
ECONOMIC ASSUMPTIONS AND ANALYSES

12. ECONOMIC ASSUMPTIONS

By the end of 2005 the U.S. economy had entered its fifth year of expansion, exhibiting a sustained solid pace of economic growth, with low rates of unemployment and underlying inflation, rising payroll jobs, high homeownership rates, strong business investment, and a record level of real household wealth. This robust performance of the economy stands in marked contrast to the economic slowdown and recession of 2000–2001 followed by the slow recovery in 2002–2003.¹ The sluggish performance during those years resulted from a number of unanticipated shocks, including sharp declines in stock market valuations beginning in 2000; falling manufacturing production and business investment; and corporate accounting scandals. The terrorist attacks of September 11, 2001 were a further shock aimed at the heart of the U.S. economy and government. The renewed solid economic performance since mid-2003 is a testament to the resilience of the U.S. economy and the adoption of successful pro-growth policies, including tax relief, Federal Reserve monetary policy actions, and ongoing efforts to promote liberalized international trade and investment in innovative technologies.

The performance of the economy over the past year provided further evidence for the robust nature of the expansion in the face of additional shocks. The economy continued its solid performance despite high energy prices and the substantial damage and disruptions from the worst hurricane season on record. Hurricanes Katrina, Rita, and Wilma resulted in significant loss of life, destruction of property and productive assets, disruption of local Gulf Coast populations and living conditions, and sharp increases in energy prices. Even so, during the very quarter of the year when the hurricanes hit, the economy still registered growth in real gross domestic product (GDP) in excess of 4 percent at an annual rate. And by the final quarter of the year, most economic indicators that had shown short-lived adverse effects had returned to their pre-storm-season paths.

As we move into 2006 and look forward to future years, the Administration and other public and private forecasters expect the expansion to continue for the foreseeable future, with sustained non-inflationary real growth, and the economy providing a solid foundation for the Federal budget outlook.

Recent Economic Performance

At the time of the preparation of the 2007 Budget, real GDP in the U.S. economy has been increasing for 16 consecutive quarters, with the latest 10 consecutive quarters showing average growth rates of 4.1 percent

and no quarter during the period growing slower than 3.3 percent. Over the 4 quarters of 2005, the economy was on track to register real GDP growth at about a 3.5 percent pace, following the 3.8 percent growth rate during 2004 and the 4.0 percent rate of 2003. By virtually all signs, the expansion has entered a self-reinforcing phase, with growth widespread across various components and sectors.

Increases in employment and ongoing strong gains in the efficiency of the U.S. workforce—that is, high growth in labor productivity—have combined to generate the sustained solid growth in real output.

- In labor markets, nonfarm payroll employment has increased by 4.6 million jobs since the post-recession low in May 2003, with 2 million of those job gains occurring during 2005—or about a 1.5 percent increase in payroll employment in the past year alone.
- Reflecting the improving labor situation, the unemployment rate declined to 4.9 percent in December 2005, down from a post-recession high of 6.3 percent in June 2003.
- Labor productivity gains—the increase in output per hour of labor—have been remarkably strong in recent years, providing a substantial boost to growth in real GDP. For example, output per hour in the nonfarm business sector was on track to rise by about 2.5 percent during 2005, following an increase of 2.6 percent during 2004 and an especially robust increase of 5.0 percent during 2003.
- The recent productivity gains reinforce the stronger trend productivity performance of the past decade. Since 1995, labor productivity in the nonfarm business sector has increased at about a 2.9 percent annual rate, compared to a 1.4 percent annual rate of gain in the period from 1973 to 1995.

Stronger growth in labor productivity is a fundamental building block for the longer-term performance of the economy and represents the essential basis for increasing standards of living for American workers and families.

At times in the past, after the economy had grown at a relatively strong pace with declining unemployment for an extended period—such as we have seen recently—there was an increase in inflationary pressures. That was the repeated experience in the 1960s and 1970s and early 1980s. Since 2003, however, strong gains in labor productivity have helped to keep the underlying rate of inflation low by historical standards despite the generally robust economic performance. Strong gains in productivity reduce production costs and keep down the pressures on output prices.

¹ Economic performance is discussed in terms of calendar years. Budget figures are in terms of fiscal years.

Although rising productivity growth when supported by responsible monetary policy can keep inflation under control in the long run, other factors can affect the short-run behavior of prices and inflation:

- Primary commodity prices generally have been on a strong upward trend over the past 4 years reflecting increased demand associated with the stronger U.S. and international economies, and some depreciation of the U.S. dollar over this period.
- Energy prices—notably crude oil and natural gas prices—have increased sharply over the past 4 years. For example, the benchmark price for West Texas Intermediate crude oil increased from just under \$20 a barrel in December 2001 to about \$65 a barrel in August 2005. Over the same period, the national average retail gasoline price rose from \$1.09 a gallon to more than \$2.60 a gallon.
- The destruction of oil and natural gas facilities and the shutdown of gasoline refineries along the coast of the Gulf of Mexico from Hurricanes Katrina and Rita contributed to further volatility and increases in energy prices during August and September 2005. Crude oil prices initially rose sharply, with West Texas Intermediate crude oil reaching nearly \$70 a barrel in early September, before falling back to hover around \$60 a barrel over the final 2 months of the year. Gasoline prices initially rose above \$3 a gallon and stayed near that level until beginning a gradual decline in mid-October, falling to about \$2.25 by the end of the year.
- The rise in energy and gasoline prices contributed to a slight increase in the “headline” rate of inflation during 2005: the consumer price index (CPI) rose 3.4 percent during 2005 (December to December), up from a 3.3 percent rate during 2004.
- Even so, abstracting from volatile food and energy items shows that “core” CPI inflation was 2.2 percent during 2005, a very low rate by historical standards. The price index for personal consumption expenditures excluding food and energy items from the National Income and Product Accounts (NIPAs)—which uses a method of calculation that eliminates one source of upward bias that exists in the CPI measures—was on track for an increase of less than 2 percent during 2005.

The key point to recognize is that, despite rising commodity and energy prices that have led to a temporary increase and heightened volatility in the overall rate of inflation, underlying inflation remains subdued and inflation expectations do not appear to be adversely affecting business or household decisions.

Indicators of real economic activity provide additional evidence for the strong, sustained growth performance of the U.S. economy in recent years and during 2005, and illustrate the broad-based nature of the expansion:

- Through the first 3 quarters of 2005, real consumer spending increased at a 3.6 percent annual

rate, following increases at a 3.8 percent rate during both 2003 and 2004. In the fourth quarter, consumption spending slowed down, mainly because of a sharp drop in motor vehicle sales in the fall. Real consumption gains resumed in the last 2 months of the quarter, however, coinciding with a rebound in consumer confidence following temporary declines in sentiment following Hurricanes Katrina and Rita, and consumption spending does not appear to have suffered a permanent shock.

- Manufacturing activity and private investment spending have been strong in recent years, rebounding from the 2000–2001 slowdown and recession. Manufacturing industrial production rose 2.8 percent during 2005, and has increased at more than a 4.5 percent annual rate over the past 2½ years. Real business equipment and software spending rose at a 10 percent annual rate through the first 3 quarters of 2005 and has increased at an 11 percent annual rate over the past 2¼ years.
- Housing market activity continues to show its best sustained performance in more than a quarter century. There were 2.1 million housing starts in 2005, following 1.95 million starts in 2004. Over the past 2 years, the national homeownership rate continued to run near record levels of about 69 percent. According to the National Association of Realtors, the median price of existing homes increased 13 percent over the most recent 12-month period. The housing boom is expected to moderate in 2006 and beyond, but without sharp declines in national housing prices or residential investment.
- Increasing housing wealth and higher stock market valuations have boosted real household wealth to record levels. At the end of the third quarter of 2005, household wealth reached \$51 trillion—or 5 times the level of annual personal income—up 7.6 percent over the prior last quarters after adjusting for inflation. The real value of household real estate assets increased by 11 percent, and the real value of household holdings of corporate equities, mutual funds, and pension funds rose by 6 percent during the last 4 quarters.

In general, economic performance during 2005 and the data and information from the past several years confirm that the U.S. economy is fundamentally strong, supporting the outlook for continued expansion with non-inflationary real growth.

Policy Background

The fiscal and monetary policies of the past 5 years have successfully contributed to the current good economic performance. The general fiscal policy outlook—as presented in the President’s Budget—continues to be consistent with the outlook for sustained expansion in the U.S. economy for the foreseeable future.

The resilience of the U.S. economy in 2005 despite the economic and social disruptions caused by the hurricanes echoed the economic recovery from the variety of shocks that hit the economy over the 2000–2003 period. Looking back, timely tax relief and reductions in interest rates promoted a rebound from the economic slowdown, helping our Nation overcome the adverse effects from these shocks, which included the bursting of the stock market bubble of the late 1990s; the terrorist attacks of September 11, 2001; problems with corporate malfeasance; and the uncertainty associated with an international war on terrorism and military conflicts in Afghanistan and Iraq. Those policies continue to provide a solid foundation for current and future economic performance.

Policy Actions

Fiscal Policy: Beginning in 2001, the Administration proposed, and Congress enacted, significant tax relief designed to overcome the shocks and recession—promoting recovery in the growth of output, income, and jobs—and to provide a strong basis for continued economic expansion in the long term.

- *The Economic Growth and Tax Relief and Reconciliation Act of 2001* lowered marginal income tax rates; reduced the marriage tax penalty; and created a new, lower 10 percent tax bracket, among other changes. In July 2001, near the low point of the 2001 recession, taxpayers began receiving rebate checks reflecting their lower liability with the new 10 percent bracket; lower withholding schedules also went into effect at that time.
- *The Job Creation and Worker Assistance Act of 2002* permitted immediate depreciation of 30 percent of the value of qualified new capital assets put in place during the three years ending September 11, 2004. Accelerated depreciation provided an incentive for firms to invest. For a limited time, more of a qualified investment could be written-off for tax purposes, thereby lowering the cost of capital and providing an incentive for firms to speed up their capital spending. The Act also extended unemployment insurance benefits to workers who had exhausted their normal benefits.
- *The Jobs and Growth Tax Relief Reconciliation Act of 2003* lowered income tax rates, reduced the marriage penalty, raised the child tax credit, and raised the exemption amount for the individual Alternative Minimum Tax. The Act reduced tax rates on dividend income and capital gains, reducing distortions in the tax code from the double taxation of corporate earnings. To stimulate business capital spending further, the Act raised the percentage of an asset's value that could be expensed immediately from 30 to 50 percent and lengthened the window of opportunity for businesses to take advantage of this benefit from September 11, 2004 to the end of the year. The Act also raised the maximum amount that a small

business could expense from \$25,000 per year to \$100,000.

- *The Working Families Tax Relief Act of 2004* extended parts of the President's tax relief plan that were scheduled to expire at the end of 2004 and reinstated several expired or expiring business-related tax incentives. In doing so, the Act protected taxpayers from several scheduled tax increases. The Act also provided tax relief to certain military personnel with families, and simplified the tax code for many families by creating a uniform definition of a qualifying child for tax purposes.

Efforts continue to preserve the favorable tax environment the President and the Congress have created. Maintaining a relatively low tax environment in the United States is a central element of the Administration's economic and budget policies. The Administration's budget proposals, including sustained lower taxes and significant spending restraint, will reduce the Federal budget deficit in coming years as a share of GDP, so that publicly held debt is projected to remain relatively stable, and eventually to decline, relative to the size of the economy.

Monetary Policy and Interest Rates: As we enter 2006, Federal Reserve monetary policy continues to be oriented toward promoting sustained non-inflationary, real growth in the U.S. economy. Looking back, from early 2001 through mid-2003 monetary policy was focused on overcoming negative shocks and restoring stronger real growth. The Federal Reserve lowered the target Federal funds rate—a key interbank overnight interest rate—13 times, from 6½ percent to 1 percent. That low rate was maintained until June 2004 when the Federal Reserve began to increase the funds rate gradually, reflecting the accumulating evidence of improved economic performance and the outlook for sustained future growth. By December 2005, the Federal Reserve had raised the funds rate to 4¼ percent. In its statement accompanying the December increase, the Federal Reserve stated that “some further measured policy firming is likely to be needed to keep the risks to the attainment of both sustainable economic growth and price stability roughly in balance.” The Administration forecast for the 3-month Treasury bill rate, presented below, is consistent with market expectations reflecting the outlook for “further measured policy firming.”

Longer-term interest rates, notably the yield on 10-year Treasury notes, remained low by historical standards during 2005. The 10-year rate traded as low as 3.9 percent and as high as 4.6 percent during the year, but it ended the year at just under 4.4 percent, not much different from where it began the year. With the increases in the Federal funds rate during the year to 4¼ percent, the low 10-year Treasury yield at the end of the year produced a very flat structure of interest rates across short- to long-term maturities. The low levels of longer-term interest rates—including those for corporate securities and for residential mortgages—

have been key factors promoting the strong gains in business and residential investment.

Challenges

Even though the general outlook is for continued healthy expansion for the U.S. economy, a number of challenges remain, including:

- The strong performance of residential construction and the increases in housing prices and wealth of recent years have introduced concerns about the future performance of housing markets and the implications for general economic activity should the housing boom end precipitously. Most analysts anticipate that an orderly transition will occur to a more moderate pace of housing activity with stabilizing prices. Although risks remain, the general expectation is that household consumption spending and overall economic performance will not be significantly affected if the housing adjustment is moderate and gradual.
- The U.S. continues to run mounting international trade and current account deficits, and concerns persist about their sustainability. These international deficits are largely the result of the persistent strength of the U.S. economy relative to our foreign trading partners. Most forecasters expect that the pressures tending to raise international deficits will alleviate somewhat going forward reflecting changes in key determinants, including expected improvements in the growth rates of foreign economies. The general expectation is that the U.S. trade position will gradually improve in coming years, consistent with the outlook for ongoing sustained expansion in the U.S. economy.
- Strong consumption spending in recent years has resulted in a low measured rate of personal saving. The increases in household wealth from higher housing and stock market valuations, and the associated increases in consumption, can account for much of the lower saving rate. An orderly transition in residential housing markets, if coupled with ongoing solid corporate equity valuations and rising real incomes, will not dampen consumption spending.
- The Federal budget outlook presents potential challenges. During 2005, the worst hurricane season on record resulted in additional costs for the Federal Government for rebuilding and disaster relief efforts. Other special costs continue, including for the international War on Terror and ongoing efforts in Afghanistan and Iraq. The short-term increases in the budget deficit require further efforts for fiscal discipline. Over the next five years, the Administration's budget proposals call for reduction in the Federal budget deficit as a share of GDP, and the publicly held debt is projected to remain relatively stable, and then to decline, relative to the size of the economy. Those patterns for the deficit and the debt are consistent

with a sustainable fiscal policy that will coincide with continued expansion. Beyond the five-year budget horizon, the effects of demographic changes and rising health care costs on entitlement programs make the long-term outlook for the deficit and the debt more problematic, as discussed in Chapter 13 of this volume, "Stewardship."

Although these factors represent potential risks and challenges, the current outlook continues to be one of a gradual and orderly transition that will support the ongoing expansion in the U.S. economy.

Economic Projections

The Administration's economic projections, based on information available as of mid-November 2005, are summarized in Table 12–1. These assumptions are close to those of the Congressional Budget Office and the consensus of private-sector forecasters, as described in more detail below and shown in Table 12–2. In brief, the assumptions call for a continuation of the recent trends of strong, sustained growth; solid jobs growth; low inflation; and, even allowing for a projected rise in the next few years, relatively low interest rates.

Real GDP, Potential GDP, and Unemployment Rate: Real GDP, which is estimated to have increased 3.6 percent in 2005 on a year-over-year basis, is projected to increase 3.4 percent this year. During the next few years, both actual and potential growth are likely to continue to moderate further to about 3.1 percent. As a result, the unemployment rate, fluctuating narrowly around 5.0 percent for the last nine months of 2005, is projected to remain at that level. That rate is the center of the range that is thought to be consistent with stable inflation. The main sources of growth in demand in coming years are likely to be business capital spending, net exports, and to a lesser extent, consumer spending. The contributions to overall growth from residential investment and the government sector are expected to be small at best.

For the private business sector of the economy, potential growth is approximately equal to the sum of the trend rates of growth of the labor force and of productivity. Potential growth of total GDP (including government sectors) is projected to be about 3¼ percent over the next two years, trending down to 3.1 percent after 2008, primarily because of an assumed slowing in labor force growth. The labor force is projected to grow about 1.3 percent per year through 2007 on average, slowing to about 0.9 percent yearly on average during 2008–2011 as increasing numbers of baby boomers enter retirement.

Trend productivity growth in the nonfarm business sector² is assumed to be 2.6 percent per year. The 2.6 percent trend pace is noticeably below the average since the business cycle peak in the first quarter of 2001 (3.6 percent per year). It is, however, close to

²The nonfarm business sector accounts for about three-fourths of the value of GDP, with households, institutions and government accounting for the remainder. The nonfarm business sector serves as the standard metric for productivity because of its reliable measurement.

Table 12-1. ECONOMIC ASSUMPTIONS ¹

(Calendar years; dollar amounts in billions)

	Actual 2004	Projections						
		2005	2006	2007	2008	2009	2010	2011
Gross Domestic Product (GDP):								
Levels, dollar amounts in billions:								
Current dollars	11,734	12,482	13,210	13,949	14,713	15,493	16,310	17,177
Real, chained (2000) dollars	10,756	11,139	11,514	11,896	12,284	12,669	13,062	13,467
Chained price index (2000=100), annual average	109.1	112.1	114.7	117.3	119.8	122.3	124.9	127.5
Percent change, fourth quarter over fourth quarter:								
Current dollars	6.8	6.4	5.6	5.6	5.4	5.3	5.3	5.3
Real, chained (2000) dollars	3.8	3.5	3.4	3.3	3.2	3.1	3.1	3.1
Chained price index (2000=100)	2.9	2.8	2.2	2.2	2.1	2.1	2.1	2.2
Percent change, year over year:								
Current dollars	7.0	6.4	5.8	5.6	5.5	5.3	5.3	5.3
Real, chained (2000) dollars	4.2	3.6	3.4	3.3	3.3	3.1	3.1	3.1
Chained price index (2000=100)	2.6	2.7	2.4	2.2	2.1	2.1	2.1	2.1
Incomes, billions of current dollars:								
Corporate profits before tax	1,059	1,425	1,506	1,497	1,516	1,495	1,497	1,500
Wages and salaries	5,389	5,745	6,095	6,459	6,843	7,229	7,613	8,028
Other taxable income ²	2,420	2,495	2,618	2,717	2,877	2,974	3,105	3,231
Consumer Price Index: ³								
Level (1982-84=100), annual average	188.9	195.3	201.1	205.9	210.9	215.9	221.1	226.6
Percent change, fourth quarter over fourth quarter	3.4	3.8	2.4	2.4	2.4	2.4	2.4	2.5
Percent change, year over year	2.7	3.4	3.0	2.4	2.4	2.4	2.4	2.5
Unemployment rate, civilian, percent:								
Fourth quarter level	5.4	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Annual average	5.5	5.1	5.0	5.0	5.0	5.0	5.0	5.0
Federal pay raises, January, percent:								
Military ⁴	4.15	3.5	3.1	2.2	NA	NA	NA	NA
Civilian ⁵	4.1	3.5	3.1	2.2	NA	NA	NA	NA
Interest rates, percent:								
91-day Treasury bills ⁶	1.4	3.2	4.2	4.2	4.3	4.3	4.3	4.3
10-year Treasury notes	4.3	4.3	5.0	5.3	5.5	5.6	5.6	5.6

NA = Not Available.

¹ Based on information available as of November 15, 2005.² 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; 2004 figure is average of various rank- and longevity-specific adjustments; percentages to be proposed for years after 2007 have not yet been determined.⁵ Overall average increase, including locality and special pay adjustments. Percentages to be proposed for years after 2007 have not yet been determined.⁶ Average rate, secondary market (bank discount basis).

the pace during 1996-2000 (2.5 percent) and not far from the average since the official productivity series began in 1947 (2.3 percent).

Inflation: Inflation increased in 2005, in large part because of surging energy prices. With the recent easing of these prices, inflation is likely to be lower in 2006. On a year-over-year basis, the CPI is projected to increase 3.0 percent this year with the increase moderating to 2.4 to 2.5 percent a year through 2011. This inflation rate is lower than the average during each decade of the 1970s, 1980s, and 1990s. The GDP price index is projected to increase 2.2 or 2.1 percent in each year through 2011, slightly less than the CPI, which is the usual pattern.

The forecast of low inflation reflects the current very low core inflation rate, modest inflationary expectations, the downward pressure on wages and prices due to both domestic and global competition, and the Federal Reserve's focus on measured policy firming so as to avoid an over-heated economy.

Interest Rates: Interest rates are projected to rise, as is the usual case during an expansion. The 3-month Treasury bill rate, which was 4.0 percent at the end of December, is expected to increase to 4.3 percent by 2008. The yield on the 10-year Treasury note, 4.3 percent at the end of last year, is projected to increase to 5.6 percent by 2009.

The forecast rates are historically low: the projected averages for 3-month and 10-year Treasuries during 2006-2016 are lower than the averages for these instruments during each decade of the 1970s, 1980s, and 1990s. The relatively low projected yields are due largely to the relatively low projected inflation rate. Adjusted for inflation, the projected real interest rates are close to their historical averages.

Income Shares: The share of labor compensation in GDP is projected to rise from its low level in 2005, while the share of corporate profits is projected to decline from the unusually high levels of 2005 and those anticipated for 2006. In recent years, growth of labor

compensation adjusted for inflation has lagged the growth of productivity. During the projection period, however, labor compensation is expected to catch up, which would raise the labor share in GDP back to about its historical average.

Among the components of labor compensation, the wage share in GDP is expected to rise from its recent low level while the share of supplements to wages and salaries is expected to remain at around the high level reached in 2005. The supplement share in GDP has risen because of rapidly growing health insurance contributions paid by employers and sharply higher employer “catch-up” contributions to defined-benefit pension plans.

Corporate profits before tax jumped sharply as a share of GDP in 2005 primarily because of the end of the accelerated depreciation permitted by the 2002 and 2003 tax acts. Accelerated depreciation lowered profits before tax compared with what they otherwise would have been in 2003 and 2004 by allowing firms to write off more of their investment sooner. After 2004, however, corporate profits before tax will be higher than normal both because new investment will not qualify for the temporary acceleration and because the

remaining depreciation permitted on investment that used this provision will be less.

Among the other income components, the share of personal interest income in GDP is projected to decline reflecting the low nominal interest rates of recent years. The remaining shares of the tax base (dividends, rental income, and proprietors’ income) are projected to remain relatively stable at around their 2005 levels.

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 12–2 compares the 2007 Budget assumptions with projections by CBO and by the Blue Chip Consensus, an average of about 50 private-sector forecasts.

Table 12–2. COMPARISON OF ECONOMIC ASSUMPTIONS

(Calendar years)

	Projections						Average, 2006–11
	2006	2007	2008	2009	2010	2011	
GDP (billions of current dollars):							
2007 Budget	13,210	13,949	14,713	15,493	16,310	17,177	
CBO January	13,263	13,960	14,696	15,455	16,208	16,954	
Blue Chip Consensus January ²	13,237	13,939	14,703	15,505	16,372	17,280	
Real GDP (chain-weighted):¹							
2007 Budget	3.4	3.3	3.3	3.1	3.1	3.1	3.2
CBO January	3.6	3.4	3.4	3.3	3.0	2.8	3.3
Blue Chip Consensus January ²	3.4	3.1	3.2	3.1	3.3	3.2	3.2
Chain-weighted GDP Price Index:¹							
2007 Budget	2.4	2.2	2.1	2.1	2.1	2.1	2.2
CBO January	2.4	1.8	1.8	1.8	1.8	1.8	1.9
Blue Chip Consensus January ²	2.4	2.1	2.3	2.2	2.3	2.2	2.3
Consumer Price Index (all-urban):¹							
2007 Budget	3.0	2.4	2.4	2.4	2.4	2.5	2.5
CBO January	2.8	2.1	2.2	2.2	2.2	2.2	2.3
Blue Chip Consensus January ²	2.9	2.4	2.5	2.5	2.4	2.5	2.5
Unemployment rate:³							
2007 Budget	5.0	5.0	5.0	5.0	5.0	5.0	5.0
CBO January	5.0	5.0	5.1	5.2	5.2	5.2	5.1
Blue Chip Consensus January ²	4.9	4.9	4.9	4.9	5.0	4.9	4.9
Interest rates:³							
91-day Treasury bills:							
2007 Budget	4.2	4.2	4.3	4.3	4.3	4.3	4.3
CBO January	4.5	4.5	4.4	4.4	4.4	4.4	4.4
Blue Chip Consensus January ²	4.5	4.5	4.4	4.3	4.4	4.4	4.4
10-year Treasury notes:³							
2007 Budget	5.0	5.3	5.5	5.6	5.6	5.6	5.4
CBO January	5.1	5.2	5.2	5.2	5.2	5.2	5.2
Blue Chip Consensus January ²	4.9	5.0	5.3	5.3	5.4	5.4	5.2

Sources: Congressional Budget Office; Blue Chip Economic Indicators, Aspen Publishers, Inc.

¹ Year-over-year percent change.

² January 2006 Blue Chip Consensus forecast for 2006 and 2007; Blue Chip October 2005 long-run extension for 2008–2011.

³ Annual averages, percent.

The three sets of economic assumptions are based on different underlying assumptions concerning economic policies. The Administration forecast generally assumes that the President's Budget proposals will be enacted. In contrast, the CBO baseline projection assumes that current law as of the time the estimates are made remains unchanged. Despite their differing policy assumptions, the three sets of economic projections, shown in Table 12–2, are very close. The similarity of the Budget economic projection to both the CBO baseline projection and the Consensus forecast underscores the conservative nature of the Administration forecast.

For real GDP, the Administration, CBO, and the Blue Chip Consensus anticipate solid growth this year. The Administration projects 3.4 percent growth on a year-over-year basis, the same as the private sector consensus and slightly below CBO's forecast. For calendar year 2007, the Administration, at 3.3 percent, is between the consensus (at 3.1 percent), and CBO's 3.4 percent. Thereafter, the Administration's projection is very close to the consensus growth rate but below CBO's through 2009. Over the six-year span as a whole, the Administration, CBO and the private sector consensus all project 3.2 or 3.3 percent average annual growth rates.

All three forecasts anticipate continued low inflation in the range of 1.8 to 2.4 percent as measured by the GDP price index; and, after 2006, between 2.2 and 2.5 percent as measured by the CPI, with CBO lower than the Administration and the private sector consensus, which are close to each other. The three unemployment rate projections are also similar with a projected rate near 5 percent throughout the forecast. All three project slightly rising interest rates during the next few years, with the Administration's long term rates slightly above the Blue Chip's and CBO's slightly below, and the short term rate forecasts nearly identical.

Changes in Economic Assumptions

The economic assumptions underlying this Budget are similar to those of the 2006 Budget, as shown in Table 12–3.

Real GDP growth is now expected to be 3.4 percent in 2006 on a year-over-year basis compared to 3.5 percent forecast in last year's Budget, and to moderate gradually to 3.1 percent in the outyears. Consequently, the levels of real GDP projected this year are little changed from those of the 2006 Budget when allowance is made for the Commerce Department's historical revisions to the National Income and Product Accounts released in July 2005. The level of nominal GDP is now projected to be higher than in the 2006 Budget because of a faster-than-expected rise in the GDP price index last year and slightly higher projected GDP inflation in the coming years.

The unemployment rate projection is virtually identical to last year's. Where the 2006 Budget had the rate level at 5.1 percent in future years, the rate is now projected to remain at the relatively low average

of 5.0 percent recorded for the last nine months of 2005. Interest rates are expected to trend upward, as before. The 3-month Treasury bill rate is now projected to rise to 4.3 percent by 2008, where before it reached that level only in 2011; and the yield on the 10-year Treasury note is expected to rise only to 5.6 percent, not 5.7 percent.

Structural and Cyclical Balances

When the economy is operating below potential, the unemployment rate exceeds the long-run sustainable average consistent with price stability. As a result, 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; the deficit is larger (or the surplus is smaller) than would be the case if the unemployment rate were at its sustainable long-run average. The portion of the deficit (or surplus) that can be traced to this factor can be called the cyclical component. The portion that would remain if the unemployment rate was at its long-run value is then called the structural deficit (or structural surplus).

Historically, the structural balance has often provided a clearer understanding of the stance of fiscal policy than has the unadjusted budget balance which includes a cyclical component. In the typical post-World War II business cycle, the structural balance has provided a clearer gauge of the surplus or deficit that would persist in the long run with the economy operating at the sustainable level of unemployment.

Conventional estimates of the structural balance are based on the historical relationship between changes in the unemployment rate and real GDP growth on the one hand, and receipts and outlays on the other. For various reasons, these estimated relationships do not take into account all of the cyclical changes in the economy. One example of a cyclical phenomenon not captured in these estimates was the sharply rising stock market during the second half of the 1990s. It boosted capital gains-related receipts and pulled down the deficit. The subsequent fall in the stock market reduced receipts and added to the deficit. Some of this rise and fall was cyclical in nature. It is not possible, however, to estimate the cyclical component of the stock market accurately, and for that reason, all of the stock market's contribution to receipts is counted in the structural balance.

Other factors unique to the current economic cycle provide other examples of less-than-complete cyclical adjustment. The extraordinary fall-off in labor force participation, from 67.1 percent of the U.S. population in 1997–2000 to 66.0 percent in 2004–2005, appears to be at least partly cyclical in nature, and most forecasters are assuming some rebound in labor force participation as the expansion continues. Since the official unemployment rate does not include workers who have left the labor force, the conventional measures of potential GDP, incomes, and Government receipts understate the extent to which potential work hours have been

Table 12-3. COMPARISON OF ECONOMIC ASSUMPTIONS IN THE 2006 AND 2007 BUDGETS

(Calendar years; dollar amounts in billions)

	2005	2006	2007	2008	2009	2010	2011
Nominal GDP:							
2006 Budget assumptions ¹	12,401	13,093	13,808	14,548	15,318	16,124	16,976
2007 Budget assumptions	12,482	13,210	13,949	14,713	15,493	16,310	17,177
Real GDP (2000 dollars):							
2006 Budget assumptions ¹	11,149	11,540	11,922	12,303	12,688	13,081	13,487
2007 Budget assumptions	11,139	11,514	11,896	12,284	12,669	13,062	13,467
Real GDP (percent change):²							
2006 Budget assumptions	3.6	3.5	3.3	3.2	3.1	3.1	3.1
2007 Budget assumptions	3.6	3.4	3.3	3.3	3.1	3.1	3.1
GDP price index (percent change):²							
2006 Budget assumptions	2.0	2.0	2.1	2.1	2.1	2.1	2.1
2007 Budget assumptions	2.7	2.4	2.2	2.1	2.1	2.1	2.1
Consumer Price Index (percent change):²							
2006 Budget assumptions	2.0	2.3	2.4	2.4	2.4	2.4	2.5
2007 Budget assumptions	3.4	3.0	2.4	2.4	2.4	2.4	2.5
Civilian unemployment rate (percent):³							
2006 Budget assumptions	5.3	5.2	5.1	5.1	5.1	5.1	5.1
2007 Budget assumptions	5.1	5.0	5.0	5.0	5.0	5.0	5.0
91-day Treasury bill rate (percent):³							
2006 Budget assumptions	2.7	3.5	3.8	4.0	4.1	4.2	4.3
2007 Budget assumptions	3.2	4.2	4.2	4.3	4.3	4.3	4.3
10-year Treasury note rate (percent):³							
2006 Budget assumptions	4.6	5.2	5.4	5.5	5.6	5.6	5.7
2007 Budget assumptions	4.3	5.0	5.3	5.5	5.6	5.6	5.6

¹ Adjusted for July 2005 NIPA revisions.² Year-over-year.³ Calendar year average.

under-utilized in the current expansion to date because of the decline in labor force participation.

A third example is the fall-off in the wage and salary share of GDP, from 49.2 percent in 2000 to 45.6 percent in the second quarter of 2004. Again, this change is widely suspected to be partly cyclical. Since Federal taxes depend heavily on wage and salary income, the larger-than-predicted decline in the wage share of GDP suggests that the true cyclical component of the deficit is understated for this reason as well.

There are also lags in the collection of tax revenue that can delay the impact of cyclical effects beyond the year in which they occur. The result is that even after the unemployment rate has fallen, receipts may

remain cyclically depressed for some time until these lagged effects have dissipated.

For all these reasons, the current estimates of the cyclical deficit are probably understated. The current unemployment gap is believed to be zero, and the Administration forecasts that it will remain so, but in the broader sense discussed above, the cyclical gap in receipts is likely to still be large and only slowly shrinking.

During fiscal years 2000 and 2001, the unemployment rate appears to have been lower than could be sustained in the long run. Therefore, as shown in Table 12-4, in those years 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.

Table 12-4. ADJUSTED STRUCTURAL BALANCE

(In billions of dollars)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Unadjusted surplus or deficit (-)	236.2	128.2	-157.8	-377.6	-412.7	-318.3	-423.2	-354.2	-223.3	-207.6	-182.7	-204.9
Cyclical component	134.6	80.8	-47.0	-91.4	-51.6	-19.3	-5.0	-0.8
Structural surplus or deficit (-)	101.6	47.5	-110.8	-286.2	-361.2	-299.0	-418.2	-353.4	-223.3	-207.6	-182.7	-204.9
Deposit insurance outlays	3.1	1.6	1.0	1.4	2.0	1.4	1.3	1.8	1.8	1.7	2.8	3.7
Adjusted structural surplus or deficit (-)	104.7	49.0	-109.8	-284.8	-359.2	-297.6	-416.9	-351.6	-221.5	-205.8	-179.9	-201.2

NOTE: The NAIRU is assumed to be 5.0 percent

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 slow 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 the 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 interest 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 12–5.

For real growth and employment:

- As shown in the first block, if in 2006 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 2006 deficit is estimated to increase by \$15.8 billion; receipts in 2006 would be lower by \$12.6 billion, and outlays would be higher by \$3.2 billion, primarily for unemployment-sensitive programs. In fiscal year 2007, the estimated receipts shortfall would grow further to \$26.6 billion, and outlays would increase by \$8.9 billion relative to the base, even though the growth rate in calendar year 2007 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 2006–2011, the cumulative increase in the budget deficit is estimated to be \$236 billion.
- The budgetary effects are much larger if the real growth rate is permanently reduced by one per-

centage 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 2006–2011, the cumulative increase in the budget deficit is estimated to be \$662 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 2006 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 2006 and 2007, outlays would be above the base by \$11.2 billion and \$19.3 billion, respectively, due in part to lagged cost-of-living adjustments. Receipts would rise by only \$16.6 billion in 2006, due to the temporary effect of higher interest rates on financial corporations' profits and taxes, but then would rise by \$44.4 billion above the base in 2007 due to the sustained effects of inflation on the tax base, resulting in a \$25.1 billion improvement in the 2007 budget balance. In subsequent years, the amounts added to receipts would continue to be larger than the additions to outlays. During 2006–2011, cumulative budget deficits would be \$123 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 \$362 billion to outlays over 2006–2011 and \$783 billion to receipts, for a net decrease in the 2006–2011 deficits of \$421 billion.
- The outlay effects of a one percentage point increase in interest rates alone are 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 and the effect of interest rate changes on financial corporations' profits (and taxes).
- The sixth block shows that a sustained one percentage point increase in the GDP price index and in CPI inflation decrease cumulative deficits by a substantial \$429 billion during 2006–2011. This large effect is because the receipts from a higher tax base exceed the combination of higher outlays from mandatory cost-of-living adjustments and lower receipts from CPI indexation of tax brackets. The separate effects of higher inflation and higher interest rates in the fifth and sixth blocks do not sum to the effects for simultaneous changes in both in the fourth block. 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 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 12-5. SENSITIVITY OF THE BUDGET TO ECONOMIC ASSUMPTIONS

(Fiscal years; in billions of dollars)

Budget effect	2006	2007	2008	2009	2010	2011	Total of Effects, 2006-2011
Real Growth and Employment							
Budgetary effects of 1 percent lower real GDP growth:							
(1) For calendar year 2006 only: ¹							
Receipts	-12.6	-26.6	-30.2	-32.1	-34.2	-36.3	-172.1
Outlays	3.2	8.9	9.8	11.9	14.0	16.2	64.0
Increase in deficit (-)	-15.8	-35.5	-39.9	-44.0	-48.3	-52.5	-236.0
(2) Sustained during 2006-2011, with no change in unemployment:							
Receipts	-12.8	-41.8	-77.7	-117.3	-161.5	-209.8	-620.8
Outlays	0.2	1.0	3.3	7.3	12.0	17.8	41.5
Increase in deficit (-)	-12.9	-42.8	-80.9	-124.5	-173.5	-227.6	-662.3
Inflation and Interest Rates							
Budgetary effects of 1 percentage point higher rate of:							
(3) Inflation and interest rates during calendar year 2006 only:							
Receipts	16.6	44.4	40.2	32.8	35.0	37.1	206.1
Outlays	11.2	19.3	14.6	13.3	12.9	12.3	83.5
Decrease in deficit (+)	5.4	25.1	25.7	19.6	22.1	24.8	122.6
(4) Inflation and interest rates, sustained during 2006-2011:							
Receipts	16.6	65.2	111.6	151.6	194.6	243.3	783.0
Outlays	11.7	35.2	54.0	70.4	86.9	103.8	361.9
Decrease in deficit (+)	4.9	30.0	57.7	81.3	107.7	139.5	421.0
(5) Interest rates only, sustained during 2006-2011:							
Receipts	3.9	24.1	36.5	38.9	39.2	40.6	183.3
Outlays	8.6	24.4	34.2	40.3	45.4	49.7	202.8
Increase in deficit (-)	-4.7	-0.3	2.2	-1.4	-6.2	-9.2	-19.5
(6) Inflation only, sustained during 2006-2011:							
Receipts	12.6	41.0	74.9	112.4	154.9	202.2	598.2
Outlays	3.1	11.1	20.5	31.6	44.2	58.3	168.8
Decrease in deficit (+)	9.5	29.9	54.4	80.8	110.8	143.9	429.4
Interest Cost of Higher Federal Borrowing							
(7) Outlay effect of \$100 billion increase in borrowing in 2006	2.2	4.6	4.9	5.2	5.5	5.8	28.2

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