Prefatory Note

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Class II FOMC - Restricted (FR)

Part 1

September 14, 2005

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

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Domestic Developments

The information we have received since the last Greenbook suggests that, in the absence of Katrina, the pace of economic activity in the second half of this year would have been essentially the same as we had written down in August. However, Katrina has obviously changed the economic landscape, albeit in ways that are extremely difficult to quantify. Much will depend on how large the initial disruption effects turn out to be, how long they last, and how much time passes before rebuilding gets under way.

Given the information currently in hand, and recognizing the considerable scope for error, we have written down a forecast in which Katrina restrains economic activity significantly over the remainder of the year. After that, however, the Katrina-related restraint begins to wane, and economic activity actually is boosted for a while by hurricane-related rebuilding. By the end of 2007, the level of real GDP is roughly the same as it would have been in the absence of the storm. All told, we now project that real GDP will increase almost 3½ percent over the next six quarters, before stepping down to just under 3 percent in 2007. The underlying picture remains the same in this projection as in the August Greenbook—tighter monetary policy and a waning impetus from stock market and housing wealth result in a gradual slowing of the expansion, with the economy settling in at an approximate balance between aggregate demand and aggregate supply.

Recent readings on core inflation have been a touch more favorable than we had expected. However, higher energy costs have boosted top line inflation and are likely to show through to core inflation in 2006. Given our forecast of receding energy prices starting in the middle of next year, we still see the monetary tightening that we built into the August forecast as sufficient to point core PCE inflation on a gradual downward path beginning in 2007 while keeping resource utilization near its sustainable level. Accordingly, we have maintained the same path for the federal funds rate as in the last Greenbook.

Hurricane Katrina

In attempting to quantify the economic effects of Hurricane Katrina, we have made a number of important assumptions on the basis of relatively scant and fractured information. Past natural disasters can serve as a rudimentary guide, but the unique characteristics of this event—including the devastation of a major city and the displacement of its population—clearly put us in uncharted territory. Complicating matters further, the indirect effects of this storm on aggregate economic activity have the

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

Measure and scenario	2005 H1	2005 H2	2006 H1	2006 H2	2007
Real GDP					
Baseline	**3.5**	**3.4**	**3.9**	**3.0**	**2.9**
Pessimistic	3.5	2.8	3.0	3.1	3.4
Optimistic	3.5	4.0	4.1	3.0	2.9
Civilian unemployment rate[1]					
Baseline	**5.1**	**5.0**	**5.0**	**5.0**	**5.0**
Pessimistic	5.1	5.1	5.3	5.4	5.2
Optimistic	5.1	4.9	4.8	4.8	4.8
PCE prices excluding food and energy					
Baseline	**2.0**	**1.9**	**2.4**	**2.2**	**2.0**
Pessimistic	2.0	1.9	2.5	2.4	2.0
Optimistic	2.0	1.9	2.4	2.2	2.1

1. Average for the final quarter of the period.

potential to be far reaching, given the key role that the affected region plays in energy production and the distribution of goods and services—both at home and abroad. That said, the United States economy has proven to be remarkably resilient in recent years to a series of significant shocks, and signs of recovery and adjustment already are evident in parts of the affected areas and elsewhere. In addition, the massive federal response will inject considerable fiscal stimulus into the economy. Recognizing these crosscurrents, we attempt in this section to lay out a broad framework for the analysis of the macroeconomic effects of Hurricane Katrina.

In the first instance, even beyond the enormous human tragedy, Katrina made the nation economically worse off. Not only did output fall as the result of the storm, but households lost their homes and other possessions, businesses were damaged or destroyed, and key infrastructure was wiped out. We estimate that the loss of real net worth for the nation as a whole totaled $76 billion: $20 billion of business capital,

$10 billion in public capital, $34 billion in residential capital, and $12 billion in the stock of consumer durables.[1] Although these estimates appear large in absolute terms, they represent only about 0.1 percent of national wealth.

The Congress has already approved about $62 billion in supplemental appropriations for hurricane relief and reconstruction, and the Administration has indicated that it will request more funding in the future. We have assumed that federal appropriations for hurricane relief and reconstruction efforts will total $85 billion, about $70 billion of which we expect to be spent within the forecast period. This spending seems sufficient to fund significant relief and reconstruction efforts, but it is likely not enough to finance any of the major long-term projects that are being contemplated, such as strengthening the levees to withstand category 5 storms.

In thinking about the economic effects of Katrina on real GDP, we identify three distinct phases. First, production and sales decline in the affected area. Second, as initial repairs are made to damaged infrastructure and disruption recedes, activity bounces back. Third, rebuilding activity boosts production for a time. In the long run, once national saving has increased enough to restore the capital stock and net worth to their desired levels, economic activity is, to a first approximation, unaffected by the natural disaster.

In our forecast, we have assumed that the recovery process in New Orleans will differ from that in other affected counties and parishes. We have assumed that New Orleans will remain effectively shut down through the fourth quarter. Time will be required to drain the city and clear out environmental hazards. We have assumed that the other regions hit by Katrina will follow a more rapid recovery path, similar to that following other major hurricanes.

We estimate that Hurricane Katrina will depress the growth of real GDP about ¾ percentage point at an annual rate in the third quarter. Almost one-half of this effect results from the reduced output of oil, natural gas, and refined petroleum products. Output both in the petroleum sector and in other areas of manufacturing in the region has been interrupted but is slowly coming back on line as commercial power is restored. Consumer spending appears likely to have been depressed by the storm. Roughly

[1] The distinction between insured and uninsured losses is not important in the aggregate. To the extent that insurance payouts or bankruptcies reduce the size of victims' losses, they simultaneously reduce the wealth of those who own the equity of insurance companies and other financial institutions. Of course, some of the insured losses will be shouldered by foreign shareholders.

800,000 people worked in the areas hardest hit by Katrina, and we are guessing that measured private payroll employment will be reduced about 400,000 in September. We expect the overall level of employment to recover from this disruption by the middle of next year.[2]

Looking to the fourth quarter, we project activity associated with the initiation of repairs and rebuilding to be a small positive on real GDP growth. However, consumption is expected to remain suppressed despite the injection of significant federal emergency aid, reflecting, in part, the effects on real income of higher consumer energy prices. On net, we estimate that Katrina will hold down real output growth almost ½ percentage point at an annual rate in the fourth quarter, further reducing the level of aggregate output below that which would have prevailed in the absence of the hurricane.

In 2006, the recovery process contributes almost ½ percentage point to the growth of real GDP. A key element in this recovery is the federal aid package that we have incorporated into the forecast, which provides some income support to evacuees and, in effect, finances a sizable portion of the reconstruction activity. Without this massive federal effort, the dislocations from Katrina, by our reckoning, would have a much greater negative effect on aggregate demand, and the rebuilding process would occur more slowly.

By comparison, Katrina has had minimal effects on the supply side of the economy. The losses of productive capital appear to be small relative to the overall size of the capital stock. Moreover, at this point, we do not believe that the dislocation of workers will be large or persistent enough to noticeably affect the natural rate of unemployment. Although we have assumed an initial job loss of 400,000, we expect the associated structural dislocations to be relatively short lived.

With potential output growth virtually unchanged, the effects of Katrina on the output gap mirror those on aggregate demand. In the near term, the downward revisions to real GDP exceed those to potential output, and the output gap widens in the second half of this year. But as real GDP bounces back next year, the effects of Katrina on the output gap are reversed for a while and are effectively gone by the end of the forecast period.

[2] In the payroll employment survey, employees who are paid during the survey week are counted as employed. Thus, although it is likely that most of the employees in the affected areas were actually not *at work* during the September survey week, we assume that many of them continued to be paid and hence will be counted as employed.

Katrina also influences our inflation outlook. Hurricane damage to natural gas production and distribution facilities and to gasoline refineries has significantly boosted the prices of natural gas and retail gasoline. We project consumer energy prices to increase at annual rates of 49 percent in the third quarter and 29 percent in the fourth and then to fall back somewhat over the subsequent two years. Over time, these price increases pass through to the cost of non-energy goods and services, contributing 0.2 percentage point to core PCE inflation in 2006 and having little effect in 2007.

Clearly, the assumptions outlined above may be wrong in many ways, and we used FRB/US to explore the implications of both a more pessimistic view of the effects of Katrina on the economy and a more optimistic alternative. In the pessimistic scenario, the disruption ("phase one") effects of Katrina prove to be twice as deep and to persist twice as long as in the baseline. This scenario reflects a slower recovery for energy production and associated higher energy prices as well as larger and more-persistent disruptions in other sectors. Under this set of assumptions, real GDP growth is more than ¼ percentage point below baseline in both 2005 and 2006 and ½ percentage point above baseline in 2007. Overall PCE inflation is boosted by higher energy prices this year and next, and core inflation rises about 0.1 percentage point above baseline next year.

In the optimistic alternative, the disruption effects of Katrina on energy production and prices, and also on activity in other sectors, are shallower and shorter lived than in the baseline. At the same time, the federal government doubles the amount of hurricane-related spending through 2007. Relative to baseline, real GDP increases 0.3 percentage point faster this year and 0.1 percentage point faster next year. Core inflation ticks up a tenth in 2007, when the inflationary consequences of higher resource utilization more than offset the deflationary pressures of lower energy prices.

Key Background Factors

Although the effects of Katrina will complicate our analysis of incoming data on real activity and inflation in the coming months, we believe that the economy's underlying economic developments will still be driven primarily by the fundamental forces that were in play before the hurricane hit, including monetary policy, fiscal policy, financial conditions, and developments in energy markets.

In that regard, the path for the federal funds rate is unchanged from that in the August Greenbook. We continue to assume that the funds rate will increase to 4 percent by the end of this year and to 4¼ percent in mid-2006. The funds rate is assumed to hold at that level through 2007. In contrast to our unchanged outlook for policy, market participants revised down their expected path for the funds rate over the intermeeting period and now appear to expect somewhat less monetary tightening than does the staff. The revision to the market's expected track for policy has lowered current long-term yields 10 to 15 basis points since the August Greenbook, and we have taken these changes on board. However, we assume that investors will gradually come to see that the staff's higher path for the funds rate will be needed to keep inflation in check. Given this assumption, we expect bond yields to rise about ¼ percentage point over the forecast period.

Broad equity indexes are currently about 2 percent below the level we had anticipated in the August Greenbook. While stock prices have been weighed down by yet higher energy prices and the disruption effects of Katrina, these influences have been largely offset by the strong earnings announced at the end of the second-quarter reporting season and by the perception that monetary and fiscal policy will keep the economy on track despite the fallout from the hurricane. In line with our usual approach, we assume that share prices will increase from their current level at an annual rate of 6½ percent over the forecast period, a pace that roughly maintains risk-adjusted parity with the return on Treasury securities.

House prices, as measured by the OFHEO repeat-transactions index, posted another large increase in the second quarter, exceeding the gain that we had anticipated. Although we continue to expect these increases to moderate in coming quarters, we now project a more gradual deceleration than we did in the August Greenbook. Our current forecast has house prices rising nearly 10 percent this year and 4½ percent in 2006, implying an upward revision of more than 4 percent to the level of prices at the end of next year; we expect house prices to rise only 2½ percent in 2007.

Other than the hurricane appropriations, our fiscal policy assumptions for fiscal 2005 and 2006 are unchanged from last Greenbook. As in the previous Greenbook, we assume that operations in Iraq and Afghanistan will continue on their present scale through 2006 and that other defense spending will rise about 3 percent in real terms. For 2007, we are assuming no real growth in defense spending; this assumption allows for some real increases in underlying defense spending (including weapons modernization) offset by some reductions in spending in Iraq. We also assume that growth in real nondefense spending will slow over time and will be flat in 2007. We are writing down a federal budget deficit of $339 billion this fiscal year (up $5 billion from the last Greenbook), $380 billion in fiscal 2006 (up $50 billion), and $385 billion in fiscal 2007.

Our projection for the exchange rate incorporates both recent declines in the dollar and the upward revision to the staff's outlook for domestic inflation. As these developments have offsetting effects, our projected path of the real trade-weighted foreign exchange value of the dollar is generally little changed from that assumed in the last Greenbook. We continue to assume that the dollar will depreciate over most of the forecast period at an annual rate of roughly 1½ percent. Our outlook for foreign GDP growth in the second half of this year has been revised down about ¼ percentage point, the decrease reflecting the influence on activity abroad of lower U.S. growth and higher energy prices. Thereafter, foreign growth returns to the 3¼ percent rate we had penciled in for the August Greenbook.

The spot price of West Texas intermediate (WTI) crude oil rose to nearly $70 per barrel immediately after Katrina but has since fallen back to about $63 per barrel. This price level is roughly $2 per barrel above that at the time of the previous Greenbook but about $2 lower than in the week before the hurricane. Futures prices indicate that market participants believe that the tight supply and strong demand for oil will persist for some time, and in line with these prices, we project the spot price of WTI to move up to nearly $66 per barrel in the second quarter of next year before edging down to about $63 per barrel by the end of 2007. In addition, Katrina has led to a substantial increase in natural gas prices, which are expected to remain elevated through much of the forecast period.

Recent Developments and the Near-Term Outlook

We now project that real GDP will increase at an annual rate of 3.1 percent in the third quarter, down about 1¼ percentage points from our August estimate. In the fourth quarter, we look for real GDP to rise at an annual rate of about 3.7 percent, down about ¼ percentage point from the last Greenbook. We have incorporated an eight-week strike at Boeing that knocks about ¼ percentage point off real GDP growth in the third quarter. As noted above, we estimate that the disruptions to economic activity in the wake of Katrina will subtract about ¾ percentage point from the change in real GDP in the third quarter and almost ½ percentage point in the fourth.

We now expect industrial production to increase at an annual rate of 1.8 percent in the third quarter, down 4½ percentage points from the past Greenbook. Most significant, of course, has been the direct impact of Katrina on energy production. Outside the energy

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

Measure	2005:Q3		2005:Q4	
	Aug. GB	Sept. GB	Aug. GB	Sept. GB
Real GDP	**4.3**	**3.1**	**4.0**	**3.7**
Private domestic final purchases	4.7	3.9	2.3	1.5
Personal consumption expenditures	4.6	4.1	2.1	1.1
Residential investment	3.2	3.6	-2.4	2.4
Business fixed investment	5.9	2.6	6.1	3.9
Government outlays for consumption and investment	3.1	2.1	2.4	4.6
	Contribution to growth (percentage points)			
Inventory investment	-.2	-.9	2.0	2.1
Net exports	-.1	.3	-.5	-.7

sector, the storm has restrained activity in a host of other industries, including basic chemicals, shipbuilding, and food processing. In total, we figure that Katrina knocked an estimated 2¾ percentage points off the growth of industrial production in the third quarter. In addition, we have marked down third-quarter IP an additional 0.6 percentage point to account for the ongoing strike at Boeing. Finally, even aside from these special factors, IP appears to have been running a little softer than we had expected as of the August Greenbook. In the fourth quarter, industrial production is expected to increase at an annual rate of 4 percent, down about 1½ percentage points from the last Greenbook.

As noted, incoming data show that consumer spending before Katrina was well maintained. However, we expect Katrina to hold down consumption growth as those directly affected by dislocations and job losses lower their own consumption and as a deterioration in sentiment reduces consumption growth more broadly. Consumption will also be held down by the sizable increase in gasoline prices, attributable only in part to the effects of the hurricane. All told, we have lowered our forecast of real consumer expenditure growth about ¾ percentage point on average over the second half of this year, to annual rates of 4.1 percent in the third quarter and 1.1 percent in the fourth.[3]

[3] As in the last Greenbook, a good part of the swing in consumption spending from the third quarter to the fourth quarter is attributable to the effects of the expiration of the "employee pricing" programs on the timing of motor vehicle purchases.

Despite a few anecdotal reports that suggest some emerging softening in the housing market, we have seen no signs of it in the data. Home sales in July remained at near-record levels, and our reading of the permits data suggests that single-family housing starts in August will be at an annual rate of about 1.7 million units, just a tad below the record level posted early this year. Furthermore, the effects of Katrina on residential investment should begin to ramp up in the fourth quarter, as hurricane-affected households outside New Orleans start to rebuild and repair their homes. We now expect real residential investment to increase about 3 percent at an annual rate in the second half of this year, compared with the ½ percent increase assumed in the last Greenbook.

Real spending on equipment and software is projected to increase at an annual rate of almost 2½ percent in the third and fourth quarters. Part of this weakness reflects steep declines in outlays for transportation equipment; we have also revised down our projection for other equipment and software spending in light of the weaker-than-expected orders and shipments data received since the August Greenbook. However, demand should receive a boost as firms start to replace the equipment and software destroyed by Katrina. We also anticipate a Katrina-induced boost to the growth of real spending on nonresidential structures, which is now expected to step up from about 3¼ percent at an annual rate in the third quarter to almost 8½ percent in the fourth.

In the federal government sector, real purchases are projected to rise at an annual rate of almost 4¼ percent this quarter. In the fourth quarter, both defense and nondefense spending will be boosted by hurricane relief and reconstruction efforts. In particular, we estimate that Katrina spending will boost the growth of real federal purchases about 2 percentage points at an annual rate in the fourth quarter, to almost 6½ percent. Similarly, we expect federal grants financed by the Katrina spending to boost real state and local spending about 1¼ percentage points at an annual rate in the fourth quarter.

Hurricane Katrina is expected to have only modest effects on the trade balance in the third quarter, as a reduction in exports almost fully offsets a reduction in imports. The Boeing strike, which got under way in September, is also expected to depress exports in the third quarter. Taking into account the surprisingly low data on July imports, we project that net exports will make a positive contribution to real GDP growth of about ¼ percentage point, compared with a slight negative drag in the August Greenbook. In the fourth quarter, a rebound in imports (including imports of refined oil products owing to lost domestic production) and a further cutback in exports in the wake of the Boeing strike, among other factors, lead the contribution of net exports to real GDP growth to swing to -¾ percentage point, a bit more negative effect than forecast in the August Greenbook.

We expect the September labor report to show a decline in private payroll employment of roughly 250,000 jobs, reflecting our assumption of 400,000 Katrina-related job losses. Some of these losses are assumed to be made up over the remainder of the year, and we expect private payroll employment growth to average about 230,000 per month in the fourth quarter.

Core PCE inflation, both market and nonmarket, was revised down in the second quarter and was lower than expected in July. In response, we have reduced our estimate of core PCE inflation in the third quarter about ½ percentage point, to an annual rate of 1.4 percent. However, larger-than-expected increases in energy prices, particularly gasoline prices, will increase overall PCE inflation substantially, to an annual rate of 3¾ percent in both the third and the fourth quarters. Core PCE inflation, boosted by the indirect effects of higher gasoline prices and a bounceback in motor vehicle prices from the expiration of this summer's "employee pricing" programs, rises to about 2½ percent at an annual rate in the fourth quarter.

As we had expected, the productivity and cost (P&C) measure of compensation per hour was revised down for the first quarter. The downward revision, however, was much smaller than we had anticipated, and we now view more of the surge in 2004 fourth-quarter compensation as having been permanent and less as a reflection of transitory factors such as stock options exercises. As a result, we have raised the level of compensation in the forecast. However, we expect the increase in hourly compensation next quarter to be held down a bit as the workers dislocated by Katrina begin to be absorbed into the labor market. Taken together, these factors have led us to boost the projected rise in the P&C measure of hourly compensation 0.1 percentage point for the year.

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

Measure	2005 H1	2005 H2	2006	2007
Real GDP	**3.5**	**3.4**	**3.4**	**2.9**
Previous	3.6	4.1	3.1	…
Final sales	4.4	2.8	3.6	2.6
Previous	4.6	3.2	3.2	…
PCE	3.3	2.6	3.6	3.1
Previous	3.6	3.4	3.3	…
Residential investment	10.8	3.0	1.3	-1.0
Previous	9.6	.4	-.4	…
BFI	7.2	3.3	9.0	5.3
Previous	6.2	6.0	7.9	…
Government purchases	2.1	3.4	2.0	1.5
Previous	2.2	2.7	2.1	…
Exports	9.1	5.8	6.3	5.7
Previous	9.8	7.4	5.5	…
Imports	3.5	5.0	6.2	6.1
Previous	3.0	6.7	5.9	…
	Contribution to growth (percentage points)			
Inventory change	-.9	.6	-.1	.3
Previous	-1.0	.9	-.1	…
Net exports	.3	-.2	-.4	-.4
Previous	.5	-.3	-.4	…

. . . Not applicable.

The Longer-Run Outlook for the Economy

We now project real GDP growth of 3.4 percent in 2006—the same rate of growth we project for 2005 and about ¼ percentage point higher than in the last Greenbook forecast. For 2007, as the effects of Katrina on rebuilding wane, we expect growth to slow a bit to just under 3 percent.

Household spending. Our forecast calls for the growth of real consumer spending to pick up to a pace of about 3½ percent in 2006. In 2007, the pace of consumer spending should slow somewhat as rising interest rates, a falling wealth-to-income ratio, and a reduction in the growth of federal transfer payments put a crimp in spending. We expect the NIPA personal saving rate to increase gradually over the forecast period, from -0.3 percent in 2005 to 1.7 percent in 2007.

Financing conditions that become slightly more restrictive over time lead us to anticipate some moderation in housing activity over the next two years, although we still expect housing starts to remain close to the record levels observed this year. Residential investment spending, which includes not only starts but also spending on repairs, should be boosted in 2006 and 2007 by Katrina.

Business spending. As in the last Greenbook, we expect investment in equipment and software to grow at a solid pace in 2006, given the rapid growth in business sales and the favorable financing environment. In addition, Katrina should add about ¼ percentage point to the growth of investment in equipment and software. Spending should decelerate in 2007, as business output growth softens, higher interest rates begin to impinge on demand, and the effects of Katrina wane. Real spending on nonresidential structures is projected to increase almost 7¼ percent in 2006, a rate of increase that reflects both Katrina-related rebuilding and an expected surge in drilling and mining activity. Spending growth falls back to 2¼ percent in 2007.

Government spending. Even with the Katrina-related spending, we expect the growth of real federal purchases to slow over the next year, from about 3½ percent in 2005 to about 1½ percent in 2006.[4] For 2007, we assume that federal spending is about unchanged in real terms. In the state and local sector, favorable budgetary conditions, including increased federal grants from the Katrina appropriations, should allow for moderate spending growth of slightly above 2¼ percent in 2006 and 2007.

Net exports. Net exports are projected to be a small drag on the change in real GDP over 2006 and 2007. The waning effects of past dollar depreciation cause real export growth to slow somewhat, and contribute to a pickup in the pace of import expansion, notwithstanding some deceleration of U.S. GDP. (*These developments are discussed in more detail in the International section of the Greenbook*.)

[4] Most of the federal spending for hurricane relief takes the form of transfers, grants, and subsidies, rather than of direct federal purchases.

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

Measure	1974-95	1996-2001	2002	2003	2004	2005	2006	2007
Structural labor productivity	1.5	2.7	3.1	3.4	3.2	2.7	2.9	2.8
Previous	1.5	2.7	3.1	3.4	3.2	2.8	2.9	…
Contributions[1]								
Capital deepening	.7	1.4	.6	.5	.7	.8	.9	1.0
Previous	.7	1.4	.6	.5	.7	.8	.9	…
Multifactor productivity	.5	1.1	2.3	2.6	2.2	1.7	1.7	1.6
Previous	.5	1.1	2.3	2.6	2.2	1.7	1.7	…
Labor composition	.3	.3	.3	.3	.3	.3	.2	.2
MEMO								
Potential GDP	3.0	3.3	3.2	3.3	3.0	2.9	3.1	3.0
Previous	3.0	3.3	3.2	3.3	3.0	3.0	3.1	…

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.

The Outlook for the Labor Market
(Percent change, Q4 to Q4, except as noted)

Measure	2003	2004	2005	2006	2007
Output per hour, nonfarm business	5.0	2.6	2.8	2.2	2.5
Previous	5.0	2.6	2.9	2.1	…
Nonfarm private payroll employment	-.1	1.8	1.6	1.5	.7
Previous	-.1	1.8	1.9	1.4	…
Household survey employment	1.2	1.3	1.7	1.1	.8
Previous	1.2	1.3	1.7	1.1	…
Labor force participation rate[1]	66.1	66.0	66.1	66.0	65.9
Previous	66.1	66.0	66.0	66.0	…
Civilian unemployment rate[1]	5.9	5.4	5.0	5.0	5.0
Previous	5.9	5.4	5.0	5.0	…
MEMO					
GDP gap[2]	1.6	.9	.4	.1	.2
Previous	1.6	.9	.1	.1	…

1. Percent, average for the fourth quarter
2. Percent difference between potential and actual GDP in the fourth quarter of the year indicated. A positive number indicates that the economy is operating below potential.
. . . Not applicable.

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

Measure	2003	2004	2005	2006	2007
PCE chain-weighted price index	1.7	3.1	3.2	1.9	1.8
Previous	1.7	3.1	2.6	2.1	…
Food and beverages	2.7	2.9	2.0	2.5	2.2
Previous	2.7	2.9	1.9	2.3	…
Energy	7.2	17.9	26.6	-5.1	-1.3
Previous	7.2	17.9	12.4	1.8	…
Excluding food and energy	1.3	2.2	1.9	2.3	2.0
Previous	1.3	2.2	2.0	2.1	…
Consumer price index	1.9	3.4	4.2	1.9	1.9
Previous	1.9	3.4	3.0	2.2	…
Excluding food and energy	1.2	2.1	2.3	2.6	2.2
Previous	1.2	2.1	2.3	2.3	…
GDP chain-weighted price index	2.0	2.9	2.7	2.0	2.1
Previous	2.0	2.9	2.3	2.1	…
ECI for compensation of private industry workers[1]	4.0	3.8	3.1	4.2	4.0
Previous	4.0	3.8	3.1	4.0	…
NFB compensation per hour	5.0	5.8	4.7	5.4	5.1
Previous	5.0	5.9	4.6	5.2	…
Prices of core nonfuel imports	1.6	3.7	1.9	.8	.6
Previous	1.6	3.7	2.5	.7	…

1. December to December.
. . . Not applicable.

Productivity and the labor market. In this forecast, the labor market adds about 165,000 new jobs per month on average in 2006, roughly the same rate of growth as in 2005. In 2007, with the labor market roughly in equilibrium, hiring sets in at a more sustainable pace of just under 100,000 new jobs per month.

In line with previous Greenbook forecasts, we expect actual productivity to move back toward the level of structural productivity over time. We project that output per hour will increase 2.2 percent in 2006, about ¾ percentage point less than the increase in structural productivity. This difference should suffice to close the gap between the two measures. For 2007, we project that actual productivity will rise 2.5 percent, almost in line with structural productivity. The unemployment rate is projected to remain at 5 percent through 2007.

Prices and wages. The recent run-up in energy prices has boosted our estimate of overall price inflation in 2005. PCE prices are now expected to increase 3.2 percent over the four quarters of 2005, almost ¾ percentage point faster than in the August Greenbook. We expect these higher energy prices to boost core PCE inflation in 2006 about ¼ percentage point. But given falling energy prices in 2006 and 2007, core inflation falls back to a rate of 2 percent in 2007. The 2006 increase in core inflation has led us to boost our projected increases in both the P&C measure of hourly compensation and the ECI ¼ percentage point in that year. For 2007, we assume that both measures step down a bit, in line with fundamentals.

Financial Flows and Conditions

Although the forecast of growth of domestic nonfinancial debt has been revised up somewhat from the August Greenbook, the basic contour of the projection has changed very little, with the pace of borrowing still expected to slow over the next few years. In our projection, domestic nonfinancial debt expands 8½ percent this year, 7 percent in 2006, and 6¼ percent in 2007; Katrina raises federal borrowing over the projection period, but its effects in other sectors are likely to be quite small.

We have boosted our projection for home mortgage borrowing this round in response to the higher path of house prices, but we continue to anticipate that both house prices and mortgage debt will decelerate over the next few years. Largely reflecting the path for mortgage borrowing, total household debt is projected to increase 9½ percent this year, 7¼ percent next year, and 6½ percent in 2007. Borrowing at this pace boosts the ratio of debt to disposable income over the forecast period, but a continued shift toward mortgage debt—which has a longer repayment period than other household debt—keeps the debt service ratio essentially flat.

The growth of nonfinancial corporate debt is projected to remain moderate over the forecast period, averaging about 6 percent at an annual rate. Although our forecast features a rise in capital expenditures and continued substantial equity retirements, we expect the overall volume of debt financing to be held down as firms draw on their large stock of liquid assets.

We have raised our projection of federal borrowing to accommodate the wider budget deficit that is built into this forecast. From the middle of this year through the end of 2007, federal debt growth averages 8 percent at an annual rate, about 1 percentage point more than in the August Greenbook. The growth of state and local government debt also has been revised up, although the impetus in this case is an upward adjustment to advance refunding activity in coming quarters rather than changes in this sector's budget outlook. As in the previous Greenbook, we expect the growth of state and local government debt to slow significantly over the forecast period, from 8½ percent in 2005 down to 3¼ percent in 2007, as advance refunding diminishes.

The growth of M2 is expected to increase over the forecast period, from this year's projection of 3 percent, to 4¼ percent next year, and 5 percent in 2007. The contour of opportunity costs should continue to hold growth in money below that of nominal income until late in the forecast period.

Alternative Simulations

In this section, we consider several risks to the staff outlook using simulations of the FRB/US model. The first two simulations alter the assumptions in the staff baseline about the effects of higher energy prices by considering, first, a sharper drop in consumer sentiment and, second, a more substantial rise in inflation expectations. We then consider two risks in the opposite direction—(1) the chance that continued favorable financial conditions will lead to stronger-than-anticipated growth in home prices and household spending and (2) the possibility that inflation expectations are anchored even more firmly than in the baseline. We evaluate each of these four risks under the assumption that the federal funds rate is held at its baseline path, and then we consider how the economic implications would differ if monetary policy were to respond to the change in the outlook along the lines suggested by the Taylor rule.[5]

Sentiment slump. The Greenbook baseline assumes that consumer sentiment will fall moderately over the next few months and then rebound, much as it did in the aftermath of September 11, 2001. But it may turn out that the sticker shock of soaring gasoline prices, followed by surging heating costs this winter, will lead to a sharper and more prolonged drop in confidence. In this scenario, we assume that the drop in sentiment will be twice as large as that built into the baseline but similar to what occurred at the time of the 1974

[5] In the Taylor-rule scenarios, the federal funds rate is assumed to move 1 percentage point relative to baseline for each percentage point deviation of the output gap from baseline and 1½ percentage points for each percentage point deviation of the four-quarter average of core PCE inflation from baseline.

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

Measure and scenario	2005 H1	2005 H2	2006 H1	2006 H2	2007
Real GDP					
Baseline	**3.5**	**3.4**	**3.9**	**3.0**	**2.9**
Sentiment slump	3.5	3.1	3.0	2.6	2.8
With monetary policy response	3.5	3.1	3.2	2.9	3.2
Deteriorating inflation expectations	3.5	3.4	3.7	3.2	3.1
With monetary policy response	3.5	3.4	3.7	3.1	2.8
Buoyant households	3.5	3.4	4.3	3.6	3.8
With monetary policy response	3.5	3.4	4.3	3.5	3.3
Low inflation	3.5	3.4	4.1	2.8	2.7
With monetary policy response	3.5	3.4	4.1	2.9	3.0
Civilian unemployment rate[1]					
Baseline	**5.1**	**5.0**	**5.0**	**5.0**	**5.0**
Sentiment slump	5.1	5.0	5.2	5.4	5.5
With monetary policy response	5.1	5.0	5.2	5.3	5.2
Deteriorating inflation expectations	5.1	5.0	5.0	5.0	4.9
With monetary policy response	5.1	5.0	5.0	5.0	5.1
Buoyant households	5.1	5.0	4.9	4.8	4.4
With monetary policy response	5.1	5.0	4.9	4.8	4.6
Low inflation	5.1	5.0	5.0	5.0	5.1
With monetary policy response	5.1	5.0	5.0	5.0	4.9
PCE prices excluding food and energy					
Baseline	**2.0**	**1.9**	**2.4**	**2.2**	**2.0**
Sentiment slump	2.0	1.9	2.4	2.1	1.8
With monetary policy response	2.0	1.9	2.4	2.2	1.9
Deteriorating inflation expectations	2.0	1.9	2.7	2.6	2.5
With monetary policy response	2.0	1.9	2.7	2.6	2.4
Buoyant households	2.0	1.9	2.4	2.2	2.1
With monetary policy response	2.0	1.9	2.4	2.2	2.0
Low inflation	2.0	1.9	2.1	1.8	1.5
With monetary policy response	2.0	1.9	2.1	1.8	1.6

1. Average for the final quarter of the period.

oil embargo and the 1990 invasion of Kuwait; sentiment recovers gradually thereafter. Under these conditions, real GDP advances at a pace of only 2¾ percent on average over 2006 and 2007, and the unemployment rate rises to 5½ percent by the end of 2007, assuming no change from baseline in the funds rate. Were monetary policy to respond to these developments along the lines suggested by the Taylor rule—holding the funds rate near its current level rather than increasing it as is assumed in the baseline—the unemployment rate would increase to only 5¼ percent.

Deteriorating inflation expectations. The staff projection assumes that surging energy costs and other factors have caused inflation expectations to drift up since 2003. Nonetheless, because the extent of this deterioration is assumed to be limited (on the order of ½ percentage point), core consumer price inflation stabilizes at 2 percent in 2007—considerably less than recent rates of *overall* consumer price inflation. In this scenario, the current surge in energy prices and past elevated rates of headline inflation cause expectations to deteriorate more sharply, boosting them a further ½ percentage point. As a result, actual core PCE price inflation rises to 2½ percent in 2007 under the assumption that the nominal funds rate follows its baseline path. In this case, the implied decline in real interest rates provides a slight stimulus to real activity. The Taylor-rule policy provides no such stimulus: The funds rate rises to almost 4¾ percent by 2007, and this increase checks the rise in inflation a bit.

Buoyant households. Not all risks to real activity are on the downside, especially as real interest rates are projected to remain low despite rates of resource utilization that are near their sustainable levels. In this scenario, the housing market—rather than cooling as in the baseline—continues to sizzle in the absence of any marked pickup in mortgage rates, and, more broadly, the pace of household spending is less restrained. In particular, the rate of increase of real estate values slows only to 10 percent by 2007, pushing the level of home prices 16 percent above baseline by late that year; residential investment grows 5 percentage points faster per year than in the baseline, keeping the growth of spending (excluding hurricane rebuilding) in line with its recent average; and the personal saving rate edges up to only 1 percent by late 2007, more than ¾ percentage point below baseline. Under these conditions, and assuming that the funds rate follows its baseline path, real GDP expands 4 percent in 2006 and 3¾ percent in 2007, and the unemployment rate falls below 4½ percent by late 2007; the resulting gradual tightening in labor and product markets adds a tenth to inflation in 2007. Conditions are moderately less robust with the Taylor-rule policy, under which the funds rate climbs to 4¾ percent by late next year and to 5¼ percent in 2007: Real GDP growth is only a bit above potential in 2007, and inflation is unchanged from baseline.

Low inflation. With survey measures of long-run inflation expectations so stable recently, we may be wrong about the ½ percentage point deterioration in the baseline

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

Measure	2005	2006	2007
Real GDP (percent change, Q4 to Q4)			
Projection	3.5	3.4	2.9
Confidence interval			
Greenbook forecast errors[1]	2.6–4.4	1.5–5.4	1.1–4.6
FRB/US stochastic simulations	2.7–4.1	1.9–5.3	0.9–5.0
Civilian unemployment rate (percent, Q4)			
Projection	5.0	5.0	5.0
Confidence interval			
Greenbook forecast errors[1]	4.7–5.3	4.2–5.8	3.8–6.2
FRB/US stochastic simulations	4.7–5.4	4.1–5.7	3.9–5.9
PCE prices excluding food and energy (percent change, Q4 to Q4)			
Projection	1.9	2.3	2.0
Confidence interval			
Greenbook forecast errors[2]	1.6–2.3	1.6–3.0	0.9–3.1
FRB/US stochastic simulations	1.7–2.2	1.5–3.1	1.1–3.0

NOTE. Shocks underlying stochastic simulations are randomly drawn from the 1978–2004 set of model equation residuals.

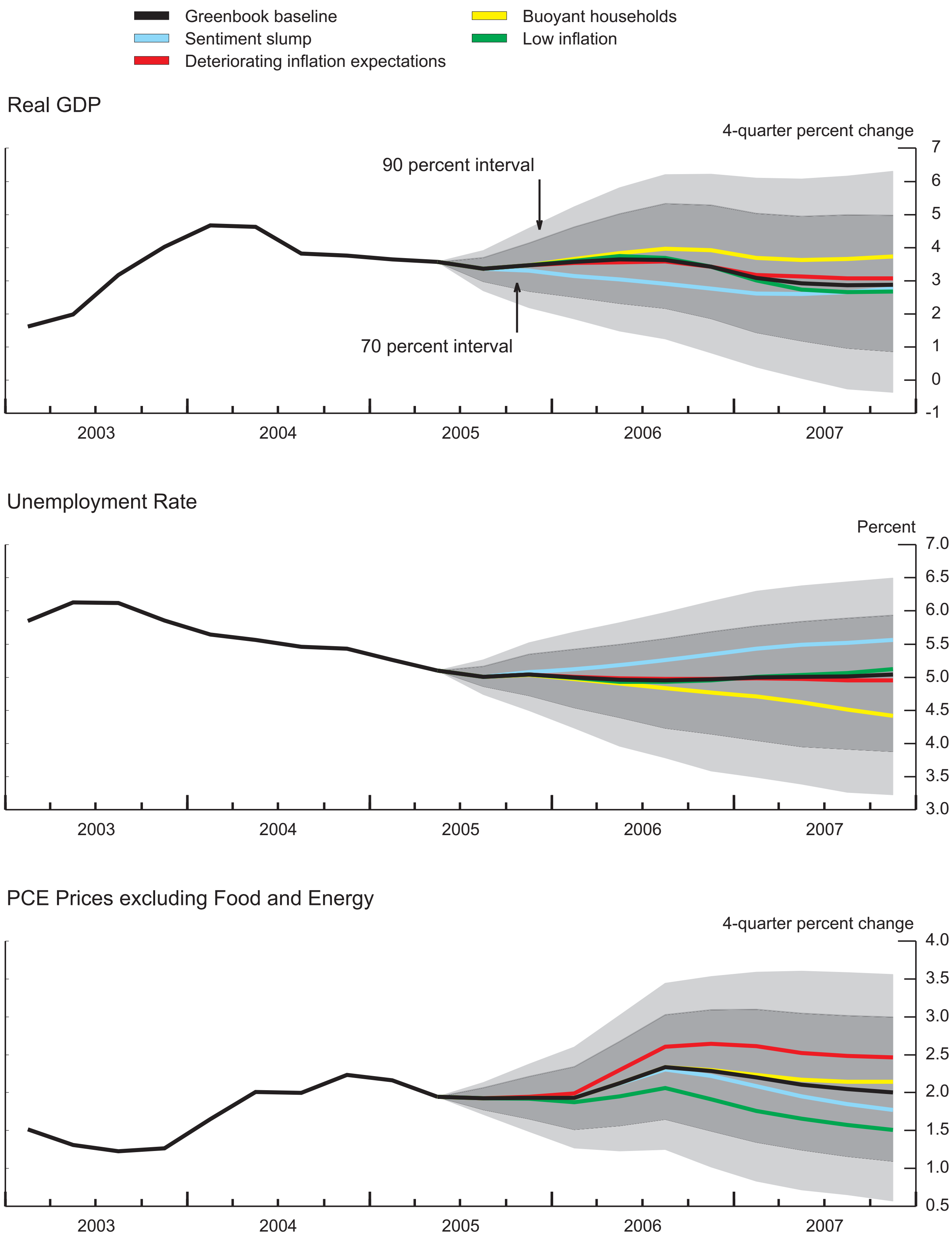
1. 1978–2004.
2. 1981–2004.

trend in inflation. In this scenario, we assume that the trend in inflation expectations has, in fact, been stable since 2003, implying that actual inflation will moderate appreciably once the direct pass-through of higher energy costs into prices is completed. Under the baseline monetary policy, this assumption causes core PCE inflation to fall back to 1½ percent by 2007. With the nominal funds rate held unchanged at baseline, lower inflation implies higher real interest rates; these shave almost ¼ percentage point off real GDP growth in 2007 and cause the unemployment rate to tick up. Under the Taylor rule, by contrast, the funds rate adjusts down in line with the revision in inflation; this adjustment removes the restraint on real activity.

Class II FOMC - Restricted (FR)

Forecast Confidence Intervals and Alternative Scenarios

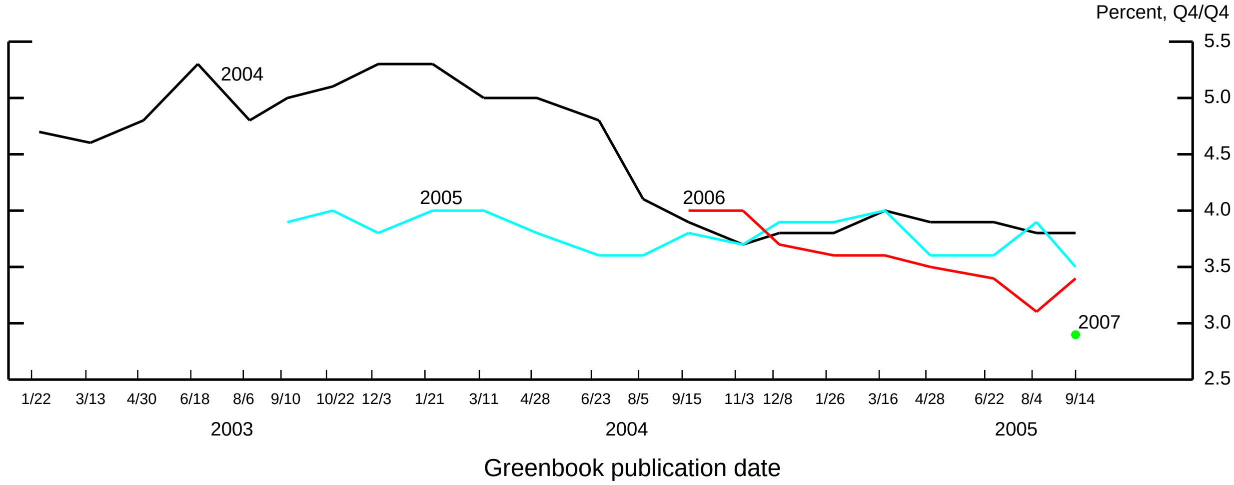
Confidence Intervals Based on FRB/US Stochastic Simulations;
Scenarios Assume Baseline Federal Funds Rate



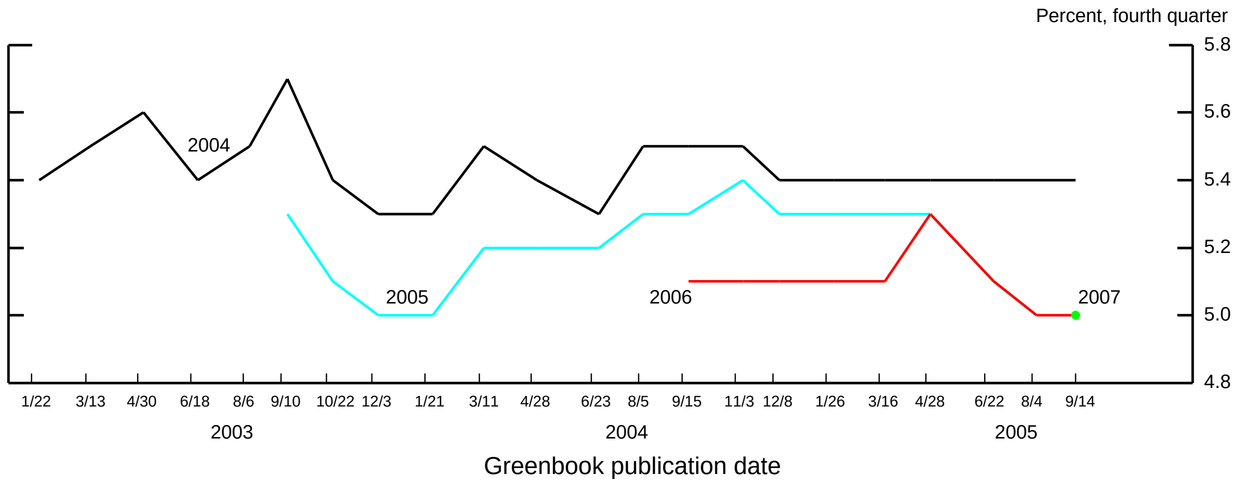
Class II FOMC - Restricted (FR)

Evolution of the Staff Forecast

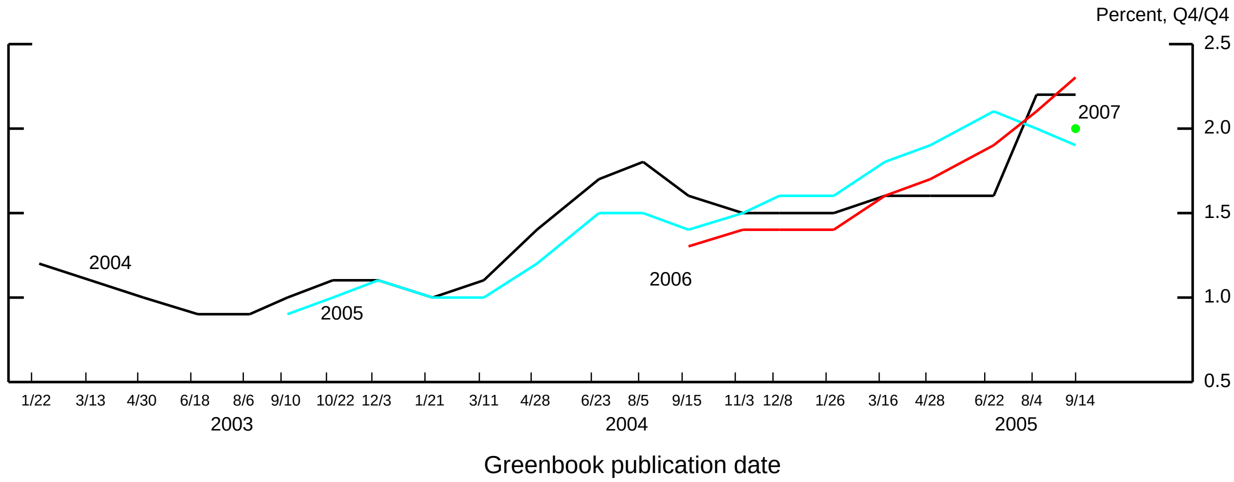
Change in Real GDP



Unemployment Rate



Change in PCE Prices excluding Food and Energy



Changes in GDP, Prices, and Unemployment
(Percent, annual rate except as noted)

Interval	Nominal GDP 8/4/05	Nominal GDP 9/14/05	Real GDP 8/4/05	Real GDP 9/14/05	PCE price index 8/4/05	PCE price index 9/14/05	Core PCE price index 8/4/05	Core PCE price index 9/14/05	Unemployment rate[1] 8/4/05	Unemployment rate[1] 9/14/05
Quarterly										
2005:Q1	7.0	7.0	3.8	3.8	2.3	2.3	2.4	2.4	5.3	5.3
Q2	5.9	5.8	3.3	3.2	3.3	3.2	1.8	1.6	5.1	5.1
Q3	5.9	5.8	4.3	3.1	2.2	3.7	1.9	1.4	5.0	5.0
Q4	6.1	6.6	4.0	3.7	2.5	3.8	2.1	2.4	5.0	5.0
2006:Q1	5.5	6.1	3.0	4.2	2.3	1.4	2.1	2.4	5.0	5.0
Q2	5.2	5.7	3.1	3.5	2.1	2.1	2.1	2.4	5.0	5.0
Q3	5.2	5.3	3.1	3.1	2.0	2.0	2.1	2.2	5.0	5.0
Q4	5.2	5.0	3.1	2.9	2.0	2.0	2.1	2.2	5.0	5.0
2007:Q1	...	5.3	...	2.9	...	1.9	...	2.0	...	5.0
Q2	...	4.9	...	2.9	...	1.8	...	2.0	...	5.0
Q3	...	4.9	...	2.9	...	1.8	...	2.0	...	5.0
Q4	...	4.9	...	2.9	...	1.8	...	2.0	...	5.0
Two-quarter[2]										
2005:Q2	6.4	6.4	3.6	3.5	2.8	2.7	2.1	2.0	-.3	-.3
Q4	6.0	6.2	4.1	3.4	2.4	3.7	2.0	1.9	-.1	-.1
2006:Q2	5.4	5.9	3.1	3.9	2.2	1.7	2.1	2.4	.0	.0
Q4	5.2	5.2	3.1	3.0	2.0	2.0	2.1	2.2	.0	.0
2007:Q2	...	5.1	...	2.9	...	1.8	...	2.0	...	.0
Q4	...	4.9	...	2.9	...	1.8	...	2.0	...	.0
Four-quarter[3]										
2004:Q4	6.8	6.8	3.8	3.8	3.1	3.1	2.2	2.2	-.5	-.5
2005:Q4	6.2	6.3	3.9	3.5	2.6	3.2	2.0	1.9	-.4	-.4
2006:Q4	5.3	5.5	3.1	3.4	2.1	1.9	2.1	2.3	.0	.0
2007:Q4	...	5.0	...	2.9	...	1.8	...	2.0	...	.0
Annual										
2004	7.0	7.0	4.2	4.2	2.6	2.6	2.0	2.0	5.5	5.5
2005	6.2	6.2	3.7	3.5	2.6	2.9	2.1	2.0	5.1	5.1
2006	5.6	5.9	3.4	3.6	2.3	2.5	2.0	2.2	5.0	5.0
2007	...	5.1	...	2.9	...	1.9	...	2.1	...	5.0

1. Level, except for two-quarter and four-quarter intervals.
2. Percent change from two quarters earlier; for unemployment rate, change is in percentage points.
3. Percent change from four quarters earlier; for unemployment rate, change is in percentage points.

Class II FOMC
Restricted (FR)

September 14, 2005

Changes in Real Gross Domestic Product and Related Items
(Percent, annual rate except as noted)

Item	2005 Q1	2005 Q2	2005 Q3	2005 Q4	2006 Q1	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 Q3	2007 Q4	2005[1]	2006[1]	2007[1]
Real GDP	3.8	3.2	3.1	3.7	4.2	3.5	3.1	2.9	2.9	2.9	2.9	2.9	3.5	3.4	2.9
Previous	3.8	3.3	4.3	4.0	3.0	3.1	3.1	3.1	. . .	. . .	. . .	. . .	3.9	3.1	. . .
Final sales	3.5	5.4	4.1	1.5	4.7	3.9	3.1	2.6	2.2	3.0	2.8	2.4	3.6	3.6	2.6
Previous	3.5	5.8	4.5	1.9	3.3	3.5	3.2	2.6	. . .	. . .	. . .	. . .	3.9	3.2	. . .
Priv. dom. final purch.	4.1	4.4	3.9	1.5	5.2	4.2	3.6	3.3	3.1	3.1	3.1	3.1	3.5	4.1	3.1
Previous	4.1	4.4	4.7	2.3	4.0	3.6	3.5	3.4	. . .	. . .	. . .	. . .	3.9	3.6	. . .
Personal cons. expend.	3.5	3.1	4.1	1.1	4.3	3.5	3.4	3.3	3.1	3.1	3.1	3.1	3.0	3.6	3.1
Previous	3.5	3.6	4.6	2.1	3.7	3.2	3.2	3.2	. . .	. . .	. . .	. . .	3.5	3.3	. . .
Durables	2.6	7.8	14.4	-7.2	14.4	7.1	7.7	7.1	6.0	6.1	6.1	6.0	4.1	9.0	6.1
Nondurables	5.3	3.7	3.6	2.8	3.9	4.0	3.7	3.7	3.7	3.6	3.6	3.6	3.9	3.8	3.6
Services	2.8	1.9	2.4	2.0	2.5	2.5	2.4	2.3	2.3	2.3	2.3	2.3	2.3	2.4	2.3
Residential investment	9.5	12.1	3.6	2.4	2.1	5.7	-1.3	-1.2	-1.3	-1.0	-1.4	-.3	6.8	1.3	-1.0
Previous	9.5	9.7	3.2	-2.4	-3.8	.8	.6	.9	. . .	. . .	. . .	. . .	4.9	-.4	. . .
Business fixed invest.	5.7	8.7	2.6	3.9	13.7	8.5	7.7	6.5	5.5	5.3	5.3	5.2	5.2	9.0	5.3
Previous	5.7	6.7	5.9	6.1	10.8	7.7	7.1	6.1	. . .	. . .	. . .	. . .	6.1	7.9	. . .
Equipment & software	8.3	10.5	2.4	2.4	15.2	8.6	8.0	7.2	6.3	6.5	6.5	6.4	5.9	9.7	6.4
Previous	8.3	8.0	6.3	6.2	12.4	8.1	8.4	7.3	. . .	. . .	. . .	. . .	7.2	9.0	. . .
Nonres. structures	-2.0	3.3	3.2	8.4	9.3	8.1	6.7	4.7	3.2	2.0	2.0	1.9	3.2	7.2	2.3
Previous	-2.0	2.6	4.5	5.8	6.1	6.7	3.6	2.9	. . .	. . .	. . .	. . .	2.7	4.8	. . .
Net exports[2]	-645	-614	-607	-625	-637	-640	-646	-663	-687	-686	-692	-709	-623	-646	-694
Previous[2]	-645	-606	-608	-622	-639	-638	-643	-663	. . .	. . .	. . .	. . .	-620	-646	. . .
Exports	7.5	10.7	4.1	7.5	7.8	5.3	5.2	7.1	3.7	5.9	5.8	7.5	7.4	6.3	5.7
Imports	7.4	-.2	1.0	9.1	7.8	4.1	4.9	8.3	7.6	3.6	5.1	8.3	4.3	6.2	6.1
Govt. cons. & invest.	1.9	2.3	2.1	4.6	3.4	1.9	1.3	1.5	1.6	1.5	1.5	1.4	2.7	2.0	1.5
Previous	1.9	2.5	3.1	2.4	2.4	2.2	2.0	1.9	. . .	. . .	. . .	. . .	2.5	2.1	. . .
Federal	2.4	1.6	4.2	6.4	4.1	1.1	.5	.3	.3	.0	.0	.0	3.6	1.5	.1
Defense	3.0	2.4	5.5	5.4	3.2	2.0	1.2	.7	.5	.0	.0	.0	4.1	1.8	.1
Nondefense	1.1	-.1	1.6	8.3	6.1	-.7	-.8	-.7	.0	.0	.0	.0	2.7	.9	.0
State & local	1.6	2.7	.9	3.5	2.9	2.4	1.8	2.2	2.4	2.4	2.4	2.2	2.2	2.3	2.4
Change in bus. inventories[2]	58	1	-23	38	26	15	15	23	44	40	44	58	19	20	46
Previous[2]	58	-6	-12	46	39	28	26	39	. . .	. . .	. . .	. . .	22	33	. . .
Nonfarm[2]	62	6	-19	40	25	13	13	21	42	38	42	56	22	18	45
Farm[2]	-2	-4	-3	-2	1	2	2	2	2	2	2	2	-3	2	2

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

Changes in Real Gross Domestic Product and Related Items
(Percent, annual rate except as noted)

Item	1999[1]	2000[1]	2001[1]	2002[1]	2003[1]	2004[1]	2005[1]	2006[1]	2007[1]
Real GDP	4.7	2.2	.2	1.9	4.0	3.8	3.5	3.4	2.9
Previous	4.7	2.2	.2	1.9	4.0	3.8	3.9	3.1	. . .
Final sales	4.2	2.9	1.5	.8	4.0	3.6	3.6	3.6	2.6
Previous	4.2	2.9	1.5	.8	4.0	3.6	3.9	3.2	. . .
Priv. dom. final purch.	5.3	4.3	1.0	1.1	4.4	4.8	3.5	4.1	3.1
Previous	5.3	4.3	1.0	1.1	4.4	4.8	3.9	3.6	. . .
Personal cons. expend.	4.9	4.1	2.8	1.9	3.8	3.8	3.0	3.6	3.1
Previous	4.9	4.1	2.8	1.9	3.8	3.8	3.5	3.3	. . .
Durables	7.3	4.7	10.8	1.2	9.2	5.2	4.1	9.0	6.1
Nondurables	4.9	3.0	1.9	2.1	4.1	4.6	3.9	3.8	3.6
Services	4.4	4.5	1.6	1.9	2.5	3.1	2.3	2.4	2.3
Residential investment	3.6	-1.9	1.4	7.0	11.8	6.6	6.8	1.3	-1.0
Previous	3.6	-1.9	1.4	7.0	11.8	6.6	4.9	-.4	. . .
Business fixed invest.	7.7	7.8	-9.6	-6.5	5.6	10.9	5.2	9.0	5.3
Previous	7.7	7.8	-9.6	-6.5	5.6	10.9	6.1	7.9	. . .
Equipment & software	10.8	7.5	-9.0	-3.4	7.2	13.8	5.9	9.7	6.4
Previous	10.8	7.5	-9.0	-3.4	7.2	13.8	7.2	9.0	. . .
Nonres. structures	-.9	8.8	-11.1	-14.9	1.2	2.7	3.2	7.2	2.3
Previous	-.9	8.8	-11.1	-14.9	1.2	2.7	2.7	4.8	. . .
Net exports[2]	-296	-379	-399	-471	-521	-601	-623	-646	-694
Previous[2]	-296	-379	-399	-471	-521	-601	-620	-646	. . .
Exports	5.6	6.5	-11.9	3.8	6.0	6.1	7.4	6.3	5.7
Imports	12.1	11.2	-7.6	9.7	5.1	10.6	4.3	6.2	6.1
Govt. cons. & invest.	4.2	.4	5.0	4.0	1.9	2.1	2.7	2.0	1.5
Previous	4.2	.4	5.0	4.0	1.9	2.1	2.5	2.1	. . .
Federal	4.2	-2.2	6.4	7.8	5.5	4.2	3.6	1.5	.1
Defense	4.3	-3.5	6.5	8.4	7.5	4.9	4.1	1.8	.1
Nondefense	4.1	.3	6.3	6.8	1.6	2.8	2.7	.9	.0
State & local	4.2	1.7	4.2	2.1	.0	.9	2.2	2.3	2.4
Change in bus. inventories[2]	69	56	-32	12	15	52	19	20	46
Previous[2]	69	56	-32	12	15	52	22	33	. . .
Nonfarm[2]	72	58	-32	15	15	50	22	18	45
Farm[2]	-3	-1	0	-2	0	2	-3	2	2

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

Contributions to Changes in Real Gross Domestic Product
(Percentage points, annual rate except as noted)

Item	2005 Q1	2005 Q2	2005 Q3	2005 Q4	2006 Q1	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 Q3	2007 Q4	2005[1]	2006[1]	2007[1]
Real GDP	3.8	3.2	3.1	3.7	4.2	3.5	3.1	2.9	2.9	2.9	2.9	2.9	3.5	3.4	2.9
Previous	3.8	3.3	4.3	4.0	3.0	3.1	3.1	3.1	. . .	. . .	. . .	. . .	3.9	3.1	. . .
Final sales	3.5	5.3	4.0	1.6	4.7	3.9	3.1	2.6	2.2	3.0	2.7	2.4	3.6	3.6	2.6
Previous	3.5	5.7	4.5	1.9	3.3	3.5	3.2	2.6	. . .	. . .	. . .	. . .	3.9	3.1	. . .
Priv. dom. final purch.	3.6	3.7	3.4	1.4	4.5	3.6	3.1	2.9	2.7	2.7	2.7	2.7	3.0	3.5	2.7
Previous	3.6	3.8	4.0	2.0	3.5	3.1	3.0	2.9	. . .	. . .	. . .	. . .	3.3	3.1	. . .
Personal cons. expend.	2.4	2.2	2.9	.8	3.0	2.4	2.4	2.3	2.2	2.2	2.2	2.2	2.1	2.5	2.2
Previous	2.4	2.5	3.2	1.5	2.6	2.2	2.2	2.2	. . .	. . .	. . .	. . .	2.4	2.3	. . .
Durables	.2	.6	1.1	-.6	1.1	.6	.6	.6	.5	.5	.5	.5	.3	.7	.5
Nondurables	1.1	.8	.7	.6	.8	.8	.8	.8	.7	.7	.7	.7	.8	.8	.7
Services	1.2	.8	1.0	.9	1.0	1.0	1.0	.9	1.0	1.0	1.0	1.0	.9	1.0	1.0
Residential investment	.5	.7	.2	.1	.1	.3	-.1	-.1	-.1	-.1	-.1	.0	.4	.1	-.1
Previous	.5	.6	.2	-.1	-.2	.0	.0	.1	. . .	. . .	. . .	. . .	.3	.0	. . .
Business fixed invest.	.6	.9	.3	.4	1.4	.9	.8	.7	.6	.6	.6	.6	.5	.9	.6
Previous	.6	.7	.6	.6	1.1	.8	.8	.7	. . .	. . .	. . .	. . .	.6	.8	. . .
Equipment & software	.6	.8	.2	.2	1.1	.7	.6	.6	.5	.5	.5	.5	.5	.7	.5
Previous	.6	.6	.5	.5	.9	.6	.7	.6	. . .	. . .	. . .	. . .	.6	.7	. . .
Nonres. structures	-.1	.1	.1	.2	.2	.2	.2	.1	.1	.1	.1	.1	.1	.2	.1
Previous	-.1	.1	.1	.2	.2	.2	.1	.1	. . .	. . .	. . .	. . .	.1	.1	. . .
Net exports	-.4	1.1	.3	-.7	-.5	-.1	-.3	-.6	-.8	.0	-.2	-.6	.1	-.4	-.4
Previous	-.4	1.4	-.1	-.5	-.6	.0	-.2	-.7	. . .	. . .	. . .	. . .	.1	-.4	. . .
Exports	.7	1.1	.4	.8	.8	.6	.5	.7	.4	.6	.6	.8	.8	.7	.6
Imports	-1.1	.0	-.2	-1.4	-1.3	-.7	-.8	-1.3	-1.2	-.6	-.8	-1.4	-.7	-1.0	-1.0
Govt. cons. & invest.	.4	.4	.4	.9	.6	.4	.3	.3	.3	.3	.3	.3	.5	.4	.3
Previous	.4	.5	.6	.5	.5	.4	.4	.4	. . .	. . .	. . .	. . .	.5	.4	. . .
Federal	.2	.1	.3	.4	.3	.1	.0	.0	.0	.0	.0	.0	.3	.1	.0
Defense	.1	.1	.3	.3	.2	.1	.1	.0	.0	.0	.0	.0	.2	.1	.0
Nondefense	.0	.0	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
State & local	.2	.3	.1	.4	.4	.3	.2	.3	.3	.3	.3	.3	.3	.3	.3
Change in bus. inventories	.3	-2.1	-.9	2.1	-.4	-.4	.0	.3	.7	-.1	.1	.5	-.1	-.1	.3
Previous	.3	-2.3	-.2	2.0	-.3	-.4	-.1	.5	. . .	. . .	. . .	. . .	.0	-.1	. . .
Nonfarm	.4	-2.0	-.9	2.1	-.5	-.4	.0	.3	.7	-.1	.1	.5	-.1	-.2	.3
Farm	-.1	-.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

1. Change from fourth quarter of previous year to fourth quarter of year indicated.

Changes in Prices and Costs
(Percent, annual rate except as noted)

Item	2005 Q1	2005 Q2	2005 Q3	2005 Q4	2006 Q1	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 Q3	2007 Q4	2005[1]	2006[1]	2007[1]
GDP chain-wt. price index	3.1	2.5	2.6	2.8	1.7	2.1	2.1	2.1	2.3	2.0	2.0	2.0	2.7	2.0	2.1
Previous	3.1	2.5	1.6	2.0	2.4	2.0	2.0	2.0	. . .	. . .	. . .	. . .	2.3	2.1	. . .
PCE chain.-wt. price index	2.3	3.2	3.7	3.8	1.4	2.1	2.0	2.0	1.9	1.8	1.8	1.8	3.2	1.9	1.8
Previous	2.3	3.3	2.2	2.5	2.3	2.1	2.0	2.0	. . .	. . .	. . .	. . .	2.6	2.1	. . .
Energy	3.6	28.6	49.0	29.2	-13.3	-3.1	-1.8	-1.5	-1.4	-1.2	-1.2	-1.2	26.6	-5.1	-1.3
Previous	3.6	28.5	10.1	8.7	6.0	1.5	.1	-.2	. . .	. . .	. . .	. . .	12.4	1.8	. . .
Food	1.0	3.5	1.3	2.1	2.6	2.6	2.5	2.4	2.3	2.2	2.2	2.2	2.0	2.5	2.2
Previous	1.0	3.5	1.2	2.1	2.3	2.3	2.3	2.3	. . .	. . .	. . .	. . .	1.9	2.3	. . .
Ex. food & energy	2.4	1.6	1.4	2.4	2.4	2.4	2.2	2.2	2.0	2.0	2.0	2.0	1.9	2.3	2.0
Previous	2.4	1.8	1.9	2.1	2.1	2.1	2.1	2.1	. . .	. . .	. . .	. . .	2.0	2.1	. . .
CPI	2.5	4.0	5.3	4.9	1.1	2.1	2.1	2.0	1.9	1.9	1.9	1.9	4.2	1.9	1.9
Previous	2.5	4.0	2.5	2.9	2.6	2.2	2.1	2.1	. . .	. . .	. . .	. . .	3.0	2.2	. . .
Ex. food & energy	2.6	2.0	1.9	2.7	2.6	2.6	2.5	2.4	2.3	2.2	2.2	2.2	2.3	2.6	2.2
Previous	2.6	2.0	2.1	2.4	2.3	2.3	2.3	2.3	. . .	. . .	. . .	. . .	2.3	2.3	. . .
ECI, hourly compensation[2]	2.5	2.5	3.6	4.0	4.2	4.3	4.2	4.1	4.0	4.0	4.0	4.0	3.1	4.2	4.0
Previous[2]	2.5	2.5	3.6	4.0	4.0	4.0	4.1	4.1	. . .	. . .	. . .	. . .	3.1	4.0	. . .
Nonfarm business sector															
Output per hour	3.2	1.7	3.6	2.8	2.6	2.0	2.0	2.1	2.5	2.5	2.5	2.5	2.8	2.2	2.5
Previous	3.3	1.9	3.7	2.8	1.6	1.9	2.3	2.5	. . .	. . .	. . .	. . .	2.9	2.1	. . .
Compensation per hour	5.5	4.4	4.4	4.3	5.3	5.4	5.4	5.3	5.2	5.1	5.0	5.0	4.7	5.4	5.1
Previous	7.0	3.4	3.2	4.8	5.2	5.2	5.2	5.2	. . .	. . .	. . .	. . .	4.6	5.2	. . .
Unit labor costs	2.2	2.6	.8	1.5	2.7	3.3	3.3	3.2	2.6	2.6	2.4	2.4	1.8	3.1	2.5
Previous	3.6	1.4	-.4	1.9	3.5	3.3	2.9	2.6	. . .	. . .	. . .	. . .	1.6	3.1	. . .

1. Change from fourth quarter of previous year to fourth quarter of year indicated.
2. Private-industry workers.

Other Macroeconomic Indicators

Item	2005 Q1	2005 Q2	2005 Q3	2005 Q4	2006 Q1	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 Q3	2007 Q4	2005[1]	2006[1]	2007[1]
Employment and production															
Nonfarm payroll employment[2]	.5	.6	.4	.4	.6	.5	.5	.4	.3	.3	.3	.3	2.0	2.0	1.1
Unemployment rate[3]	5.3	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Previous[3]	5.3	5.1	5.0	5.0	5.0	5.0	5.0	5.0	. . .	. . .	. . .	. . .	5.0	5.0	. . .
GDP gap[4]	.7	.6	.6	.4	.1	.0	.0	.1	.1	.2	.2	.2	.4	.1	.2
Previous[4]	.7	.6	.3	.1	.1	.1	.1	.1	. . .	. . .	. . .	. . .	.1	.1	. . .
Industrial production[5]	3.6	1.5	1.8	4.0	6.7	4.7	3.4	3.4	3.1	2.9	3.0	3.0	2.7	4.6	3.0
Previous[5]	3.6	2.1	6.3	5.6	3.3	3.4	3.6	3.3	. . .	. . .	. . .	. . .	4.4	3.4	. . .
Manufacturing industr. prod.[5]	4.0	1.0	2.2	3.6	6.3	4.9	3.5	3.7	3.5	3.3	3.3	3.3	2.7	4.6	3.4
Previous[5]	4.0	1.5	5.3	5.8	3.5	3.6	3.8	3.6	. . .	. . .	. . .	. . .	4.1	3.6	. . .
Capacity utilization rate - mfg.[3]	78.1	78.1	78.2	78.6	79.4	79.9	80.1	80.3	80.5	80.7	80.9	81.0	78.6	80.3	81.0
Previous[3]	78.1	78.2	78.9	79.7	80.0	80.2	80.5	80.7	. . .	. . .	. . .	. . .	79.7	80.7	. . .
Housing starts[6]	2.1	2.0	2.0	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Light motor vehicle sales[6]	16.5	17.2	17.8	16.4	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.0	17.1	17.1
Income and saving															
Nominal GDP[5]	7.0	5.8	5.8	6.6	6.1	5.7	5.3	5.0	5.3	4.9	4.9	4.9	6.3	5.5	5.0
Real disposable pers. income[5]	-3.4	2.1	-3.0	5.9	6.9	5.7	4.2	4.1	4.4	3.8	3.2	4.0	.3	5.2	3.8
Previous[5]	-2.9	1.4	3.0	3.7	5.2	5.1	4.1	4.3	. . .	. . .	. . .	. . .	1.3	4.7	. . .
Personal saving rate[3]	.5	.3	-1.5	-.3	.3	.9	1.1	1.3	1.6	1.7	1.7	1.9	-.3	1.3	1.9
Previous[3]	.7	.1	-.2	.2	.5	1.0	1.2	1.5	. . .	. . .	. . .	. . .	.2	1.5	. . .
Corporate profits[7]	24.5	24.9	-27.8	75.7	-4.2	-4.1	-8.9	-5.8	-2.8	-1.1	-.7	-1.0	18.5	-5.8	-1.4
Profit share of GNP[3]	10.5	11.0	10.0	11.3	11.0	10.8	10.4	10.1	9.9	9.8	9.7	9.5	11.3	10.1	9.5
Excluding FR Banks[3]	10.3	10.8	9.8	11.2	10.9	10.6	10.3	10.0	9.8	9.7	9.5	9.4	11.2	10.0	9.4
Federal surplus/deficit[8]	-298	-286	-338	-335	-390	-401	-400	-391	-426	-416	-406	-407	-314	-396	-414
State & local surplus/deficit[8]	7	20	-3	24	26	26	29	28	28	29	32	34	12	27	31
Gross national saving rate[3]	13.4	13.7	13.2	13.2	13.1	13.2	13.1	13.1	12.9	13.0	13.0	13.1	13.2	13.1	13.1
Net national saving rate[3]	1.7	2.3	-.5	1.8	1.7	1.8	1.7	1.7	1.5	1.6	1.6	1.6	1.8	1.7	1.6

1. Change from fourth quarter of previous year to fourth quarter of year indicated, unless otherwise indicated.
2. Change, millions.
3. Percent, annual values are for the fourth quarter of the year indicated.
4. Percent difference between potential and actual GDP; a positive number indicates that the economy is operating below potential; annual values are for the fourth quarter of the year indicated.
5. Percent change, annual rate.
6. Level, millions, annual values are annual averages.
7. Percent change, annual rate, with inventory valuation and capital consumption adjustments.
8. Billions of dollars, annual values are annual averages.

Staff Projections of Federal Sector Accounts and Related Items
(Billions of dollars except as noted)

Item	Fiscal year				2005				2006				2007			
	2004[a]	2005	2006	2007	Q1[a]	Q2[a]	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
					Not seasonally adjusted											
Unified budget																
Receipts[1]	1880	2128	2274	2385	452	665	524	524	482	709	559	548	512	740	586	580
Outlays[1]	2293	2467	2654	2770	628	620	613	655	682	665	652	687	718	695	671	730
Surplus/deficit[1]	-413	-339	-380	-385	-177	45	-90	-131	-200	44	-93	-139	-206	45	-85	-150
On-budget	-568	-514	-559	-580	-202	-38	-104	-191	-222	-40	-106	-201	-232	-45	-102	-215
Off-budget	155	175	179	195	25	83	14	60	21	84	14	62	26	90	17	64
Means of financing																
Borrowing	378	302	414	397	165	-43	78	144	184	-15	101	129	190	-16	94	140
Cash decrease	-1	20	-18	0	2	-11	16	-8	15	-25	0	10	15	-25	0	10
Other[2]	36	18	-16	-12	10	9	-5	-4	1	-4	-8	-0	0	-4	-8	-0
Cash operating balance, end of period	36	17	35	35	22	33	17	25	10	35	35	25	10	35	35	25
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	1933	2178	2359	2472	2197	2239	2222	2304	2351	2379	2402	2429	2459	2482	2519	2536
Expenditures	2348	2501	2741	2882	2495	2525	2559	2639	2741	2780	2802	2820	2885	2898	2925	2942
Consumption expenditures	711	757	807	837	760	762	773	788	808	814	819	823	838	841	845	849
Defense	474	508	543	565	509	511	521	530	543	548	552	555	565	568	570	573
Nondefense	237	250	264	272	251	251	252	257	265	266	267	268	273	274	275	276
Other spending	1637	1744	1934	2045	1735	1763	1787	1851	1934	1966	1983	1997	2048	2057	2080	2093
Current account surplus	-415	-323	-381	-410	-298	-286	-338	-335	-390	-401	-400	-391	-426	-416	-406	-407
Gross investment	99	106	115	116	101	106	109	113	116	116	115	116	116	116	116	117
Gross saving less gross investment[3]	-421	-332	-396	-422	-302	-294	-349	-349	-406	-416	-414	-404	-439	-428	-417	-417
Fiscal indicators[4]																
High-employment (HEB) surplus/deficit	-377	-310	-394	-421	-279	-276	-334	-339	-404	-418	-416	-406	-438	-426	-414	-412
Change in HEB, percent of potential GDP	0.7	-0.7	0.5	0.0	-0.6	-0.1	0.4	-0.0	0.5	0.1	-0.1	-0.1	0.2	-0.1	-0.1	-0.1
Fiscal impetus (FI) percent of GDP	0.8	0.3	0.5	0.0	0.0	0.1	0.1	0.2	0.2	0.1	0.0	-0.0	0.0	0.0	0.0	-0.0

1. In July, OMB projected deficits of $333 billion and $341 billion for FY 2005 and FY 2006. In August, CBO projected deficits of $331 billion and $314 billion for FY 2005 and FY 2006. Budget receipts, outlays, and surplus/deficit include corresponding social security (OASDI) categories. The OASDI surplus and the Postal Service surplus are excluded from the on-budget surplus and shown separately as off-budget, as classified under current law.
2. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.
3. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
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 aggregate demand stimulus.
a--Actual

Change in Debt of the Domestic Nonfinancial Sectors
(Percent)

			Nonfederal						
				Households					
Period [1]	Total	Federal government	Total	Total	Home mortgages	Consumer credit	Business	State and local governments	Memo: Nominal GDP
Year									
2000	4.8	-8.0	8.3	8.7	8.2	10.8	9.3	1.3	4.6
2001	6.1	-0.2	7.6	8.8	9.6	7.7	6.0	8.9	2.7
2002	6.9	7.6	6.8	9.8	12.0	4.7	2.7	11.1	3.6
2003	8.1	10.9	7.6	10.1	12.5	4.6	4.4	8.2	6.1
2004	8.6	9.0	8.5	10.9	13.2	4.7	5.7	7.4	6.8
2005	8.5	7.8	8.7	9.4	11.1	4.1	7.7	8.6	6.3
2006	7.0	8.4	6.7	7.3	8.2	4.4	6.2	5.3	5.5
2007	6.3	8.0	5.9	6.4	6.9	4.8	5.7	3.3	5.0
Quarter									
2005:1	9.9	14.4	8.9	9.6	11.3	4.1	7.2	12.0	7.0
2	7.3	0.1	8.9	9.9	11.5	3.7	8.4	5.6	5.8
3	8.0	5.6	8.6	9.1	10.3	5.1	7.6	10.0	5.8
4	7.9	10.5	7.3	8.0	9.4	3.3	6.7	5.7	6.6
2006:1	8.5	15.0	7.0	7.8	8.9	4.2	6.2	6.1	6.1
2	5.9	2.4	6.7	7.2	8.2	4.0	6.1	6.0	5.7
3	6.4	7.0	6.3	6.8	7.6	4.4	6.0	4.4	5.3
4	6.5	8.4	6.1	6.7	7.3	4.6	5.7	4.4	5.0
2007:1	7.4	14.3	5.9	6.6	7.2	4.6	5.6	3.3	5.3
2	5.1	2.1	5.8	6.3	6.8	4.7	5.7	3.3	4.9
3	5.7	5.9	5.7	6.2	6.7	4.7	5.6	3.2	4.9
4	6.1	8.7	5.6	5.9	6.4	4.7	5.5	3.2	4.9

Note. Quarterly data are at seasonally adjusted annual rates.
1. Data after 2005:Q2 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.

2.6.3 FOF

Class II FOMC
Restricted (FR)

Flow of Funds Projections: Highlights
(Billions of dollars at seasonally adjusted annual rates except as noted)

September 14, 2005

Category	2004	2005	2006	2007	2005		2006				2007			
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Net funds raised by domestic nonfinancial sectors														
1 Total	1746.2	1773.4	1660.1	1634.2	1676.7	1739.3	1991.9	1397.7	1588.0	1662.9	1968.7	1342.5	1543.9	1681.8
2 Net equity issuance	-157.0	-288.1	-175.0	-120.0	-348.0	-284.0	-228.0	-176.0	-158.0	-138.0	-120.0	-120.0	-120.0	-120.0
3 Net debt issuance	1903.3	2061.5	1835.1	1754.2	2024.7	2023.3	2219.9	1573.7	1746.0	1800.9	2088.7	1462.5	1663.9	1801.8
Borrowing sectors														
Nonfinancial business														
4 Financing gap [1]	45.4	-110.7	25.1	205.1	-284.8	-186.0	-161.4	42.5	88.2	131.2	175.8	189.2	210.9	244.5
5 Net equity issuance	-157.0	-288.1	-175.0	-120.0	-348.0	-284.0	-228.0	-176.0	-158.0	-138.0	-120.0	-120.0	-120.0	-120.0
6 Credit market borrowing	419.2	604.7	519.8	512.7	620.7	558.9	526.7	522.9	524.7	504.8	501.1	516.9	514.5	518.1
Households														
7 Net borrowing [2]	1007.0	969.3	819.5	770.1	975.9	878.2	873.6	822.1	793.9	788.5	790.9	768.9	771.4	749.2
8 Home mortgages	878.6	834.7	691.0	630.3	826.3	770.3	747.0	700.3	662.9	653.6	653.6	630.3	630.3	606.9
9 Consumer credit	96.7	88.2	97.9	111.0	111.1	73.5	94.4	91.0	101.2	105.1	108.1	109.9	112.4	113.6
10 Debt/DPI (percent) [3]	112.5	118.7	120.2	121.1	120.5	120.2	120.2	120.1	120.3	120.6	120.7	121.0	121.3	121.4
State and local governments														
11 Net borrowing	115.1	143.9	96.8	62.8	174.7	101.8	110.8	110.8	82.8	82.8	62.8	62.8	62.8	62.8
12 Current surplus [4]	181.3	174.9	194.2	204.4	158.8	187.0	190.3	192.1	197.2	197.3	199.1	202.1	206.0	210.2
Federal government														
13 Net borrowing	361.9	343.6	399.1	408.7	253.4	484.4	708.7	118.0	344.7	424.9	733.9	114.0	315.1	471.7
14 Net borrowing (n.s.a.)	361.9	343.6	399.1	408.7	78.2	143.6	184.2	-14.8	101.0	128.7	190.5	-15.8	93.6	140.4
15 Unified deficit (n.s.a.)	400.7	352.7	387.3	396.7	89.5	131.4	200.2	-44.2	92.6	138.7	205.9	-44.7	85.2	150.3
Depository institutions														
16 Funds supplied	825.6	859.5	602.7	478.6	939.0	556.6	706.5	547.6	657.2	499.7	563.0	426.3	486.6	438.6
Memo (percentage of GDP)														
17 Domestic nonfinancial debt [5]	197.8	202.1	205.6	208.5	203.0	203.7	204.8	205.6	206.1	206.9	207.8	208.6	208.9	209.4
18 Domestic nonfinancial borrowing	16.2	16.5	13.9	12.6	16.1	15.9	17.2	12.0	13.1	13.4	15.3	10.6	11.9	12.8
19 Federal government [6]	3.1	2.8	3.0	2.9	2.0	3.8	5.5	0.9	2.6	3.2	5.4	0.8	2.3	3.3
20 Nonfederal	13.1	13.8	10.9	9.7	14.1	12.1	11.7	11.1	10.5	10.2	9.9	9.8	9.7	9.4

Note. Data after 2005:Q2 are staff projections.
1. For corporations: Excess of capital expenditures over U.S. internal funds.
2. Includes change in liabilities not shown in lines 8 and 9.
3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.
4. NIPA state and local government saving plus consumption of fixed capital and net capital transfers.
5. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.
6. Excludes government-insured mortgage pool securities.
n.s.a. Not seasonally adjusted.

2.6.4 FOF

International Developments

Amid concerns about oil supply and continued strong global demand, oil prices were extremely volatile during the intermeeting period. The spot price of West Texas intermediate (WTI) crude oil hit a record of nearly $70 per barrel immediately following Hurricane Katrina but has since fallen back to around $63 per barrel, about $2 per barrel higher than in early August. The projected path of WTI prices is now a bit higher than in the August Greenbook. We have revised up the path of the average price of imported oil (which includes refined products) by somewhat more, reflecting both increases in product prices and shifts in the mix of oil imports. We believe that lower U.S. activity and higher energy prices will pull down foreign growth this quarter and next from what it otherwise would have been, although the uncertainties around this outlook are considerable. For the remainder of the forecast period, which we have now extended to 2007, we anticipate that the underlying strength of foreign demand will keep growth abroad at a solid pace.

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

Indicator	2004	2005: H1	Projection			
			2005		2006	2007
			Q3	Q4		
Foreign output	3.7	2.8	3.1	3.1	3.3	3.3
August GB	3.6	2.9	3.3	3.4	3.3	. . .
Foreign CPI	2.8	1.8	3.4	2.9	2.4	2.4
August GB	2.8	1.8	2.7	2.6	2.5	. . .

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

Rising energy prices have boosted foreign headline inflation in recent months, and accordingly we have marked up our outlook for foreign inflation in the second half of this year. To date, core consumer prices have been little affected, and we expect that headline inflation will ease in coming quarters as energy prices decline somewhat and as excess economic capacity persists in many countries.

Over the intermeeting period, the nominal exchange value of the dollar has declined. However, because the staff's outlook for U.S. prices has been revised upward, the projected path of the broad real dollar is generally little changed from that in the August

Greenbook. We continue to project that the broad real dollar will depreciate at an annual rate of roughly 1½ percent over most of the forecast period, reflecting the need to finance the widening U.S. current account deficit.

The contours of our outlook for trade in the second half of this year and early next year are influenced by several important developments. First, the direct effects of Hurricane Katrina are likely to depress real export growth a little less than 1 percentage point (annual rate) in the third quarter and to depress real import growth 1¼ percentage point; taken together, the direct effect on net exports is small. These effects are reversed in the fourth quarter as trade recovers from the disruption. Second, the ongoing Boeing strike is projected to cut into exports in both the third and the fourth quarters and to boost exports early next year. Third, lower-than-expected imports in July have led us to reduce projected import growth in the near term. All told, the arithmetic contribution of net exports to GDP growth is now +0.3 percentage point in the third quarter and swings to -0.7 percentage point in the fourth quarter, compared with contributions of -0.1 and -0.5 percentage point, respectively, in the August Greenbook. Net exports subtract 0.4 percentage point from GDP growth in both 2006 and 2007.

We estimate that the U.S. current account deficit exceeded $770 billion in the second quarter and project that it will increase to more than $860 billion, or 6¾ percent of GDP, by year-end. This projected level is about unchanged from the August Greenbook: The non-oil trade balance is little changed, and a larger imported oil bill—reflecting both higher prices and quantities—is offset by an upward revision to net investment income. The current account deficit is projected to grow further over the next two years, exceeding $1 trillion, or nearly 7½ percent of GDP, in 2007.

Oil Prices

Oil prices began to rise early in the intermeeting period, well before the advent of Hurricane Katrina, on concerns about tight market conditions. The spot price of West Texas intermediate (WTI) crude oil peaked at $69.82 per barrel in the aftermath of the hurricane but has since moved down to close at $63.12 per barrel on September 13, about $2 per barrel higher than in early August. Oil futures prices reflect expectations that tight market conditions will persist. The far-dated futures contract (currently for delivery in December 2011) closed at $58.93 per barrel on September 13, down a touch from early August but up from $36.50 at the beginning of the year. Early in the intermeeting period, the price spreads between WTI (a light, sweet crude) and heavier, more sulfurous grades of crude oil widened, but they have narrowed as Hurricane Katrina has predominantly disrupted U.S. sour crude production.

Currently, U.S. oil production in the Gulf of Mexico is down 850,000 barrels per day as a result of Hurricane Katrina. The cumulative production lost since August 26 is 20 million barrels. In addition, four refineries with a combined capacity of 880,000 barrels per day—roughly 5 percent of total U.S. refining capacity—remain shut. To help cope with the shortfall in production and refining, the International Energy Agency (IEA) authorized the sale of 60 million barrels from the strategic reserves of its member countries, including 30 million barrels from the U.S. Strategic Petroleum Reserve (SPR). The SPR contains only crude oil, but the European sales will include refined products. The U.S. government also loaned 13 million barrels of crude oil from the SPR directly to refineries whose supplies were disrupted by the hurricane. Because of the high level of private crude oil inventories, diminished demand from the damaged refineries, and the releases from strategic reserves, the spot price of WTI is actually down about $2 per barrel from the week preceding Katrina.

The net increase in oil prices since the August Greenbook reflects, in part, supply disruptions in the Gulf of Mexico, the North Sea, offshore India, Ecuador, and Africa. Perceptions that the market will be tight going forward also reflect heightened concerns regarding oil supplies from the Middle East because of developments in Iraq, Iran, and Saudi Arabia, as well as expectations of continued strong global oil demand. Recent supply developments are of particular concern because OPEC has little spare production capacity.

In line with NYMEX futures prices, the spot price of WTI is projected to increase to almost $66 per barrel in the second quarter of next year before edging down thereafter, to about $63 per barrel by the end of the forecast period. The current projection averages roughly $1.50 per barrel higher in the fourth quarter of 2005 and $1.80 per barrel higher in 2006 than the projection in the August Greenbook. Our revisions to the projected path of the average price of imported oil (which includes both crude oil and refined products) in the second half of this year are somewhat larger, mainly reflecting the post-Katrina increases in the share of refined petroleum products, including gasoline, in overall oil imports.

Hurricane Katrina had a large impact on wholesale natural gas prices. Prices of NYMEX natural gas futures contracts for delivery in the fourth quarter of this year average $11.30

per million British thermal units (MMBtu), nearly $2.50 per MMBtu higher than at the time of the August Greenbook. This boost is expected to persist because there are no strategic reserves of natural gas and there is only limited scope to increase imports to replace lost domestic production. Shut-in natural gas production is currently 3.7 billion cubic feet per day, about 37 percent of normal daily production.

International Financial Markets

The trade-weighted exchange value of the dollar against the major foreign currencies declined 1¼ percent on net over the intermeeting period, with much of this decline occurring in late August and early September in reaction to several releases of weaker-than-expected U.S. economic indicators. Market reaction may have been exacerbated by concerns over the possible impact of Hurricane Katrina on U.S. economic growth. On balance, the dollar depreciated 2½ percent against sterling and the Canadian dollar and 1¾ percent against the yen, but it appreciated ½ percent against the euro. The Bank of England lowered its policy rate on August 4, but the subsequent release of the minutes of that meeting revealed that the decision had been a closer-than-expected 5-to-4 vote, with Governor King in the minority. This information reportedly led investors to partially reverse earlier declines in U.K. market interest rates and to bid up sterling. On September 7, the Bank of Canada raised its policy rate 25 basis points, a move that had been widely expected but nevertheless prompted some appreciation of the Canadian dollar.

The exchange value of the dollar rose ½ percent against the currencies of our other important trading partners over the intermeeting period, led by the dollar's 1½ percent appreciation against the Mexican peso and appreciations against several Asian currencies. Indonesian financial indicators tumbled in late August on concerns that the government's popular fuel price subsidies may lead to fiscal problems, but they recovered some of those losses after Indonesia's central bank tightened monetary policy and as oil prices fell back. The Chinese renminbi's spot exchange rate against the dollar moved in a very narrow range over the intermeeting period.

Although the broad dollar has declined in nominal terms on net over the intermeeting period, the staff's outlook for U.S. prices in the second half of this year has been revised up to a greater extent. We therefore raised the fourth-quarter value of the broad real dollar a bit relative to the August Greenbook. Starting early next year, however, the projected value of the broad real dollar returns close to the path of the August Greenbook as U.S. inflation falls back. For the remainder of the forecast period, we expect that the broad real dollar will depreciate at an annual rate of roughly 1½ percent, as we continue to foresee downward pressures on the dollar stemming from the need to finance the U.S. current account deficit.

Government bond yields declined globally in the intermeeting period. Yields on long-term European government bonds fell about 25 basis points, keeping pace with the drop in yields on U.S. Treasuries, while Canadian benchmark yields declined 20 basis points and the yield on the ten-year JGB declined only slightly. The yield on the ten-year German benchmark bond hit a record low of 3.04 percent in early September. Headline stock market indexes were little changed on net in Europe and Canada but jumped 9 percent in Japan, primarily on strong performances of shares of Japanese banks and Prime Minister Koizumi's convincing success in the lower-house elections on September 11.

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

Foreign Industrial Countries

Real GDP growth in the foreign industrial countries in the second quarter is now estimated at 2¾ percent, a bit stronger than we had expected at the time of the August Greenbook. Our forecast now has growth easing to a bit under 2½ percent in the second half of the year before picking up next year. Our near-term outlook is slightly weaker than in the August Greenbook, because we expect the pace of activity to be held back a bit by higher energy prices and slower U.S. growth. The near-term projection for inflation is slightly higher than that in the August Greenbook, reflecting increases in energy prices. We project four-quarter headline inflation in Europe and Canada to move above 2 percent this quarter, remain near that rate through the first half of 2006, and drop back a bit later in the year and in 2007.

In Japan, real GDP grew a stronger-than-expected 3.3 percent in the second quarter, the increase reflecting solid gains in consumption and investment and a surprisingly strong contribution from net exports. However, industrial production and indicators of consumer spending declined in July, suggesting a softer pace of activity in the current quarter. Our outlook calls for Japanese GDP growth of a bit more than 1¼ percent in the second half of this year and a shade over 1½ percent thereafter. Consumption and investment, supported by improving labor market conditions and healthy corporate balance sheets, should continue contributing solidly to growth. Net exports should also make further small positive contributions to growth. We continue to expect mild deflation in Japan in the near term and a return to positive inflation by the second half of 2006, leading the Bank of Japan to begin its exit from quantitative easing.

Our forecast for Canada now calls for GDP growth to ease to about 3 percent by the fourth quarter of this year before picking up slightly in 2006. Although we expect Canada's energy sector to benefit from increased demand and higher prices, we also expect near-term economic activity to be held back somewhat by the slowdown in U.S. growth. Going forward, Canadian domestic demand should remain firm and net exports should contribute to growth. With headline inflation moving above the 2 percent inflation target in the near term, the Bank of Canada is expected to make further gradual increases to the overnight policy rate over the next year.

Euro-area GDP expanded about 1¼ percent in the second quarter. Investment spending, inventory accumulation, and net exports all contributed to growth, but consumer spending declined. Indicators for the current quarter—including improvement in industrial orders and robust growth in German industrial production in July—suggest a modest pickup in the pace of growth. We anticipate that euro-area growth will edge up to about 1½ percent in the second half of this year and to 1¾ percent by 2007. Higher oil prices helped push euro-area headline inflation to more than 2 percent during the summer, but inflation should fall back a bit next year. We assume that the ECB will continue to keep policy rates unchanged this year and next.

In the United Kingdom, second-quarter GDP growth came in at 1.9 percent, an upward revision from the preliminary estimate. Our projection calls for U.K. GDP growth to remain just below that rate in the second half of 2005 but to pick up to 2½ percent by late 2006, in line with potential growth. Inflation is projected to remain near 2¼ percent through mid-2006 but then to move below 2 percent as energy prices level off. We now expect that the Bank of England, which cut the policy rate 25 basis points in August, will remain on hold through the forecast period.

Other Countries

We estimate that average real GDP growth in the emerging market economies picked up to about 3½ percent in the second quarter after having been restrained by several one-time factors in the first quarter. We expect growth to move up to about 4¼ percent in the second half of the year—a bit slower than in the August Greenbook, reflecting higher energy prices and lower U.S. economic activity—and then to improve to about 4½ percent for the rest of the forecast period. Four-quarter consumer price inflation is expected to increase to about 3½ percent in the fourth quarter and to rise to about 4 percent by the middle of next year, reflecting higher energy prices and reduced fuel subsidies in some countries. Inflation eases somewhat over the remainder of the forecast period as oil prices stabilize.

In emerging Asia, real GDP growth is estimated to have jumped to 6¾ percent in the second quarter, largely because of sharp rebounds in Singapore and Thailand and a spurt of investment spending in Hong Kong associated with the completion of Hong Kong Disneyland. Our forecast calls for growth in emerging Asia to slow to about 5¼ percent in the current quarter and to drop to about 4¾ percent in the fourth quarter in response to slower U.S. growth and higher energy prices. Growth is expected to average about 5 percent over the rest of the forecast period, a pace that is down from the 6 percent rate recorded in 2004. High oil prices and tighter monetary policy in several economies weigh on the outlook. In addition, growth in China is expected to cool somewhat from its blistering pace of recent years, as investment slows to a more sustainable rate. In Korea, growth is expected to slow from its strong second-quarter pace, but it still averages around 3½ percent next year and nearly 4 percent in 2007 as domestic demand strengthens.

In Latin America, real GDP was stagnant on average in the second quarter, as Mexican real GDP contracted because of weak manufacturing exports and a surprisingly poor performance by the agricultural sector. Mexican growth is projected to bounce back from its second-quarter drop, notwithstanding some restraint from slower U.S. growth in the near term, as agricultural production recovers. Growth in Mexico should strengthen further next year, in line with projected gains in U.S. manufacturing output. In Brazil, growth is now expected to slow a bit, to just below 3 percent, during the second half of the year, but then to edge up to 3¼ percent through the rest of the forecast period. All told, we see growth in the region rebounding to 3¼ percent in the second half of 2005 and improving to roughly 3¾ percent over the next two years.

Four-quarter consumer price inflation in emerging Asia is expected to increase a little from 3¼ percent this year to 3½ percent next year as the effects of increases in oil prices show through to consumer prices. Inflation should ease a bit in 2007. In Latin America, we expect four-quarter inflation of more than 4 percent for the next two years. A continuation of the downward trend in core inflation in Mexico, in part the result of monetary policy tightening in 2004 and early 2005, should be roughly offset by the effects in the region of higher energy prices.

Prices of Internationally Traded Goods

After increasing just over 2 percent at an annual rate in the second quarter, core import prices are expected to remain flat in the third quarter, partly because of the strengthening of the dollar earlier this year as well as some leveling off of commodity prices. Since the previous Greenbook, we have received monthly price data for both July and August. Flat core import prices in both months have led us to revise down our projection for core import price inflation in the third quarter by 2 percentage points.

We project that core import price inflation will step up to 2¾ percent at an annual rate in the fourth quarter because of the projected depreciation of the dollar, a bump up in foreign CPI inflation, and the recent run-up in natural gas prices. This projection is roughly ¾ percentage point higher than that in the previous Greenbook. (Excluding natural gas, core import prices are projected to rise just less than 2 percent in the fourth quarter, following an estimated decline of ¾ percent in the third quarter.) We project core import price inflation to fall below 1 percent in 2006 and then to edge down to ½ percent in 2007. The moderate pace of core import price inflation in 2006 and 2007 reflects our projection that commodity prices will stabilize and the dollar will depreciate only gradually over the forecast period. Additionally, we continue to assume that the expiration of the Multi-fiber Arrangement will exert downward pressure on core import prices over the forecast period.

July and August data suggest that core export price inflation will slow to 1½ percent (annual rate) in the third quarter from 3¾ percent in the second quarter. The decline reflects a slower rise in both domestic goods prices and primary commodity prices. We expect core export price inflation to remain at about 1½ percent in the fourth quarter before picking up slightly in 2006, in line with the projected increase in domestic goods prices. Our forecast for the fourth quarter and beyond is lower than that in the previous

Greenbook, reflecting a change in our forecasting procedure that places greater weight on commodity prices.

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

Trade category	2004	2005: H1	Projection			
			2005		2006	2007
			Q3	Q4		
Exports						
Core goods	5.1	5.0	1.4	1.4	1.7	1.3
August GB	5.1	5.0	3.0	2.5	2.2	. . .
Imports						
Non-oil core goods	4.3	3.3	0.0	2.8	.9	.5
August GB	4.3	3.4	2.0	2.0	.8	. . .
Excluding natural gas	3.7	3.2	-0.8	1.9	.8	.6
August GB	3.7	3.2	1.8	1.7	.7	. . .
Oil (dollars per barrel)	40.91	46.30	55.40	58.37	59.36	57.88
August GB	40.91	46.27	53.09	55.74	58.31	. . .

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.

Trade in Goods and Services

Our Greenbook forecast incorporates our admittedly highly uncertain estimate of how Hurricane Katrina will affect merchandise trade. Trade through the Gulf region’s ports accounts for about 6 percent of U.S. merchandise exports and 5 percent of U.S. merchandise imports. Although many ports sustained damage, they are now in the process of resuming operations. Shipments have also been diverted to other ports, further limiting the overall effect on U.S. trade. We assume that the net reduction in exports in September will amount to about 25 percent of the shipments that normally flow through the affected region. These hurricane-related losses reflect the destruction of warehoused goods and obstructions to shipping and air freight. With non-oil imports being somewhat easier than exports to shift away from the most affected Gulf ports to other points of entry, we assume that the reduction in non-oil imports in September amounts to roughly

15 percent of the amount that would normally enter through the region's ports. As ports continue to recover and shippers find alternative means of transport, trade begins to recover in October and is largely normalized by November.

We believe that Hurricane Katrina will leave a larger imprint on the pattern of oil imports. The immediate impact of the storm was to reduce oil imports, reflecting in part the temporary closure of the Louisiana Offshore Oil Port (LOOP), which is the largest U.S. import terminal and handles 11 percent of U.S. oil imports. Beyond the very near term, however, the effects of the hurricane will likely be to increase imports of crude oil to compensate for crude oil production outages in the Gulf of Mexico. However, this effect will be tempered by the release of crude oil from the SPR and diminished demand from the damaged refineries. Given reduced domestic capacity to refine crude oil into finished products, we project that additional quantities of products, particularly gasoline, will be imported in the fourth quarter. Overall, we project that growth in real imports of oil and refined oil products will be reduced about 7 percentage points (annual rate) in the third quarter but then boosted nearly 13 percentage points in the fourth quarter.

All told, our estimate of the direct effects of Hurricane Katrina on U.S. trade, including oil, is to depress the third-quarter growth of exports a little less than 1 percentage point (annual rate) and of imports about 1¼ percentage point. In the fourth quarter, as trade recovers from the disruption, growth in total merchandise exports is boosted about ¾ percentage point and in merchandise imports nearly 2 percentage points. These revisions increase the arithmetic contribution of real net exports to U.S. GDP growth by 0.1 percentage point in the third quarter and reduce it by 0.2 percentage point in the fourth quarter.

During the intermeeting period, we received nominal trade data for June and July. June nominal imports rose from a relatively strong May, led by gains in capital goods and oil. We now estimate that real imports fell about ¼ percent (annual rate) in the second quarter, a smaller rate of decline than we had previously projected.

Nominal imports declined in July and were well below our expectations, with weakness concentrated in core goods and services. In response to these data and the assumed effects of Katrina, we have revised down our projection for real import growth in the third quarter to 1 percent, 4 percentage points below the projection in the August Greenbook. Core imports are projected to rise only 1.8 percent, substantially less than would be predicted by U.S. growth and relative prices alone. In the fourth quarter, imports rebound from this sluggish pace as core imports respond to the step-up in U.S. GDP growth and oil imports surge. On balance, our forecast for import growth in the second half is 5.0 percent, about 1.7 percentage points lower than in the August Greenbook. This revision reflects the offsetting effects of the weak July data and the slower pace of U.S. growth on the one hand, and higher imports of oil products on the other.

In 2006 and 2007, real import growth is expected to remain firm at around 6¼ percent, as the effect on core imports of slowing U.S. growth is offset by a lessening drag from core import prices. Imports of computers and semiconductors are projected to rise steadily, whereas the growth of imported services eases, along with U.S. growth. Compared with the August Greenbook, our current projection for 2006 is little changed, in part because the path of the broad real dollar is about unchanged from the previous forecast.

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

Measure	2004	2005: H1	Projection			
			2005		2006	2007
			Q3	Q4		
Real exports	6.1	9.1	4.1	7.5	6.3	5.7
August GB	6.1	9.8	6.9	7.9	5.5	. . .
Real imports	10.6	3.5	1.0	9.1	6.2	6.1
August GB	10.6	3.0	5.0	8.6	5.9	. . .

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

In June, nominal exports of goods and services grew a bit from a very robust level in May. We now estimate that real exports expanded 10¾ percent (annual rate) in the second quarter. This pace, while quite rapid, is a bit weaker than in the August Greenbook projection, reflecting a significant downward revision to data on exports of services.

Nominal export data for July came in a touch weaker than we had expected. We now project that real exports of goods and services will decelerate to about 4 percent in the third quarter before bouncing back in the fourth. This pattern largely reflects the contour of core export growth. As with real imports, the quarterly pattern for the second half in part reflects the effects of Hurricane Katrina. The pattern for exports also reflects the effects of the ongoing strike at Boeing. Aircraft exports (which are part of core exports) are assumed to be held down in September and more so in the fourth quarter. On average during the second half of the year, growth in exports of computers and semiconductors is projected to ease a bit in the second half of this year from the second quarter's exceptional pace, while exports of services, after having stalled in the second quarter, rise to a pace in line with foreign GDP and relative prices.

Core export growth remains strong in early 2006, as aircraft exports recover. Although solid foreign GDP growth in 2006 and 2007 should continue to boost exports of core goods and services, the diminishing effects of past dollar depreciation provide some restraint. Our projection for total export growth in 2006 is now somewhat stronger than that in the August Greenbook, primarily reflecting the boost from aircraft early in the year.

Alternative Simulations

Oil prices have risen about $20 per barrel since the beginning of the year, and they could move markedly higher in response to a future significant supply disruption. To explore this possibility, we used SIGMA, the staff's forward-looking multi-country model, to analyze the effects of an immediate rise in oil prices to $100 per barrel, which is roughly 50 percent higher than the path projected in our baseline.[1]

In our first scenario, we consider a permanent oil shock that occurs in the last quarter of 2005. Both households and firms understand the nature of the shock. In this case, real GDP growth weakens about 0.3 percentage point in 2006, as consumer spending falls in response to the reduction in permanent income and as firms reduce investment in reaction to higher energy costs that depress the productivity of capital. The oil price shock causes the core PCE inflation rate to rise roughly 0.3 percentage point above baseline in 2006 and 2007. Rising energy costs also contribute to an immediate deterioration of the U.S. trade deficit equal to about 0.8 percentage point of GDP. Given that both firms and

[1] The implications of SIGMA for the effects of oil shocks that are reported below are within the range of estimates derived from other macroeconomic models used at the Board (these models include the FRB/Global model, and variants of the FRB/US model with either adaptive or model-consistent expectations).

households have limited ability to substitute away from energy in the short run, the effects on the trade balance persist through the forecast period.

In our second scenario, the rise in oil prices is temporary, with oil prices reverting to baseline after about three years. Households and firms correctly ascertain the path of the oil shock after the initial spike. The shock depresses real activity mainly in the near term, with real GDP growth declining about 0.2 percentage point below baseline through the first half of 2006. In 2007, growth moves above baseline as the economy begins to recover. Given that firms understand that the upward pressure on marginal costs is less persistent than if the shock had been permanent, the rise in the core PCE inflation rate is much smaller.

Alternative Simulations:
Higher Oil Prices
(Percent change from previous period, annual rate)

Indicator and simulation	2005		2006		2007	
	H1	H2	H1	H2	H1	H2
U.S. real GDP						
Baseline	3.5	3.4	3.9	3.0	2.9	2.9
Permanent Rise	3.5	3.1	3.5	2.7	2.8	2.9
Temporary Rise	3.5	3.2	3.7	3.0	3.0	3.0
U.S. PCE prices excluding food and energy						
Baseline	2.0	1.9	2.4	2.2	2.0	2.0
Permanent Rise	2.0	2.0	2.7	2.6	2.3	2.2
Temporary Rise	2.0	1.9	2.6	2.3	2.0	2.0
U.S. Trade Balance (percent of GDP)						
Baseline	-5.6	-5.9	-6.1	-6.0	-6.1	-6.0
Permanent Rise	-5.6	-6.7	-6.9	-6.8	-6.9	-6.7
Temporary Rise	-5.6	-6.7	-6.7	-6.4	-6.3	-6.1

Note. H1 is Q2/Q4; H2 is Q4/Q2. The federal funds rate is adjusted according to a Taylor rule.

OUTLOOK FOR FOREIGN REAL GDP AND CONSUMER PRICES: SELECTED COUNTRIES
(Percent, Q4 to Q4)

Measure and country	1999	2000	2001	2002	2003	2004	2005	2006	2007
							-----Projected----		
REAL GDP (1)									
Total foreign	5.0	4.2	0.3	3.0	2.9	3.7	2.9	3.3	3.3
Industrial Countries	4.4	3.5	0.8	2.5	1.8	2.4	2.4	2.6	2.5
of which:									
Canada	5.9	4.1	1.3	3.6	1.7	3.3	2.9	3.3	3.1
Japan	0.2	3.2	-1.9	1.5	2.2	0.9	2.9	1.6	1.6
United Kingdom	3.4	3.2	2.0	2.1	3.1	2.7	1.8	2.3	2.6
Euro Area (2)	4.0	3.0	0.9	1.1	0.9	1.5	1.4	1.6	1.7
Germany	3.5	2.3	1.1	0.2	0.2	0.5	1.3	1.2	1.5
Developing Countries	6.0	5.2	-0.4	3.6	4.6	5.5	3.7	4.4	4.5
Asia	8.6	5.7	1.1	6.0	6.5	5.9	5.3	5.0	5.1
Korea	11.5	4.5	4.6	7.8	4.2	3.0	3.3	3.6	3.9
China	7.1	7.7	7.0	8.4	10.0	9.5	8.1	7.3	7.3
Latin America	4.3	4.5	-1.3	1.5	2.4	5.1	2.0	3.8	3.8
Mexico	5.5	4.8	-1.3	2.0	2.1	4.8	1.3	3.8	3.8
Brazil	3.4	3.9	-0.9	4.2	0.9	4.7	3.2	3.2	3.2
CONSUMER PRICES (3)									
Industrial Countries	1.1	1.7	0.9	2.1	1.3	1.8	1.6	1.3	1.6
of which:									
Canada	2.4	3.1	1.1	3.8	1.7	2.3	2.5	1.8	2.0
Japan	-1.1	-1.2	-1.3	-0.5	-0.5	0.4	-0.6	0.2	0.4
United Kingdom (4)	1.2	1.0	1.0	1.5	1.3	1.4	2.3	1.8	1.9
Euro Area (2)	1.5	2.5	2.1	2.3	2.0	2.3	2.2	1.5	1.8
Germany	1.1	1.7	1.5	1.2	1.2	2.1	1.6	1.3	1.4
Developing Countries	4.6	4.1	2.8	2.8	3.1	3.9	3.5	3.7	3.4
Asia	0.1	1.9	1.2	0.7	2.2	3.2	3.3	3.5	3.1
Korea	1.2	2.5	3.3	3.4	3.5	3.4	3.1	4.2	3.2
China	-1.0	1.0	-0.1	-0.5	2.7	3.3	2.7	3.4	2.9
Latin America	12.5	8.4	5.3	6.4	4.9	5.6	3.9	4.2	4.1
Mexico	13.4	8.7	5.1	5.2	3.9	5.3	3.4	3.8	3.8
Brazil	8.4	6.4	7.5	10.7	11.5	7.2	5.7	5.0	4.1

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

OUTLOOK FOR FOREIGN REAL GDP AND CONSUMER PRICES: SELECTED COUNTRIES
(Percent changes)

			Projected									
	2005				2006				2007			
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	2.5	3.0	3.1	3.1	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.3
Industrial Countries	2.0	2.7	2.3	2.4	2.7	2.4	2.5	2.5	2.5	2.5	2.5	2.5
of which:												
Canada	2.1	3.2	3.2	3.1	3.7	3.1	3.3	3.2	3.1	3.1	3.1	3.1
Japan	5.8	3.3	1.3	1.4	1.5	1.6	1.7	1.7	1.6	1.6	1.6	1.5
United Kingdom	1.5	1.9	1.8	1.8	2.2	2.2	2.4	2.5	2.6	2.6	2.6	2.6
Euro Area (2)	1.5	1.2	1.4	1.4	1.5	1.5	1.6	1.6	1.7	1.7	1.8	1.8
Germany	3.0	0.0	1.0	1.0	1.1	1.2	1.2	1.3	1.4	1.5	1.5	1.6
Developing Countries	3.1	3.5	4.2	4.2	4.5	4.4	4.4	4.4	4.5	4.5	4.5	4.5
Asia	4.5	6.8	5.3	4.8	5.1	5.0	5.0	5.0	5.1	5.1	5.1	5.1
Korea	1.5	5.0	3.9	3.0	3.8	3.6	3.6	3.6	3.9	3.9	3.9	3.9
China	12.7	5.0	7.6	7.2	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Latin America	1.3	-0.0	3.2	3.4	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Mexico	0.7	-1.7	3.0	3.3	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Brazil	1.5	5.8	2.7	2.8	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
CONSUMER PRICES (3)	Four-quarter changes											
Industrial Countries	1.4	1.4	1.7	1.6	1.8	1.6	1.4	1.3	1.5	1.5	1.5	1.6
of which:												
Canada	2.1	1.9	2.6	2.5	2.6	2.3	1.9	1.8	1.9	2.1	2.0	2.0
Japan	-0.4	-0.4	-0.3	-0.6	-0.0	0.2	0.2	0.2	0.3	0.3	0.4	0.4
United Kingdom (4)	1.7	1.9	2.3	2.3	2.3	2.1	1.9	1.8	1.8	1.8	1.9	1.9
Euro Area (2)	2.0	2.0	2.2	2.2	2.2	1.9	1.6	1.5	1.8	1.8	1.8	1.8
Germany	1.7	1.6	1.7	1.6	1.9	1.6	1.4	1.3	1.4	1.4	1.4	1.4
Developing Countries	3.5	3.3	3.2	3.5	3.9	4.1	3.9	3.7	3.6	3.6	3.5	3.4
Asia	2.9	2.4	2.5	3.3	3.6	4.1	3.8	3.5	3.4	3.3	3.2	3.1
Korea	3.1	3.0	2.4	3.1	3.5	3.9	4.2	4.2	4.0	3.7	3.5	3.2
China	2.8	1.7	1.5	2.7	3.0	3.9	3.9	3.4	3.3	3.1	3.0	2.9
Latin America	4.9	5.0	4.5	3.9	4.2	4.0	4.1	4.2	4.1	4.1	4.1	4.1
Mexico	4.4	4.5	4.0	3.4	3.8	3.6	3.7	3.8	3.8	3.8	3.8	3.8
Brazil	7.4	7.7	6.2	5.7	5.2	4.5	5.1	5.0	4.7	4.4	4.2	4.1

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

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	1999	2000	2001	2002	2003	2004	------ 2005	Projected 2006	------ 2007
NIPA REAL EXPORTS and IMPORTS									
Percentage point contribution to GDP growth, Q4/Q4									
Net Goods & Services	-1.0	-0.9	-0.2	-0.9	-0.1	-0.9	0.1	-0.4	-0.4
Exports of G&S	0.6	0.7	-1.3	0.4	0.6	0.6	0.8	0.7	0.6
Imports of G&S	-1.6	-1.6	1.1	-1.3	-0.7	-1.5	-0.7	-1.0	-1.0
Percentage change, Q4/Q4									
Exports of G&S	5.6	6.5	-11.9	3.8	6.0	6.1	7.4	6.3	5.7
Services	5.3	1.8	-8.9	10.2	4.5	4.6	4.7	4.9	5.8
Computers	13.4	22.7	-23.5	-1.1	11.0	6.3	17.0	14.4	14.4
Semiconductors	34.6	27.6	-34.6	10.1	38.8	-6.1	12.0	17.0	17.0
Other Goods 1/	3.3	5.9	-10.2	0.7	4.5	7.8	8.0	6.0	4.6
Imports of G&S	12.1	11.2	-7.6	9.7	5.1	10.6	4.3	6.2	6.1
Services	6.6	10.6	-5.9	8.8	4.2	7.7	4.2	4.4	3.6
Oil	-3.4	13.3	3.7	3.8	1.5	9.7	-5.1	-1.2	2.0
Computers	26.0	13.9	-13.6	13.2	16.8	22.2	15.3	17.5	17.5
Semiconductors	34.2	22.8	-51.1	11.0	-0.2	9.4	8.1	17.0	17.0
Other Goods 2/	12.9	10.5	-6.5	10.1	5.1	10.5	5.1	7.4	6.7
Billions of Chained 2000 Dollars									
Net Goods & Services	-296.2	-379.5	-399.1	-471.3	-521.4	-601.3	-623.0	-646.4	-693.7
Exports of G&S	1008.2	1096.3	1036.7	1013.3	1031.2	1117.9	1199.2	1278.3	1349.2
Imports of G&S	1304.4	1475.8	1435.8	1484.6	1552.6	1719.2	1822.2	1924.7	2042.9
Billions of dollars									
US CURRENT ACCOUNT BALANCE	-300.1	-416.0	-389.5	-475.2	-519.7	-668.1	-799.9	-925.0	-1013.7
Current Acct as Percent of GDP	-3.2	-4.2	-3.8	-4.5	-4.7	-5.7	-6.4	-7.0	-7.3
Net Goods & Services (BOP)	-263.4	-378.3	-362.7	-421.2	-494.8	-617.6	-720.5	-798.7	-843.3
Investment Income, Net	19.1	25.7	30.3	15.5	51.8	36.2	16.3	-20.4	-62.6
Direct, Net	78.2	94.9	115.9	99.8	121.8	127.9	138.5	153.9	171.8
Portfolio, Net	-59.1	-69.2	-85.5	-84.3	-70.0	-91.7	-122.2	-174.3	-234.4
Other Income & Transfers,Net	-55.8	-63.5	-57.1	-69.5	-76.7	-86.7	-95.7	-105.9	-107.8

1. Merchandise exports excluding computers and semiconductors.
2. Merchandise imports excluding oil, computers, and semiconductors.

Class II FOMC
Restricted (FR)

September 14, 2005

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2002				2003				2004			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NIPA REAL EXPORTS and IMPORTS												
Percentage point contribution to GDP growth												
Net Goods & Services	-1.0	-0.6	-0.5	-1.5	0.1	-0.7	0.5	-0.5	-1.2	-1.4	-0.2	-1.0
Exports of G&S	0.5	1.0	0.3	-0.3	-0.3	-0.2	1.0	1.7	0.5	0.7	0.5	0.7
Imports of G&S	-1.4	-1.6	-0.8	-1.2	0.4	-0.5	-0.6	-2.2	-1.6	-2.0	-0.7	-1.7
Percentage change from previous period, s.a.a.r.												
Exports of G&S	5.2	10.6	2.9	-3.1	-2.9	-2.1	11.5	19.1	5.0	6.9	5.5	7.1
Services	22.9	2.7	4.6	11.7	-11.9	-6.6	17.2	23.7	-0.4	4.8	-0.6	15.5
Computers	-21.1	14.7	-6.0	12.6	-5.7	0.2	35.9	18.2	-7.4	1.6	21.7	11.5
Semiconductors	22.3	42.1	12.6	-25.0	34.8	33.9	43.7	43.2	7.0	-4.8	-19.4	-5.5
Other Goods 1/	-1.6	12.5	2.0	-9.1	0.0	-2.0	5.5	15.4	8.6	9.2	9.5	3.8
Imports of G&S	11.7	12.5	5.7	9.0	-2.5	3.3	4.1	16.5	12.0	14.5	4.7	11.3
Services	24.7	-3.0	1.7	14.0	-2.2	-10.2	21.4	10.7	10.0	13.7	4.6	3.1
Oil	-9.8	-10.3	-12.7	64.3	-9.0	7.8	-1.3	9.5	35.7	-26.0	-0.5	45.0
Computers	52.2	5.3	2.8	-0.2	11.5	12.4	8.7	36.4	21.2	34.3	25.3	9.5
Semiconductors	39.8	34.8	-6.2	-14.0	-6.7	1.5	-3.7	8.9	42.6	20.2	4.7	-20.3
Other Goods 2/	7.6	19.4	9.5	4.3	-2.6	5.8	0.7	17.7	8.4	20.4	4.0	9.7
Billions of Chained 2000 Dollars, s.a.a.r.												
Net Goods & Services	-441.3	-458.9	-472.2	-513.0	-510.7	-528.4	-516.2	-530.2	-563.0	-601.7	-606.5	-634.1
Exports of G&S	992.8	1018.0	1025.2	1017.2	1009.7	1004.5	1032.2	1078.4	1091.8	1110.2	1125.0	1144.5
Imports of G&S	1434.0	1476.9	1497.4	1530.2	1520.4	1532.9	1548.4	1608.6	1654.8	1711.9	1731.5	1778.6
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-440.4	-477.1	-480.3	-503.0	-546.6	-515.2	-515.9	-501.0	-584.4	-666.5	-667.9	-753.4
Current Account as % of GDP	-4.3	-4.6	-4.6	-4.7	-5.1	-4.8	-4.7	-4.5	-5.1	-5.7	-5.7	-6.3
Net Goods & Services (BOP)	-372.7	-413.8	-430.3	-467.9	-499.3	-491.4	-490.8	-497.7	-555.4	-608.2	-629.9	-676.9
Investment Income, Net	11.4	1.8	14.1	34.5	29.3	50.6	50.9	76.5	65.8	29.6	30.8	18.8
Direct, Net	100.5	91.4	95.0	112.2	102.3	117.4	119.9	147.8	140.3	116.3	121.4	133.7
Portfolio, Net	-89.2	-89.6	-80.9	-77.7	-72.9	-66.8	-69.0	-71.3	-74.6	-86.7	-90.6	-114.9
Other Inc. & Transfers, Net	-79.0	-65.1	-64.2	-69.6	-76.6	-74.4	-76.0	-79.7	-94.7	-88.0	-68.8	-95.3

1. Merchandise exports excluding computers and semiconductors.
2. Merchandise imports excluding oil, computers, and semiconductors.

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2005 Q1	2005 Q2	2005 Q3	2005 Q4	2006 Q1	2006 Q2	2006 Q3	2006 Q4	2007 Q1	2007 Q2	2007 Q3	2007 Q4
	Projected											
NIPA REAL EXPORTS and IMPORTS												
Percentage point contribution to GDP growth												
Net Goods & Services	-0.4	1.1	0.3	-0.7	-0.5	-0.1	-0.3	-0.6	-0.8	0.0	-0.2	-0.6
Exports of G&S	0.7	1.1	0.4	0.8	0.8	0.6	0.5	0.7	0.4	0.6	0.6	0.8
Imports of G&S	-1.1	0.0	-0.2	-1.4	-1.3	-0.7	-0.8	-1.3	-1.2	-0.6	-0.8	-1.4
Percentage change from previous period, s.a.a.r.												
Exports of G&S	7.5	10.7	4.1	7.5	7.8	5.3	5.2	7.1	3.7	5.9	5.8	7.5
Services	12.5	-0.6	3.2	4.2	4.7	4.8	5.0	5.1	5.5	5.8	5.9	5.9
Computers	12.6	26.9	14.3	14.8	14.4	14.4	14.4	14.4	14.4	14.4	14.4	14.4
Semiconductors	-12.9	26.9	21.1	17.7	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Other Goods 1/	6.1	14.8	3.1	8.2	8.4	4.4	4.2	7.2	1.6	4.9	4.7	7.4
Imports of G&S	7.4	-0.2	1.0	9.1	7.8	4.1	4.9	8.3	7.6	3.6	5.1	8.3
Services	3.7	4.9	3.1	4.9	5.7	4.5	3.7	3.7	3.7	3.6	3.6	3.6
Oil	3.4	-24.3	-12.8	18.8	3.4	-16.9	-7.9	20.4	13.8	-15.3	-6.4	19.8
Computers	11.3	13.5	18.8	17.7	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Semiconductors	-7.9	8.1	17.0	17.3	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0
Other Goods 2/	9.1	2.1	1.8	7.6	8.4	7.8	6.9	6.4	6.6	6.6	6.7	6.8
Billions of Chained 2000 Dollars, s.a.a.r.												
Net Goods & Services	-645.4	-614.4	-607.0	-625.1	-636.9	-639.5	-646.3	-662.9	-687.4	-686.2	-692.3	-709.0
Exports of G&S	1165.3	1195.2	1207.2	1229.2	1252.4	1268.7	1284.9	1307.3	1319.2	1338.2	1357.3	1382.1
Imports of G&S	1810.7	1809.6	1814.2	1854.3	1889.3	1908.2	1931.2	1970.1	2006.6	2024.4	2049.6	2091.1
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-785.4	-779.3	-771.8	-863.0	-906.9	-905.4	-932.1	-955.5	-1011.0	-1001.5	-1013.3	-1029.1
Current Account as % of GDP	-6.4	-6.3	-6.2	-6.8	-7.0	-6.9	-7.0	-7.1	-7.4	-7.3	-7.3	-7.3
Net Goods & Services (BOP)	-692.2	-693.3	-727.0	-769.4	-788.9	-792.6	-798.2	-815.1	-840.6	-836.3	-840.2	-856.2
Investment Income, Net	20.7	11.1	23.0	10.3	-4.1	-8.7	-27.8	-41.1	-54.5	-59.3	-65.0	-71.5
Direct, Net	125.2	127.1	150.6	151.0	152.5	151.1	153.9	157.9	163.7	169.3	174.7	179.7
Portfolio, Net	-104.4	-116.0	-127.6	-140.7	-156.6	-159.8	-181.8	-199.0	-218.2	-228.6	-239.6	-251.2
Other Inc. & Transfers, Net	-113.9	-97.1	-67.8	-103.8	-113.9	-104.0	-106.1	-99.3	-115.8	-105.8	-108.1	-101.3

1. Merchandise exports excluding computers and semiconductors.
2. Merchandise imports excluding oil, computers, and semiconductors.