ECONOMIC ASSUMPTIONS AND ANALYSES

2. ECONOMIC ASSUMPTIONS

Introduction

The economy passed through nearly all the stages of a business cycle over the last three years. Growth slowed sharply in the second half of calendar year 2000 as the expansion that began in 1991 entered its final phase. That expansion finally gave way in 2001 to a mild recession lasting most of the year. An economic recovery began late in 2001, but it has proceeded unevenly and at an overall slower pace than the typical upturn, entailing rising unemployment and job losses.

In a typical business expansion, the economy establishes a virtuous circle. An initial burst of growth generates employment gains, falling unemployment, and rising consumer confidence, in the process creating additional jobs and income. Businesses then boost capital spending to meet the rising demands, generating still more jobs and income. Restored investor confidence pushes up equity prices, helping to hold down the cost of capital and supporting increased investment. A stock market rally, in fact, usually precedes the business recovery in anticipation of the imminent upturn in activity and profits.

This time, however, the stock market continued to fall even as the economy began to expand; consumer and investor confidence remained depressed; and job growth was lackluster, limiting the growth of income, spending, and investment. Although the actual fourth quarter growth rate will not be available until after the budget goes to press, it appears that growth in the final quarter of 2002 was well below the average for the first four quarters of the upturn. As 2002 ended, the expansion appeared to be losing momentum.

In response, on January 7th, the President proposed a comprehensive growth and jobs creation package designed to strengthen the expansion and raise the potential for long-term growth. Thus as 2003 begins, the foundation for a sustained expansion is in place: inflation is low, productivity growth is high, and monetary and fiscal policies are focused on fostering faster growth of aggregate demand and supply. To be sure, a great deal of uncertainty remains about the economic outlook due to domestic and international concerns. Nonetheless, most private- and public-sector forecasters, including the Administration, expect these restraints on growth to be overcome by the favorable fundamental forces that will propel this expansion for years to come.

This chapter begins with a review of recent fiscal and monetary policy actions and related economic developments. The chapter goes on to present the Administration's economic assumptions for the 2004 Budget and compares them with the projections of the Congressional Budget Office and private-sector economists. The Administration's assumptions are close to those of the other forecasters. Consequently, the assumptions provide a sound and prudent basis for the budget projections. The subsequent sections of the chapter describe the revisions to the economic assumptions since last year's Budget and how changes in the assumptions, policies and technical factors since last year have affected the budget outlook. The next section presents cyclical and structural components of the budget balance. The chapter concludes with estimates of the sensitivity of the budget to changes in economic assumptions.

Policy Actions

Fiscal Policy: In June 2001 the President signed into law the Economic Growth and Tax Relief Reconciliation Act (EGTRRA). The Act was designed to provide long-term benefits to the economy. It provided for a phase-in of tax relief over several years, thereby reducing disincentives in the tax system and making it more conducive to work, saving, and investment. Although focused on the long-term, EGTRRA also turned out to be the appropriate policy from a cyclical perspective. By providing significant immediate tax relief to all income tax payers early on in the recession, EGTRRA helped minimize the depth and the duration of the downturn.

Because of EGTRRA, beginning in July 2001, 86 million taxpayers were sent rebate checks totaling $36 billion. This sum reflected the creation of a new, lower 10 percent tax bracket. At the same time, income tax withholding schedules were reduced to incorporate the first stage of a multi-year lowering of marginal income tax rates for those in the 28 percent tax bracket and higher. In January 2002, withholding schedules were lowered to incorporate the new 10 percent tax bracket.

In addition to lowering income tax rates, EGTRRA phased in reductions in the marriage penalty, increased the Child Tax Credit, included measures to promote saving for education and retirement, and phased out the taxation of estates and gifts. All in all, EGTRRA lowered tax liabilities by about $56 billion in calendar year 2001, $78 billion in 2002, and $80 billion in 2003. The next two stages of the phase-in of marginal tax rate reductions under EGTRRA were scheduled for January 2004 and 2006.

In March 2002, the President signed the Job Creation and Worker Assistance Act to support the nascent and still vulnerable recovery. The Act promoted business investment and assisted unemployed workers. The Act allows businesses to expense 30 percent of the value of qualified new capital assets, including equipment and software, for a limited time ending on September 11, 2004. The remaining 70 percent is depreciated according to existing schedules. The expensing provisions provide a temporary incentive for businesses to invest during the first fragile years of the expansion. The Act also provided up to 13 weeks of additional unemployment benefits for those who had exhausted their regular State unemployment insurance benefits.

On January 7, 2003, the President proposed a substantial new growth and jobs creation package to strengthen the Nation's economic security by insuring that the economy quickly achieves strong, self-sustaining growth. The plan reduces income taxes and lowers the cost of capital to business. Combined, the components of the package will raise after-tax incomes of households, increase consumer spending, improve consumer and investor confidence, support the stock market, and stimulate business investment. Over fiscal years 2003–2013 inclusive, the package is estimated to provide $671 billion in tax relief. In addition, the package provides $3.6 billion during 2003–2004 to help unemployed workers find new jobs. The extension of unemployment insurance, called for by the President and passed by Congress in early January, provides unemployed workers who have exhausted their normal benefits about $7 billion in additional benefits in 2003.

The package accelerates to the beginning of 2003 tax relief that was scheduled to occur over the next several years under provisions of EGTRRA. These include: reductions in marginal income tax rates and the marriage tax penalty, an increase in the Child Tax Credit to $1,000 from $600 currently, and an increase in the upper income threshold for the lowest 10 percent tax rate so that some income would be subject to that low rate rather than at the next higher rate of 15 percent.

In addition, the package excludes dividend income from individual taxable income, thereby eliminating the unfair and distortionary double taxation of dividend income that now occurs because dividends are taxed both at the corporate level and again at the individual taxpayer level. Also, the package increases the Alternative Minimum Tax (AMT) exemption amount for married joint filers by $8,000 and for single filers by $4,000. (The AMT is a parallel tax system using a broader tax base and lower tax rates than the regular income tax. Taxpayers pay the higher of their tax liability as determined in the regular income tax and the AMT calculations.) The AMT exclusion needs to be raised in tandem with the proposed tax relief in order to make sure that taxpayers do not lose some of their potential tax relief because they would become subject to the AMT. Finally, the proposal increases the amount of investment purchases a small business can deduct immediately from $25,000 to $75,000, thereby reducing the true cost of investment.

All told, the tax relief would reduce calendar year 2003 tax liabilities by an estimated $98 billion. This would add directly to households' purchasing power this year. Soon after enactment of this legislation, the $400 increase in the Child Tax Credit for 2003 would be mailed out as checks to eligible families. Also, new payroll withholding schedules would take effect that incorporate the lower marginal tax rates, providing an immediate boost to employees' take-home pay.

The benefits of the proposed tax relief would also add to purchasing power in the spring of 2004 when taxpayers file their 2003 income tax returns and receive their refunds or make any additional tax payments. The tax relief from the dividend exclusion will show up at that time. Similarly, some of the reduction in tax liability on wage income will take the form of bigger tax refunds or smaller tax payments when 2003 income taxes are filed. That is because the new withholding schedules will only affect pay received after those schedules are put in effect, which may be well into 2003. Wages received earlier in 2003 will have been withheld based on the current higher tax rates, creating over-withholding on some 2003 wages. While some wage earners may adjust their withholding later in the year so that their 2003 liabilities and withholdings more nearly balance out, for many taxpayers the correction for overwithholding will occur when they file their 2003 income taxes.

In addition to creating growth and jobs, the President's package also assists unemployed workers in two ways. First, because the extension of unemployment insurance passed in March 2002 had expired, the President's plan included a call for Congress to extend Federal unemployment insurance (UI) benefits to those workers who exhausted their regular State benefits. In early January, Congress passed and the President signed legislation that will provide up to 13 weeks of additional benefits; for the unemployed in States with relatively high unemployment rates, the extension will cover up to 26 weeks.

Second, the growth and jobs creation package includes Personal Re-employment Accounts, a new form of job assistance. The package provides $3.6 billion to create individual accounts of up to $3,000 for each eligible individual. Recipients can use the funds to aid their job search or training and, significantly, recipients get to keep any funds not used if they get a job within 13 weeks. Thus, there is a new incentive for eligible UI beneficiaries to find work quickly and get off of the UI rolls sooner.

Monetary Policy: As it became clear early in 2001 that the economy had begun to falter, the Federal Reserve reduced the federal funds rate sharply, from 6½ percent at the start of the year to 3½ percent by early September. After the terrorist attacks of September 11th, the Federal Reserve further cut the funds rate to 1¾ percent by December 2001 while making sure that there was enough financial liquidity to keep the economy going in the aftermath of September 11th. The 1¾ funds rate was maintained for almost a year until November 2002, when it was reduced further to 1¼ percent and held at that low level into 2003. Very low and falling inflation during the past two years has enabled the Federal Reserve to ease monetary policy substantially without fear of igniting inflation.

Short-term interest rates fell sharply in response to the Federal Reserve's actions. At the end of 2002, the

3-month Treasury bill rate was a mere 1.2 percent, down sharply from 5.7 percent two years earlier. Short-term private sector rates fell in parallel. Adjusted for inflation, short-term interest rates during 2002 were close to zero.

As is usually the case, the change in rates at the longer-end of the maturity spectrum was not as large as at the short end; the declines, however, were still substantial and brought long-term rates to the lowest levels since the 1960s. At the end of 2002, the yield on the 10-year Treasury note was 3.8 percent, down from 5.1 percent at the end of 2000. This is the lowest level in four decades. The rate on conventional 30-year mortgages ended the year under 6 percent, also the lowest level since the mid-1960s. Because of heightened uncertainties in the corporate sector, the yield on corporate bonds did not fall quite as far as Treasury and mortgage rates, but for well-rated companies they were still down to the lowest levels since the late 1960s. The yields on below-investment-grade bonds, however, were no lower at the end of 2002 than they were two years earlier. The risk premium on lower quality debt increased substantially during 2002, in part because of the bankruptcy of several large, well-regarded companies; some, but not all of these, had been tainted by accounting scandals.

Slower-Than-Usual Recovery

The contraction of real Gross Domestic Product (GDP) during the 2001 recession was relatively mild. From its peak in the fourth quarter of 2000 to its low point in the third quarter of 2001, real GDP fell by just 0.6 percent. By comparison, the average decline in real GDP during the prior seven recessions was 2.3 percent. During the first four quarters of this recovery, however, real GDP rose only 3.3 percent, about half the 6.0 percent average gain during the comparable periods of the prior seven recoveries. It is not unusual for mild recessions to be followed by subpar recoveries, but this recovery has also been held back by a number of extraordinary factors unique to this cycle.

Stock Market Collapse: The stock market fell sharply during 2002, in marked contrast to the strong gains usually recorded in the first year of past economic recoveries. During 2002, the S&P 500 dropped 23 percent, bringing its total fall since the March 2000 market peak to 42 percent. The technology-laden NASDAQ fell by a similar amount in 2002, but its cumulative loss since March 2000 reached nearly 75 percent. Three consecutive years of falling markets is unprecedented in the post-World War II experience, but so too were the record gains set in the prior five years. From the start of the bull market at the end of 1994 to its peak in March 2000, the S&P 500 tripled and the NASDAQ increased six fold.

In dollar terms, the collapse of equity values since March 2000 reduced household wealth by about $6¾ trillion, eliminating nearly two-thirds of the equity gain during the bull market of the last half of the 1990s. While the strong rise in the value of household-owned real estate last year supported household wealth and spending, it was not nearly enough to offset the restraint on consumer spending resulting from falling equities.

In addition to the negative effect on consumer spending, the declining stock market restrained business investment by increasing the cost of capital. Federal and State government revenues were also hurt by the slumping stock market's effect on income and capital gains tax receipts. In response, States took a variety of measures to balance their budgets, including restraining spending growth.

Based on past relationships between equity wealth and spending, the cumulative loss in equity wealth may have reduced real GDP growth during 2002 by almost 2 percentage points. This estimate does not include the fiscal and monetary policy responses that were taken to stimulate the sluggish expansion.

Falling Confidence: Usually, consumer and investor confidence strengthen as a recovery takes hold; during 2002, however, they weakened. By year-end, surveys revealed that the level of confidence was lower than at the start of the year. Confidence was shaken by a wide range of economic and non-economic factors. Consumers were especially concerned about the weak labor market as the expansion generated relatively few new jobs. Investors' confidence was shaken by their falling equity wealth and by accounting scandals at several major corporations that revealed huge overstatements of earnings.

A number of large, once well-regarded firms filed for bankruptcy, some in the aftermath of accounting scandals. In related developments, serious questions were raised about conflicts of interest at several accounting and Wall Street brokerage firms that could have resulted in investors receiving inaccurate and misleading reports on businesses' financial condition. In response to the scandals, in July the President signed the Sarbanes-Oxley Act to make wide-ranging reforms of corporate governance; in August, the Securities and Exchange Commission required major firms to re-examine their financial statements and certify their accuracy; and in December ten major Wall Street firms paid a total of $1.4 billion to Federal, State and industry regulators and agreed to reform their stock advisory functions to avoid conflicts of interest with other activities of the firms.

Among the non-economic factors depressing confidence and restraining economic activity were concerns about the possibility of further terrorist attacks. The leisure and airline industries were especially affected by such fears. Business investment in new structures, which fell throughout 2002, was depressed, in part by the difficulty of obtaining insurance against the risk of terrorist-caused damages. In November, the President signed both the Terrorism Risk Insurance Act to provide coverage for catastrophic losses from potential terrorist attacks and the Homeland Security Act. The Homeland Security Act reorganized 22 Federal agencies across the government into a single department to improve the government's ability to deal more effectively with the threat of terrorism in the United States. Near the turn of the year, the possibility of armed conflict with Iraq and its possible consequences also raised concerns among consumers and investors.

Worldwide Slowdown: In the past, recovery in the United States was often aided by concurrent expansions in other industrialized economies. That was not the case in 2002. Most of our major trading partners were either in recession or were suffering from very slow growth. As a result, U.S. exports were restrained by weak growth of demand abroad. The U.S. manufacturing sector is heavily dependent on export sales and was especially hard-hit by the overseas slowdown. According to forecasts by the Organization for Economic Cooperation and Development (OECD), in 2002 real GDP grew only 1.1 percent in the member states of the OECD aside from the United States. Output in Japan, the world's second largest economy, fell for the second consecutive year. In the European Union, growth was forecast to be only 0.9 percent. Among the larger OECD countries, only Canada had faster growth than the U.S. last year. Although some nations took actions during the year to stimulate their flagging economies, it is likely that additional measures will be needed to restore healthy growth in our trading partners.

U.S. export sales were also dampened, and imports fostered, by the lagged effects of the appreciation of the dollar during 2000–2001 when the trade-weighted value of the dollar rose 15 percent against major foreign currencies. During 2002, the dollar fell, returning it to the mid-2000 level. The decline in the dollar will help make U.S. producers more competitive here and abroad. Despite last year's slow growth here, falling U.S. stock market, and sliding dollar, the United States remained a relatively favorable outlet for foreign savings, especially in light of the weaker growth and sharply falling stock markets abroad.

Leaders and Laggards: The subpar expansion reflected moderate growth in the economy's leading sectors and continued restraint on growth from the lagging sectors. Households were willing to spend, especially when they perceived a bargain, such as zero percent car financing and extensive sales at Christmas time. Nonetheless, the pace of consumer spending, a leading factor in this upturn, was less than usual for a recovery. During the first year of prior expansions, consumer spending adjusted for inflation rose 4.9 percent on average. By contrast, during the first four quarters of this expansion, from the fourth quarter of 2001 through the third quarter of 2002, real consumer spending rose 3.8 percent. Growth of consumer spending appears to have slowed considerably in the fourth quarter of last year judging by the partial information now at hand. (As of this writing, the official estimates of fourth quarter GDP and its components are not available.)

Housing was also an important leading sector in the recovery last year, aided by the lowest mortgage rates since the mid-1960s. Housing starts for 2002 reached a 16-year high; new and existing home sales reached the highest level on record. The increase in demand pushed up prices significantly and reduced the inventory of unsold new homes to historically low levels.

In contrast to consumption and housing, real business capital spending was a significant restraint on growth, falling 5.1 percent during the first four quarters of the recovery. In contrast, during the comparable period in the past seven expansions investment increased 5.8 percent on average. This time, investment in new structures declined in each quarter, while investment in equipment and software turned positive only by the third and fourth quarters of the expansion. It is not unusual for business investment to lag as the economy begins to recover. However, in this upturn, the turnaround in investment has been unusually delayed and weak.

Business inventory investment swung from liquidation at the start of the expansion to moderate restocking by the fourth quarter of the recovery. Overall, inventory investment made a moderate contribution to GDP growth during the first year of the expansion. Businesses remained cautious in their inventory management, however, and the ratio of inventories to sales remained low by historical standards.

The impetus to growth from increased inventory investment was just about offset by the deterioration in the foreign trade balance. Real exports of goods and services rose a moderate 2.8 percent while imports soared 6.7 percent. The surge in imports meant that a significant portion of the increase in U.S. demand last year was supplied by foreign producers. The widening trade deficit caused by slow growth abroad and the lagged effects of an earlier rise in the dollar pushed the current account deficit to a record of nearly 5 percent of GDP.

Government purchases added a little less than one percentage point to GDP growth during the first year of the expansion. Federal spending, primarily on defense, accounted for about half of this. The contribution from State and local governments waned during the year as these governments, which are required to balance their budgets, cut back on spending growth in the face of an unanticipated decrease in receipts.

Unemployment and Inflation: The weak expansion, combined with strong productivity growth, resulted in net job losses last year. There were 180,000 fewer jobs at the end of 2002 than at the end of 2001; manufacturing employment was down by almost 600,000. The unemployment rate finished the year at 6.0 percent, compared with 5.8 percent at the end of 2001. The rise in the unemployment rate would have been greater except that it was limited by a very slow rise in the labor force as the weak job market caused some potential workers to leave the labor force.

Virtually all of the increase in output during the first year of the expansion was accounted for by rising output per hour. Total hours worked in the economy barely increased. During this first year, output per hour in the nonfarm business sector rose 5.6 percent, the best four-quarter performance since 1973. In the long-run, strong productivity growth is a very healthy development for the economy because it increases the Nation's potential output and our standard of living. In the short-run, however, if GDP growth is subpar, then strong productivity growth results in little, if any, job growth.

Inflation, which was already low at the end of the recession, slowed further last year as the subpar recovery created additional slack in labor and product markets. During the four quarters of 2002, the core Consumer Price Index (CPI), which excludes the volatile food and energy components, rose a mere 2.0 percent, down from 2.7 percent during 2001. The overall CPI rose 2.2 percent last year, slightly faster than the core CPI because of a pickup in energy prices, which more than offset slow growth of food prices. The GDP chain-weighted price index, a more comprehensive measure of overall inflation that includes purchases of businesses, governments, and consumers, rose between 1 and 2 percent at an annual rate in each quarter of 2002. Overall CPI inflation in the range of 1 to 2 percent is consistent with the goal of price stability. Low inflation has enabled the Federal Reserve to pursue a growth-promoting monetary policy.

Economic Projections

The Administration's economic projections are summarized in Table 2–1. These economic assumptions are prudent and close to those of the Congressional Budget Office and the consensus of private sector forecasters, as described in more detail below.

The Budget assumptions strike a balance between upside and downside risks. On the upside, real GDP growth may be greater than projected if the response of consumers, businesses, and investors to the growth and jobs creation package quickly sets the economy onto a strong expansion path. In addition, if the favorable productivity performance of recent years continues unabated, then long-run growth may be stronger than assumed here. On the other hand, the restraining forces that contributed to weak growth near the end of last year may take longer than assumed to dissipate. The Budget assumptions take a cautious view of these risks to avoid an over-estimation of available budgetary resources.

Real GDP: The pace of economic activity is expected to gather momentum during 2003 with real GDP projected to rise 2.9 percent on a calendar year basis in 2003, up from 2.4 percent in 2002. During the next few years, real growth is projected to exceed the Nation's long-term potential, which is estimated at 3.1 percent. The unemployment rate is expected to decline until it reaches a sustainable level of 5.1 percent in the fourth quarter of 2005.

The largest contributions to growth in the near-term are expected to come from consumer spending and business fixed investment. The President's growth package will increase after-tax incomes of families, and thereby boost spending, by accelerating reductions in marginal tax rates and the marriage tax penalty, increasing the Child Tax Credit, and raising the upper threshold of the 10 percent income bracket so that less income is taxed at the 15 percent rate. The exclusion of dividends from taxation will increase after-tax incomes and will likely support the stock market. Any resulting increase in equity wealth would contribute both to near-term spending and to saving available for retirement. The dividend exclusion will also lower the cost of capital to business and thereby raise business investment. As the expansion picks up speed, the usual virtuous circle of more jobs, more spending, and more capital investment will be firmly established.

Residential investment, which was already at a very high level in 2002, is unlikely to rise further. Consequently, its contribution to GDP growth may be quite small in the next few years. A positive contribution to growth from net exports may be delayed a few years until such time as there is stronger growth abroad.

The Federal, State, and local government contribution to GDP growth is also likely to be quite modest in the next few years. At the Federal level, growth of spending on security requirements is expected to be accompanied by more moderate growth in other spending. At the State and local level, outlays will be restrained by the need to restore budget balance in the face of very weak receipts growth.

Potential GDP: The growth of potential GDP is assumed to be 3.1 percent per year. Potential growth is approximately equal to the sum of the trend growth rates of the labor force and of productivity. The labor force is projected to grow 1.0 percent per year on average; the trend growth of productivity is assumed to be 2.2 percent. This rate of productivity growth is equal to the average growth experienced from the business cycle peak in 1990 through the third quarter of 2002, but it is slower than the 2.6 percent rate achieved during the past seven years. The underlying trend of productivity growth, and therefore potential growth, may turn out to be higher than assumed, especially if business investment responds rapidly to the improving economy. In the interest of prudent budget forecasting, however, a more cautious assumption appears warranted.

Inflation and Unemployment: Inflation is projected to remain low. The CPI is expected to increase 2.2 percent on a calendar year basis in 2003, rising gradually to 2.3 percent in 2008. The GDP chain-weighted price index is projected to edge up 1.3 percent this year, rising to 1.8 percent annually in 2008. The out-year inflation rates are slightly lower than the average rates of the past decade: 2.6 percent yearly for the CPI and 1.9 percent for the GDP inflation measure.

The slower rise of prices projected during the next six years relative to the prior decade is the result of very low inflation at this stage of the expansion and the downward pressure on wages and prices that will remain until the excess slack in labor and capital resources is eliminated by the growing economy. The unemployment rate, which reached 6.0 percent in Decem-

Table 2–1. ECONOMIC ASSUMPTIONS [1]

(Calendar years; dollar amounts in billions)

	Actual 2001	Projections 2002	2003	2004	2005	2006	2007	2008
Gross Domestic Product (GDP):								
Levels, dollar amounts in billions:								
Current dollars	10,082	10,442	10,884	11,447	12,031	12,637	13,263	13,919
Real, chained (1996) dollars	9,215	9,440	9,710	10,061	10,414	10,760	11,102	11,446
Chained price index (1996=100), annual average	109.4	110.6	112.1	113.8	115.5	117.4	119.4	121.6
Percent change, fourth quarter over fourth quarter:								
Current dollars	2.0	4.2	4.8	5.2	5.0	5.0	4.9	5.0
Real, chained (1996) dollars	0.1	2.9	3.4	3.6	3.4	3.3	3.1	3.1
Chained price index (1996=100)	2.0	1.2	1.4	1.5	1.6	1.7	1.8	1.8
Percent change, year over year:								
Current dollars	2.6	3.6	4.2	5.2	5.1	5.0	5.0	4.9
Real, chained (1996) dollars	0.3	2.4	2.9	3.6	3.5	3.3	3.2	3.1
Chained price index (1996=100)	2.4	1.1	1.3	1.5	1.5	1.7	1.7	1.8
Incomes, billions of current dollars:								
Corporate profits before tax	670	659	771	830	1,069	1,069	1,085	1,120
Wages and salaries	4,951	5,021	5,275	5,575	5,870	6,159	6,450	6,757
Personal dividend income	409	434	450	470	477	497	526	567
Other taxable income [2]	1,957	1,979	1,986	2,067	2,116	2,170	2,230	2,295
Consumer Price Index (all urban): [3]								
Level (1982–84=100), annual average	177.1	179.9	183.8	187.6	191.5	195.7	200.0	204.5
Percent change, fourth quarter over fourth quarter	1.9	2.3	2.0	2.1	2.1	2.2	2.2	2.3
Percent change, year over year	2.8	1.6	2.2	2.1	2.1	2.2	2.2	2.3
Unemployment rate, civilian, percent:								
Fourth quarter level	5.6	5.8	5.6	5.3	5.1	5.1	5.1	5.1
Annual average	4.8	5.8	5.7	5.5	5.2	5.1	5.1	5.1
Federal pay raises, January, percent:								
Military [4]	3.7	6.9	4.7	*	NA	NA	NA	NA
Civilian [5]	3.7	4.6	3.1	*	NA	NA	NA	NA
Interest rates, percent:								
91-day Treasury bills [6]	3.4	1.6	1.6	3.3	4.0	4.2	4.2	4.3
10-year Treasury notes	5.0	4.6	4.2	5.0	5.3	5.4	5.5	5.6

NA = Not Available; * = (see note below).

[1] Based on information available as of late November 2002.

[2] Rent, interest and proprietor's components of personal income.

[3] Seasonally adjusted CPI for all urban consumers.

[4] Percentages apply to basic pay only; 2002 and 2003 figures are averages of various rank- and longevity-specific adjustments; pay raises for 2004 range from 2.0 to 6.25 percent, depending on rank and longevity; percentages to be proposed for years after 2004 have not yet been determined.

[5] Overall average increase, including locality pay adjustments. The increase for 2004 (which would also apply also to uniformed services other than armed forces) would be 2.0 percent. Percentages to be proposed for years after 2004 have not yet been determined.

[6] Average rate, secondary market (bank discount basis).

ber 2002, is projected to decline gradually to 5.1 percent. This rate is the center of the range around the unemployment rate that is consistent with stable inflation. Similarly, the low capacity utilization rate in manufacturing, at about 74 percent in the last quarter of 2002, will exert further downward pressure on prices and it will take a few years for this effect to abate.

The one-half percentage point faster rise in the CPI than in the GDP inflation measure is consistent with historical experience. The CPI tends to rise faster than the GDP measure in part because computer prices, which have been falling sharply, have a larger weight in GDP inflation which includes computer purchases of government, business, and consumers. Also, the CPI uses a fixed market basket for its weights, while the GDP measure uses current, "chain" weights. As such, the CPI does not fully reflect the reallocation of purchases that occurs in response to changing relative prices that is reflected in the GDP inflation measure. This source of upward bias to the CPI has been eliminated in a new supplemental series, the Chained Consumer Price Index for All Urban Consumers, that uses chain weights. This alternative measure of consumer price inflation is likely to increase more in line with the GDP measure than the conventional CPI.

Interest Rates: Interest rates are projected to rise with the resumption of strong, self-sustaining growth. The 3-month Treasury bill rate, at 1.2 percent at the end of last year, is expected to rise to 4.3 percent over the next six years. As is usually the case when credit demands increase as growth accelerates, the increase at the longer end of the maturity spectrum is likely to be smaller than at the short end. The yield on the 10-year Treasury note, which was 3.8 percent at the end of 2002, is projected to rise to 5.6 percent by 2008. Adjusted for inflation, the outyear real interest rates are close to their historical averages.

Income Shares: The share of taxable income in nominal GDP is projected to rise through 2005 and decline thereafter. The wage and salary share is expected to rise through 2005 from its relatively low level in 2002 as workers capture in higher wages more of the recent gains in productivity growth. During these years, “other labor income,” which includes employer-paid health insurance and pension contributions that are not part of the tax base, is likely to rise. After 2005, the wage share is projected to decline while an increasing proportion of labor compensation is accounted for by further increases in other labor income, essentially tax-exempt employee benefits.

Two factors are likely to drive up the share of other labor income in GDP during the coming years. First, health insurance paid by employers is expected to continue to rise rapidly. During 2002, employer contributions to health insurance rose at a double-digit pace after increasing around nine percent in 2000 and 2001. Employers will shift some of the future cost increases on to employees by raising deductibles and co-pays; nonetheless, the increases in employers’ contributions are likely to be significant. Second, employers’ contributions to defined-benefit pension plans are also likely to rise. The sharp fall in the stock market in the last three years has created underfunding in many plans that will have to be made up by larger contributions in the coming years. In addition, many plans, including those that are currently well-funded, will have to raise contributions because of lower assumed rates of return on fund assets in light of the actual lower returns.

The share of corporate profits before tax will be affected by the pace of economic activity and by the temporary expensing provisions of the Job Creation and Worker Assistance Act of 2002. The faster growth beginning this year is expected to increase the profits share from the low levels during the recession and the subpar recovery. The expensing provision lowers book profits through September 11, 2004 by allowing firms to write off more of their investment expense sooner. After the expiration of expensing on that date, book profits will be raised because the remaining depreciation on investments eligible for expensing will be lower. Taking these and other factors affecting book profits into consideration, the share of profits before tax in GDP is projected to rise from 6.3 percent in 2002 to a high of 8.9 percent in 2005, and then gradually decline to eight percent in at the end of the forecast horizon.

Among the other components of taxable income, the share of personal interest income in GDP is projected to decline significantly, reflecting the lagged effects of past declines in interest rates on the average yield on interest-earning assets of the household sector. The shares of the remaining components (proprietors’ income, rental income, and dividend income) are projected to remain stable at around their 2002 levels. The President’s growth and jobs creation package proposes to eliminate income taxes on dividends which have already been taxed at the corporate level.

Comparison with CBO and Private-Sector Forecasts

The Congressional Budget Office (CBO) and many private-sector forecasters also make projections. CBO develops its projections to aid Congress in formulating budget policy. In the executive branch, this function is performed jointly by the Treasury, the Council of Economic Advisers, and the Office of Management and Budget. Private-sector forecasts are often used by businesses for long-term planning. Table 2–2 compares the Budget assumptions with projections by the CBO and the Blue Chip consensus, an average of about 50 private-sector forecasts.

The three sets of economic assumptions are based on different underlying assumptions concerning economic policies. The private-sector forecasts are based on appraisals of the most likely policy outcomes, which vary among forecasters. The CBO baseline projection assumes that current law will remain unchanged. Despite their differing policy assumptions, the three sets of economic projections, shown in Table 2–2, are very close. The similarity of the Budget economic projection with the CBO baseline projection underscores the cautious nature of the Administration forecast.

For real GDP growth, the Administration, CBO and the Blue Chip consensus anticipate that the pace of economic activity will accelerate during the next two years. For calendar year 2003, the three forecasts fall within the narrow range of 2.5 to 2.9 percent; for 2004, all three project 3.6 percent growth. The three forecasts have similar projections for 2005–2008.

All three forecasts anticipate continued low inflation of around two percent as measured by the GDP chain-weighted price index and 2½ percent as measured by the CPI. The unemployment rate projections are also similar. All three forecasts envisage a similar path of rising interest rates during the next few years. For short-term rates, CBO’s projection is slightly higher than the Blue Chip’s, which is slightly higher than the Administration’s. The three long-term interest rate projections are very close.

Changes in Economic Assumptions

As shown in Table 2–3, the economic assumptions underlying this Budget have been revised significantly from those of the 2003 Budget, which were finalized just 2-1/2 months after the September 11th attacks. At that time it seemed that recovery from the attacks would be quite slow in coming and that it would not be until 2003 that a strong expansion would be well-established. In the event, the economy proved to be much more resilient than the Administration and other forecasters had anticipated.

Real GDP growth during 2002, although relatively weak for a recovery, was still considerably stronger than projected in last year’s Budget. However, by the end of last year, the current recovery appeared to be losing momentum, rather than gaining it as projected in last year’s Budget. Consequently, projected real GDP growth during 2003 is now lower than anticipated in

Table 2–2. COMPARISON OF ECONOMIC ASSUMPTIONS

(Calendar years)

	Projections						Average,
	2003	2004	2005	2006	2007	2008	2003-08
Real GDP (billions of 1996 dollars):							
CBO January	9,673	10,018	10,358	10,697	11,037	11,380	
Blue Chip Consensus January [2]	9,704	10,050	10,383	10,709	11,041	11,384	
2004 Budget	9,710	10,061	10,414	10,760	11,102	11,446	
Real GDP (chain-weighted): [1]							
CBO January	2.5	3.6	3.4	3.3	3.2	3.1	3.2
Blue Chip Consensus January [2]	2.8	3.6	3.3	3.1	3.1	3.1	3.2
2004 Budget	2.9	3.6	3.5	3.3	3.2	3.1	3.3
Chain-weighted GDP Price Index: [1]							
CBO January	1.6	1.7	2.0	2.1	2.1	2.2	2.0
Blue Chip Consensus January [2]	1.6	1.9	2.1	2.1	2.1	2.1	2.0
2004 Budget	1.3	1.5	1.5	1.7	1.7	1.8	1.6
Consumer Price Index (all urban): [1]							
CBO January	2.1	2.2	2.5	2.5	2.5	2.5	2.4
Blue Chip Consensus January [2]	2.2	2.2	2.5	2.6	2.5	2.5	2.4
2004 Budget	2.2	2.1	2.1	2.2	2.2	2.3	2.2
Unemployment rate: [3]							
CBO January	5.9	5.8	5.4	5.3	5.3	5.2	5.5
Blue Chip Consensus January [2]	5.9	5.5	5.1	5.1	5.1	5.1	5.3
2004 Budget	5.7	5.5	5.2	5.1	5.1	5.1	5.3
Interest rates: [3]							
91-day Treasury bills:							
CBO January	1.4	3.5	4.8	4.9	4.9	4.9	4.1
Blue Chip Consensus January [2]	1.6	2.9	4.2	4.4	4.6	4.4	3.7
2004 Budget	1.6	3.3	4.0	4.2	4.2	4.3	3.6
10-year Treasury notes: [3]							
CBO January	4.4	5.2	5.6	5.8	5.8	5.8	5.4
Blue Chip Consensus January [2]	4.4	5.2	5.6	5.8	5.7	5.7	5.4
2004 Budget	4.2	5.0	5.3	5.4	5.5	5.6	5.2

Sources: Congressional Budget Office; Aspen Publishers, Inc., *Blue Chip Economic Indicators*
[1] Year over year percent change.
[2] January 2003 Blue Chip Consensus forecast for 2003 and 2004; Blue Chip October 2002 long run for 2005 - 2008.
[3] Annual averages, percent.

last year's Budget. From 2004 onwards, however, real GDP growth in this and the prior Budget are quite similar. Largely because of the better-than-projected growth in 2002, the level of real GDP is now projected to be higher in each year than in last year's Budget (adjusted for historical revisions).

The level of nominal GDP, however, is projected to be lower in each year than in last year's Budget. That is primarily because actual GDP inflation was lower in 2002, and is expected to be lower thereafter, than in last year's Budget. The unemployment rate is expected to be slightly higher than in last year's assumptions and ultimately to decline to 5.1 percent rather than 4.9 percent. Interest rates are projected to be lower during the next few years than was envisaged in last year's Budget, reflecting their current low levels. While the outyear short-term rate is about unchanged from last year's assumptions, outyear long-term rates are slightly higher. Adjusted for inflation, the real long-term rate is higher than in last year's Budget.

Sources of Change in the Budget since Last Year

The sources of the change in the budget outlook from the 2003 Budget baseline (which excludes the effects of policy proposals) to the 2004 Budget policy projection are shown in Table 2–4. The second block shows that enacted legislation reduced the pre-policy surplus of $109 billion for 2004 projected in the 2003 Budget by $79 billion.

The third, fourth, and fifth blocks quantify the separate impacts on the budget outlook from changes in economic projections, technical factors, and revised historical data on GDP and taxable incomes.

The third block shows the effects on receipts and outlays from changes in economic assumptions. These include the effects of changes in assumptions for real growth, inflation, interest rates, unemployment, and the growth rates of various taxable incomes.

Technical factors (block 4) are all changes in budget estimates that are not due to explicit economic assumptions, revisions to historical economic data, or legislation. Examples of technical factors are changes in re-

Table 2–3. COMPARISON OF ECONOMIC ASSUMPTIONS IN THE 2003 AND 2004 BUDGETS

(Calendar years; dollar amounts in billions)

	2002	2003	2004	2005	2006	2007	2008
Nominal GDP:							
2003 Budget assumptions [1]	10,346	10,930	11,530	12,162	12,794	13,438	14,114
2004 Budget assumptions	10,442	10,884	11,447	12,031	12,637	13,263	13,919
Real GDP (1996 dollars):							
2003 Budget assumptions [1]	9,250	9,602	9,959	10,315	10,650	10,980	11,321
2004 Budget assumptions	9,440	9,710	10,061	10,414	10,760	11,102	11,446
Real GDP (percent change): [2]							
2003 Budget assumptions	0.7	3.8	3.7	3.6	3.2	3.1	3.1
2004 Budget assumptions	2.4	2.9	3.6	3.5	3.3	3.2	3.1
GDP price index (percent change): [2]							
2003 Budget assumptions	1.9	1.7	1.7	1.9	1.9	1.9	1.9
2004 Budget assumptions	1.2	1.4	1.5	1.6	1.7	1.8	1.8
Consumer Price Index (percent change): [2]							
2003 Budget assumptions	2.4	2.2	2.3	2.4	2.4	2.4	2.4
2004 Budget assumptions	2.3	2.0	2.1	2.1	2.2	2.2	2.3
Civilian unemployment rate (percent): [3]							
2003 Budget assumptions	5.9	5.5	5.2	5.0	4.9	4.9	4.9
2004 Budget assumptions	5.8	5.7	5.5	5.2	5.1	5.1	5.1
91-day Treasury bill rate (percent): [3]							
2003 Budget assumptions	2.2	3.5	4.0	4.2	4.4	4.4	4.2
2004 Budget assumptions	1.6	1.6	3.3	4.0	4.2	4.2	4.3
10-year Treasury note rate (percent): [3]							
2003 Budget assumptions	5.1	5.1	5.1	5.1	5.2	5.2	5.2
2004 Budget assumptions	4.6	4.2	5.0	5.3	5.4	5.5	5.6

[1] Adjusted for July 2002 NIPA revisions.
[2] Year over year.
[3] Calendar year average.

ceipts and outlays from changes in estimating methodologies.

Revisions in the level of historical income data affect receipts estimates. These effects are shown in the fifth block, which quantifies the impact on the budget of data revisions affecting tax bases. After the publication of the 2003 Budget in February 2002, the historical levels of profits and of wages and salaries for calendar year 2001 were revised down significantly. As a result of the lower historical starting point for the projection of incomes, the levels of the tax base in 2002 and beyond that were assumed in the 2003 Budget were too high. The reduction in receipts estimates because of the lower initial level of the tax base (and the associated higher net interest outlays) account for $75 billion of the downward re-estimate of the budget baseline for 2004.

Block 6 shows the 2004 Budget baseline, which is equal to block 1, plus all the changes in blocks 2 through 5.

Block 7 of the table shows the budgetary effect of policies proposed in this Budget. These total –$149 billion in 2004.

Structural and Cyclical Balances

When the economy is operating below potential and the unemployment rate exceeds the long-run sustainable average, as is projected to be the case for the next few years, receipts are lower than they would be if resources were more fully employed, and outlays for unemployment-sensitive programs (such as unemployment compensation and food stamps) are higher. As a result, the deficit is larger (or the surplus is smaller) than would be the case if the unemployment rate were at the sustainable long-run average. The portion of the deficit (or surplus) that can be traced to this factor is called the cyclical component. The balance is the portion that would remain if the unemployment rate were at its long-run value, and is called the structural deficit (or structural surplus).

The structural balance can often provide a clearer understanding of the stance of fiscal policy than the unadjusted budget balance. That is because the unadjusted budget balance is affected by cyclical economic conditions. The structural balance, however, shows the surplus or deficit that will persist even when the economy is operating at the sustainable level of unemployment. For this reason, changes in the structural balance give a better picture of the independent impact of budget policy on the economy than does the unadjusted balance.

The estimates of the structural balance are based on the relationship between changes in unemployment and real GDP growth on the one hand, and receipts and outlays on the other. As such, the relationships do not take into account other possible changes in the economy that might also be cyclically related. For example, the sharply rising stock market during the second half of the 1990s boosted capital gains-related receipts, and the subsequent fall in the stock market reduced receipts. Some of this rise and fall may have been cyclical in nature. It is not possible, however, to estimate

Table 2–4. SOURCES OF CHANGE IN BUDGET TOTALS

(In billions of dollars)

	2003	2004	2005	2006	2007	2008
(1) 2003 Budget baseline						
Receipts	2,121	2,234	2,366	2,461	2,581	2,710
Outlays	2,070	2,126	2,197	2,266	2,341	2,435
Unified budget surplus	51	109	169	196	240	274
(2) Changes due to enacted legislation:						
Receipts	–37	–26	20	19	14	10
Outlays	64	53	49	49	54	54
Surplus reduction (-), enacted legislation	–101	–79	–30	–30	–40	–44
(3) Changes due to economic assumptions:						
Receipts	–27	–30	–29	–34	–38	–36
Outlays	–26	–29	–16	–8	–3	–*
Surplus reduction (-), economic	–1	–1	–13	–25	–35	–36
(4) Changes due to technical factors:						
Receipts	–134	–77	–42	–11	–*	1
Outlays	21	35	35	27	29	28
Surplus reduction (-), technical	–156	–112	–78	–39	–29	–27
(5) Changes due to NIPA Revisions:[1]						
Receipts	–56	–70	–78	–83	–87	–92
Outlays	1	4	10	14	19	24
Surplus reduction (-), NIPA revisions	–57	–75	–88	–97	–106	–116
(6) Surplus or deficit (-), 2004 Budget baseline	–264	–158	–40	5	29	51
(7) Changes due to 2004 Budget policy:						
Receipts	–31	–109	–100	–89	–71	–72
Outlays	9	40	68	116	136	169
Surplus reduction (-), policy	–40	–149	–168	–205	–207	–241
(8) 2004 Budget totals (policy)						
Receipts	1,836	1,922	2,135	2,263	2,398	2,521
Outlays	2,140	2,229	2,343	2,464	2,576	2,711
Unified budget surplus or deficit (-)	–304	–307	–208	–201	–178	–190

* Less than $500 million.

Note: Changes in interest costs due to receipts changes included in outlay lines.

[1] Effect of changes in historical data on GDP and incomes in the National Income and Product Accounts (NIPA).

this cyclical component accurately. As a result, both the unadjusted and structural balances are affected by cyclical stock market movements.

From 1997 to 2001, the unemployment rate appears to have been lower than could be sustained in the long run. Therefore, as shown in Table 2–5, in 1997 the structural deficit of $37 billion exceeded the actual deficit of $22 billion. Similarly, in 1998–2001, the structural surplus was smaller than the actual surplus, which was enlarged by the boost to receipts and the reduction in outlays associated with the low level of unemployment.

On the other hand, in 2002, the unemployment rate was above what is currently thought to be the sustainable level and the actual deficit of $158 billion exceeded the structural deficit of $111 billion. Similarly in 2004, the actual deficit of $304 billion contains a cyclical component of about $36 billion. The structural deficit for that year is lower, at $272 billion. As the projected unemployment rate declines toward the sustainable level in the next few years, the projected unadjusted deficit is expected to decline to be about equal to the structural deficit in 2007 and thereafter.

In the early 1990s, large swings in net outlays for deposit insurance (the saving and loan bailouts) had substantial impacts on deficits, but had little concurrent impact on economic performance. It therefore became customary to estimate an adjusted structural balance that removed deposit insurance outlays as well as the cyclical component of the budget balance from the actual balance. Deposit insurance net outlays are projected to be very small in the coming years. Therefore, the adjusted structural deficit and the structural deficit are nearly identical over the forecast horizon.

Sensitivity of the Budget to Economic Assumptions

Both receipts and outlays are affected by changes in economic conditions This sensitivity complicates budget planning because errors in economic assumptions lead to errors in the budget projections. It is therefore useful to examine the implications of alternative economic assumptions. Many of the budgetary effects of changes in economic assumptions are fairly predictable, and a set of rules of thumb embodying these relationships can aid in estimating how changes in the economic assumptions would alter outlays, receipts, and the surplus or deficit.

Economic variables that affect the budget do not usually change independently of one another. Output and employment tend to move together in the short run: a high rate of real GDP growth is generally associated with a declining rate of unemployment, while moderate or negative growth is usually accompanied by rising unemployment. In the long run, however, changes in the average rate of growth of real GDP are mainly due to changes in the rates of growth of productivity and labor force, and are not necessarily associated with changes in the average rate of unemployment. Inflation and interest rates are also closely interrelated: a higher expected rate of inflation increases interest rates, while lower expected inflation reduces rates.

Changes in real GDP growth or inflation have a much greater cumulative effect on the budget over time if they are sustained for several years than if they last for only one year. Highlights of the budgetary effects of the above rules of thumb are shown in Table 2–6.

For real growth and employment:

- As shown in the first block, if real GDP growth is lower by one percentage point in calendar year 2003 only and the unemployment rate rises by one-half percentage point more than in the budget assumptions, the fiscal year 2003 deficit is estimated to increase by $11.8 billion; receipts in 2003 would be lower by $9.3 billion, and outlays would be higher by $2.5 billion, primarily for unemployment-sensitive programs. In fiscal year 2004, the estimated receipts shortfall would grow further to $19.4 billion, and outlays would increase by $7.3 billion relative to the base, even though the growth rate in calendar 2004 equaled the rate originally assumed. This is because the level of real (and nominal) GDP and taxable incomes would be permanently lower, and unemployment permanently higher. The budget effects (including growing interest costs associated with larger deficits) would continue to grow slightly in each successive year. During 2003–2008, the cumulative increase in the budget deficit is estimated to be $173 billion.
- The budgetary effects are much larger if the real growth rate is one percentage point lower in each year than initially assumed and the unemployment rate is unchanged, as shown in the second block. This scenario might occur if trend productivity is permanently lower than initially assumed. In this case, the estimated increase in the deficit is much larger than in the first scenario. In this example, during 2003–2008, the cumulative increase in the budget deficit is estimated to be $465 billion.
- The third block shows the effect of a one percentage point higher rate of inflation and one percentage point higher interest rates during calendar year 2003 only. In subsequent years, the price level and nominal GDP would be one percent higher than in the base case, but interest rates are assumed to return to their base levels. In 2004, outlays would be above the base by $18.5 billion, due in part to lagged cost-of-living adjustments; receipts would rise $22.1 billion above the base, however, resulting in an $3.6 billion improvement in the budget balance. In subsequent years, the amounts added to receipts would continue to be larger than the additions to outlays. During 2003–2008, cumulative budget deficits would be $38 billion smaller than in the base case.
- In the fourth block example, the rate of inflation and the level of interest rates are higher by one percentage point in all years. As a result, the price level and nominal GDP rise by a cumulatively growing percentage above their base levels. In this case, the effects on receipts and outlays mount steadily in successive years, adding $317 billion to outlays over 2003–2008 and $428 billion to receipts, for a net decrease in the 2003–2008 deficits of $111 billion. The table also shows the interest rate and the inflation effects separately. These separate effects for interest rates and inflation rates do not sum to the effects for simultaneous changes in both. This occurs largely because the gains in budget receipts due to higher inflation result in higher debt service savings when interest rates are assumed to be higher as well (the combined case) than when interest rates are assumed to be unchanged (the separate case).
- The outlay effects of a one percentage point increase in interest rates alone is shown in the fifth

Table 2–5. ADJUSTED STRUCTURAL BALANCE

(In billions of dollars)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Unadjusted surplus or deficit (–)	–22.0	69.2	125.6	236.4	127.3	–157.8	–304.2	–307.4	–208.2	–200.5	–178.1	–189.6
Cyclical component	15.1	47.6	69.9	106.2	49.6	–46.5	–53.9	–35.7	–18.2	–6.1	–0.5	–*.1
Structural surplus or deficit (–)	–37.1	21.7	55.7	130.3	77.7	–111.3	–250.3	–271.7	–190.0	–194.4	–177.6	–189.6
Deposit insurance outlays	–14.4	–4.4	–5.3	–3.1	–1.4	....	....	....	–*	....	–*	....
Adjusted structural surplus or deficit (–)	–51.5	17.3	50.4	127.2	76.3	–111.3	–250.3	–271.7	–190.0	–194.4	–177.6	–189.6

NOTE: The long-run sustainable unemployment rate is assumed to be 5.2% through calendar year 1998 and 5.1% thereafter.

block. The receipts portion of this rule-of-thumb is due to the Federal Reserve's deposit of earnings on its securities portfolio.

- The sixth block shows that a sustained one percentage point increase in the GDP chain-weighted price index and in CPI inflation decrease cumulative deficits by a substantial $258 billion during 2003–2008. This large effect is because the receipts from a higher tax base exceeds the combination of higher outlays from mandatory cost-of-living adjustments and lower receipts from CPI indexation of tax brackets.

The last entry in the table shows rules of thumb for the added interest cost associated with changes in the budget surplus or deficit.

The effects of changes in economic assumptions in the opposite direction are approximately symmetric to those shown in the table. The impact of a one percentage point lower rate of inflation or higher real growth would have about the same magnitude as the effects shown in the table, but with the opposite sign.

Table 2–6. SENSITIVITY OF THE BUDGET TO ECONOMIC ASSUMPTIONS

(In billions of dollars)

Budget effect	2003	2004	2005	2006	2007	2008	Total of Effects, 2003-2008
Real Growth and Employment							
Budgetary effects of 1 percent lower real GDP growth:							
(1) For calendar year 2003 only: [1]							
Receipts	–9.3	–19.4	–21.6	–22.4	–23.2	–24.3	–120.4
Outlays	2.5	7.3	7.9	9.6	11.4	13.5	52.1
Increase in deficit (–)	–11.8	–26.7	–29.5	–32.0	–34.6	–37.8	–172.5
(2) Sustained during 2003–2008, with no change in unemployment:							
Receipts	–9.4	–30.3	–56.4	–83.6	–112.8	–144.5	–437.0
Outlays	–0.1	0.2	1.9	4.6	8.3	13.5	28.4
Increase in deficit (–)	–9.3	–30.5	–58.3	–88.3	–121.1	–157.9	–465.4
Inflation and Interest Rates							
Budgetary effects of 1 percentage point higher rate of:							
(3) Inflation and interest rates during calendar year 2003 only:							
Receipts	11.1	22.1	22.3	20.9	21.6	22.6	120.6
Outlays	10.5	18.5	16.1	13.3	12.5	12.1	83.0
Decrease in deficit (+)	0.6	3.6	6.3	7.6	9.1	10.5	37.6
(4) Inflation and interest rates, sustained during 2003–2008:							
Receipts	11.1	33.8	58.4	81.9	107.2	135.1	427.5
Outlays	10.6	28.9	46.4	61.9	76.8	92.2	316.8
Decrease in deficit (+)	0.5	4.9	12.1	20.0	30.3	42.9	110.7
(5) Interest rates only, sustained during 2003–2008:							
Receipts	1.7	4.0	5.3	5.9	6.6	7.2	30.7
Outlays	8.7	21.0	30.5	36.4	41.8	47.2	185.6
Increase in deficit (–)	–7.0	–17.0	–25.2	–30.4	–35.3	–40.0	–154.9
(6) Inflation only, sustained during 2003–2008:							
Receipts	9.4	29.7	53.0	75.7	100.2	127.5	395.5
Outlays	1.9	8.1	16.4	26.6	36.7	47.6	137.4
Decrease in deficit (+)	7.5	21.6	36.6	49.1	63.5	79.8	258.1
Interest Cost of Higher Federal Borrowing							
(7) Outlay effect of $100 billion increase in the 2003 unified deficit	0.8	2.8	4.4	4.8	5.1	5.5	23.4

* $50 million or less.

[1] The unemployment rate is assumed to be 0.5 percentage point higher per 1.0 percent shortfall in the level of real GDP.