ 1$ per barrel lower, on average, in 2008.

The relatively small change in our projected path of oil prices masks some notable developments over the past month. Prices fell rapidly throughout much of early August, primarily reflecting concerns about the potential negative impact of recent financial market developments on the global demand for oil. Late in the month, however, and moving into early September, larger than expected U.S. inventory draws - reflecting, in part, production disruptions related to Hurricane Dean - helped drive prices higher, more than offsetting the earlier declines.

On September 11, OPEC member countries (not including Iraq and Angola) agreed to increase crude oil production 500,000 barrels per day, effective November 1, 2007. However, it is unclear whether the proposed production hike will actually be implemented. Moreover, the size of the agreed increase is relatively small, restoring less
than one third of the production cut implemented late last year. Accordingly, we continue to expect the oil market to remain tight: ongoing concerns regarding potential supply disruptions in Iran, Iraq, Nigeria, and Venezuela, as well as continued strong global demand for oil, are expected to support continued high oil prices over the forecast period.

## International Financial Markets

News on August 9 that the French bank BNP Paribas was restricting redemptions on three of its investment funds triggered a sharp market reaction, sending overnight interest rates well above central bank targets in most of the advanced foreign economies. The Federal Reserve, the European Central Bank, the Bank of Japan, the Bank of Canada, and the central banks of Australia, Norway, and Switzerland all conducted special market operations over the following week to inject liquidity into overnight funding markets.

Money markets came under pressure as banks increased their demand for liquidity amid fears that draws on the credit lines that they had extended to commercial paper programs would balloon. Although central bank actions helped to stabilize overnight interest rates, concerns about liquidity led to difficulties in funding any but the shortest maturities. Disruptions to money markets also sharply impaired funding flows between the United States and Europe. Problems with conduits issuing asset-backed commercial paper (ABCP) to fund purchases of U.S. mortgage-backed securities have surfaced in Germany, the United Kingdom, Canada, and Australia in addition to the United States. Commercial paper issuance slowed, particularly that of ABCP . Overall corporate bond issuance also fell markedly in the advanced foreign economies in July and remained low in August; spreads on investment-grade corporate bond have risen modestly. Yields on long-term sovereign bonds declined 15 to 30 basis points in the larger advanced foreign economies as the financial turmoil boosted demand for safer assets and increased market expectations that most central banks will postpone further tightening.

The trade-weighted exchange value of the dollar against the major foreign currencies is down $11 / 2$ percent since the August meeting. The dollar depreciated most sharply against the yen, declining $33 / 4$ percent, as heightened market volatility encouraged the unwinding of carry trades. However, the dollar appreciated $1 / 3$ percent against the currencies of our other important trading partners; it rose about 1 percent against the Mexican peso, the Brazilian real, and the Korean won, but fell $2 / 3$ percent against the Chinese renminbi. All told, the starting point for the projected path of the broad real dollar is down $1 / 2$ percent from its level in the previous Greenbook. Going forward, we continue to project the
dollar will depreciate modestly, reflecting investors' concerns about the large U.S. current account deficit.

Global equity markets fell sharply over the first half of August but have since partially rebounded. On balance over the intermeeting period, European indexes fell about 2 percent and Japanese equity prices declined 7 percent. Bank stocks were particularly hard hit by the recent financial market turmoil; European bank stocks fell about 8 percent. Emerging market stock indexes were mixed. Of note, the Chinese stock market increased 11 percent since the previous FOMC meeting.

The Reserve Bank of Australia announced that it had intervened in currency markets on August 16, but disclosed nothing further concerning either the size of the intervention or the currencies in which it had intervened.
. The Desk did not intervene during the period for the accounts of the System or the Treasury.

## Advanced Foreign Economies

Real GDP growth in the advanced foreign economies moderated from its rapid pace of 3.7 percent in the first quarter of this year to 2.4 percent in the second quarter. We expect growth to edge down to $21 / 4$ percent in the current quarter and to slow further in the fourth quarter, partly as a result of the lagged effects of previous monetary tightening and the projected slowdown in U.S. growth. Thereafter, growth should average close to 2 percent, in line with trend growth.

Relative to the August Greenbook, we marked down real GDP growth over most of the forecast period. In the second half of this year, we expect that growth will be $1 / 2$ percentage point lower than in the previous Greenbook. This downward revision is our response to the latest data from Canada and Japan, which were weaker than we had anticipated, and to the markdown in U.S. growth. We have also incorporated some effects of recent financial market disruptions, although the effects are uncertain in the absence of hard data on economic activity during the period since the disruption began. Beyond the near term, we reassessed our outlook for Canada, bringing it closer to the pace of U.S. GDP growth in 2008 and 2009. Mainly because of this change, growth in 2008 for the advanced foreign economies is nearly $1 / 2$ percentage point lower than in the August Greenbook.

In light of the concerns about the potential negative effects of recent financial market developments, we have revised our previous assessment that most major foreign central banks would tighten further. We now assume that the ECB will keep policy rates unchanged during the forecast period. We expect the Bank of Canada will lower its policy rate 25 basis points next quarter, and the Bank of England will lower rates by the same amount in 2008. The Bank of Japan is now assumed to delay boosting its policy rate until the fourth quarter.

Our forecast for inflation in the industrial countries is slightly lower than in the August Greenbook, reflecting recent inflation data, especially for the United Kingdom. We project that inflation will generally stay near $13 / 4$ percent over the forecast period. By contrast, inflation in Japan will remain near zero in the near term and rise to about $1 / 2$ percent next year.

## Emerging Market Economies

Recent indicators of economic activity in emerging market economies, most of which predate the latest bout of financial turbulence, have been favorable. We now estimate that real GDP in developing Asia grew at a 10 percent annual rate in the second quarter, faster than our already-robust projection in the August Greenbook. Second-quarter growth in Latin America is also estimated to have been strong at $51 / 2$ percent. Going forward, growth in the emerging market economies should moderate from these elevated rates, but remain solid.

After a widespread surge in the second quarter, we expect real GDP growth in emerging Asia to slow in the second half of this year to a little over 6 percent. Growth in China should moderate to about $91 / 4$ percent, a bit less than projected in the August Greenbook and down markedly from its red-hot pace of more than 14 percent in the first half of the year. Next year, we expect growth in emerging Asia to remain near $61 / 4$ percent, about unchanged from the previous Greenbook, with the negative effects from weaker outlooks for the U.S. and other industrial economies being offset by greater domestic demand.

In Latin America, second-quarter real GDP growth rebounded in Mexico to $51 / 4$ percent, on the strength of sharp increases in agriculture and services. In the second half of this year, growth is expected to weaken from this unusually rapid rate to a little over

3 percent, a touch lower than projected in the August Greenbook. Thereafter, Mexican growth should remain at around $31 / 4$ percent through 2009. In Brazil, growth is expected to hold steady at around 4 percent over the forecast period.

Our projections for emerging markets do not build in much of an adverse effect on real activity from the recent turmoil in global financial markets. Although initial adverse movements in financial indicators were substantial for most of these economies, most of these indicators have recovered to a large extent. However, the possibility of a large effect on economic activity poses an important downside risk to the outlook.

Incoming data indicate that inflation has picked up in a number of emerging market economies, notably China, Brazil, and Singapore. In the case of China, the pickup entirely reflects a further acceleration of food prices, but in a number of other countries core inflation is rising as well. Overall in emerging markets, we expect inflation to pick up to about 4 percent this year, and then fall back to about 3 percent in 2008 and 2009.

## Prices of Internationally Traded Goods

We expect core import price inflation to slow from an annual rate of $31 / 2$ percent in the second quarter to $23 / 4$ percent in the third quarter. In July, core import prices rose modestly; prices for imported industrial supplies, led by metals, slowed sharply from the double-digit pace of the second quarter and more than offset a pickup in imported food prices. We expect core import price inflation to decelerate further next quarter and to stabilize at an annual rate of about 1 percent in the middle of next year, as commodity prices level off and dollar depreciation slows from its rapid pace in the past few quarters. Compared with the August Greenbook, this forecast is down sharply over the next several quarters, reflecting significant declines in the spot and futures prices for a number of commodities, notably metals.

## Staff Projections of Selected Trade Prices

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

| Trade category | 2006 | $\begin{gathered} \text { 2007: } \\ \text { H1 } \end{gathered}$ | Projection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2007 |  | 2008 | 2009 |
|  |  |  | Q3 | Q4 |  |  |
| Imports |  |  |  |  |  |  |
| Core goods | 2.4 | 3.0 | 2.8 | 2.5 | 1.2 | 1.0 |
| August GB | 2.4 | 3.1 | 4.1 | 3.1 | 1.6 | ... |
| Oil (dollars per barrel) | 55.33 | 63.84 | 70.25 | 72.09 | 67.32 | 65.99 |
| August GB | 55.33 | 63.78 | 71.30 | 71.57 | 68.38 |  |
| Exports |  |  |  |  |  |  |
| Core goods | 4.3 | 6.6 | 2.9 | 2.0 | 0.7 | 0.9 |
| August GB | 4.3 | 6.5 | 4.2 | 2.6 | 1.5 |  |

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. Imported oil includes both crude oil and refined products.
. . . Not applicable.

After rising at an annual rate of 7 percent in the second quarter, we expect core export prices to decelerate sharply to 3 percent in the current quarter. Data for July showed only a tepid increase in core export prices, and prices for material-intensive goods, which rose at a double-digit rate in the first half of this year, were flat. Prices for exported industrial supplies (excluding fuels and agricultural products), which fell in July for the first time this year, were pulled down by declines in prices for some metals. We expect core export prices to decelerate further, leveling out below 1 percent early next year. This projection reflects an expected path for commodity prices that is consistent with futures markets and is roughly flat over the next two years. The forecast is down $1 \frac{1}{4}$ percentage points in the current quarter, primarily because of a downward revision to projected U.S. producer prices for petroleum and, to a lesser extent, because of the recent decline in spot prices for metals. The forecast is also down through the end of next year, due to lower projected inflation for metals and agricultural exports.

## Trade in Goods and Services

After contributing $11 / 4$ percentage points at an annual rate to U.S. GDP growth last quarter, we project that real net exports will add more than $3 / 4$ percentage point to GDP growth in the current quarter. For the remainder of the forecast period, the contribution is expected to be more modest, but to remain positive on average, as import growth picks
up from its recent slow pace and as export growth moderates. Compared with the August Greenbook projection, the contribution of net exports has been revised up somewhat in the second and third quarters, as the June and July data on nominal exports came in particularly strong, but is little changed thereafter.

Real imports of goods and services fell at an annual rate of $21 / 2$ percent in the second quarter, in line with the estimate in the August Greenbook. After a modest increase in June, nominal imports rose briskly in July, with noticeable gains in imports of automotive products and machinery. Accordingly, we expect that real imports will rise at a $33 / 4$ percent pace in the current quarter. Much of the projected turnaround reflects a pickup in core imports and services, as the unusual contraction in the second quarter gives way to growth more in line with U.S. GDP. Imports of computers, which declined in the previous quarter, are also expected to move up, and we project imports of oil to continue to decline.

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

| Measure | 2006 | $\begin{gathered} \text { 2007: } \\ \text { H1 } \end{gathered}$ | Projection |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2007 |  | 2008 | 2009 |
|  |  |  | Q3 | Q4 |  |  |
| Real imports | 3.7 | 0.6 | 3.8 | 5.4 | 2.7 | 4.4 |
| August GB | 3.7 | 0.7 | 1.0 | 4.5 | 3.0 | ... |
| Real exports | 9.3 | 4.4 | 13.3 | 5.9 | 5.8 | 5.9 |
| August GB | 9.3 | 3.3 | 6.3 | 6.1 | 5.8 |  |

Note. Changes for years are measured as Q4/Q4; half-year is measured as Q2/Q4.

In the fourth quarter, real import growth is expected to strengthen further, as a rebound in oil imports offsets some moderation in core goods and services, which are restrained by the step down in U.S. GDP growth. Over the course of 2008 and into 2009, imports of core goods and services gradually accelerate in response to firming GDP growth and the deceleration of import prices. Imports of computers and semiconductors expand steadily as well, whereas, smoothing through the quarterly volatility, oil imports are roughly flat. Compared with the August Greenbook projection, the forecast for real imports is stronger in the third quarter, as imports in July came in above expectations. Thereafter, the outlook is little changed, as the restraint from slightly slower U.S. real GDP growth is offset by the lower path of core import prices.

Real exports of goods and services rose $73 / 4$ percent at an annual rate in the second quarter, even faster than we wrote down in the August Greenbook, as the June data came in stronger than expected. In the current quarter, we expect real export growth to rise to $131 / 4$ percent. This acceleration derives from the steep contour of the monthly data during the second quarter as well as robust exports in July. Core exports were boosted in July by a surge in shipments of aircraft and automotive products. Real computer exports, which fell in the second quarter, are projected to increase briskly in the third quarter, whereas services exports decelerate to a still-robust pace. Compared with the previous Greenbook, we have marked up real export growth 7 percentage points (a.r.) in the current quarter, largely reflecting stronger-than-expected exports in June and July.

In the fourth quarter, we project that real export growth will step down to 6 percent, as exports of core goods decelerate to a pace more in line with foreign GDP growth and relative prices. We judge that the recent exceptional strength in exports of automotive products and aircraft will not persist, and in addition, exports of computers are expected to slow from their rapid third-quarter pace. Exports of services also decelerate, albeit slightly.

In 2008 and 2009, export growth remains near 6 percent, as exports of core goods and services are supported by solid foreign growth, the deceleration in export prices, and the ongoing, modest depreciation of the dollar. Exports of computers and semiconductors are projected to grow steadily, at a pace in line with historical trends. Compared with the August Greenbook, our forecast for real exports in 2008 is largely unchanged, as the effects of a somewhat slower pace of foreign GDP growth are offset by a slightly lower dollar and a downward revision to export prices.

## Alternative Simulations

The turmoil in financial markets may lead to a larger contraction in foreign activity than our baseline forecast projects. To assess this risk, we use the FRB/Global model to examine the effects of a weakening in autonomous demand abroad that is more heavily concentrated in foreign industrial countries. Although this shock causes some endogenous appreciation of the dollar against foreign currencies, greater uncertainty in financial markets may also spur investors to seek high-quality assets, further strengthening the dollar. Accordingly, we consider a second scenario in which the decline in foreign demand is augmented with a risk-premium shock that boosts the demand for dollar-denominated assets.

In the first scenario, the shock begins in 2007:Q4 and is calibrated so that consumption and investment spending would decline 1 percent per year relative to the baseline in foreign industrial countries and $1 / 2$ percent per year in emerging market countries in the absence of endogenous adjustment of interest rates. The fall in foreign activity reduces U.S. real net exports directly through weaker foreign spending and indirectly through a modest appreciation of the dollar. As a result, U.S. GDP growth declines about 0.3 percentage point relative to baseline in 2008 and in 2009. The decline in output relative to baseline is cushioned by a substantial policy response, with the federal funds rate falling about 80 basis points below baseline by the end of the forecast period. Core PCE inflation declines 0.1 percentage point below baseline in 2008 and 2009. The fall in core PCE prices reflects both lower import prices due to dollar appreciation and the effect of the contraction in aggregate demand on domestic prices. The combination of weaker foreign activity and an appreciated dollar contributes to a deterioration of the ratio of the trade balance to GDP of 0.2 percentage point by the end of the forecast period.

In the second scenario, the foreign demand shock is augmented by a risk-premium shock that causes the broad real dollar to appreciate 10 percent by the end of the forecast period, compared with only about 4 percent in the first scenario. The larger appreciation of the dollar induces a more pronounced slowing in the growth of U.S. GDP than in the first scenario, to 0.6 percentage point below baseline in 2009. Core PCE inflation falls noticeably more than in the first scenario, and there is also a considerably larger decline in the federal funds rate. Finally, the combined shocks contribute to a deterioration of the trade balance of about 0.6 percentage point of GDP by the end of the forecast period.

## Alternative Scenarios:

## Weaker Foreign Demand and Dollar Appreciation

(Percent change from previous period, annual rate)

| Indicator and simulation | 2007 |  | 2008 |  | 2009 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H 1 | H 2 | H 1 | H 2 | H 1 | H 2 |
| U.S. real GDP |  |  |  |  |  |  |
| Baseline | 2.1 | 1.8 | 1.5 | 1.9 | 2.1 | 2.2 |
| Weaker foreign demand | 2.1 | 1.8 | 1.3 | 1.6 | 1.8 | 2.0 |
| Additional dollar appreciation | 2.1 | 1.8 | 1.0 | 1.0 | 1.2 | 1.9 |
| U.S. PCE prices |  |  |  |  |  |  |
| (excluding food and energy) |  |  |  |  |  |  |
| Baseline | 1.9 | 2.0 | 2.0 | 1.9 | 1.9 | 1.9 |
| Weaker foreign demand | 1.9 | 2.0 | 1.9 | 1.8 | 1.8 | 1.8 |
| Additional dollar appreciation | 1.9 | 2.0 | 1.8 | 1.7 | 1.7 | 1.7 |
|  |  |  |  |  |  |  |
| U.S federal funds rate, |  |  |  |  |  |  |
| (percent) |  |  |  |  |  |  |
| Baseline | 5.25 | 5.0 | 4.75 | 4.75 | 4.75 | 4.75 |
| Weaker foreign demand | 5.25 | 5.0 | 4.65 | 4.35 | 4.15 | 3.95 |
| Additional dollar appreciation | 5.25 | 5.0 | 4.45 | 3.85 | 3.25 | 2.95 |
| U.S. trade balance |  |  |  |  |  |  |
| (percent of GDP) |  |  |  |  |  |  |
| Baseline |  |  |  |  |  |  |
| Weaker foreign demand | -5.2 | -5.2 | -5.0 | -4.7 | -4.6 | -4.4 |
| Additional dollar appreciation | -5.2 | -5.1 | -4.9 | -4.7 | -4.7 | -4.6 |

Note. Half-year changes are measured as Q2/Q4 or Q4/Q2. The federal funds rate is the average rate for the final quarter of the period.

## Evolution of the Staff Forecast



Foreign Real GDP


Core Import Prices*

*Prices for merchandise imports excluding computers, semiconductors, oil, and natural gas.
Class II FOMC
Restricted (FR)
OUTLOOK FOR FOREIGN REAL GDP AND CONSUMER PRICES: SELECTED COUNTRIES (Percent, Q4 to Q4)

| Measure and country | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | -----Projected---- |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | 2007 | 2008 | 2009 |
| REAL GDP (1) |  |  |  |  |  |  |  |  |  |
| Total foreign | 0.4 | 3.1 | 3.0 | 3.8 | 3.8 | 3.9 | 3.8 | 3.2 | 3.2 |
| Advanced Foreign Economies of which: | 0.9 | 2.5 | 1.8 | 2.6 | 2.7 | 2.5 | 2.6 | 2.0 | 2.1 |
| Canada | 1.3 | 3.5 | 1.5 | 3.5 | 3.2 | 1.9 | 2.8 | 1.6 | 2.0 |
| Japan | $-1.7$ | 2.0 | 2.4 | 1.1 | 2.8 | 2.5 | 1.1 | 1.9 | 1.6 |
| United Kingdom | 2.1 | 2.3 | 3.4 | 2.6 | 1.8 | 3.1 | 2.7 | 2.4 | 2.4 |
| Euro Area (2) | 1.1 | 1.0 | 1.1 | 1.6 | 1.9 | 3.3 | 2.2 | 2.0 | 2.0 |
| Germany | 1.1 | -0.0 | 0.1 | 0.1 | 1.6 | 3.9 | 2.1 | 2.0 | 2.0 |
| Emerging Market Economies | $-0.4$ | 4.0 | 4.8 | 5.6 | 5.4 | 5.7 | 5.5 | 4.8 | 4.8 |
| Asia | 1.1 | 6.4 | 6.9 | 5.9 | 7.5 | 6.7 | 7.5 | 6.3 | 6.3 |
| Korea | 4.7 | 7.7 | 4.2 | 2.9 | 5.7 | 4.0 | 5.2 | 4.6 | 4.4 |
| China | 7.1 | 8.5 | 10.1 | 9.6 | 10.0 | 10.4 | 11.8 | 9.7 | 9.5 |
| Latin America | $-1.3$ | 1.6 | 2.4 | 5.3 | 3.1 | 4.9 | 3.6 | 3.3 | 3.4 |
| Mexico | -1.3 | 2.0 | 2.1 | 4.8 | 2.5 | 4.3 | 3.2 | 3.1 | 3.2 |
| Brazil | -0.7 | 5.0 | 0.8 | 5.0 | 3.1 | 4.7 | 3.8 | 4.1 | 4.1 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |
| Advanced Foreign Economies of which: | 0.9 | 2.1 | 1.3 | 1.8 | 1.5 | 1.3 | 2.0 | 1.7 | 1.7 |
| Canada | 1.1 | 3.8 | 1.7 | 2.3 | 2.2 | 1.3 | 3.0 | 2.4 | 2.0 |
| Japan | -1.1 | -0.5 | -0.3 | 0.5 | -1.0 | 0.3 | 0.1 | 0.3 | 0.5 |
| United Kingdom (4) | 1.0 | 1.5 | 1.3 | 1.4 | 2.1 | 2.7 | 1.9 | 2.1 | 2.0 |
| Euro Area (2) | 2.1 | 2.3 | 2.0 | 2.3 | 2.3 | 1.8 | 2.2 | 1.8 | 1.9 |
| Germany | 1.5 | 1.2 | 1.1 | 2.1 | 2.2 | 1.3 | 2.2 | 1.7 | 1.8 |
| Emerging Market Economies | 2.8 | 2.9 | 3.1 | 3.9 | 3.0 | 2.9 | 4.1 | 3.0 | 3.1 |
| Asia | 1.2 | 0.8 | 2.2 | 3.2 | 2.6 | 2.3 | 4.2 | 2.7 | 2.8 |
| Korea | 3.3 | 3.3 | 3.5 | 3.4 | 2.5 | 2.1 | 2.8 | 2.7 | 2.3 |
| China | $-0.1$ | -0.6 | 2.7 | 3.3 | 1.4 | 2.1 | 5.4 | 2.6 | 2.9 |
| Latin America | 5.3 | 6.4 | 4.9 | 5.7 | 3.8 | 4.2 | 4.0 | 3.7 | 3.8 |
| Mexico | 5.1 | 5.2 | 3.9 | 5.3 | 3.1 | 4.1 | 3.5 | 3.5 | 3.5 |
| Brazil | 7.5 | 10.7 | 11.5 | 7.2 | 6.1 | 3.2 | 4.3 | 3.7 | 3.7 |

[^7]|  | 2007 |  |  |  | $\begin{aligned} & \text { Projected } \\ & 2008 \end{aligned}$ |  |  |  | 2009 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measure and country | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| REAL GDP (1) ------------------ Quarterly changes at an annual rate |  |  |  |  |  |  |  |  |  |  |  |  |
| Total foreign | 4.1 | 4.6 | 3.4 | 3.1 | 3.1 | 3.1 | 3.2 | 3.3 | 3.2 | 3.2 | 3.2 | 3.2 |
| Advanced Foreign Economies of which: | 3.7 | 2.4 | 2.3 | 1.9 | 1.9 | 1.9 | 2.0 | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| Canada | 3.9 | 3.4 | 2.2 | 1.7 | 1.5 | 1.5 | 1.6 | 2.0 | 2.0 | 2.0 | 2.0 | 2.1 |
| Japan | 3.0 | $-1.2$ | 1.3 | 1.6 | 2.0 | 2.2 | 1.9 | 1.7 | 1.7 | 1.7 | 1.6 | 1.6 |
| United Kingdom | 2.8 2.9 | 3.4 1.4 | 2.5 2.5 | 2.3 2.0 | 2.4 1.9 | 2.4 1.9 | 2.4 2.0 | 2.4 2.0 | 2.4 2.0 2.0 | 2.4 2.0 | 2.4 2.0 | 2.4 2.0 |
| Germany | 2.2 | 1.0 | 2.9 | 2.3 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| Emerging Market Economies | 4.7 | 7.7 | 4.9 | 4.7 | 4.7 | 4.8 | 4.9 | 4.9 | 4.9 | 4.9 | 4.8 | 4.8 |
| Asia | 7.5 | 10.1 | 6.1 | 6.2 | 6.3 | 6.3 | 6.4 | 6.3 | 6.3 | 6.3 | 6.3 | 6.3 |
| Korea | 3.6 | 7.4 | 5.0 | 4.7 | 4.6 | 4.6 | 4.6 | 4.5 | 4.5 | 4.5 | 4.4 | 4.4 |
| China | 14.2 | 14.7 | 9.4 | 9.2 | 9.5 | 9.7 | 10.0 | 9.7 | 9.5 | 9.5 | 9.5 | 9.5 |
| Latin America | 1.9 | 5.5 | 3.6 | 3.2 | 3.2 | 3.2 |  |  |  |  |  |  |
| Mexico | $\frac{1}{3} \cdot 2$ | 5.3 | 3.4 | 2.9 | 2.8 | 2.9 | 3.3 | 3.3 | 3.3 | 3.3 | 3.2 | 3.2 |
| Brazil | 3.1 | 4.3 | 4.0 | 4.0 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 | 4.1 |
| CONSUMER PRICES (3) |  |  |  |  |  |  |  |  |  |  |  |  |
| Advanced Foreign Economies | 1.6 | 1.6 | 1.6 | 2.0 | 1.9 | 1.7 | 1.8 | 1.7 | 1.7 | 1.7 | 1.7 | 1.7 |
| of which: | 1.9 | 2.0 | 2.3 | 3.0 | 2.5 | 2.3 | 2.5 | 2.4 | 2.2 | 2.1 | 2.0 |  |
| Japan | -0.1 | -0.0 | -0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.3 | 0.4 | 0.5 | 0.5 | 0.5 |
| United Kingdom (4) | 2.9 | 2.6 | 1.9 | 1.9 | 1.8 | 1.8 | 2.2 | 2.1 | 2.0 | 2.0 | 2.0 | 2.0 |
| Euro Area (2) | 1.9 | 1.9 | 1.9 | 2.2 | 2.1 | 1.9 | 1.9 | 1.8 | 1.9 | 1.9 | 1.9 | 1.9 |
| Germany | 1.9 | 2.0 | 2.1 | 2.2 | 1.9 | 1.7 | 1.7 | 1.7 | 1.7 | 1.8 | 1.8 | 1.8 |
| Emerging Market Economies | 3.1 | 3.3 | 4.3 | 4.1 | 4.0 | 3.9 | 2.9 | 3.0 | 3.0 | 3.0 | 3.0 | 3.1 |
| Asia | 2.7 2.0 | 3.0 2.5 | 4.4 2.3 | 4.2 2.8 | 4.1 3.3 | 3.8 2.8 | 2.6 2.8 | 2.7 2.7 | 2.7 2.6 | 2.7 2.5 | 2.7 2.4 | 2.8 2.3 |
| China | 2.8 | 3.6 | 6.0 | 5.4 | 5.1 | 4.5 | 2.3 | 2.6 | 2.6 | 2.6 | 2.7 | 2.9 |
| Latin America | 4.2 | 4.2 | 4.2 | 4.0 | 3.7 | 4.0 | 3.8 | 3.7 | 3.7 | 3.8 | 3.8 | 3.8 |
| Mexico | 4.1 | 4.0 | 3.9 | 3.5 | 3.4 | 3.8 | 3.6 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 |
| Brazil | 3.1 | 3.4 | 4.2 | 4.3 | 3.8 | 3.9 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 | 3.7 |

[^8]Class II FOMC
Restricted (FR)
OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

|  | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | ---- | $\begin{array}{r} \text { Projec } \\ 2008 \end{array}$ | 2009 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NIPA REAL EXPORTS and IMPORTS |  |  |  |  |  |  |  |  |  |
|  | Percentage point contribution to GDP growth, Q4/Q4 |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -0.2 | -0.9 | $-0.1$ | -0.9 | -0.1 | 0.4 | 0.4 | 0.2 | -0.0 |
| Exports of $G \& S$ | -1. 3 | 0.4 | 0.6 | 0.7 | 0.7 | 1.0 | 0.8 | 0.7 | 0.7 |
| Imports of G\&S | 1.1 | $-1.3$ | -0.7 | $-1.7$ | -0.8 | -0.6 | -0.4 | -0.5 | -0.7 |
| Percentage change, Q4/Q4 |  |  |  |  |  |  |  |  |  |
| Exports of $G \& S$ | -11.9 | 3.8 | 5.8 | 7.4 | 7.0 | 9.3 | 6.9 | 5.8 | 5.9 |
| Services | -8.9 | 10.2 | 3.0 | 8.3 | 4.1 | 8.3 | 6.6 | 6.1 | 5.0 |
| Computers | -23.5 | -1.1 | 11.3 | 5.8 | 14.0 | 8.2 | 0.9 | 9.5 | 9.5 |
| Semiconductors | -34.6 | 10.1 | 38.3 | -6.0 | 17.5 | 2.4 | 17.8 | 11.0 | 11.0 |
| Core Goods 1/ | -10.2 | 0.6 | 4.9 | 8.0 | 7.5 | 10.2 | 6.9 | 5.3 | 5.9 |
| Imports of $G \& S$ | -7.6 | 9.7 | 4.8 | 11.5 | 5.1 | 3.7 | 2.6 | 2.7 | 4.4 |
| Services | -5.9 | 8.8 | 2.2 | 9.3 | 1.4 | 6.1 | 0.7 | 2.0 | 3.0 |
| Oil | 3.7 | 3.8 | 1.2 | 10.8 | 1.2 | -9.0 | 2.7 | -1.7 | 1.2 |
| Natural Gas | -6.5 | 19.5 | 1.3 | 4.9 | 11.3 | -13.4 | 6.6 | 1.3 | 0.3 |
| Computers | $-13.6$ | 13.2 | 17.0 | 23.2 | 12.2 | 13.6 | 13.8 | 15.5 | 15.5 |
| Semiconductors | $-51.1$ | 11.0 | $-0.1$ | 9.8 | 7.6 | -0.5 | 7.0 | 5.0 | 5.0 |
| Core Goods $2 /$ | -6.5 | 10.0 | 5.2 | 11.4 | 6.0 | 5.9 | 2.1 | 3.0 | 4.7 |
| Billions of Chained 2000 Dollars |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services |  |  |  |  |  |  |  |  |  |
| Exports of $G \& S$ | $1036.7$ | $1013.3$ | $1026.1$ | 1126.1 | 1203.4 | 1304.1 | 1400.9 | 1496.8 | 1584.7 |
| Imports of $G \& S$ | 1435.8 | 1484.6 | 1545.0 | 1719.9 | 1821.5 | 1928.6 | 1973.1 | 2028.0 | 2104.9 |
| Billions of dollars |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | $-384.7$ | -459.6 | -522.1 | -640.2 | -754.8 | -811.5 | -780.0 | -792.8 | -793.2 |
| Current Acct as Percent of GDP | -3.8 | -4.4 | -4.8 | -5.5 | -6.1 | -6.2 | -5.7 | -5.5 | -5.3 |
| Net Goods \& Services (BOP) | -365.1 | -423.7 | -496.9 | -612.1 | -714.4 | -758.5 | -716.0 | -692.5 | -671.8 |
| Investment Income, Net | 36.9 | 33.2 | 51.1 | 62.5 | 54.5 | 43.2 | 37.3 | 2.4 | $-20.6$ |
| Direct, Net | 115.9 | 102.4 | 112.7 | 139.4 | 152.5 | 174.2 | 220.0 | 239.8 | 258.6 |
| Portfolio, Net | -79.0 | -69.1 | -61.5 | -76.9 | -98.1 | -131.0 | -182.7 | -237.4 | -279.2 |
| Other Income \& Transfers, Net | $-56.5$ | $-69.2$ | -76.3 | -90.6 | -94.9 | -96.1 | -101.4 | -102.7 | $-100.7$ |

[^9]NIPA REAL EXPORTS and IMPORTS

|  | 2004 |  |  |  | 2005 |  |  |  | 2006 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| NIPA REAL EXPORTS and IMPORTS Percentage point contribution to GDP growth |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services | -0.8 | -1.5 | -0.4 | -1.1 | 0.3 |  | -0.1 | -1.4 | 0.1 | 0.5 | -0.2 | 1.2 |
| Exports of Imports of of $G \& S$ | 0.9 -1.7 | 0.6 -2.1 | 0.3 -0.7 | 1.0 -2.0 | 0.6 -0.3 | 0.9 -0.1 | 0.2 -0.3 | 1.1 -2.5 | -1.2 | 0.5 -0.1 | 0.6 -0.9 | 1.5 -0.3 |
| Percentage change from previous period, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Exports of $\mathrm{G} \& \mathrm{~S}$ | 10.0 | 6.5 | 3.1 | 10.0 | 6.0 | 9.5 | 2.1 | 10.6 | 11.5 | 5.7 | 5.7 | 14.3 |
| Services | 16.2 | 5.1 | -3.4 | 16.8 | 6.5 | 0.9 | 2.6 | 6.3 | 2.9 | 3.9 | 2.0 | 26.0 |
| Computers | -7.0 | 1.7 | 16.7 | 13.4 | 17.4 | 24.9 | 12.8 | 2.0 | 14.6 | 13.0 | -3.9 | 9.9 |
| Semiconductors | 16.7 | -13.4 | -20.9 | -2.4 | -1.7 | 9.3 | 23.2 | 43.8 | 25.3 | 14.5 | -11.5 | -13.5 |
| Core Goods 1/ | 7.8 | 9.2 | 7.7 | 7.4 | 5.6 | 13.1 | 0.2 | 11.6 | 14.9 | 5.7 | 9.2 | 11.0 |
| Imports of G ¢ SSerricesOilNaturalNatusComputersSemiconductorsCore Goods | 12.3 | 15.2 | 4.8 | 13.8 | 2.1 | 0.8 | 2.1 | 16.2 | 6.9 | 0.9 | 5.4 | 1.6 |
|  | 16.5 | 8.9 | 1.8 | 10.5 | -3.5 | -0.5 | 0.0 | 10.3 | 9.5 | -0.1 | 1.3 | 14.2 |
|  | 39.2 | -26.3 | -7.1 | 58.3 | 5.4 | -26.2 | -14.2 | 57.1 | -3.6 | -26.1 | 3.3 | -6.9 |
|  | 33.4 | 43.1 | 48.5 | -57.3 | 53.9 | -4.0 | 108.6 | -50.2 | -49.4 | 123.0 | 24.1 | -59.8 |
|  | 20.7 | 30.1 | 25.6 | 17.0 | 5.7 | 9.8 | 17.0 | 16.6 | 27.0 | 16.9 | 16.0 | -3.2 |
|  | 43.0 | 18.5 | 3.9 | -17.4 | -9.5 | 7.7 | 15.7 | 18.8 | 0.1 | -1.5 | 20.9 | -17.9 |
|  | 6.5 | 23.0 | 5.4 | 11.6 | 2.3 | 6.1 | 2.9 | 13.2 | 9.7 | 5.4 | 5.5 | 3.1 |
| Billions of Chained 2000 Dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Goods \& Services Exports of G\&S Imports of $\mathrm{G} \& \mathrm{~S}$ | $\begin{aligned} & -549.1 \\ & 1101.8 \end{aligned}$ | $\begin{aligned} & -591.1 \\ & 1119.4 \end{aligned}$ | $\begin{aligned} & -602.7 \\ & 1128.0 \end{aligned}$ | $\begin{array}{r} -632.3 \\ 1155.3 \end{array}$ | $\begin{aligned} & -624.4 \\ & 1172.4 \end{aligned}$ | $\begin{array}{r} -601.0 \\ 1199.3 \end{array}$ | $\begin{aligned} & -604.1 \\ & 1205.6 \end{aligned}$ | $\begin{array}{r} -642.6 \\ 1236.4 \end{array}$ | $\begin{aligned} & -640.1 \\ & 1270.6 \end{aligned}$ | $\begin{aligned} & -626.6 \\ & 1288.4 \end{aligned}$ | $\begin{aligned} & -633.8 \\ & 1306.6 \end{aligned}$ | $\begin{array}{r} -597.3 \\ 1350.9 \end{array}$ |
|  | 1650.9 | 1710.5 | 1730.8 | 1787.7 | 1796.8 | 1800.3 | 1809.7 | 1879.0 | 1910.7 | 1915.0 | 1940.4 | 1948.2 |
| Billions of dollars, s.a.a.r. |  |  |  |  |  |  |  |  |  |  |  |  |
| US CURRENT ACCOUNT BALANCE | -559.8 | -634.7 | -632.3 | -733.8 | -729.6 | -732.9 | -693.6 | -863.2 | -802.4 | -822.4 | -869.3 | -751.8 |
| Current Account as \% of GDP | -4.9 | -5.5 | -5.4 | -6.1 | -6.0 | -6.0 | -5.5 | -6.8 | -6.2 | -6.3 | -6.6 | 5.6 |
| Net Goods \& Services (BOP) | -544.1 | -602.4 | -626.4 | -675.4 | -666.6 | -682.7 | -723.8 | -784.4 | -758.8 | -770.3 | -797.2 | -707.7 |
| Investment Income, Net |  |  |  |  |  |  |  | 35.3 | 48.3 | 49.2 | 30.0 |  |
| Direct, ${ }_{\text {det }}$ Nortfolio, ${ }^{\text {Net }}$ | 146.2 -63.9 | 129.6 -70.3 | 143.4 -74.2 | 138.4 -99.2 | 140.4 -84.3 | 147.3 -93.8 | 176.1 -103.3 | 146.2 -110.9 | 168.0 -119.8 | 178.6 -129.4 | 161.9 -132.0 | 188.3 -143.0 |
| Other Inc. \& Transfers, Net | -97.8 | -91.7 | -75.1 | -97.6 | -119.2 | -103.8 | -42.6 | -114.1 | -91.8 | -101.2 | -102.1 | -89.4 |

[^10]Last Page
NIPA REAL EXPORTS and IMPORTS
6
0
1



| -515.8 | -508.0 | -524.6 |
| :--- | :--- | :--- |
| 1573.2 | 1595.8 | 1618.6 |
| 2089.0 | 2103.9 | 2143.2 |



[^11]
[^0]:    ${ }^{1}$ In calibrating our response to these developments, we assume that nonprime mortgage originations will drop from 20 percent of home sales in the fourth quarter of 2006 to 2 percent of home sales by the fourth quarter of 2007 and then gradually recover to about 8 percent of sales by early 2009 (which is about where they were as a share of sales in the first half of 2004). In addition, we assume that jumbo mortgage originations for purchase will decline from 8 percent in the fourth quarter of last year to 5 percent by the end of this year and then gradually recover to 8 percent by early 2009. Taken together, these assumptions reduced our forecast of the level of home sales by 13 percent in the fourth quarter of this year and by 4 percent in early 2009.

[^1]:    ${ }^{2}$ Despite the sizable downward revisions that we have made to real GDP growth, the rise in the unemployment rate is only a little steeper than in the previous Greenbook. Using our former estimate of the NAIRU, the unemployment rate in recent quarters had been lower than would have been consistent with an Okun's law relationship, and we had expected the disconnect to be remedied over time, putting upward pressure on the unemployment rate. Now that we have changed our NAIRU assumption, the current level of the unemployment rate seems roughly in line with Okun's law, thereby removing that source of upward pressure.

[^2]:    1．Change from fourth quarter of previous year to fourth quarter of year indicated．
    2．Billions of chained（2000）dollars．

[^3]:    1. Change from fourth quarter of previous year to fourth quarter of year indicated.
    2. Private-industry workers.
[^4]:    1．Change from fourth quarter of previous year to fourth quarter of year indicated，unless otherwise indicated．
    3．Percent，annual values are for the fourth quarter of the year indicated． Annual values are for the fourth quarter of the year indicated．

    5．Percent change，annual rate．
    7．Percent change，annual rate，with inventory valuation and capital consumption adjustments．
    8．Billions of dollars，annual values are annual averages．

[^5]:    aggregate demand stimulus.
    a--Actual

[^6]:    Note. Data after 2007:Q2 are staff projections.

    1. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.
    2. Includes change in liabilities not shown in home mortgages and consumer credit.
    3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income. 4. For corporations, excess of capital expenditures over U.S. internal funds.
    4. NIPA state and local government saving plus consumption of fixed capita
    5. NIPA state and local government saving plus consumption of fixed capital and net capital transfers
    n.s.a. Not seasonally adjusted.
    2.6.4 FOF
[^7]:    . Foreign GDP aggregates calculated using shares of U.S. exports. -oil 3. Foreign CPI aggregates calculated using shares of U.S. non-oil imports.

[^8]:    1. Foreign GDP aggregates calculated using shares of U.S. exports.

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

[^9]:    2. Merchandise imports excluding oil, natural gas, computers, and semiconductors
[^10]:    1. Merchandise exports excluding computers and semiconductors.
[^11]:    1. Merchandise exports excluding computers and semiconductors
    2. Merchandise exports excluding computers and semiconductors.
