ECONOMIC ASSUMPTIONS AND ANALYSES

11. ECONOMIC ASSUMPTIONS

Introduction

The economic outlook appears brighter now than at any time in recent years. Expansionary fiscal and monetary policies, combined with the inherent resilience of the American economy, have finally succeeded in overcoming the forces of restraint that have held growth back. Barring adverse shocks, over the near-term there is good reason to believe that a self-sustaining and on-going expansion is at hand, one that will create more jobs, more income, and more consumer spending and business investment.

From a longer-term perspective, the expansion should proceed briskly in the years ahead due to strengthened productivity growth and improvements in the tax system that will make it easier for markets to reward work and investment. A healthy economy will raise living standards and shrink the budget deficit when combined with restraint in Federal spending.

Economic growth began to slow in 2000 following the stock market downturn that began in March. The decline showed up first in manufacturing, where employment peaked in July 2000. The overall economy contracted in the third quarter of 2000, and the slowdown turned into a brief, mild recession in early 2001 that was over by the end of the year. Although the economy began to expand in the fourth quarter of 2001, the pace of growth was initially well shy of that of a normal recovery and the labor market weakened further. In a typical business recovery, employment begins to rise soon after the recession ends, but in this instance payroll employment sagged for many months following the recession trough.

Beginning in mid-2003, however, there were gathering signs of self-reinforcing economic growth. In such a virtuous circle, rising employment adds to workers' incomes and supports consumer spending, which leads to additional increases in output and further gains in employment. Growing consumer confidence contributes to new spending and is further strengthened by continued growth and prosperity. Meanwhile, as businesses experience increased sales, orders, and profits, they are encouraged to boost capital spending, which creates still more jobs and income. Improved business conditions strengthen investor confidence in the economy's future, which drives up the stock market, boosting household wealth and reducing the cost of capital to business, which helps spur further growth.

The process can continue as long as inflation and interest rates remain low and the economy does not bump up against supply constraints. With inflation and interest rates at their lowest levels in decades, there is good reason to expect that the strengthening economic forces now emerging will return the economy to high levels of labor and capital resource use.

Productivity growth accelerated in the last half of the 1990s and has stepped up still further in the last three years. Some of the recent acceleration is very likely a temporary gain: cyclical pressures pushed firms to cut labor and other costs in the face of weak sales. Even taking such cyclical factors into account, however, the underlying pace of productivity growth appears to have improved significantly. If more rapid productivity growth is sustained, then future economic growth would be considerably stronger than most forecasters currently expect. Consistent with conservative forecasting, the Administration assumes productivity growth that is slower than recent experience and close to the average pace of the last four decades.

The Administration's economic near- and medium-term projections reflect a reasonably sanguine view of the outlook, which is shared by most forecasters. The Administration's economic projections are similar to those of private sector forecasters and the Congressional Budget Office. However, after several years of generally disappointing economic news, it would not be surprising if the gathering positive cyclical forces propelled the economy forward even faster than is now generally anticipated.

Policy Actions

Fiscal Policy: During the first three years of this Administration, the President proposed and Congress passed three important tax relief measures that have helped pull the economy out of recession and provide a foundation for future growth.

- In June 2001, the President signed the Economic Growth and Tax Relief and Reconciliation Act (EGTRRA). It provided significant income tax rate reductions including lower marginal income tax rates; a reduction in the marriage tax penalty; and a new, lower, 10 percent tax bracket. Beginning in July 2001, 85 million taxpayers received rebate checks totaling $36 billion reflecting the new 10 percent bracket. The rebate and lower withholding rates bolstered consumer spending at a critical juncture, helping to return the economy to growth by the end of 2001.
- In March 2002, the President signed the Job Creation and Worker Assistance Act (JCWAA). The main provision of JCWAA reduced the tax disincentive for business to invest by permitting expensing on 30 percent of the value of qualified new capital assets, primarily equipment and software. This expensing provision created a temporary period of lower capital costs until the provision originally expired in September 2004. JCWAA

was aimed directly at weak capital spending, a key reason why the business cycle recovery was much slower than usual. The Act also provided additional unemployment benefits for long-term unemployed workers who exhausted their regular unemployment insurance benefits.

- In May 2003, the President signed another extension of unemployment insurance benefits for individuals who had exhausted their regular benefits. He also signed the Jobs and Growth Tax Relief Reconciliation Act (JGTRRA) to provide additional stimulus to the subpar recovery. This legislation:

  1) Advanced the date at which the 2001 tax bill's lower marginal individual income tax rates were to take effect and made them retroactive to January 2003; raised the child tax credit for 2003 and 2004, with the 2003 increase given to families in the form of rebate checks during the summer; advanced the reduction in the marriage penalty; and raised the exemption amount for the individual Alternative Minimum tax (AMT) in 2003 and 2004. (Taxpayers pay the higher of their tax liability as determined by the regular income tax and the AMT calculation.)

  2) Reduced the individual income tax rates on dividend income and capital gains. The tax bill reduced to 15 percent the maximum tax rate on dividends which previously were taxed at the taxpayer's marginal tax rate, and it reduced the maximum tax rate on net capital gains (the excess of net long-term gains over net short-term losses) from 20 percent to 15 percent. Tax rates on capital income were also reduced for those lower income families paying less than the maximum rate. The reductions in the tax rates on capital gains and dividends reduced a longstanding distortion in the tax code: the double taxation of corporate earnings that had lowered business investment and biased corporate financing against equity and in favor of debt.

  3) Raised the expensing provision of the 2002 tax bill from 30 percent to 50 percent and extended the window for eligible investments from September 11, 2004 to the end of the year. Also, the maximum amount of new investment that a small business can expense was raised from $25,000 to $100,000.

All told, the three tax relief bills provided $68 billion in tax stimulus in fiscal year 2001, $89 billion in 2002, $159 billion in 2003, $272 billion in 2004, and $171 billion in 2005. The total stimulus, including assistance to States and long-term unemployed workers, was even larger.

Tax relief played a crucial role in ending the 2001 recession and then invigorating the recovery. It took two years, but the stimulus in the tax bills is finally producing the rapid economic growth that the economy needs and that will eventually generate new jobs and higher incomes. In addition to the near-term stimulus, the 2001 and 2003 Acts also made fundamental improvements in the Nation's tax system that will raise the long-term level of economic activity by reducing the disincentives and distortions in the system.

- The reductions in marginal tax rates mean that individuals, sole proprietorships, and partnerships will have more incentive to produce more, earn more, save more, and invest more.
- Lower tax rates on dividends and capital gains will lower the after-tax cost of purchasing capital equipment and software, thus raising the rate of investment. Lower tax rates will also shift investment to more productive uses by reducing distortions in the pattern of investment caused by the tax system. By reducing the bias in favor of debt over equity finance, lower tax rates on dividends and capital gains will encourage corporations to maintain stronger balance sheets.
- The reduction in the individual capital gains tax rates will encourage more high-risk, high-payoff investments essential to maintaining a dynamic economy and ensuring U.S. competitiveness in the world economy.
- Lower tax rates on capital income will help raise asset values and thereby improve household and business balance sheets.

The short-term benefits of fiscal stimulus are already evident in the quick end to the recession in 2001 and the further surge in economic growth that occurred in the second half of 2003. The tax cuts have helped to transform an ailing economy into a healthier one. The longer-term benefits from an improved tax system will be evident in the years ahead as new incentives alter the behavior of individuals and businesses in ways that augment economic growth.

Monetary Policy: Since early 2001 the Federal Reserve has aggressively pursued a policy aimed at restoring strong, self-sustaining growth. As it became clear that the abrupt slowing of growth in late 2000 would likely turn into a recession in early 2001, the Federal Reserve cut the federal funds rate sharply. Eventually, it lowered this key interest rate eight times, bringing it down from $6\frac{1}{2}$ percent at the start of 2001 to $3\frac{1}{2}$ percent by August. In the months following the terrorist attacks of September 11th, the Federal Reserve cut the rate four more times bringing it to just $1\frac{3}{4}$ percent by the end of the year, the lowest level since the early 1960s.

As the economy began to expand beginning in the fourth quarter of 2001, the Federal Reserve held the federal funds rate constant, but as the pace of growth proved disappointing and payrolls continued to contract, the Federal Reserve reduced the funds rate to $1\frac{1}{4}$ percent in November 2002 and to 1 percent in June 2003. Even as growth accelerated in the second half of 2003, the Federal Reserve indicated that it intended to maintain an accommodative monetary policy for a considerable period of time.

At the longer end of the maturity spectrum, interest rates declined sharply in late 2000 as markets perceived the slowdown in the economy. They remained about unchanged during 2001, and then resumed their decline in 2002 and the first half of 2003. At its low point in June 2003, the yield on the 10-year Treasury note fell to 3.1 percent, three percentage points below its level three years earlier and the lowest level since the late 1950s. The yield rose during the second half of 2003 and finished the year at 4.3 percent. With the exception of the past year and a half, this is the lowest level for the 10-year note since 1965.

The decline in long-term interest rates that continued until mid-2003 reflected slack credit demand, a reduction in inflation and in inflation expectations, and the easing of monetary policy. The final phase of the decline in rates in May through June 2003 also reflected some apparent confusion in financial markets regarding the Federal Reserve's intentions. The rise in long-term rates during the second half of 2003 reflected a better understanding by market participants of Federal Reserve policy, along with the pickup in economic activity, and the expectation of further strengthening of the expansion in 2004.

The trend in yields on long-term private sector instruments was similar to that of Treasury notes, declining to very low levels by mid-2003 and then rising to still relatively low levels by year's end. The yield on corporate AAA bonds closed the year at 5.6 percent, the lowest level since 1967. The rate on 30-year fixed rate mortgages finished the year at 5.8 percent, the lowest level since the early 1960s.

Recent Developments

The economic expansion that began in late 2001 was restrained by a number of special factors. The stock market decline, which lasted from early 2000 until early 2003, was much longer—and much steeper—than in a typical business cycle. The market decline was prolonged by the corporate accounting scandals in 2002 that shook investor confidence. The erosion of consumer confidence was another negative factor that persisted until early 2003, well beyond the normal cyclical correction. Confidence was sapped not only by economic conditions in 2001–2002, but also by the terrorist attacks on September 11, 2001, and subsequent developments in the War on Terror which periodically heightened anxiety. Another factor holding back growth was the business capital stock overhang that had emerged in late 2000 and needed to be worked off. The overhang held down investment spending until mid-2003. Finally, slow growth, or even recession, in other leading industrial nations curtailed U.S. exports.

These obstacles to growth had been overcome or greatly reduced by mid-2003. The stock market was on the rise again as the uncertainties surrounding the 2002 accounting scandals subsided and new legislation passed in 2002 led to wide-ranging reforms of corporate governance. Consumers and investors became more optimistic as the Administration and the American people together successfully met the domestic and international threats to the Nation's security at home and overseas. Businesses had largely eliminated the excess capital stock by mid-2003, and investment began increasing again. Growth abroad also picked up modestly. The attenuation of these special factors permitted the highly stimulative fiscal and monetary policies put in place in 2001–2003 to operate to full effect, restoring the economy to a healthy growth rate.

The economy surged in the third quarter of 2003 as real GDP growth soared to an 8.2 percent annual rate, the fastest quarterly advance since 1983. Growth in the fourth quarter undoubtedly moderated from this stellar pace, but it appears to have remained robust. (The official estimate of fourth quarter growth was not available until after the Budget had gone to press.)

A telling indication that the expansion has become healthier and more self-sustaining is the more balanced mix of the growth of GDP components. Unlike the initial phase of the expansion, which was dominated by consumer and Government spending, growth is now being propelled by business and consumer spending as Government spending growth slows.

Components of Aggregate Demand: Business investment in equipment and software, adjusted for inflation, increased at an 18 percent annual rate in the third quarter, the fastest growth in 5 1/2 years. Rising shipments of nondefense capital goods in October and November suggest that equipment investment made a substantial contribution to GDP growth in the fourth quarter as well. Business investment in structures has leveled off instead of declining as it had earlier. Given the usual lags, an upturn in spending on structures is increasingly likely this year.

The stalwart of the expansion has been consumer spending, and it continued to expand rapidly at nearly a 7 percent annual rate in the third quarter. Consumption probably remained strong in the fourth quarter, as well. Individuals' discretionary spending, such as for new cars, has been especially robust. Residential investment has been the other mainstay of the expansion so far, spurred by relatively low mortgage rates. Residential investment spending rose at over a 20 percent rate in the third quarter, the fastest pace in a decade. Housing starts in November reached the highest level in almost twenty years, which suggests another double-digit rise in residential investment in the fourth quarter.

Other Indications of Stronger Growth:

- The Nation's payrolls have begun increasing again, and unemployment is on the decline. The unemployment rate fell from 6.3 percent in June to 5.7 percent in December. From July to December, employers added 278,000 workers to their payrolls, reversing the trend of shrinking payrolls of the prior months. However, the gain in December of only 1,000 jobs suggests that job creation at the end of the year was still well shy of the usual expansion pace. Further significant payroll gains are likely in 2004, although recent experience suggests that job growth may remain uneven through the early part of the year.

- Output in the hard-hit manufacturing sector turned around in 2003. Manufacturing production during September through December rose at the fastest pace in nearly four years. The Purchasing Managers' Index, a forward looking indicator of manufacturing activity, reached 66 in December, the highest level in 20 years. A reading above 50 indicates an expanding manufacturing sector.
- Consumer and investor confidence has risen sharply. From their low points in March 2003, the University of Michigan Index of Consumer Sentiment increased nearly 20 percent through December and the Conference Board measure advanced almost 50 percent. A survey of investor confidence conducted by UBS/Gallup rose from a low reading of 5 in March to 104 in December.
- Corporate profit margins and overall profits expanded briskly in 2003, which should help foster further increases in business hiring and capital spending in 2004. In the third quarter, the share of profits in GDP reached 10 percent, the highest level since late 1997. Strong productivity growth, well in excess of the growth of labor compensation, has contributed to the growth of profits by lowering unit labor costs and raising profit margins.
- Stock markets have soared since March 2003. The S&P 500 and the Dow Jones Industrial average each gained about 30 percent during the last nine months of 2003; the NASDAQ, with its predominance of high-tech companies, rose 50 percent. The increase in equity values added almost $3 billion to household wealth from the end of March to the end of December and reduced the cost of equity capital to businesses.
- At the same time that economic activity has been picking up, inflation has been drifting lower. The core Consumer Price Index, which excludes the volatile food and energy components, increased a mere 1.1 percent in the 12 months ending in December 2003. That is the lowest rate in 40 years and well below the 2.7 percent increase at the recession's trough in November 2001. The rise in the overall CPI was 1.9 percent during the most recent 12 months. This was higher than the core rate mainly because of a jump in energy prices. The GDP price index increased 1.7 percent in the year ending in the third quarter of 2003. The absence of any significant inflationary pressures suggests that the Federal Reserve should be able to maintain an accommodative monetary policy for some time yet.

Productivity and the Longer Run Outlook: Since the fourth quarter of 2000, productivity in the nonfarm business sector has risen at a 4.4 percent annual rate. That is much faster than the 1.4 percent average from 1974 to 1995 and faster even than the accelerated 2.5 percent pace during the latter half of the 1990s. While some of the recent step up is likely attributable to intense cost cutting during the recession and the subsequent slow recovery, and therefore transitory, a considerable part of the productivity improvement is likely to prove to be permanent. Strong productivity growth is the best foundation for continued economic growth.

In summary, the accommodative stances of fiscal and monetary policy have combined to ignite a more vigorous expansion. Growth is likely to be above average this year, accompanied by further declines in unemployment and stronger employment gains. Beyond this year, solid productivity growth, low inflation, and an improved tax framework offer the prospect of a new, extended period of robust economic growth.

Economic Projections

The Administration's economic projections are summarized in Table 11–1. These assumptions are close to those of the Congressional Budget Office and the average of private sector forecasters, as described in more detail below. The assumptions were based on information available as of late November. In December, the Bureau of Economic Analysis released a comprehensive revision of the National Income and Product Accounts. The Addendum to Table 11–1 presents the assumptions on a basis comparable to the revised national accounts.

As the foregoing discussion suggests, the Administration is projecting the economy to improve steadily. The major contributors to economic growth this year are likely to be business investment and consumer spending, spurred by stronger income growth, the tax relief legislation of the past three years, the rise in stock market, and increased housing wealth. Spending on equipment and software could surge later this year as firms take advantage of the expensing provision scheduled to expire at year's end. To the extent that the timing of investment is shifted forward from 2005 to 2004, capital spending in early 2005 may be temporarily weakened. Businesses are also likely to add to their inventories in 2004, which were lean at the end of 2003.

The foreign sector may once again make at least a modest positive contribution to growth because of an expected pick up of economic activity abroad and the recent decline in the value of the dollar, both of which should help U.S. exports. From February 2002 to the end of 2003, the dollar declined 23 percent against the currencies of the major U.S. trading partners.

Residential investment may not maintain the exceptionally high levels reached in late 2003 and so may make little, if any, contribution to growth. The contribution to real GDP growth from Government spending is also likely to be at most modest. At the Federal level, growth in spending on security requirements will be partly offset by more moderate spending growth in areas of lower priority. At the State and local level, growth of outlays will continue to be restrained as these governments strive to achieve balanced budgets.

Real GDP and Unemployment: The economy is projected to grow 4.4 percent in 2004 measured on a calendar year-over-year basis, compared with 3.1 percent in 2003. During the next few years, real growth is

Table 11–1. ECONOMIC ASSUMPTIONS [1]

(Calendar years; dollar amounts in billions)

	Actual 2002	Projections						
		2003	2004	2005	2006	2007	2008	2009
Gross Domestic Product (GDP):								
Levels, dollar amounts in billions:								
Current dollars	10,446	10,939	11,566	12,139	12,746	13,396	14,096	14,831
Real, chained (1996) dollars	9,440	9,730	10,163	10,528	10,886	11,248	11,607	11,969
Chained price index (1996=100), annual average	110.7	112.4	113.8	115.3	117.1	119.1	121.4	123.9
Percent change, fourth quarter over fourth quarter:								
Current dollars	4.3	5.8	5.2	4.9	5.0	5.2	5.2	5.2
Real, chained (1996) dollars	2.9	4.2	4.0	3.4	3.3	3.3	3.1	3.1
Chained price index (1996=100)	1.3	1.5	1.2	1.4	1.6	1.8	2.0	2.0
Percent change, year over year:								
Current dollars	3.6	4.7	5.7	4.9	5.0	5.1	5.2	5.2
Real, chained (1996) dollars	2.4	3.1	4.4	3.6	3.4	3.3	3.2	3.1
Chained price index (1996=100)	1.1	1.6	1.2	1.3	1.5	1.7	2.0	2.0
Incomes, billions of current dollars:								
Corporate profits before tax	665	756	891	1,181	1,134	1,134	1,175	1,222
Wages and salaries	4,996	5,101	5,356	5,686	6,008	6,347	6,687	7,030
Other taxable income [2]	2,411	2,487	2,609	2,681	2,727	2,791	2,888	3,016
Consumer Price Index: [3]								
Level (1982–84=100), annual average	179.9	184.0	186.6	189.4	192.8	196.8	201.5	206.6
Percent change, fourth quarter over fourth quarter	2.2	2.0	1.4	1.6	1.9	2.2	2.5	2.5
Percent change, year over year	1.6	2.3	1.4	1.5	1.8	2.1	2.4	2.5
Unemployment rate, civilian, percent:								
Fourth quarter level	5.9	5.9	5.5	5.3	5.2	5.1	5.1	5.1
Annual average	5.8	6.0	5.6	5.4	5.2	5.1	5.1	5.1
Federal pay raises, January, percent:								
Military [4]	6.9	4.7	4.15	3.5	NA	NA	NA	NA
Civilian [5]	4.6	4.1	4.1	1.5	NA	NA	NA	NA
Interest rates, percent:								
91-day Treasury bills [6]	1.6	1.0	1.3	2.4	3.3	4.0	4.3	4.4
10-year Treasury notes	4.6	4.0	4.6	5.0	5.4	5.6	5.8	5.8
ADDENDUM: [7]								
Gross Domestic Product (GDP), revised:								
Levels, dollar amounts in billions:								
Current dollars	10,481	10,984	11,612	12,187	12,796	13,449	14,151	14,890
Real, chained (2000) dollars	10,083	10,397	10,858	11,248	11,630	12,017	12,401	12,788
Chained price index (2000=100), annual average	103.9	105.7	107.0	108.4	110.0	111.9	114.1	116.4
Percent change, fourth quarter over fourth quarter:								
Current dollars	4.2	5.9	5.2	4.9	5.0	5.2	5.2	5.2
Real, chained (2000) dollars	2.8	4.3	4.0	3.4	3.3	3.3	3.1	3.1
Chained price index (2000=100)	1.4	1.5	1.2	1.4	1.6	1.8	2.0	2.0
Percent change, year over year:								
Current dollars	3.8	4.8	5.7	4.9	5.0	5.1	5.2	5.2
Real, chained (2000) dollars	2.2	3.1	4.4	3.6	3.4	3.3	3.2	3.1
Chained price index (2000=100)	1.5	1.6	1.2	1.3	1.5	1.7	2.0	2.0
Incomes, billions of current dollars, revised:								
Corporate profits before tax	745	845	992	1,313	1,261	1,262	1,307	1,359
Wages and salaries	4,975	5,092	5,352	5,682	6,004	6,342	6,682	7,025
Other taxable income [2]	2,349	2,401	2,515	2,587	2,634	2,701	2,796	2,923

NA = Not Available.
[1] Based on information available as of late November 2003.
[2] Dividends, rent, interest and proprietors' income components of personal income.
[3] Seasonally adjusted CPI for all urban consumers.
[4] Percentages apply to basic pay only; 2002, 2003, and 2004 figures are averages of various rank- and longevity- specific adjustments; percentages to be proposed for years after 2005 have not yet been determined.
[5] Overall average increase, including locality pay adjustments. Percentages to be proposed for years after 2005 have not yet been determined.
[6] Average rate, secondary market (bank discount basis).
[7] Assumptions adjusted to reflect comprehensive revisions to GDP and incomes released by the Bureau of Economic Analysis in December 2003.

expected to exceed the long-run potential growth rate. As a result, the unemployment rate is projected to decline gradually from its 5.7 percent level in December 2003 to 5.1 percent in 2007. This rate is in the center of the range that is thought to be consistent with stable inflation.

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 about 1.0 percent per year on average, a combination of a 1.1 percent increase in the working-age population and a slight decline in the labor force participation rate. Trend productivity growth in the nonfarm business sector is assumed to average 2.3 percent per year, about the average during the past four decades, an extended period that encompasses rapid and slow productivity growth trends. The productivity assumption is a cautious one, especially in light of the 4.4 percent average growth rate in nonfarm productivity since the fourth quarter of 2000.

Inflation: Inflation is expected to edge up slightly from its low levels in 2003. The GDP chain-weighted price index is projected to increase 1.2 percent this year, rising to 2.0 percent in 2008 and 2009. The CPI is expected to increase 1.4 percent this calendar year, and then move up to 2.5 percent in 2009. The difference between inflation measured by the CPI and the GDP price index in the outyears is consistent with historical experience.

The forecast for low inflation in the coming years reflects the current very low inflation, the absence of inflationary expectations, the additional downward pressure on wages and prices that will persist until stronger growth eventually eliminates excess slack in the economy, and the demonstrated ability of the Federal Reserve in recent years to assure a reasonable degree of price stability. Not since the mid-1960s has there been a 10-year period with average inflation as low as is projected for 2000–2009.

Interest Rates: As is usual during an expansion, interest rates are projected to rise. The 3-month Treasury bill rate ended 2003 at 0.9 percent. It is expected to increase to 4.4 percent by 2009. The yield on the 10-year Treasury note ended last year at 4.3 percent. It is projected to increase to 5.8 percent by 2009.

The larger increase at the short end of the maturity spectrum than at the longer end is the usual cyclical experience and reflects an assumed less accommodative monetary policy as the expansion matures. Rates start from such a low level currently that, despite their projected increase, interest rates on average during 2003 through 2009 are likely to be lower than during any other seven-year period since the mid-1960s. 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 projected to rise steadily through 2007 from a relatively low level in the third quarter of 2003. The share of the nontaxable component of labor compensation in GDP is expected to rise significantly over the forecast horizon. This component, called supplements to wages and salaries in the national income accounts, is composed of employer contributions for social insurance and employer-paid benefits, such as health insurance and pension contributions. Both health insurance and pension contributions are projected to rise more rapidly than taxable wages and salaries.

The cost of health insurance purchased by employers rose at a double-digit pace in both 2002 and 2003. Employers have shifted some of the rise in insurance costs on to employees, and are likely to continue to do so. Nonetheless, the upward pressure on the employers' share of insurance premiums is expected to be substantial. Also, employers' contributions to defined-benefit pension plans are expected to increase significantly over the next few years. Firms must reduce the large underfunding of plans created by the fall in the stock market between 2000 and 2003, lower assumed rates of return on fund assets, and the ongoing obligations for their workforce.

The share of corporate profits before tax will be affected by the strength of the economy and the end of the temporary expensing provisions for qualified capital by the end of 2004. Healthy economic growth will help sustain the corporate profits share. On the other hand, the expensing provision will lower profits before tax this year compared to what they otherwise would have been by allowing firms to write off more of their investment sooner. After 2004, however, corporate profits before tax will increase both because new investments will not qualify for the temporary expensing provision and because the remaining depreciation on expensed investments will be lower. Taking these various factors into account, the corporate profits share is expected to increase slightly this year, jump sharply in 2005 when the receipts payback for expensing will begin, and then decline gradually thereafter.

Among the other components of the tax base, the share of personal interest income in GDP is projected to decline significantly reflecting the relatively low nominal interest rates during the next six years. The remaining shares of the tax base (proprietors' income, rental income, and dividend income) are projected to remain relatively stable at around their 2003 levels.

Summary: The economic news since the assumptions were finalized has generally been favorable, although job growth in December fell well below expectations. On balance, at the start of 2004, the upside risks to the near-term forecast may exceed the downside risks. Moreover, if the strong productivity performance of recent years continues at even a somewhat more moderate pace, then long-run growth may also be stronger than assumed here. On the other hand, growth may also be weaker than forecast if, for example, the economy is subjected to additional and significant adverse shocks.

Comparison with CBO and Private-Sector Forecasts

In addition to the Administration, the Congressional Budget Office (CBO) and many private-sector forecasters also make economic 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 11–2 compares the 2005 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 their appraisals of the most likely policy outcomes, which vary among the forecasters. The Administration forecast assumes that all Budget proposals will be enacted. The CBO baseline projection assumes that current law as of the time the estimates are made will remain forever unchanged. Despite their differing policy assumptions, the three sets of economic projections, shown in Table 11–2, are very close. The similarity of the Budget economic projection to both the CBO baseline projection and the Consensus forecast underscores the cautious nature of the Administration forecast.

For real GDP, the Administration, CBO, and the Blue Chip consensus anticipate strong growth this year. The Administration projects 4.4 percent growth, slightly below the CBO and private sector consensus. For calendar year 2005, the Administration, at 3.6 percent, is again slightly below the Consensus (at 3.7 percent), and significantly less than CBO's 4.2 percent. Thereafter, the Administration's forecast remains close to the consensus growth rate. Over the six-year span as a whole, the Administration and the private sector consensus both project an average 3.5 percent annual growth rate, CBO 3.4 percent.

All three forecasts anticipate continued low inflation of between 1 and 2 percent as measured by the GDP chain-weighted price index, and between $1\frac{1}{2}$ and $2\frac{1}{2}$ percent as measured by the CPI. The unemployment rate projections are also similar. All three forecasts en-

Table 11–2. COMPARISON OF ECONOMIC ASSUMPTIONS

(Calendar years)

	Projections						Average,
	2004	2005	2006	2007	2008	2009	2004-09
GDP (billions of current dollars):							
CBO January	11,629	12,243	12,814	13,389	14,023	14,686	
Blue Chip Consensus January [2]	11,660	12,291	12,929	13,588	14,292	15,045	
2005 Budget	11,612	12,187	12,796	13,449	14,151	14,890	
Real GDP (chain-weighted): [1]							
CBO January	4.8	4.2	3.1	2.7	2.8	2.8	3.4
Blue Chip Consensus January [2]	4.6	3.7	3.3	3.1	3.2	3.2	3.5
2005 Budget	4.4	3.6	3.4	3.3	3.2	3.1	3.5
Chain-weighted GDP Price Index: [1]							
CBO January	1.1	1.1	1.5	1.8	1.9	1.9	1.5
Blue Chip Consensus January [2]	1.4	1.6	1.8	1.9	2.0	2.0	1.8
2005 Budget	1.2	1.3	1.5	1.7	2.0	2.0	1.6
Consumer Price Index (all-urban): [1]							
CBO January	1.6	1.7	2.0	2.2	2.2	2.2	2.0
Blue Chip Consensus January [2]	1.7	2.1	2.3	2.4	2.4	2.4	2.2
2005 Budget	1.4	1.5	1.8	2.1	2.4	2.5	2.0
Unemployment rate: [3]							
CBO January	5.8	5.3	5.0	5.1	5.2	5.2	5.3
Blue Chip Consensus January [2]	5.8	5.4	5.4	5.3	5.3	5.2	5.4
2005 Budget	5.6	5.4	5.2	5.1	5.1	5.1	5.3
Interest rates: [3]							
91-day Treasury bills:							
CBO January	1.3	3.0	4.0	4.6	4.6	4.6	3.7
Blue Chip Consensus January [2]	1.3	2.6	3.7	3.9	4.1	4.1	3.3
2005 Budget	1.3	2.4	3.3	4.0	4.3	4.4	3.3
10-year Treasury notes: [3]							
CBO January	4.6	5.4	5.5	5.5	5.5	5.5	5.3
Blue Chip Consensus January [2]	4.7	5.4	5.5	5.6	5.6	5.6	5.4
2005 Budget	4.6	5.0	5.4	5.6	5.8	5.8	5.4

Sources: Congressional Budget Office; Aspen Publishers, Inc., Blue Chip Economic Indicators
All forecasts adjusted to reflect December 2003 comprehensive revisions to the National Income and Product Accounts.
[1] Year over year percent change.
[2] January 2004 Blue Chip Consensus forecast for 2004 and 2005; Blue Chip October 2003 long run extension for 2006 - 2009.
[3] Annual averages, percent.

visage slightly rising interest rates during the next few years. For short-term rates, the consensus forecast is slightly below the Administration's in the outyears, while CBO is higher. The three long-term interest rate projections are very close.

Changes in Economic Assumptions

As shown in Table 11–3, the economic assumptions underlying this Budget have been revised significantly from those of the 2004 Budget.

Real GDP growth accelerated beyond expectation in the latter part of 2003 and for the year as a whole was a bit stronger, overall, than projected in last year's Budget. A year ago, the economic recovery appeared to be losing momentum; now, it is gaining speed. Consequently, the level of real GDP projected for this year is now a full percentage point higher than anticipated in last year's Budget, and the year-over-year growth rate is 0.8 percentage points higher. From 2005 onwards, moreover, real GDP growth in this budget is projected to be slightly above last year's projected rates.

The level of nominal GDP is projected to be about one percentage point higher in each year, 2004–2009, than in last year's budget. That is primarily because actual real GDP was significantly higher in 2003, and is now expected to grow slightly faster during 2004–2008, than in last year's budget. The unemployment rate is expected to be somewhat higher than in last year's assumptions but ultimately to decline to 5.1 percent, as before. 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. The short-term rate is expected to gradually approach last year's outyear assumptions, but long-term rates are now projected to be slightly higher. Adjusted for inflation, the real long-term rate is the same as 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 2004 Budget to the 2005 Budget are shown in Table 11–4. The second block shows that proposed and enacted legislation increases the deficit in 2004 and 2005 but has little effect thereafter.

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 various taxable incomes.

Technical factors (block 4) are all changes in budget estimates that are not due to changes in economic assumptions or legislation. Examples of technical factors are revised demographic data from the 2000 Census and changes in estimating methodologies, including changes in the relationship between economic variables, income reported on tax returns, and actual tax collections.

Table 11–3. COMPARISON OF ECONOMIC ASSUMPTIONS IN THE 2004 AND 2005 BUDGETS

(Calendar years; dollar amounts in billions)

	2003	2004	2005	2006	2007	2008	2009
Nominal GDP: [1]							
2004 Budget assumptions	10,884	11,447	12,031	12,637	13,263	13,919	14,608
2005 Budget assumptions	10,939	11,566	12,139	12,746	13,396	14,096	14,831
Real GDP (1996 dollars): [1]							
2004 Budget assumptions	9,710	10,061	10,414	10,760	11,102	11,446	11,801
2005 Budget assumptions	9,730	10,163	10,528	10,886	11,248	11,607	11,969
Real GDP (percent change): [2]							
2004 Budget assumptions	2.9	3.6	3.5	3.3	3.2	3.1	3.1
2005 Budget assumptions	3.1	4.4	3.6	3.4	3.3	3.2	3.1
GDP price index (percent change): [2]							
2004 Budget assumptions	1.3	1.5	1.5	1.7	1.7	1.8	1.8
2005 Budget assumptions	1.6	1.2	1.3	1.5	1.7	2.0	2.0
Consumer Price Index (percent change): [2]							
2004 Budget assumptions	2.2	2.1	2.1	2.2	2.2	2.3	2.3
2005 Budget assumptions	2.3	1.4	1.5	1.8	2.1	2.4	2.5
Civilian unemployment rate (percent): [3]							
2004 Budget assumptions	5.7	5.5	5.2	5.1	5.1	5.1	5.1
2005 Budget assumptions	6.0	5.6	5.4	5.2	5.1	5.1	5.1
91-day Treasury bill rate (percent): [3]							
2004 Budget assumptions	2.0	3.6	4.3	4.4	4.4	4.5	4.5
2005 Budget assumptions	1.0	1.3	2.4	3.3	4.0	4.3	4.4
10-year Treasury note rate (percent): [3]							
2004 Budget assumptions	4.2	5.0	5.3	5.4	5.5	5.6	5.6
2005 Budget assumptions	4.0	4.6	5.0	5.4	5.6	5.8	5.8

[1] Not adjusted for December 2003 comprehensive revisions to the National Income and Product Accounts.
[2] Year over year.
[3] Calendar year average.

Table 11–4. SOURCES OF CHANGE IN BUDGET TOTALS

(In billions of dollars)

	2004	2005	2006	2007	2008	2009
(1) 2004 Budget						
Receipts	1,922	2,135	2,263	2,398	2,521	2,649
Outlays	2,229	2,343	2,464	2,576	2,711	2,843
Unified budget deficit (-)	–307	–208	–201	–178	–190	–194
(2) Changes due to policy:						
Receipts	–17	15	38	33	23	19
Outlays	92	62	34	39	27	14
Deficit increase (-), policy	–109	–48	4	–5	–5	4
(3) Changes due to economic assumptions:						
Receipts	–39	–37	–41	–27	–10	4
Outlays	–22	–37	–33	–24	–14	–6
Deficit increase (-), economic	–18	1	–8	–4	4	10
(4) Changes due to technical factors:						
Receipts	–68	–77	–55	–53	–48	–56
Outlays	19	31	8	–1	1	2
Deficit increase (-), technical	–87	–108	–63	–54	–48	–57
(5) Total changes from 2004 Budget:						
Receipts	–124	–99	–57	–47	–36	–33
Outlays	89	56	10	16	14	10
Total deficit increase (-)	–213	–155	–67	–63	–49	–43
(6) 2005 Budget						
Receipts	1,798	2,036	2,206	2,351	2,485	2,616
Outlays	2,319	2,400	2,473	2,592	2,724	2,853
Unified budget deficit (-)	–521	–364	–268	–241	–239	–237

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

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 portion that would remain if the unemployment rate was at its long-run value 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 including the cyclical component. The structural balance shows the surplus or deficit that will persist even when the economy is operating at the sustainable level of unemployment.

The estimates of the structural balance are based on the relationship between changes in the unemployment rate 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 was cyclical in nature. It is not possible, however, to estimate this cyclical component accurately. As a result, both the unadjusted and structural balances are affected by cyclical stock market movements.

From 1998 to 2001, the unemployment rate appears to have been lower than could be sustained in the long run. Therefore, as shown in Table 11–5, in 1998 the structural surplus of $22 billion was less than the actual surplus of $69 billion. Likewise, in 1999–2001, the structural surplus continued to be 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 $104 billion. Similarly in 2003, the actual deficit of $375 billion contained a cyclical component of about $74 billion. The structural deficit for that year was $302 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 negative numbers 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 possible changes in economic assumptions. Many of the budgetary effects of such changes 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. These rules of thumb should be understood as suggesting orders of magnitude; they ignore a long list of secondary effects that are not captured in the estimates.

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 11–6.

For real growth and employment:

- As shown in the first block, if in 2004 for one year only, real GDP growth is lower by one percentage point and the unemployment rate permanently rises by one-half percentage point relative to the budget assumptions, the fiscal year 2004 deficit is estimated to increase by $12.2 billion; receipts in 2004 would be lower by $9.3 billion, and outlays would be higher by $2.9 billion, primarily for unemployment-sensitive programs. In fiscal year 2005, the estimated receipts shortfall would grow further to $20.8 billion, and outlays would increase by $7.4 billion relative to the base, even though the growth rate in calendar 2005 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 2004–2009, the cumulative increase in the budget deficit is estimated to be $187 billion.
- The budgetary effects are much larger if the real growth rate is permanently reduced by one percentage point and the unemployment rate is unchanged, as shown in the second block. This scenario might occur if trend productivity were permanently lowered. In this example, during 2004–2009, the cumulative increase in the budget deficit is estimated to be $511 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 2004 only. In subsequent years, the price level and nominal GDP would be one percent higher than in the base case, but interest rates and future inflation rates are assumed to return to their base levels. In 2005, outlays would be above the base by $22.2 billion, due in part to lagged cost-of-living adjustments; receipts would rise $22.3 billion above the base, however, resulting in a $0.1 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 2004–2009, cumulative

Table 11–5. ADJUSTED STRUCTURAL BALANCE

(In billions of dollars)

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Unadjusted surplus or deficit (–)	69.2	125.6	236.4	127.4	–157.8	–375.3	–520.7	–363.6	–267.6	–241.3	–239.0	–237.1
Cyclical component	47.5	72.8	110.2	49.0	–53.4	–73.6	–39.1	–15.3	–5.1	–1.4	–.1	....
Structural surplus or deficit (–)	21.7	52.7	126.3	78.4	–104.4	–301.7	–481.6	–348.3	–262.6	–239.9	–239.0	–237.1
Deposit insurance outlays	–4.4	–5.3	–3.1	–1.4	–1.0	–1.4	–1.5	–1.5	–1.0	–1.2	–1.9	–2.0
Adjusted structural surplus or deficit (–)	17.4	47.4	123.2	77.0	–105.5	–303.1	–483.1	–349.8	–263.6	–241.1	–240.8	–239.1

Note: The NAIRU is assumed to be 5.2% through calendar year 1998 and 5.1% thereafter.

budget deficits would be $23 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 $365 billion to outlays over 2004–2009 and $442 billion to receipts, for a net decrease in the 2004–2009 deficits of $78 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 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 $257 billion during 2004–2009. 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 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 11–6. SENSITIVITY OF THE BUDGET TO ECONOMIC ASSUMPTIONS

(In billions of dollars)

Budget effect	2004	2005	2006	2007	2008	2009	Total of Effects, 2004-2009
Real Growth and Employment							
Budgetary effects of 1 percent lower real GDP growth:							
(1) For calendar year 2004 only: [1]							
Receipts	–9.3	–20.8	–23.8	–24.9	–26.1	–27.5	–132.6
Outlays	2.9	7.4	7.8	9.7	12.0	14.3	54.1
Increase in deficit (–)	–12.2	–28.3	–31.6	–34.6	–38.2	–41.8	–186.7
(2) Sustained during 2004–2009, with no change in unemployment:							
Receipts	–9.5	–32.5	–61.1	–91.6	–124.7	–160.7	–480.1
Outlays	–0.1	0.1	1.4	4.5	9.4	15.7	31.0
Increase in deficit (–)	–9.3	–32.6	–62.5	–96.0	–134.1	–176.5	–511.1
Inflation and Interest Rates							
Budgetary effects of 1 percentage point higher rate of:							
(3) Inflation and interest rates during calendar year 2004 only:							
Receipts	10.6	22.3	22.8	21.6	22.7	23.9	123.9
Outlays	11.3	22.2	19.1	16.9	16.2	15.3	101.0
Decrease in deficit (+)	–0.6	0.1	3.7	4.7	6.5	8.6	22.9
(4) Inflation and interest rates, sustained during 2004–2009:							
Receipts	10.6	34.1	59.4	84.4	111.8	142.2	442.5
Outlays	11.5	34.3	53.9	71.3	88.2	105.7	364.8
Decrease in deficit (+)	–0.9	–0.1	5.6	13.1	23.6	36.5	77.7
(5) Interest rates only, sustained during 2004–2009:							
Receipts	1.8	4.4	5.7	6.4	7.0	7.7	33.0
Outlays	9.4	25.1	35.3	42.9	49.8	56.9	219.4
Increase in deficit (–)	–7.6	–20.7	–29.7	–36.5	–42.8	–49.2	–186.5
(6) Inflation only, sustained during 2004–2009:							
Receipts	8.8	29.6	53.6	77.7	104.4	134.0	408.2
Outlays	2.1	9.4	19.1	29.4	40.1	51.4	151.4
Decrease in deficit (+)	6.7	20.2	34.5	48.3	64.3	82.7	256.7
Interest Cost of Higher Federal Borrowing							
(7) Outlay effect of $100 billion increase in the 2004 unified deficit	0.6	2.2	3.4	4.3	5.1	5.5	21.2

* $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.