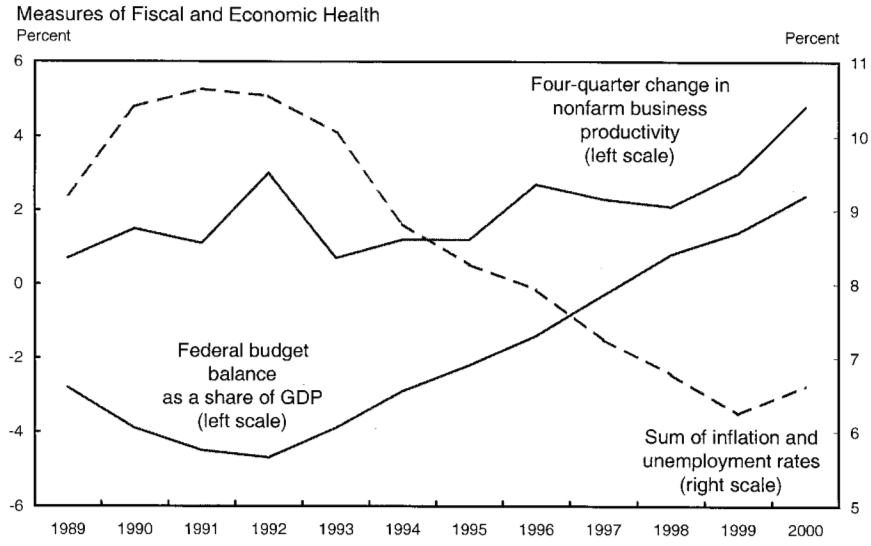
CHAPTER 2

Macroeconomic Policy and Performance



Note: Data are for fiscal years. Inflation is measured using the CPI-U-RS excluding food and energy.
Sources: Department of Labor (Bureau of Labor Statistics) and Office of Management and Budget.

Since 1993, the economy has experienced rising productivity growth, low rates of unemployment and inflation, and a turnaround in the budget balance.

The United States achieved a growth milestone early in 2000. In February the duration of the economic expansion, measured from the last business cycle trough in March 1991, reached 107 months, eclipsing the previous record set in the 1960s. With private payroll employment growth strong in November 2000, the expansion appeared to still have steam left after 116 months. Even more remarkable than the length of this marathon expansion has been its ongoing strength. In the ninth consecutive year of economic growth, driven by vigorous investment and accelerating productivity, real GDP grew a torrid 6 percent between the second quarter of 1999 and the second quarter of 2000, yet core inflation (which excludes changes in food and energy prices) remained tame. It is probably not surprising after such a surge that growth moderated in the third quarter. Nevertheless, the unemployment rate in November remained a low 4.0 percent.

Strong and rising productivity growth well into an expansion and the prolonged coexistence of low unemployment and low inflation have not previously been seen together in the postwar period. Together with a sustained high rate of investment in new technology, this confluence of

indicators is evidence that the United States is indeed in a New Economy. But even a New Economy cannot claim to have banished the business cycle, and indeed risks remain. For example, oil price shocks were associated with the onset of recession twice in the 1970s and again in 1990, and oil prices have increased sharply in the past 2 years. Yet the fundamental soundness of today's economy augurs well for its ability to weather the oil price storm, just as it weathered the turmoil of the Asian, Russian, and Latin American financial crises in 1997–98. Indeed, the U.S. economy appears to be at a unique juncture in its modern history, reaping the benefits of sound policies and a business environment rife with new technological possibilities.

This chapter describes the fruits of these policies and technological developments as they manifest in the recent performance of the overall economy. But it also looks to the future. In particular, the chapter discusses the importance of preserving the fiscal discipline that has contributed in a major way to encouraging investment and supporting the strong economic performance of recent years.

The chapter begins with a review of macroeconomic developments during 2000. This review identifies several positive trends that herald a New Economy, such as sustained high investment rates, continued strong productivity growth, and low unemployment with stable core inflation. But it also notes two potential caution signals: a low and falling private saving rate and a widening trade deficit. Although either of these could become the source of problems, each appears, in the short run at least, to be a side effect of the economy's investment-led growth rather than an indicator of poor performance. Low private saving, as measured in the standard national income accounts, has been accompanied by large increases in wealth that are not part of saving as conventionally measured. In large part these increases in wealth stem from the unprecedented recent rise in the stock market, reflecting, among other things, investors' optimism about the prospects for continued rapid growth in corporate profits. Similarly, the widening deficit in the Nation's international accounts may well reflect not only low private saving out of current income here at home but also, as discussed in Chapter 4, the attractiveness to foreigners of investing in the United States.

Although the evidence is widespread that there really is something new about the economy, it is not clear just how much the basic parameters of macroeconomic performance have changed. Productivity growth has certainly been strong of late. But just how much of the increase in productivity growth is due to temporary factors such as the phase of the business cycle, and how much represents an improved long-term trend? The economy has been able to achieve remarkably low unemployment rates without igniting inflation. But has the concept of a minimum sustainable rate of unemployment consistent with stable inflation lost relevance, and if not, has

that rate changed? Recently, the succession of positive developments that suggest we are in a New Economy has also led forecasters to keep revising their short-term forecasts upward. But does this mean simply that those particular forecasts were wrong, as forecasts have been before, or has the New Economy rendered the forecasters' models obsolete? None of these questions can yet be answered definitively, but this chapter's discussion of the Administration's forecast and the short-term economic outlook addresses some of them. Because the forecast plays such an important role in the budget process, this Administration has consistently been cautious about giving too much weight to recent favorable deviations from longer term trends. But if productivity continues to accelerate and policy remains sound, the economy could yet again outperform the forecast.

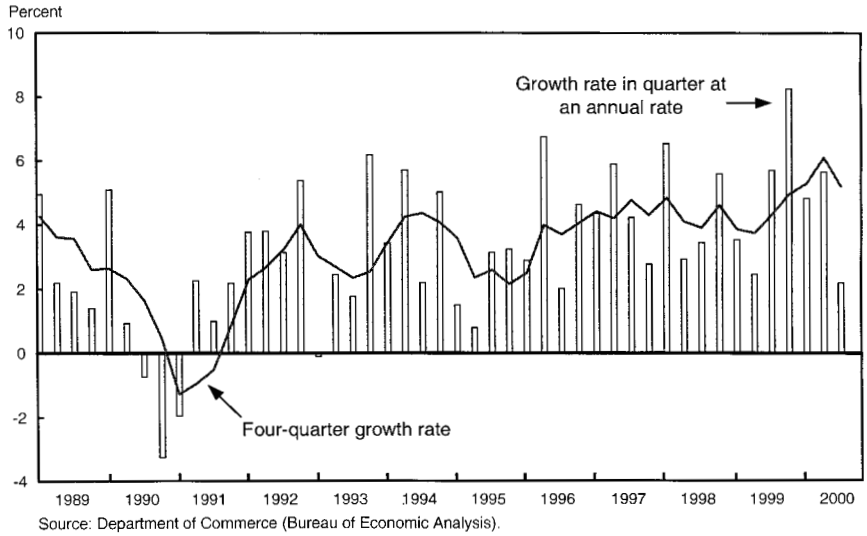
The last part of the chapter shifts the focus from the short-term performance of the economy and the economic outlook to the long-term fiscal outlook. The remarkable turnaround in Federal Government finances over the past 8 years has created a virtuous cycle in which fiscal prudence has helped keep interest rates attractive for investment, and the resulting strong, productive investment has generated a healthy and growing economy that yields ever-larger budget surpluses. As a result, the United States is on track to be free of public Federal debt before the middle of the next decade. Even if the economy continues to perform reasonably well, however, that outcome is not guaranteed if the government makes unwise fiscal choices. Moreover, as this chapter will document, demographic trends are pushing us toward a situation in which an aging population will put pressure on the budget and deficits could reemerge. Maintaining fiscal discipline today is critical to building up the resources and the economic strength needed to address these demographic pressures down the road.

The Year in Review

After growing rapidly between mid-1999 and mid-2000, the economy showed signs of moderating in the second half of 2000. Nevertheless, real GDP grew at a 4.2 percent annual rate over the first three quarters of 2000, following 4 consecutive years of growth in excess of 4 percent. Once all the data are in, growth in 2000 is likely to have been near the 4 percent average annual rate that has been achieved since 1993 (Chart 2-1). The pattern of spending in 2000 was similar to what it had been in the preceding 2 years (Table 2-1), with consumer expenditures growing faster than income, business investment in equipment and software growing robustly, and domestic spending outpacing domestic income to produce a further decline in net exports. With the economy already operating at a very low level of

Economic growth has averaged over 4 percent annually since 1996 and was particularly strong between mid-1999 and mid-2000.

Chart 2-1 Growth in Real GDP



Source: Department of Commerce (Bureau of Economic Analysis).

TABLE 2-1.— *Growth of Real GDP and Its Components During 1998-99 and 2000*

Item	Growth rate (percent)		Contribution to GDP growth (percentage points)	
	1998-1999	2000	1998-1999	2000
Gross domestic product	4.8	4.2	4.8	4.2
Final sales	4.7	4.3	4.7	4.3
Consumer expenditures	5.3	5.0	3.5	3.4
Residential investment	6.5	-2.2	.3	-.1
Business equipment and software	15.0	14.5	1.4	1.4
Business structures	1.6	13.5	.0	.4
Exports of goods and services	3.3	11.4	.4	1.2
Imports of goods and services	11.6	15.8	-1.5	-2.2
Federal Government consumption and gross investment	2.8	-2.9	.2	-.2
State and local government consumption and gross investment	3.9	2.7	.4	.3
Change in inventories			.1	-.1
Final sales to domestic purchasers	5.8	5.1	5.8	5.2
Net exports			-.9	-.9

Note.—Growth rates for 1998-99 are from fourth quarter 1997 to fourth quarter 1999 at an annual rate; rates for 2000 are from fourth quarter 1999 to third quarter 2000 at an annual rate.
Contributions are approximate.
Detail may not add to totals because of rounding.

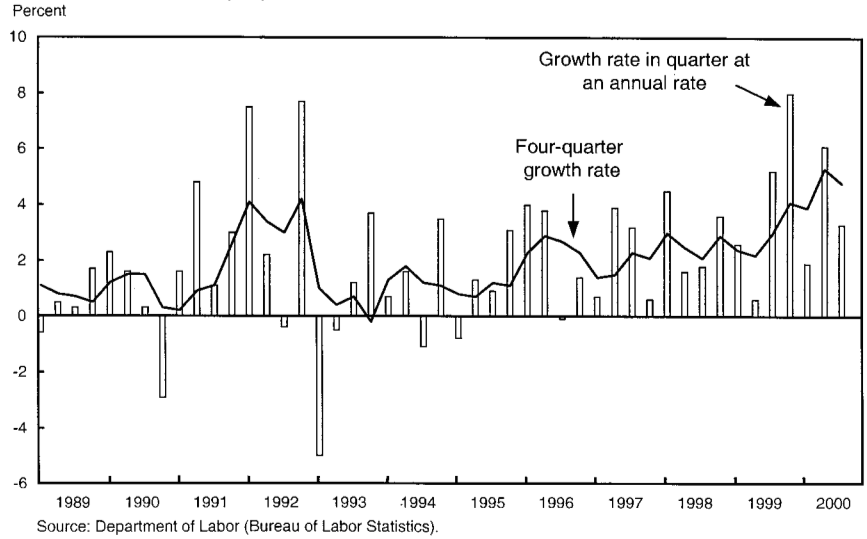
Source: Department of Commerce (Bureau of Economic Analysis).

unemployment, one measure of labor input, hours worked, grew at only a 1.3 percent annual rate in the first 11 months of 2000, and the labor force participation rate was flat. Nevertheless, economic growth continued to be strong because of surging labor productivity (Chart 2-2). Although rising energy prices contributed to an increase in overall inflation, core inflation increased only modestly despite continued tight labor markets.

In 2000 the economy had to negotiate several speed bumps. First, the explosive growth in the stock market that in recent years has fueled both consumer spending and investment came to a halt. Technology stocks in general and Internet stocks in particular fell sharply after peaking in the spring, and near the end of the year they were down from their 1999 close. This cooling of the stock market most likely played a role in slowing growth in consumer spending and business investment as the year progressed. Rising energy prices probably also helped slow the economy, as did increases in interest rates associated with monetary tightening by the Federal Reserve between June 1999 and May 2000. The challenge for policymakers has been to negotiate these speed bumps and keep the economy on a sustainable growth path with low unemployment and stable inflation. Success in doing so thus far has given the United States a record-breaking economic expansion that has now lasted almost 10 years.

Productivity growth has risen since 1995 and exceeded 5 percent between mid-1999 and mid-2000.

Chart 2-2 Growth in Output per Hour in the Nonfarm Business Sector



Source: Department of Labor (Bureau of Labor Statistics).

Private Domestic Spending

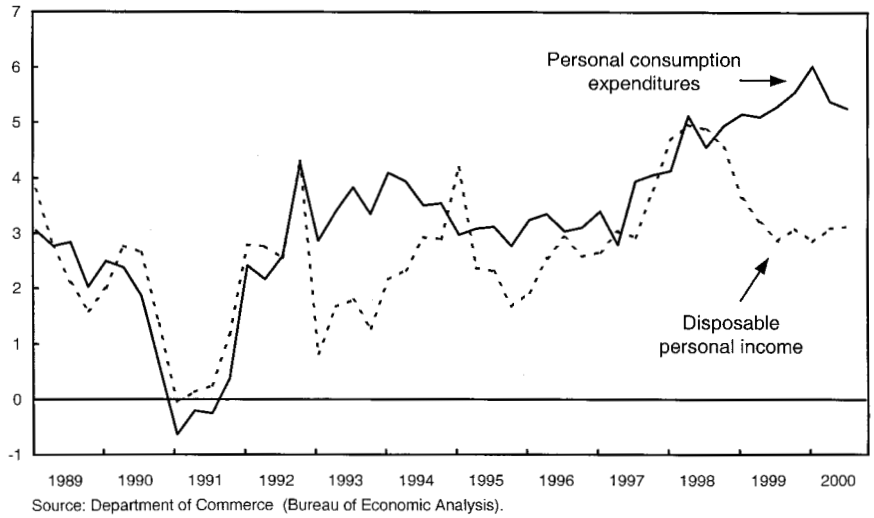
The rich technological opportunities and booming stock market that characterize the New Economy have affected the shape of aggregate demand in recent years. The effect of these technological opportunities can be seen most directly in the very high rates of investment in business equipment and software. And it is the expectation of substantial payoffs from those investments that has fueled much of the increase in the stock market. The surge in the stock market between 1994 and 1999, in turn, generated enough wealth to affect consumption noticeably. And even though the stock market stumbled in 2000, consumption retained considerable momentum from the buildup of wealth in prior years.

Households

Consumer spending was exceptionally strong in the first quarter of 2000 and then slowed somewhat in the second and third quarters. Even with the slowdown, real consumer expenditures rose 5.3 percent between the third quarter of 1999 and the third quarter of last year, continuing to outpace growth in disposable personal income (Chart 2-3). Purchases of motor vehicles and parts, which surged in the first quarter, fell back later in the year. Even so, through November at least, 2000 was on track to become the best-selling year ever for light motor vehicles. After growing at a very rapid pace in 1998 and 1999, residential investment was lower in the third quarter of 2000

Growth in personal consumption expenditures was particularly strong in 1999-2000, substantially outpacing growth in disposable personal income.

Chart 2-3 Consumption and Disposable Income
Four-quarter percent change



Source: Department of Commerce (Bureau of Economic Analysis).

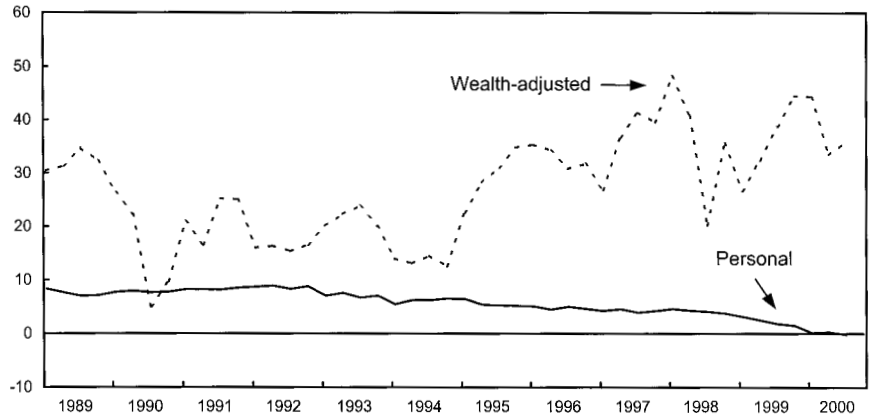
than it had been a year earlier, as higher mortgage interest rates contributed to slowing demand.

The increase in consumption expenditures in 1999 and 2000 is generally explained by the sharp increase in household wealth since 1994. According to the standard life-cycle model of consumer behavior, increases in wealth are not spent all at once; instead, people generally aim to raise their living standards over the remainder of their lives by spending only a portion of that new wealth each year. Historical evidence suggests that each $1 change in stock market wealth leads to a permanent change in future consumer spending of about 3½ cents per year, with most of the effect phasing in by the third year. The rate of growth in consumption is affected during the transition from one permanent level to another, but persistent changes in the rate of growth of consumption require persistent changes in wealth. The increase in stock market wealth from 1994 into early 2000 raised consumption growth by about 1⅓ percent per year. The lagged effects of these past increases in stock market wealth probably continued to boost consumption in 2000.

Increased consumption due to this wealth effect reduces saving out of current income, and in fact the household saving rate as conventionally measured in the national income and product accounts fell below zero in the third quarter of last year (Chart 2-4). However, this measure of saving does not include capital gains, because these gains do not represent income earned from current production. When income and saving are augmented by changes in net worth—mainly capital gains—that are not related to current

The personal saving rate became negative in 2000, but a saving measure that includes capital gains remained high.

Chart 2-4 Personal and Wealth-Adjusted Saving Rates
Percent of income



Note: The personal saving rate is saving in the national income and product accounts as a percent of disposable personal income. The wealth-adjusted saving rate is the average over four quarters of the change in household net worth as a percent of disposable personal income plus capital gains.

Sources: Department of Commerce (Bureau of Economic Analysis) and Board of Governors of the Federal Reserve System.

saving, the picture is quite different: the resulting "wealth-adjusted saving rate" jumped up in 1995 and has generally stayed high since. To the extent that these changes in household net worth reflect revised views of the future productivity of the underlying assets, the low official personal saving rate is not evidence that households are overextended or living beyond their means. It does mean, however, that households are contributing little or nothing to the pool of national saving available for new investment.

Looking more closely at the financial condition of households, there is little question that, even with some stock market setbacks last year, the overall picture of household net worth remains strong. Within this sector, however, some households are net creditors, while others are net debtors and could be subject to financial stress. The Federal Reserve's Survey of Consumer Finances shows, for example, that 14.5 percent of families in 1998 (up from 13.6 percent in 1995) owed annual debt payments exceeding 40 percent of their income. Other indicators of the financial condition of households, such as credit card delinquencies and bankruptcies, show less potential stress. Although these indicators suggest that some households could find themselves in trouble if economic conditions weakened sufficiently, the kinds of credit imbalances that could precipitate financial problems for the macroeconomy are not in evidence.

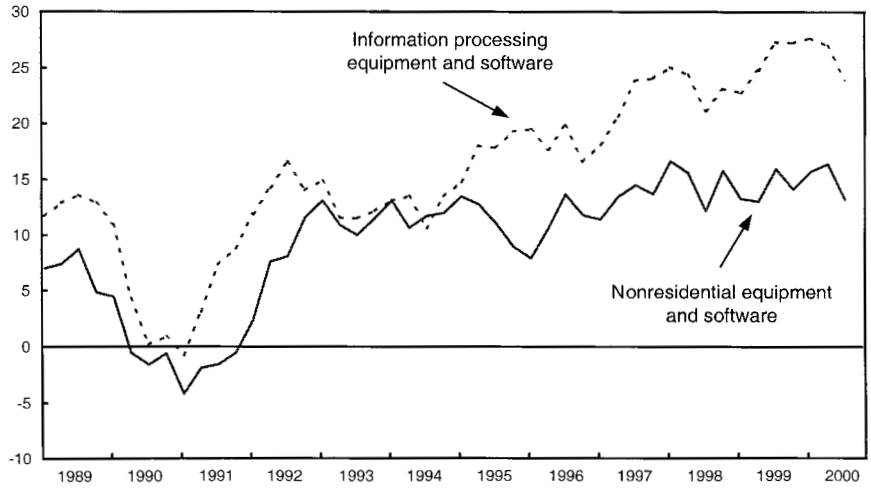
Businesses

Very strong investment in the equipment and software category, and especially in information processing equipment and software, is one of the hallmarks of the New Economy. In 1999 and 2000 growth in investment in information processing equipment and software was roughly 25 percent at an annual rate (Chart 2-5). An important component of this growth appears to reflect replacement of the large but rapidly depreciating stock of this equipment that has been built up in recent years. The primary motivation for this strong pace of investment continued to be rapidly declining prices of computer equipment. Fears of year-2000 (Y2K) problems may have suppressed computer investment in the fourth quarter of 1999. But when these worries passed with the New Year, computer investment rebounded strongly in the first half of 2000. Moreover, the strong stock market gains since 1994 have made such investment easier to finance. Stock market valuations continued to support investment spending in 2000, as the dividend-to-price ratio remained low.

Construction of office buildings was strong in 2000, but industrial construction continued at a pace below rates seen earlier in the decade. With energy prices up sharply, investment in drilling and mining was also strong, accounting for nearly one-third of the growth in total investment in nonresidential structures between the third quarter of 1999 and the third quarter of 2000.

Real investment in equipment and software has been strong since 1993, with an acceleration in information processing equipment and software since 1995.

Chart 2-5 Real Investment in Equipment and Software
Four-quarter percent change



Source: Department of Commerce (Bureau of Economic Analysis).

After declining sharply relative to sales in 1998 and 1999, inventories moved up a bit in late 2000. Nevertheless, the aggregate inventory-to-sales ratio remains very low by historical standards, and an inventory overhang that could threaten the expansion is not in evidence.

Credit conditions tightened for some borrowers over the course of 2000. Arguably, however, credit markets were doing a good job of distinguishing among borrowers according to their credit risk. As the year progressed, lower rated corporate borrowers faced higher interest rates, and banks appeared to have tightened their lending standards. High-quality borrowers did not see the same increase in borrowing costs, and profits in general remained high, suggesting that business investment in general was not subject to a credit crunch. As with households, some businesses would have trouble borrowing or meeting their debt service obligations if economic conditions weakened sufficiently, but the overall financial condition of businesses was sound in 2000, with little or no indication of the kinds of imbalances that would precipitate an economic or financial crisis.

Government Spending and Fiscal Policy

Government expenditures for consumption and investment have grown more slowly than GDP during this expansion, and Federal expenditures have fallen in real terms. In the first three quarters of 2000, Federal Government expenditures fell at a 2.9 percent annual rate. Increases were recorded at the

State and local level, but government in the aggregate made a negligible contribution to growth in GDP.

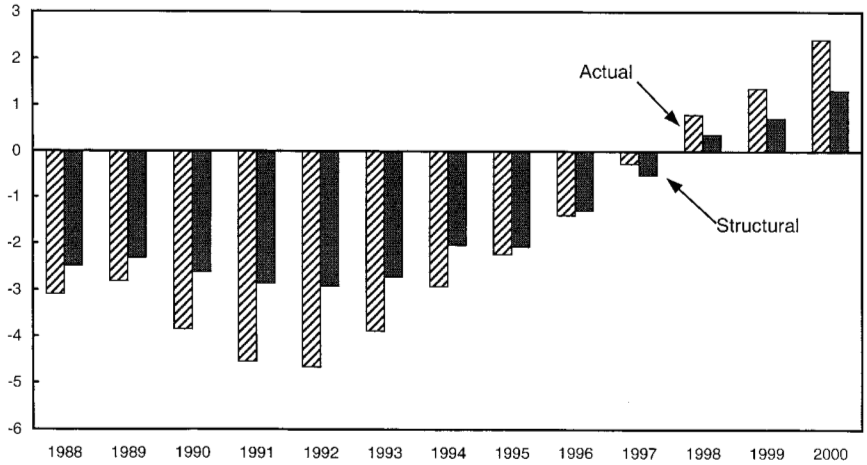
One measure of whether fiscal policy is stimulating or restraining economic activity is the change in the standardized, or structural, budget balance. In contrast to the actual budget balance, the structural balance controls for the effect of cyclical economic activity by estimating what receipts and outlays would be if the economy were operating at potential output. After 1995 the structural deficit shrank, although not as fast as the actual deficit (Chart 2-6), indicating that fiscal policy was restrictive. The structural balance turned positive in 1999 and is estimated to have increased further in 2000 as fiscal restraint has continued. As discussed later in this chapter, the turnaround in the Federal budget balance has been so substantial that, until recently, increases in public saving have more than offset declines in private saving, and national saving has increased as a share of GDP.

International Influences

U.S. exports grew robustly in 2000 as many of our foreign trading partners experienced renewed economic growth after a slump caused by the Asian economic crisis. But imports grew even more rapidly, reflecting strong growth in consumption and investment. Imports of capital equipment accounted for more than one-third of the growth in imports during the first three quarters of the year. As a result, the U.S. current account deficit

Both the actual and the structural budget balances moved sharply from deficit to surplus from 1993 to 2000.

Chart 2-6 Actual and Structural Federal Budget Balances
Percent of GDP



Note: Data are for fiscal years. The structural balance is adjusted for deposit insurance and Desert Storm.
Source: Office of Management and Budget.

continued to widen. And real net exports (exports minus imports) continued to make a negative contribution to aggregate demand. As discussed in Chapter 4, however, the widening of the trade and current account deficits in the past few years most likely is a sign of the strength of the new American economy, not a sign of weakness.

A country runs a current account deficit when its domestic spending exceeds its income earned from production and it borrows abroad to fund that extra spending. Put another way, a current account deficit reflects an excess of domestic investment over domestic saving, with the excess investment funded by foreigners. The wealth effects discussed previously have generated substantial growth in consumption, some of which has been met through imports. Moreover, as discussed in Chapter 4, imports represent a significant share of U.S. investment, including investment in information technology. At the same time, investment in the New Economy of the United States has been attractive to foreigners, and this has supported the dollar. Arguably, the U.S. economy is in a transitory phase in which national saving is being held down by especially low private saving out of current income, and foreign saving is being attracted by the extraordinary investment opportunities in the United States, the clear frontrunner in making New Economy investments.

Monetary Policy and Financial Markets

Monetary and financial market developments in 2000 were not particularly unusual for an economy experiencing a long expansion with a period of extraordinary stock market gains. The stock market took a breather last year, and credit conditions reflected the exercise of monetary restraint by the Federal Reserve.

Equity Markets

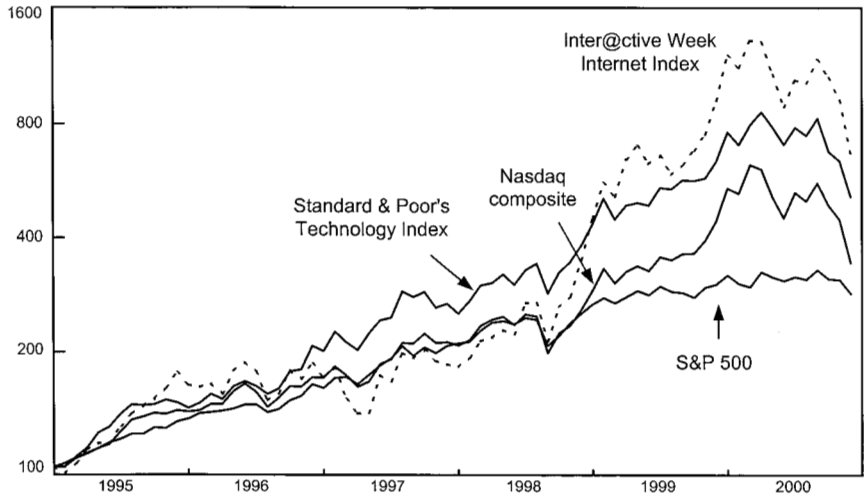
The 1990s saw a remarkable bull market in stocks. The Wilshire 5000 index (the most comprehensive index of U.S. stock prices) quadrupled between the end of 1989 and the end of 1999, with more than three-quarters of the gain coming after 1995. At the end of 1999 the market value of U.S. stocks was over $17 trillion—more than $10 trillion higher than at the end of 1995. Indicative of the importance of the New Economy, technology stocks, and particularly Internet stocks, showed spectacular gains in 1998–99. The market capitalization of Internet companies (defined as those in the Wilshire 5000 Internet index, which seeks to include all companies that derive a substantial fraction of their business from the Internet) increased from $145 billion in December 1997 to $1.6 trillion in December 1999. Internet stocks alone accounted for about 23 percent of the total increase in stock market wealth over that period.

The sharp increase in stock prices came to a halt in 2000. The Standard & Poor's 500 index of large-company stocks was down 11 percent as of December 15, while the Nasdaq Composite Index, after climbing 22 percent between January and its peak in March, fell sharply and was down 35 percent as of December 15. Total stock market wealth had fallen by 10 percent as of November 30, compared with an average annual increase of around 17¾ percent over the past decade. Reversing their previous pattern of outperforming the overall market, technology and Internet stocks did even worse than stocks generally in 2000 (Chart 2-7). Internet stocks were particularly notable for their roller-coaster ride. Instead of being a major contributor to growth in market capitalization as in 1999, Internet stocks subtracted $630 billion from the broader market in 2000 (Chart 2-8).

In the absence of irrational investor behavior, stock market prices reflect the discounted present value of future corporate cash flows, where the discount rate includes a risk factor. Thus, rational explanations for the performance of the stock market last year are likely to be found in the factors affecting such a valuation. For example, a rise in interest rates reduces the present value of future cash flows; hence the rise in interest rates since last summer was probably a dampening factor. Increasing expectations that Federal Reserve tightening and other factors would slow the economy could also have reduced expectations of future profits and hence of future cash flows. Disappointing earnings reports may have reduced expectations of future profitability as well. Finally, it is possible that the higher growth

After leading stock market growth in 1998-99, Internet and technology stocks fell in 2000; the broader S&P 500 index was flat.

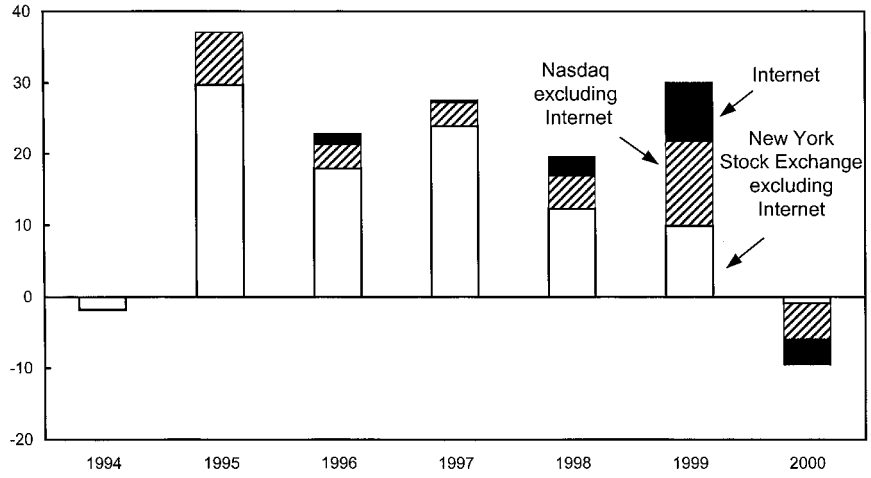
Chart 2-7 Equity Prices
Index, December 31, 1994 = 100 (ratio scale)



Note: Data for 2000 are through December 15.
Sources: American Stock Exchange, National Association of Securities Dealers, Inc., and Standard & Poor's.

After 2 years of strong contributions to growth in stock market capitalization, Internet stocks and non-Internet Nasdaq stocks suffered declines in 2000.

Chart 2-8 Contributions to Growth in Market Capitalization
Percentage points



Note: Data for 2000 are through November 30.
Sources: Bloomberg LP, National Association of Securities Dealers, Inc., New York Stock Exchange, and Wilshire Associates.

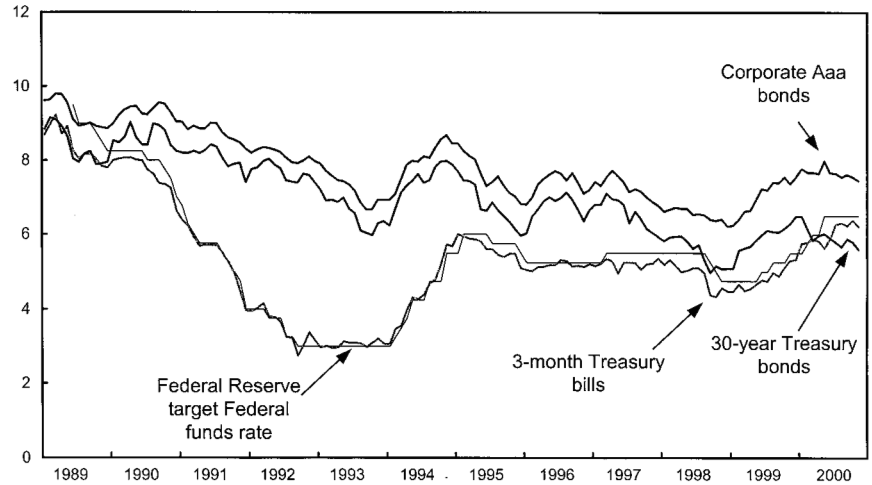
potential that technology companies have enjoyed—and continue to enjoy—has already been priced into the market, as this sector ceased to outperform the rest of the market.

Interest Rates

Between June 1999 and May 2000 the Federal Reserve raised its target for the Federal funds rate (the rate banks charge each other for overnight lending) by 175 basis points, from 4.75 percent to 6.5 percent. (A basis point is 1/100th of a percentage point.) In the second half of 1999, when the Fed began its rate hikes, both Treasury yields and corporate bond yields rose as the Federal funds rate rose. Yields on Treasury and other fixed-income securities of all maturities increased (Chart 2-9). Beginning in early 2000, however, the Treasury yield curve (which plots the yields of Treasury securities of different maturities, from shortest to longest) began to exhibit atypical behavior. Instead of displaying its normal, upward-sloping shape, the yield curve became inverted: yields on longer term securities fell below those on shorter term securities. This development appears to have been determined mostly by supply conditions in the market for Treasury securities, associated with a growing recognition that substantial Federal budget surpluses were likely to emerge, and therefore that the stock of Treasury securities might decline. This perception was reinforced in January 2000, when the Treasury detailed plans for buying back Federal debt.

Yields on long-term Treasury bonds fell relative to those on private bonds and other Treasury securities in 2000.

Chart 2-9 Selected Interest Rates and Yields
Percent



Sources: Department of the Treasury, Board of Governors of the Federal Reserve System, and Moody's Investors Service.

The decline in intermediate- and long-term Treasury yields was not mirrored in the market for private sector securities, where yields on longer term corporate bonds did not retreat much from their late-1999 levels. The anomalous behavior of Treasury yields raised questions about their role as a benchmark for evaluating interest rates (Box 2-1). Although yield curves for corporate bonds and other privately issued instruments did not become inverted, they were flatter than usual in the first half of the year, reflecting the Fed tightening and the perceived likelihood that economic activity would slow to a sustainable, noninflationary pace. As discussed earlier, borrowing costs increased for the riskiest borrowers, but yields on higher quality corporate debt remained relatively stable.

Labor Markets and Inflation

For the most part, 2000 marked another year in which the unemployment rate remained very low without generating excessive inflation or inflationary expectations. The unemployment rate averaged 4.0 percent in the first 11 months of 2000. Sharp increases in oil prices beginning in early 1999 did push up the overall consumer price index (CPI) by 3.4 percent in the 12 months ending in November. Until very recently, however, the rise in oil prices did not feed into most other prices, and core inflation (which does not include changes in oil prices) rose only 2.6 percent over the same period. On the other hand, import prices are no longer as much of a restraint on overall inflation as they were for several years in the late 1990s. In contrast to earlier

Box 2-1. Are Treasuries Being Swapped out of Their Benchmark Role?

U.S. Treasury securities provide investors with a financial vehicle that is both free of default risk and highly liquid (that is, easily turned into cash). These properties have made Treasuries a widely used benchmark for determining and assessing interest rates on other assets that are less liquid or less safe. Historically, for example, new corporate debt has typically been marketed in terms of its yield relative to that of a benchmark asset, such as Treasury securities, rather than at a price in dollars or a yield in percent, and the performance of corporate bonds is often assessed relative to that of Treasuries. Thus changes in the pricing of the credit risk associated with other financial instruments (the spread between their yield and that of Treasuries) can be separated from changes in interest rates generally (as represented by changes in the yield on Treasuries). The Treasury yield curve is also a useful tool in economic forecasting. For example, a narrowing of the spread between short-term and long-term rates is often taken as a sign that economic activity is expected to moderate.

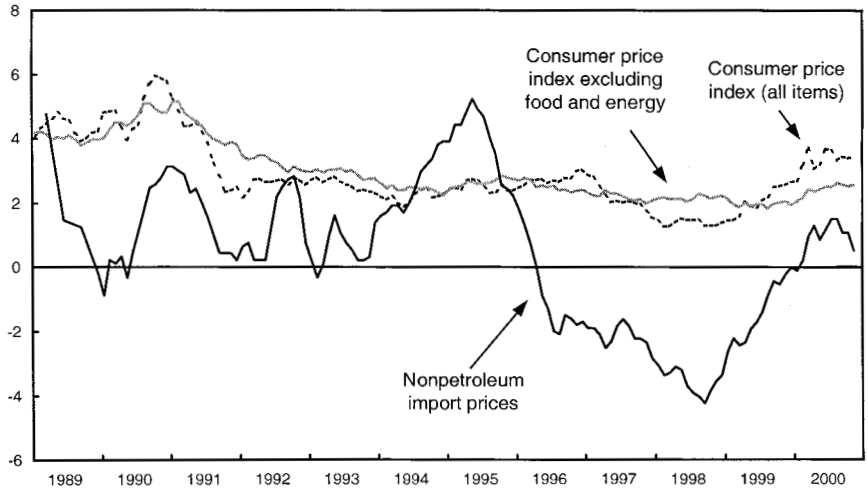
Many observers believe that yields on long-term Treasuries were driven down in 2000 by the growing consensus that the supply of these securities would be markedly reduced in the future. Interest rate swaps began to receive more attention as an alternative benchmark. A swap is the exchange of a stream of variable-interest-rate payments, usually tied to the London interbank offer rate (LIBOR), for a stream of fixed-interest-rate payments. Swaps have durations ranging from a few months to many years. For example, one party to a swap may expect to receive a variable stream of payments tied to LIBOR (and an implicit principal balance) over the next 5 years but would prefer the certainty of fixed payments. The second party agrees to pay a fixed periodic amount in exchange for that variable stream of payments. The swap rate is expressed as a fixed rate that market participants are willing to exchange for a floating rate. Underlying implicit balances are not exchanged.

The swaps market is sufficiently deep and liquid, and trading takes place across a sufficiently broad range of maturities, to provide an alternative yield curve to that of Treasuries and an alternative benchmark for assessing other interest rates. The increased prominence of the swaps market illustrates how financial markets have begun to adapt to the anticipated paydown of marketable Federal debt associated with the improved U.S. fiscal situation.

years when import prices (including oil prices prior to 1999) were falling, nonpetroleum import prices are now on a rising trend, although the rates of increase have so far been modest (Chart 2-10).

Underlying inflation remained modest in 2000 despite rising energy prices and less restraint from import prices.

Chart 2-10 Consumer and Import Prices
12-month percent change



Source: Department of Labor (Bureau of Labor Statistics).

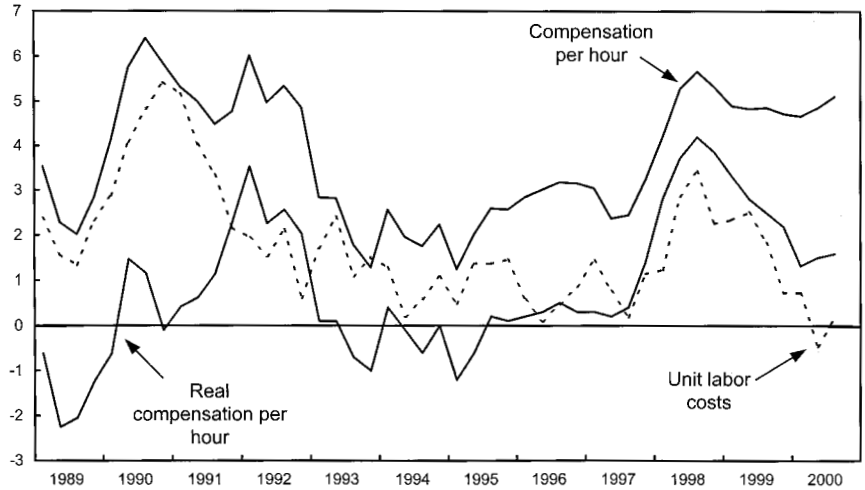
Wages and compensation registered solid increases in nominal terms in 2000. From the standpoint of businesses, however, these wage increases were more than offset by strong productivity gains, with the result that unit labor costs (compensation per unit of output) did not put upward pressure on product prices (Chart 2-11). From the standpoint of workers, increases in the CPI associated with higher energy prices have meant smaller increases in real wages and compensation than in some recent years.

The Economic Outlook

Although economic performance remained strong in 2000, the resilience of the new macroeconomy of fast productivity growth and a very strong labor market could be tested in the coming year or so. Chapter 3 provides ample reason to be optimistic about future productivity increases, but it remains uncertain how much of the recent increase in productivity growth will be sustained in the long run. Absorbing the inflationary pressures from the recent rise in oil prices, as well as diminishing restraint from non-oil import prices, will be easier if productivity growth continues strong. On the demand side, the very low private saving rates of recent years might not persist, raising the question of whether the transition from a stock market–fueled consumption boom to a more sustainable consumption pace will be

Annual growth in nominal compensation per hour exceeded 4 percent in 1999-2000, but growth in real compensation per hour and unit labor costs slowed.

Chart 2-11 Nonfarm Business Compensation per Hour and Unit Labor Costs
Four-quarter percent change



Source: Department of Labor (Bureau of Labor Statistics).

accomplished smoothly. Toward the year's end, stock market declines and higher interest rates charged to high-risk corporate borrowers added a note of uncertainty to financial markets. Fortunately, the economy remains remarkably free of the kinds of imbalances typically associated with the ends of expansions. Core inflation remains low, inventories in most industries remain lean in relation to sales, and the outlook for the economy remains good.

Growth of GDP is projected to moderate to 3.2 percent during 2001 and to remain at or near this growth rate through 2007 (Table 2-2). These growth rates are below estimates of the trend growth in aggregate supply, and as a result, the unemployment rate is projected to edge up gradually to 5.1 percent, the middle of the range of unemployment compatible in the long run with stable inflation. The growth of aggregate supply is projected to edge down over the 11-year budget window, reflecting a return to more traditional rates of productivity growth, a slower rate of population growth, and the anticipated retirement of the first wave of the baby-boom generation.

The Near-Term Outlook

The prospects for another year of solid growth rest on continued growth of aggregate supply, stable core inflation, and the sound application of fiscal and monetary policy. When inflation is used as an indicator, economic activity

TABLE 2-2.—*Administration Forecast*[1]

Year	Nominal GDP	Real GDP (chain-type)	GDP price index (chain-type)	Consumer price index (CPI-U)	Unemployment rate (percent)	Interest rate, 91-day Treasury bills (percent)	Interest rate, 10-year Treasury notes (percent)	Nonfarm payroll employment (millions)
	Percent change, fourth quarter to fourth quarter				Level, calendar year			
1999 (actual)	6.5	5.0	1.6	2.6	4.2	4.7	5.6	128.8
2000	6.7	4.1	2.4	3.4	4.0	5.9	6.1	131.5
2001	5.3	3.2	2.0	2.5	4.1	6.0	5.8	133.4
2002	5.4	3.2	2.1	2.6	4.4	5.7	5.8	135.0
2003	5.4	3.2	2.1	2.7	4.6	5.4	5.8	136.5
2004	5.4	3.2	2.1	2.7	4.7	5.3	5.8	138.2
2005	5.4	3.2	2.1	2.7	4.8	5.3	5.8	139.8
2006	5.3	3.1	2.1	2.7	4.9	5.3	5.8	141.4
2007	5.2	3.0	2.1	2.7	5.0	5.3	5.8	143.0
2008	5.1	2.9	2.1	2.7	5.1	5.3	5.8	144.6
2009	5.1	2.9	2.1	2.7	5.1	5.3	5.8	146.2
2010	5.1	2.9	2.1	2.7	5.1	5.3	5.8	147.8
2011	5.1	2.9	2.1	2.7	5.1	5.3	5.8	149.4

[1] Based on data available as of November 17, 2000.

Sources: Council of Economic Advisers, Department of Commerce (Bureau of Economic Analysis), Department of Labor (Bureau of Labor Statistics), Department of the Treasury, and Office of Management and Budget.

now appears to be in the neighborhood of its potential, as measures of core inflation have risen slightly or not at all.

Potential output is expected to increase at a solid 3.8 percent annual rate in 2001 and 2002, about the same as its growth rate from 1995 to 2000. This estimate is based on the prospect that a large and rapidly growing level of investment spending will continue to support rapid growth of capital services per hour worked. At these levels of investment spending, structural productivity is expected to increase at about a 2.8 percent annual rate. The labor force, another component of aggregate supply, is expected to grow at about a 1 percent annual rate.

The projected real GDP growth rate of 3.2 percent per year during 2001 and 2002 is somewhat slower than the rise in potential output, and as a consequence the unemployment rate is projected to edge up 0.3 percentage point per year during those years. At these growth rates, any tightness in labor and product markets will unwind.

Consumption, which constitutes two-thirds of GDP, is expected to be the major factor in the deceleration of GDP, as the stimulus to consumption growth from the 1995–99 bull market in stocks recedes into the past. Real private nonresidential investment, which has grown more than twice as fast

as real GDP during the past 2 years, is projected to continue to outpace activity as a whole. Even so, its growth is expected to moderate. The fall in the relative price of investment goods, a cause of the recent investment strength, is expected to persist.

Exports have rebounded strongly since mid-1999, reflecting the rebound in activity from the depressed levels of the Asian economic crisis. Looking ahead, activity in the industrial countries as a group—which has grown rapidly in the past year—is projected to slow slightly in 2001. As a result, exports are projected to grow at a slower, but still strong, rate in 2001. As fast as exports have grown, imports have grown even faster, and so both net exports and the current account deficit have deteriorated. During the next few years, import growth is expected to come down with the projected deceleration of U.S. GDP. Nevertheless, imports generally grow roughly two times faster than GDP, and as a result, the current account deficit is projected to widen further before it narrows.

Productivity and the NAIRU

The level of unemployment consistent with stable inflation remains temporarily depressed by the still-surprising increase in productivity growth. Permanent declines in this unemployment rate may have been caused by, among other things, the development of the temporary help industry and the Internet job market. These factors were discussed in more detail in last year's *Report*. The acceleration of productivity after 1995 appears to have initiated a process that allows the unemployment rate to fall lower temporarily, with less consequence for inflation, than would have been possible otherwise. The rate of growth of nominal hourly compensation has increased during the past 4 years, but these nominal increases have not resulted in much of an increase in price inflation. Businesses have been able to grant these larger pay increases without higher inflation, partly because increases in unit labor costs have remained stable, as rising productivity growth offset the rising compensation gains.

The new, higher trend growth of productivity since 1995 has temporarily lowered the NAIRU (the nonaccelerating-inflation rate of unemployment, that is, the unemployment rate consistent with stable inflation), because it can take many years for firms and workers to recognize this favorable development and incorporate it into their wage setting. In the meantime the productivity surprise can stabilize inflation of unit labor costs and prices even at unemployment rates below the previous NAIRU. A 1-percentage-point surprise in trend productivity growth is estimated to lower the NAIRU by 1¼ percentage points. The effect of the increase in productivity growth in holding down the NAIRU cannot last indefinitely, however. If productivity growth is maintained at the current high level, it will cease to be unexpected,

demands for real wage increases will eventually rise to match productivity growth, and the short-term NAIRU will gravitate back to its long-term level.

Some evidence points to an upward drift of real wage expectations—although the jury is still out. Private sector wages, as measured by the employment cost index, have increased 1½ percentage points faster than expected inflation over the past four quarters (as measured by the University of Michigan Survey of Consumers). This is the largest gain in expected real wages in more than 15 years. Even so, this growth in expected real wages remains well below recent productivity increases. Nor has real hourly compensation (deflated by the price of output) grown as fast as productivity. As a result, the labor share of GDP has continued to erode and is now about 1 percentage point below its 40-year average.

As the slow process of adjustment by wage setters to a higher level of productivity growth proceeds, the NAIRU—currently estimated to be in a range centered around 4¼ percent—is expected to edge up gradually to 5.1 percent by 2007. This upward drift closely mirrors the projected path for the unemployment rate. As a result, the Administration expects price inflation to flatten out at levels barely above current rates: 2.1 percent for the GDP price index and 2.7 percent for the CPI.

Inflation Measurement and the Federal Surplus

The wedge between the CPI and the GDP measures of inflation has an important effect on Federal budget projections. A larger wedge reduces the Federal budget surplus because cost-of-living adjustments for Social Security and other indexed programs increase with the CPI, whereas Federal revenue increases roughly in line with the slower growing GDP price index. The effect is reinforced by the use of the CPI to index income tax brackets and other features of the tax code. Of the two indexes, the CPI tends to increase faster because it measures the price of a fixed market basket. In contrast, the GDP price index increases less rapidly than the CPI, because it reflects choices of economic agents to shift their purchases away from items with increasing relative prices and toward items with decreasing relative prices. In addition, the GDP price index includes investment goods, particularly computers, whose relative prices have been falling rapidly. Computers, in particular, receive a much larger weight in the GDP price index (1.2 percent) than in the CPI (0.08 percent in November 2000).

Over the past 6 years, the version of the CPI designed to be consistent with current methods (the CPI-U-RS) has increased 0.6 percentage point per year faster than the GDP price index. The projected wedge is in line with this 6-year average, and this is reflected in the Administration's inflation projections.

The Stock Market, Saving, and Consumption Prospects

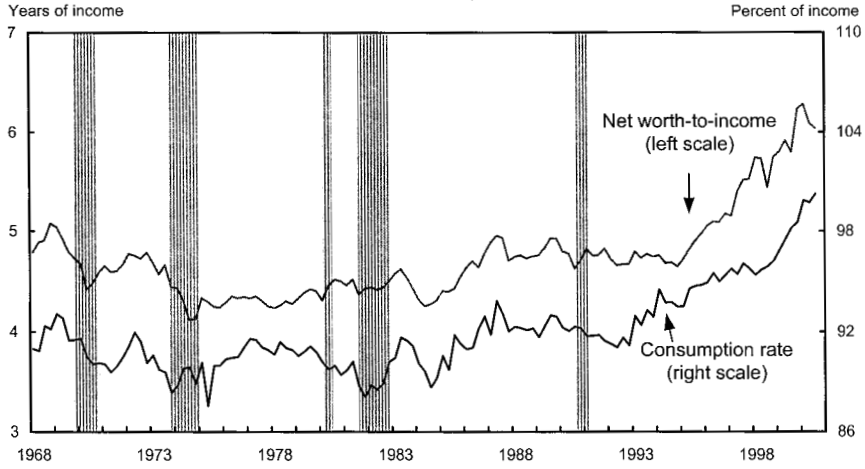
Consumption has been an engine of demand growth during this expansion, growing faster than income in 7 of the past 8 years. By the third quarter of 2000, personal outlays exceeded disposable personal income, and the personal saving rate dropped to –0.2 percent. The rise in the ratio of net worth to income—a consequence of the 5-year surge in stock prices from 1995 to 1999—accounts for the strength of consumption over this period (Chart 2-12). The increase in the consumption-to-income ratio over the past 5 years is roughly consistent with the rule of thumb that attributes an eventual 3½-cent gain in consumption from every dollar increase in stock market wealth. In the near term, current stock market values support the current level of the consumption rate.

The growth rate of consumption, however, is another matter. The stock market declined in the second half of 2000, foreshadowing a period when consumption growth is unlikely to exceed the growth of income. As a result, it appears probable that consumption will decelerate in the year ahead. Because consumption accounts for about two-thirds of GDP, this deceleration, if it comes to pass, will have a restraining effect on aggregate demand.

Over the long term (the next 5 years or so) the saving rate is likely to increase from its current level. But predicting whether the saving rate will rise from a pickup of income or from a slowdown of consumption depends on

After growing rapidly for 5 years, the ratio of net worth to income declined in 2000, suggesting that growth in consumption is likely to slow.

Chart 2-12 Net Worth-to-Income Ratio and Consumption Rate



Note: The personal consumption rate is the ratio of personal outlays to disposable personal income. Shading indicates recessions.
Sources: Department of Commerce (Bureau of Economic Analysis) and Board of Governors of the Federal Reserve System.

the interpretation of the increase in the stock market from 1995 to 1999. Today's stock valuations do not bear the same relation to apparent dividend prospects as in the past. Through about 1996, a stable rule of thumb tied the value of the stock market to a proxy for the apparent present value of dividends. But this relationship broke down after 1996 as the stock market soared ahead of this valuation model.

Assuming that the current value of the stock market is appropriate, either dividend prospects have greatly improved or the so-called equity risk premium (discussed below) has fallen. These two alternative explanations for the rise in stock market values have different implications for the sustainability of consumption growth. If dividend prospects have improved, the low saving rate means that consumers are spending some of their future dividend income today. In this scenario, consumption need not slow; rather, the saving rate will rise if and when dividend income outpaces other components of income.

A substantial but still controversial literature suggests that stocks have been undervalued for most of the past century. As discussed in last year's *Report*, the additional riskiness of stock returns over that of bond returns does not appear to be enough to justify the higher returns on stocks (the equity risk premium), unless investors are extraordinarily risk averse or their investment horizon is very short. According to this line of argument, it follows that the lower initial price (and higher expected return) traditionally demanded by investors has been excessive. As investors have come to regard the equity risk premium as excessive, they have bid up stock prices to current levels.

But if stock prices have risen because of erosion of the equity risk premium, then investors are paying more for the rights to a given stream of dividends—that future stream has not increased. And without any change in the stream of dividends, the path of future consumption cannot differ much from the one that the consumer had planned before the decline in the equity risk premium. Certainly those investors who have received large capital gains are richer and can spend more, but this effect should be partly offset by those who wish to become stockholders and who must now save more to purchase a given quantity of stock.

With the actual prospects for dividends and profits uncertain, one cannot know today which of these explanations for the 1995–99 stock market rise is correct. But some may incorrectly perceive that the rise in stock prices foreshadows higher dividends when it only reflects a decline in the equity risk premium. If the increased stream of dividends fails to materialize, consumption will probably slow relative to income. In any case, the present value of future consumption must equal the present value of future income. It follows that either dividends must grow much faster than other forms of income, or consumption must grow more slowly than nondividend income, or some combination of these two. In either case, the saving rate would be expected to increase.

The Long-Term Projection

Growth of productivity during the past 5 years has been impressive—so impressive that it seems reasonable to wonder whether it can be sustained. As discussed in Chapter 1, productivity accelerated by 1.6 percentage points from 1973–95 to 1995–2000, about 0.4 percentage point of which can be explained by capital deepening and the direct contribution of productivity growth in the computer sector. Although business cycle dynamics often underlie much of the year-to-year variation in productivity growth, this factor appears to have played only a minor role in the post-1995 acceleration. The growth of output from 1991 to 1994 put underutilized labor back to work, and so the traditional cyclical rebound from the 1990–91 recession had largely played itself out by 1995. The Council of Economic Advisers estimates that the level of productivity had risen about 2 percent above its trend by 1995, and that it edged up only slightly further above its trend from 1995 through 2000.

Another 1.2 percentage points of the productivity acceleration can be attributed to faster growth in total factor productivity, the variation in aggregate output that is not explained by changes in inputs. This acceleration represents improvements in technology and means of organization, and Chapter 3 describes evidence that supports this view. However, the evidence is not conclusive, and forecasters are left wondering whether some of the acceleration represents one-time improvements that have shifted productivity to a higher level rather than a permanently higher rate of growth.

Capital deepening is projected to play just as strong a role in the near future as in the recent past. However, it is not prudent to expect the same contribution from total factor productivity as in the recent past, and therefore the Administration projects that structural productivity will grow at about a 2.8 percent annual rate during the next 2 years. Actual productivity may grow somewhat less rapidly, as the economy slows. With the labor force and the other components of aggregate supply expected to grow about 1 percent per year, potential output is projected to grow about 3.8 percent at an annual rate.

Structural productivity is projected to slow a bit further in the later years of the 10-year budget window. It is expected to grow at a 2.3 percent annual rate from 2003 to 2007, and then to trail off to 2.1 percent from 2007 to 2011. These slower growth rates are more in keeping with the pace of productivity growth over the past two decades or so.

In addition to productivity, the factors on the supply side whose growth rates affect GDP growth include population, the labor force participation rate, the employment rate, and the workweek, as shown in Table 2-3. In line with the latest projection from the Bureau of the Census, the working-age population is projected to grow at a 1.1 percent annual rate through 2008.

TABLE 2-3.—*Accounting for Growth in Real GDP, 1960-2008*

[Average annual percent change]

Item	1960 Q2 to 1973 Q4	1973 Q4 to 1990 Q3	1990 Q3 to 2000 Q3	2000 Q3 to 2008 Q4
1) Civilian noninstitutional population aged 16 and over	1.8	1.5	1.0	1.1
2) PLUS: Civilian labor force participation rate [1]	.2	.5	.0	.1
3) EQUALS: Civilian labor force [1]	2.0	2.0	1.0	1.1
4) PLUS: Civilian employment rate [1]	.0	-.1	.2	-.1
5) EQUALS: Civilian employment [1]	2.0	1.9	1.2	1.0
6) PLUS: Nonfarm business employment as a share of civilian employment [1 2]	.1	.1	.4	.3
7) EQUALS: Nonfarm business employment	2.1	2.0	1.7	1.2
8) PLUS: Average weekly hours (nonfarm business)	-.5	-.4	.0	.0
9) EQUALS: Hours of all persons (nonfarm business)	1.6	1.7	1.7	1.2
10) PLUS: Output per hour (productivity, nonfarm business)	2.9	1.4	2.2 [3]2.5	2.3
11) EQUALS: Nonfarm business output	4.6	3.1	3.9 [3]4.2	3.6
12) PLUS: Ratio of real GDP to nonfarm business output [4]	-.3	-.2	-.5 [3] -.6	-.4
13) EQUALS: Real GDP	4.2	2.9	3.4 [3]3.5	[5]3.1

[1] Adjusted for 1994 revision of the Current Population Survey.
[2] Line 6 translates the civilian employment growth rate into the nonfarm business employment growth rate.
[3] Income-side definition.
[4] Line 12 translates nonfarm business output back into output for all sectors (GDP), which includes the output of farms and general government.
[5] GDP growth is projected to fall below its underlying trend for this period (about 3.4 percent) as the employment rate is projected to fall 0.13 percent per year over this period.

Note.—The periods 1960 Q2, 1973 Q4, and 1990 Q3 are business cycle peaks.
Detail may not add to totals because of rounding.

Sources: Council of Economic Advisers, Department of Commerce (Bureau of Economic Analysis), and Department of Labor (Bureau of Labor Statistics).

The labor force participation rate is expected to inch up by less than 0.1 percent per year. The average workweek is projected to remain flat over the entire projection period. In contrast, the employment rate is projected to decline roughly 0.1 percent per year as the unemployment rate edges up to 5.1 percent—the middle of the range judged consistent with long-run inflation stability. From 2008 forward, growth in the working-age population is projected to slow a bit, and the labor force participation rate will begin to fall as the first cohort of the baby boom, those born in 1946, reach the early retirement age of 62. Together, the supply-side factors imply potential real GDP growth of 2.9 percent by the end of the decade.

Long-term interest rates are expected to remain flat over the entire 11-year projection span at a yield of 5.8 percent on 10-year Treasury notes. The 91-day Treasury bill rate is currently above the yield on 10-year notes—an unusual situation that tends to occur when the market expects the economy to slow. Another reason for this inversion of the yield curve is that the ongoing reduction in Federal debt has led investors to expect a diminishing supply of Treasury securities. (See the earlier discussion of the yield curve.)

Consistent with the projected slowdown in real activity, the interest rate on 91-day Treasury bills (which was 6.2 percent at the time the Administration projection was finalized) is projected to decline to 5.3 percent during the next several years. Real long-term interest rates, calculated by subtracting the Administration's expected rate of inflation (2.7 percent as measured by the CPI) from projected nominal rates, are projected to be similar to their historical average.

On the income side, the Administration's projection is based on the long-run stability of the labor share of GDP. At present, the labor share of GDP is the lowest it has been in more than 30 years, and the Administration projects this share to rise, returning partway toward its long-run average. Wages as a share of total compensation are expected to erode, as other labor income, especially employer-provided medical insurance, is expected to grow faster than wages. With the labor share of GDP rising, the capital share is expected to edge down. Within the capital share, a rise in the depreciation share (a consequence of a high-investment economy) is projected to come at the expense of the profit share. Profits before tax, which were 9.4 percent of GDP in the third quarter of 2000, are projected to fall to 7.1 percent by 2011.

The Administration does not believe that an annual growth rate of just over 3 percent is the best the economy can do. Rather, it is hoped that the policies that this Administration has in place will generate even better results than in the projection. For the purpose of prudent budget planning, however, this projection reflects a balance between upside and downside risks.

As of November 2000 the current expansion, having lasted 116 months, was the longest on record, and there is no apparent reason why it cannot continue. Expansions do not die of old age. The current situation of low inflation, high productivity growth, and lean inventories reveals no sign of an end to the expansion, although growth is expected to moderate. The likely prognosis remains similar to that of last year: sustained job creation and continued noninflationary growth.

The Fiscal Terrain in the New Economy

The turnaround in the finances of the Federal Government since 1993 has completely changed the fiscal outlook for decades to come. Whereas just a few years ago the Nation faced deficits as far as the eye could see, the prospect now—if appropriate budget discipline is maintained—is for an extended period of surpluses that would wipe out the entire outstanding public Federal debt. Instead of being a drain on the saving available to finance investment, the Federal Government is acting as an additional source of national saving. Indeed, until very recently the annual rise in public (Federal plus State and local government) saving has more than offset the

annual decline in private saving. A virtuous cycle has been created in which fiscal discipline has promoted strong economic growth, and that strong growth has boosted the surplus.

Challenges lie ahead, however, and it will be important to preserve the fiscal discipline that was so hard won. In particular, the aging of the population will begin to put downward pressure on the surplus just a few years from now, as the number of Social Security and Medicare beneficiaries rises relative to the number of workers paying into these systems. Imprudent, irreversible decisions to dissipate the surplus now would leave little time to recover before the first members of the baby-boom generation begin to retire. Prudent decisions today about what to do with the surpluses currently projected will not only help sustain the current performance of the economy but also address the fiscal policy challenges posed by population aging. Fiscal responsibility requires restraint in cutting taxes and in launching new spending programs, so that the public debt will continue to fall. It also calls for flexibility in our policy priorities, as the composition and hence the needs of our population change.

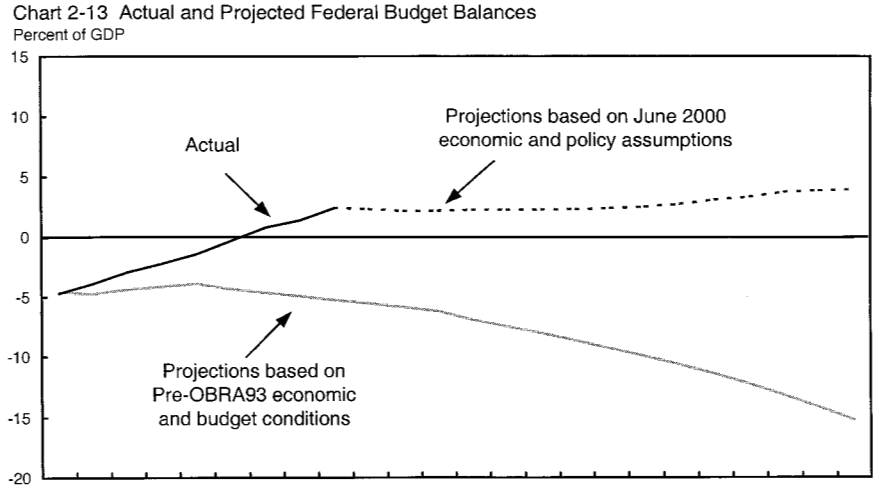
Strong Public Saving: The Payoff from Deficit Reduction

Changes in Federal policy produced large budget deficits in the 1980s, and despite deficit reduction measures taken in the Omnibus Budget and Reconciliation Act of 1990, the country still faced a bleak budget outlook in 1993. But a succession of subsequent actions helped to turn this situation around. The Omnibus Budget and Reconciliation Act of 1993 (OBRA93) reduced the deficit through progressive changes in the income tax structure and effective constraints on spending. Welfare reform legislation changed the Nation's welfare programs in ways that encouraged work and hence reduced government spending needs. The Balanced Budget Act of 1997 dramatically reduced real growth in Medicare expenses through restraint on provider prices and payment systems. The difference between the pre-OBRA93 deficit path and the current situation is stunning. Where Federal deficits were once projected to grow from 4.6 percent of GDP in 1992 to double-digit percentages by 2009, the current outlook is for a long string of surpluses in excess of 2 percent of GDP (Chart 2-13). The national debt, which had reached almost half of GDP in 1992 and was projected to surpass GDP by 2009, has instead begun to decline and, under June 2000 projections, will be eliminated before the middle of the next decade (Chart 2-14).

One very important consequence of this turnaround has been an increase in national saving. The large Federal budget deficits in the 1980s and early 1990s represented public dissaving (that is, negative saving) and thus were a drain on the pool of national saving (the sum of public and private saving)

The budget outlook is now for continued surpluses, not widening deficits, assuming prudent policies are followed.

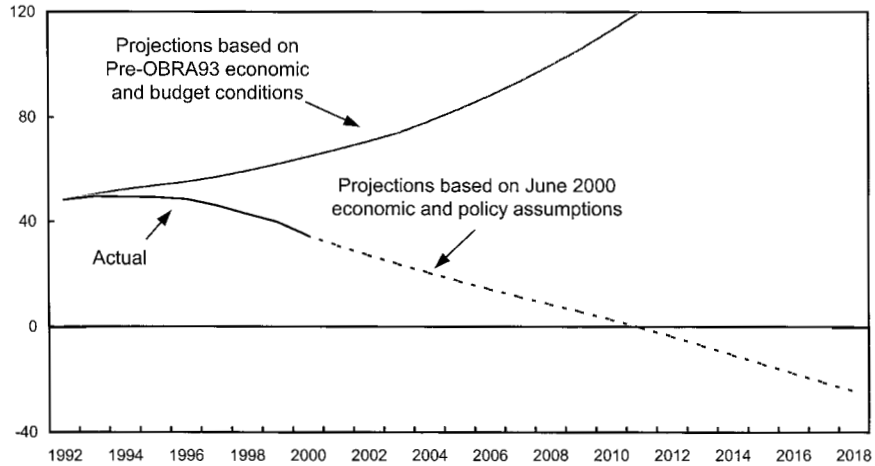
Chart 2-13 Actual and Projected Federal Budget Balances



Note: Data are for fiscal years. Projections are based on policy and economic assumptions from the June 2000 Mid-Session Review updated for actual economic performance through the third quarter of 2000.
Source: Office of Management and Budget.

Instead of soaring as projected in 1993, Federal debt held by the public is now on course to be eliminated around the beginning of the next decade.

Chart 2-14 Actual and Projected Debt Held by the Public



Note: Data are for fiscal years. Projections are based on policy and economic assumptions from the June 2000 Mid-Session Review updated for actual economic performance through the third quarter of 2000.
Source: Office of Management and Budget.

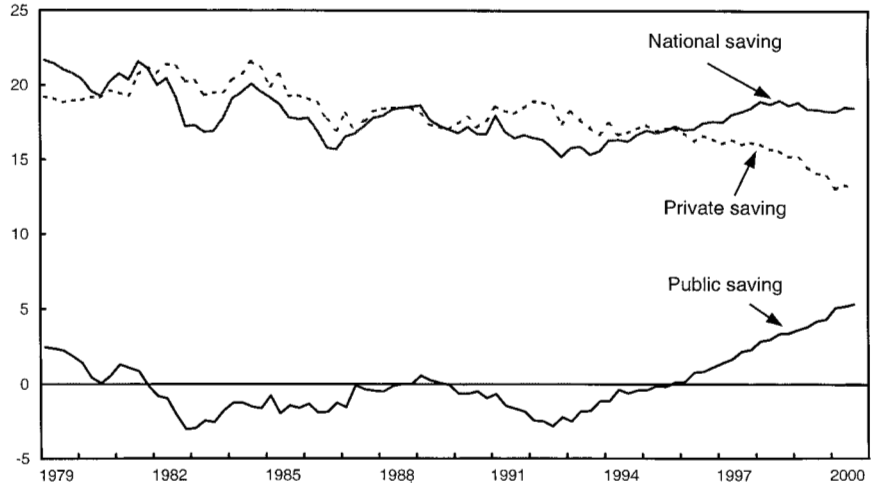
available for investment. The improvement in the Federal budget balance since 1993 has turned the public sector into a net saver. National saving rose as a share of GDP in the 1990s (Chart 2-15). As discussed earlier, private saving has been particularly low recently, and this has restrained national saving. Thus, without the improvement in the Federal budget balance since 1993, national saving would have been lower than it has been, interest rates would have been higher, and investment would have been constrained.

In the 1980s the Federal Reserve sought to keep the economy stable in the face of the fiscal stimulus from large Federal budget deficits, and the result was to push interest rates up. Although fiscal stimulus can be helpful in propelling an economy out of a recession, it is a source of inflationary pressure when the economy is close to full employment. Moreover, a mix of loose fiscal policy and tight monetary policy produces high interest rates, which discourage investment relative to current consumption. This is what happened in the 1980s. In the 1990s, by contrast, an improved Federal budget outlook and fiscal restraint allowed the Fed to pursue an accommodative monetary policy—one that not only promoted economic expansion but also was more conducive to keeping interest rates down and stimulating investment.

Lower interest rates and a declining national debt have important direct consequences for the budget. Federal interest outlays have already fallen from their 1991 high of 3.3 percent of GDP (or nearly 15 percent of total Federal outlays) to less than 2½ percent of GDP most recently (12 percent of

The turnaround in the Federal budget balance since 1993 has raised national saving despite a decline in private saving.

Chart 2-15 Public, Private, and National Saving
Percent of GDP



Source: Department of Commerce (Bureau of Economic Analysis).

outlays), and they are projected to fall still further. The cumulative savings in interest payments on the national debt since 1993 amount to over $330 billion, compared with the pre-OBRA93 baseline. Lower interest rates have also benefited household borrowers. In mid-2000 each percentage point added to interest rates would have added about $860 per year to payments on a $100,000, 30-year mortgage; $70 per year to payments on a $10,000, 4-year car loan; and $140 per year to payments on a $20,000, 10-year student loan. A rough estimate is that interest rates would be 2½ to 3 percentage points higher if pre-OBRA93 economic and budget conditions had prevailed. Under that scenario Federal debt held by the public would be roughly 1½ times as large as GDP by the middle of the next decade, rather than essentially eliminated as under current projections.

What Caused the Surpluses?

The changes in fiscal policy that began in 1993 played an important role in bringing down the budget deficit. In addition to those already mentioned, these changes included budget enforcement rules that Congress imposed on itself requiring that tax cuts or increased spending in one area be offset by deficit-reducing measures elsewhere in the budget. Finally, changes in the economy generated large increases in income that caused Federal tax revenue, particularly individual income tax receipts, to rise faster than GDP despite no further increase in statutory tax rates.

Controlling Expenditure

Spending discipline and a strong economy have combined to push Federal budget outlays to their lowest level as a share of GDP since 1974. Total outlays declined from 22.2 percent of GDP in fiscal 1992 to 18.2 percent in the most recent fiscal year. Only 1 percentage point of this decline represents a retracing of the increase in spending between 1989 and 1992 associated with the 1990–91 recession (Table 2-4). The changes in net interest outlays already mentioned accounted for 0.9 percentage point of the 4.0-percentage-point reduction from 1992 to 2000. Declines in discretionary outlays for national defense accounted for another 1.9 percentage points.

Discretionary outlays are outlays for defense and nondefense programs subject to annual appropriations by the Congress; they account for about a third of total Federal spending. Discretionary spending has been subject to dollar caps since 1990, and these caps were generally effective over the 1990s in limiting the growth of outlays. The rest of the budget besides interest and discretionary spending consists of mandatory outlays for programs such as Social Security, Medicare, and food stamps. Spending on these programs generally depends on the number of beneficiaries and the benefit amounts to which they are entitled by law. Budget enforcement provisions did not put

TABLE 2-4.— *Components of Federal Budget Outlays*
[Percent of GDP; fiscal years]

Category	1989	1992	2000	Change[1]	
				1989 to 1992	1992 to 2000
Total outlays	21.2	22.2	18.2	1.0	-4.0
Discretionary outlays	9.0	8.6	6.3	-.4	-2.3
National defense	5.6	4.9	3.0	-.7	-1.9
Nondefense	3.4	3.7	3.3	.3	-.4
Mandatory outlays	9.0	10.4	9.7	1.4	-.7
Social Security	4.3	4.6	4.1	.3	-.5
Means-tested entitlements	1.6	2.3	(2)	.7	(2)
Other	4.0	4.1	(2)	.1	(2)
Undistributed offsetting receipts	-.8	-.6	(2)	.2	(2)
Net interest	3.1	3.2	2.3	.1	-.9

[1] Percentage points.
[2] Not available.

Note.—Detail may not add to totals because of rounding.

Sources: Office of Management and Budget and Council of Economic Advisers.

specific dollar limits on spending for mandatory programs but did require that any legislation that would increase mandatory spending be offset by an equivalent amount of deficit reduction elsewhere in the budget.

Some Federal Government expenditures, such as unemployment compensation, are sensitive to the business cycle, so that overall spending might be expected to fall as the economy booms. In general, however, the cyclical component of spending is much smaller than that of revenue, which is discussed below. In the past, spending for welfare was also sensitive to the business cycle, but the 1996 welfare reform legislation devolved control of program spending to the States and transformed this component of Federal spending into fixed block grants. Thus any cyclical fluctuations in spending on these programs are now more likely to occur at the State and the local levels than at the Federal level. The combination of low inflation and low unemployment has been especially helpful in keeping government spending down during this economic expansion, because both keep down the levels of expenditure from transfer programs whose benefits are indexed to inflation. Changes to expenditure programs during this Administration have also been a factor. As already noted, the 1996 reform reduced welfare caseloads by encouraging work, and the 1997 Balanced Budget Act made changes to the Medicare payments system that have at least temporarily constrained growth in health care spending.

Rising Incomes and Revenue

Federal Government receipts vary with the business cycle in the opposite direction from expenditures, growing during booms and shrinking in recessions. In fact, receipts, especially income tax revenues, play an important role as an automatic stabilizer of the economy. The progressivity of the income tax system causes income tax receipts to fall faster than income during a recession, cushioning the impact of the recession on after-tax income. Thus some of the improvement in the Federal budget since 1993 reflects a normal cyclical recovery. But growth in receipts, especially personal income tax receipts, has been especially strong in the past few years, when the economy has been expanding rapidly. This has happened even though statutory tax rates have not increased.

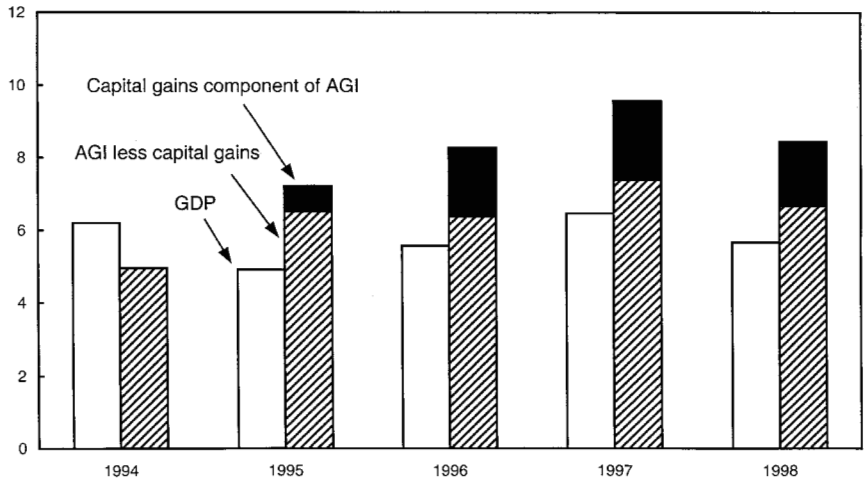
Individual income tax receipts have risen from less than 8 percent of GDP in 1994 to nearly 10 percent most recently. From 1994 to 1998 the growth in that ratio contributed approximately $140 billion in additional cumulative revenue. This faster growth in revenue relative to GDP reflects two main factors: faster growth in taxable income than in income generally, and a rise in receipts due to rising real incomes and the progressive structure of income tax rates.

According to Treasury Department and Congressional Budget Office analyses of the 1994–98 period, nearly 60 percent of the increase in individual income tax liabilities relative to GDP arose from rapid growth in adjusted gross income (AGI) relative to GDP. Of this 60 percent, about 17 percentage points occurred because the taxable components of personal income grew faster than the other income components of GDP. The rest reflects strong growth in sources of AGI that are not included in GDP (because this income is not earned as a result of current production), such as capital gains realizations and retirement benefits. The former have been particularly important (Chart 2-16): growth of capital gains alone accounts for 30 to 40 percent of the additional revenue.

The remaining growth in individual income tax liabilities relative to GDP (about 40 percent) reflects the growth of revenue that results from rising real incomes in a progressive tax system. Although statutory individual income tax rates have not increased since 1993, the average tax rate on non–capital gains AGI has increased. Two factors account for most of this increase. First, for taxpayers in general, income has grown faster than inflation. As a result, more taxpayers have more income taxed in the higher brackets, even though the brackets are indexed for inflation. Second, more taxable income is accruing at the top of the distribution of taxpayers, and hence more is subject to the top tax rates. Tax return data indicate that the share of taxpayers with AGIs above $200,000 (in 1998 dollars) rose over the 1994–98 period, and those taxpayers experienced faster growth in income

Adjusted gross income has grown faster than GDP in recent years, largely as a result of sharp increases in capital gains realizations.

Chart 2-16 Growth in GDP and Adjusted Gross Income (AGI)
Percent



Sources: Department of Commerce (Bureau of Economic Analysis) and Department of the Treasury (Internal Revenue Service and Office of Tax Analysis).

than the average taxpayer. Incomes grew even faster for taxpayers with more than $1 million in AGI.

The share of income taxes collected from taxpayers at the top of the distribution has increased in recent years, but only because their before-tax incomes have increased significantly; their share of total after-tax income has increased as well. Impressive growth in the stock market contributed to the taxable incomes of these households through higher capital gains realizations, greater taxable retirement benefits, and increased compensation in the form of stock options. Labor earnings, which have increased the most for married couples at the top of the income distribution, have also contributed. Capital gains, and the taxes on those gains, had already been surging for a few years before the significant reduction in tax rates on capital gains that took place in 1997—and both capital gains and the taxes on those gains continued to surge after tax rates were cut.

It bears repeating that the additional tax revenue that has contributed to an improved budget outlook has come during a period in which income tax rates have not been increased at all for the overwhelming majority of taxpayers, and no income tax rates have been increased since 1993. The increases in marginal tax rates in OBRA93 affected only the highest-income households (1.2 percent of all taxpayers), but many of these households (and others) got tax relief in 1997 when capital gains tax rates were reduced. Many taxpayers with more modest incomes enjoyed meaningful tax relief over this period from other changes in the tax code. The Earned Income Tax Credit

was expanded several times in the 1990s, most significantly in 1993, and taxes were reduced substantially for lower and middle-income families in 1997 through the child tax credit and new, education-related tax credits, which are phased out at higher income levels. Thus, at any given level of real taxable income, average tax rates have been constant or falling since 1993. For a family of four earning the median income, real income has been rising while the average tax rate has fallen, even after accounting for payroll taxes.

Thus the strong revenue growth that has helped produce growing budget surpluses and rising national saving has been associated with very strong increases in income. Indeed, real after-tax incomes throughout almost all of the income distribution rose strongly over the 1993–99 period. The rising tide has lifted all boats, even after inflation and taxes, and even as government deficits were eliminated. This experience contrasts with that of the 1980s, when higher after-tax private incomes came at the expense of public saving, and increases in income were more skewed toward the top of the income distribution.

The Importance of Maintaining Fiscal Discipline

The improved budget outlook since 1993 reflects real changes in the economy and in policy and represents the achievement of budget discipline. The U.S. economy has reaped the benefits of reduction in the public debt and increased public saving. Nevertheless, the course of the budget and of the economy in the years ahead remains highly uncertain. This makes it especially important to maintain fiscal discipline now, when the economy is strong and the Nation can most afford it—just as a prudent family saves extra income in good times for a future rainy day.

Economic and Policy Uncertainty

As noted in the discussion of the economic outlook, the economic assumptions underlying the budget projections reflect a cautious view of whether recent favorable economic developments will continue. However, a serious economic downturn or an adverse productivity shock would cut into the projected surpluses and slow the paydown of the national debt. Also, the recent very strong growth in revenue relative to GDP is unlikely to be sustained, because taxable income—in particular, the capital gains component—cannot continue to grow faster than GDP indefinitely. (The surplus projections do, in fact, assume a leveling off of individual income tax collections relative to GDP, and a decline in total taxes relative to GDP.) Even when uncertainties are acknowledged, however, it seems most likely that the budget can be kept in surplus if budget policy remains disciplined.

Maintaining that discipline entails an appropriate recognition of current policy priorities while preserving significant amounts of the available

surpluses as a margin of safety and to meet future needs. Budget projections are typically based on current law and practice, but there are always pressures to change current law. For example, analysts have pointed to the possibility that discretionary spending might well rise faster than projected. Also, various tax provisions now scheduled to expire could be extended, and changes could be made to the alternative minimum tax, in ways that would reduce revenue. The pressures to deviate from existing policies do not invalidate the usefulness of projections based on those policies, but they do remind us that part of the challenge of maintaining fiscal discipline will involve addressing these issues.

The Demographic Challenge

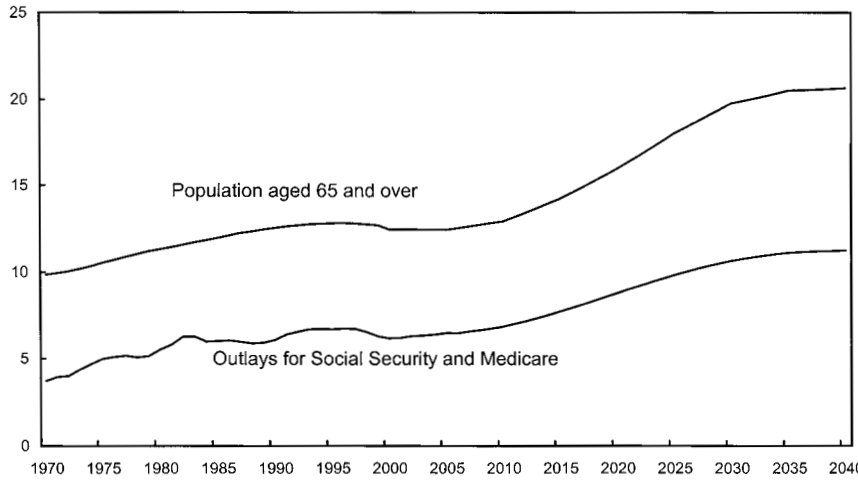
One force affecting future budget surpluses that is both large and inevitable is the aging of the population. Projections indicate that the population aged 65 and over will rise from its current share of about 12½ percent of the total population to nearly 21 percent by 2040 (Chart 2-17). As a result, the share of the population that is at or beyond retirement age relative to that of the working-age population (the elderly dependency ratio) will rise dramatically.

These demographic changes imply changes in the demands that certain government programs place on the Nation's resources and in the role these programs play in the dynamics of the Federal budget. Currently, Federal outlays for health and retirement programs for the elderly are a large share of the budget, but payroll contributions tied to Social Security and Medicare are even larger. Thus the Social Security and Medicare systems are net contributors to the unified budget surplus today. Fairly quickly, however, the surpluses in these systems will start to shrink and eventually turn into deficits if changes are not made. At the same time, retirement and health programs for the elderly will take up an increasing share of Federal outlays. The costs per beneficiary of both Social Security and Medicare are expected to rise in the future, implying an even more dramatic increase in spending on the elderly than population projections alone would suggest. The Medicaid program will also be affected through its coverage of nursing home care: over time, Medicaid is projected to pay an increasing share of the health care bills of the elderly.

Long-term projections indicate that, under current policies, spending on Social Security and Medicare will grow dramatically as a share of GDP, from 6.1 percent in fiscal 2000 to 11.2 percent in 2040 (Chart 2-17) and 12.4 percent by 2075. The Social Security trust fund has been growing since the 1980s and will continue to grow over the next several years. But current projections (based on assumptions of the Social Security trustees) show that Social Security payroll tax revenue will fall short of outlays starting in 2015 and that the trust fund will be depleted in 2037. At that point current

The aging of the population will lead to increased Social Security and Medicare outlays.

Chart 2-17 Population Aged 65 and Over and Outlays for Social Security and Medicare
Percent of total population or GDP



Sources: Department of Commerce (Bureau of the Census), Office of Management and Budget, and Social Security Administration.

receipts will cover only about 70 percent of outlays. In addition to the demographic challenge, Medicare faces pressures associated with projected increases in health care costs. During this Administration the strong economy, along with a slowing in the growth of health costs, have significantly brightened the short-term outlook for Medicare. However, policy changes still appear necessary to maintain its financial soundness in the long run. Outlays for the hospital insurance portion of Medicare are now expected to exceed corresponding tax receipts starting in 2010, and the hospital insurance trust fund is expected to run out in 2025. Finally, the long-term implications of demographic change for national saving are aggravated by the fact that private saving is also likely to decline as the population ages, because older people tend to draw down their private assets during retirement.

The projected erosion of the Social Security surpluses will reduce the unified budget surplus starting fairly soon. Moreover, the gap between benefits and receipts continues to widen beyond the 75-year window used for the long-run projections of the Social Security trustees; hence the pressure on the budget intensifies over time. Although they have not eliminated these long-term pressures, developments in the economy that have produced a long expansion and higher productivity growth have improved the budget outlook over that 75-year period even more dramatically (primarily through the power of compounding) than they have improved the short-term outlook. A projection of the Administration's economic and policy assumptions based on the June 2000 Mid-Session Review of the budget

suggests that the unified budget could remain in surplus throughout the next 75 years (Chart 2-18).

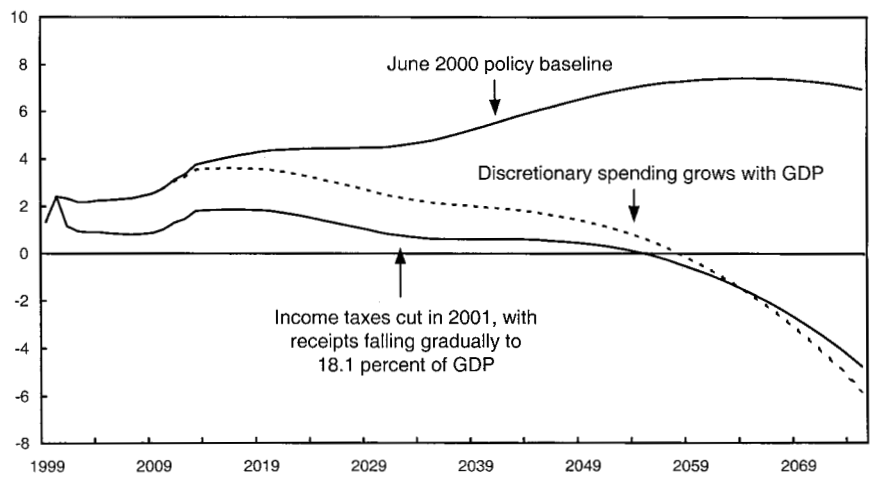
Of course, 75-year projections are fraught with uncertainty, because over this span it is easy for a particular set of economic and policy assumptions to be proved wrong. For example, starting with the baseline projection in Chart 2-18, slower-than-expected growth in tax revenue—or a tax cut—that reduced receipts as a share of GDP to their 1994 level of 18.1 percent would hasten the return of deficits. A similar outcome would occur if discretionary spending were to rise proportionally with GDP instead of merely rising with inflation, as the projections assume. Obviously, various combinations of tax cuts and spending increases could produce even more adverse changes. Other assumptions could also prove inaccurate. More rapid productivity growth or a larger-than-expected increase in immigration would improve the long-term surplus outlook. Slower productivity growth or continuing rapid growth in health care costs would significantly worsen it. So, too, could a lower fertility rate or longer life expectancy than is assumed by the Social Security trustees.

Addressing the Challenge

Current economic and demographic projections indicate that, with the benefits and tax rates specified under current law, Social Security and Medicare will not pay for themselves over the long run. Some combination of modified benefits, increased payroll taxes, or alternative financing will

Decisions to increase spending or cut taxes could undermine the outlook for continued surpluses.

Chart 2-18 Long-Term Budget Balance Projections Under Different Policy Assumptions



Note: Data are for fiscal years. Projections are based on policy and economic assumptions from the June 2000 Mid-Session Review updated for actual economic performance through the third quarter of 2000.
Source: Office of Management and Budget.

be necessary to resolve the imbalance. A growing economy helps with this resolution, even if needed changes are postponed to the future. But starting to address the challenge now would reduce uncertainty about what, if any, adjustments future generations will face and would give today's workers greater notice so that they can better plan for their retirement.

A strong economy with adequate saving is critical. The virtuous cycle of fiscal discipline and changes in the economy that have boosted productivity and growth has already paid off: with the vastly improved long-run budget outlook, national saving has increased in a way that contributes to preserving prosperity over the long run and meeting the demographic challenge. But even in a New Economy policymakers must confront scarcity and trade-offs. New tax cuts or spending programs should be well thought out, target high-priority public needs, and include an assessment of overall benefits, costs, and risks. The most effective fiscal strategy to prepare for the future is to pursue policies that boost the productive capacity of the economy. These include encouraging productive public investments in infrastructure and human capital—as well as maintaining fiscal discipline, to encourage public saving and private investment.

Productive public investment complements private investment in raising the economy's capacity to produce goods and services. For example, decades of economic growth have overwhelmed many of the Nation's sanitation, public transportation, and road systems whose original designs date back 50 to 100 years. Investments in modernizing and expanding this infrastructure can improve health outcomes, reduce pollution, ease congestion, and enhance job prospects. As discussed in Chapter 5, education is especially important for preparing Americans to prosper in the New Economy, yet an estimated $127 billion in additional repairs is needed to rebuild the Nation's schools. Clean, safe schools are better learning environments that will pay dividends well into the middle of this century.

To the extent such investments in infrastructure increase the Nation's capital stock and productive capacity, they contribute to stronger economic growth and raise real incomes. This in turn increases future revenue and reduces the payout of government transfers. But such investment must be undertaken wisely. Poorly thought out investments could prove counterproductive by crowding out more-productive private investment.

Investments in human capital provide another means of maintaining prosperity and preparing for the future. Increased education and training can enhance workers' productivity in much the same way that increases in the amount and quality of physical capital do. State and local governments are mainly responsible for primary and secondary education, but as described in Chapter 5, the Federal Government's more limited role can be crucial as well. Federal programs are also important for postsecondary education and lifetime learning. In recent years the Federal student loan program has been

especially successful at making college more affordable, helped along by the fiscal discipline that has allowed an easing of interest rates; at the same time the Administration's efforts to improve loan repayment have saved taxpayers more than $14 billion. The Administration's Lifetime Learning tax credit allows some educational expenses to be deducted from income, further improving the affordability of college. Although such tax credits reduce current government revenue, the investment in human capital that they stimulate adds significantly to future private income and income tax receipts. In 1998 the mean earnings of high-school graduates aged 18 or over amounted to $22,895, whereas persons with a bachelor's degree had mean earnings of $40,478. This difference in income generated an estimated tax liability for the bachelor's degree holder that was 2.4 times as large as that of the high-school graduate, suggesting that funding education can be good for the Nation's fiscal integrity as well as for personal incomes.

Finally, preserving some share of future budget surpluses will allow public saving to continue to contribute to national saving, increase the amount of capital available in the economy, and support continued economic growth. It will also allow a continued paying down of the public debt, perpetuating the virtuous cycle that has been so good for the New Economy. Debt reduction also helps shrink the demands on the Federal budget as interest payments are reduced and eventually eliminated. Interest savings alone could pay for a large share of the added expenses associated with demographic change and provide a margin of safety against unforeseen adverse economic events.

One way to emphasize the importance of not spending the surplus is to create a "lockbox" for the Social Security and Medicare trust fund surpluses. Funds placed in a lockbox could not be used to pay for other programs, but instead would have to be saved. Although the precise amount that the government should save is not necessarily equal to that which would accumulate in the lockbox, such a provision might be an effective way to ensure that significant saving does occur.

Fiscal prudence that preserves the current surpluses, combined with appropriate public investment, would generate more national saving and investment than a policy of large tax cuts or spending increases. Greater saving and investment, in turn, would produce a stronger and more productive economy in the future. Besides directly improving the outlook for Social Security and Medicare under their current structure, such an outcome would provide more resources to deal with any changes to those programs in the future.

Conclusion

U.S. economic performance in 2000 continued to illustrate the benefits that have accrued from a combination of sound policies and a blossoming of technological opportunities. Strong growth, accelerating productivity, low unemployment, and low inflation continue to characterize the longest economic expansion on record. The fiscal stance of the Federal Government has been completely turned around, from one of spiraling deficits to one in which it is reasonable to contemplate the elimination of the public debt. The critical task now is to maintain the fiscal discipline that has been achieved and to focus on ensuring that adequate resources are available for the coming demographic challenge.