Prefatory Note

The attached document represents the most complete and accurate version available based on original copies culled from the files of the FOMC Secretariat at the Board of Governors of the Federal Reserve System. This electronic document was created through a comprehensive digitization process which included identifying the best-preserved paper copies, scanning those copies,[1] and then making the scanned versions text-searchable.[2] Though a stringent quality assurance process was employed, some imperfections may remain.

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

---

[1] In some cases, original copies needed to be photocopied before being scanned into electronic format. All scanned images were deskewed (to remove the effects of printer- and scanner-introduced tilting) and lightly cleaned (to remove dark spots caused by staple holes, hole punches, and other blemishes caused after initial printing).

[2] A two-step process was used. An advanced optical character recognition computer program (OCR) first created electronic text from the document image. Where the OCR results were inconclusive, staff checked and corrected the text as necessary. Please note that the numbers and text in charts and tables were not reliably recognized by the OCR process and were not checked or corrected by staff.

Content last modified 5/20/2009.

Confidential (FR) Class II FOMC

Part 1

March 13, 2003

CURRENT ECONOMIC AND FINANCIAL CONDITIONS

Summary and Outlook

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

Confidential (FR) Class II FOMC

March 13, 2003

Summary and Outlook

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

Domestic Developments

On balance, the information we have received since the January Greenbook suggests that the economy is growing more slowly than we had anticipated, albeit from an upward-revised level in the fourth quarter. Although the pace of spending has been reasonably well maintained, conditions in the labor market have deteriorated. Furthermore, anxiety about the possibility of war and its aftermath seems to be weighing heavily on sentiment and the stock market, but distinguishing these effects from broader concerns about the underlying health of the economy is difficult. To be sure, changes in the geopolitical situation could have significant implications for the pace of economic activity, and this forecast must be viewed as more uncertain than usual (we discuss some possible economic implications of the current conflict with Iraq in the final section of the domestic outlook). That said, we now project that real GDP will increase at an annual rate of about 2-1/4 percent over the first half of 2003, 1/2 percentage point lower than in the January Greenbook.

We continue to expect that, after the first half of this year, the economy will pick up steam as businesses emerge from their current doldrums and consumer sentiment recovers. Monetary and fiscal policies are stimulative, and labor productivity growth remains solid. The projected recovery is a shade less vigorous than in the previous Greenbook because equity prices have moved down once again during the intermeeting period and oil prices have moved noticeably higher. Nonetheless, we expect real GDP to increase about 4 percent in the second half of 2003 and about 4-1/2 percent in 2004.

With real GDP increasing more slowly than its potential in the near-term, the unemployment rate is projected to rise to 6.2 percent by the third quarter. Thereafter, an acceleration of activity to a pace above the growth of potential leads to a gradual downdrift in the jobless rate to 5-1/2 percent by the end of the forecast period. The persistent slack in resource utilization maintains downward pressure on inflation, and we expect the rate of increase of core PCE prices to edge down to 1.1 percent per year in 2004—a touch below our previous projection.

Key Background Factors

This projection has been assembled in the face of considerable uncertainty about the possibility of war with Iraq. The timing, intensity, duration, and possible economic implications of such a conflict, should it occur, span a wide range of outcomes. In recognition of this uncertainty, we have chosen not to incorporate a specific war scenario into this Greenbook. Instead, we take as our initial conditions the current value of stock prices, interest rates, and consumer sentiment, and rely on futures markets to set the path of oil prices. All of these indicators presumably reflect a probability-weighted average of a wide variety of geopolitical outcomes and associated economic effects. We have made no allowance for any sharp movements in these variables that could accompany a particular geopolitical outcome.

This “mean” approach avoids arbitrary assumptions about events that clearly cannot be predicted with any certainty. It also maximizes continuity with our assumptions in the January Greenbook and, hence, presents to the Committee our assessment of how developments over the intermeeting period have affected the economic outlook. The approach deviates from our usual practice of generating something more akin to a “modal” forecast for the baseline—a projection that represents our best estimate of the most likely economic outcome. As a consequence, no specific military scenario maps directly into the staff projection.

We have made only a small adjustment to the monetary policy assumptions underlying this projection. The federal funds rate is now assumed to remain at 1-1/4 percent throughout the projection period rather than to turn up in the latter half of 2004 as forecast in the last Greenbook. At the same time, the markets have removed much of the tightening that they had anticipated over the forecast period and, indeed, now expect an easing in the near term. This shift in market expectations has fed through to longer-term interest rates, with the yield on the ten-year Treasury down about 40 basis points since the last Greenbook. In response to this decline, we have built in a lower path for long-term rates over the entire projection period. But, as in the January Greenbook, we assume that Treasury rates drift up from current levels throughout the forecast interval in response to an acceleration in economic activity.

Risk spreads for corporate issues have not changed appreciably over the intermeeting period and are still much wider than normal. We project that they will narrow gradually throughout the projection period as the economy gains vigor.

Equity prices have fallen 10 percent since the last Greenbook, and we have lowered our projected path for the stock market by approximately this amount. In line with our usual approach, we assume that share prices will increase from their current level at a pace that roughly maintains risk-adjusted parity with the return on Treasury securities.

The outlook for the federal deficit has deteriorated sharply since the last Greenbook. We are now expecting unified deficits of $287 billion in fiscal year 2003 and $367 billion in fiscal year 2004, $70 billion and $114 billion larger, respectively, than projected in the January Greenbook. Federal personal and corporate tax receipts are coming in far below expectations, leading us to revise down our revenue projection by roughly $55 billion in both fiscal 2003 and fiscal 2004. The deployment of the troops to the Persian Gulf has boosted spending well above the budgeted pace, and the Administration plans to request a supplemental appropriation to fund these and any additional war-related spending. As a result, we have raised nominal defense spending about $20 billion in both fiscal 2003 and fiscal 2004. Including the $5 billion in Iraq-related defense spending that we had already built into the last Greenbook, our projection of defense spending over the forecast is roughly consistent, for example, with a prolonged stalemate in the Gulf or a relatively short war followed by continued commitment of some troops to the region.[1]

We continue to assume that the Congress will pass the tax-cut package incorporated in the January Greenbook, although we now project that the implementation date will be delayed to October 1, 2003, from the July 1, 2003, date we had assumed in the previous projection. This package—which involves moving ahead several provisions of the 2001 tax act—is assumed to reduce tax liabilities relative to current law by roughly $70 billion this calendar year and next.[2] All told, we estimate that discretionary fiscal policy will boost the growth of real aggregate demand 0.8 percent in 2003 and 0.9 percent in 2004, a bit more stimulus than we had assumed in the last Greenbook.[3]

Crude oil prices now stand at $37 per barrel for West Texas intermediate (WTI), almost $5.00 per barrel higher than we had anticipated in the January Greenbook. The recent rise in oil prices reflects primarily heightened concerns about military action in Iraq, unusually cold weather in the United States, and tightening inventories here and abroad. Consistent with readings in futures markets, we expect WTI to fall relatively rapidly through 2003, to a little more

---

1. We are relying on CBO estimates of the costs of a potential conflict with Iraq. In its latest estimates, the cost of deploying troops to the region is about $15 billion, most of which has already been incurred. An initial month of combat would cost roughly $10 billion; subsequent months, if needed, would be slightly less costly. Redeployment of troops back home will cost about $10 billion. Beyond the direct costs, subsequent occupation would cost between $1 billion and $4 billion per month, depending on the level of commitment. Additional possible expenses include repairs to damaged infrastructure, humanitarian aid, and other forms of economic assistance. However, only a portion of these various costs would be reflected in additional outlays in 2003 and 2004; in particular, rebuilding of military stocks as well as postwar aid would likely be spread out over a number of years. See Congressional Budget Office, *An Analysis of the President's Budgetary Proposals for Fiscal Year 2004: An Interim Report* (March 2003), box 1, p. 4.

2. Specifically, the package we have built in involves accelerating to 2003 the increase in the child tax credit, the expansion of the 10 percent tax bracket, the marginal rate reductions, and the marriage penalty relief, which are currently scheduled to be phased in between 2004 and 2010.

3. We have made several modifications to the federal sector greensheet: We now report fiscal impetus as a percentage of GDP, we base the high-employment surplus on the staff estimate of NAIRU and potential GDP, we have changed the NIPA federal government saving measure to gross saving less gross investment, and we have stopped reporting the unified deficit excluding deposit insurance.

than $29 per barrel, and then to decline more gradually, to $25 per barrel by the end of 2004—about $1 above our January projection.

Growth of foreign real GDP slowed somewhat more sharply in the fourth quarter than we had estimated at the time of the January Greenbook. As oil prices have continued to rise and consumer sentiment abroad has soured, we have lowered the forecast for foreign growth in the first half of this year to an annual rate of about 2-1/4 percent. The downward revision to the near-term outlook is broadly based across our major trading partners. However, for the second half of this year and for 2004, we anticipate a moderate rebound in economic activity abroad. The real trade-weighted foreign exchange value of the dollar has dipped over the intermeeting period; we continue to project a modest depreciation of the dollar over the forecast period.

Recent Developments and the Near-Term Outlook

Economic activity early this year appears to be increasing somewhat more slowly than we had anticipated in the last Greenbook, the difference reflecting, in part, less upward impetus from stockbuilding. Real GDP growth in the fourth quarter of 2002 was revised up substantially, mainly reflecting more inventory investment. On the assumption that firms have not increased their long-run target inventory-sales ratios, we have marked down the swing in inventory investment over the first half of this year.

To be sure, the incoming spending data for the first quarter have contained a few positive surprises. In light of more recent readings of the economy that show a weaker labor market and falling sentiment, however, we anticipate that this strength will dissipate in coming months. Payroll employment tumbled in February, and given the persistently high level of initial claims, we expect job losses to continue through the second quarter. In addition, manufacturing IP is projected to increase at an annual rate of only about 3/4 percent this quarter. All in all, we now project that real GDP will increase at an annual rate of about 2-1/4 percent in this quarter and next, leaving growth over the first half of the year 1/2 percentage point slower than in the January forecast.

Sales of light motor vehicles in the first quarter are projected to be a bit less than 15-3/4 million units, down appreciably from the pace of 16-1/2 million units recorded in the fourth quarter. Although some of the decline reflects the disruptive effects of February snowstorms, indications for March also suggest underlying weakness. As a result, we have lowered our sales projection for the second quarter to 16 million units, about 1/4 million units below our last projection.

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

Measure	2003:Q1 Jan. GB	2003:Q1 Mar. GB	2003:Q2 Jan. GB	2003:Q2 Mar. GB
Real GDP	**2.6**	**2.3**	**2.9**	**2.3**
Private domestic final purchases	2.1	1.8	2.9	2.9
Personal consumption expenditures	1.9	1.7	2.8	2.3
Residential investment	9.5	16.7	3.1	4.9
Business fixed investment	.8	-3.5	3.7	6.3
Government outlays for consumption and investment	2.7	3.9	1.8	3.9
	Contribution to growth (percentage points)			
Inventory investment	.2	-.2	.6	-.2
Net exports	.0	.2	-.5	-.7

We have also lowered our projection for consumer spending outside the motor vehicle sector. Controlling for the effects of the February storms, available data suggest that spending has been well maintained so far this quarter. But we expect that the weaker consumer sentiment, equity values, and employment of late will slow that momentum. We now project real PCE excluding motor vehicles to increase at an annual rate of 2.4 percent in the first quarter and 2.1 percent in the second.

Residential construction remains strong. In the single-family sector, housing starts moved up to an annual rate of 1.5 million units in January, when the weather was unusually dry, and we expect starts in February, which was unusually wet, to show some payback. Smoothing through these monthly swings, however, the underlying pace of construction activity—fueled by continued low mortgage rates—should remain brisk.

The available data on spending in the business sector present a mixed picture. Overall, real spending on equipment and software (E&S) in the first quarter is projected to fall, reflecting declines in purchases of motor vehicles and aircraft. Excluding the transportation sector, the recent spending indicators are somewhat more upbeat, especially in the high-tech sector. For investment in nonresidential structures, we anticipate a further decline this quarter, as vacancy rates in the industrial and office sectors remain high. But we expect the increase in energy prices to boost investment in drilling and mining enough to cause a small uptick in total nonresidential investment in the second quarter.

In the government sector, real federal expenditures on consumption and gross investment are projected to rise at an annual rate of about 8 percent over the first half of this year, after having jumped more than 11 percent in the fourth quarter. This step-up in spending is predominantly in defense and is largely attributable to the continued deployment of troops to the Persian Gulf. Our assessment of state and local conditions is unchanged from last Greenbook, with the pace of spending continuing to be restrained by ongoing budgetary pressures.

We now estimate that net exports arithmetically deducted about 1-1/2 percentage points from the growth of real GDP in the fourth quarter, a significantly larger drag than we had anticipated in the January Greenbook. We expect much of the surprising strength of imports and weakness in exports to be reversed, resulting in a positive contribution of about 1/4 percentage point to the change in GDP this quarter.

We have raised our near-term inflation projection in response to higher expected energy prices. PCE prices are now projected to increase at an annual rate of 2.3 percent this quarter and 2.2 percent in the second quarter—up 0.2 and 1.0 percentage point, respectively, from our last projection. In contrast, we have lowered our projection of core PCE inflation in the first quarter by 1/2 percentage point, reflecting lower-than-expected incoming data, and raised it only 0.2 percentage point in the second quarter. Our projection for wage increases in the near term is little changed from last Greenbook. We project ECI hourly compensation to rise at a pace of about 3-1/4 percent over the first half of the year.

The Longer-Term Outlook for the Economy

Our longer-term forecast is a bit weaker than that in the January Greenbook, as the influence of the lower level of the stock market and higher oil prices offsets the effect of lower interest rates. Nonetheless, the basic contour of our forecast remains the same: As uncertainty and pessimism fade and as energy prices retreat, the ongoing impetus from accommodative monetary policy, stimulative fiscal policy, and strong underlying structural productivity growth should show through to robust gains in real GDP. In particular, after increasing at an annual rate of about 2-1/4 percent in the first half of this year, real GDP is projected to accelerate to a rate of increase of 4 percent in the second half of 2003 and of 4-1/2 percent in 2004.

Household and business spending. Consumer spending is expected to accelerate over the projection period as negative wealth effects wane, income growth improves, and tax liabilities decline. That said, we expect the acceleration to come a bit later than we forecast in the last Greenbook because we now assume that the tax cut, which we had expected to be in place by the

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

Measure	2003 H1	2003 H2	2004
Real GDP	**2.3**	**4.1**	**4.6**
Previous	2.8	4.5	4.7
Final sales	2.5	4.0	4.3
Previous	2.4	4.2	4.5
PCE	2.0	3.5	4.3
Previous	2.4	3.9	4.2
Residential investment	10.6	9.8	3.9
Previous	6.3	6.0	5.7
BFI	1.2	8.1	11.9
Previous	2.2	9.4	12.7
Government purchases	3.9	1.8	1.7
Previous	2.3	1.9	1.9
Exports	4.1	8.9	9.0
Previous	5.8	9.1	8.8
Imports	4.4	6.9	9.6
Previous	5.8	7.2	9.2
	Contribution to growth, percentage points		
Inventory change	-.2	.2	.3
Previous	.4	.3	.3
Net exports	-.2	-.1	-.5
Previous	-.3	-.1	-.5

third quarter, will be delayed until the fourth.[4] All told, we expect real PCE to increase at an annual rate of about 3-1/2 percent in the second half of 2003 and to accelerate to about a 4-1/4 percent pace in 2004. Business spending on fixed investment is also projected to pick up markedly over the next eighteen months,

4. These tax cuts provide an initial boost to disposable income of about $40 billion in the fourth quarter of 2003, when the tax law changes are assumed to go into effect, and $105 billion in 2004, when taxpayers who did not adjust their withholding schedules receive refunds on their 2003 tax returns.

spurred by improving confidence, favorable financing conditions, the partial-expensing tax incentive, and accelerator effects from rising business output. The growth of real business fixed investment rises to an annual rate of about 8 percent in the second half of the year and about 12 percent in 2004.

As the pace of economic activity steps up, firms are expected to start rebuilding their inventories. But stocks should increase more slowly than sales, as continued improvements in supply-chain management keep the aggregate inventory-sales ratio on its long-term downward trend. In our projection, inventory investment makes a positive contribution to real GDP of about 1/4 percentage point in both the second half of 2003 and in 2004.

Government spending. The ongoing deployment of troops to the Persian Gulf and the heightened possibility of war have led us to raise the level of real defense spending in 2003 and 2004 by about $20 billion on average (annual rate). We now project that real defense spending will rise 5-1/4 percent in 2003 and be about flat in 2004. The rise in real nondefense outlays is expected to be about 4 percent in 2003 and 3-1/2 percent in 2004. Ongoing budget pressures are likely to hold down the increase in real state and local spending to a bit less than 2 percent, on average, over this year and next.

Net exports. We expect that net exports will make small negative arithmetic contributions to the change in real GDP of about 1/4 percentage point this year and 1/2 percentage point next year, about the same as in the January Greenbook. Rebounding foreign economic growth and continued modest depreciation of the dollar are projected to boost real export growth to about 6-1/2 percent this year and 9 percent next year. The increase in real imports is projected to step down from the pace of 10 percent in 2002 to 5-3/4 percent in 2003. However, in 2004, the effect of the acceleration in the U.S. economy should more than offset the effect of dollar depreciation, pushing the increase in imports back up to about 9-1/2 percent. *(The International Developments section provides more detail on the outlook for the external sector.)*

Prices and wages. The outlook for price and wage inflation is little changed from the last Greenbook. The slack in resource utilization that has characterized the economy over the past year or so is expected to exert downward pressure on inflation; we expect core PCE prices to decelerate from a 1.6 percent pace in 2002 to a 1.1 percent pace in 2004. Given this easing in price inflation and the continued slack in the labor market, we also expect a slowdown in wage increases. The effects of that slowdown on hourly labor compensation are tempered by upward pressures from rising benefit costs. All told, we expect the employment cost index for hourly compensation to rise about 3-1/4 percent this year and next.

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

Measure	2001	2002	2003	2004
PCE chain-weighted price index	1.5	1.8	1.5	1.0
Previous	1.5	1.8	1.3	1.2
Food and beverages	3.1	1.4	1.7	1.7
Previous	3.1	1.4	2.1	1.8
Energy	-10.3	7.0	3.5	-3.6
Previous	-10.3	7.7	-1.6	-1.2
Excluding food and energy	1.9	1.6	1.3	1.1
Previous	1.9	1.6	1.3	1.2
Consumer price index	1.8	2.2	2.0	1.4
Previous	1.9	2.3	1.7	1.6
Excluding food and energy	2.7	2.1	1.9	1.7
Previous	2.7	2.1	1.9	1.8
GDP chain-weighted price index	2.0	1.3	1.4	1.3
Previous	2.0	1.3	1.2	1.3
ECI for compensation of private industry workers[1]	4.2	3.2	3.2	3.2
Previous	4.2	3.5	3.3	3.3
NFB compensation per hour	1.4	4.2	3.1	2.9
Previous	1.4	4.1	3.2	3.1
Prices of core non-oil merchandise imports	-2.9	.7	2.6	1.2
Previous	-2.9	.6	3.1	1.7

1. December to December.

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	1.8	2.3	2.2	2.3
Previous	1.4	2.5	2.6	1.9	2.3	2.2	2.4
Contributions[1]							
Capital deepening	.6	1.3	1.1	.3	.2	.3	.6
Previous	.6	1.3	1.2	.4	.3	.3	.7
Multifactor productivity	.6	1.0	1.2	1.3	1.8	1.6	1.5
Previous	.6	1.0	1.2	1.3	1.8	1.6	1.5
Labor composition	.3	.3	.3	.3	.3	.3	.3
MEMO							
Potential GDP	2.9	3.5	3.6	2.9	3.3	3.1	3.3
Previous	2.9	3.5	3.6	2.9	3.3	3.2	3.4

NOTE. Components may not sum to totals because of rounding.
1. Percentage points.

The Outlook for the Labor Market

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

Measure	2001	2002	2003	2004
Output per hour, nonfarm business	1.9	4.1	1.9	1.6
Previous	1.9	3.8	1.8	1.8
Nonfarm private payroll employment	-1.4	-.5	1.1	3.3
Previous	-1.4	-.5	1.5	3.3
Household employment survey	-.8	.3	1.7	2.4
Previous	-1.0	.0	1.3	2.4
Labor force participation rate[1]	66.8	66.5	66.6	67.0
Previous	66.9	66.5	66.8	67.1
Civilian unemployment rate[1]	5.6	5.9	6.1	5.5
Previous	5.6	5.9	6.1	5.4

1. Percent, average for the fourth quarter.

Financial Flows and Conditions
The rise in domestic nonfinancial debt is expected to be 7 percent in 2003, about the same as last year, and to dip to 6-3/4 percent in 2004. Household and state and local government borrowing slows over the two years, while business and federal government borrowing are expected to strengthen.

The expansion of household debt is projected to moderate from nearly 10 percent last year to 8-1/4 percent in 2003 and 7 percent in 2004. The rise in mortgage debt is anticipated to slow from its recent frenetic pace as the impetus from falling mortgage rates and robust house price appreciation wanes. We expect the expansion of consumer credit to remain lackluster in 2003 but to step up in 2004. Next year's rise reflects both stronger spending on consumer durable goods and more limited use of mortgage borrowing to finance household outlays.

In the state and local sector, borrowing is expected to remain strong but below the rapid pace of last year. The forecast calls for the current wave of advance refunding to run its course and for short-term financing needs to ease as state and local government budgets move toward balance.

In contrast, we expect the increase in business debt to strengthen this year and next, reflecting a pickup in capital spending and improving credit conditions. This forecast, which is little changed from the January Greenbook, shows business debt increasing 4-1/2 percent in 2003 and 5-1/4 percent in 2004, up from the 3 percent rise of last year.

As noted, this forecast incorporates lower federal tax receipts and greater military spending than did the January Greenbook, both of which boost federal borrowing over the next two years. With this revision, the rate of increase in federal debt picks up from 7-1/2 percent last year to 9-1/2 percent in 2004.

Gains in M2 last year were boosted by a decline in opportunity costs to a historically low level and by mortgage refinancing activity. During the forecast period, opportunity costs stabilize and mortgage refinancing, while continuing to boost money growth in 2003, becomes a net drag on growth in 2004. On balance, the forecast calls for the expansion of M2 to slow to around 6-1/2 percent in 2003 and 5-1/2 percent in 2004.

Alternative Simulations
In this section, we use FRB/US simulations to explore two risks to the staff forecast that have been of concern for some time—a further delay in the projected recovery in E&S investment and disinflationary pressures that turn out to be more intense than we currently anticipate. We also consider the effects of

Alternative Scenarios

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

Measure	2002: H2	2003 Q1	2003 Q2	2003 H2	2004
Real GDP					
Greenbook Baseline	**2.7**	**2.3**	**2.3**	**4.1**	**4.6**
Prolonged investment slump	2.7	2.3	2.2	3.7	3.9
More disinflation	2.7	2.3	2.3	4.1	4.6
Lower funds rate	2.7	2.3	2.3	4.2	5.0
Market-based funds rate	2.7	2.3	2.3	4.2	4.6
Civilian unemployment rate[1]					
Greenbook Baseline	**5.9**	**5.8**	**6.1**	**6.1**	**5.5**
Prolonged investment slump	5.9	5.8	6.1	6.2	5.9
More disinflation	5.9	5.8	6.1	6.1	5.5
Lower funds rate	5.9	5.8	6.1	6.1	5.3
Market-based funds rate	5.9	5.8	6.1	6.1	5.4
PCE prices excluding food and energy					
Greenbook Baseline	**1.5**	**.7**	**1.6**	**1.4**	**1.1**
Prolonged investment slump	1.5	.7	1.6	1.4	1.1
More disinflation	1.5	.7	1.5	1.1	0.7
Lower funds rate	1.5	.7	1.6	1.4	1.2
Market-based funds rate	1.5	.7	1.6	1.4	1.1

1. Average for the final quarter of the period.

a near-term cut in the funds rate as well as the consequences of aligning our monetary policy assumptions with market expectations.

Prolonged investment slump. In light of persistently downbeat anecdotal reports, one risk to the forecast is that we may be too optimistic about the near-term prospects for a solid rebound in business investment. In the baseline, the gloom currently afflicting the business sector is assumed to begin dissipating by midyear so that investment moves back into line with fundamentals by the end of this year. With significant unused capacity and continued uncertainty over the strength of the economic recovery, firms may instead decide to hold back capital spending for a longer period of time. In this scenario, the acceleration in business investment is delayed until the middle of next year. Under this assumption, the rate of increase in real GDP stays below 4 percent throughout the forecast period, and the unemployment rate remains close to 6 percent at the end of next year. Core inflation is little changed from baseline, as weaker productivity from less capital deepening offsets the effects of additional labor market slack.

More disinflation. Another risk is that we have underestimated the forces restraining inflation. Recurring reports of limited pricing power suggest that firms have found it difficult to pass through cost increases to their customers, and in this regard, the markup has fallen sharply from its peak in 1997. In the baseline forecast, we anticipate that the markup will remain roughly constant at a level slightly above its historical average. In this scenario, we instead assume a continuing erosion of the markup, at a rate similar to that experienced over the past few years. Under these conditions, core inflation falls to 3/4 percent by 2004. Because the nominal funds rate is held constant in this scenario, the real funds rate steadily increases. Nonetheless, output and unemployment are little affected, because the fall in the markup raises real labor and transfer income, which stimulates consumer spending by more than the fall in property income restrains it.

Lower funds rate. In this scenario, the federal funds rate is lowered 50 basis points by midyear and remains at 3/4 percent thereafter. The additional monetary stimulus is sufficient to boost the rise in real GDP to 5 percent next year and to bring the unemployment rate down to 5-1/4 percent by the end of 2004, only 1/4 percentage point above our assumed NAIRU. The change in core PCE prices falls only to 1-1/4 percent in 2004.

Market-based funds rate. Futures quotes are consistent with a cut in the funds rate of 25 to 50 basis points by this summer, followed by increases in 2004 that raise the funds rate to 2 percent by the end of next year. Incorporating this path for the funds rate into the outlook boosts real GDP and lowers the unemployment rate a touch. Inflation is unaffected.

Economic Uncertainties Arising from the Conflict with Iraq

As noted above, the staff forecast takes as its initial conditions current readings on equity prices, interest rates, consumer confidence, and futures quotes for crude oil prices. These assumptions presumably represent, in the market's assessment, a weighted average of a wide range of possible geopolitical outcomes that include no war; a short, successful war followed by a limited occupation of Iraq; and an unexpectedly long conflict followed by a substantial long-term military commitment. The response of households and businesses to any one of these possible scenarios is highly uncertain. For example, even if we knew that a war would be successfully concluded in a short period of time, we would not know in advance how an easing in global tensions, if it were to occur, would influence consumer and business confidence. We do, however, have an analytical framework that can help quantify the possible effects of those factors that seem likely to be most important in determining the economic consequences of a war with Iraq. In this section, we consider how five key factors—oil prices, consumer and business confidence, asset prices, fiscal policy, and developments in the rest of the world—might be affected by a military confrontation with Iraq and might, in turn, affect activity in the United States.

Oil prices. The near-term path obviously is uncertain**.** On the one hand, spot oil prices may fall considerably faster than in the baseline projection if market participants are assured that the infrastructure of oil production and distribution in Iraq (and in the Middle East more generally) is not importantly damaged, that any interruptions in the supply of Iraqi oil to world markets will be eliminated without great delay, and that any losses in supply will be made up from other sources, such as Saudi Arabia or the Strategic Petroleum Reserve. Futures prices for the longer term may also decline below current levels if resolution of the crisis increases the likelihood that Iraq will fully develop its oil resources over time. Conversely, oil prices could rise far above current levels and stay high for some time if the infrastructure of oil supply in Iraq (and perhaps elsewhere in the Middle East) is seen to be substantially damaged or if continuing military or political developments threaten to interrupt the supply of oil to world markets for a prolonged period.

Initial movements in oil prices may be very noisy indicators of their ultimate path. Oil prices fell substantially with the start of the Gulf war air campaign in January 1991, but given the leanness of world stocks today, one can easily imagine oil prices rising substantially with the start of a war. Considerable volatility of prices can be expected until the resolution of uncertainties regarding damage to oil production facilities in the region or the outcome of the geopolitical crisis more generally.

In thinking about the consequences of any war-related oil price movements, one must distinguish between temporary and persistent price changes because only the latter are likely to have important economic effects. Transitory increases in oil prices can significantly depress domestic income and profits for a time as more output is diverted to pay for oil imports. But these temporary shocks do not greatly influence the expectations of forward-looking households and firms about longer-term growth trends, and thus in most models they have little or no effect on potential output. In fact, simulations of the staff model suggest that even if prices jumped to $50 per barrel and remained there through the end of the third quarter, the growth of real GDP would be trimmed only about 1/4 percentage point in 2003, as long as the price hike was expected to dissipate quickly in subsequent quarters. As oil prices fall, GDP growth would be boosted 0.2 percentage point in 2004.

However, a persistent increase in the level of oil prices would not only affect national income through a higher bill for imported oil but would also influence the supply side of the economy in important ways. Faced with a large permanent increase in the relative price of oil, businesses would attempt to economize on the amount of energy used in production. They might do so by using additional labor or by replacing existing capital with more-energy-efficient equipment and structures. As a result, structural labor productivity would tend to grow more slowly for an extended period of time as the economy gradually adjusted to the new set of relative prices, eventually reaching a level of potential GDP that is lower than in the baseline. We have analyzed the effects of persistently higher oil prices by assuming that the price of oil jumps to $50 per barrel, as in the first scenario, but then remains at that level thereafter. In this scenario, the price of oil is $25 per barrel above baseline at the end of 2004. Model simulations suggest that, under these conditions, real output growth might be reduced by about 1/2 percentage point this year, and 1/4 percentage point in 2004. In contrast, an outcome that resulted in permanently lower oil prices would improve the supply side outlook and support aggregate spending.

Consumer and business confidence. In recent months, consumer sentiment has slipped by an amount that is difficult to explain by economic factors alone. Businesses, too, appear unusually pessimistic about the outlook. Uncertainty about the consequences of war may explain some of this gloom. If so, successful resolution of the current crisis might lead to a jump in sentiment. In contrast, in the event of deeper and prolonged geopolitical tensions, confidence could slip further.

In the baseline, we assume that the factors currently holding down consumer sentiment dissipate gradually over the projection period. If the current crisis is resolved and international tensions ease, that gloom might dissipate immediately. This rebound would be similar to that at the time of the Gulf war, when consumer sentiment jumped about 10 points at the start of the air campaign in January 1991. Based on the historical relationship between sentiment and consumer spending, such an increase could add as much as 0.3 percentage point to the rise in real household spending this year and 0.1 percentage point in 2004. Allowing for a similarly quick recovery in the optimism of firms, and taking into account their response to increased consumer demand, business investment would also pick up substantially. As a result, real GDP growth could be as much as 0.4 percentage point above baseline in 2003 and 0.3 percentage point in 2004. Obviously, any developments in the Middle East that led to a comparably sized decline in sentiment would be associated with correspondingly large declines in activity.

Financial markets. War and concerns about its long-run consequences appear to have been depressing financial markets in recent weeks, and a successful resolution of the current crisis might lead to a rally in equity and corporate bond markets. As with consumer and business confidence, one cannot know how large and persistent such a rally might be or even whether it would occur.

However, if one assumes that most of the decline in the stock market seen since January is related to the war, then a quick resolution might yield a reversal of these losses, pushing up equity prices 10 percent relative to the staff's baseline assumption. According to the staff model, such an increase in wealth and a reduction in equity financing costs would stimulate consumption and investment, perhaps adding 0.1 percentage point to the rise in real GDP this year and 0.2 percentage point in 2004. Of course, if international tensions were to increase, financial market conditions might not improve and could even deteriorate.

A complicating factor, whether in the case of more favorable or less favorable outcomes in other financial markets, would be the behavior of the dollar. At present, it is difficult to know how the dollar would respond to any particular geopolitical scenario. On the one hand, rising tensions over Iraq in recent months have coincided with a depreciation of the currency, perhaps as a result of a generalized pullback in capital flows in response to concerns about heightened risk. This linkage implies that a future easing of such concerns, for example, would boost the dollar. On the other hand, the recent decline in the dollar may have been owing to other factors—such as concerns about the U.S. current account deficit—which overwhelmed the effects of a rise in the demand for dollars resulting from safe-haven considerations. In that case, a successful resolution of the crisis could see a weakening of the dollar as funds flow back toward what are perceived to be riskier foreign investments.

Fiscal policy. As discussed previously, CBO estimates suggest that the direct cost of a quick war with Iraq and continued commitment of troops through 2004 would likely be around $50 billion over two years, with some additional expenses in subsequent years. Costs would be somewhat higher in the case of a more prolonged war or if the long-term military commitment required more troops. But avoidance of war would result in only limited budget savings this year now that forces have already been deployed because personnel and transportation expenses account for a sizable chunk of the direct costs.

Past 2004, the federal budget might be significantly affected by the need to maintain a continuing military presence in Iraq or to help it rebuild its infrastructure. But even the more expansive estimates seem insufficiently large to have much effect on long-term interest rates. Moreover, a portion of this spending would be used to purchase goods and services produced outside the United States.

Of course, if the resolution of the conflict with Iraq and the economic effects accompanying it change the political climate at home, there might be budgetary implications beyond the direct costs of war. For example, the fiscal stimulus package might be trimmed or expanded as a result.

International conditions. The direct effects on the U.S. economy of most of the factors previously described are likely to be augmented through their impact on foreign economies. For example, increases in the price of oil relative to baseline are likely to depress activity among most of our foreign trading partners, reduce their demand for our exports, and hence add to any direct contractionary effect of higher oil prices on U.S. GDP. Declines in oil prices would have the opposite effects.

As in the United States, sentiment, particularly among consumers, has been deteriorating in many foreign countries in recent months; any rapid and pronounced rebound in sentiment would likely boost spending abroad and hence provide support to U.S. external demand, whereas a further decline in sentiment would have the opposite effect. In the event of a favorable resolution of the current crisis, financial market variables might also move in a beneficial direction, as already discussed for the United States, and thus possibly increase foreign output as well.

As noted above, movements in the dollar are particularly difficult to foresee and would remain so even if we knew how military and political developments were to play out. Also, the implications of movements in the dollar will be the opposite for domestic and foreign activity. For example, favorable geopolitical developments that buoy sentiment and financial markets might also engender a stronger exchange value of the dollar, which would restrain U.S. output somewhat but stimulate foreign GDP. Based on a simulation of the FRB/Global model described in the International Developments section of Greenbook Part 1, a 10 percent rise in the dollar against the currencies of our major industrial country trading partners should lower U.S. GDP growth about 0.4 percentage point below baseline over the second half of 2003 and all of 2004 and boost foreign industrial country GDP growth to a comparable extent. Conversely, a 10 percent fall in the dollar would have opposite effects.

(This page intentionally blank.)

Strictly Confidential <FR> March 13, 2003
Class II FOMC

STAFF PROJECTIONS OF CHANGES IN GDP, PRICES, AND UNEMPLOYMENT
(Percent, annual rate)

Interval		Nominal GDP		Real GDP		GDP chain-weighted price index		Consumer price index[1]		Unemployment rate[2]	
		01/22/03	03/13/03	01/22/03	03/13/03	01/22/03	03/13/03	01/22/03	03/13/03	01/22/03	03/13/03
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		3.5	3.6	2.4	2.4	1.1	1.1	1.6	1.6	5.8	5.8
2003		3.9	4.1	2.6	2.6	1.3	1.5	2.1	2.5	6.2	6.0
2004		6.0	5.7	4.6	4.4	1.3	1.3	1.5	1.3	5.7	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	4.4
	Q3	1.9	1.9	-0.3	-0.3	2.2	2.2	0.7	0.9	4.8	4.8
	Q4	2.2	2.2	2.7	2.7	-0.5	-0.5	-0.2	-0.7	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	2.5	2.5	1.3	1.3	1.2	1.2	3.4	3.4	5.9	5.9
	Q3	5.1	5.1	4.0	4.0	1.0	1.0	1.8	2.2	5.7	5.8
	Q4	2.0	3.0	0.2	1.4	1.8	1.6	2.4	2.0	5.9	5.9
2003	Q1	3.8	4.3	2.6	2.3	1.2	2.0	2.9	3.8	6.2	5.8
	Q2	4.1	3.8	2.9	2.3	1.2	1.4	1.6	2.8	6.2	6.1
	Q3	5.6	4.9	4.3	3.8	1.2	1.0	1.1	0.4	6.2	6.2
	Q4	5.9	5.7	4.6	4.5	1.3	1.2	1.4	1.1	6.1	6.1
2004	Q1	6.7	6.6	5.0	4.9	1.6	1.6	1.6	1.4	6.0	6.0
	Q2	6.2	6.0	4.9	4.7	1.2	1.2	1.6	1.4	5.8	5.9
	Q3	6.0	5.7	4.7	4.6	1.2	1.1	1.6	1.4	5.6	5.7
	Q4	5.6	5.5	4.4	4.4	1.2	1.1	1.6	1.5	5.4	5.5
TWO-QUARTER[3]											
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	1.2
2002	Q2	4.5	4.5	3.1	3.1	1.3	1.3	2.4	2.4	0.3	0.3
	Q4	3.5	4.0	2.1	2.7	1.4	1.3	2.1	2.1	0.0	0.0
2003	Q2	4.0	4.0	2.8	2.3	1.2	1.7	2.2	3.3	0.3	0.2
	Q4	5.7	5.3	4.5	4.1	1.2	1.1	1.2	0.8	-0.1	0.0
2004	Q2	6.5	6.3	5.0	4.8	1.4	1.4	1.6	1.4	-0.3	-0.2
	Q4	5.8	5.6	4.5	4.5	1.2	1.1	1.6	1.4	-0.4	-0.4
FOUR-QUARTER[4]											
2000	Q4	4.6	4.6	2.3	2.3	2.3	2.3	3.4	3.4	-0.1	-0.2
2001	Q4	2.0	2.0	0.1	0.1	2.0	2.0	1.9	1.8	1.6	1.7
2002	Q4	4.0	4.3	2.6	2.9	1.3	1.3	2.3	2.2	0.3	0.3
2003	Q4	4.8	4.7	3.6	3.2	1.2	1.4	1.7	2.0	0.2	0.2
2004	Q4	6.1	6.0	4.7	4.6	1.3	1.3	1.6	1.4	-0.7	-0.6

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)

March 13, 2003

									- - - Projected - - -	
Item	Units[1]	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	10445.2	10874.4	11499.6
Real GDP	Bill. Ch. $	7813.2	8159.5	8508.9	8859.0	9191.4	9214.5	9439.7	9683.8	10111.4
Real GDP	% change	4.1	4.3	4.8	4.3	2.3	0.1	2.9	3.2	4.6
Gross domestic purchases		4.3	5.0	5.8	5.2	2.9	0.1	3.7	3.2	4.9
Final sales		3.9	3.9	4.7	4.2	2.6	1.6	1.7	3.2	4.3
Priv. dom. final purchases		4.4	5.1	6.3	5.2	3.7	0.9	2.3	3.4	5.2
Personal cons. expenditures		3.1	4.1	5.0	5.0	3.5	2.8	2.6	2.7	4.3
Durables		5.0	8.8	12.7	10.0	3.8	13.2	1.8	4.7	8.0
Nondurables		3.2	2.5	5.0	4.9	3.0	1.7	3.5	3.2	4.3
Services		2.7	3.9	3.6	4.0	3.8	1.3	2.4	2.1	3.7
Business fixed investment		12.1	11.8	12.3	6.6	6.2	-9.3	-1.7	4.6	11.9
Equipment & Software		11.8	13.7	14.9	9.7	5.2	-8.8	3.3	6.8	15.0
Nonres. structures		12.8	6.5	4.9	-2.5	9.3	-10.6	-15.9	-2.5	1.1
Residential structures		5.6	3.5	10.0	4.0	-1.2	1.0	6.7	10.2	3.9
Exports		9.8	8.5	2.3	4.9	7.3	-11.4	3.9	6.5	9.0
Imports		11.2	14.3	10.8	11.9	11.1	-8.0	10.1	5.7	9.6
Gov't. cons. & investment		2.7	2.4	2.7	4.5	1.3	5.1	3.6	2.8	1.7
Federal		2.0	0.1	0.6	4.0	-1.2	7.5	7.6	4.9	1.3
Defense		0.8	-1.4	-0.8	4.4	-2.5	7.4	9.4	5.3	0.1
State & local		3.0	3.7	3.8	4.8	2.6	3.9	1.5	1.7	2.0
Change in bus. inventories	Bill. Ch. $	30.0	63.8	76.7	62.8	65.0	-61.4	5.5	21.2	48.6
Nonfarm		21.2	60.6	75.0	64.1	67.2	-63.2	4.4	20.2	47.1
Net exports		-89.0	-113.3	-221.1	-320.5	-398.8	-415.9	-488.5	-545.1	-597.5
Nominal GDP	% change	6.0	6.2	6.0	5.9	4.6	2.0	4.3	4.7	6.0
EMPLOYMENT AND PRODUCTION										
Nonfarm payroll employment	Millions	119.6	122.7	125.9	128.9	131.7	131.9	130.8	131.1	134.7
Unemployment rate	%	5.4	4.9	4.5	4.2	4.0	4.8	5.8	6.0	5.8
Industrial prod. index	% change	5.5	8.0	4.0	4.9	2.7	-5.7	1.5	3.5	5.9
Capacity util. rate - mfg.	%	81.2	82.7	81.9	81.4	81.4	75.6	73.8	74.2	77.6
Housing starts	Millions	1.48	1.47	1.62	1.64	1.57	1.60	1.71	1.89	1.99
Light motor vehicle sales		15.05	15.07	15.41	16.78	17.24	17.02	16.70	16.47	17.51
North Amer. produced		13.34	13.14	13.39	14.30	14.38	13.94	13.42	13.15	14.06
Other		1.70	1.93	2.02	2.48	2.86	3.08	3.29	3.31	3.45
INCOME AND SAVING										
Nominal GNP	Bill. $	7831.2	8325.4	8778.1	9297.1	9848.0	10104.1	10435.6	10877.5	11501.0
Nominal GNP	% change	5.9	6.0	5.8	6.4	4.6	2.1	3.8	4.8	5.9
Nominal personal income		5.9	6.3	6.7	5.1	7.7	1.4	4.3	4.4	5.3
Real disposable income		2.6	3.8	5.0	2.4	4.8	0.3	5.9	3.2	5.0
Personal saving rate	%	4.8	4.2	4.7	2.6	2.8	2.3	3.9	4.4	5.6
Corp. profits, IVA & CCAdj.	% change	11.4	9.9	-9.6	7.0	-9.1	8.2	-6.3	7.3	9.8
Profit share of GNP	%	9.6	10.0	8.9	8.7	8.0	7.2	7.5	7.2	7.5
Excluding FR Banks		9.4	9.7	8.6	8.4	7.7	7.0	7.2	7.0	7.3
Federal surpl./deficit	Bill. $	-136.8	-53.3	43.8	111.9	206.9	72.0	-199.2	-271.1	-328.5
State & local surpl./def.		21.4	31.0	40.7	38.3	18.0	-31.3	-50.6	-59.0	-28.4
Ex. social ins. funds		18.7	29.9	40.0	37.4	17.8	-31.2	-50.4	-58.9	-28.3
Gross natl. saving rate	%	17.2	18.0	18.8	18.3	18.4	16.5	15.2	14.7	15.6
Net natl. saving rate		5.7	6.7	7.5	6.8	6.7	3.8	2.1	1.4	2.5
PRICES AND COSTS										
GDP chn.-wt. price index	% change	1.9	1.8	1.1	1.6	2.3	2.0	1.3	1.4	1.3
Gross Domestic Purchases chn.-wt. price index		1.9	1.4	0.8	1.9	2.5	1.3	1.6	1.6	1.0
PCE chn.-wt. price index		2.3	1.5	1.1	2.0	2.5	1.5	1.8	1.5	1.0
Ex. food and energy		1.8	1.7	1.6	1.5	1.8	1.9	1.6	1.3	1.1
CPI		3.2	1.9	1.5	2.6	3.4	1.8	2.2	2.0	1.4
Ex. food and energy		2.6	2.2	2.3	2.0	2.6	2.7	2.1	1.9	1.7
ECI, hourly compensation[2]		3.1	3.4	3.5	3.4	4.4	4.2	3.2	3.2	3.2
Nonfarm business sector										
Output per hour		2.3	2.2	2.9	2.9	2.1	1.9	4.1	1.9	1.6
Compensation per Hour		3.2	3.4	5.3	4.3	7.2	1.4	4.2	3.1	2.9
Unit labor cost		0.9	1.1	2.3	1.4	4.9	-0.5	0.1	1.2	1.3

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

Strictly Confidential <FR>
Class II FOMC

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

March 13, 2003

Item	Units	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	10376.9
Real GDP	Bill. Ch. $	9097.4	9205.7	9218.7	9243.8	9229.9	9193.1	9186.4	9248.8	9363.2	9392.4
Real GDP	% change	2.6	4.8	0.6	1.1	-0.6	-1.6	-0.3	2.7	5.0	1.3
Gross domestic purchases		3.6	5.7	1.2	1.3	-1.1	-1.1	-0.1	2.9	5.6	2.6
Final sales		4.4	3.1	1.7	1.3	2.8	-0.4	-0.2	4.2	2.4	-0.1
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	2.0
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	-2.4
Equipment & Software		15.5	10.9	0.9	-5.4	-6.3	-16.7	-9.2	-2.5	-2.7	3.3
Nonres. structures		13.8	8.2	12.1	3.6	-3.1	-8.4	2.9	-30.1	-14.2	-17.6
Residential structures		8.3	-3.0	-9.3	0.0	8.2	-0.5	0.4	-3.5	14.2	2.7
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	22.2
Gov't. cons. & investment		-1.2	4.6	-1.0	2.9	5.7	5.6	-1.1	10.5	5.6	1.4
Federal		-13.2	16.0	-7.2	2.0	9.5	6.0	1.2	13.5	7.4	7.5
Defense		-19.9	15.0	-6.1	4.7	8.3	2.7	4.6	14.3	11.6	7.8
State & local		5.6	-0.8	2.4	3.3	3.8	5.4	-2.3	8.9	4.6	-1.7
Change in bus. inventories	Bill. Ch. $	45.3	91.5	63.1	59.9	-26.9	-58.3	-61.8	-98.4	-28.9	4.9
Nonfarm		58.9	88.6	64.6	56.8	-32.6	-54.9	-63.6	-101.5	-35.1	4.2
Net exports		-368.8	-394.6	-413.1	-418.5	-404.5	-414.8	-419.0	-425.3	-446.6	-487.4
Nominal GDP	% change	5.7	7.3	2.2	3.2	3.0	0.9	1.9	2.2	6.5	2.5
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	4.0	3.9	4.2	4.4	4.8	5.6	5.6	5.9
Industrial prod. index	% change	5.4	7.1	0.2	-1.6	-6.1	-6.1	-4.6	-5.8	1.4	4.4
Capacity util. rate - mfg.	%	82.0	82.4	81.4	80.0	77.9	76.1	74.8	73.4	73.4	73.9
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	10356.8
Nominal GNP	% change	5.3	7.5	1.9	3.7	2.2	1.7	1.1	3.2	5.1	1.6
Nominal personal income		13.2	6.9	6.8	4.2	3.9	0.8	1.4	-0.2	4.8	5.1
Real disposable income		8.4	4.8	4.3	1.8	-0.1	-0.6	10.5	-7.6	14.5	3.9
Personal saving rate	%	2.6	2.9	2.9	2.9	2.4	1.9	4.0	0.8	3.5	4.0
Corp. profits, IVA & CCAdj.	% change	-8.0	-0.1	-9.4	-17.9	-21.1	8.7	-17.7	94.4	-6.6	-6.2
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	7.3
Federal surpl./deficit	Bill. $	223.2	197.2	213.2	193.8	173.8	144.4	-51.7	21.3	-145.8	-195.6
State & local surpl./def.		32.7	20.2	19.2	-0.2	-16.5	-32.3	-46.2	-30.2	-55.8	-45.1
Ex. social ins. funds		32.2	20.0	19.2	-0.1	-16.4	-32.2	-46.1	-30.0	-55.6	-44.9
Gross natl. saving rate	%	18.8	18.4	18.5	17.8	16.9	16.6	16.5	15.8	15.5	15.5
Net natl. saving rate		7.3	6.9	6.8	5.9	4.8	4.1	3.3	3.1	2.7	2.4
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	1.2
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	2.3
PCE chn.-wt. price index		3.4	2.3	2.1	2.2	3.3	1.8	-0.1	0.8	1.1	2.7
Ex. food and energy		2.2	1.8	1.3	1.8	2.8	1.2	0.7	2.7	1.4	1.9
CPI		4.1	3.3	3.5	2.8	4.0	3.2	0.9	-0.7	1.4	3.4
Ex. food and energy		2.5	2.7	2.7	2.4	2.9	2.6	2.6	2.8	2.1	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	-1.4	-0.1	2.1	7.2	8.6	1.7
Compensation per hour		15.2	2.2	8.7	3.1	2.8	0.1	1.0	1.5	2.9	4.0
Unit labor cost		14.9	-3.6	8.0	1.4	4.3	0.3	-1.1	-5.4	-5.3	2.3

1. Private-industry workers.

Strictly Confidential <FR> Class II FOMC

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

March 13, 2003

			- - - - - -	- - - - - -	- - - - - -	- - Projected - -	- - - - - -	- - - - - -	- - - - - -	- - - - - -	- - - - - -
Item	Units	2002 Q3	2002 Q4	2003 Q1	2003 Q2	2003 Q3	2003 Q4	2004 Q1	2004 Q2	2004 Q3	2004 Q4
EXPENDITURES											
Nominal GDP	Bill. $	10506.2	10584.5	10697.3	10796.7	10925.4	11078.2	11257.0	11421.5	11581.9	11738.2
Real GDP	Bill. Ch. $	9485.6	9517.6	9570.8	9625.8	9715.8	9822.9	9941.6	10056.6	10169.3	10278.3
Real GDP	% change	4.0	1.4	2.3	2.3	3.8	4.5	4.9	4.7	4.6	4.4
Gross domestic purchases		3.9	2.8	1.9	2.9	4.0	4.2	5.3	5.2	4.9	4.2
Final sales		3.4	1.0	2.5	2.5	3.5	4.4	4.8	4.1	4.1	4.2
Priv. dom. final purchases		3.4	2.0	1.8	2.9	4.2	4.7	6.0	5.3	5.1	4.5
Personal cons. expenditures		4.2	1.5	1.7	2.3	3.2	3.8	4.6	4.3	4.2	4.2
Durables		22.8	-8.5	-3.5	4.3	11.3	7.1	9.0	8.3	6.9	7.9
Nondurables		1.0	5.3	4.4	2.0	2.9	3.6	4.3	4.2	4.2	4.4
Services		2.3	1.9	1.3	2.0	1.9	3.2	3.8	3.6	3.7	3.5
Business fixed investment		-0.8	2.3	-3.5	6.3	8.4	7.8	12.5	12.7	13.4	9.0
Equipment & Software		6.7	6.3	-1.9	8.0	11.2	10.2	16.5	16.0	16.2	11.3
Nonres. structures		-21.4	-9.9	-9.1	0.6	-1.0	-0.3	-0.7	1.4	3.3	0.4
Residential structures		1.1	9.5	16.7	4.9	8.5	11.1	12.5	4.3	-0.2	-0.6
Exports		4.6	-5.9	2.5	5.8	7.6	10.2	6.7	9.0	9.2	11.3
Imports		3.3	7.3	0.1	9.0	7.8	6.0	9.0	11.5	10.1	7.8
Gov't. cons. & investment		2.9	4.6	3.9	3.9	2.0	1.6	1.9	1.7	1.5	1.9
Federal		4.3	11.2	8.1	8.1	2.5	1.0	1.8	1.1	0.5	1.7
Defense		6.9	11.4	10.5	10.2	1.8	-0.7	0.3	0.1	-0.7	0.8
State & local		2.2	1.2	1.6	1.6	1.7	2.0	1.9	2.0	2.1	2.1
Change in bus. inventories	Bill. Ch. $	18.8	27.1	21.0	15.9	23.0	24.8	28.0	44.5	58.8	63.1
Nonfarm		20.8	27.8	20.4	14.9	21.9	23.5	26.7	43.1	57.3	61.4
Net exports		-488.0	-532.0	-525.6	-545.2	-556.1	-553.5	-571.7	-594.1	-611.1	-612.9
Nominal GDP	% change	5.1	3.0	4.3	3.8	4.9	5.7	6.6	6.0	5.7	5.5
EMPLOYMENT AND PRODUCTION											
Nonfarm payroll employment	Millions	130.8	130.8	130.6	130.5	131.2	132.2	133.2	134.2	135.2	136.1
Unemployment rate	%	5.8	5.9	5.8	6.1	6.2	6.1	6.0	5.9	5.7	5.5
Industrial prod. index	% change	3.4	-3.1	1.9	0.9	5.4	6.0	6.4	6.0	5.8	5.5
Capacity util. rate - mfg.	%	74.3	73.5	73.5	73.6	74.4	75.4	76.4	77.3	78.1	78.8
Housing starts	Millions	1.70	1.76	1.82	1.86	1.90	1.97	2.02	1.99	1.99	1.98
Light motor vehicle sales		17.63	16.50	15.68	16.00	17.04	17.16	17.37	17.52	17.54	17.60
North Amer. produced		14.27	13.25	12.38	12.72	13.70	13.82	13.93	14.07	14.09	14.15
Other		3.35	3.24	3.29	3.28	3.34	3.34	3.44	3.45	3.45	3.45
INCOME AND SAVING											
Nominal GNP	Bill. $	10495.3	10575.2	10693.5	10802.6	10931.3	11082.7	11259.9	11423.2	11582.6	11738.2
Nominal GNP	% change	5.5	3.1	4.5	4.1	4.8	5.7	6.6	5.9	5.7	5.5
Nominal personal income		3.6	3.8	3.7	3.8	4.9	5.3	5.6	5.3	5.2	5.0
Real disposable income		3.1	2.7	1.7	1.2	3.9	5.9	8.5	3.9	3.9	3.7
Personal saving rate	%	3.8	4.2	4.3	4.1	4.3	4.8	5.7	5.6	5.6	5.5
Corp. profits, IVA & CCAdj.	% change	-6.9	-5.3	0.4	6.9	11.2	10.9	12.1	9.6	9.0	8.5
Profit share of GNP	%	7.3	7.2	7.1	7.2	7.3	7.4	7.5	7.5	7.6	7.6
Excluding FR Banks		7.1	7.0	6.9	6.9	7.1	7.1	7.2	7.3	7.4	7.4
Federal surpl./deficit	Bill. $	-200.7	-254.6	-267.0	-271.8	-255.3	-290.4	-364.7	-347.3	-331.4	-270.4
State & local surpl./def.		-52.5	-48.8	-61.6	-65.8	-60.0	-48.5	-38.8	-33.8	-27.8	-13.3
Ex. social ins. funds		-52.4	-48.7	-61.5	-65.7	-59.9	-48.4	-38.7	-33.7	-27.7	-13.2
Gross natl. saving rate	%	15.0	14.7	14.5	14.4	14.8	15.0	15.3	15.5	15.7	15.8
Net natl. saving rate		1.9	1.5	1.2	1.1	1.6	1.9	2.2	2.4	2.7	2.8
PRICES AND COSTS											
GDP chn.-wt. price index	% change	1.0	1.6	2.0	1.4	1.0	1.2	1.6	1.2	1.1	1.1
Gross Domestic Purchases chn.-wt. price index		1.2	1.6	3.0	1.9	0.5	0.9	1.3	1.0	0.9	1.0
PCE chn.-wt. price index		1.7	1.6	2.3	2.2	0.5	0.9	1.0	1.0	0.9	1.0
Ex. food and energy		1.8	1.3	0.7	1.6	1.5	1.4	1.2	1.1	1.0	1.0
CPI		2.2	2.0	3.8	2.8	0.4	1.1	1.4	1.4	1.4	1.5
Ex. food and energy		2.1	1.7	1.7	2.2	2.0	1.9	1.9	1.8	1.7	1.7
ECI, hourly compensation[1]		2.5	2.8	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2
Nonfarm business sector											
Output per hour		5.5	0.8	3.2	2.3	1.0	1.2	1.7	1.6	1.6	1.5
Compensation per hour		5.4	4.6	3.4	3.1	3.1	3.0	3.1	3.0	2.9	2.8
Unit labor cost		-0.1	3.8	0.2	0.8	2.1	1.8	1.3	1.3	1.3	1.3

1. Private-industry workers.

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	1.3	4.0	2.3	0.1	2.9
Gross dom. purchases	1.3	1.3	-1.1	-1.2	-0.1	3.0	5.8	2.7	4.0	3.0	0.2	3.9
Final sales	1.7	1.2	2.7	-0.5	-0.2	4.1	2.5	-0.1	3.5	2.6	1.6	1.7
Priv. dom. final purchases	2.6	1.0	1.2	-1.0	0.3	2.6	2.2	1.1	2.9	3.1	0.8	2.0
Personal cons. expenditures	2.5	1.4	1.5	0.9	1.0	4.1	2.2	1.2	2.9	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	0.2	0.6	0.3	0.7
Services	1.5	1.3	0.2	0.6	0.4	0.9	1.2	1.1	1.0	1.5	0.5	1.0
Business fixed investment	0.5	-0.4	-0.7	-1.9	-0.7	-1.3	-0.7	-0.3	-0.1	0.8	-1.2	-0.2
Equipment & Software	0.1	-0.5	-0.6	-1.6	-0.8	-0.2	-0.2	0.3	0.5	0.5	-0.8	0.3
Nonres. structures	0.4	0.1	-0.1	-0.3	0.1	-1.1	-0.4	-0.5	-0.6	0.3	-0.4	-0.5
Residential structures	-0.4	0.0	0.3	-0.0	0.0	-0.2	0.6	0.1	0.1	-0.1	0.0	0.3
Net exports	-0.7	-0.2	0.5	-0.4	-0.2	-0.3	-0.8	-1.4	-0.0	-0.8	-0.1	-1.0
Exports	1.3	-0.5	-0.7	-1.4	-1.9	-1.0	0.3	1.3	0.5	0.8	-1.3	0.4
Imports	-2.0	0.2	1.2	1.0	1.7	0.7	-1.1	-2.7	-0.5	-1.5	1.2	-1.3
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	0.7
Federal	-0.5	0.1	0.5	0.4	0.1	0.8	0.5	0.5	0.3	-0.1	0.4	0.5
Defense	-0.2	0.2	0.3	0.1	0.2	0.5	0.5	0.3	0.3	-0.1	0.3	0.4
Nondefense	-0.2	-0.1	0.2	0.3	-0.1	0.3	0.0	0.2	-0.0	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	0.3	0.3	0.5	0.2
Change in bus. inventories	-1.1	-0.1	-3.3	-1.1	-0.1	-1.4	2.6	1.3	0.6	-0.3	-1.5	1.2
Nonfarm	-1.0	-0.3	-3.4	-0.8	-0.3	-1.4	2.5	1.5	0.7	-0.4	-1.6	1.3
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.

CONTRIBUTIONS TO GROWTH IN REAL GROSS DOMESTIC PRODUCT AND RELATED ITEMS

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	1.4	2.3	2.3	3.8	4.5	4.9	4.7	4.6	4.4	2.9	3.2	4.6
Gross dom. purchases	2.9	2.0	3.0	4.2	4.4	5.6	5.5	5.1	4.4	3.9	3.4	5.1
Final sales	1.0	2.5	2.5	3.5	4.4	4.8	4.1	4.1	4.2	1.7	3.2	4.3
Priv. dom. final purchases	1.7	1.5	2.5	3.5	4.0	5.1	4.5	4.3	3.9	2.0	2.9	4.5
Personal cons. expenditures	1.1	1.2	1.6	2.3	2.7	3.2	3.0	2.9	2.9	1.9	1.9	3.0
Durables	-0.8	-0.3	0.3	0.9	0.6	0.7	0.7	0.6	0.6	0.2	0.4	0.6
Nondurables	1.0	0.9	0.4	0.6	0.7	0.9	0.8	0.8	0.9	0.7	0.7	0.9
Services	0.8	0.6	0.8	0.8	1.4	1.6	1.5	1.5	1.5	1.0	0.9	1.5
Business fixed investment	0.2	-0.4	0.6	0.9	0.8	1.3	1.3	1.4	1.0	-0.2	0.5	1.2
Equipment & Software	0.5	-0.2	0.6	0.9	0.8	1.3	1.3	1.3	1.0	0.3	0.5	1.2
Nonres. structures	-0.3	-0.2	0.0	-0.0	-0.0	-0.0	0.0	0.1	0.0	-0.5	-0.1	0.0
Residential structures	0.4	0.7	0.2	0.4	0.5	0.6	0.2	-0.0	-0.0	0.3	0.5	0.2
Net exports	-1.6	0.2	-0.7	-0.4	0.1	-0.6	-0.7	-0.5	-0.0	-1.0	-0.2	-0.5
Exports	-0.6	0.2	0.5	0.7	1.0	0.7	0.9	0.9	1.1	0.4	0.6	0.9
Imports	-1.0	-0.0	-1.3	-1.1	-0.9	-1.3	-1.6	-1.4	-1.1	-1.3	-0.8	-1.4
Government cons. & invest.	0.9	0.7	0.7	0.4	0.3	0.4	0.3	0.3	0.4	0.7	0.5	0.3
Federal	0.7	0.5	0.6	0.2	0.1	0.1	0.1	0.0	0.1	0.5	0.3	0.1
Defense	0.5	0.4	0.4	0.1	-0.0	0.0	0.0	-0.0	0.0	0.4	0.2	0.0
Nondefense	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
State and local	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2
Change in bus. inventories	0.4	-0.2	-0.2	0.3	0.1	0.1	0.6	0.5	0.1	1.2	-0.0	0.3
Nonfarm	0.3	-0.3	-0.2	0.3	0.1	0.1	0.6	0.5	0.1	1.3	-0.0	0.3
Farm	0.1	0.1	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)

Item	Fiscal year				2002				2003				2004			
	2001[a]	2002[a]	2003	2004	Q1[a]	Q2[a]	Q3[a]	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Unified budget[1]					Not seasonally adjusted											
Receipts[2]	1991	1853	1857	1856	413	523	452	428	403	559	467	440	411	533	472	470
Outlays[2]	1864	2011	2144	2223	509	507	493	536	543	540	525	561	563	556	542	580
Surplus/deficit[2]	127	-158	-287	-367	-97	16	-41	-108	-139	19	-58	-121	-153	-22	-71	-109
On-budget	-33	-317	-454	-545	-127	-58	-52	-161	-163	-58	-72	-165	-194	-100	-86	-155
Off-budget	161	160	167	178	30	73	11	53	24	77	13	43	41	78	16	46
Means of financing																
Borrowing	-90	221	273	405	51	21	89	97	112	14	51	138	147	56	64	105
Cash decrease	8	-17	37	-21	38	-26	-21	28	17	-43	36	-6	0	-30	15	15
Other[3]	-45	-46	-23	-17	8	-11	-27	-16	10	11	-28	-10	5	-4	-8	-10
Cash operating balance, end of period	44	61	24	45	14	40	61	33	16	59	24	30	30	60	45	30
NIPA federal sector					Seasonally adjusted annual rates											
Receipts	2024	1909	1896	1924	1885	1884	1874	1870	1883	1900	1932	1928	1891	1923	1954	2033
Expenditures	1909	2039	2157	2257	2031	2079	2075	2117	2150	2172	2187	2219	2256	2270	2285	2304
Consumption expenditures	517	570	633	663	566	581	590	609	630	644	648	651	664	667	669	673
Defense	337	375	421	438	372	383	389	403	418	430	432	432	439	440	440	442
Nondefense	180	195	212	225	194	199	201	206	212	214	216	218	225	227	229	231
Other spending	1392	1469	1524	1595	1464	1498	1485	1508	1520	1528	1540	1568	1591	1603	1616	1631
Current account surplus	115	-130	-260	-333	-146	-196	-201	-247	-267	-272	-255	-290	-365	-347	-331	-270
Gross investment	98	106	115	120	106	107	108	108	114	118	119	119	120	120	121	122
Gross saving less gross investment[4]	116	-135	-270	-344	-151	-201	-206	-252	-277	-284	-268	-302	-376	-358	-342	-280
Fiscal indicators[5]																
High-employment (HEB) surplus/deficit	116	-76	-189	-290	-98	-136	-146	-179	-199	-198	-181	-225	-318	-311	-306	-254
Change in HEB, percent of potential GDP	0.1	1.9	1.0	0.8	1.7	0.3	0.1	0.3	0.2	-0.0	-0.2	0.4	0.8	-0.1	-0.1	-0.5
Fiscal impetus (FI) percent of GDP	0.6	1.1	0.8	0.9	0.6	0.4	0.0	0.3	0.2	0.1	0.1	0.2	0.6	0.0	0.0	-0.0

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 February 2003 baseline surplus estimates are -\$264 billion in FY 2003 and -\$158 billion in FY 2004. CBO's March 2003 baseline surplus estimates are -\$246 billion in FY 2003 and -\$200 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. Gross saving is the current account surplus plus consumption of fixed capital of the general government as well as government enterprises.
5. HEB is gross saving less gross investment (NIPA) in current dollars, with cyclically sensitive receipts and outlays adjusted to the staff's measure of potential output and the NAIRU. Quarterly figures for change in HEB and FI are not at annual rates. The sign on Change in HEB, as a percent of nominal potential GDP, is reversed. FI is the weighted difference of discretionary changes in federal spending and taxes in chained (1996) dollars, scaled by real GDP. The annual FI estimates are on a calendar year basis. For FI and the change in HEB, positive values indicate aggregate demand stimulus.
a--Actual

Change in Debt of the Domestic Nonfinancial Sectors
(Percent)

			Nonfederal						
				Households					
Period [1]	Total	Federal government	Total	Total	Home mortgages	Consumer credit	Business	State and local governments	Memo: Nominal GDP
Year									
1997	5.5	0.6	7.2	6.4	6.7	4.7	9.0	4.0	6.2
1998	6.9	-1.4	9.6	8.2	8.9	5.9	12.1	6.3	6.0
1999	6.4	-1.9	8.8	8.3	9.0	7.4	10.6	3.4	5.9
2000	4.9	-8.0	8.3	8.4	8.3	9.6	9.7	1.3	4.6
2001	6.2	-0.2	7.7	8.6	9.8	6.8	6.4	8.6	2.0
2002	7.1	7.6	7.0	9.8	12.4	3.3	2.9	11.4	4.3
2003	7.0	8.6	6.7	8.2	10.2	3.3	4.6	8.0	4.7
2004	6.8	9.4	6.2	7.0	7.9	4.8	5.3	5.7	6.0
Quarter									
2002:1	5.0	1.2	5.8	9.2	10.3	4.8	2.2	5.1	6.5
2	8.3	15.5	6.8	8.7	10.9	4.7	3.4	13.9	2.5
3	6.5	7.5	6.3	9.4	12.6	3.3	1.9	10.6	5.1
4	7.7	5.6	8.2	10.7	13.7	0.1	4.0	14.1	3.0
2003:1	7.4	7.8	7.3	9.4	12.1	3.7	4.5	8.9	4.3
2	7.8	13.4	6.7	8.0	10.1	2.8	4.5	9.4	3.8
3	5.6	2.9	6.2	7.6	8.9	3.3	4.5	6.5	4.9
4	6.5	9.5	5.9	6.9	8.3	3.3	4.7	6.2	5.7
2004:1	6.8	10.8	5.9	6.8	8.0	3.9	4.8	6.0	6.6
2	7.9	16.4	6.0	6.7	7.7	4.6	5.1	5.6	6.0
3	5.7	3.9	6.1	6.8	7.6	5.0	5.3	5.4	5.7
4	6.1	5.4	6.3	6.9	7.6	5.4	5.7	5.3	5.5

Note. Quarterly data are at seasonally adjusted annual rates.
1. Data after 2002:Q4 are staff projections. Changes are measured from end of the preceding period to end of period indicated except for annual nominal GDP growth, which is calculated from Q4 to Q4.

2.6.3 FOF

Strictly Confidential (FR)
Class II FOMC

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

March 13, 2003

Category	Calendar year				Seasonally adjusted annual rates									
					2002		2003				2004			
	2001	2002	2003	2004	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Net funds raised by domestic nonfinancial sectors														
1 Total	1078.5	1324.2	1385.1	1438.1	1167.2	1525.9	1468.0	1578.8	1141.9	1351.8	1427.8	1702.7	1251.0	1370.8
2 Net equity issuance	-47.4	-40.2	-66.3	-57.0	-130.8	-39.9	-62.0	-72.0	-63.0	-68.0	-66.0	-64.0	-49.0	-49.0
3 Net debt issuance	1125.9	1364.4	1451.4	1495.1	1298.0	1565.8	1530.0	1650.8	1204.9	1419.8	1493.8	1766.7	1300.0	1419.8
Borrowing sectors														
Nonfinancial business														
4 Financing gap [1]	141.4	92.7	106.1	144.8	90.2	143.1	112.8	102.6	105.4	103.7	107.4	127.0	146.7	197.8
5 Net equity issuance	-47.4	-40.2	-66.3	-57.0	-130.8	-39.9	-62.0	-72.0	-63.0	-68.0	-66.0	-64.0	-49.0	-49.0
6 Credit market borrowing	417.6	201.8	330.7	397.2	132.6	285.0	323.3	325.0	329.8	344.6	355.6	385.8	406.8	440.4
Households														
7 Net borrowing [2]	611.8	756.9	691.5	637.2	755.7	883.1	794.6	690.5	665.8	615.4	619.0	626.1	642.8	660.9
8 Home mortgages	478.5	668.4	620.0	529.5	716.7	799.3	733.2	630.2	572.2	544.2	533.2	522.2	527.2	535.2
9 Consumer credit	108.8	55.5	58.0	87.7	57.9	1.0	65.0	49.1	58.2	59.8	71.1	85.1	93.4	101.2
10 Debt/DPI (percent) [3]	99.8	103.0	107.4	108.8	103.1	104.5	106.1	107.5	108.4	108.6	107.9	108.4	108.9	109.5
State and local governments														
11 Net borrowing	102.2	147.4	115.0	88.8	144.0	196.5	127.8	138.8	98.8	94.8	92.8	88.8	86.8	86.8
12 Current surplus [4]	140.6	130.1	125.2	162.8	128.3	130.1	120.0	117.5	125.0	138.2	149.7	156.5	164.3	180.6
Federal government														
13 Net borrowing	-5.6	258.2	314.1	371.9	265.7	201.1	284.3	496.5	110.5	365.0	426.5	666.0	163.6	231.7
14 Net borrowing (quarterly, n.s.a.)	-5.6	258.2	314.1	371.9	89.4	96.9	111.9	13.7	50.6	137.8	147.4	56.1	63.9	104.5
15 Unified deficit (quarterly, n.s.a.)	-94.3	231.2	300.3	354.9	41.5	108.7	139.4	-18.9	58.4	121.5	152.9	22.1	70.5	109.4
Depository institutions														
16 Funds supplied	289.4	489.6	392.5	440.2	743.6	553.3	344.9	383.6	457.9	383.9	420.9	436.7	443.1	460.1
Memo (percentage of GDP)														
17 Domestic nonfinancial debt [5]	185.8	191.2	196.6	198.8	191.4	193.3	194.9	196.8	197.7	198.0	198.1	198.8	199.3	199.6
18 Domestic nonfinancial borrowing	11.2	13.1	13.3	13.0	12.4	14.8	14.3	15.3	11.0	12.8	13.3	15.5	11.2	12.1
19 Federal government [6]	-0.1	2.5	2.9	3.2	2.5	1.9	2.7	4.6	1.0	3.3	3.8	5.8	1.4	2.0
20 Nonfederal	11.2	10.6	10.5	9.8	9.8	12.9	11.6	10.7	10.0	9.5	9.5	9.6	9.8	10.1

Note. Data after 2002:Q4 are staff projections.
1. For corporations: Excess of capital expenditures over U.S. internal funds.
2. Includes change in liabilities not shown in lines 8 and 9.
3. Average debt levels in the period (computed as the average of period-end debt positions) divided by disposable personal income.
4. NIPA 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.

(This page intentionally blank.)

International Developments

Foreign real GDP growth slowed more sharply in the fourth quarter than estimated in the January Greenbook. With oil prices higher, stock markets stumbling, and consumer sentiment souring, we have lowered the forecast for foreign growth in the first half of this year about ½ percentage point. The downward revision to the near-term outlook is broad-based across our major trading partners. For the second half of this year and for 2004, however, we continue to project a moderate rebound in growth, as monetary policy remains stimulative, geopolitical uncertainties dissipate, and oil prices come down.

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

Indicator	2002		Projection				
	H1	Q3	2002: Q4	2003 Q1	2003 Q2	2003 H2	2004
Foreign output	3.6	2.9	1.3	2.0	2.4	3.0	3.5
January GB	*3.3*	*3.0*	*1.8*	*2.4*	*3.0*	*3.2*	*3.5*
Foreign CPI	2.4	2.8	2.7	2.8	2.4	2.1	2.0
January GB	*2.6*	*2.7*	*2.3*	*2.3*	*2.1*	*2.0*	*2.0*

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

Oil prices currently are almost $5 per barrel higher than anticipated in the January Greenbook, primarily reflecting increased anxiety over the possibility of military action in Iraq and increased demand owing to unusually cold weather in the United States. In line with quotes from futures markets, we project that oil prices will decline to about $25 per barrel by the end of 2004, about $1 above our January projection. The upward revision to our near-term outlook for foreign inflation in part reflects the recent pickup in oil prices.

Since the January FOMC meeting, the foreign exchange value of the dollar as measured by the major currencies index has declined about 1 percent on balance amid continued market concerns about geopolitical risks. How unfolding events are likely to affect exchange rates in the near term is unclear, but mindful of the longer-term implications of the large and growing U.S. external imbalance, we project modest depreciation of the dollar over the forecast period.

The U.S. current account deficit as a share of GDP is projected to be nearly 5½ percent throughout the forecast period. In dollar terms, the deficit is projected to be about $580 billion in 2003 and $620 billion in 2004. Net exports are expected to make a positive arithmetic contribution of ¼ percentage point to U.S. real GDP growth in the current quarter as exports recover from a low in 2002:Q4 and imports are little changed. For 2003 as a whole, net exports are projected to have a slight negative effect as imports resume expanding. We project that in 2004 net exports will subtract ½ percentage point from GDP growth as U.S. economic activity accelerates more than activity abroad.

Oil Prices

The spot price of West Texas Intermediate (WTI) crude oil is currently around $37 per barrel. The high level of oil prices reflects the market's apprehension regarding military action in Iraq, the decrease in world oil supplies resulting from the strike in Venezuela, and unusually cold weather in the United States. Oil demand also has increased in Japan recently, as safety issues have forced the closure of a majority of the country's nuclear power plants. Given these developments, oil inventories have fallen to historically low levels, heightening the reaction of oil prices to any news regarding potential supply disruptions.

Our oil price projection, in line with quotes from NYMEX crude oil futures contracts, calls for the spot price of WTI to fall relatively rapidly through 2003 to a little more than $29 per barrel and then to decline gradually to about $25 per barrel by the end of 2004. Compared with the January Greenbook, the current oil price projection is almost $5 per barrel higher in the second quarter of 2003 and averages almost $2 per barrel higher in 2004. Given that our oil price projection is based on futures prices, it reflects the market's mean expectation of uncertain events. Key risks center on how geopolitical tensions evolve, any consequences of military action for supply facilities, and under what circumstances the U.S. and other governments might release oil from strategic petroleum stocks.

International Financial Markets

The foreign exchange value of the dollar, as measured by the staff's major currencies index, has declined 1 percent on balance since the January FOMC meeting. The dollar moved down amid increased geopolitical uncertainties, which may have diminished the attractiveness of cross-border investments generally and lessened the willingness of investors to continue to fund the large and growing U.S. current account deficit.

Among individual currencies, the dollar depreciated about 3 percent against the Canadian dollar, which was supported in part by a quarter-point tightening by the Bank of Canada and by rising commodity prices. The U.S. dollar declined about ½ percent against the euro and the yen. In response, Japanese authorities continued to counter yen appreciation through official intervention during the intermeeting period. The yen firmed partly in reaction to the naming of Toshihiko Fukui to be the new Governor of the Bank of Japan; Fukui is seen as unlikely to adopt radical monetary policy measures to combat deflation. In contrast to the dollar's decline against most major foreign currencies, the dollar appreciated 2 percent against sterling, prompted partly by the unexpected decision of the Bank of England to ease monetary policy 25 basis points on February 6. Against the currencies of our other important trading partners, the dollar changed little.

The starting point for our dollar forecast incorporates the exchange market developments since the January Greenbook and, implicitly, the market assessment of prospects for war. Those adjustments put the value of the staff's broad real index in the second quarter about ½ percent below its level in the previous projection. Going forward, we cannot say with any confidence how unfolding military and political developments will affect the dollar in the near term. In the longer run, however, our view is that investors are unlikely to be willing, at unchanged exchange rates, to add indefinitely to their already large holdings of U.S. external liabilities. Accordingly, we project that the dollar will edge down another 1 percent over the remainder of the forecast period.

Industrial country share prices were volatile and on net declined during the intermeeting period; bond yields moved lower, as investor demands shifted out of equities and toward fixed-income securities. Economic data showing continued weak activity may have been a factor also. In the euro area, equity prices were down nearly 10 percent, and the ten-year German government bond yield declined almost 10 basis points on balance. In Japan, share prices moved down 7 percent, and the ten-year government bond yield edged down 5 basis points, to a level of only 74 basis points. Reduced growth prospects, euro appreciation, and signs that inflationary pressures are diminishing prompted the European Central Bank (ECB) to ease 25 basis points, and expectations for further rate cuts by the ECB and the Bank of England continue to be priced into financial markets. The Swiss National Bank also eased, reducing its target for the 3-month Swiss franc LIBOR to a range of 0 to 75 basis points and stating its intention to keep the rate near 25 basis points.

Tensions over developments on the Korean peninsula added to pressures on asset prices in South Korea and elsewhere in Asia. South Korean equity prices declined more than 11 percent, and the won depreciated 5 percent against the dollar. Stock prices in Taiwan, Singapore, and Malaysia were also down significantly. In Latin America, stock market performance was more mixed. Inflation concerns prompted the central banks of Mexico and Brazil to further tighten monetary policy. In Brazil, this move, as well as news that the Brazilian government intends to increase its primary fiscal surplus, contributed to a rise in the *real* and government debt prices. Brazil's EMBI+ spread over U.S. Treasuries declined 320 basis points during the period.

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

Foreign Industrial Countries

GDP growth slowed somewhat more than expected in the fourth quarter in most of the foreign industrial countries. Recent data, including declining consumer confidence and lackluster manufacturing indicators, suggest that growth has remained weak in the first quarter, and we have marked down our forecasts for the near term. Further out, as oil prices decline, recent and projected monetary stimulus takes hold, negative wealth effects wane, and the U.S. economy recovers, growth should pick up to above potential rates during 2004. In Canada and Europe, twelve-month headline inflation rates remain above central bank targets, and the recent surge in oil prices is expected to keep inflation elevated over the next few quarters. However, as oil prices decline, economic slack persists in most countries, and recent and projected foreign currency appreciation helps to moderate import prices, inflation should move down to within central bank target bands. In Japan, consumer prices are projected to continue to decline through 2004.

Japan's real GDP grew 2¼ percent (s.a.a.r.) in the fourth quarter, with buoyant exports outweighing a marked slowing in domestic demand. National accounts data likely overstate the strength of the Japanese economy; the all-industries index of output, a production-based proxy for GDP, declined 1 percent in the fourth quarter. We project that a further softening in domestic demand will push the economy back into recession during the first half of this year. Private consumption is expected to be depressed by record-high levels of unemployment and declining wages. In addition, monthly trade data suggest that the contribution of net exports likely turned negative in the first quarter. Exports should provide some support later this year, however, as global economic activity strengthens. We project that Japanese GDP, after declining at an annual rate of about 1¼ percent in the first half, will gradually recover, albeit at anemic rates.

Euro-area GDP growth slowed more than expected, to ¾ percent (s.a.a.r.) in the fourth quarter, with German growth turning slightly negative. Expansion in the euro area is projected to remain sluggish in the near term. Industrial production data and surveys of purchasing managers suggest that manufacturing activity strengthened slightly in the first quarter, but the services sector appears to have weakened. Household spending is likely to be restrained in the near term by the impact of higher oil prices on real incomes and by heightened uncertainty about job prospects, given signs that the pace of layoffs has picked up. The ECB reduced its policy rate 25 basis points on March 6, and we expect another 50 basis points of easing by midyear. Monetary stimulus and rising real incomes from projected declines in inflation should boost household spending in the second half of this year and in 2004. The projected pickup in global demand should also support euro-area growth, although the substantial appreciation of the euro over the past year is likely to limit the stimulus from the external sector.

Canadian GDP growth slowed sharply to a 1½ percent pace in the fourth quarter, as a sizable drop in exports, primarily motor vehicle exports to the United States, pulled down growth. In contrast, domestic demand remained vigorous. Recent data indicate continued strength of domestic demand, particularly residential construction, in the first quarter. In addition, exports appear to have rebounded following their steep decline in the fourth quarter. We project that Canadian growth will rise over the course of this year, but the pickup will be less robust than that in the United States. The 100 basis points of tightening in Canadian monetary policy over the past year is likely to restrain Canadian growth, and fiscal policy is expected to provide less stimulus than in the United States. Inflation, which has been boosted by energy prices and other transitory factors to well above the 3 percent upper limit of the Bank of Canada's target range, is projected to move back toward the 2 percent midpoint of the range by early next year.

Other Countries

Mexican economic growth slowed a bit more than we had expected in the fourth quarter, probably driven largely by weakness in U.S. manufacturing. Mexican exports picked up considerably in January, but business confidence decreased sharply in February, likely because of concerns about U.S. prospects. Given our projection that growth in the United States will accelerate in the second half of this year and will be robust over the remainder of the forecast period, the Mexican economy, too, should be able to post sizable gains over the forecast period.

In South America, economic performance has been mixed. Brazilian real GDP growth surprised on the upside in the fourth quarter, led by strong exports. Investor attitudes toward Brazil have improved further since mid-January, with sovereign bond spreads declining to their lowest point since last June. Nevertheless, spreads are still high, and debt-servicing remains an issue, prompting us to leave unchanged the outlook for Brazil, which calls for positive, but modest, growth over the next two years. In Argentina, economic activity has stopped falling, but there are no fresh signs of any attempt to address the country's long-run fundamental problems. The Argentine Supreme Court's recent ruling nullifying the earlier forced conversion to pesos of some specific dollar deposits has created uncertainty about the fate of $9 billion in deposits and has further clouded the country's prospects. In Venezuela, real GDP plunged in the fourth quarter. The restructuring of the state oil company by President Chavez, which included the firing of 40 percent of the oil workers, has led to a partial recovery of oil production. Nonetheless, the overall economy remains deeply troubled.

Chinese real GDP grew about 7 percent (s.a.a.r.) in the fourth quarter, boosted by strong exports, private investment, and government expenditure. We project growth to remain buoyant this year and next, as China continues to benefit from its entry into the World Trade Organization and to attract large inflows of foreign direct investment. Elsewhere in developing Asia, growth generally remained somewhat restrained. Exports from Korea have continued to be strong, but tensions associated with Iraq and North Korea appear to be holding back consumer confidence and sales. GDP growth is estimated to have slowed in the fourth quarter in most of the ASEAN countries. We see little evidence so far of a revitalization of the high-tech sector in either Taiwan or the ASEAN countries, with the exception of Singapore, which has shown robust expansion in the production of electronics goods. We look for growth in these countries to increase over the forecast period to robust rates, as high-tech demand recovers, the U.S. economy accelerates, and oil prices decline.

Average inflation in the developing countries is estimated to have been a restrained 3 percent last year. In general, despite the run-up in oil prices, we expect inflation to increase only a little this year, with price pressures kept in check by growth that is insufficient to raise output over potential in most countries. That said, inflationary pressures remain in some countries that experienced large currency depreciations last year, particularly Argentina and Brazil, with the latter missing its inflation target last year by about 6 percentage points.

Prices of Internationally Traded Goods

The price index for U.S. imports of non-oil core goods is projected to rise at about a 3½ percent annual rate in the first half of 2003, up from less than 1½ percent in the second half of 2002. Product categories driving this rise include non-oil industrial supplies and capital goods. The elevated rate of core import price inflation in the first half reflects a weaker exchange value of the dollar, as well as continuing and lagged effects from inflation in primary commodities. In the second half of 2003, core import prices are expected to grow at the more subdued pace of 1¾ percent, in line with inflation abroad.

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

Trade category	2002		Projection				
	H1	Q3	2002: Q4	2003			2004
				Q1	Q2	H2	
Exports							
Core goods	1.2	4.4	1.7	1.7	1.1	.3	1.0
Imports							
Non-oil core goods	-.1	1.2	1.6	3.1	3.7	1.8	1.2
Oil (dollars per barrel)	24.04	25.50	25.75	31.19	32.95	27.12	22.29

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

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

The price index for U.S. exports of core goods is projected to rise at an annual rate of about 1¾ percent in the first quarter of 2003, about the same as in the fourth quarter of last year. We project that core export inflation will slow in the second half of 2003 and return to about 1 percent in 2004, in line with projected U.S. producer price inflation.

Trade in Goods and Services
In the fourth quarter of 2002, real exports of goods and services fell 6 percent at an annual rate. The surprisingly large decline in real exports in the fourth quarter was the first decrease recorded in a year and occurred in core goods (particularly machinery, aircraft, and automotive products) and semiconductors, reflecting, in part, slowing economic growth in our important trading partners. In contrast, real exports of computers and services receipts rose in the fourth quarter.

We anticipate that some of the fourth-quarter decline in exports will be reversed in the current quarter. The value of exported goods rebounded in January and reversed more than half of the sharp drop in December, with increases widespread across trade categories. Services receipts edged down slightly in January after rising steadily for four months. We project that growth of real exports of goods and services will average a sluggish 2½ percent at an annual rate in the current quarter, as core goods, computers, and services each expand only moderately, largely reflecting the effects of weak foreign demand. We project that the declines in exported semiconductors will bottom out in the current quarter as the slump in high-tech markets begins to ease.

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

Measure	2002		Projection				
	H1	Q3	2002: Q4	2003 Q1	2003 Q2	2003 H2	2004
Real exports	8.7	4.6	-5.9	2.5	5.8	8.9	9.0
January GB	*8.7*	*4.6*	*-1.0*	*4.0*	*7.7*	*9.1*	*8.8*
Real imports	15.2	3.3	7.3	0.1	9.0	6.9	9.6
January GB	*15.2*	*3.3*	*2.9*	*2.5*	*9.1*	*7.2*	*9.2*

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

Looking forward, we expect real exports of goods and services to pick up noticeably in the second quarter and to accelerate to about 9 percent at an annual rate in the second half of this year and in 2004. Most of the rise in exports of core goods, which are projected to increase more than 7 percent in the second half of this year and next year, reflects the pick-up in foreign economic growth, although a weaker dollar also provides a lift. Moreover, we have built in some additional strength in exports of core goods over the forecast period, in line with our view that trade in core goods generally shows greater cyclical fluctuation than would be expected from its trend relationship with real GDP and relative prices. Exports of services are expected to increase around 5½ percent at an annual rate over the forecast period. In addition, exports of computers and semiconductors are expected to recover significantly from the high-tech downturn and to resume growth that is broadly in line with historical experience.

Real imports of goods and services rose a surprisingly strong 7¼ percent annual rate in the fourth quarter of 2002, with particularly large increases in imported oil and services. Imports of core goods grew 5 percent at an annual rate, about the same pace as in the third quarter and notably slower than in the first half of 2002, when the cyclical rebound in imports was more pronounced. In the fourth quarter, there were sharp increases in imported consumer goods and aircraft, moderate rises in industrial supplies and food, but declines in automotive products and machinery. Imports of computers rose only moderately. For semiconductors, the decline in real imports nearly matched the drop in exports.

In January, the value of imported goods and services moved down from the high levels recorded in November and December. The decrease in January came largely from core goods, especially consumer goods, automotive products from Europe and Japan, and industrial supplies. Services payments declined only slightly in January from a high recorded in December. With January trade data in hand, we estimate that growth of real imports of goods and services will be a mere 0.1 percent at an annual rate in the current quarter. Imports are held down by a drop in imported oil resulting from the reduced production in Venezuela. In addition, we have lowered our current quarter estimate of the BEA's adjustment from imports on a balance of payments basis to a NIPA basis, thereby retarding measured NIPA growth of core imports in the first quarter and boosting it in the second quarter. Excluding this adjustment, we project that imports of core goods will grow 2½ percent (a.r.) in the first quarter and nearly 4 percent in the second quarter.

Looking ahead, real imports of goods and services are projected to rise 5¾ percent this year and to accelerate to a 9½ percent rate in 2004, as imported core goods increase about 5 percent this year and 8½ percent next year. The projected strengthening of U.S. economic activity over the forecast period greatly outweighs the restraining effects of a declining dollar. In addition, we have built in a small boost to imports of core goods over the forecast period to reflect a cyclical rebound in trade that is likely not being captured by its estimated relationship with income and relative prices. As in the case of exports, imports of services, computers, and semiconductors are projected to grow steadily over the forecast period.

Alternative Simulations

As we have noted above, it is difficult to assess how the dollar will react to events in the near term. In recent months, market commentary has tied declines in the dollar's value to an intensification of geopolitical uncertainties. Should current levels of international tensions abate, the value of the dollar might rise. In our alternative simulation, we use the FRB/Global model to consider a fall in the risk premium on the dollar in foreign exchange markets. The shock is assumed to occur in 2003:Q2 and has been scaled so that the real value of the dollar would rise about 10 percent against the currencies of Canada, Japan, the United Kingdom, and the euro area in the absence of endogenous adjustments in long-term interest rates. This appreciation of the dollar depresses net exports, lowering U.S. GDP growth about 0.3 percentage point in 2003:H2 relative to baseline and 0.4 percentage point in 2004. Core PCE inflation falls about 0.4 percentage point below baseline in the second half of 2003 and about 0.3 percentage point in 2004, mainly because of declining import prices.

Alternative Simulation:
Dollar Appreciation vs. Major Foreign Industrial Countries
(Percent change from previous period, annual rate)

Indicator and simulation	2003		2004	
	H1	H2	H1	H2
U.S. real GDP				
Baseline	2.3	4.1	4.8	4.5
Dollar appreciation	2.3	3.8	4.5	4.0
U.S. PCE prices excl. food and energy				
Baseline	1.2	1.4	1.2	1.0
Dollar appreciation	1.2	1.0	0.9	0.8

NOTE. H1 is Q2/Q4; H2 is Q4/Q2. In these simulations, the nominal federal funds rate remains unchanged from baseline, and the monetary authorities in major foreign economies adjust their policy rates according to a Taylor rule.

Strictly Confidential (FR)   March 13, 2003
Class II FOMC

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

							-----Projected----		
Measure and country	1996	1997	1998	1999	2000	2001	2002	2003	2004
REAL GDP (1)									
Total foreign	4.0	4.2	1.6	4.9	4.2	0.1	2.8	2.6	3.5
Industrial Countries	2.7	3.4	2.7	4.1	3.5	0.3	2.8	1.8	2.7
of which:									
Canada	2.7	4.4	4.4	5.7	3.5	0.8	3.9	2.6	3.1
Japan	3.3	0.3	-1.3	-0.5	5.1	-2.4	2.8	-0.5	1.2
United Kingdom	2.8	3.7	2.6	3.2	2.2	1.6	2.1	1.8	2.5
Euro Area (2)	1.6	3.1	2.1	3.8	2.7	0.5	1.3	1.4	2.7
Germany	1.4	1.7	0.7	3.3	1.9	0.1	0.7	0.6	2.2
Developing Countries	6.2	5.3	-0.2	6.2	5.2	-0.3	2.9	3.9	4.7
Asia	6.6	4.9	-2.0	8.6	6.2	1.0	5.2	5.0	5.7
Korea	6.4	3.4	-5.2	13.8	5.1	4.4	6.0	5.0	5.4
China	5.3	8.7	9.5	4.1	8.0	7.5	8.0	7.3	7.7
Latin America	6.3	6.2	1.2	4.4	4.4	-1.5	1.1	3.2	4.2
Mexico	7.1	6.9	2.9	5.6	4.7	-1.5	2.1	3.8	4.9
Brazil	5.4	2.5	-1.6	3.5	4.0	-0.7	3.4	1.7	2.0
CONSUMER PRICES (3)									
Industrial Countries	1.5	1.5	1.0	1.2	1.8	1.0	2.2	1.5	1.2
of which:									
Canada	2.0	1.0	1.1	2.4	3.1	1.1	3.8	2.8	2.2
Japan	0.2	2.1	0.7	-1.1	-1.3	-1.3	-0.4	-1.0	-0.8
United Kingdom (4)	3.2	2.7	2.5	2.2	2.1	2.0	2.6	2.8	2.2
Euro Area (2)	1.9	1.5	0.8	1.5	2.4	2.2	2.3	1.8	1.3
Germany	1.3	1.5	0.3	1.1	1.7	1.7	1.1	0.9	0.6
Developing Countries	11.1	6.8	9.0	4.6	4.1	2.8	2.9	3.4	2.8
Asia	4.8	2.7	4.4	0.1	1.8	1.0	0.7	2.2	1.9
Korea	5.0	4.9	5.8	1.2	2.5	3.3	3.4	4.3	3.1
China	6.8	0.9	-1.2	-0.9	0.8	-0.2	-0.7	1.2	1.2
Latin America	25.8	15.5	15.4	12.5	8.4	5.4	6.5	5.2	4.5
Mexico	28.0	17.0	17.3	13.5	8.8	5.2	5.3	3.8	3.6
Brazil	9.6	4.6	2.0	8.4	6.4	7.5	10.7	13.3	8.7

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.

Strictly Confidential (FR)
Class II FOMC

March 13, 2003

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

					Projected							
	2002				2003				2004			
Measure and country	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
REAL GDP (1)	Quarterly changes at an annual rate											
Total foreign	2.7	4.5	2.9	1.3	2.0	2.4	2.9	3.2	3.4	3.5	3.5	3.5
Industrial Countries	3.4	3.4	2.8	1.4	1.1	1.6	2.1	2.4	2.6	2.7	2.7	2.7
of which:												
Canada	6.0	4.4	3.6	1.6	2.3	2.3	2.7	3.1	3.3	3.3	3.0	2.9
Japan	0.4	5.5	3.1	2.2	-2.4	-0.5	0.3	0.6	1.0	1.2	1.3	1.3
United Kingdom	0.6	2.5	3.8	1.5	1.2	1.7	2.0	2.1	2.2	2.4	2.6	2.8
Euro Area (2)	1.6	1.3	1.6	0.7	0.7	1.1	1.6	2.0	2.4	2.7	3.0	2.9
Germany	1.2	0.6	1.2	-0.1	-0.0	0.4	0.8	1.3	1.7	2.1	2.6	2.6
Developing Countries	1.6	6.1	3.0	1.2	3.5	3.7	4.2	4.4	4.7	4.7	4.8	4.8
Asia	5.7	7.3	3.7	4.2	4.7	4.7	5.2	5.4	5.6	5.7	5.8	5.8
Korea	7.9	5.8	5.1	5.1	4.8	5.0	5.1	5.2	5.3	5.3	5.4	5.5
China	8.5	9.3	7.5	6.8	7.0	7.0	7.7	7.7	7.7	7.7	7.7	7.7
Latin America	-1.5	5.3	2.2	-1.3	2.7	2.9	3.5	3.7	4.2	4.2	4.2	4.2
Mexico	-0.7	7.4	1.2	0.6	3.3	3.3	4.1	4.4	4.9	4.9	4.9	4.9
Brazil	3.7	3.4	3.7	2.9	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
CONSUMER PRICES (3)	Four-quarter changes											
Industrial Countries	1.2	1.0	1.4	2.2	2.2	2.1	1.9	1.5	1.2	1.1	1.1	1.2
of which:												
Canada	1.6	1.3	2.3	3.8	4.1	3.9	3.3	2.8	2.1	1.9	2.0	2.2
Japan	-1.5	-1.1	-0.9	-0.4	-0.5	-0.7	-0.8	-1.0	-0.8	-0.8	-0.8	-0.8
United Kingdom (4)	2.4	1.9	2.0	2.6	3.0	3.3	3.2	2.8	2.2	2.0	2.1	2.2
Euro Area (2)	2.6	2.0	2.1	2.3	2.1	2.1	2.1	1.8	1.5	1.3	1.3	1.3
Germany	1.9	1.0	1.1	1.1	0.9	1.2	1.1	0.9	0.8	0.7	0.6	0.6
Developing Countries	2.6	2.5	2.6	2.9	3.3	3.3	3.3	3.4	3.3	3.1	3.0	2.8
Asia	0.8	0.6	0.5	0.7	1.3	1.5	1.9	2.2	2.0	2.0	2.0	1.9
Korea	2.6	2.6	2.5	3.4	4.0	3.8	4.3	4.3	3.9	3.5	3.2	3.1
China	-0.6	-1.1	-0.8	-0.7	0.1	0.4	0.7	1.2	1.0	1.1	1.2	1.2
Latin America	5.1	5.4	6.0	6.5	6.8	6.3	5.6	5.2	5.5	5.1	4.8	4.5
Mexico	4.8	4.8	5.2	5.3	5.3	4.7	4.0	3.8	4.6	4.3	3.9	3.6
Brazil	7.7	7.9	7.7	10.7	15.2	16.4	16.2	13.3	9.4	8.8	8.7	8.7

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.

Strictly Confidential (FR)
Class II FOMC

March 13, 2003

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	-1.0	-0.2	-0.5
Exports of G&S	1.1	1.0	0.3	0.5	0.8	-1.3	0.4	0.6	0.9
Imports of G&S	-1.3	-1.7	-1.3	-1.5	-1.5	1.2	-1.3	-0.8	-1.4
Percentage change, Q4/Q4									
Exports of G&S	9.8	8.5	2.3	4.9	7.3	-11.4	3.9	6.5	9.0
Services	8.9	1.4	2.9	3.2	4.8	-9.2	11.4	4.1	5.5
Computers	21.6	25.8	8.1	13.4	23.0	-23.4	-2.0	30.4	33.5
Semiconductors	44.6	21.3	9.1	34.6	26.9	-34.9	8.6	27.3	36.0
Other Goods 1/	7.3	9.8	1.3	3.2	5.7	-9.4	0.5	5.0	7.4
Imports of G&S	11.2	14.3	10.8	11.9	11.1	-8.0	10.1	5.7	9.6
Services	5.3	14.0	8.5	5.9	10.9	-8.6	11.6	2.6	5.7
Oil	7.8	3.9	4.1	-3.4	13.3	0.1	4.1	-1.9	4.9
Computers	17.8	33.0	25.8	26.0	13.6	-13.8	13.8	34.8	33.5
Semiconductors	56.7	32.9	-8.7	34.2	22.5	-51.4	9.3	26.0	36.0
Other Goods 2/	10.4	12.7	11.5	12.7	10.4	-6.2	10.0	4.8	8.5
Billions of chained 1996 dollars									
Net Goods & Services	-89.0	-113.3	-221.1	-320.5	-398.8	-415.9	-488.5	-545.1	-597.5
Exports of G&S	874.2	981.5	1002.4	1036.3	1137.2	1076.1	1058.8	1096.3	1188.8
Imports of G&S	963.1	1094.8	1223.5	1356.8	1536.0	1492.0	1547.3	1641.3	1786.3
Billions of dollars									
US CURRENT ACCOUNT BALANCE	-117.8	-128.4	-203.8	-292.9	-410.3	-393.4	-506.0	-581.4	-619.5
Current Acct as Percent of GDP	-1.5	-1.5	-2.3	-3.2	-4.2	-3.9	-4.8	-5.3	-5.4
Net Goods & Services (BOP)	-101.8	-107.8	-166.9	-262.2	-378.7	-358.3	-435.7	-528.2	-554.7
Investment Income, Net	28.6	25.1	12.7	23.9	27.6	20.5	-5.3	8.5	6.7
Direct, Net	69.4	72.4	65.5	75.0	88.9	102.6	80.3	93.9	98.1
Portfolio, Net	-40.8	-47.3	-52.9	-51.1	-61.2	-82.1	-85.6	-85.4	-91.3
Other Income & Transfers,Net	-44.6	-45.7	-49.6	-54.5	-59.3	-55.6	-65.0	-61.8	-71.5

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

Strictly Confidential (FR)
Class II FOMC

March 13, 2003

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												
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
Percentage change from previous period, s.a.a.r.												
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/	-12.0	0.9	10.8	15.4	4.2	9.1	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	-4.7	-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.

Strictly Confidential (FR)
Class II FOMC

March 13, 2003

OUTLOOK FOR U.S. INTERNATIONAL TRANSACTIONS

	2002				Projected 2003				2004			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
NIPA REAL EXPORTS and IMPORTS												
Percentage point contribution to GDP growth												
Net Goods & Services	-0.7	-1.4	0.0	-1.6	0.2	-0.7	-0.4	0.1	-0.6	-0.7	-0.5	-0.0
Exports of G&S	0.3	1.3	0.5	-0.6	0.2	0.5	0.7	1.0	0.7	0.9	0.9	1.1
Imports of G&S	-1.1	-2.7	-0.4	-1.0	-0.0	-1.2	-1.1	-0.9	-1.3	-1.6	-1.4	-1.1
Percentage change from previous period, s.a.a.r.												
Exports of G&S	3.5	14.3	4.6	-5.9	2.5	5.8	7.6	10.2	6.7	9.0	9.2	11.3
Services	21.7	10.7	5.9	7.8	1.8	3.4	5.8	5.6	5.3	5.5	5.6	5.7
Computers	-21.1	-0.5	-0.8	18.5	23.9	31.1	33.5	33.5	33.5	33.5	33.5	33.5
Semiconductors	13.7	65.8	21.3	-39.2	8.2	31.0	36.0	36.0	36.0	36.0	36.0	36.0
Other Goods 1/	-3.1	14.2	3.3	-10.7	1.3	4.1	5.3	9.5	3.8	7.4	7.5	10.9
Imports of G&S	8.5	22.2	3.3	7.3	0.1	9.0	7.8	6.0	9.0	11.5	10.1	7.8
Services	35.7	-2.1	3.1	13.4	1.4	1.0	3.5	4.7	5.9	6.0	5.6	5.3
Oil	-19.0	34.5	-13.3	24.2	-25.5	40.2	12.9	-21.3	-0.0	31.5	11.7	-17.4
Computers	52.4	5.6	-4.4	8.9	41.1	31.1	33.5	33.5	33.5	33.5	33.5	33.5
Semiconductors	45.2	41.8	-5.9	-26.4	4.1	31.1	36.0	36.0	36.0	36.0	36.0	36.0
Other Goods 2/	1.9	28.8	6.3	4.9	0.7	5.4	5.8	7.5	8.3	8.7	8.6	8.3
Billions of chained 1996 dollars, s.a.a.r.												
Net Goods & Services	-446.6	-487.4	-488.0	-532.0	-525.6	-545.2	-556.1	-553.5	-571.7	-594.1	-611.1	-612.9
Exports of G&S	1030.6	1065.5	1077.7	1061.5	1068.1	1083.2	1103.3	1130.4	1148.8	1173.9	1199.9	1232.6
Imports of G&S	1477.1	1552.9	1565.7	1593.5	1593.7	1628.4	1659.3	1683.9	1720.5	1768.0	1811.1	1845.5
Billions of dollars, s.a.a.r.												
US CURRENT ACCOUNT BALANCE	-450.4	-511.0	-505.7	-556.8	-566.2	-586.5	-584.5	-588.5	-601.5	-617.8	-629.8	-628.8
Current Account as % of GDP	-4.4	-4.9	-4.8	-5.3	-5.3	-5.4	-5.3	-5.3	-5.3	-5.4	-5.4	-5.4
Net Goods & Services (BOP)	-382.5	-437.8	-441.0	-481.4	-509.3	-539.3	-537.2	-526.8	-538.3	-553.4	-564.4	-562.7
Investment Income, Net	2.7	-14.5	-5.5	-3.9	1.5	11.3	11.2	9.8	8.3	7.1	6.1	5.4
Direct, Net	88.3	75.2	75.3	82.6	86.9	96.0	96.4	96.4	96.5	97.0	98.4	100.4
Portfolio, Net	-85.5	-89.7	-80.8	-86.5	-85.4	-84.6	-85.2	-86.5	-88.1	-89.9	-92.3	-95.0
Other Inc. & Transfers, Net	-70.6	-58.7	-59.2	-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.