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Part 1

September 18, 2002

CURRENT ECONOMIC AND FINANCIAL CONDITIONS

Summary and Outlook

September 18, 2002

Summary and Outlook

Domestic Developments

Since the August FOMC meeting, the tenor of economic reports has been mixed. Indicators of household and business spending have for the most part been solid, and motor vehicle production has provided a considerable lift to activity. But other factory output was flat in July and August, and the labor market has yet to show any persistent improvement. On balance, we estimate that real GDP has risen at an annual rate of 3-1/4 percent this quarter—on the strength of a very large increase in productivity—and we are projecting a 2 percent gain in the fourth quarter. This forecast for the second half of this year is just a shade higher than in the August Greenbook.

We project real GDP to increase 3-1/4 percent next year and about 3-3/4 percent in 2004. Stimulative monetary and fiscal policies should support the recovery, as should a gradual improvement of business confidence. Nonetheless, the pace of economic growth in the projection is not sufficient to prevent the unemployment rate from moving up in the near term (especially from its surprisingly low level in August), and with a projected continuation of the extended unemployment compensation program through 2004, we are forecasting the jobless rate to remain around 6 percent through next year. Thereafter, the unemployment rate should drift down slightly, ending the projection period at 5-3/4 percent. With this persistent slack in the labor market, we expect consumer price inflation to continue to edge lower.

Although we view this forecast as the most likely outcome for the economy, we have explored several alternative scenarios using FRB/US model simulations. These simulations focus on the possibilities of a prolonged stagnation of business investment, a sudden reacceleration of final demand, a decline in house prices, and faster growth of structural productivity.

Key Background Factors

With the economy expected to expand at about its potential pace next year, we have maintained our assumption of no change in the federal funds rate through the end of 2003. As the economy gains sufficient steam in 2004 to close the gap in resource utilization more noticeably, we have incorporated a gradual removal of monetary accommodation.

The stock market has remained volatile over the intermeeting period. Broad indexes of equity prices moved up after the August 14 deadline for CEOs and CFOs to certify their financial statements passed with few negative headlines, but they later retreated on concerns about the economy and the prospects for war with Iraq. On net, we have adjusted the assumed trajectory for equity prices up about 2 percent.

Interest rates on long-term Treasuries and other high-grade securities have moved down roughly 1/4 percentage point over the intermeeting period, while

rates on lower-rated bonds have come down more. In addition, trading conditions in the corporate bond market have improved somewhat since August 14. Nonetheless, spreads for riskier bonds remain wide, reflecting ongoing concerns about credit quality and considerable risk aversion on the part of lenders. Net business financing has continued to be subdued; this weakness partly reflects lingering tightness in financial conditions, but we believe the main cause is soft demand for credit. In contrast, household borrowing has remained robust, supported by the lowest mortgage rates in more than three decades, auto financing incentives, and an environment of readily available credit.

We continue to assume that stock prices will change little, on net, over the remainder of this year but will increase moderately over 2003 and 2004. In addition, as the recovery strengthens further, credit spreads are anticipated to narrow as Treasury yields move up somewhat and rates on risky corporate debt decline.

The projected path for the exchange value of the dollar is a touch higher than it was in the August Greenbook. We continue to project that the dollar will depreciate gradually over the projection period, with the broad real exchange rate moving down slightly more than 1 percent in each of 2003 and 2004. We also continue to expect a modest pickup in the pace of economic activity in foreign countries, though in this forecast we have shaded down our projection.

Crude oil prices currently stand near \$30 per barrel for West Texas intermediate—about \$3 per barrel higher than we had predicted in the August Greenbook. The recent increase has reflected not only the possibility of U.S. military action in Iraq but also low current exports from Iraq and tighter crude oil inventories in the United States. Looking ahead, futures prices point to a gradual decline in crude oil prices that totals about \$6 per barrel by late 2004.

Our underlying fiscal policy assumptions are little changed from the August Greenbook. Nonetheless, the outlook for the federal budget deficit has improved. For the current fiscal year, we are expecting a federal deficit of \$152 billion, a little lower than we had projected in August, reflecting a larger-than-expected corporate tax payment in September. We have carried forward that news on the effective corporate tax rate, and largely for this reason, we now project a deficit of \$161 billion in fiscal 2003—\$25 billion less than in the previous forecast. In fiscal 2004, as the economy continues to strengthen, we expect the deficit to narrow to \$125 billion.

Recent Developments and the Near-Term Forecast

We now estimate that real GDP increased at an annual rate of 1.5 percent in the second quarter, 0.4 percentage point faster than in the BEA's preliminary

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

Measure	2002:Q3		2002:Q4	
	Aug. GB	Sept. GB	Aug. GB	Sept. GB
Real GDP	2.7	3.2	2.2	2.0
Private domestic final purchases	2.7	4.2	1.2	.5
Personal consumption expenditures	3.7	4.8	1.2	1.1
Residential investment	-2.8	-1.5	-4.2	-3.6
Business fixed investment	-.9	2.6	3.3	-1.6
Government outlays for consumption and investment	3.4	3.3	3.5	3.2
	Contribution to growth (percentage points)			
Inventory investment	.0	-.6	.3	.9
Net exports	-.3	-.4	.2	.0

release. A larger accumulation of nonfarm inventories and greater strength in net exports account for most of this expected revision. In the current quarter, spending indicators have come in stronger than we anticipated in the August Greenbook, most notably consumption spending and orders for durable goods. But industrial production outside motor vehicles leveled off over the summer, and firms still have not added any substantial number of workers, on net, to their payrolls. Our projection for real GDP to rise at an annual rate of 3-1/4 percent this quarter balances these considerations and implies that productivity will increase at an annual rate of about 4-1/4 percent.

Personal consumption expenditures have been strong this quarter, especially for motor vehicles. Consumers responded vigorously to the motor vehicle industry's zero percent financing incentives, and light vehicle sales averaged an annual pace of more than 18-1/4 million units in July and August. The manufacturers boosted production sharply to meet this demand, and that increase has been sufficient in itself to contribute 1 percentage point (annual rate) to GDP growth in the current quarter. Makers have now extended the incentives to 2003 models, though at somewhat less generous levels; we expect light vehicle sales to ease off in September but to remain at a very solid pace—near 17 million units—through year-end. The motor vehicle companies apparently expect a similar stepdown in sales, and they have scheduled lower production in the fourth quarter; that reduction is expected to hold down GDP growth 1 percentage point next quarter—a key factor explaining our projection that real GDP growth will slow to about 2 percent in that period.

Consumer spending outside motor vehicles also was strong in July, and retail sales data point to a further modest gain in August. As a result, we are projecting an increase in real non-auto consumer outlays of about 3 percent at an annual rate in the third quarter. Overall, we have revised up our outlook for real PCE growth in the current quarter by more than 1 percentage point, to an annual rate of 4-3/4 percent. In the fourth quarter, consumer spending is expected to rise at a pace of only about 1 percent, with the drop-off in motor vehicle sales accounting for the bulk of that slowdown.

Spending on residential construction has also been well maintained. Low mortgage rates should continue to support residential construction, and we expect starts of new units for the rest of the year to average an annual pace of 1.67 million units, as they did in the second quarter.

Business spending on equipment and software posted its first increase in a year and a half in the second quarter and appears to have improved further at the beginning of the third quarter. In July, both shipments and new orders for capital equipment rose noticeably more than we had expected. Also, purchases of aircraft and motor vehicles increased in the third quarter—the latter reflecting both continued high sales of heavy trucks in advance of more stringent environmental regulations and the incentives on light vehicles, which were available to some business buyers as well as to consumers. In all, we are looking for equipment investment to rise at an annual rate of 10 percent in the current quarter. In the fourth quarter, when transportation spending should drop back, we expect to see just a small increase in overall equipment spending. Meanwhile, business investment in nonresidential structures remains depressed. Spending declined further in July for most categories of nonresidential construction, and we are anticipating real spending to decline at an annual rate of 18 percent in the current quarter and 9 percent in the fourth quarter.

Although exports increased rapidly in the second quarter, imports rose even faster, and net exports subtracted 1-1/2 percentage points from the growth in real GDP. We expect smaller increases in exports and imports during the second half of this year, and net exports should be only a small negative for GDP growth.

Inventories (outside motor vehicles) increased in July. But in light of the apparent strength in final sales and the weakness in industrial production, on net we expect to see little inventory investment for the third quarter as a whole. We expect restocking to pick up again in the months to come, however, and non-motor-vehicle inventories provide an important source of support for the growth in production in the fourth quarter.

As noted, the most recent news from the labor market has been disappointing. Few new jobs have been added on net to private payrolls since the spring, and the workweek in August reversed only a third of its sharp July drop. Furthermore, initial claims for unemployment insurance have gone back up to more than 400,000 per week, pointing to little net change in employment again in September. Such persistently weak hiring would typically be associated with an upward drift in the unemployment rate; yet this has not happened, and indeed the jobless rate dropped back to 5.7 percent in August. We are nonetheless looking for the unemployment rate to move back up to near 6 percent for the remainder of the year and for increases in private payrolls to rise only gradually to an average of 50,000 per month in the fourth quarter.

Price inflation remains moderate. The core CPI rose 0.3 percent in August, but the rise followed some smaller increases in the preceding few months, and both this measure and the core PCE price index (which is not yet available for August) have decelerated between 1/4 and 1/2 percentage point from their year-earlier rates. We look for continued small increases in core consumer prices in the coming months. We project gasoline prices to increase in response to the recent run-up in spot crude oil prices, but overall consumer price measures are expected to rise around the same rate as the core measures through year-end. Wage pressures also have been subdued on balance, and we expect increases in hourly compensation to continue to edge lower going forward.

The Longer-Term Outlook for the Economy

The forces driving the longer-term outlook in this projection are similar to those in the last. On the negative side are the ongoing adjustment to the drop over the last two years in equity prices, capital stocks that likely remain excessively high in some industries, and a general lack of business confidence that appears to be hindering spending and hiring. But offsetting these headwinds are several expansionary forces that should allow economic performance to gradually improve: An accommodative stance of monetary policy should continue to support both household and business expenditures; expansionary fiscal policy should boost demand in general, and the partial-expensing tax incentives should provide an especially important lift to investment in equipment and software; solid gains in structural productivity should support business earnings and household income; and a lower exchange value of the dollar should help tilt foreign and domestic demand toward U.S. goods and services.

Household spending. The restraint on the growth of consumer spending from the decline in stock market wealth over the past two years should diminish over time. In addition, PCE growth should be supported by low interest rates and by income growth that reflects both the gradual pickup in employment and substantial increases in structural productivity. We are projecting a rise in personal consumption expenditures of 2-1/2 percent next year, just a shade less

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

Measure	2003		2004
	H1	H2	
Real GDP	3.0	3.5	3.8
Previous	3.3	3.7	--
Final sales	2.6	3.6	3.8
Previous	2.7	3.5	--
PCE	2.4	2.6	3.1
Previous	2.4	2.6	--
Residential investment	1.1	2.1	4.2
Previous	-.8	-.1	--
BFI	7.3	10.4	10.5
Previous	8.4	10.8	--
Government purchases	2.8	2.9	2.9
Previous	3.0	2.8	--
Exports	6.3	8.8	8.1
Previous	7.0	9.6	--
Imports	7.6	6.2	7.6
Previous	7.6	7.0	--
	Contribution to growth, percentage points		
Inventory change	.5	.0	.0
Previous	.6	.2	--
Net exports	-.5	.0	-.3
Previous	-.4	-.1	--

than this year's increase. In 2004, with employment rising more rapidly and the next phase of income-tax rate reductions coming into effect, we are looking for PCE growth to step up to about 3 percent.

Low mortgage interest rates have sustained spending on residential investment despite the reduction in economic growth and the decline in wealth, and we expect this situation to continue over the forecast period. Indeed, we project both the number of housing starts and the level of real expenditures on residential construction to edge higher over the next two years.

Although we project ongoing strength in household spending, we have not built into our forecast the sort of strong rebound in either housing or durable goods consumption that is typical of the early stages of an economic expansion. Given that outlays in these categories did not experience the usual cyclical decline during the downturn, we are comfortable with such a projection. Nevertheless, we have included among our alternative simulations a scenario in which the low interest rates we expect to prevail over the projection period generate a notably stronger expansion than is embodied in the Greenbook baseline.

Business fixed investment. We expect business spending on equipment and software to continue to improve gradually as business pessimism fades and gives way to factors acting to stimulate spending, including low financing costs, the partial-expensing tax incentives, rising cash flow, depreciating capital stocks, and the increased need for capital to meet a growing demand for goods and services. To be sure, this improvement will not be evenly distributed across the economy; the makers of communications equipment, in particular, still seem a distance away from seeing any firming of demand for their products. But real spending on computers appears to be on an uptrend, and expenditures outside the high-tech area are strengthening as well. In all, after having risen at an annual rate of about 5-1/4 percent in the second half of this year, equipment and software spending are expected to increase around 12 percent in both 2003 and 2004.¹

In the nonresidential construction sector, high vacancy rates for office buildings and especially for industrial space point to further declines in spending going forward. We expect a considerably slower recovery for business spending on new structures than for investment in equipment, in part because the partial-expensing tax incentives do not extend to investment in structures and because structures depreciate only slowly. We are not expecting any firming in nonresidential construction until late next year, and our forecast calls for only modest increases in 2004.

Inventory investment. Next year, as the expansion solidifies, the pace of nonfarm, non-motor-vehicle inventory investment is expected to continue to move higher and to contribute about 1/4 percentage point to GDP growth. We

1. The partial-expensing incentives, which are scheduled to expire in late 2004, should remain a positive influence on the growth of investment spending in 2004 as a whole. However, because the extra investment that businesses make to take advantage of these incentives will come at the expense of spending that would otherwise have been made later, we expect to see a slowdown in investment growth in the fourth quarter of that year (and in 2005 as well) after the incentives expire.

project that inventory investment will be a roughly neutral factor for the growth of output in 2004.

Government spending. We expect federal government expenditures in the second half of this year to increase at an annual rate of more than 5 percent, reflecting greater spending in both the defense and nondefense areas, much of it relating to security. But the step-up in security spending should be largely in place by the end of this year, and we expect federal spending in 2003 and 2004 to rise 3 percent and 2-1/4 percent, respectively. By contrast, spending by state and local governments should be restrained in the near term by current fiscal pressures; this stringency should ease as the economy expands, and we expect state and local spending to rise 2-3/4 percent in 2003 and 3-1/4 percent in 2004.

Net exports. Strengthening foreign GDP growth and the recent and projected dollar depreciation should help real exports to continue expanding at a rate of around 8 percent over the forecast period. Meanwhile, import growth is expected to slow notably from this year's elevated pace. On net, we expect the arithmetic contribution of net exports to real GDP growth to be around -1/4 percentage point in each of the next two years—a notably smaller drag than we are expecting for 2002. This projection is essentially the same as that in the August Greenbook. (*The International Developments section provides more detail on the outlook for net exports.*)

Decomposition of Structural Labor Productivity

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

Measure	1973-95	1996-99	2000	2001	2002	2003	2004
Structural labor productivity	1.4	2.5	2.6	1.9	1.7	2.1	2.3
Previous	1.4	2.5	2.6	1.9	1.7	2.1	--
<i>Contributions¹</i>							
Capital deepening	.6	1.3	1.2	.4	.3	.4	.7
Previous	.6	1.3	1.2	.4	.3	.5	--
Multifactor productivity	.6	1.0	1.2	1.3	1.2	1.4	1.4
Previous	.6	1.0	1.2	1.3	1.2	1.4	--
Labor composition	.3	.3	.3	.3	.3	.3	.3
MEMO							
Potential GDP	2.9	3.5	3.6	2.9	2.7	3.1	3.3
Previous	2.9	3.5	3.6	2.9	2.7	3.1	--

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

1. Percentage points.

Aggregate Supply, the Labor Market, and the Outlook for Inflation

Our assumptions for structural productivity and potential GDP are unchanged from the August Greenbook. Reflecting the pattern of capital spending, structural labor productivity growth slows to 1-3/4 percent this year but moves back to 2 percent in 2003 and 2-1/4 percent in 2004. Admittedly, productivity gains this year have been well in excess of our structural estimates; we have interpreted these increases as reflecting the reluctance of businesses to increase hiring at present rather than as evidence that our assumptions about structural productivity are not generous enough. However, one of our alternative simulations assesses the implications for our projection of more rapid structural productivity growth.

Productivity and the labor market. As the expansion gains traction next year, we expect firms' caution in hiring gradually to diminish and changes in private payroll employment to trend upward, reaching about 200,000 per month by the latter part of next year and remaining at that pace in 2004. Through the middle of next year, we expect the unemployment rate to drift upward, peaking at 6.1 percent, and then to edge back down to 5.7 percent by the end of 2004. This path for the unemployment rate is boosted about 0.2 percentage point throughout the projection period by the federal temporary extended unemployment compensation (TEUC) program, which we have now assumed will be continued through the end of 2004. (In the August Greenbook, we assumed that these benefits would expire in mid-2003.)

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

Measure	2001	2002	2003	2004
Output per hour, nonfarm business	1.9	3.7	1.5	1.6
Previous	2.0	2.8	1.3	--
Nonfarm private payroll employment	-1.4	-.3	1.9	2.2
Previous	-1.4	-.1	1.9	--
Household employment survey	-1.0	.1	1.4	1.5
Previous	-1.0	.0	1.6	--
Labor force participation rate ¹	66.9	66.6	66.7	66.8
Previous	66.9	66.6	66.7	--
Civilian unemployment rate ¹	5.6	6.0	6.0	5.7
Previous	5.6	6.0	5.7	--

1. Percent, average for the fourth quarter.

In recent quarters, firms appear to have met demand by using their existing capital and labor resources particularly intensively, pushing the level of productivity well above our estimated structural trend. Although we expect hiring to remain subdued—and utilization therefore to remain especially intensive—for a while longer, we believe that such use of resources will not be maintained indefinitely. As demand continues to strengthen, firms will eventually want to add to their payrolls to bring employment into better alignment with output. We are therefore expecting productivity increases of only 1-1/2 percent per year in 2003 and 2004—somewhat less than our estimated growth rates for structural productivity.

Prices and wages. The outlook for core PCE inflation is little changed from the August Greenbook. After having run at an annual rate of just under 2 percent in 2000 and 2001, core PCE inflation is projected to come in at only 1.6 percent this year and then to edge lower to 1.4 percent in 2003 and 1.3 percent in 2004. This year's reduction in core inflation—as well as a notable deceleration in food prices—has helped to offset a turnaround of 15 percentage points in energy prices; overall PCE inflation is expected to show an increase of 1-3/4 percent this year, just 1/4 percentage point higher than in 2001. Overall PCE price inflation is expected to post essentially the same increases as core inflation in 2003 and 2004.

The decline in core inflation this year reflects downward pressure from economic slack as well as the lagged indirect effects of last year's big drop in energy prices on firms' costs. With energy prices having backed up this year, that indirect benefit should be essentially eliminated over the forecast period; the faster rise in import prices from now on ought to exert a small upward influence on consumer price inflation as well. Nevertheless, the persistence of economic slack, modest inflation expectations, and our anticipated pickup in structural productivity growth in 2003 and 2004 combine to produce some further downward movement of core consumer price inflation over the next two years.

On the compensation side, nonfarm compensation per hour is likely to increase around 3-3/4 percent this year, up from a very small rise in 2001 that was held down by a reduction in the pace of stock option exercises. We also expect a 3-3/4 percent increase this year in the ECI for hourly compensation (which does not include stock options). Both compensation measures are projected to decelerate next year, reflecting the influence of labor market slack and the lagged effects of falling inflation. That deceleration should be concentrated in the wage and salary component of employee compensation. As in previous Greenbooks, a continuation of rapid increases in health insurance premiums is expected to exert upward pressure on labor costs, as is some firming of bonuses. Indeed, we expect the benefits component of the ECI to accelerate from an

Inflation Projections

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

Measure	2001	2002	2003	2004
PCE chain-weighted price index	1.5	1.7	1.4	1.3
Previous	1.5	1.6	1.4	--
Food and beverages	3.1	1.4	2.0	1.9
Previous	3.1	1.6	2.0	--
Energy	-10.3	5.6	-2.0	-.4
Previous	-10.3	4.2	-1.6	--
Excluding food and energy	1.9	1.6	1.4	1.3
Previous	1.9	1.4	1.4	--
Consumer price index	1.9	2.2	1.8	1.7
Previous	1.9	2.1	1.8	--
Excluding food and energy	2.7	2.2	2.1	1.9
Previous	2.7	2.1	2.1	--
GDP chain-weighted price index	2.0	1.2	1.5	1.4
Previous	2.0	1.2	1.5	--
ECI for compensation of private industry workers ¹	4.2	3.8	3.4	3.4
Previous	4.2	3.8	3.4	--
NFB compensation per hour	1.4	3.7	3.3	3.2
Previous	1.4	3.3	3.2	--
Prices of core non-oil merchandise imports	-2.9	1.5	2.9	1.7
Previous	-2.9	2.3	2.9	--

1. December to December.

increase of 4-3/4 percent this year to 5-1/2 percent in 2003 and 5-3/4 percent in 2004.

Financial Flows and Conditions

Domestic nonfinancial debt is projected to grow at a pace of around 6 percent through mid-2003 and to slow a bit thereafter. This general contour has changed little since the August Greenbook and reflects mostly the anticipated slowing of federal borrowing from its elevated pace in 2002 and the first half of 2003. Growth in nonfederal debt is expected to be about flat as slower growth in household and state and local debt is offset by an upturn in business borrowing.

The anticipated slowdown in federal debt issuance reflects the recovery of the economy—and associated strengthening in revenues—over the forecast period, as well as the phase-in of only relatively small tax cuts in 2004 as part of last year's tax act. Debt growth in the state and local sector, which in 2002 is projected to reach its fastest rate since 1987, also moderates over the forecast period as budget conditions for these governments improve and the financing environment offers fewer opportunities for advance refunding.

Growth in the debt of nonfinancial businesses is expected to pick up over the coming quarters from a downward-revised pace in the current quarter. Demand for funds is projected to revive with the upturn in investment spending. In addition, the difficult market conditions that prevailed through mid-August have improved somewhat and are not anticipated to be much of a drag on business borrowing going forward—except for companies with bleak prospects, such as telecom firms. Business debt growth is forecast to reach 4 percent in the fourth quarter of this year and to strengthen gradually to about 5-1/2 percent by 2004.

Household borrowing in the near term remains buoyed by low mortgage rates and auto incentives but is expected to slow somewhat over the next two years, with debt growth dropping from about 8-3/4 percent this year to 6-3/4 percent in 2003 and 2004. Mortgage debt accounts for most of the slowing, as our projection of smaller increases in existing home prices going forward limits the growth of home equity against which households can borrow.

M2 has continued to increase at a robust pace in the current quarter as declining stock prices and elevated volatility have driven investors to seek the safety and liquidity of deposits and money funds. Despite some projected slowing in the fourth quarter, we expect M2 growth for the year to come in at 6-3/4 percent, 3/4 percentage point higher than the estimate in the last Greenbook. In 2003 and 2004, M2 grows at a more modest pace, a bit below that of nominal GDP. In part, the slowdown in 2003 reflects the reversal of mortgage-refinancing effects as refinancing activity recedes from its exceptional recent pace. In addition, with markets expected to become more settled, the anticipated unwinding of the portfolio shifts seen this year acts as a drag on M2 growth. In 2004, monetary policy tightening raises the opportunity cost of holding M2, and M2 growth slows further.

Alternative Simulations

In this section, we report simulations of the FRB/US model to illustrate several important risks to the forecast. The first three scenarios focus on shocks to aggregate demand—the chance that the current slump in equipment investment will persist longer than we are projecting in the baseline forecast, the risk that real estate prices will begin to slide and restrain consumer spending, and the possibility that the present low level of interest rates will bring about a sharp

rebound in economic activity. We then turn to a discussion of supply-side risks. The first of these scenarios addresses the chance that we have understated the growth of structural productivity and potential output, while the second examines the effects of a lower NAIRU. In all these scenarios, we assume that the federal funds rate follows the baseline path. However, in our final scenario we consider a path for the funds rate based on the expectations currently embedded in the futures market for federal funds.

Weaker investment. In the baseline outlook, low interest rates, tax incentives, and a pickup in overall activity support the continued gradual recovery of business investment. However, we may have understated the restraint imposed by the high levels of excess capacity in many sectors, and we may have overstated the stimulus from the temporary expensing provision. We illustrate these possibilities by considering a scenario in which the pickup in spending on equipment and software over the next two years is only half as great as in the baseline. In this alternative, real GDP grows nearly 1 percentage point less in both 2003 and 2004, and the unemployment rate ends the projection period above 6-1/4 percent. Despite the increase in labor market slack, inflation is little affected because the reduction in capital deepening reduces structural productivity, putting upward pressure on unit labor costs.

Real estate slump. The significant climb in house prices in recent years has spawned commentaries that a residential real estate “bubble” may have developed. Although we think that bubble-related concerns are overstated, we admit the risk that the real estate market could cool abruptly and that prices might even begin to fall. In this scenario, we assume that, rather than rising at an annual rate of about 3 percent as in the baseline, nominal house prices fall about 2 percent per year over the forecast period. After adjustment for overall inflation, such negative shocks to house prices would be similar to those seen during the severe real estate slumps of the early 1980s and early 1990s. The direct effect on consumer spending of this gradual decline in household wealth is relatively modest. But falling house prices also imply a reduction in the amount of capital gains realized in the turnover of existing homes. Some preliminary econometric evidence suggests that home sellers consume a significant fraction of such gains; if the estimated magnitude of this “realizations” effect is incorporated into the staff’s model, the consequences of a real estate slump become more noticeable—real GDP growth is trimmed about 1/2 percentage point in 2004, the unemployment rate stays in the vicinity of 6 percent, and inflation is a touch more subdued.

Stronger rebound. In the staff outlook, the current low level of the real funds rate is assumed to be consistent with only a modest pickup in activity because offsetting factors now restraining the economy—falling household wealth, capital overhangs, and the elevated dollar—are expected to dissipate only

Alternative Scenarios

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

Measure	2002		2003		2004
	H1	H2	H1	H2	
<i>Real GDP</i>					
Baseline	3.2	2.6	3.0	3.5	3.8
Weaker investment	3.2	2.5	2.4	2.5	2.9
Real estate slump	3.2	2.5	2.8	3.2	3.3
Stronger rebound	3.2	2.6	4.3	5.1	4.7
Faster productivity growth	3.2	2.9	3.8	4.3	4.5
Low NAIRU	3.2	2.7	3.1	3.6	3.7
Futures-based funds rate	3.2	2.6	3.2	3.6	3.4
<i>Civilian unemployment rate¹</i>					
Baseline	5.9	6.0	6.1	6.0	5.7
Weaker investment	5.9	6.0	6.2	6.3	6.4
Real estate slump	5.9	6.0	6.2	6.1	6.1
Stronger rebound	5.9	6.0	5.9	5.4	4.5
Faster productivity growth	5.9	6.1	6.2	5.9	5.5
Low NAIRU	5.9	6.0	6.1	5.9	5.6
Futures-based funds rate	5.9	6.0	6.1	5.9	5.8
<i>PCE prices excluding food and energy</i>					
Baseline	1.5	1.7	1.5	1.4	1.3
Weaker investment	1.5	1.7	1.5	1.4	1.3
Real estate slump	1.5	1.7	1.5	1.4	1.2
Stronger rebound	1.5	1.7	1.5	1.5	1.6
Faster productivity growth	1.5	1.6	1.3	1.1	.9
Low NAIRU	1.5	1.5	1.2	1.0	.8
Futures-based funds rate	1.5	1.7	1.5	1.5	1.3

1. Average for the final quarter of the period.

slowly. In effect, we have assumed that the equilibrium real funds rate will be unusually low for at least the next two years. In this scenario, we assume that the factors that have been holding down the equilibrium federal funds rate will fade more quickly. Specifically, we assume that private spending (particularly in the interest-sensitive sectors of the economy) increases more rapidly over the next two years, by an amount consistent with an equilibrium real rate that is close to its historical average. These spending surprises—which would not be exceptionally large by historical standards—cause real GDP to increase about 4-3/4 percent in both 2003 and 2004. As a result, the unemployment rate falls below the NAIRU in 2004, and inflation begins to edge up.

Faster structural productivity growth. We may have been too cautious in translating the recent large gains in output per hour into our estimates of past and future structural productivity. In this scenario, we assume that potential output this year and through 2004 increases 1/2 percentage point faster than in the baseline. This faster growth implies brighter long-run prospects for earnings and income and so strengthens the outlook for business and household spending. However, because we assume that this more optimistic assessment is already the view of investors, equity prices and long-term interest rates are little changed from the baseline. All told, real GDP growth picks up to 4-1/4 percent by the second half of next year, a little faster than potential. As a result, the unemployment rate is a touch below baseline by late 2004. But despite a slightly tighter labor market, strong productivity performance leads to a deceleration in unit labor costs; hence core inflation falls below 1 percent in 2004.

Low NAIRU. This scenario considers the possibility that the staff's estimate of the NAIRU may be too high and, as an alternative, assumes that the NAIRU is currently—and has been for some time—4-1/4 percent. Owing to its effects on the level of potential output, the lower NAIRU puts significant downward pressure on prices and provides a slight boost to GDP in 2003. But with the nominal federal funds rate assumed the same as in the baseline, lower inflation generates a higher real funds rate, which restrains output growth in 2004.

Market-based funds rate. Futures quotes are consistent with a slight decline in the funds rate toward the end of this year, followed by increases from mid-2003 through the end of 2004. In 2003, the stance of monetary policy is slightly more stimulative, on balance, than in the baseline, pushing up GDP growth a touch. In 2004, the funds rate averages about 60 basis points higher than baseline, and GDP growth slows—though not enough to have an appreciable effect on either the unemployment rate or inflation.

Interval	Nominal GDP		Real GDP		GDP chain-weighted price index		Consumer price index ¹		Unemployment rate ²		
	08/07/02	09/18/02	08/07/02	09/18/02	08/07/02	09/18/02	08/07/02	09/18/02	08/07/02	09/18/02	
ANNUAL											
2000	5.9	5.9	3.8	3.8	2.1	2.1	3.4	3.4	4.0	4.0	
2001	2.6	2.6	0.3	0.3	2.4	2.4	2.8	2.8	4.8	4.8	
2002	3.4	3.5	2.3	2.4	1.1	1.1	1.5	1.6	5.9	5.9	
2003	4.4	4.3	2.9	2.8	1.4	1.4	1.9	2.0	5.8	6.1	
2004		5.2		3.7		1.5		1.8		5.8	
QUARTERLY											
2001	Q1	3.0	3.0	-0.6	-0.6	3.7	3.7	4.0	4.0	4.2	4.2
	Q2	0.9	0.9	-1.6	-1.6	2.5	2.5	3.2	3.2	4.5	4.5
	Q3	1.9	1.9	-0.3	-0.3	2.2	2.2	0.7	0.7	4.8	4.8
	Q4	2.2	2.2	2.7	2.7	-0.5	-0.5	-0.2	-0.2	5.6	5.6
2002	Q1	6.5	6.5	5.0	5.0	1.3	1.3	1.4	1.4	5.6	5.6
	Q2	2.3	2.6	1.2	1.5	1.2	1.1	3.4	3.4	5.9	5.9
	Q3	3.5	4.3	2.7	3.2	0.8	1.1	1.7	1.8	6.0	5.8
	Q4	3.4	3.2	2.2	2.0	1.3	1.2	1.9	2.2	6.0	6.0
2003	Q1	5.0	4.8	3.3	2.9	1.7	1.9	1.8	2.0	6.0	6.1
	Q2	4.8	4.6	3.4	3.1	1.4	1.5	1.8	1.8	5.9	6.1
	Q3	5.0	4.8	3.6	3.4	1.4	1.4	1.9	1.8	5.7	6.0
	Q4	5.3	5.1	3.8	3.7	1.4	1.4	1.9	1.8	5.7	6.0
2004	Q1		5.6		3.8		1.8		1.8		5.9
	Q2		5.3		3.9		1.4		1.8		5.9
	Q3		5.3		3.9		1.3		1.7		5.8
	Q4		4.8		3.5		1.3		1.7		5.7
TWO-QUARTER³											
2001	Q2	1.9	1.9	-1.1	-1.1	3.1	3.1	3.5	3.5	0.5	0.5
	Q4	2.1	2.1	1.2	1.2	0.8	0.8	0.2	0.2	1.1	1.1
2002	Q2	4.4	4.5	3.1	3.2	1.3	1.2	2.4	2.4	0.3	0.3
	Q4	3.5	3.7	2.4	2.6	1.1	1.1	1.8	2.0	0.1	0.1
2003	Q2	4.9	4.7	3.3	3.0	1.6	1.7	1.8	1.9	-0.1	0.1
	Q4	5.1	5.0	3.7	3.5	1.4	1.4	1.9	1.8	-0.2	-0.1
2004	Q2		5.5		3.8		1.6		1.8		-0.1
	Q4		5.1		3.7		1.3		1.7		-0.2
FOUR-QUARTER⁴											
2000	Q4	4.6	4.6	2.3	2.3	2.3	2.3	3.4	3.4	-0.1	-0.1
2001	Q4	2.0	2.0	0.1	0.1	2.0	2.0	1.9	1.9	1.6	1.6
2002	Q4	3.9	4.1	2.7	2.9	1.2	1.2	2.1	2.2	0.4	0.4
2003	Q4	5.0	4.9	3.5	3.3	1.5	1.5	1.8	1.8	-0.3	-0.1
2004	Q4		5.3		3.8		1.4		1.7		-0.3

1. For all urban consumers.

2. Level, except as noted.

3. Percent change from two quarters earlier; for unemployment rate, change in percentage points.

4. Percent change from four quarters earlier; for unemployment rate, change in percentage points.

REAL GROSS DOMESTIC PRODUCT AND RELATED ITEMS, ANNUAL VALUES
(Seasonally adjusted annual rate)

September 18, 2002

Item	Units ¹	- - Projected - -								
		1996	1997	1998	1999	2000	2001	2002	2003	2004
EXPENDITURES										
Nominal GDP	Bill. \$	7813.2	8318.4	8781.5	9274.3	9824.6	10082.2	10438.1	10887.0	11455.1
Real GDP	Bill. Ch. \$	7813.2	8159.5	8508.9	8859.0	9191.4	9214.5	9437.3	9704.1	10062.6
Real GDP	% change	4.1	4.3	4.8	4.3	2.3	0.1	2.9	3.3	3.8
Gross domestic purchases		4.3	5.0	5.8	5.2	2.9	0.1	3.4	3.4	3.9
Final sales		3.9	3.9	4.7	4.2	2.6	1.6	1.8	3.1	3.8
Priv. dom. final purchases		4.4	5.1	6.3	5.2	3.7	0.9	2.1	3.2	4.1
Personal cons. expenditures		3.1	4.1	5.0	5.0	3.5	2.8	2.7	2.5	3.1
Durables		5.0	8.8	12.7	10.0	3.8	13.2	2.4	3.7	4.5
Nondurables		3.2	2.5	5.0	4.9	3.0	1.7	3.1	2.5	2.7
Services		2.7	3.9	3.6	4.0	3.8	1.3	2.6	2.3	3.0
Business fixed investment		12.1	11.8	12.3	6.6	6.2	-9.3	-1.9	8.8	10.5
Equipment & Software		11.8	13.7	14.9	9.7	5.2	-8.8	2.7	11.9	12.3
Nonres. structures		12.8	6.5	4.9	-2.5	9.3	-10.6	-14.9	-1.2	4.2
Residential structures		5.6	3.5	10.0	4.0	-1.2	1.0	2.8	1.6	4.2
Exports		9.8	8.5	2.3	4.9	7.3	-11.4	7.3	7.6	8.1
Imports		11.2	14.3	10.8	11.9	11.1	-8.0	10.3	6.9	7.6
Gov't. cons. & investment		2.7	2.4	2.7	4.5	1.3	5.1	3.4	2.9	2.9
Federal		2.0	0.1	0.6	4.0	-1.2	7.5	6.4	2.9	2.2
Defense		0.8	-1.4	-0.8	4.4	-2.5	7.4	7.1	2.7	1.4
State & local		3.0	3.7	3.8	4.8	2.6	3.9	1.8	2.8	3.3
Change in bus. inventories	Bill. Ch. \$	30.0	63.8	76.7	62.8	65.0	-61.4	-2.1	40.7	48.4
Nonfarm		21.2	60.6	75.0	64.1	67.2	-63.2	-3.7	39.5	46.8
Net exports		-89.0	-113.3	-221.1	-320.5	-398.8	-415.9	-483.5	-524.4	-554.1
Nominal GDP	% change	6.0	6.2	6.0	5.9	4.6	2.0	4.1	4.9	5.3
EMPLOYMENT AND PRODUCTION										
Nonfarm payroll employment	Millions	119.6	122.7	125.9	128.9	131.7	131.9	130.8	132.3	135.0
Unemployment rate	%	5.4	4.9	4.5	4.2	4.0	4.8	5.9	6.1	5.8
Industrial prod. index	% change	5.8	7.4	3.5	4.3	2.6	-5.9	2.8	4.0	4.4
Capacity util. rate - mfg.	%	81.6	82.7	81.4	80.6	80.7	75.1	74.1	75.5	77.9
Housing starts	Millions	1.48	1.47	1.62	1.64	1.57	1.60	1.68	1.70	1.75
Light motor vehicle sales		15.05	15.06	15.43	16.78	17.24	17.02	16.89	17.07	17.22
North Amer. produced		13.34	13.12	13.41	14.30	14.38	13.94	13.60	13.75	13.80
Other		1.70	1.93	2.02	2.48	2.86	3.08	3.29	3.32	3.42
INCOME AND SAVING										
Nominal GNP	Bill. \$	7831.2	8325.4	8778.1	9297.1	9848.0	10104.1	10426.1	10871.9	11433.9
Nominal GNP	% change	5.9	6.0	5.8	6.4	4.6	2.1	3.6	4.9	5.1
Nominal personal income		5.9	6.3	6.7	5.1	7.7	1.4	4.2	4.6	4.8
Real disposable income		2.6	3.8	5.0	2.4	4.8	0.3	5.6	2.2	3.5
Personal saving rate	%	4.8	4.2	4.7	2.6	2.8	2.3	3.6	3.6	4.0
Corp. profits, IVA & CCAdj.	% change	11.4	9.9	-9.6	7.0	-9.1	8.2	-2.6	5.4	3.5
Profit share of GNP	%	9.6	10.0	8.9	8.7	8.0	7.2	7.6	7.5	7.5
Excluding FR Banks		9.4	9.7	8.6	8.4	7.7	7.0	7.4	7.3	7.3
Federal surpl./deficit	Bill. \$	-136.8	-53.3	43.8	111.9	206.9	72.0	-183.7	-152.4	-133.9
State & local surpl./def.		21.4	31.0	40.7	38.3	18.0	-31.3	-42.9	-26.1	-4.5
Ex. social ins. funds		18.7	29.9	40.0	37.4	17.8	-31.2	-42.8	-26.0	-4.4
Gross natl. saving rate	%	17.2	18.0	18.8	18.3	18.4	16.5	15.4	16.0	16.8
Net natl. saving rate		5.7	6.7	7.5	6.8	6.7	3.8	2.3	2.6	3.4
PRICES AND COSTS										
GDP chn.-wt. price index	% change	1.9	1.8	1.1	1.6	2.3	2.0	1.2	1.5	1.4
Gross Domestic Purchases										
chn.-wt. price index		1.9	1.4	0.8	1.9	2.5	1.3	1.6	1.5	1.4
PCE chn.-wt. price index		2.3	1.5	1.1	2.0	2.5	1.5	1.7	1.4	1.3
Ex. food and energy		1.8	1.7	1.6	1.5	1.8	1.9	1.6	1.4	1.3
CPI		3.2	1.9	1.5	2.6	3.4	1.9	2.2	1.8	1.7
Ex. food and energy		2.6	2.2	2.3	2.1	2.5	2.7	2.2	2.1	1.9
ECI, hourly compensation ²		3.1	3.4	3.5	3.4	4.4	4.2	3.8	3.4	3.4
Nonfarm business sector										
Output per hour		2.3	2.2	2.9	2.9	2.1	1.9	3.7	1.5	1.6
Compensation per Hour		3.2	3.4	5.3	4.3	7.2	1.4	3.7	3.3	3.2
Unit labor cost		0.9	1.1	2.3	1.4	4.9	-0.5	0.1	1.8	1.6

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

Item	Units	Projected									
		2000 Q1	2000 Q2	2000 Q3	2000 Q4	2001 Q1	2001 Q2	2001 Q3	2001 Q4	2002 Q1	2002 Q2
EXPENDITURES											
Nominal GDP	Bill. \$	9649.5	9820.7	9874.8	9953.6	10028.1	10049.9	10097.7	10152.9	10313.1	10379.0
Real GDP	Bill. Ch. \$	9097.4	9205.7	9218.7	9243.8	9229.9	9193.1	9186.4	9248.8	9363.2	9397.2
Real GDP	% change	2.6	4.8	0.6	1.1	-0.6	-1.6	-0.3	2.7	5.0	1.5
Gross domestic purchases		3.6	5.7	1.2	1.3	-1.1	-1.1	-0.1	2.9	5.6	2.8
Final sales		4.4	3.1	1.7	1.3	2.8	-0.4	-0.2	4.2	2.4	-0.0
Priv. dom. final purchases		6.9	3.8	3.1	1.1	1.5	-1.2	0.3	3.0	2.5	1.3
Personal cons. expenditures		5.3	3.0	3.8	2.1	2.4	1.4	1.5	6.0	3.1	1.8
Durables		17.8	-3.7	8.1	-5.3	11.5	5.3	4.6	33.6	-6.3	1.9
Nondurables		2.2	4.9	2.0	2.7	2.3	-0.3	1.3	3.6	7.9	-0.1
Services		4.4	3.6	3.9	3.3	0.6	1.5	0.9	2.1	2.9	2.7
Business fixed investment		15.0	10.2	3.5	-3.2	-5.4	-14.5	-6.0	-10.9	-5.8	-2.6
Equipment & Software		15.5	10.9	0.9	-5.4	-6.3	-16.7	-9.2	-2.5	-2.7	3.2
Nonres. structures		13.8	8.2	12.1	3.6	-3.1	-8.4	2.9	-30.1	-14.2	-18.2
Residential structures		8.3	-3.0	-9.3	0.0	8.2	-0.5	0.4	-3.5	14.2	2.9
Exports		7.7	14.6	11.6	-4.0	-6.0	-12.4	-17.3	-9.6	3.5	14.3
Imports		14.7	18.6	13.8	-1.6	-7.9	-6.8	-11.8	-5.3	8.5	22.5
Gov't. cons. & investment		-1.2	4.6	-1.0	2.9	5.7	5.6	-1.1	10.5	5.6	1.6
Federal		-13.2	16.0	-7.2	2.0	9.5	6.0	1.2	13.5	7.4	7.7
Defense		-19.9	15.0	-6.1	4.7	8.3	2.7	4.6	14.3	11.6	7.6
State & local		5.6	-0.8	2.4	3.3	3.8	5.4	-2.3	8.9	4.6	-1.4
Change in bus. inventories	Bill. Ch. \$	45.3	91.5	63.1	59.9	-26.9	-58.3	-61.8	-98.4	-28.9	8.6
Nonfarm		58.9	88.6	64.6	56.8	-32.6	-54.9	-63.6	-101.5	-35.1	7.9
Net exports		-368.8	-394.6	-413.1	-418.5	-404.5	-414.8	-419.0	-425.3	-446.6	-488.4
Nominal GDP	% change	5.7	7.3	2.2	3.2	3.0	0.9	1.9	2.2	6.5	2.6
EMPLOYMENT AND PRODUCTION											
Nonfarm payroll employment	Millions	131.0	131.8	131.9	132.2	132.4	132.2	131.9	131.1	130.8	130.7
Unemployment rate	%	4.0	4.0	4.1	4.0	4.2	4.5	4.8	5.6	5.6	5.9
Industrial prod. index	% change	5.8	7.0	0.6	-2.6	-6.1	-5.9	-4.7	-6.7	2.6	4.1
Capacity util. rate - mfg.	%	81.2	81.6	80.7	79.1	77.2	75.6	74.5	73.1	73.5	74.0
Housing starts	Millions	1.66	1.59	1.50	1.54	1.61	1.62	1.60	1.57	1.73	1.67
Light motor vehicle sales		18.15	17.14	17.42	16.26	16.95	16.54	16.23	18.37	16.34	16.35
North Amer. produced		15.29	14.27	14.56	13.41	14.04	13.51	13.23	15.00	13.04	13.10
Other		2.86	2.87	2.86	2.85	2.90	3.04	3.00	3.37	3.31	3.25
INCOME AND SAVING											
Nominal GNP	Bill. \$	9670.5	9846.4	9892.5	9982.8	10038.0	10081.0	10109.3	10188.1	10314.9	10362.7
Nominal GNP	% change	5.3	7.5	1.9	3.7	2.2	1.7	1.1	3.2	5.1	1.9
Nominal personal income		13.2	6.9	6.8	4.2	3.9	0.8	1.4	-0.2	5.1	5.0
Real disposable income		8.4	4.8	4.3	1.8	-0.1	-0.6	10.5	-7.6	14.6	3.7
Personal saving rate	%	2.6	2.9	2.9	2.9	2.4	1.9	4.0	0.8	3.5	3.9
Corp. profits, IVA & CCAdj.	% change	-8.0	-0.1	-9.4	-17.9	-21.1	8.7	-17.7	94.4	-6.6	-3.6
Profit share of GNP	%	8.4	8.2	8.0	7.5	7.0	7.2	6.8	8.0	7.7	7.6
Excluding FR Banks		8.0	7.9	7.7	7.2	6.7	6.9	6.5	7.7	7.5	7.4
Federal surpl./deficit	Bill. \$	223.2	197.2	213.2	193.8	173.8	144.4	-51.7	21.3	-143.5	-185.4
State & local surpl./def.		32.7	20.2	19.2	-0.2	-16.5	-32.3	-46.2	-30.2	-51.7	-43.1
Ex. social ins. funds		32.2	20.0	19.2	-0.1	-16.4	-32.2	-46.1	-30.0	-51.6	-43.0
Gross natl. saving rate	%	18.8	18.4	18.5	17.8	16.9	16.6	16.5	15.8	15.6	15.6
Net natl. saving rate		7.3	6.9	6.8	5.9	4.8	4.1	3.3	3.1	2.8	2.5
PRICES AND COSTS											
GDP chn.-wt. price index	% change	3.1	2.3	1.6	2.1	3.7	2.5	2.2	-0.5	1.3	1.1
Gross Domestic Purchases chn.-wt. price index		3.7	2.2	2.2	2.1	3.3	1.7	-0.2	0.4	1.2	2.2
PCE chn.-wt. price index		3.4	2.3	2.1	2.2	3.3	1.8	-0.1	0.8	1.1	2.5
Ex. food and energy		2.2	1.8	1.3	1.8	2.8	1.2	0.7	2.7	1.4	1.6
CPI		3.9	3.3	3.5	2.8	4.0	3.2	0.7	-0.2	1.4	3.4
Ex. food and energy		2.3	2.7	2.7	2.4	3.1	2.4	2.6	2.6	2.4	2.1
ECI, hourly compensation ¹		5.6	4.7	4.1	3.5	4.6	4.0	3.7	4.2	3.6	4.4
Nonfarm business sector											
Output per hour		0.2	6.0	0.6	1.7	-1.5	-0.1	2.1	7.3	8.6	1.9
Compensation per hour		15.2	2.2	8.7	3.1	2.8	0.1	1.0	1.5	3.6	3.7
Unit labor cost		14.9	-3.6	8.0	1.4	4.3	0.3	-1.1	-5.4	-4.6	1.8

1. Private-industry workers.

Item	Units	----- Projected -----									
		2002 Q3	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 Q3	2004 Q4
EXPENDITURES											
Nominal GDP	Bill. \$	10488.7	10571.5	10697.1	10819.0	10947.2	11084.6	11237.6	11383.1	11531.6	11667.9
Real GDP	Bill. Ch. \$	9471.5	9517.5	9586.1	9660.5	9740.7	9829.2	9921.5	10016.2	10113.3	10199.5
Real GDP	% change	3.2	2.0	2.9	3.1	3.4	3.7	3.8	3.9	3.9	3.5
Gross domestic purchases		3.4	1.9	3.2	3.5	3.5	3.3	4.1	4.1	4.1	3.2
Final sales		3.8	1.0	2.4	2.7	3.2	3.9	3.6	3.7	4.0	3.9
Priv. dom. final purchases		4.2	0.5	2.6	3.2	3.5	3.7	4.0	4.3	4.4	3.7
Personal cons. expenditures		4.8	1.1	2.3	2.5	2.6	2.7	2.9	3.0	3.0	3.4
Durables		22.9	-6.3	2.4	3.8	5.3	3.2	5.3	3.6	2.9	6.4
Nondurables		2.5	2.1	2.4	2.4	2.4	2.7	2.7	2.7	2.7	2.7
Services		2.6	2.2	2.2	2.2	2.2	2.5	2.6	3.0	3.2	3.2
Business fixed investment		2.6	-1.6	6.7	7.9	9.4	11.5	11.2	11.7	13.2	6.1
Equipment & Software		10.2	0.7	10.0	11.3	12.3	14.2	13.5	14.3	15.7	6.0
Nonres. structures		-18.0	-8.9	-3.5	-3.1	-0.2	2.3	3.3	2.6	4.5	6.3
Residential structures		-1.5	-3.6	-1.2	3.5	2.9	1.2	3.5	5.8	5.2	2.3
Exports		3.9	8.1	5.2	7.4	7.7	10.0	6.0	8.2	8.2	10.1
Imports		5.5	5.6	6.5	8.7	7.2	5.2	7.1	8.8	8.3	6.0
Gov't. cons. & investment		3.3	3.2	2.9	2.8	2.9	2.9	3.0	2.9	2.9	2.9
Federal		5.9	4.7	3.4	2.8	2.9	2.4	2.4	2.3	2.1	2.0
Defense		5.1	4.0	3.4	3.1	2.2	2.0	1.0	1.7	1.9	1.2
State & local		1.9	2.4	2.6	2.8	2.9	3.1	3.3	3.3	3.3	3.3
Change in bus. inventories	Bill. Ch. \$	-6.1	17.9	32.3	43.2	46.6	40.7	48.0	52.1	52.0	41.4
Nonfarm		-5.2	17.6	31.5	42.0	45.3	39.2	46.5	50.5	50.4	39.7
Net exports		-499.3	-499.8	-511.2	-525.6	-533.5	-527.2	-539.5	-552.6	-563.8	-560.4
Nominal GDP	% change	4.3	3.2	4.8	4.6	4.8	5.1	5.6	5.3	5.3	4.8
EMPLOYMENT AND PRODUCTION											
Nonfarm payroll employment	Millions	130.8	131.0	131.4	132.0	132.7	133.3	134.0	134.6	135.3	136.1
Unemployment rate	%	5.8	6.0	6.1	6.1	6.0	6.0	5.9	5.9	5.8	5.7
Industrial prod. index	% change	3.2	1.4	2.9	3.7	4.4	4.8	4.9	4.6	4.2	3.8
Capacity util. rate - mfg.	%	74.4	74.4	74.7	75.2	75.8	76.5	77.1	77.7	78.2	78.6
Housing starts	Millions	1.67	1.67	1.68	1.69	1.70	1.71	1.73	1.74	1.76	1.76
Light motor vehicle sales		17.92	16.96	17.00	17.00	17.14	17.14	17.22	17.22	17.22	17.22
North Amer. produced		14.58	13.70	13.70	13.70	13.80	13.80	13.80	13.80	13.80	13.80
Other		3.33	3.26	3.30	3.30	3.34	3.34	3.42	3.42	3.42	3.42
INCOME AND SAVING											
Nominal GNP	Bill. \$	10470.5	10556.3	10681.9	10803.0	10932.9	11069.6	11222.2	11365.7	11509.1	11638.7
Nominal GNP	% change	4.2	3.3	4.8	4.6	4.9	5.1	5.6	5.2	5.1	4.6
Nominal personal income		3.3	3.5	5.7	4.1	4.2	4.3	6.0	4.5	4.5	4.4
Real disposable income		2.3	2.3	2.0	2.1	2.2	2.3	5.6	2.7	2.8	2.7
Personal saving rate	%	3.3	3.7	3.6	3.6	3.5	3.5	4.1	4.0	4.0	3.9
Corp. profits, IVA & CCAdj.	% change	5.2	-4.8	2.4	4.2	6.8	8.3	4.1	4.3	4.9	0.9
Profit share of GNP	%	7.6	7.5	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.4
Excluding FR Banks		7.4	7.3	7.2	7.2	7.3	7.3	7.3	7.3	7.3	7.2
Federal surpl./deficit	Bill. \$	-189.5	-216.4	-185.2	-165.2	-135.1	-124.2	-163.3	-146.0	-127.8	-98.6
State & local surpl./def.		-41.5	-35.2	-32.6	-29.9	-23.8	-18.1	-12.9	-5.4	-1.4	1.8
Ex. social ins. funds		-41.4	-35.1	-32.5	-29.8	-23.7	-18.0	-12.8	-5.3	-1.3	1.9
Gross natl. saving rate	%	15.2	15.3	15.6	15.8	16.1	16.3	16.5	16.7	17.0	17.0
Net natl. saving rate		2.0	2.0	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.5
PRICES AND COSTS											
GDP chn.-wt. price index	% change	1.1	1.2	1.9	1.5	1.4	1.4	1.8	1.4	1.3	1.3
Gross Domestic Purchases chn.-wt. price index		1.4	1.6	1.9	1.4	1.3	1.3	1.7	1.3	1.3	1.3
PCE chn.-wt. price index		1.6	1.7	1.5	1.3	1.3	1.3	1.3	1.4	1.3	1.3
Ex. food and energy		1.8	1.6	1.5	1.5	1.4	1.4	1.4	1.3	1.3	1.3
CPI		1.8	2.2	2.0	1.8	1.8	1.8	1.8	1.8	1.7	1.7
Ex. food and energy		2.1	2.2	2.1	2.1	2.1	2.0	2.0	1.9	1.9	1.8
ECI, hourly compensation ¹		3.7	3.5	3.5	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Nonfarm business sector											
Output per hour		4.3	0.0	1.1	1.4	1.5	1.8	1.7	1.7	1.7	1.3
Compensation per hour		4.2	3.5	3.4	3.2	3.2	3.2	3.3	3.2	3.2	3.2
Unit labor cost		-0.1	3.4	2.3	1.8	1.7	1.4	1.6	1.5	1.5	1.8

1. Private-industry workers.

Strictly Confidential <FR> September 18, 2002
 Class II FOMC CONTRIBUTIONS TO GROWTH IN REAL GROSS DOMESTIC PRODUCT AND RELATED ITEMS

Item	2000 Q3	2000 Q4	2001 Q1	2001 Q2	2001 Q3	2001 Q4	2002 Q1	2002 Q2	2002 Q3	00Q4/99Q4	01Q4/00Q4	02Q4/01Q4
Real GDP	0.6	1.1	-0.6	-1.6	-0.3	2.7	5.0	1.5	3.2	2.3	0.1	2.9
Gross dom. purchases	1.3	1.3	-1.1	-1.2	-0.1	3.0	5.8	2.9	3.6	3.0	0.2	3.6
Final sales	1.7	1.2	2.7	-0.5	-0.2	4.1	2.5	-0.0	3.8	2.6	1.6	1.8
Priv. dom. final purchases	2.6	1.0	1.2	-1.0	0.3	2.6	2.2	1.1	3.5	3.1	0.8	1.8
Personal cons. expenditures	2.5	1.4	1.5	0.9	1.0	4.1	2.2	1.2	3.3	2.4	1.9	1.9
Durables	0.6	-0.4	0.9	0.4	0.4	2.5	-0.6	0.2	1.7	0.3	1.0	0.2
Nondurables	0.4	0.5	0.5	-0.1	0.3	0.7	1.6	-0.0	0.5	0.6	0.3	0.6
Services	1.5	1.3	0.2	0.6	0.4	0.9	1.2	1.1	1.1	1.5	0.5	1.1
Business fixed investment	0.5	-0.4	-0.7	-1.9	-0.7	-1.3	-0.7	-0.3	0.3	0.8	-1.2	-0.2
Equipment & Software	0.1	-0.5	-0.6	-1.6	-0.8	-0.2	-0.2	0.3	0.8	0.5	-0.8	0.2
Nonres. structures	0.4	0.1	-0.1	-0.3	0.1	-1.1	-0.4	-0.5	-0.5	0.3	-0.4	-0.4
Residential structures	-0.4	0.0	0.3	-0.0	0.0	-0.2	0.6	0.1	-0.1	-0.1	0.0	0.1
Net exports	-0.7	-0.2	0.5	-0.4	-0.2	-0.3	-0.8	-1.5	-0.4	-0.8	-0.1	-0.7
Exports	1.3	-0.5	-0.7	-1.4	-1.9	-1.0	0.3	1.3	0.4	0.8	-1.3	0.7
Imports	-2.0	0.2	1.2	1.0	1.7	0.7	-1.1	-2.8	-0.8	-1.5	1.2	-1.4
Government cons. & invest.	-0.2	0.5	1.0	1.0	-0.2	1.9	1.0	0.3	0.6	0.2	0.9	0.6
Federal	-0.5	0.1	0.5	0.4	0.1	0.8	0.5	0.5	0.4	-0.1	0.4	0.4
Defense	-0.2	0.2	0.3	0.1	0.2	0.5	0.5	0.3	0.2	-0.1	0.3	0.3
Nondefense	-0.2	-0.1	0.2	0.3	-0.1	0.3	0.0	0.2	0.2	0.0	0.2	0.1
State and local	0.3	0.4	0.5	0.6	-0.3	1.1	0.6	-0.2	0.2	0.3	0.5	0.2
Change in bus. inventories	-1.1	-0.1	-3.3	-1.1	-0.1	-1.4	2.6	1.5	-0.6	-0.3	-1.5	1.1
Nonfarm	-1.0	-0.3	-3.4	-0.8	-0.3	-1.4	2.5	1.7	-0.5	-0.4	-1.6	1.2
Farm	-0.2	0.2	0.2	-0.3	0.2	0.1	0.1	-0.2	-0.1	0.1	0.0	-0.0

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

Strictly Confidential <FR> Class II FOMC
 CONTRIBUTIONS TO GROWTH IN REAL GROSS DOMESTIC PRODUCT AND RELATED ITEMS
 September 18, 2002

Item	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 Q3	2004 Q4	02Q4/ 01Q4	03Q4/ 02Q4	04Q4/ 03Q4
Real GDP	2.0	2.9	3.1	3.4	3.7	3.8	3.9	3.9	3.5	2.9	3.3	3.8
Gross dom. purchases	2.0	3.3	3.6	3.6	3.5	4.2	4.3	4.3	3.3	3.6	3.5	4.0
Final sales	1.1	2.4	2.7	3.2	3.9	3.5	3.7	3.9	3.8	1.8	3.1	3.8
Priv. dom. final purchases	0.4	2.2	2.7	3.0	3.1	3.4	3.6	3.7	3.1	1.8	2.8	3.5
Personal cons. expenditures	0.8	1.6	1.7	1.9	1.9	2.1	2.1	2.1	2.4	1.9	1.8	2.1
Durables	-0.6	0.2	0.3	0.4	0.3	0.4	0.3	0.2	0.5	0.2	0.3	0.4
Nondurables	0.4	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.6	0.5	0.5
Services	0.9	0.9	0.9	0.9	1.1	1.1	1.3	1.3	1.3	1.1	1.0	1.2
Business fixed investment	-0.2	0.7	0.8	1.0	1.2	1.2	1.2	1.4	0.7	-0.2	0.9	1.1
Equipment & Software	0.1	0.8	0.9	1.0	1.1	1.1	1.2	1.3	0.5	0.2	1.0	1.0
Nonres. structures	-0.2	-0.1	-0.1	-0.0	0.1	0.1	0.1	0.1	0.1	-0.4	-0.0	0.1
Residential structures	-0.2	-0.1	0.2	0.1	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.2
Net exports	-0.0	-0.4	-0.5	-0.3	0.2	-0.4	-0.4	-0.4	0.1	-0.7	-0.2	-0.3
Exports	0.8	0.5	0.7	0.8	1.0	0.6	0.8	0.8	1.0	0.7	0.8	0.8
Imports	-0.8	-0.9	-1.2	-1.0	-0.7	-1.0	-1.3	-1.2	-0.9	-1.4	-1.0	-1.1
Government cons. & invest.	0.6	0.5	0.5	0.6	0.5	0.6	0.6	0.6	0.5	0.6	0.5	0.6
Federal	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1
Defense	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.3	0.1	0.1
Nondefense	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
State and local	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.2	0.4	0.4
Change in bus. inventories	0.9	0.5	0.4	0.1	-0.2	0.3	0.1	-0.0	-0.4	1.1	0.2	0.0
Nonfarm	0.9	0.5	0.4	0.1	-0.2	0.3	0.1	-0.0	-0.4	1.2	0.2	0.0
Farm	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	-0.0	0.0	-0.0	0.0	0.0

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

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

September 18, 2002

Item	Fiscal year ¹				2002				2003				2004			
	2001 ^a	2002	2003	2004	Q1 ^a	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	Not seasonally adjusted															
Unified budget																
Receipts ²	1991	1858	1951	2065	413	523	457	435	433	605	478	467	456	642	500	495
Outlays ²	1864	2010	2112	2189	510	507	490	532	536	528	516	552	555	547	535	575
Surplus/deficit ²	127	-152	-161	-125	-97	16	-33	-97	-103	77	-38	-86	-99	95	-35	-79
On-budget	-33	-310	-328	-312	-127	-58	-44	-137	-141	2	-53	-130	-141	12	-52	-125
Off-budget	161	158	167	187	30	73	10	39	38	74	15	44	42	83	18	46
Surplus excluding deposit insurance	126	-152	-162	-125	-97	15	-34	-97	-103	76	-38	-86	-99	94	-35	-79
Means of financing																
Borrowing	-90	215	175	142	51	21	83	102	100	-53	26	81	94	-61	28	74
Cash decrease	8	-5	4	0	38	-26	-9	9	0	-20	15	15	0	-30	15	15
Other ³	-45	-59	-18	-17	8	-11	-41	-14	3	-4	-4	-10	5	-4	-8	-10
Cash operating balance, end of period	44	49	45	45	14	40	49	40	40	60	45	30	30	60	45	30
NIPA federal sector																
Receipts	2024	1915	1968	2097	1887	1890	1892	1896	1954	1989	2032	2072	2071	2105	2140	2188
Expenditures	1909	2039	2143	2237	2031	2074	2082	2113	2139	2154	2167	2196	2234	2251	2268	2287
Consumption expenditures	517	569	610	639	566	581	587	594	610	615	620	624	640	644	649	653
Defense	337	374	399	417	372	383	385	390	399	403	406	408	417	419	422	424
Nondefense	180	196	211	223	194	199	202	205	211	212	214	216	223	225	226	228
Other spending	1392	1470	1533	1598	1464	1493	1495	1518	1528	1539	1547	1572	1594	1607	1619	1634
Current account surplus	115	-124	-175	-140	-144	-185	-189	-216	-185	-165	-135	-124	-163	-146	-128	-99
Gross investment	98	107	118	123	106	108	113	115	117	119	120	121	123	124	125	127
Current and capital account surplus	17	-232	-293	-264	-249	-293	-303	-331	-302	-284	-255	-246	-286	-270	-253	-225
Fiscal indicators⁴																
High-employment (HEB) surplus/deficit	-39	-233	-293	-282	-256	-291	-306	-331	-301	-283	-257	-254	-302	-292	-281	-257
Change in HEB, percent of potential GDP	0	2	.5	-2	2	.3	.1	.2	-.3	-.2	-.3	-.1	.4	-.1	-.1	-.2
Fiscal impetus (FI) percent, calendar year	11	20	10	7	10	6	.9	3	3	2	2	1	3	1	2	-4

1. Fiscal year data for the unified budget come from OMB; quarterly data come from the Monthly Treasury Statement and may not sum to OMB fiscal year totals.

2. OMB's July 2002 baseline surplus estimates are -\$62 billion in FY 2003 and \$17 billion in FY 2004. CBO's August 2002 baseline surplus estimates are -\$145 billion in FY 2003 and -\$111 billion in FY 2004. 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.

3. Other means of financing are checks issued less checks paid, accrued items, and changes in other financial assets and liabilities.

4. HEB is the NIPA current and capital account surplus in current dollars, with cyclically sensitive receipts and outlays, adjusted to the level of potential output associated with an unemployment rate of 6 percent. 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 (1996) dollars, scaled by real federal consumption plus investment. For FI and the change in HEB, negative values indicate aggregate demand restraint.

a--Actual

Strictly Confidential (FR) **Change in Debt of the Domestic Nonfinancial Sectors** **September 18, 2002**
 Class II FOMC (Percent)

Period ¹	Total	Federal government	Nonfederal					Memo: Nominal GDP	
			Total	Households		Consumer credit	Business		State and local governments
				Total	Home mortgages				
<i>Year</i>									
1997	5.6	0.6	7.3	6.4	6.7	4.7	9.0	5.3	6.2
1998	6.8	-1.4	9.6	8.2	8.9	5.9	11.8	7.2	6.0
1999	6.6	-1.9	9.1	8.3	9.0	7.4	11.1	4.4	5.9
2000	4.9	-8.0	8.4	8.3	8.2	9.6	9.9	2.2	4.6
2001	6.1	-0.2	7.5	8.6	9.7	6.9	6.1	8.1	2.0
2002	6.2	7.1	6.1	8.7	9.8	6.1	2.7	8.8	4.1
2003	5.6	4.2	5.9	6.6	7.4	5.7	5.1	5.8	4.9
2004	5.6	3.6	6.0	6.7	7.3	5.4	5.5	4.5	5.3
<i>Quarter</i>									
2002:1	4.8	1.2	5.6	9.2	10.3	4.8	1.9	4.5	6.5
2	7.8	13.3	6.7	9.0	10.8	5.9	2.9	12.4	2.6
3	5.8	6.9	5.6	8.2	8.7	7.3	1.8	9.5	4.3
4	6.0	6.2	5.9	7.3	7.9	6.0	4.0	7.6	3.2
2003:1	5.9	6.5	5.8	6.6	7.5	5.8	4.6	7.0	4.8
2	5.9	6.3	5.8	6.3	7.2	5.6	5.0	6.1	4.6
3	4.9	0.3	5.8	6.5	7.0	5.6	5.1	5.3	4.8
4	5.4	3.6	5.7	6.4	7.1	5.4	5.2	4.4	5.1
2004:1	5.9	5.6	5.9	6.6	7.3	5.4	5.4	4.4	5.6
2	5.8	5.2	5.9	6.5	7.2	5.4	5.4	4.4	5.3
3	4.9	0.5	5.8	6.5	7.1	5.2	5.4	4.4	5.3
4	5.3	2.9	5.8	6.4	7.0	5.3	5.4	4.4	4.8

Note. Quarterly data are at seasonally adjusted annual rates.

1. Data after 2002: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

Flow of Funds Projections: Highlights
(Billions of dollars except as noted)

Strictly Confidential (FR)
Class II FOMIC

September 18, 2002

Category	Calendar year				Seasonally adjusted annual rates							
					2003							
	2001	2002	2003	2004	Q1	Q2	Q3	Q4				
<i>Net funds raised by domestic nonfinancial sectors</i>												
1 Total	1045.9	1183.8	1063.3	1149.1	933.8	1594.0	1077.8	1129.5	1133.0	1138.1	935.3	1046.6
2 Net equity issuance	-61.8	-27.0	-91.3	-64.0	-3.7	62.5	-82.8	-84.0	-80.0	-85.0	-95.0	-105.0
3 Net debt issuance	1107.8	1210.8	1154.5	1213.1	937.5	1531.5	1160.6	1213.5	1213.0	1223.1	1030.3	1151.6
<i>Borrowing sectors</i>												
Nonfinancial business												
4 Financing gap ¹	141.4	73.7	112.9	151.8	68.9	76.8	64.4	84.7	96.8	108.8	120.4	125.7
5 Net equity issuance	-61.8	-27.0	-91.3	-64.0	-3.7	62.5	-82.8	-84.0	-80.0	-85.0	-95.0	-105.0
6 Credit market borrowing	399.8	185.7	361.7	412.8	132.4	201.1	124.3	285.1	324.7	360.7	373.7	387.5
Households												
7 Net borrowing ²	610.3	665.3	551.6	593.5	703.0	705.5	657.6	595.2	548.0	538.1	562.1	558.4
8 Home mortgages	477.8	525.1	435.5	465.5	554.2	595.7	493.2	457.2	441.2	430.2	430.2	440.2
9 Consumer credit	110.2	104.6	103.2	104.1	81.4	101.9	127.6	107.4	104.5	102.5	103.5	102.2
10 Debt/DPI (percent) ³	99.8	102.5	106.2	108.3	101.3	102.0	103.2	104.2	105.0	105.8	106.6	107.3
State and local governments												
11 Net borrowing	103.2	121.4	87.5	71.3	62.3	173.6	137.1	112.7	104.8	93.8	81.8	69.8
12 Current surplus ⁴	140.6	137.6	162.0	193.6	128.2	135.8	138.9	147.4	152.3	157.1	165.5	173.3
Federal government												
13 Net borrowing	-5.6	238.3	153.7	135.6	39.8	451.3	241.7	220.5	235.5	230.6	12.7	136.0
14 Net borrowing (quarterly, n.s.a.)	-5.6	238.3	153.7	135.6	50.8	2.4	83.4	101.7	99.7	-52.8	26.2	80.6
15 Unified deficit (quarterly, n.s.a.)	-92.3	211.7	149.3	118.6	96.6	-15.6	33.5	97.3	102.7	-76.6	37.7	85.5
<i>Depository institutions</i>												
16 Funds supplied	289.4	327.9	301.8	321.3	254.5	396.7	340.5	319.9	196.2	362.1	366.9	282.0
Memo (percentage of GDP)												
17 Domestic nonfinancial debt ⁵	186.7	191.4	194.4	195.1	189.0	190.8	192.0	193.3	193.9	194.5	194.8	194.8
18 Domestic nonfinancial borrowing	11.0	11.6	10.6	10.6	9.1	14.8	11.1	11.5	11.3	11.3	9.4	10.4
19 Federal government ⁶	-0.1	2.3	1.4	1.2	0.4	4.3	2.3	2.1	2.2	2.1	0.1	1.2
20 Nonfederal	11.0	9.3	9.2	9.4	8.7	10.4	8.8	9.4	9.1	9.2	9.3	9.2

Note. Data after 2002:Q2 are staff projections.

1. For corporations: Excess of capital expenditures over U.S. internal funds.

2. Includes change in liabilities not shown in lines 8 and 9.

3. Average debt levels in the period (computed as the average of period-end debt positions)

divided by disposable personal income.

2.6.4 FOF

4. NIPA surplus less changes in retirement fund assets plus consumption of fixed capital.

5. Average debt levels in the period (computed as the average of period-end debt positions) divided by nominal GDP.

6. Excludes government-insured mortgage pool securities.

International Developments

The elevated volatility of global financial markets that appeared early in the summer has persisted through the intermeeting period. Generalized uncertainty about economic prospects, as well as specific factors such as renewed concerns about terrorism, tensions in the Middle East, and South American politics have continued to weigh on investor sentiment. Equity prices in most foreign industrial countries have fallen, and the price of oil has risen since our August forecast, leading us to shave a bit more off the outlook for foreign growth. Although spreads on bond yields in emerging markets have declined from their summertime peaks, they remain high relative to the first half of the year.

Summary of Staff Projections

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

Indicator	2001		2002: H1	Projection		
	H1	H2		2002: H2	2003	2004
Foreign output	-0.1	0.3	3.1	2.7	3.2	3.4
<i>Previous GB</i>	-0.2	0.3	3.3	2.9	3.4	
Foreign CPI	2.6	0.8	2.6	2.3	2.1	1.9
<i>Previous GB</i>	2.6	0.8	2.6	2.2	2.1	

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

The markdown of growth projections for the second half of this year and for next year is shared about equally among all major regions. Recent data suggest that foreign economies are continuing to grow, albeit at a somewhat sluggish pace. We expect that activity will accelerate in 2003 and 2004 in Mexico, Europe, and developing Asia in an environment of supportive monetary policy stances and rising exports to the United States. In Canada, where economic performance has been stronger, we project that output growth will stabilize as buoyant consumer demand ebbs and the impetus from inventories recedes. For Japan and South America, we project weak growth but continuing substantial excess capacity throughout the forecast period. In Japan, structural problems will continue to weigh on activity, and monetary and fiscal policies will continue to be hamstrung. Even if the financial situation in Brazil does not melt down, economic activity will likely be subdued. There are no signs that the Argentine and Venezuelan economies are bottoming out.

Higher oil prices have boosted foreign consumer price inflation this year, but we expect that continued excess capacity and a gradual decline in oil prices will cause foreign inflation to subside over the forecast period. As growth picks up in 2003 and 2004, central banks in most foreign industrial countries are

expected to raise policy interest rates gradually, with the primary exception of the Bank of Japan, which is expected to maintain its zero rate.

The dollar has moved up slightly over the intermeeting period against both the major foreign currencies and the currencies of our other important trading partners. We continue to project a modest depreciation of the dollar over the forecast period, taking the broad real dollar down about 2½ percent over the next 9 quarters.

Exports and especially imports grew strongly in the first half of this year, reversing much of their declines last year. We expect real trade flows over the forecast period to exhibit their historical tendency to grow faster than output, with exports slightly boosted and imports slightly restrained by recent and projected dollar depreciation. Net exports are expected to make a negative arithmetic contribution to U.S. GDP growth of about ¼ percentage point (annual rate) on average over the forecast period. These contributions are essentially unchanged from the August Greenbook.

Oil prices. West Texas intermediate (WTI) crude oil is currently trading near \$30 per barrel. After fluctuating around \$27 per barrel through most of July, the spot price increased in mid-August to around its current level. The relatively high oil price reflects low exports from Iraq and concerns about possible military action there, as well as tightening crude inventories in the United States. Markets appear to be expecting that at the meeting scheduled for September 19 OPEC will reach a compromise agreement for small increases in production quotas. We project that, in line with recent quotes from futures markets, the spot price of WTI will decrease to about \$24 per barrel by the end of 2004. Compared with the August Greenbook, our projection is approximately \$3 per barrel higher in the fourth quarter of 2002 and about \$1 per barrel higher by the end of 2003.

International financial markets. Foreign asset prices continued to be highly volatile during the intermeeting period. Stock prices and government bond yields in the major industrial countries moved down further as incoming economic indicators were mildly disappointing. Nonetheless, emerging-market sovereign and European corporate risk spreads declined, as investors appeared to be relieved that several potential calamities did not occur (for example, substantial escalation of military activity in Iraq, terrorist incidents around the September 11 anniversary, and financial collapse in Brazil).

The foreign exchange value of the dollar edged up on balance over the period. The dollar rose about 2½ percent against the yen amid growing political pressure on the Bank of Japan to increase liquidity; the yield on the bellwether

government bond in Japan declined as much as 25 basis points but closed the period down only 3 basis points. The dollar moved up about ½ percent against the Canadian dollar and less against the euro. Ten-year government bond yields fell about 20 basis points in Canada, the United Kingdom, and the euro area.

The third-quarter value of the broad real dollar is slightly higher than the value projected in the August Greenbook, reflecting a bit of market disenchantment with economic prospects for many of our main trading partners. We expect that the dollar will move down about 2½ percent in real terms against the currencies of our important trading partners by the end of 2004. This projection is consistent with the view that investors' willingness to continue acquiring the growing volume of U.S. external liabilities is likely to fade somewhat further, particularly if U.S. rates of return remain weak.

Stock prices in industrial countries extended their declines during the intermeeting period, generally exceeding the 5 percent decline of the S&P 500. German equities plunged 15 percent. Japanese equities recovered a bit near the end of the period, finishing down 3 percent. In emerging markets, equity price movements were mixed.

During the intermeeting period, yield spreads on emerging-market dollar-denominated bonds declined on average about 25 basis points, remaining at elevated levels. The average spread on Brazilian debt declined 350 basis points, supported in part by IMF approval of a financial assistance package. Spreads in emerging Asia were little changed at generally low levels.

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

Foreign industrial countries. In response to the latest data, we have made modest changes to our projections of growth in the foreign industrial countries over the forecast period. Growth in the first half of 2002 is estimated to have been over 3 percent. Softness in confidence surveys and the recent turbulence in global financial markets have led us to revise down second-half growth, to just over 2 percent. We project that growth in 2003 will edge back up to 2½ percent as domestic demand in these countries strengthens. Monetary policy should remain stimulative: We assume that foreign industrial country central banks will not tighten until mid-2003 at the earliest.

Headline inflation rates in the foreign industrial countries have ticked up in recent months and are expected to rise moderately through the end of the year, as energy price increases feed through into inflation. By early next year,

however, inflation rates should begin to decline, with output in most countries expected to remain below potential and with the past and projected further appreciation of major foreign currencies against the dollar helping to attenuate price pressures.

Euro-area data have continued to come in weak over the past month. Consumer and business sentiment have retreated from May's recent peaks and are consistent with growth continuing at only a modest rate in the near term. The latest readings on industrial production, orders, and retail sales also have weakened. In addition, fiscal policy is likely to be somewhat contractionary, with the Stability and Growth Pact's deficit limit constraining policy in Germany and possibly France. Accordingly, we have revised down our forecast for the euro area. For the remainder of this year we project continued weak growth at a 1½ percent annual pace, with consumption, net exports, and inventories continuing to contribute positively and investment continuing to decline. Subsequently, consumption growth is expected to increase as real incomes are boosted by falling oil prices and as uncertainty due to the recent financial market turmoil abates. These positive developments should also eventually support a rebound in investment. We expect the rate of GDP growth to rise above potential by mid-2003, but projected growth will not be enough to close the output gap by the end of the forecast period. We expect that the ECB will not raise interest rates until the second half of next year.

Smoothing through the effects of the Queen's Jubilee in June, which lowered growth in the second quarter and raised it in the third, we have kept our forecast for the United Kingdom relatively unchanged.¹ We expect economic growth to continue to strengthen over the forecast period, nearly closing the output gap by the end of 2004. Surveys of business confidence suggest further expansion. Consumption growth should continue, supported by large increases in real estate prices. The twelve-month rate of inflation has been--and is expected to remain--below the Bank of England's 2½ percent target, allowing the Bank to postpone tightening until next year.

Preliminary Japanese GDP figures, now calculated using a method that gives greater weight to supply-side data, suggest that a slow recovery took hold during the first half of the year, with net exports making a significant contribution to growth. Data for the current quarter suggest that this recovery could be stalling. Growth of industrial production and of exports slowed significantly recently. In addition, household spending and construction starts have been weak, although

1. A bank holiday normally observed in May was moved to June, and an additional holiday was created this year, to celebrate the fiftieth anniversary of the coronation of Queen Elizabeth II.

recent increases in machinery orders at least suggest that the steep declines in investment spending may be coming to an end. We project anemic growth and continued deflation over the remainder of the forecast period. Our forecast assumes that the Bank of Japan will keep its quantitative easing policy in place and that nominal short-term interest rates will remain near zero. Today's announcement that the Bank will consider measures to help banks reduce their equity exposure has not changed our expectation of the stance of future monetary policy. Despite a new fiscal package that is expected to be announced this week, our judgment is that concerns over the national debt will keep fiscal policy slightly contractionary over the next two years.

The Canadian economy is projected to decelerate from the brisk growth it recorded in the first half of the year to a more sustainable rate for the remainder of 2002, reflecting in part a lower contribution to growth from inventories as well as a slowing of consumption growth. Favorable labor market conditions, however, should continue to support domestic demand. In mid-July, the Bank of Canada raised its target for the overnight rate 25 basis points, bringing its cumulative tightening since April to 75 basis points; at its September meeting the Bank left rates unchanged. The Bank of Canada is now expected to keep rates steady through the end of next year, in response to recent financial market turmoil and concerns about the robustness of the U.S. recovery, but we have penciled in further tightening in 2004.

Other countries. Economic and financial conditions remain weak in South America. Brazil has experienced some stabilization of its financial markets over the intermeeting period; this has resulted partly from the IMF's \$30 billion loan package for the country approved in early September and from a move up in the opinion polls by José Serra, the presidential candidate who appears to be favored by most market participants. We continue to project a "muddle-through" scenario for Brazil, with output declining slightly in the second half of this year and rising very slowly thereafter. Nevertheless, the possibility of a full-blown crisis remains a significant risk to the outlook. Elsewhere in South America, there are no indications that Argentina and Venezuela will recover any time soon; in fact, in Venezuela, GDP plunged more than 20 percent (s.a.a.r.) in the second quarter, despite the run-up in oil prices.

Prospects seem brighter for Mexico. After six consecutive quarters of decline, the country's real GDP grew at nearly a 5 percent rate in the second quarter, led by strong exports. Although exports continued to grow in July, industrial production was flat, and business confidence declined in July and August. Accordingly, we look for growth to slow to 3½ percent in the second half of this year and then to increase moderately over the next two years, following the general pattern of U.S. growth.

In emerging Asia, activity has continued to grow at a solid pace, although the data have been somewhat uneven across countries and there are some signs of an overall moderation in the rate of growth. Export strength continued to fuel the Asian recovery in the second quarter, but domestic demand also made a major contribution in a number of economies, including China, Korea, Taiwan, Singapore, and Indonesia. In the current quarter, available data on export growth show a modest slowdown. Overall, we expect growth in emerging Asia to moderate from a pace of about 6 percent in the first half of this year to less than 5 percent in the second half, and then to edge up a bit thereafter. This projection is predicated on a continuation of the U.S. recovery and a favorable outlook for the global high-tech sector.

We expect average consumer price inflation in the developing countries of 3 percent over the forecast period, reflecting our projection that growth will not be sufficient to raise output above potential. However, we expect that Argentina and Venezuela will continue to experience substantial price pressures as result of their currency depreciations.

Prices of internationally traded goods. The price index for U.S. imports of non-oil core goods is estimated to have risen about 2 percent at an annual rate in the third quarter. This marks the second consecutive quarterly increase following a year of decline, although the size of the increase in the third quarter is less than we had projected in August. This turnaround largely reflects the behavior of prices of nonpetroleum industrial supplies, which fell sharply last year but stabilized earlier this year and rose during the past several months. In addition, prices of non-high-tech machinery and consumer goods appear to have turned up in the third quarter. With commodity prices expected to keep rising this year, in line with quotes on futures exchanges, and with the dollar projected to decline, import prices should continue to rise at an average rate of about 3 percent through the end of next year. The rate of increase should slacken in 2004 as commodity prices decelerate.

The price index for exports of U.S. core goods is estimated to have risen at an annual rate of about 3½ percent in the third quarter following a similar-sized increase in the second quarter. We expect the index to continue to rise at about this pace in the fourth quarter and then to decelerate in 2003 and 2004, in line with projected U.S. producer price inflation.

Selected Trade Prices

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

Trade category	2001		2002: H1	Projection		
	H1	H2		2002: H2	2003	2004
<i>Exports</i>						
Core goods	-0.5	-2.5	1.1	3.7	1.3	0.9
<i>Imports</i>						
Non-oil core goods	-1.3	-4.5	.0	3.0	2.9	1.7
Oil (dollars per barrel)	24.21	18.39	24.02	27.71	23.19	21.37

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

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

Trade in goods and services. Real exports of goods and services grew about 14 percent at an annual rate in the second quarter, with the increase primarily in core goods, particularly exported industrial supplies, machinery, and automotive parts. Service exports also showed a sizable gain for the second consecutive quarter, as expenditures on travel and passenger fares continued to recover from the low levels at the end of last year. Over the forecast period, foreign economic activity is projected to expand at an average pace of around 3 percent, whereas exports of core goods are projected to grow at an average rate of around 5 percent. The relatively rapid growth in exports largely owes to the reversal of a pattern that emerged over the past year or so: U.S. goods exports more closely tracked the pronounced decline in foreign industrial production than the stagnation in foreign GDP. Hence, as industrial production abroad recovers, core goods exports (60 percent of which are industrial supplies and capital equipment) are expected to rise as well. Exports will also be boosted by the recent and projected depreciation of the dollar. After falling sharply last year, real exports of computers and semiconductors are also projected to rise this year and next, and service receipts should continue to recover. We thus project that real exports of all goods and services, after declining 11½ percent in 2001, will increase 7½ percent in 2002 and 2003 and about 8 percent in 2004.

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

Measure	2001		2002: H1	Projection		
	H1	H2		2002: H2	2003	2004
Real exports	-9.3	-13.5	8.7	6.0	7.6	8.1
<i>Previous GB</i>	-9.3	-13.5	7.2	6.5	8.2	--
Real imports	-7.3	-8.6	15.3	5.6	6.9	7.6
<i>Previous GB</i>	-7.3	-8.6	15.2	5.0	7.3	--

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

Real imported goods and services registered an even larger increase in the second quarter than in the previous quarter, rising at an annual rate of nearly 23 percent. All major trade categories except aircraft posted gains. Particularly notable growth was recorded in imported automotive products (due to the strength of U.S. motor vehicle sales), consumer goods, and machinery. For the latter, increases were not only in high-tech goods but also in imports of basic industrial and service equipment, which rose for the first time in more than a year. A portion of the second-quarter strength in imports may have reflected efforts to accelerate shipments into the spring in order to avoid a possible dock strike on the West Coast, but we have found no firm evidence of such behavior. Given the elevated level of second-quarter imports, we expect growth to slow to about 5½ percent at an annual rate in the second half of the year. There is a risk of an even greater slowdown in import growth in the near term, if a dock strike occurs or if importers turn out to have significantly accelerated shipments into the second quarter.

Growth of core goods imports is projected to average about 6 percent over the forecast period, as the effects of continued recovery in the U.S. economy and the rebound from last year's sharp fall in the level of imports are only slightly offset by the effect of recent and projected dollar depreciation. Real imports of computers and semiconductors should grow briskly over the next two years, and service imports are expected to pick up gradually.

The U.S. current account deficit as a share of nominal GDP is projected to rise from 5 percent in the second quarter of this year to 5¼ percent by the end of the year and to increase a bit further to 5½ percent by the end of 2004.

Alternative simulations. Our baseline forecast projects that oil prices will decline gradually from their present level of about \$30 per barrel to around \$24 per barrel by the end of the forecast period. However, probabilities derived from oil futures and options contracts suggest that the risk of a spike in oil prices may have increased in recent months. To assess the impact of such a spike, we use the FRB/Global model to consider a temporary 50 percent rise in the price of crude oil. The shock begins in 2002:Q4 and lasts only two quarters, so that oil prices return to baseline in 2003:Q2. An oil price shock of a similar magnitude and duration occurred during the second half of 1990, following Iraq's invasion of Kuwait. In calculating the effect of such an oil-price change, we have considered only the effects of the relative price itself and have not incorporated any response of business or consumer confidence here or abroad.

The oil price shock reduces U.S. real GDP growth by 0.4 percentage point in the first half of 2003. Higher oil prices weaken consumer spending through their effect on household disposable income, while investment falls because of a lower return to capital. However, because the shock is transient, the economy quickly returns to baseline as output growth rebounds in the second half of 2003. The shock increases the core PCE inflation rate by 0.4 percentage point on impact, as increased production costs put upward pressure on prices. Higher prices take time to unwind fully after the shock is withdrawn, leaving the level of the PCE deflator still above baseline at the end of 2004.

The effects of an oil price shock of similar magnitude are greater if the shock is more persistent. To gauge the effect of a sustained shock, we conducted a simulation in which oil prices rise 50 percent and remain there over the entire forecast period. In this case output growth does not bounce back quickly, but does begin to recover in 2004 owing to lower long-term real interest rates (given an assumed fixed nominal federal funds rate) and some improvement in real net exports (primarily to Canada and Mexico, oil-exporting countries that are major U.S. trading partners).

Not surprisingly, the effect of persistently high oil prices on inflation is longer lasting than the effect of a temporary oil price shock. In this case the level of the core PCE deflator rises permanently.

**Alternative Simulations:
50 Percent Rise in Price of Oil¹**
(Percent change from previous period, annual rate)

Indicator and simulation	2002		2003		2004	
	H1	H2	H1	H2	H1	H2
<i>U.S. real GDP</i>						
Baseline	3.2	2.6	3.0	3.5	3.8	3.7
Simulation 1: Temporary rise in price of oil	3.2	2.6	2.6	3.8	4.0	3.7
Simulation 2: Persistent rise in price of oil	3.2	2.6	2.6	3.5	4.0	3.9
<i>U.S. PCE prices excl. food and energy</i>						
Baseline	1.5	1.7	1.5	1.4	1.4	1.3
Simulation 1: Temporary rise in price of oil	1.5	1.7	1.9	1.2	1.4	1.3
Simulation 2: Persistent rise in price of oil	1.5	1.7	1.9	1.6	1.5	1.4

NOTE. H1 is Q2/Q4; H2 is Q4/Q2.

1. In these simulations, the nominal federal funds rate remains unchanged from baseline, and the monetary authorities in major foreign economies adjust their policy rates according to a Taylor rule.

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

Measure and country	-----Projected-----									
	1996	1997	1998	1999	2000	2001	2002	2003	2004	
REAL GDP (1)										

Total foreign	4.1	4.2	1.6	5.0	4.0	0.1	2.9	3.2	3.4	
Industrial Countries	2.8	3.5	2.7	4.2	3.1	0.4	2.6	2.5	2.6	
of which:										
Canada	2.7	4.4	4.4	5.7	3.5	0.8	4.0	2.9	2.9	
Japan	3.7	0.5	-1.3	0.6	2.3	-1.5	1.0	1.1	1.2	
United Kingdom	2.8	3.7	2.6	3.2	2.2	1.5	2.1	2.5	3.0	
Euro Area (2)	1.6	3.1	2.0	3.8	2.7	0.4	1.4	2.4	2.7	
Germany	1.4	1.7	0.7	3.3	1.9	0.1	1.0	2.1	2.6	
Developing Countries	6.2	5.3	-0.2	6.2	5.2	-0.4	3.3	4.1	4.6	
Asia	6.6	4.9	-2.0	8.8	6.3	0.8	5.4	5.3	5.5	
Korea	6.4	3.4	-5.2	13.8	5.1	4.4	6.0	5.9	5.2	
China	5.3	8.7	9.5	4.1	8.0	7.5	8.0	7.2	7.5	
Latin America	6.3	6.1	1.2	4.3	4.5	-1.5	1.7	3.2	3.9	
Mexico	7.1	6.7	2.8	5.4	4.9	-1.5	2.9	3.9	4.7	
Brazil	5.4	2.4	-1.6	3.7	3.8	-0.6	1.0	1.4	1.5	
CONSUMER PRICES (3)										

Industrial Countries	1.5	1.5	0.9	1.2	1.9	0.9	1.8	1.2	1.1	
of which:										
Canada	2.0	1.0	1.1	2.3	3.1	1.1	3.3	2.2	1.9	
Japan	0.2	2.1	0.7	-1.2	-1.2	-1.3	-0.8	-0.9	-0.9	
United Kingdom (4)	3.2	2.7	2.5	2.2	2.1	2.0	2.3	2.3	2.5	
Euro Area (2)	1.9	1.5	0.8	1.5	2.7	2.1	2.2	1.6	1.4	
Germany	1.3	1.5	0.3	1.1	2.5	1.7	1.3	1.0	0.8	
Developing Countries	11.1	6.8	9.0	4.6	4.1	2.8	3.0	3.0	2.8	
Asia	4.8	2.7	4.4	0.1	1.8	1.0	1.1	1.9	2.1	
Korea	5.0	4.9	5.8	1.2	2.5	3.3	3.6	3.1	3.0	
China	6.8	0.9	-1.2	-0.9	0.9	-0.2	-0.2	1.0	1.2	
Latin America	25.8	15.5	15.4	12.5	8.4	5.4	6.1	5.2	4.2	
Mexico	28.0	17.0	17.3	13.5	8.8	5.2	5.1	4.6	3.6	
Brazil	9.6	4.6	2.0	8.4	6.4	7.5	6.9	4.3	4.3	

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)

Measure and country	2002				Projected 2003				2004			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
REAL GDP (1)	----- Quarterly changes at an annual rate -----											
Total foreign	2.8	3.5	2.7	2.7	3.1	3.1	3.2	3.2	3.4	3.4	3.4	3.4
Industrial Countries	3.3	2.9	2.1	2.1	2.5	2.5	2.6	2.6	2.7	2.7	2.6	2.6
of which:												
Canada	6.2	4.3	2.9	2.6	3.2	2.9	2.8	2.8	2.8	2.8	2.9	2.9
Japan	-0.0	2.6	0.6	0.9	1.0	1.0	1.1	1.1	1.2	1.2	1.2	1.2
United Kingdom	0.6	2.3	3.2	2.3	2.4	2.5	2.5	2.9	3.1	3.1	2.9	2.8
Euro Area (2)	1.4	1.4	1.3	1.6	1.9	2.3	2.6	2.8	2.8	2.8	2.7	2.7
Germany	1.1	1.1	0.6	1.1	1.4	1.9	2.4	2.7	2.8	2.7	2.6	2.5
Developing Countries	2.0	4.3	3.5	3.6	4.0	4.1	4.2	4.2	4.4	4.6	4.6	4.6
Asia	5.8	6.1	4.7	5.0	5.2	5.2	5.4	5.4	5.5	5.5	5.5	5.5
Korea	7.8	5.6	5.0	5.5	6.0	6.0	6.0	5.5	5.3	5.2	5.2	5.2
China	8.5	9.3	7.2	7.2	7.3	7.2	7.2	7.5	7.5	7.5	7.5	7.5
Latin America	-1.2	2.9	2.4	2.6	3.2	3.2	3.3	3.3	3.8	4.0	4.0	4.0
Mexico	-0.0	4.7	3.5	3.5	3.9	3.9	3.9	3.9	4.5	4.8	4.8	4.8
Brazil	3.5	2.4	-1.0	-1.0	1.2	1.2	1.5	1.5	1.5	1.5	1.5	1.5
CONSUMER PRICES (3)	----- Four-quarter changes -----											
Industrial Countries	1.1	1.0	1.2	1.8	1.6	1.3	1.2	1.2	1.2	1.1	1.1	1.1
of which:												
Canada	1.5	1.3	2.0	3.3	3.1	2.5	2.3	2.2	2.1	2.0	1.9	1.9
Japan	-1.5	-1.1	-1.0	-0.8	-0.8	-1.0	-1.2	-0.9	-0.9	-0.9	-0.9	-0.9
United Kingdom (4)	2.4	1.9	1.9	2.3	2.1	2.4	2.3	2.3	2.4	2.4	2.5	2.5
Euro Area (2)	2.6	2.1	2.2	2.2	1.9	1.5	1.6	1.6	1.5	1.5	1.4	1.4
Germany	2.0	1.1	1.1	1.3	0.7	0.9	1.1	1.0	0.9	0.8	0.8	0.8
Developing Countries	2.6	2.5	2.7	3.0	3.3	3.1	3.0	3.0	3.0	2.9	2.8	2.8
Asia	0.8	0.6	0.7	1.1	1.4	1.5	1.7	1.9	2.0	2.1	2.1	2.1
Korea	2.5	2.7	2.4	3.6	3.9	3.0	3.3	3.1	3.0	3.0	3.0	3.0
China	-0.6	-1.0	-0.4	-0.2	0.2	0.5	0.6	1.0	1.2	1.2	1.2	1.2
Latin America	5.1	5.4	6.0	6.1	6.9	6.2	5.4	5.2	5.0	4.7	4.4	4.2
Mexico	4.8	4.8	5.2	5.1	6.0	5.5	4.7	4.6	4.4	4.1	3.8	3.6
Brazil	7.7	7.9	7.6	6.9	6.4	5.8	4.6	4.3	4.3	4.3	4.3	4.3

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

	1996	1997	1998	1999	2000	2001	2002	Projected 2003	2004
NIPA REAL EXPORTS and IMPORTS									
Percentage point contribution to GDP growth, Q4/Q4									
Net Goods & Services	-0.2	-0.8	-1.1	-1.0	-0.8	-0.1	-0.7	-0.2	-0.3
Exports of G&S	1.1	1.0	0.3	0.5	0.8	-1.3	0.7	0.8	0.8
Imports of G&S	-1.3	-1.7	-1.3	-1.5	-1.5	1.2	-1.4	-1.0	-1.1
Percentage change, Q4/Q4									
Exports of G&S	9.8	8.5	2.3	4.9	7.3	-11.4	7.3	7.6	8.1
Services	8.9	1.4	2.9	3.2	4.8	-9.2	10.5	5.6	5.7
Computers	21.6	25.8	8.1	13.4	23.0	-23.4	3.4	32.6	33.6
Semiconductors	44.6	21.3	9.1	34.6	26.9	-34.9	29.6	34.2	36.0
Other Goods 1/	7.3	9.8	1.3	3.1	5.7	-9.3	4.8	5.2	5.3
Imports of G&S	11.2	14.3	10.8	11.9	11.1	-8.0	10.3	6.9	7.6
Services	5.3	14.0	8.5	5.9	10.9	-8.6	7.4	2.5	3.8
Oil	7.8	3.9	4.1	-3.4	13.3	0.1	0.5	3.0	3.2
Computers	17.8	33.0	25.8	26.0	13.6	-13.8	21.7	32.6	33.6
Semiconductors	56.7	32.9	-8.7	34.2	22.5	-51.4	31.3	34.2	36.0
Other Goods 2/	10.4	12.7	11.5	12.7	10.4	-6.2	10.7	5.8	5.9
Billions of chained 1996 dollars									
Net Goods & Services	-89.0	-113.3	-221.1	-320.5	-398.8	-415.9	-483.5	-524.4	-554.1
Exports of G&S	874.2	981.5	1002.4	1036.3	1137.2	1076.1	1067.2	1143.3	1234.6
Imports of G&S	963.1	1094.8	1223.5	1356.8	1536.0	1492.0	1550.7	1667.7	1788.7
Billions of dollars									
US CURRENT ACCOUNT BALANCE	-117.8	-128.4	-203.8	-292.9	-410.3	-393.4	-517.7	-577.9	-622.2
Current Acct as Percent of GDP	-1.5	-1.5	-2.3	-3.2	-4.2	-3.9	-5.0	-5.3	-5.4
Net Goods & Services (BOP)	-101.8	-107.8	-166.9	-262.2	-378.7	-358.3	-439.7	-498.8	-527.5
Investment Income, Net	28.6	25.1	12.7	23.9	27.6	20.5	-13.4	-17.3	-23.3
Direct, Net	69.4	72.4	65.5	75.0	88.9	102.6	79.2	85.7	93.9
Portfolio, Net	-40.8	-47.3	-52.9	-51.1	-61.2	-82.1	-92.5	-103.0	-117.2
Other Income & Transfers, Net	-44.6	-45.7	-49.6	-54.5	-59.3	-55.6	-64.6	-61.8	-71.5

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

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

1999 2000 2001

Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4 Q1 Q2 Q3 Q4

NIPA REAL EXPORTS and IMPORTS

	Percentage point contribution to GDP growth											
	Percentage change from previous period, s.a.a.r.											
Net Goods & Services	-1.8	-1.4	-0.7	0.1	-1.1	-1.0	-0.7	-0.2	0.5	-0.4	-0.2	-0.3
Exports of G&S	-0.8	0.4	1.1	1.3	0.8	1.5	1.2	-0.5	-0.7	-1.4	-2.0	-1.0
Imports of G&S	-1.0	-1.9	-1.8	-1.2	-1.9	-2.5	-1.9	0.3	1.2	1.0	1.7	0.7
Exports of G&S	-6.9	4.3	10.6	12.6	7.7	14.6	11.6	-4.0	-6.0	-12.4	-17.3	-9.6
Services	-1.5	3.4	4.7	6.4	10.2	11.2	-5.9	4.4	-6.0	-2.5	-13.9	-13.8
Computers	0.8	24.7	20.6	9.2	33.5	45.9	28.8	-8.8	-7.3	-41.7	-22.8	-17.6
Semiconductors	34.2	45.2	41.3	19.0	14.6	90.9	43.4	-17.5	-34.6	-47.3	-40.9	-11.7
Other Goods 1/	-12.1	0.7	10.7	15.4	4.2	9.2	16.7	-5.9	-2.9	-10.5	-16.5	-6.9
Imports of G&S	8.4	15.4	14.5	9.4	14.7	18.6	13.8	-1.6	-7.9	-6.8	-11.8	-5.3
Services	0.2	6.8	9.7	7.1	20.7	9.6	15.1	-0.5	0.3	8.5	-23.2	-16.5
Oil	3.9	29.8	-5.8	-31.5	28.6	40.4	-2.3	-6.5	23.3	7.2	-26.9	3.9
Computers	35.0	43.7	14.4	13.5	2.5	40.4	27.9	-9.5	-21.6	-24.5	-18.7	14.6
Semiconductors	23.0	67.9	16.3	35.0	23.5	50.0	69.8	-28.5	-43.9	-68.8	-55.9	-27.5
Other Goods 2/	7.8	12.2	17.4	13.4	13.1	15.5	12.3	1.3	-9.4	-6.2	-4.6	-4.5

Billions of chained 1996 dollars, s.a.a.r.

Net Goods & Services	-283.2	-319.6	-339.6	-339.5	-368.8	-394.6	-413.1	-418.5	-404.5	-414.8	-419.0	-425.3
Exports of G&S	1007.5	1018.1	1044.1	1075.6	1095.8	1133.9	1165.5	1153.7	1135.8	1098.8	1048.0	1021.8
Imports of G&S	1290.7	1337.7	1383.7	1415.2	1464.6	1528.5	1578.6	1572.2	1540.3	1513.6	1467.0	1447.2

Billions of dollars, s.a.a.r.

US CURRENT ACCOUNT BALANCE	-238.7	-280.6	-320.6	-331.6	-376.4	-392.3	-428.7	-443.9	-430.9	-396.9	-365.3	-380.3
Current Account as % of GDP	-2.6	-3.1	-3.4	-3.5	-3.9	-4.0	-4.3	-4.5	-4.3	-3.9	-3.6	-3.7
Net Goods & Services (BOP)	-209.5	-253.4	-286.5	-299.6	-348.7	-367.7	-393.3	-405.0	-388.6	-373.3	-319.1	-352.1
Investment Income, Net	20.8	24.9	18.3	31.5	25.1	30.6	22.1	32.8	10.3	30.1	9.4	32.4
Direct, Net	72.3	71.4	71.3	85.0	79.0	86.9	89.2	100.3	89.0	111.3	95.6	114.4
Portfolio, Net	-51.5	-46.5	-53.0	-53.5	-53.9	-56.3	-67.1	-67.5	-78.7	-81.2	-86.3	-82.0
Other Inc. & Transfers, Net	-50.0	-52.1	-52.4	-63.5	-52.8	-55.3	-57.5	-71.7	-52.5	-53.7	-55.6	-60.6

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

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

----- Projected -----
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											
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Net Goods & Services	-0.7	-1.4	-0.4	0.0	-0.4	-0.5	-0.3	0.2	-0.4	-0.4	-0.4	0.1
Exports of G&S	0.3	1.3	0.4	0.8	0.5	0.7	0.8	1.0	0.6	0.8	0.8	1.0
Imports of G&S	-1.1	-2.7	-0.7	-0.8	-0.9	-1.2	-1.0	-0.7	-1.0	-1.2	-1.2	-0.9
Exports of G&S	3.5	14.3	3.9	8.1	5.2	7.4	7.7	10.0	6.0	8.2	8.2	10.1
Services	21.7	11.0	5.0	5.1	5.7	5.5	5.4	5.6	5.8	5.8	5.7	5.7
Computers	-21.1	-1.2	-0.0	46.4	31.1	32.3	33.6	33.6	33.6	33.6	33.6	33.6
Semiconductors	13.7	65.1	31.1	14.8	31.1	33.5	36.0	36.0	36.0	36.0	36.0	36.0
Other Goods 1/	-3.1	14.1	1.8	7.2	1.8	5.1	5.3	8.7	2.1	5.5	5.4	8.3
Imports of G&S	8.5	22.5	5.5	5.6	6.5	8.7	7.2	5.2	7.1	8.8	8.3	6.0
Services	35.7	-0.3	-0.5	-1.1	1.0	2.3	3.0	3.6	3.9	3.9	4.0	3.3
Oil	-19.0	35.1	-1.0	-5.8	1.9	27.8	7.5	-19.7	2.1	24.3	10.6	-19.2
Computers	52.4	5.4	12.6	21.6	31.1	32.3	33.6	33.6	33.6	33.6	33.6	33.6
Semiconductors	45.2	41.6	6.1	36.0	31.1	33.5	36.0	36.0	36.0	36.0	36.0	36.0
Other Goods 2/	1.9	28.7	7.2	6.8	6.0	6.0	5.5	5.4	5.5	5.8	6.2	5.9

Percentage change from previous period, s.a.a.r.

Billions of chained 1996 dollars, s.a.a.r.

Net Goods & Services	-446.6	-488.4	-499.3	-499.8	-511.2	-525.6	-533.5	-527.2	-539.5	-552.6	-563.8	-560.4
Exports of G&S	1030.6	1065.6	1075.7	1096.8	1110.7	1130.8	1152.0	1179.7	1197.0	1220.8	1245.2	1275.4
Imports of G&S	1477.1	1554.0	1575.0	1596.7	1622.0	1656.4	1685.5	1706.9	1736.5	1773.4	1809.1	1835.8

Billions of dollars, s.a.a.r.

US CURRENT ACCOUNT BALANCE	-449.8	-519.1	-538.8	-563.2	-563.9	-576.9	-581.7	-588.9	-601.6	-616.8	-633.2	-637.4
Current Account as % of GDP	-4.4	-5.0	-5.1	-5.3	-5.3	-5.3	-5.3	-5.3	-5.4	-5.4	-5.5	-5.5
Net Goods & Services (BOP)	-382.0	-441.8	-460.9	-474.3	-488.1	-500.2	-506.8	-500.3	-512.5	-525.7	-537.0	-534.6
Investment Income, Net	2.7	-18.5	-20.4	-17.3	-17.3	-18.2	-16.4	-17.2	-17.6	-19.5	-24.7	-31.3
Direct, Net	88.3	70.7	76.2	81.4	83.2	83.6	87.2	88.9	91.1	93.0	94.6	96.8
Portfolio, Net	-85.6	-89.2	-96.5	-98.8	-100.5	-101.8	-103.7	-106.1	-108.6	-112.6	-119.3	-128.1
Other Inc. & Transfers, Net	-70.5	-58.9	-57.5	-71.5	-58.5	-58.5	-58.5	-71.5	-71.5	-71.5	-71.5	-71.5

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