CHAPTER 1

Restoring Prosperity

Over the past two decades, the Nation has witnessed an impressive increase in prosperity. Over 35 million jobs were created, and real income nearly doubled, producing an unprecedented standard of living. This economic success also serves as an example of what an open, free market economy—one that relies on the private sector as the engine of growth—can achieve.

A hallmark of the economy has been its ability to weather adverse economic developments in a flexible and resilient manner. This is not an accident but rather a characteristic of an economic system that relies on market forces to determine adjustments in economic activity. But such an economy, even in the presence of sound fiscal and monetary policies, is not immune to business cycles. Economic activity in 2001 is an example of how a series of adverse developments can cause setbacks on the road to greater prosperity. The last year also highlighted the value of continued efforts to strengthen the policy environment in a way that allows the private sector both to recover more quickly and flourish more strongly in the future.

Macroeconomic Performance in 2001: Softer Economy, Harder Choices

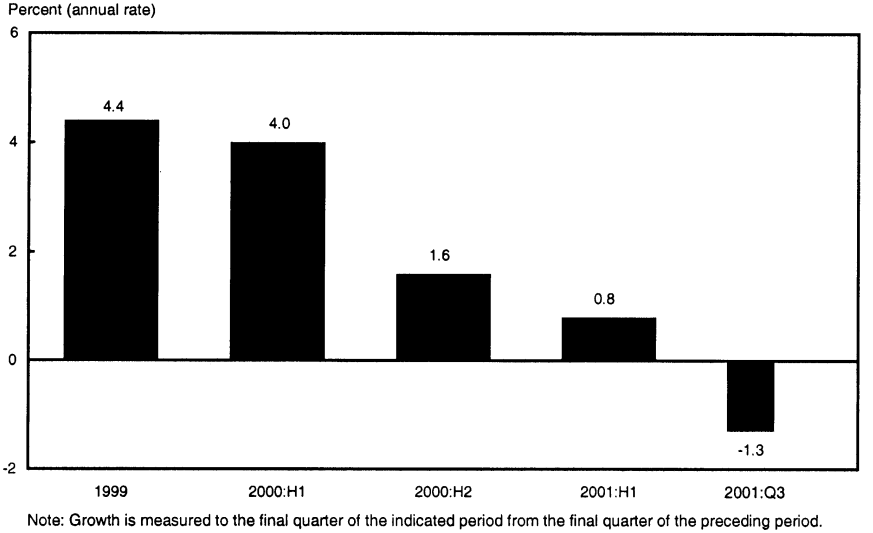
U.S. economic growth continued to decelerate during 2001. It was apparent early in the year that policymakers would face considerable challenges as the rate of growth slowed from the rapid rates of past years. The momentum placing downward pressure on economic activity appeared to subside by midsummer, however, by which time growth of real gross domestic product (GDP) had come to a virtual standstill. Economic conditions showed some tentative signs of firming, and growth prospects were brightening. All that changed on September 11. The President, Congress, and other policymakers responded decisively to the damage and disruptions caused by the terrorist attacks, while continuing to work to strengthen the long-run economic fundamentals.

Aggregate Demand During the First Three Quarters

The deceleration of real GDP in 2001 continued a slowdown in economic activity that had begun the previous year (Chart 1-1). Real GDP growth over the first three quarters remained barely positive, at 0.1 percent on an annualized basis; however, the economy steadily weakened through this period,

ending with a 1.3 percent annualized contraction in real GDP in the third quarter. Although several key components of aggregate demand rose moderately, overall growth was dragged down by unusually weak investment spending. Preliminary evidence indicates a further decline in the fourth quarter due to weaker economic conditions—especially during the early months of the quarter—in the aftermath of the September terrorist attacks. This assessment, however, may be subject to large revision because of the limitations of existing statistical sources (Box 1-1).

Chart 1-1 **Real GDP Growth**
The economy has been decelerating since mid-2000.



Note: Growth is measured to the final quarter of the indicated period from the final quarter of the preceding period. H1 and H2 denote the first half and second half of the year.

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

Box 1-1. Better Tools: Improving the Accuracy and Timeliness of Economic Statistics

Economic statistics are valuable tools that economists, policymakers, business leaders, and individual investors use to increase our understanding of the economy. The Bureau of Economic Analysis, the Bureau of Labor Statistics, the Bureau of the Census, the Federal Reserve, and other departments and agencies combine thousands of bits of information from market transactions, consumer and business surveys, and numerous other sources to produce scores of economic estimates every month.

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Box 1-1.—*continued*

The ability of government, consumers, workers, and businesses to make appropriate decisions about work, investments, taxes, and a host of other important issues depends critically on the relevance, accuracy, and timeliness of economic statistics. At turning points in the economy, such as those marking the beginning or the end of an economic slowdown, the accuracy and timeliness of data are especially critical, because at these times fiscal and monetary policy can be most useful in steering the economy.

Recent economic events have emphasized the importance of timely economic information. Thus one area deserving considerable attention is the need for readily accessible real-time data. Investment in sources of these data could yield handsome dividends, especially at key junctures in the business cycle.

Moreover, the quality of existing statistics is far from perfect and could be enhanced with further investment. Even real GDP, generally thought of as a reliable measure of overall activity in the U.S. economy, is susceptible to considerable revisions. For example, in the third quarter of 2000, real GDP was first estimated to have grown 2.7 percent at an annual rate—a subpar but respectable growth rate. That rate was then revised downward to 2.4 percent and then again to 2.2 percent. Seven months later it was further revised downward to 1.3 percent, providing evidence that the economy had begun to slow dramatically at that time. A key component of the revision came from revised data on gross private domestic investment, initially estimated to have risen 3.2 percent but later revised to show a contraction of 2.8 percent. Such revisions lead to uncertainty for both government and private decisionmakers, which can cause costly delays. Although most revisions are not that large, the average quarterly revision of real GDP growth over 1978-98 was about 1.4 percentage points in either direction, while real GDP growth averaged 2.9 percent.

In addition to these problems with large revisions, the national accounts statistics are beset by some growing inconsistencies. Gross domestic product, the sum of final expenditures for goods and services produced by the U.S. economy, and gross domestic income, the sum of the costs incurred and income received in the production of those goods and services, are theoretically equal. Because of statistical discrepancies, there has always been some divergence between these two reported numbers. However, this discrepancy has been growing lately, raising concerns among policy experts and business leaders as well as among the producers of the data themselves. These differing estimates can lead to different readings of such critical indicators as output and productivity growth.

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Box 1-1.—*continued*

A number of steps can be taken to improve the accuracy and timeliness of economic statistics. In particular, targeted improvements to the source data for the national accounts would go a long way toward illuminating the causes of the growing statistical discrepancy. Another cost-effective measure would be to ease the current restrictions on the sharing of confidential statistical data among Federal statistical agencies. Such data sharing, which would be done solely for statistical purposes, is currently hindered by lack of a uniform confidentiality policy. Confidentiality is of key importance to all agencies and to the individuals and businesses who participate in Federal surveys, but a uniform confidentiality policy would allow agencies such as the Bureau of Economic Analysis, the Bureau of Labor Statistics, and the Bureau of the Census to cost-effectively compare and improve the quality of their published statistics while preserving confidentiality. In the past, attempts have been made to pass legislation, together with a conforming bill to modify the Internal Revenue Code, allowing such data sharing under carefully crafted agreements between or among statistical agencies. In 1999 such legislation passed the House but stalled in the Senate. The Administration will continue to seek passage of data sharing legislation to improve the quality and effectiveness of Federal statistical programs.

In addition to data sharing legislation, the Administration is proposing new and continued funding for the development of better and more timely measures to reflect recent changes in the economy. For example, these resources would allow for tracking the effects of the growth in e-commerce, software, and other key services, and for developing better estimates of employee compensation. The latter are increasingly important given the expansion in the use of stock options as a form of executive compensation, as well as for tracking the creation and dissolution of businesses, given the importance of business turnover in a constantly evolving economy. Improved quality-adjusted price indexes for high-technology products are also an important area for future research. The direct contribution of these products accounted for nearly a third of the 3.8 percent average annual growth rate in real GDP during 1995-2000, but current estimating techniques fail to capture productivity growth in high technology-using service industries. This shortcoming may lead to underestimates of annual productivity growth of 0.2 to 0.4 percentage point or more. As the economy continues to change and grow, the need persists to create and develop such new measures, to provide decisionmakers with better tools with which to track the economy as accurately as possible.

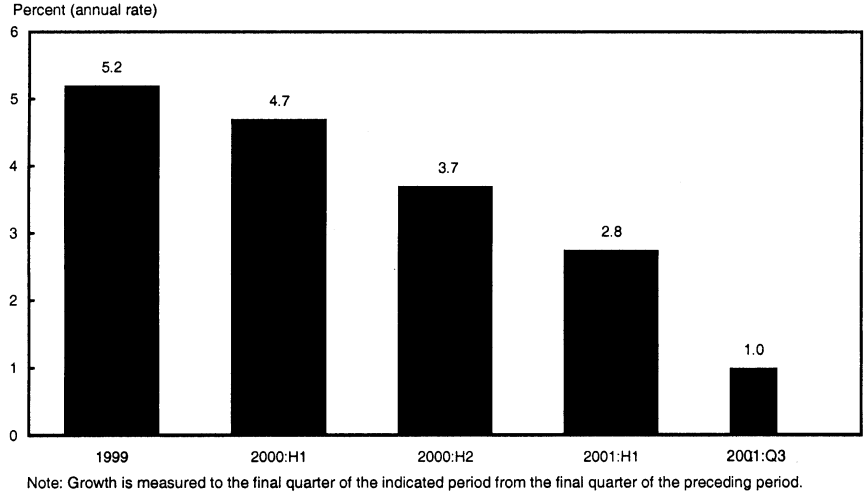
Consumption

Personal consumption expenditures grew 2.8 percent at an annual rate in the first half of 2001, followed by a 1.0 percent increase in the third quarter (Chart 1-2). Consumption growth in the first three quarters was 2.2 percent—notably slower than the 4.8 percent rate of the previous 3 years.

Spending for all types of consumption slowed in 2001. Growth in spending on nondurable goods declined to a 1.1 percent annual rate through the third quarter, from a 4.5 percent rate in 1998-2000. The sharp decline in nondurable consumption is somewhat surprising, because swings in this category of consumption tend to be more muted than those in overall consumption. Consumption of food and of clothing and shoes decelerated sharply, in a significant deviation from recent trends. The Bureau of Economic Analysis estimates that food consumption edged down 0.4 percent in the first three quarters of 2001, after averaging 3.8 percent growth in the previous 3 years; clothing and shoes consumption rose 1.9 percent after averaging nearly 7 percent growth in 1998-2000. Energy consumption continued to be weak, reflecting higher energy prices early in the year.

Growth in durable goods spending also subsided, but remained relatively strong, in the first three quarters of 2001: purchases rose 6.1 percent at an annual rate compared with 9.7 percent on average in 1998-2000. This recent strength has been atypical because, during most economic downturns,

Chart 1-2 **Real Consumption Growth**
Consumer spending has been slowing since mid-2000, but remained positive in 2001 despite the contraction in overall economic activity.



Note: Growth is measured to the final quarter of the indicated period from the final quarter of the preceding period. H1 and H2 denote the first half and second half of the year.

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

durable goods spending tends to slow more sharply than nondurable goods spending. Part of the explanation is that two key durable goods industries have proved more resilient to the slowdown than in the past. Furniture and household equipment grew robustly, as the housing sector stayed healthy in 2001. And although growth in sales of motor vehicles and parts was anemic early in the year, these sales remained remarkably high for a period of such marked slowing in overall activity.

Finally, consumption of services—the least cyclical component of consumption—grew at a 1.9 percent annual rate in the first three quarters of 2001, down from a 4.0 percent rate over 1998-2000. Medical care spending, however, continued its strong upward trend.

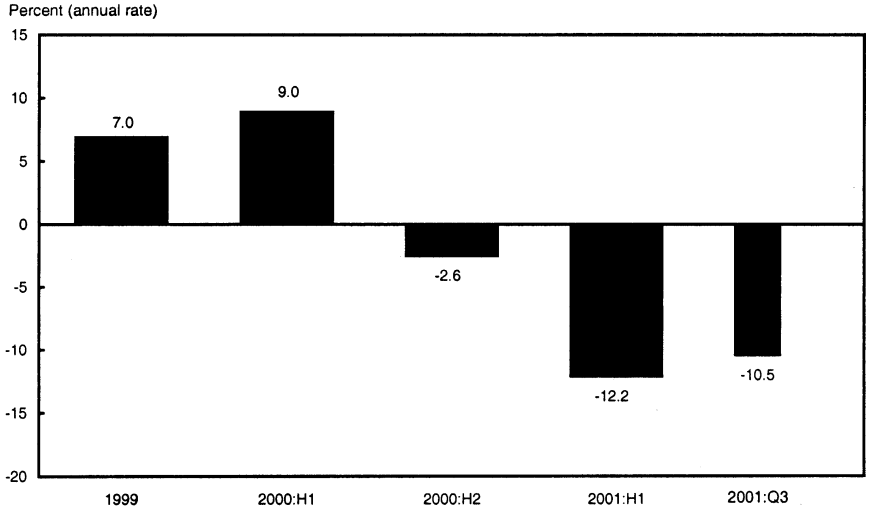
These patterns in consumption spending—which constitutes two-thirds of GDP—reflected several key economic crosscurrents. On the downside, the decline in equity markets and the deterioration in labor markets (discussed below) reduced wealth and consumer confidence. On the upside, housing prices continued to climb, rising at roughly an 8 percent annual rate. In addition, lower mortgage interest rates sparked the strongest wave of home refinancing ever, transforming housing equity into more liquid forms of wealth. Refinancing is estimated to have increased household liquidity (from increased cash flow and cashouts) by about $80 billion during the year. In addition, real disposable personal income, aided somewhat by provisions of the President's tax cut—reduced withholding and the payment of rebates for the new 10 percent personal income tax bracket—rose at a solid 4.5 percent annual rate during the first three quarters.

Investment Spending

Real gross private domestic investment fell at a double-digit annual rate (roughly 12 percent) in each of the first two quarters of 2001—the steepest decline in investment spending in a decade (Chart 1-3). The year began with a sizable inventory liquidation, which accounted for most of the decline in gross private domestic investment in the first quarter and subtracted 2.6 percentage points from the growth rate of real GDP. Inventory reduction remained a drag on GDP growth in subsequent quarters, with manufacturing industries shedding inventories at a faster pace than wholesalers and retailers. By the end of the third quarter, the inventory-to-sales ratio had returned to a level close to the average over the previous 3 years, indicating that the downward phase of the inventory cycle may soon be ending.

Nonresidential business fixed investment contracted sharply in 2001, in stark contrast to the investment boom from 1995 to early 2000. In the first quarter this category of investment fell at only a 0.2 percent annual rate—the first decline in 9 years. In the second quarter, however, it fell at a 14.6 percent annual rate, with declines in investment in structures and in equipment

Chart 1-3 **Growth in Real Gross Private Domestic Investment**
The pronounced deceleration in investment spending since mid-2000 led the economic slowdown.



Note: Growth is measured to the final quarter of the indicated period from the final quarter of the preceding period. H1 and H2 denote the first half and second half of the year.

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

and software of 12.3 percent and 15.4 percent, respectively. Investment in information processing equipment and software alone fell at a 19.5 percent rate in the second quarter. The widespread decline in business fixed investment continued in the third quarter with an 8.5 percent contraction, combining a 7.6 percent drop in structures investment with an 8.8 percent decline in equipment and software spending. Capital spending on computers and peripherals during the second and third quarters was hit particularly hard, plunging at a 28.6 percent rate.

The housing sector was a bright spot in 2001. Lower mortgage rates and rising real income helped to support rising residential investment in each of the first three quarters; growth for the period averaged 5.6 percent at an annual rate. Investment in single-family structures rose 6.0 percent, after declining during most of 2000. Investment spending on multifamily structures rose briskly at a 15.3 percent rate. Investment in residential building improvements increased at a 3.2 percent rate.

Government Spending

Government spending—Federal, State, and local levels combined—added to economic activity over the first three quarters of the year. Federal Government spending increased at a 2.9 percent annual rate during this

period. In contrast, Federal spending in 2000 fell by 1.4 percent, and over 1995-2000 it grew at only a 0.1 percent average rate. Last year's increase was driven by national defense expenditure, which rose 4.4 percent through the first three quarters. Defense spending on research and development as well as personnel support accounted for most of the increase. Nondefense expenditure grew only 0.2 percent in the first three quarters of 2001.

State and local government spending increased 3.8 percent at an annual rate in the first three quarters. State and local spending has increased steadily over the past decade, averaging 2.8 percent annual growth from 1990 to 2000 and 3.2 percent from 1995 to 2000. Investment by State and local governments rose much faster (4.6 percent a year on average) than their consumption (2.8 percent) during 1995-2000. However, consumption expenditure accounts for 80 percent of State and local spending.

Net Exports

Net exports exerted a smaller drag on economic activity in 2001 than in 2000. Both imports and exports fell significantly during the year, but the drop in imports was larger. Real exports of goods and services, measured at an annual rate, declined $95.3 billion through the third quarter, mostly because of a decline in exports of capital goods—especially high-technology goods—as a result of the global economic slowdown (discussed further below). Over the same period, real imports declined $105.3 billion. Real imports of services suffered one of the largest declines on record in the third quarter, largely because international travel was disrupted in September.

Overall, net exports contributed 0.1 percentage point to real GDP growth in the first three quarters of the year. By comparison, in 2000 net exports depressed real GDP growth by 0.8 percentage point.

Preliminary Evidence on Aggregate Demand in the Fourth Quarter

The terrorist attacks of September 11 changed the direction of the macroeconomy. Before the attacks, the economy had been showing tentative signs of stabilizing after its long deceleration, and many forecasters expected real GDP growth to accelerate in the third and fourth quarters of 2001. Immediately after the attacks, however, the economy turned down because of the direct effect of the assault on the Nation's economic and financial infrastructure and because of the indirect, but more significant, effect on consumer and business confidence. The drop was sufficient to turn the sluggish period of economic activity into a recession.

The disruptions to lower Manhattan's telecommunications and trading facilities temporarily interfered with the normal operations of key components

of the Nation's financial center and caused dislocations in the Nation's payment system, which processes trillions of dollars in transactions on a typical business day. Equity markets shut down temporarily, and when they reopened a week later, the value of shares fell by $500 billion. Money markets and foreign exchange markets continued to function during this period but faced considerable difficulties.

In the New York City area, the closure of much of lower Manhattan weakened economic activity, especially employment, and had serious consequences for local businesses that depend on sales from that part of the city. The local tourism and business travel industries also sagged. The attack on the Pentagon had less of a direct effect on the private sector because of the limited destruction of private infrastructure. Nonetheless, economic activity in the Washington, D.C., area slumped, primarily because of the need to temporarily close Reagan National Airport for national security reasons. Local businesses, such as hotels and restaurants, that provide ancillary services for travelers were hit particularly hard. As in the New York City area, small businesses were especially affected, because many operate from only one business location, whereas large businesses with operations throughout the country are often better able to weather local dislocations.

The terrorist attacks also had a significant macroeconomic effect. The Nation's airspace was shut down for several days after the attacks, halting passenger travel and deliveries of airfreight. In addition, cross-border ground shipping was delayed because of increased security measures. Businesses that rely on highly synchronized deliveries of inputs were forced to slow down their assembly lines, and in some cases close plants, creating disruptions up and down the stream of production.

Beyond the initial impacts, the attacks continued to have a significant negative effect on the economy as uncertainty about the future led to a steep decline in consumer and business spending. Consumers retrenched as they mourned the loss of life and reevaluated the risks inherent in even the most mundane activities, such as shopping at malls and traveling by air. Meanwhile businesses adopted a more pessimistic outlook about the prospects for a speedy recovery. The underlying psychology was affected again in October, by the discovery of anthrax spores delivered through the mail distribution system, although the direct macroeconomic effects of this attack have been fairly limited.

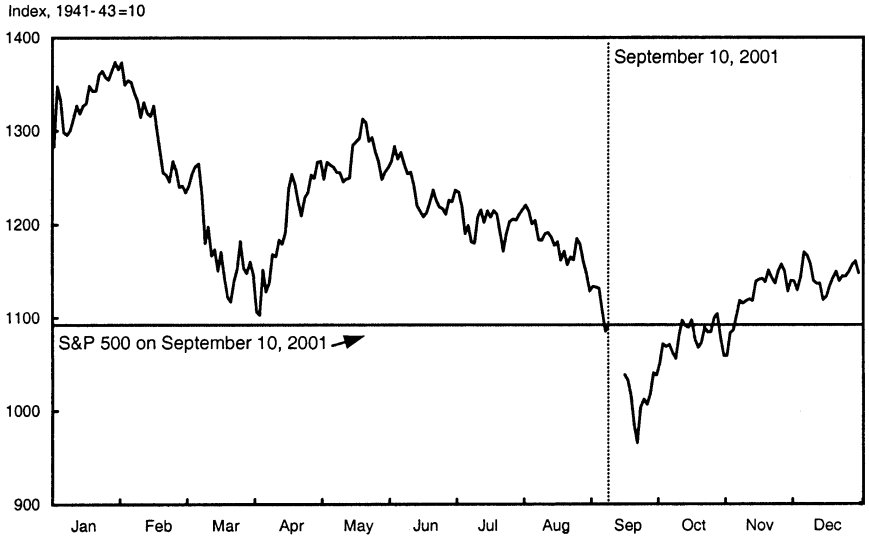
Preliminary evidence indicates that economic activity at the beginning of the fourth quarter of 2001 suffered a pronounced decline. The industrial sector contracted at a faster pace in October than earlier in the year, and job losses mounted. By November, however, some tentative signs had emerged that business conditions were deteriorating at a slower pace. For example, the decline in industrial production was milder, and nondefense capital goods

spending appeared to have bottomed out, with new orders recovering from the trough in September. Construction spending also performed well, as weather in the fall was unseasonably warm. By December the manufacturing sector, which had been particularly hard hit in 2001, witnessed increases in the length of the average workweek and in factory overtime. Meanwhile the Purchasing Managers' Index (PMI) of the Institute for Supply Management (formerly the National Association of Purchasing Management) rebounded sharply, with a jump to 48.2 in December from 39.8 in October. The production component of the PMI rose to 50.6 from 40.9 in October; the new orders index surged to end the year at 54.9. Moreover, industrial production in December was nearly unchanged after several months of sizable declines.

Despite the initial dropoff in consumer confidence after the terrorist attacks, consumer spending bounced back within the quarter from its September plunge. Real personal consumption expenditures on durable goods, nondurable goods, and services rose considerably in October and November. Purchases of automobiles and light trucks contributed substantially to the rebound, as consumers responded favorably to the incentive programs offered by manufacturers and dealers, such as zero-percent financing and rebates. Automobile and light truck sales surged to a record 21 million units at an annual rate in October, then moderated to something closer to the average 17-million-unit selling pace of the first three quarters. Even though nominal retail sales of goods excluding motor vehicles edged down in November and December, falling prices for energy and consumer goods suggest that real consumption spending continued to rise.

The performance of financial markets confirmed the view that economic conditions were firming in the fourth quarter. Stock market prices rebounded from a sharp decline after September 11 (Chart 1-4). The Standard & Poor's 500 Composite Stock Index had returned to its pre-September 11 level by mid-October, and it ended the year near 1150, up 19 percent from its post-September 11 low. Other market indexes such as the Dow Jones Industrial Average and the Wilshire 5000 rose in a similar pattern. In addition, credit markets were active in providing funds to businesses. Low interest rates made bond financing attractive, especially for investment grade issuers. Lending by commercial banks for real estate and consumer purchases was rising and generally higher in the fourth quarter than earlier in the year. Commercial and industrial lending, in contrast, was lower in the quarter than earlier. According to the Federal Reserve, banks tightened credit standards and terms on commercial and industrial loans by late summer and early autumn. The tightening of non-price-related loan terms was especially apparent for small firms.

Chart 1-4 **Standard & Poor's 500 Composite Stock Index**
Stock prices generally declined in 2001, with a precipitous drop after the terrorist attacks on September 11. Stock prices returned to pre-attack levels by mid-October.



Note: The New York Stock Exchange was closed on September 11 and reopened on September 17.

Source: Standard & Poor's.

Labor Markets

Private nonfarm payrolls dropped by roughly 1.5 million in 2001, reflecting the weak economy. The bulk of the decline occurred in manufacturing, especially in durable goods-producing industries, where over 1 million jobs were shed after December 2000. In addition, employment in help supply services, which provide labor to other industries, fell by about 550,000 jobs. Job losses in manufacturing and help supply services were offset in part by increases in some other service industries during the year. The health services industry logged strong increases in 2001. In recent months, service employment has been hurt by cutbacks in business travel and tourism, which have adversely affected employment in air transportation and travel-related services such as travel agencies, hotels, and amusements and entertainment.

Labor markets became substantially less tight in 2001. The total unemployment rate rose from 4.0 percent in December 2000 to 5.8 percent a year later, still below the average rate for the past 20 years of 6.2 percent. The average duration of unemployment rose by 2 weeks during 2001, ending the year at 14.5 weeks. More than half of this increase occurred in the last 3 months of 2001.

Every region saw its unemployment rate rise, as the slowdown in economic activity was national in scope. The Mountain States experienced the largest increase, 1.8 percentage points. The smallest increase occurred in the West North Central States; this region had one of the lowest unemployment rates in the country at the end of 2000.

The labor force participation rate (the share of the working-age population either working or seeking work) fell 0.4 percentage point over the year. Labor force participation has hovered near 67 percent since 1997, after rising from near 60 percent in 1970. The average number of discouraged and displaced workers has risen nearly 30 percent since the beginning of 2001 but remains below the average for the past 5 years.

Inflation

Inflation remained low and stable in 2001. The consumer price index (CPI) rose only 1.6 percent during the 12 months ending in December. Consumer energy prices for fuel oil, electricity, natural gas, and gasoline tumbled 13.0 percent, reflecting a collapse in crude oil and in wellhead natural gas prices. In contrast, energy price inflation a year ago was 14.2 percent. Food prices rose 2.8 percent, the same rate as a year ago. The CPI excluding the volatile food and energy components—often referred to as the core CPI—posted another year of stable inflation. Core inflation was 2.7 percent, up somewhat from its 2.3 percent average rate over the past 4 years.

The absence of price pressures in the production pipeline helped hold consumer price increases in check. The producer price index (PPI) for finished goods fell 1.8 percent in the 12 months ending in December. At the start of the year, producer prices had been rising rapidly, largely reflecting rising energy prices; but PPI inflation fell all year long as energy prices slumped and economic activity weakened. Excluding the volatile energy and food components, the PPI for finished goods rose 0.7 percent during 2001. PPI inflation for intermediate and crude materials declined throughout the year, sometimes experiencing periods of steep price declines.

Productivity and Employment Costs

Despite the economic slowdown, nonfarm business labor productivity grew at a 1.2 percent annual rate during the first three quarters of the year. Although below the 2.4 percent average rate recorded during 1995-2000, productivity growth has been remarkably strong for this stage of the business cycle. During previous postwar recessions, productivity growth averaged 0.8 percent.

Manufacturing productivity, in contrast, edged down at a 0.2 percent annual rate for the first three quarters of the year, compared with a 0.6 percent

decline in the 1990-91 recession. The 2001 figure represents the first decrease in manufacturing productivity in the past 8 years, and it reflects the pronounced slump in the industrial sector that began in mid-2000. A sharp deceleration in durable manufacturing productivity from a nearly 7 percent rate of growth in 2000 to a 0.8 percent rate of decline during the first three quarters of 2001 accounted for much of the change. Nondurable manufacturing productivity grew at only a 0.1 percent rate over the first three quarters of 2001.

Employment costs rose at a slower rate in 2001 than in 2000. Total wages and salaries for private workers as measured by the employment cost index (ECI) rose 3.7 percent at an annual rate through the first three quarters of 2001—slightly less than the 3.9 percent increase in 2000. The total cost of benefits for private industry workers increased at a 5.1 percent rate through September 2001, down from a 5.7 percent increase in 2000. The ECI for manufacturing rose 3.3 percent, combining a 3.8 percent rise in wages and salary with a 2.7 percent increase in benefit costs. This slowdown in the rate of employment cost increases should help to moderate future inflationary pressure.

Saving and Investment

National saving, which comprises private saving and government saving, fell in 2001. As a share of gross national product, national saving edged down to 17.2 percent during the first three quarters of 2001 from 17.9 percent in 2000. Shrinking Federal Government saving accounted for most of the decline, as the economic slowdown reduced revenue and caused some types of automatic expenditure to rise. The personal saving rate (personal saving as a share of disposable income) averaged 2 percent in the first three quarters of 2001, up from 1 percent in 2000. Part of the increase was due to the down-payment on the President's tax cut, which was sent out in the form of "rebate" checks in July through September. Although the personal saving rate rose in the third quarter, Federal Government saving declined, the natural consequence of returning surpluses to taxpayers.

As the current account deficit shrank with the slowing economy, net foreign investment flows slowed in 2001. As a result, despite the decline in the national saving rate, domestic sources of saving funded a larger share of domestic investment. Over the previous 3 years, net foreign investment had been growing by roughly $100 billion a year. After reaching a peak of just over $450 billion in 2000, net foreign investment fell steadily in 2001, its first decline since 1997. By the third quarter, net foreign investment had dropped to $355 billion, although this was exaggerated somewhat by the one-time insurance payment of roughly $40 billion (at an annual rate) from foreign sources on claims (recorded on an accrual basis) related to the terrorist attacks.

National saving and investment are key to our long-run prosperity, and the President's 2001 fiscal initiatives improved incentives for private saving and investment. Because budget resources ultimately depend on the health of the economy as a whole, this approach serves as the best way to enhance budget surpluses over the long run.

In June the President signed the Economic Growth and Tax Relief Reconciliation Act (EGTRRA, described in more detail later in this chapter), which removes impediments to private saving by expanding contribution limits for Individual Retirement Accounts (IRAs), 401(k) plans, and education savings accounts. Education savings accounts raise incentives not only to save for education, but also to improve the quality and productivity of the Nation's work force in the future. Other provisions of the act, such as lower marginal tax rates, a reduced marriage penalty, and elimination of the estate tax, provide strong incentives to work, save, and invest. Another important initiative is the President's Commission to Strengthen Social Security, which in December issued its final report on meaningful reform options to strengthen the Social Security system and improve the ability of individuals to accumulate and pass along wealth.

The Cyclical Slowdown

Several factors contributed to the deceleration in economic activity during 2000 and 2001 from its very high levels in the preceding years: the decline in stock market wealth, the spike in energy prices, an increase in interest rates, the collapse of the high-technology sector, and the lingering effects of preparations against the year-2000 (Y2K) computer bug. With this backdrop setting the stage for sluggish growth, the economic aftermath of the terrorist attacks in September and the subsequent precipitous decline in consumer and business confidence late in 2001 were sufficient to tip the Nation into its seventh recession since 1960.

Moderation After Very Rapid Growth

The strong growth recorded from 1995 through 1999 was a welcome and beneficial development, as the private sector reaped the rewards from its investments in high technology. In particular, the productivity gains offered by the more intensive use of computers, fiber optic technologies, and the Internet drove an investment boom in which the Nation's businesses retooled and upgraded their workplaces for the 21st century. Not surprisingly, the rapid pace of investment then slowed as the need to adopt the new technologies began to be satisfied and a more mature investment phase began. Although the transition to a more moderate growth rate could in principle

have been smooth, in practice additional economic developments created swings in investment spending that contributed to the significant slowing of economic activity.

Decline in Equity Values

The decline in equity values starting in early 2000 also helped slow economic activity by dampening both consumption and business fixed investment spending. Equity in businesses (both in corporations and in noncorporate businesses) fell from its peak of $17.5 trillion in the first quarter of 2000 to just under $13 trillion in the third quarter of 2001, according to the latest quarterly estimate from the Federal Reserve's flow of funds accounts. Various studies suggest that every one-dollar decline in stock market wealth ultimately reduces annual consumption spending by 3 to 4 cents. Thus the observed $4.5 trillion decline in wealth could be expected to reduce consumption by $135 billion to $180 billion, or roughly 1 to 2 percentage points of GDP. Downward pressure from the equity decline may continue to affect consumption spending into 2002, because a drop in wealth typically has lagged effects for 1 to 2 years. Offsetting some of the decline in equity wealth, however, has been a continued increase in housing wealth. From the start of 2000 to the middle of 2001, housing prices rose at a steady 9 percent annual pace, increasing housing wealth by $1.7 trillion.

The effect of the decline in equity prices on investment demand was both direct and indirect. Lower equity prices reduced investment spending directly by raising the cost of capital for corporations, and indirectly by causing growth in aggregate demand for final goods and services to wane.

Surge in Energy Prices

Energy prices surged in 1999 and 2000, reaching extremely high levels at the start of 2001. Oil prices rose dramatically from $12.00 a barrel to peak in November 2000 at $34.40 a barrel for West Texas Intermediate crude, its highest monthly average price since October 1990. Even more dramatic was the spike in natural gas prices, to the highest price on record, $8.95 per million Btu in December 2000. This was more than 3½ times the average price over the preceding 6 years. These developments in energy prices had important ramifications for 2001. Personal disposable income available for goods and services other than energy fell as gasoline, heating, and electricity prices soared. Producers of nonenergy goods and services also suffered as their costs of production rose—especially in the energy-intensive manufacturing sector. The decline in demand and the rise in input costs squeezed profit margins, slowing corporate cash flow and reinforcing the downdraft on stock market values and capital spending plans.

Higher Interest Rates

Higher interest rates in 2000 and early 2001 also contributed to the deceleration in activity. The 10-year Treasury yield peaked at 6.7 percent in January 2000, and the 10-year corporate Baa yield hit 8.9 percent in May. Short-term interest rates rose consistently for a full year before reaching 6.2 percent in November 2000. The higher interest rate environment slowed economic activity as consumers were given the incentive to consume less, and investment in plant and equipment became less attractive.

Collapse of the High-Technology Sector

The collapse of stock prices in the high-technology sector—especially the dot-coms, or Internet-related firms—contributed an additional drag on economic activity. Prices for high-technology stocks as measured by the NASDAQ composite index fell 67 percent from their monthly peak in March 2000 to their monthly trough in October 2001, returning the NASDAQ to levels last seen in early 1998. By contrast, during the same period the Wilshire 5000 index fell by a much smaller 32 percent. The drop in the high-technology stocks represented an important reduction in equity wealth, but it also signaled a sea change in the fortunes of these businesses—especially those in the information and communications technology industries—which had been an important source of economic gains in the 1995-99 period. Investors both ratcheted down the earnings prospects of these firms and perceived a greater risk of investing in both established and more speculative high-technology businesses. This fundamental reevaluation of information and communications technology firms led to a swift downturn in the sector's activity and a reversal of the capital investment boom.

Lingering Effects of Y2K

The runup in capital spending by firms nationwide in anticipation of and in response to the Y2K event created conditions that exacerbated swings in high-technology capital spending. Instead of primarily upgrading existing capital and software, which might have remained vulnerable to the Y2K bug, most businesses replaced them with the latest technologies. The resulting bulge in investment spending around January 2000 generated a tendency toward a subsequent investment lull. Given that the typical replacement cycle for high-technology goods is about 3 to 5 years, it is not surprising that the investment decline that began in 2000 lingered in 2001.

Effects on Inventories and the Capital Stock

The factors just discussed—the transition to more moderate growth rates, the decline in equity values, the surge in energy prices, higher interest rates, the collapse of high-technology industries, and the lingering effects of Y2K—constituted a potent set of adverse economic circumstances for investment in 2000, with consequences for 2001. The declining stock market and higher interest rates increased the cost of external financing of new investment. At the same time, higher energy prices ate into corporate cash flow, which was already slowing as the economy decelerated. As a result, the financing gap (capital expenditure less internally generated funds) hit an all-time high in 2000. Also, by mid-2000 businesses found themselves with unplanned inventories as demand began to soften, and the result was a traditional inventory cycle. The accumulation of unwanted inventories led businesses to slow production further, with consequences for employment growth. This in turn fed the reduction in demand that had left businesses with rising inventories in the first place.

As the economy slowed, firms found themselves with the desire to defer future capital spending plans. By some estimates, a "capital overhang" developed in which the actual capital stock exceeded that desired by firms to meet the lower expected demand in 2000. By late 2001, however, the decline in investment spending had likely eliminated the capital overhang (Box 1-2).

Box 1-2. Capital Overhang and Investment in 2001

A capital overhang develops when the amount of capital in the economy exceeds the amount that businesses desire for the production of goods and services. The emergence of such an overhang complicates both business planning and policymaking. Businesses often have to alter their capital spending plans and curtail their investment spending—sometimes quite abruptly. A large overhang may also reduce the stimulative effects of tax policies designed to boost investment, possibly lengthening the recovery time during a period of sluggish economic activity, especially for the manufacturing sector.

An overhang can arise in various ways. If, for example, rapid growth is expected in the future, businesses will begin increasing their investment in advance. If the faster growth is not realized, these businesses will find themselves with too much capital. A capital overhang can also arise during a short period of unexpectedly sluggish growth. If the decline in demand is thought to be sufficiently deep and persistent, businesses may want to reduce their capital spending plans,

continued on next page...

Box 1-2.—*continued*

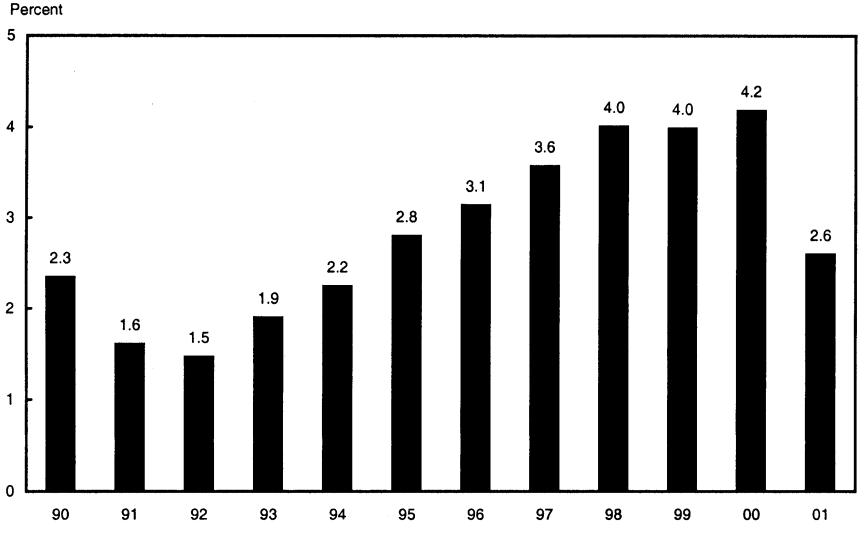
and possibly sell off part of their capital stock, especially those capital goods that are readily marketable. However, if the slowdown is sufficiently short, businesses may prefer to reduce their use of the capital stock rather than sell it, especially because the market price of capital goods is likely to fall during such periods. Selling capital and buying it back at a later date can then be more costly than simply holding onto it and not using it to its full capacity. Reducing the utilization rate thus helps to prevent the desired capital stock from falling.

Policymakers have lately been concerned that the changing business climate may have given rise to a capital overhang over the past 2 years. Some businesses, especially in the information and communications technology sector, may have overestimated the potential of the "New Economy" and therefore overinvested in productive capacity. In addition, businesses throughout the economy were surprised by the extent of the slowdown in aggregate demand in 2000 and 2001, and they therefore had to revise downward the path of their desired capital stock.

Empirical evidence suggests that a capital overhang did develop in 2000. The overhang was modest for the economy on average, but various types of capital equipment such as servers, routers, switches, optical cabling, and large trucks were disproportionately affected. Estimates of the total overhang must be interpreted with caution. There is considerable uncertainty about its size, because it is difficult to estimate precisely both the capital stock that businesses desire and the capital stock they actually possess. Better data collection (see Box 1-1) could help solve this problem in the future. In any case, over the past year and a half, the decline in investment spending and depreciation of the existing capital stock combined to slow capital accumulation sufficiently to eliminate the overhang. Chart 1-5 shows that the capital stock, which had been growing at an annual rate above 4 percent over the past several years, is estimated to have grown just over 2 1/2 percent in 2001.

The remarkable slowdown in capital accumulation during 2001 underscores the importance of the President's tax relief recommendations for economic stimulus. The partial expensing provisions and the elimination of the corporate alternative minimum tax will encourage business investment, stimulating economic activity in the short run and laying the foundation for stronger growth in the long run. The reductions in marginal income tax rates will help spur investment by providing incentives for flow-through entities, mainly small businesses, to grow and create jobs. The President's tax relief will also help foster a smooth and more predictable transition to a period of sustainable growth.

Chart 1-5 **Growth in the Real Capital Stock**
Growth in the Nation's fixed nonresidential capital stock slowed considerably in 2001 as investment spending plummeted from its rapid pace during the preceding 5 years.



Sources: Department of Commerce (Bureau of Economic Analysis) for 1990-2000; Council of Economic Advisers for 2001.

From Slowdown to Recession

Even though economic activity had begun to soften in the first half of 2000, the onset of recession did not arrive until March 2001, according to the Business Cycle Dating Committee of the National Bureau of Economic Research (NBER), the arbiter of U.S. business cycle dates. The committee based this date on its reading of the economic data through November 2001, especially the four measures of economic activity it considers most important: industrial production, the real volume of sales in manufacturing and trade, employment, and real personal income less transfer payments. Industrial production peaked in June 2000, real sales in manufacturing and trade peaked in August 2000, employment peaked in March 2001, and real personal income less transfers may not have peaked yet.

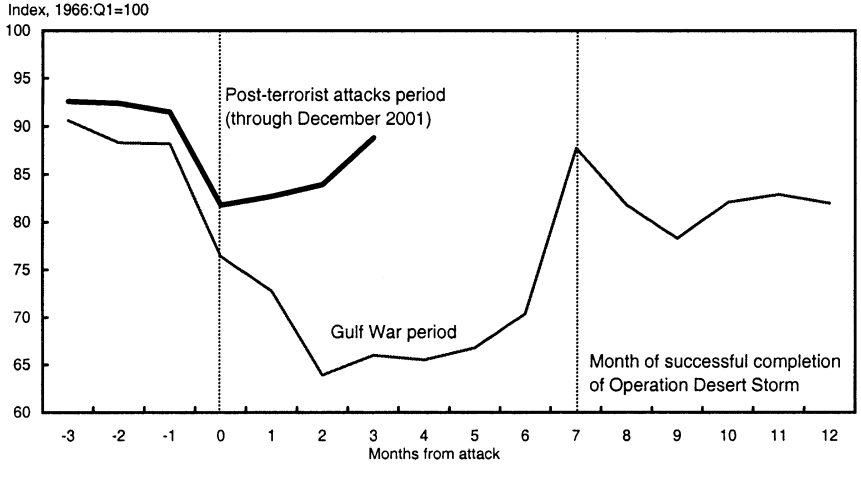
As the variation in these dates suggests, picking "the" month for the start of a recession involves considerable judgment and is not without controversy. The employment series appears to play a dominant role in the NBER committee's decisions. Without a doubt, employment is a key resource for economic activity, representing about two-thirds of all inputs into production. In recessions since 1960, however, the peak in employment has tended to follow the peak in economy-wide activity. In addition, total industrial capacity utilization, a standard measure of the employment of capital—the other key input in production—peaked in mid-2000, suggesting an earlier

economy-wide turning point. These statistical arguments notwithstanding, the evidence is clear that the industrial sector was already well into a contraction, and real sales volumes were sagging, before March 2001. Finally, the economic consequences of the terrorist attacks were critical to the business cycle dating. As the committee noted in its decision, "before the attacks, it is possible that the decline in the economy would have been too mild to qualify as a recession. The attacks clearly deepened the contraction and may have been an important factor in turning the episode into a recession."

The decline in consumer and business confidence following the terrorist attacks in September had a larger and more durable macroeconomic effect than the physical destruction and was sufficient to scuttle any possibility of avoiding a recession. Chart 1-6 shows, however, that the decline in the University of Michigan consumer sentiment index following September 11 was less than the sharp drop following Iraq's invasion of Kuwait in 1990. Since September, consumer confidence has rebounded noticeably, to close to the preattack level. By comparison, during the Gulf War period, consumer confidence remained subdued for a longer period but then surged when the successful completion of Operation Desert Storm largely resolved uncertainty about the future.

Overall, the deceleration of economic activity since mid-2000 has been dramatic. Unemployment has risen, business earnings have suffered, and government budgets have been strained. As in past recessions, no single key

Chart 1-6 **Consumer Sentiment**
Consumer sentiment fell sharply after September 11. But sentiment rebounded more quickly than after the Iraqi invasion of Kuwait.



Note: The month of the attack initiating the Gulf War was August 1990, when Iraq invaded Kuwait.

Source: Surveys of Consumers (University of Michigan).

factor caused the slowdown and subsequent recession; rather it took the confluence of a series of unforeseen adverse events. Despite some similarities shared with previous episodes of sluggish growth, the 2000-01 slowdown has been unique in many respects and has required policies to address the particular challenges of these developments.

Policy Developments in 2001

Both fiscal and monetary policy became expansionary in 2001. The Federal budget surplus, although still substantial by historical standards, fell because of deteriorating economic conditions and changing fiscal priorities after the terrorist attacks. Falling short-term interest rates and rapid expansion of the money supply indicated that monetary policy was eased significantly during the year.

Fiscal Policy Before the Terrorist Attacks

In February 2001 the President's budget for fiscal 2002 outlined major policy initiatives for the Nation. These included continuing the retirement of the Federal debt, providing tax relief for American families, strengthening and reforming education, modernizing and reforming Social Security, modernizing and reforming Medicare, revitalizing national defense, and championing faith-based initiatives. Although tangible progress has already been made, fiscal vigilance will be essential to continuing toward these goals. The Federal budget process needs to be more disciplined, and spending limits previously agreed upon should be respected. Too often in the past, budget deadlines were missed and legislation was consolidated into omnibus spending bills that exceeded the agreed spending limits. Appropriations in fiscal 2001, even before the emergency funds made available after September 11, were over $50 billion higher than in 2000—the largest 1-year appropriations increase in history. The events in September and October precluded an expeditious completion of the appropriations process in the fall, but the President and Congress agreed to limit discretionary spending to $686 billion excluding emergency spending. This new level provides reasonable spending growth, ensures funding for Medicare and Social Security, and sets an example for future budget negotiations.

In fiscal 2001 the Federal Government ran the second-largest budget surplus in history and paid down the second-largest amount of debt in history, despite the weak economic conditions. Looking forward, the Federal budget will be in deficit during fiscal 2002 but, with spending restraint and pro-growth policies, is projected to return to surplus beginning in 2005. About two-thirds of the decline in the projected baseline fiscal position since

last year may be traced to the weaker economy and technical revisions. Spending accounts for nearly 20 percent of the decline, and the EGTRRA provisions account for under 15 percent.

A sound long-run fiscal position holds down unnecessary spending and removes tax-based impediments to economic growth. As noted earlier, the tax cut in 2001 was key to mitigating the severity of the slowdown and simultaneously improving growth incentives. The deterioration in the surplus from a weak economy is the mirror image of the experience of the late 1990s, when budget surpluses were fueled largely by a strong economy. In general, faster economic growth causes budget surpluses, not the other way around. Moreover, policies that promote job creation and entrepreneurial activity ultimately increase the size of the economy and hence provide the resources for future spending obligations.

Tax Relief in 2001

The President laid a strong foundation for growth in 2001 with the Economic Growth and Tax Relief Reconciliation Act. This package provides a powerful stimulus for future growth, with reductions in marginal tax rates that improve incentives and leave in the hands of Americans a greater share of their own money to spend on consumption, education, and retirement investment.

The first reduction in marginal tax rates was effective for 2001 and was reflected in lower withholding during the second half of the year. In addition, the new 10 percent tax rate bracket, carved out of the beginning of the 15 percent rate bracket, was reflected in rebate checks totaling $36 billion, which were mailed to 85 million taxpayers during the second half. The timing of these reductions in withholding and rebates proved propitious: they added significant economic stimulus by boosting purchasing power in the hands of consumers during a period of sluggish economic activity. The 2001 tax rate reductions were just the first step in a series of income tax rate reductions to be phased in by 2006; by that year the 39.6 percent tax rate will have dropped to 35 percent, the 36 percent rate to 33 percent, the 31 percent rate to 28 percent, and the 28 percent rate to 25 percent.

The tax cut package also provided incentives for saving, investment, and capital accumulation. Higher IRA and 401(k) retirement contribution limits are to be phased in over time, with those for persons over 50 phased in more quickly. Beginning in 2002 and continuing through 2009, the highest estate tax rates are reduced and the effective exemption amount is increased, reducing an important impediment to the growth of entrepreneurial enterprises and the overall accumulation of wealth. In 2010 the estate tax is eliminated. Small businesses will benefit from the lowering of individual income tax rates for owners of flow-through business entities such as sole

proprietorships and partnerships. In 1998 there were close to 24 million flow-through businesses in the United States, including 17.1 million sole proprietorships, 2.1 million farm proprietorships, 1.9 million partnerships, and 2.6 million S corporations. By 2006, when the personal income tax cut is fully phased in, the Treasury Department estimates that over 20 million tax filers with income from flow-through businesses will receive a tax reduction.

Finally, the President's tax cut strengthens families and reduces the burden of financing education. The marriage penalty is reduced, and the annual child tax credit is increased from $500 to $600 per child in 2001 and gradually increased to $1,000 by 2010. Adoption credits are doubled in 2002 from $5,000 per child; in addition, the credit will apply to more taxpayers, because the income threshold at which the credit begins to phase out will rise to $150,000 from $75,000. Contribution limits for education savings accounts (formerly called educational IRAs) are raised to $2,000 a year, and distributions are made tax-exempt. The law also increased the income phaseout range for student loan interest deductions and made certain higher education costs tax-exempt for households with less than $130,000 in income.

The initial macroeconomic effects of tax relief have been positive, strengthening aggregate demand in the face of other downward pressures. The rebate checks and the lower marginal tax rates alone reduced taxpayer liabilities by $44 billion in 2001 and by $52 billion in 2002. Adding in the effects of the other provisions of EGTRRA (such as the education incentives, child credits, the individual alternative minimum tax, and marriage penalty relief) brings the liability reduction in 2001 and 2002 to $57 billion and $69 billion, respectively.

In short, the President delivered important tax relief in 2001, providing a solid foundation for renewed growth in consumer spending once confidence rebounds, and for an improved investment climate for businesses. The boost in aggregate demand should help provide a foundation for economy-wide recovery in 2002.

Monetary Policy Before the Terrorist Attacks

The Federal Reserve aggressively pursued an easier monetary policy during 2001. With clear evidence that economic activity was sharply decelerating at the end of 2000 and that inflation pressures were minimal, the Federal Open Market Committee (FOMC) began cutting the target Federal funds rate by 50 basis points (hundredths of a percentage point) at an unscheduled meeting on January 3, 2001. By mid-August the FOMC had lowered its target Federal funds rate on seven occasions, from 6½ percent at the start of the year to 3½ percent (the lowest rate since early 1994). The target rate reductions were also notable for their rapid succession. The Federal Reserve

lowered the target rate at every scheduled meeting and at two unscheduled meetings—a sequence of events rare in its history, and one that underscored the seriousness of the deterioration in economic conditions. At each meeting the committee also reaffirmed its view that the risks of weaker economic activity outweighed the risks of higher inflation. Over the first 8 months of 2001, easier monetary policy pushed growth in M2 (a broad definition of the money supply) to an annualized 10 percent rate.

Market interest rates responded to the lower targets for the Federal funds rate. Short-term interest rates followed in lockstep, with the 3-month Treasury bill rate declining roughly 240 basis points from December 2000 to early September 2001. Three-month commercial paper rates, credit card rates, personal loan rates, and 1-year adjustable mortgage rates also moved down. Long-term rates decreased as well, but by a smaller amount. Ten-year Treasury yields slid almost 20 basis points, and rates on 30-year fixed rate mortgages fell about 25 basis points. Corporate bond yields also receded: yields on corporate Baa-rated bonds fell roughly 15 basis points. The Merrill Lynch high-yield bond index was off about 20 basis points.

The pattern of short-term and long-term interest rates during 2001 is consistent with similar periods in the past. History shows that when the economy has slowed sharply or is in a recession, and monetary policy has eased significantly, short-term interest rates have tended to fall more than long-term rates, but the large decline in short-term rates often proves temporary. In addition, the widening interest rate spread during 2001 reflected the fact that long-term rates had edged down in 2000 in anticipation of lower short-term rates in 2001. On the whole, the pattern of the yield spread is more a reflection of the circumstances of the recession, not a factor contributing to it.

The Macroeconomic Policy Response After September 11

In the days and weeks following the September terrorist attacks, fiscal and monetary actions were taken to address the new challenges. The President expeditiously requested emergency funds to assist in meeting humanitarian, recovery, and national security needs. The Federal Reserve added substantial liquidity through various channels to help markets function in an orderly fashion in the immediate aftermath of the attacks, and it continued to ease monetary policy.

Fiscal Policy

In the wake of the attacks, the President took action to ensure the security of Americans. The President signed the 2001 Emergency Supplemental Appropriations Act for Recovery from and Response to Terrorist Attacks on the United States. The $40 billion in funding assisted victims and addressed

other consequences of the attacks. Funding was provided for debris removal, search and rescue efforts, and victim assistance efforts of the Federal Emergency Management Agency; emergency grants to health providers in the disaster-affected metropolitan areas; investigative expenses of the Federal Bureau of Investigation; increased airport security and sky marshals; initial repair of the Pentagon; evacuation of high-threat embassies abroad; additional expenditures of the Small Business Administration disaster loan program; and initial crisis and recovery operations of the Department of Defense and other national security operations. These measures took needed initial steps toward restoring security and confidence in the economy. The President also proposed additional funding to help displaced workers and to extend unemployment insurance in impacted areas.

In September the President signed the Air Transportation Safety and System Stabilization Act, which provided the tools necessary to aid the transition of the air transport system to the new security and economic environment. The law provides $5 billion to compensate for losses to the industry directly resulting from the attacks; it also allows the President to issue up to $10 billion in Federal loan guarantees.

The terrorist attacks introduced new risks into the economic environment. One of the challenges has been to provide an umbrella of support for economic security that draws on the strengths of the private sector. The Administration has proposed measures designed to provide economic growth insurance, or economic stimulus. The central focus of this effort is to address the immediate needs of those displaced workers directly affected by the recession and the terrorist attacks, while also mitigating the effects of these events on the broader economy. In response to the President's leadership, the House of Representatives passed such stimulus legislation on two separate occasions, but the Senate failed to pass such legislation.

In choosing among alternative economic stimulus policies, the government should favor those that are pro-growth—enhancing long-term incentives to work, invest, take risks, and expand productive capacity—as well as remain cognizant of short-term needs. The Administration's approach includes tax relief for low-income families and extended unemployment insurance benefits. These types of policies address short-term needs while also providing purchasing power that helps to ensure steady demand for businesses.

However, the real solution to the economic woes of displaced workers is employment. Fully addressing these workers' needs and buttressing confidence on the part of all households and businesses requires a focus on job growth. One key to this effort is small businesses and entrepreneurs, traditionally an important source of new jobs in the economy. The best policy to help businesses and entrepreneurs is to reduce their marginal tax rates. The

Administration proposes moving forward the implementation of the marginal tax rate cuts passed by Congress in the spring of 2001. Lower marginal tax rates both improve incentives and augment the cash flow of small businesses. Research shows that entrepreneurs will respond to these stronger incentives and increased cash flow by expanding their payrolls and increasing their investments.

A second policy to provide incentives for private sector job creation is to help businesses overcome uncertainty and restart investment spending. At the aggregate level, the return to rapid growth requires a resumption in the growth of capital expenditure. Employment losses have been concentrated in the manufacturing sector—a sector heavily dependent on the health of business investment. For this reason the Administration has focused on growth incentives, such as partial expensing and reform of the corporate alternative minimum tax, that target the source of the problem, namely, an investment slump that has diminished private sector job creation.

Property and casualty insurance is one mechanism by which economies respond efficiently to risks in the business environment. Insurance spreads these risks, converting, for each business that takes out insurance, a potential cost of unknowable size and timing into a set of smaller premium payments of known magnitude. The events of September 11 induced a dramatic revision in businesses' perceptions of the risks facing them. In normal circumstances, such increased risks are translated into higher premiums. This serves the useful economic function of pricing risk, leading the private sector toward those activities that present a risk worth taking, and away from foolhardy gambles.

In the aftermath of September 11, however, one concern was that the economy faced disproportionate increases in terrorism risk insurance premiums or, in the extreme, a complete withdrawal of this type of coverage. With this concern in mind, the Administration proposed legislation to provide a short-term backstop for terrorism risk insurance that would encourage rather than discourage private market incentives to expand the economy's capacity to absorb and diversify risk, and which would expire as soon as the private market is capable of insuring these losses on its own.

Taken as a whole, the President's policies have improved the Nation's security, compensated the direct victims of the September attacks, and aided displaced workers. If the President's terrorism risk insurance and economic stimulus proposals are passed, they will further enhance economic security.

Monetary Policy

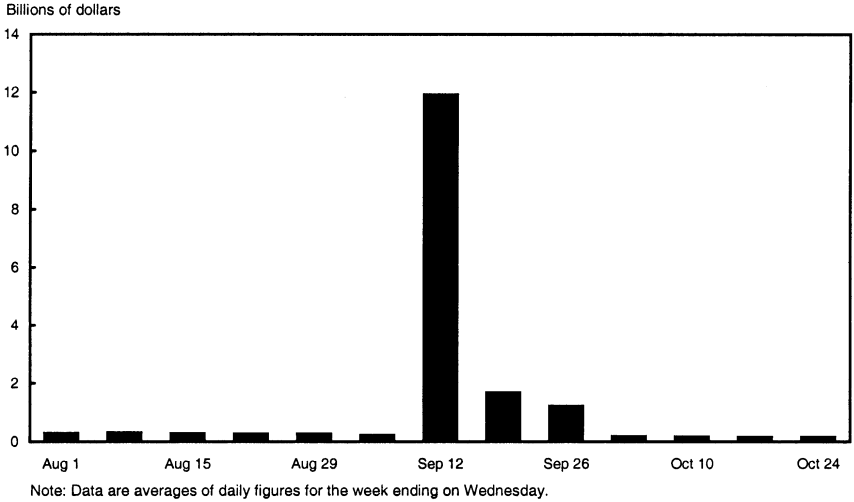
In the hours, days, and weeks following the terrorist attacks, the Federal Reserve used its financial resources to provide liquidity and ensure the functioning of financial markets. The Nation's central bank injected substantial liquidity into financial markets by promoting the use of the discount

window by depository institutions, increasing the volume of open market operations, and arranging temporary reciprocal currency swaps (swap lines) with several foreign central banks.

On September 11, the Federal Reserve made it clear through a press release that the discount window was available to meet liquidity needs, and depository institutions responded by employing the discount window at an unprecedented level. Before September 11 average weekly discount borrowing during 2001 had been $143 million. During the week of the attack, however, borrowing ballooned to an all-time high of $11.8 billion (Chart 1-7). In the next 2 weeks, as liquidity pressures waned, borrowing quickly dropped to the $1 billion to $1.5 billion range and then returned to levels seen earlier in the year. On the days that followed the attack, the Federal Reserve also allowed reserves in the Federal funds market to rise as Federal Reserve float surged because of the closure of the Nation's air transportation system. In addition, the Federal Reserve made liquidity available by arranging temporary swap lines with the European Central Bank (ECB) and the Bank of England, and by augmenting existing swap lines with the Bank of Canada.

In the week following the attacks, the Federal Reserve eased monetary policy further at an unscheduled meeting of the FOMC, lowering its target Federal funds rate ½ percentage point, to 3 percent. The FOMC reiterated, in a press release accompanying its decision, that it would continue to supply large amounts of liquidity to counter the extraordinary strains in the

Chart 1-7 **Discount Window Borrowing**
The banking system's liquidity needs in the immediate aftermath of the September 2001 terrorist attacks were addressed in part through unprecedented levels of discount window borrowing.



Note: Data are averages of daily figures for the week ending on Wednesday.

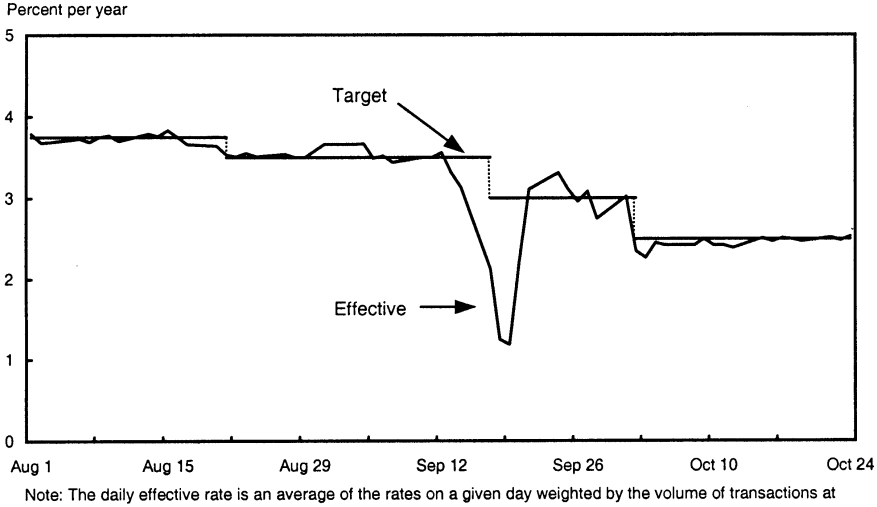
Source: Board of Governors of the Federal Reserve System.

financial markets as well as to help ensure the effective functioning of the banking system. The committee recognized that providing ample liquidity in the short run could lead to the Federal funds rate trading well below its target. In fact, in the week following September 11, the effective Federal funds rate fell to an average of 1.2 percent for the 2 days of the week when liquidity issues were of primary concern (Chart 1-8).

Despite the devastation to New York's financial center, financial markets and the banking system resumed business quickly and were operating at near-normal conditions within just weeks of the terrorist attacks. The remarkable resiliency of the financial markets and the longstanding policy of the Federal Reserve to provide ample liquidity to stabilize markets in the wake of unusual developments combined to mute the effects of the initial shock.

Since mid-September the FOMC has continued its easing of monetary policy to help counter the deterioration of economic activity. By the end of the year the Federal Reserve had lowered its Federal funds target to 1¾ percent, its lowest level in 40 years, leaving the real Federal funds rate near zero. Meanwhile there was no evidence of increasing inflation pressures. The lowering of the Federal funds rate target led to further declines in short-term and long-term market interest rates. At the end of the year, short-term market interest rates were below 2 percent. The 10-year Treasury yield was 5.2 percent, and 30-year conventional mortgage rates averaged 7.2 percent.

Chart 1-8 **Effective and Target Federal Funds Rates**
The Federal Reserve added liquidity into markets immediately after the September 2001 terrorist attacks, causing the effective Federal funds rate to plunge. In addition, the target Federal funds rate was lowered.



Note: The daily effective rate is an average of the rates on a given day weighted by the volume of transactions at these rates.

Source: Board of Governors of the Federal Reserve System.

Economic Developments Outside the United States

Growth in the rest of the world slowed markedly in 2001. The global slowdown is attributable to many of the same factors that affected the United States: weakened investment demand (especially for high-technology goods), relatively high oil prices in 2000 and early 2001, and the increased costs and loss of confidence associated with the September terrorist attacks.

Canada and Mexico, our largest trading partners, saw their economies soften in 2001. Canadian economic growth began to fall in 2000 as the deterioration in U.S. economic conditions particularly affected Canadian exports. Late in 2001 Canada's exports and domestic demand were weakened further by disruptions and increased uncertainty following the terrorist attacks. Real GDP growth was 1.4 percent for 2001 as a whole, down from 4.4 percent in 2000, and the unemployment rate stood at 8 percent at year's end. Mexico experienced zero growth in 2001, following a long period of expansion; real GDP growth had been 6.9 percent in 2000. The unemployment rate edged up to 2.5 percent for 2001.

Growth also faltered in Europe. In the euro area (the 12 European countries that have adopted the euro as their common currency), output growth slowed significantly in 2001, after weak growth in the second half of 2000. The unemployment rate remained above 8 percent last year. Because of constraints imposed by member countries' commitments to the monetary union, fiscal policy in the euro area remained only slightly stimulative. With regard to monetary policy, the European Central Bank cut interest rates by a total of 150 basis points in 2001. Growth in the United Kingdom declined in 2001, but by less than in continental Europe, bolstered in part by a 200-basis-point reduction in short-term interest rates. Over the year, growth fell to 2.3 percent from 2.9 percent in 2000. The unemployment rate declined to 5.1 percent in 2001, its lowest in 26 years.

Japan fell into its third recession in 8 years during 2001, with its unemployment rate reaching an all-time high of 5.5 percent as of November. Although Japan, too, suffered from the effects of the slowing global economy, it also continued to struggle with its moribund banking and corporate sectors. Fiscal stimulus and monetary easing have done little thus far to improve the country's economic prospects.

The newly industrialized economies in East Asia were particularly hard hit by economic stagnation in Japan and the slump in global technology investment. High-technology goods account for roughly 40 percent of these economies' exports. After increasing 8.2 percent in 2000, output in these economies registered only a 0.4 percent increase in 2001.

In the developing economies as a group, economic growth moderated from almost 6 percent in 2000 to 4 percent in 2001. Meanwhile growth for the developing economies in Asia declined from almost 7 percent to just over 5½ percent. In China, fiscal measures aimed at infrastructure investment helped maintain rapid growth: Chinese GDP growth for 2001 was roughly 7 percent. The Middle East and developing countries in the Western Hemisphere saw GDP growth fall dramatically, to just 1 to 2 percent in 2001. In contrast, Africa saw growth edge up from just under 3 percent to 3½ percent.

Two of the world's larger developing economies—Turkey and Argentina—faced significant financial turmoil in 2001. In Turkey, a banking crisis and political uncertainty led to high real interest rates and a sharp drop in output. The Turkish lira was floated in February 2001 and depreciated sharply against the dollar before stabilizing. Late in the year Argentina also experienced severe financial distress, with unsustainable fiscal policy leading to loss of confidence and a run on bank deposits, culminating in a default on the country's sovereign debt and dramatic political unrest.

The Economic Outlook

The Administration expects that the economy will recover in 2002. The economy continues to display characteristics favorable to long-term growth: productivity growth remains strong, and inflation remains low and stable.

Near-Term Outlook: Poised for Recovery

Real GDP growth is expected to pick up early in 2002 (Table 1-1). The pace is expected to be slow initially, followed by an acceleration thereafter; over the four quarters of 2002 real GDP is expected to grow 2.7 percent. The unemployment rate is projected to continue rising through the middle of 2002, when it is expected to peak around 6 percent.

As discussed earlier, the decline in aggregate demand during the past year was concentrated in inventory investment, business fixed investment, and exports. Of these downward pressures, that from inventory disinvestment is projected to reverse its course soonest and most rapidly, as the pace of liquidation is forecast to recede dramatically in the first quarter of 2002. By the end of 2001 inventories had become quite lean, making it likely that, once sales resume their growth, stockbuilding will boost real GDP growth.

Growth in business investment and exports may take longer to reassert itself. Nonresidential investment fell sharply in 2001, and some downward momentum probably remained at the start of 2002. Still, the financial foundations for investment remain positive: real short-term interest rates are low,

TABLE 1-1.—*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			
2000 (actual)	5.3	2.8	2.4	3.4	4.0	5.8	6.0	131.8
2001	1.9	-.5	2.4	2.0	4.8	3.4	5.0	132.3
2002	4.7	2.7	1.9	2.4	5.9	2.2	5.1	132.2
2003	5.6	3.8	1.7	2.2	5.5	3.5	5.1	135.2
2004	5.5	3.7	1.7	2.3	5.2	4.0	5.1	138.3
2005	5.4	3.5	1.9	2.4	5.0	4.3	5.1	140.9
2006	5.0	3.1	1.9	2.4	4.9	4.3	5.2	143.2
2007	5.0	3.1	1.9	2.4	4.9	4.3	5.2	145.4
2008	5.0	3.1	1.9	2.4	4.9	4.3	5.2	147.5
2009	5.0	3.1	1.9	2.3	4.9	4.3	5.2	149.6
2010	5.0	3.1	1.9	2.3	4.9	4.3	5.3	151.7
2011	5.0	3.1	1.9	2.3	4.9	4.3	5.3	153.9
2012	5.0	3.1	1.9	2.3	4.9	4.3	5.3	156.1

[1] Based on data available as of November 30, 2001.

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.

prices of computers are again falling rapidly, and equity prices moved up during the fourth quarter. Indications late in the year suggested that these factors were contributing to an upturn in new orders for nondefense capital goods in October and November. The Administration projects that business fixed investment will return to positive growth around the middle of 2002 and resume rapid growth thereafter.

The past year's decline in exports reflects stagnating growth among the United States' trading partners. Consensus estimates of foreign growth in 2002 are anemic as well. In these circumstances any rebound in exports is likely to lag behind the expected recovery of U.S. GDP as a whole. Imports meanwhile are projected to grow faster than GDP. As a result, net exports and the current account deficit are likely to become increasingly negative during 2002.

Consumption growth slowed during the past year but has remained in positive territory. This slowing may be attributable to the decline in the stock market from its peak in March 2000. But in the absence of further stock market declines, such restraint is expected to wane. Consumption will also be supported by fiscal stimulus and interest rate cuts. The major provisions of EGTRRA will lower tax liabilities by about $69 billion in 2002 (up from its contribution of $57 billion in 2001).

Inflation Forecast

As measured by the GDP price index, inflation was stable at about 2.3 percent during the four quarters ending in the third quarter of 2001. The Administration expects this measure of inflation to fall to 1.9 percent over the four quarters of 2002. The unemployment rate is now above the level that the Administration considers to be the center of the range consistent with stable inflation, and capacity utilization in the industrial sector is substantially below its historical average. Despite faster-than-trend growth of output in 2003 and 2004, some downward pressure will be maintained on the inflation rate, because the unemployment rate is projected to remain high over that period. As a result, inflation in terms of the GDP price index is expected to inch down to 1.7 percent in 2003 before edging up to 1.9 percent over the forecast period.

In contrast, consumer price inflation is likely to edge up temporarily over the four quarters of 2002, to 2.4 percent, reflecting energy price fluctuations. (Petroleum-related goods make up a larger share of consumer budgets, on which the CPI is based, than of the production of final goods in the economy, on which the GDP price index is based.) In 2001 CPI inflation was held down by a 13 percent decline in energy prices. In 2002 petroleum prices are expected to stabilize, and energy price inflation is projected to be positive, but still moderate. Following a temporary increase in 2002, overall CPI inflation is projected to edge down and eventually flatten out at about 2.3 percent from 2003 forward.

Long-Term Outlook: Strengthening the Foundation for the Future

The Administration forecasts real GDP growth to average 3.1 percent a year during the 11 years through 2012. The growth rate of the economy over the long run is determined primarily by the growth rates of its supply-side components, which include population, labor force participation, productivity, and the workweek. The forecast is shown in Table 1-2.

The Administration expects nonfarm labor productivity to grow at a 2.1 percent average pace over the forecast period, the same as over the entire period since the previous business cycle peak in the third quarter of 1990. This forecast is noticeably more conservative than the 2.6 percent average annual growth rate of actual productivity from 1995 to 2001. The pace is projected to be slower as a caution against several downside risks:

- Nonresidential fixed investment has fallen about 6 percent from its peak in the fourth quarter of 2000, while the level of the capital stock—and therefore depreciation—remain elevated. This combination implies

that the near-term growth of capital services is likely to be reduced from its average pace from 1995 to 2001, leading to slower growth in labor productivity from the use of these capital services.

- The diversion of capital and labor toward increased security (which is largely an intermediate product) may reduce the growth of productivity modestly over the next few years (Box 1-3). Once the transition phase has been completed, the enduring restraint on productivity growth is likely to be small.
- As discussed in Box 1-4, about one-half of the post-1995 structural productivity acceleration is attributable to growth in total factor productivity (TFP) outside of the computer sector, perhaps due to technological progress and better business organization. (The latter aspect is discussed in Chapter 3.) Although there is no reason to expect this process not to continue, the Administration forecast adopts a cautious view in which the pace of TFP growth is near its longer term average.

TABLE 1-2.—*Accounting for Growth in Real GDP, 1960-2012*

[Average annual percent change]

Item	1960 Q2 to 1973 Q4	1973 Q4 to 1990 Q3	1990 Q3 to 2001 Q3	2001 Q3 to 2012 Q4
1) Civilian noninstitutional population aged 16 or over	1.8	1.5	1.0	1.0
2) Plus: Civilian labor force participation rate	.2	.5	.0	.0
3) Equals: Civilian labor force [1]	2.0	2.0	1.0	1.0
4) Plus: Civilian employment rate [1]	.0	-.1	.1	.0
5) Equals: Civilian employment [1]	2.0	1.9	1.1	1.0
6) Plus: Nonfarm business employment as a share of civilian employment [1 2]	.1	.1	.3	.3
7) Equals: Nonfarm business employment	2.1	2.0	1.5	1.3
8) Plus: Average weekly hours (nonfarm business)	-.5	-.4	-.1	.0
9) Equals: Hours of all persons (nonfarm business)	1.7	1.7	1.4	1.3
10) Plus: Output per hour (productivity, nonfarm business)	2.9	1.4	2.1	2.1
11) Equals: Nonfarm business output	4.6	3.1	3.4	3.5
12) Plus: Ratio of real GDP to nonfarm business output [3]	-.3	-.2	-.4	-.4
13) Equals: Real GDP	4.2	2.9	3.0	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] Line 12 translates nonfarm business output back into output for all sectors (GDP), which includes the output of farms and general government.

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).

Box 1-3. Increased Security Spending and Productivity Growth

The Nation will spend more on security in the wake of the terrorist attacks. Economic growth will likely slow because more labor and capital will be diverted toward the production of an intermediate product—security—and away from the production of final demand. In addition, lower output from these direct effects will lower national saving and investment, and this reduces output a bit further. The eventual increase in the private security budget is unknown, but for calibration purposes it is assumed that it doubles. Smaller or larger changes would produce proportionally smaller or larger effects. Under these assumptions, increased security costs reduce the level of output and productivity by about 0.6 percent after 5 years below what they would have been otherwise.

The United States spends roughly $110 billion a year on security. This includes the services of Federal, State, and local police (but not the armed forces). Of this, private business spends about $55 billion, or 0.53 percent of GDP. It is assumed that one-third of the incremental spending goes to security capital and two-thirds to security labor.

The diversion of two-thirds of $55 billion for additional security labor diverts about 760,000 workers from productive employment, lowering labor input to the economy by 0.69 percent. This diversion lowers production by about two-thirds of 0.69, or about 0.46 percent. The diversion of one-third of $55 billion from productive investment in the first year lowers the "productive" capital stock by 0.10 percent and lowers production by one-third of that, or about 0.03 percent.

In addition, by reducing output, the diversion also reduces saving and investment, in turn reducing output further. The diversion in each subsequent year lowers capital services even more. Assuming a 25 percent depreciation rate, capital services will have fallen by 0.39 percent after 5 years, lowering output by 0.13 percent.

The effect of the labor diversion is relatively large and immediate. The effect of the capital diversion, in contrast, takes a few years to accumulate. By the fifth year, output will be about 0.6 percent lower, with 85 percent of that effect arising in the first year or two. Thus productivity growth will be lower by 1/4 percentage point during the first 2 years but will be affected only marginally thereafter.

The other components of potential GDP growth shown in Table 1-2 are more easily projected. In line with the latest projection from the Bureau of the Census, the working-age population is projected to grow at an average 1.0 percent annual rate through 2012. The labor force participation rate and the work week are projected to remain approximately flat. In sum, potential real GDP growth is projected to grow at about a 3.1 percent annual pace, slightly above the average pace since 1973.

The rate on 91-day Treasury bills fell about 4 percentage points during the 12 months of 2001, reflecting the series of cuts in the Federal Reserve's interest rate target in response to the slowing economy. By the end of December, the Treasury bill rate had fallen to about 1.7 percent. At this nominal rate, real short-term rates (that is, nominal rates less expected inflation) are close to zero. Real rates this low are not expected to persist once recovery becomes firmly established, and nominal rates are projected to increase gradually to 4.3 percent by 2005. At that level the real rate on Treasury bills will be close to its historical average.

The Administration projects that the yield on 10-year Treasury notes will remain flat at 5.1 percent. The Administration's expectation for the 10-year rate reflects the assumption that the market yield embodies all pertinent information about the path of future interest rates. In 2003 and thereafter, the real 10-year rate is projected to remain slightly below its historical average. The projected term premium (the premium of the 10-year rate over the 91-day rate) of about 1 percentage point is projected to remain slightly (about 30 basis points) below its historical average.

One important purpose of the Administration forecast is to estimate future government revenue. To this end, the forecast of the components of taxable income is crucial. The Administration's income-side projection is based on the historical stability of the long-run labor and capital shares of gross domestic income (GDI). During the first three quarters of 2001, the labor share of GDI was on the high side of its historical average of 57.7 percent. It is projected to decline to this long-run average and then remain at this level over the forecast period. Nevertheless, the Administration forecasts that wages and salaries as a share of GDI will decline and that other labor income, especially employer-provided medical insurance, will grow faster than wages. The capital share of GDI is expected to rebound in the short run, reflecting an expected cyclical rebound in productivity, and to remain flat at roughly its historical average thereafter. Within the capital share, a near-term decline in the depreciation share (a consequence of the recent decline in equipment investment) implies an increase in the profit share from its current level. (Profits before taxes had fallen to 6.7 percent of GDP by the third quarter of 2001, well below the post-1969 average of 8.1 percent.) The Administration projects an increase in the profit share over the next several years, so that it averages 8.1 percent over the forecast period.

Box 1-4. Is There Still a New Economy?

The late 1990s witnessed what many regard as the birth of a "New Economy"—one characterized by the dominance of high-technology industries, immunity from cyclical downturns, and, most of all, rapid productivity growth. In the past year, however, high-technology stocks, especially Internet and communications stocks, led the stock market's retreat; the 1990s expansion ended; and July's annual revision to the national income and product accounts caused productivity to be revised downward. It is useful, therefore, to examine the evidence for a resumption of the post-1995 acceleration in productivity.

Productivity growth is cyclical: it typically slows relative to its trend immediately before and after a business cycle peak. Yet over the four quarters ending in the third quarter of 2001, productivity growth grew faster than in any comparable period during the last four decades (Chart 1-9).

Table 1-3 presents the results of an analysis of the factors that influence productivity growth and compares their influences in two periods: 1973 to 1995, and 1995 to 2001. According to a model designed to capture its cyclical behavior, the productivity acceleration after 1995 would have been stronger by 0.48 percentage point a year but for the hiring that took place during this period to accommodate the increase in demand that occurred before and during 1995. (See the second line in Table 1-3.) This model estimates that business cycle effects raised productivity growth noticeably in 1992-94 as the economy emerged from recession, and reduced it noticeably in 1999, 2000, and 2001 (by 0.8, 0.4, and 1.4 percentage points, respectively). Adjusted for this cyclical effect, structural productivity has accelerated by 1.70 percentage points. In short, the latest evidence shows structural productivity growth continuing to exceed its pace during the period from 1973 to 1995. Because it was reduced by the effects of the business cycle slowdown, actual productivity growth accelerated somewhat less than structural productivity: by 1.21 percentage points, to a 2.60 percent annual rate of growth.

In general, an acceleration in structural productivity can come from increases in any of the following four sources of growth:

- growth in the amount of capital services per worker-hour throughout the economy (capital deepening),
- improvements in the measurable skills of the work force (labor quality),
- total factor productivity (TFP) growth in computer-producing industries, and
- TFP in other industries.

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Box 1-4.—*continued*

TFP growth is the increase in aggregate output over and above that due to increases in capital or labor inputs. For example, TFP growth may result from a firm redesigning its production process in a way that increases output while keeping the same number of machines, materials, and workers as before.

Business investment was relatively strong during the past 6 years, so that even after declining during the past year, nonresidential fixed investment remained (at 12.0 percent of GDP in the third quarter of 2001) well above its postwar average (10.7 percent of GDP). Investment in information equipment and software was especially strong after 1995, and likewise remains above its historical average share of GDP, although it, too, has fallen from levels of a year ago. As Table 1-3 shows, investment in information technologies added 0.60 percentage point to the increase in structural productivity growth after 1995. The buildup of capital outside of information technology maintained about the same pace after 1995 as before, and so did not contribute to the acceleration of productivity.

The Bureau of Labor Statistics measures labor quality in terms of the education, gender, and experience of the work force. The agency uses differences in earnings paid to workers with different characteristics to infer relative differences in productivity. Measured in this way, labor quality has risen as the education and skills of the work force have increased. Because that increase occurred at about the same rate before and after 1995, however, the contribution of labor quality to the recent acceleration in productivity has been negligible.

The rate of growth of TFP in computer-producing industries has been rising, as evidenced by the rapid decline in computer prices. Computer prices did not fall as rapidly in 2000 as they did from 1997 to 1999; however, their rapid descent resumed in 2001. Using computer prices as an indirect measure of productivity growth in the computer-producing industries, calculations indicate that computer manufacturing accounts for 0.16 percentage point of the economy-wide acceleration in productivity.

The final contribution comes from accelerating TFP in the economy outside the computer-producing industries. The contribution of this source is calculated as a residual; it captures the extent to which technological change and other business and workplace improvements outside the computer-producing industries have boosted productivity growth since 1995. This factor accounts for about 0.90 percentage point of the acceleration, or about half of the total. Taken at face value, it implies that improvements in the ways capital and labor are used

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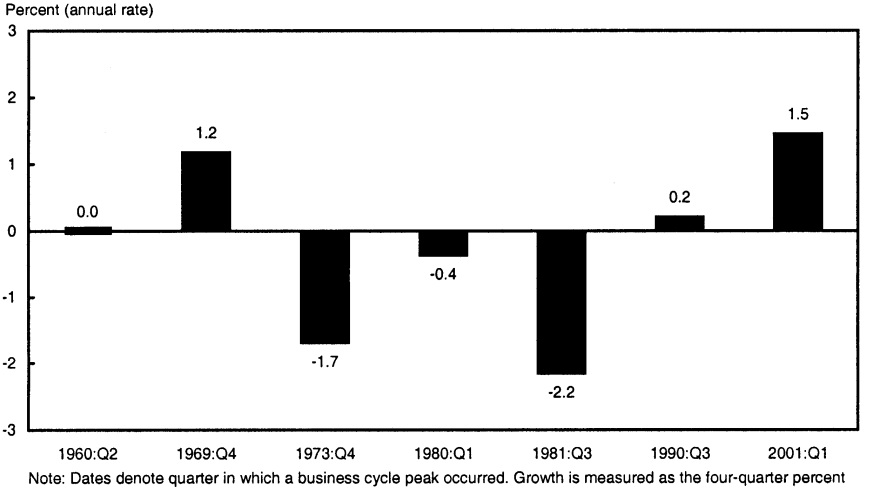
Box 1-4.—*continued*

throughout the economy are central to the recent acceleration in productivity, but it is equally an illustration of the limits on our ability to account for the acceleration.

In summary, structural labor productivity growth and TFP growth remained strong through 2001. This growth argues that the New Economy remains alive and well.

The Administration believes that the economy may be able to grow faster than assumed in the budget, once the new tax policy is in place. The reductions in marginal tax rates are expected to lead to increases in labor force participation and increased entrepreneurial activity. The budget, however, uses economic assumptions that are close to the consensus of forecasters. As such, the assumptions provide a prudent, cautious basis for the budget projections.

Chart 1-9 **Productivity Growth Around Business Cycle Peaks**
Nonfarm productivity growth was higher around the 2001 business cycle peak than around any other peak in the past four decades.



Note: Dates denote quarter in which a business cycle peak occurred. Growth is measured as the four-quarter percent change for the period ending two quarters after each business cycle peak. Thus, growth shown for 2001:Q1 is for the four quarters ending in third quarter 2001.

Sources: Department of Labor (Bureau of Labor Statistics) and National Bureau of Economic Research.

TABLE 1-3.—*Accounting for the Productivity Acceleration Since 1995*

[Private nonfarm business sector; average annual rates]

Item		1973 to 1995	1995 to 2001	Change (percentage points)
Labor productivity growth rate (percent)		1.39	2.60	1.21
Percentage point contributions:				
Less:	Business cycle effect	.02	-.46	-.48
Equals:	Structural labor productivity	1.37	3.07	1.70
Less:	Capital services	.72	1.29	.57
	Information capital services	.41	1.01	.60
	Other capital services	.31	.28	-.03
	Labor quality	.27	.31	.04
Equals:	Structural TFP	.37	1.44	1.07
Less:	Computer sector TFP	.18	.35	.16
Equals:	Structural TFP excluding computer sector TFP	.19	1.09	.90

Note.—Labor productivity is the average of income- and product-side measures of output per hour worked. Total factor productivity (TFP) is labor productivity less the contributions of capital services per hour (capital deepening) and labor quality.

Productivity for 2001 is inferred from data for the first three quarters.

Detail may not add to totals because of rounding.

Sources: Department of Commerce (Bureau of Economic Analysis) for output and computer prices; Department of Labor (Bureau of Labor Statistics-BLS) for hours and for capital services and labor quality through 1999-but the BLS figures have been adjusted for the effects of the July 2001 annual revision to the national income and product accounts; and Council of Economic Advisers for the business cycle effect, and for capital services and labor quality for 2000-2001.

The Policy Outlook: An Agenda for Economic Security

The events of 2001 have brought home to us a simple lesson: We cannot be complacent about the security of American lives. Nor can we be complacent about our rate of economic growth, our gains in productivity, or our successes in the international marketplace. The war against terrorism steps up the demands on our economy. We must seek every opportunity to remove obstacles to greater efficiency and seek new ways to combine our workers' skills, our new technologies, the drive of our entrepreneurs, the efficiency of our financial markets, and the strength of our small businesses to yield faster growth. As we integrate ever more closely our own resources, so must we also extend this integration abroad, addressing the economic roots of terrorism and securing the gains from worldwide markets in goods and capital. This is our economic challenge.

The United States boasts a more rapid long-term rate of productivity growth than do other major industrialized economies. Nonetheless, the Administration is committed to seeking opportunities to enable the economy to grow even more rapidly in the future. Growth, of course, is not an end in itself. As the President has said, we seek "prosperity with a purpose." Economic growth raises standards of living and generates resources that may be devoted to a variety of activities in the market and beyond. Growth can fund environmental protection, the good works of charitable organizations, and a wide variety of nonmarket goods and services that benefit the United States, other industrialized economies, and developing economies alike.

To build upon our past success and rise to our new challenges, we must remove impediments to growth and build the institutions necessary to foster improved economic performance. For example, as noted in Chapter 7, one of the President's top priorities is the U.S.-led effort toward more open global trade. Trade raises the productivity of Americans, and the United States has an opportunity to reap significant gains from future trade agreements.

Another area of interest is science and technology, long an important source of economic growth. For example, although information technology-producing industries account for roughly one-twelfth of total output, they contributed nearly a third to economic growth between 1995 and 1999. They generate some of the best and highest paying new jobs and contribute strongly to productivity growth. Technology also improves our quality of life. New agricultural technologies are increasing crop yields while reducing the need to spray herbicides and insecticides on our foods or into the atmosphere. More generally, however, it is important to establish incentives that will ensure continued growth in innovation and the new technologies that will define the 21st century. We must not only invest in basic research, but also ensure that the intellectual property of innovators is secure at home and abroad.

Getting the most out of the economy's resources also means avoiding unnecessary costs. Prominent among these are the costs—in terms of slower economic growth and waste—associated with the Federal tax code. The entire tax system would benefit from changes to address its complexity and inefficiency. With the President's leadership, progress has been made with the individual income tax by reducing marginal tax rates and improving tax fairness. Much more needs to be done, however, to ease the burden of taxation on the economy, to help it generate resources and increase productivity.

The current tax code imposes multiple layers of taxation, whose inefficiency costs may be as high as ½ percent of GDP a year, according to the Treasury Department. In addition, tax complexity is much more than an irritant around April 15: it, too, imposes real costs on taxpayers and the economy. Taxpayers bear the cost in terms of the billions of dollars they

spend—on recordkeeping, tax help, and their own valuable time—trying to comply. Tax compliance costs range from $70 billion to $125 billion a year. The economy also suffers because tax complexity raises the uncertainty surrounding business decisions, wastes resources, reduces our international competitiveness, and lowers productivity. These are costs that produce few benefits. They are largely avoidable. To get the most out of our economy, we must investigate options for tax reform.

The deregulation of the economy over the past 25 years has been a tremendous source of economic flexibility and productivity growth. We must build on that success. Deregulation of several key sectors during the 1970s and 1980s has brought substantial benefits to consumers and to the economy at large. In the 20 years following the beginning of airline deregulation, the average fare declined 33 percent in real terms. Rates for long-distance telecommunications dropped 40 to 47 percent in the 10 years following deregulation of that market.

Partly because of increased competition arising from reductions in banking regulations, banks have greatly expanded the financial services they offer customers, including important new tools for diversifying risk. Together these price declines and quality improvements across a range of deregulated industries have yielded substantial economic benefits. One study estimates the combined economic benefit of deregulating just three industries—airlines, motor carriers, and railroads—at about ½ percent of GDP each year.

This important strength of our economy must be protected against unintended interference and extended to new spheres. Competition and incentives to compete are at the core of exploiting opportunities to achieve faster growth. (Chapter 3 discusses competition policy.) The rule of law is central to efficient markets. Today, however, frivolous lawsuits and the lure of windfall recoveries are transforming America from a lawful society to a litigious one. The litigation explosion imposes a variety of costs on all of us—as much as 2 percent of GDP by one estimate—and damages the prospects for growth. The inefficiencies in our tort system are a pure waste, an unnecessary tax on our attempts to grow faster. To reduce this wasteful distortion we must address the incentives that lead to unnecessary torts and unreasonably large settlements.

We must reexamine the provision of economic security for every individual American. For example, Chapter 2 of this *Report* examines the changing nature of retirement security and documents the widely accepted need for reform. Personal accounts within the national retirement system would enhance the ability to diversify retirement portfolios, including diversifying part of retirement security away from the unsustainable current system. In doing so, they could for the first time provide rights of ownership, wealth accumulation, and inheritance within the Social Security framework.

We must design an efficient set of institutions that meet the short-run needs of displaced workers and move them quickly toward productive activities. The past year has displayed an extreme form of the shocks to which our economy may be subjected. The President's vision of economic security recognizes that many events impact the economy all the time. We should think comprehensively about these policies and focus our efforts on incentives for getting workers back to work, and quickly. Resources should be devoted flexibly to basic needs and retraining, without creating an incentive for unnecessarily long spells between jobs, because benefits extended under the wrong conditions create a "tax" when a new job is taken and those benefits are lost.

Finally, getting the most out of the economy will require an emphasis on efficiency in government as well. If government spending grows without discipline, billions of dollars will be siphoned away from private sector innovation, taxes will rise, and growth will suffer. The President's Management Agenda seeks to shift the emphasis of government toward results, not process. It aims to replace the present Federal Government hierarchy with a flatter, more responsive management structure and to establish a performance-based system. Chapter 5 of this *Report* examines fiscal federalism and shows how this approach to the structure of Federal programs may usefully be extended to the conduct of intergovernmental relations, particularly in education, welfare, and health insurance for low-income Americans.