CHAPTER 2

Recent Developments and the Economic Outlook

OVER THE LAST SEVERAL years, the U.S. economy has been struggling through a period of consolidation and transition. In addition to the oil price shock in the second half of 1990, various structural relationships and imbalances contributed to the recession and the sluggish economic performance including defense downsizing; a boom-bust cycle in commercial real estate aggravated by wide swings in the tax laws and bank regulation; credit market constraints resulting from the balance sheet, capital, and regulatory difficulties that financial institutions faced; and a buildup in corporate debt relative to profits and household debt relative to income. The working off of these imbalances added to the economy's cyclical difficulties. Changing demographic trends that have slowed the underlying rate of household formation and the more recent trend toward corporate downsizing also have played a role in slowing the economy. The sluggish economic performance has not been confined to the United States: In recent years, Australia, Canada, and the United Kingdom have been in recession, and Japan and Germany entered recession during 1992. Other European countries are verging on recession. Although some countries are adopting policies to help stimulate their economies, the general slowdown in the international economy will act as a drag on U.S. exports and growth for some time.

As the Nation's economic difficulties are resolved—as the drag associated with corporate and household indebtedness is reduced; banks improve their capital position, become less cautious about lending, and face a more-balanced regulatory environment; the adjustment to defense cuts progresses; and the supply of developed real estate is brought into balance with demand—conditions for a stronger, sustained expansion are being laid. Other developments that promise to enhance the prospects for a sustained expansion include low and stable inflation, low interest rates, and rising productivity. Interest rates and core inflation—consumer price inflation excluding the volatile food and energy components—are at their lowest levels in a generation.

In the late 1970s, inflation climbed to disturbing double-digit levels, exceeding 13 percent during 1979 and 12 percent during

1980. Inflation imposed a heavy burden on the economy, complicating saving and investment decisions and adding to the economic uncertainties that many Americans faced. Additionally, because tax brackets were not indexed for inflation at that time, increases in nominal income that barely kept pace with inflation automatically pushed taxpayers into higher tax brackets. The severe recession that followed in the early 1980s, the country's worst economic performance since World War II, was largely a direct consequence of the disinflation policies—in particular tight monetary policy—that successfully reduced inflation from the double-digit levels of 1979–80 to less than 4 percent in 1982. Inflation remained in the 4- to 5-percent range for the rest of the decade. While the recession of the early 1980s was deep, the loss of output was not nearly as severe as many economists had predicted it would have to be in order to achieve such a sharp reduction in inflation.

The lower rate of inflation was a significant improvement, and the economy grew strongly, producing over 21 million new jobs between 1982 and 1990. But concern mounted that progress toward lower inflation had stalled. It seemed that a rate of 4 to 5 percent might be a new floor below which inflation would be unlikely to fall. In the early 1970s, such rates of inflation had been considered unacceptably high; in response to such rates, the Nixon Administration imposed wage and price controls to bring inflation down, in what proved to be an unsuccessful effort with costly side effects. In the late 1980s, as the economy continued to expand and the unemployment rate fell to its lowest level in 15 years, incipient inflationary pressures raised fears of a resurgence in inflation. This raised the possibility of another round of rapidly accelerating inflation—and the costly efforts required to fight it—much like the severe events of the late 1970s.

The Federal Reserve was determined to avoid the mistakes of the past and to act before a new inflationary spiral developed. In order to prevent a substantial increase in inflation and to resume the progress toward lower inflation that had begun early in the decade, the Federal Reserve pursued a strategy that tightened monetary policy gradually in an attempt to contain the growth of nominal output and reduce inflation without causing an actual decline in real output. This has sometimes been called a "soft-landing" strategy. Short-term interest rates rose from about 7 percent in early 1988 to about 10 percent in early 1989. By acting in a timely manner with forward-looking monetary policies, the Federal Reserve improved the prospects for a reduction in inflation without a costly economic downturn.

As growth slowed in 1989 and early 1990, the Federal Reserve began gradually lowering interest rates as evidence of poor economic performance and lower inflationary pressures accumulated.

Interest rates fell gradually from the spring of 1989 until the beginning of 1990. In the last quarter of 1990, after it was evident that the economy had indeed entered a recession, the Federal Reserve became more aggressive in lowering interest rates, which continued to fall through 1991 and much of 1992. During this period, the reserves of banks and other depository institutions grew substantially. However, the broader money supply measures grew at surprisingly low rates and appeared largely unresponsive to increases in bank reserves and reductions in short-term interest rates (Chapter 3). Moreover, the economy did not respond to the decline in interest rates as rapidly or as strongly as the Federal Reserve and many private observers had anticipated.

The soft-landing strategy involved inevitable risks because it slowed aggregate demand growth and made the economy more vulnerable to potential adverse developments. This strategy might have worked if large shocks and other unforeseen factors depressing economic activity had not emerged or if the drag they exerted on the economy had been readily observable and easily offset by changes in policy. However, policies are always conducted in an uncertain environment, and it takes time to recognize problems and implement policies—and for those policies to take effect.

At the time the various problems facing the economy began to emerge, it was difficult to determine their severity or the kind of stimulus that would be required to offset them without reversing progress toward lower inflation. With the benefit of hindsight, a more rapid reduction in interest rates might have reduced the downward pressures on output and contributed to a healthier recovery without reviving inflationary pressures—although the progress in reducing inflation could have been slowed. In any event, too much reliance was placed on monetary policy, and the economy would have benefited from fiscal stimulus (primarily tax incentives), regulatory relief, and policies oriented toward trade expansion.

If the soft-landing strategy failed to avert a recession as a result of unexpected events, the strategy was highly successful in reestablishing progress toward lower inflation. The rate of core inflation declined from 5.2 percent during 1990 to about 3.5 percent during 1992. Following the decline of inflation from the double-digit levels of the late 1970s to the 4- to 5-percent range in the mid- to late-1980s, the more recent decline represents the second round of a long-term disinflation effort started over a decade ago. The current low and stable inflation rate means that households will be able to save with reduced concern that inflation will erode the purchasing power of their nominal assets, while businesses will be able to commit themselves to long-term projects with less uncertainty that inflation might render their investments unprofitable. As a result

of reduced inflationary pressures and the credibility the Federal Reserve has gained from its inflation fight, the economy may be spared the need for the policy reversals—so prevalent from the late 1960s through the early 1980s—that resulted in the upward ratcheting of inflation and wide swings in output and employment.

During the recent period of disinflation, the U.S. economy has gone through several fairly distinct phases: a period of slow growth starting in early 1989 and continuing through the first half of 1990; a recession for the next three quarters, with real gross domestic product (GDP) falling a total of 2.2 percent; and three quarters of very sluggish recovery, with real GDP growing about 1.2 percent at an annual rate. During 1992, the U.S. economy remained in a modest and uneven recovery, with the rate of growth picking up to the 2.5- to 3-percent range.

Last year's Administration forecast correctly predicted that, by historical standards, the economy would grow at a quite modest pace during 1992. Through the middle of the year, employment and income growth remained sluggish, and consumer and business confidence were low. Export growth slowed, restricting what had been a source of strength for the U.S. economy for many years. However, by midyear the outlook began to improve as unemployment began a gradual decline, nonfarm payrolls began to edge up, income growth picked up, and consumer and business confidence stabilized and then began to rise.

The current Administration forecast predicts that real GDP will grow about 3 percent during 1993. Growth is expected to continue in the 3-percent range through the mid-1990s. Sustained growth will require, among other things, a fiscal policy oriented toward spending restraints to reduce the structural budget deficit over time and tax incentives that enhance growth, a monetary policy that provides sufficient growth in money and credit to sustain the expansion while maintaining low inflation, regulatory reform that provides greater room for the use of market incentives to minimize the negative impacts of regulation on economic growth, and trade policies that succeed in opening markets worldwide and in supporting growth in the international economy.

The unemployment rate is expected to decline slowly but steadily during 1993, averaging 6.9 percent for the year (compared with 7.4 percent for 1992) and to continue its slow decline through the mid-1990s. Inflation likely will remain low in 1993 and in coming years, with consumer prices rising in the range of about 3 percent per year. With moderate growth and low inflation, short-term interest rates are expected to remain low in 1993, and long-term interest rates are expected to decline. In coming years, short-term rates are likely to increase slightly as the economy continues to expand, and long-term rates are expected to stabilize as inflation remains low.

However, the outlook for interest rates in general and long-term rates in particular depends on fiscal and monetary policies. Policies that would lead to higher spending and deficits or higher inflation, relative to what is currently expected, could boost long-term interest rates and retard economic growth in the future.

The economy is expected to improve in coming years. But challenges remain. Short-term cyclical performance remains uncertain, various structural imbalances have yet to be worked out, and a high rate of productivity growth must be maintained to sustain increases in Americans' living standards. Of the various short-term cyclical concerns that remain, the most important center on the need for improved employment prospects and the related bolstering of consumer confidence. Corporate restructuring and military downsizing are significant structural adjustments that could hamper job growth.

This Administration has recognized throughout its term, and stated explicitly in each of its previous *Economic Reports*, that *the Nation faces serious economic challenges and cannot take economic growth for granted.* The Administration's policies and policy proposals have been designed to support sustained increases in the Nation's standard of living by raising long-term productivity growth while boosting the job base. Unfortunately, the Congress did not enact many of the Administration's key growth proposals in an acceptable form. Included in these proposals were pro-growth fiscal measures designed to enhance incentives for entrepreneurship, saving, and investment and to increase economic growth, as well as spending controls aimed at reducing the multiyear structural budget deficit. This Administration also has promoted a trade policy designed to open markets worldwide, contributing to more vigorous growth, and pursued regulatory reforms to reduce unnecessary burdens on businesses and consumers.

The Nation has been through difficult economic times over the past several years, but despite these difficulties, the U.S. economy remains the strongest and most resilient in the world. The recovery from the recent recession has been slow and protracted, but the performance of the economy during the last 4 years has not been uniformly weak. Broad-based, readily available information does not support the argument that the country's recent economic performance has been the worst since World War II. Economic conditions, including inflation, interest rates, unemployment, and real growth, have been better during the past 4 years than they were during the 1978–82 period. Core inflation and interest rates are now at their lowest levels in a generation, well below the double-digit rates that prevailed 12 years ago. At its recent peak the unemployment rate was 7.7 percent, considerably lower than the peak of nearly 11 percent in the early 1980s and the 9-percent peak

during the 1973–75 recession. And in terms of real GDP and income, the slow growth of the past 4 years still exceeds the average growth from 1978 to 1982.

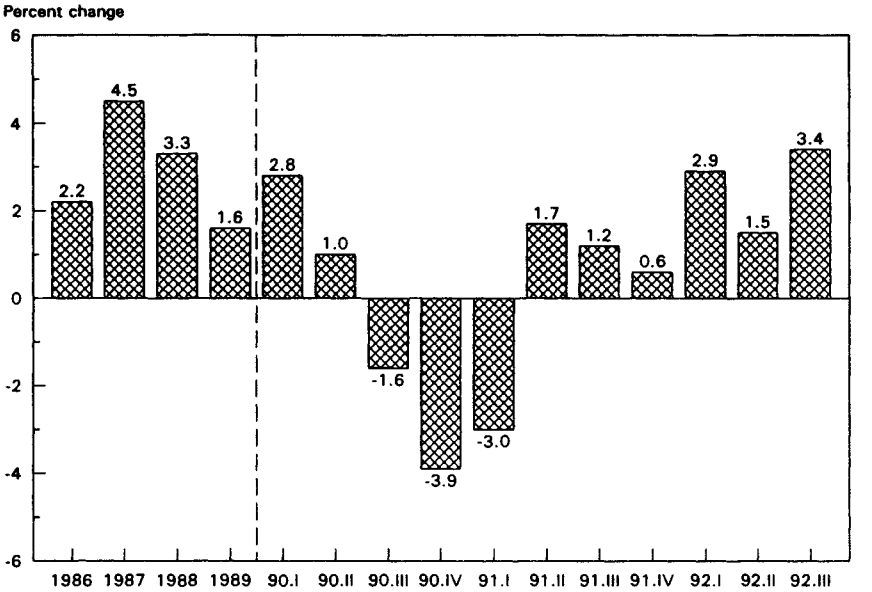
The soaring inflation and interest rates of the late 1970s condemned the U.S. economy to years of declining output, falling incomes, and rising unemployment. Yet these adjustments, painful as they were, set the stage for the sustained expansion of the 1980s. For the last several years, the economy has been going through a similar but much less severe period of consolidation and transition, with structural adjustments and disinflation restricting economic growth. This period once again has meant substantial hardship for millions of Americans. But the numerous structural adjustments of recent years have been laying the basis for a solid, sustained expansion in the 1990s. As the drag associated with household and corporate indebtedness is reduced, consumer spending and investment in plant and equipment will increase. As banks improve their balance sheet positions and banking regulation and supervision become more balanced, credit conditions will improve. Over time, shifting resources from defense to civilian industries will strengthen the private economy and provide new employment opportunities. Enhanced productivity already has boosted the Nation's competitive position in international markets, and low and stable inflation will reduce the need for policies that could restrict future growth. Together, these factors will help create a strong, sustainable recovery, more jobs, and higher incomes in years to come.

AN OVERVIEW OF THE ECONOMY IN 1992

The pattern of real GDP growth reveals the slow and uneven nature of the economy's recent performance (Chart 2–1). The recession of 1990–91 ended in March 1991, following 8 months of decline (Box 2–1). Beginning with the second quarter of 1991, real GDP grew for six consecutive quarters, although growth averaged only 2 percent at an annual rate. Furthermore, the pattern of growth was uneven. During the final three quarters of 1991, the pace of recovery was particularly slow; in the fourth quarter of 1991, the economy was essentially flat, with real GDP increasing at only a 0.6-percent annual rate. During the first three quarters of 1992, the economy grew at a stronger pace, but still well below the average for previous recoveries.

Uneven growth during a recovery is not unusual. Indeed, every previous postwar recovery has shown a "saw-tooth" growth pattern with weaker quarters following, or sandwiched between, stronger quarters. The underlying growth rate was low for much of 1991 and 1992—too low, in fact, to increase employment appreciably. While real GDP increased for six consecutive quarters after its

Chart 2-1 **Real Gross Domestic Product Growth**
Real GDP has grown for six consecutive quarters, following three quarters of decline during the recession.



Note: Annual values are IV/IV change. Quarterly values are seasonally adjusted at an annual rate.
Source: Department of Commerce.

trough in the first quarter of 1991, the unemployment rate increased by 1.2 percentage points, reaching an 8-year high of 7.7 percent in June 1992 before trending down for the remainder of the year (Chart 2-2). Nonfarm payroll employment remained almost flat after the recession ended, declining slightly in late 1991 and early 1992, before growing slowly through the end of 1992 (Chart 2-3).

EARLY IMPROVEMENT

The economy picked up in the first quarter of 1992, with real GDP expanding at an annual rate of 2.9 percent—the strongest growth in 3 years. Real consumer spending posted its best quarterly performance in over 5 years, rising 5.1 percent at an annual rate. Real final sales—real GDP less the change in business inventories, a measure of aggregate demand in the economy—rose at an annual rate of 4.7 percent in the first quarter. Real per capita disposable personal income also increased, recording its largest gain in 2 years. Consumer confidence, as measured by the Conference Board's Consumer Confidence Survey, reached an 18-year low early in the year but then rose more than 50 percent through the spring

Box 2-1.—Recessions and Business Cycle Dating

For the past year and a half the question of whether the economy has been in a slow recovery or has continued in recession has been hotly debated. The National Bureau of Economic Research (NBER), a private economic research organization, is the official arbiter determining the beginning and ending dates for recessions and expansions—the turning points of the business cycle. In late December 1992, the NBER Business Cycle Dating Committee determined that the recession that began in July 1990 ended in March 1991, indicating the recession lasted only 8 months.

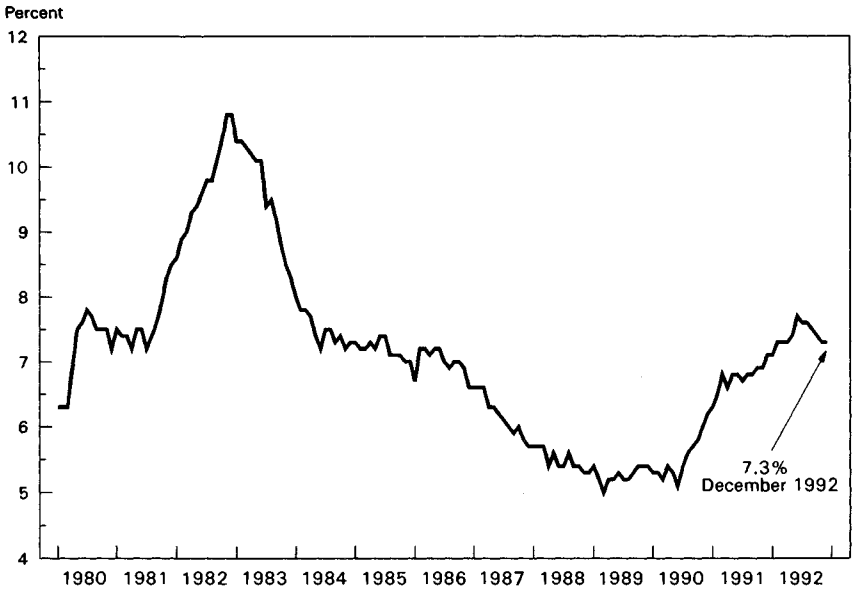
During a recession, the economy is in a decline of significant depth, duration, and diffusion (that is, spread across various industries and sectors); during a recovery it regains the output lost during the recession. A recovery is typically followed by a sustained expansion. To say that the recession ended in March 1991 does not mean that the economy was doing well after that date; rather, it means that the period of decline had ended and output had begun to increase. The recovery was complete by the third quarter of 1992, when real GDP climbed above the prerecession peak of the second quarter of 1990.

Key economic variables must be examined to determine the beginning or end of a recession. The components of the Department of Commerce's index of coincident indicators—nonfarm payroll employment, industrial production, real personal income less transfer payments, and real manufacturing and trade sales—generally serve that purpose well. Industrial production and real manufacturing and trade sales hit their low point in early 1991. Real personal income less transfer payments and nonfarm payroll employment also reached their initial lows in early 1991 but then flattened out, even dipping slightly in late 1991 and early 1992.

The debate also was clouded somewhat by the methodology used to construct the index of coincident indicators. This methodology results in a downward bias that would generate a declining index even if the economy were growing very slowly. The Department of Commerce has begun publishing an alternative coincident index based on revised methodology that shows a trough—the low point in economic activity—in March 1991, a result consistent with the NBER dating of the end of the recession.

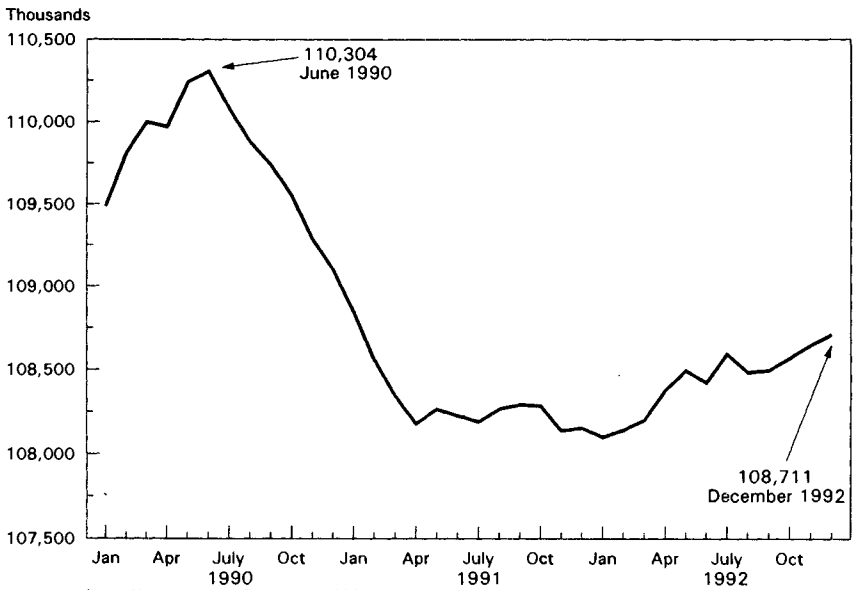
(Chart 2-4). Civilian employment and labor force participation—the percentage of the working-age population working or actively seek-

Chart 2-2 **Civilian Unemployment Rate**
The unemployment rate fell steadily during the second half of 1992. The recent peak of 7.7 percent in June 1992 was well below the 10.8 percent peak following the 1981-82 recession.



Source: Department of Labor.

Chart 2-3 **Nonfarm Payroll Employment**
Nonfarm payroll employment grew slowly during 1992, after being stagnant for much of 1991 following the recession.

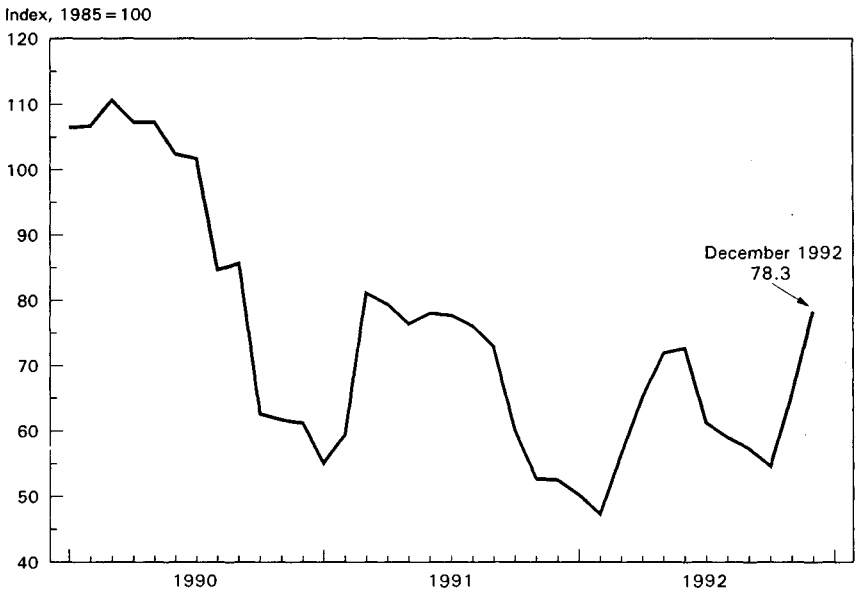


Note: November and December 1992 data are preliminary.
Source: Department of Labor.

ing work—rose as the economy appeared to be moving into a sustainable recovery and job prospects appeared brighter. After-tax corporate profits surged nearly 11 percent in the first quarter, the largest increase in 4 years.

Chart 2-4 **Consumer Confidence**

Consumer confidence has been extremely volatile over the last 2 years, turning up again in the final months of 1992.



Source: The Conference Board.

Other indicators also pointed to an improved economic outlook in early 1992. Lower mortgage rates helped boost housing construction, with housing starts surging 20 percent over the first 3 months of the year. Orders for durable goods rose 7.4 percent between December 1991 and April 1992, and industrial production—the output of the Nation's factories, mines, and utilities—rose 2.2 percent between January and May. The improved economic outlook was reflected in five consecutive monthly increases in the index of leading indicators, a measure designed to predict the economy's short-term performance.

MIXED PERFORMANCE AND UNCERTAINTY

Growth slowed after the initial surge, and the economy expanded at a modest 1.5-percent annual rate in the second quarter. Real final sales declined slightly in the second quarter, indicating that aggregate demand was weak. Hence, the change in inventory investment more than accounted for the growth in the economy in

the second quarter. Inventory investment often increases significantly and adds to growth during recovery periods as firms increase stocks in anticipation of increased sales. However, in the recent recovery, better management of inventories coupled with slow and uneven demand led businesses to be more efficient and, at the same time, more cautious in managing inventories. In such an environment, the degree to which inventory accumulation is due to lower-than-expected demand—and is therefore undesired—and the degree to which it is a desired buildup in anticipation of increased sales remain unclear.

The final expenditure components of real GDP—consumption, investment, government purchases, and net exports (exports of goods and services minus imports of goods and services)—showed uneven performance in the second quarter. Consumer spending stalled. Fixed investment increased strongly, with spending for producers' durable equipment and residential investment showing solid gains. Government purchases declined slightly. Net exports fell significantly as imports rose and exports declined slightly. The deterioration in net exports in the second quarter had a significant negative effect on real GDP, directly reducing the annual growth rate by 1.8 percentage points.

Consumer confidence also began to fall again in the middle of the year. Although mortgage rates remained low compared to earlier years, they moved up somewhat from their January low, and housing starts and housing sales fell back after their earlier surge. New orders for durable goods, retail sales, industrial production, and the index of leading indicators flattened out.

The lack of significant improvement in the labor market was a particularly important factor underlying the continued sluggish performance of the economy throughout 1992. While employment rose in the first half of the year, too few jobs were created to absorb the increased number of job seekers. As a result, the unemployment rate rose from 7.1 percent in January to 7.7 percent in June, as the number of unemployed persons rose from just under 9 million to nearly 10 million. The optimism of the first few months of the year was replaced with pessimism as employment prospects stagnated.

The weak labor markets reflect, in part, increases in efficiency. The strong performance of corporate profits noted earlier reflected vigorous cost-cutting efforts that often involved layoffs or restricted hiring in response to slow growth in aggregate demand. While such cost-cutting measures may help boost productivity and profits and, eventually, strengthen the economy, they also contribute initially to sluggish labor markets and slow income growth for a large proportion of households.

Because sustained income gains are the basis for continued growth in consumption, the immediate effect of sluggish performance in the labor market, with the accompanying reduced prospects for income gains, is decreased prospects for a pickup in spending. Wages and salaries and "other" labor income—primarily employer contributions to private pension and welfare funds—account for nearly two-thirds of all personal income. From March 1991 through September 1992, aggregate weekly hours worked by private nonagricultural production workers were essential flat, increasing only 0.3 percent, and real average gross hourly earnings for private nonagricultural workers actually fell, decreasing 0.7 percent. Total real wages and salaries rose less than 1 percent over the same period. Because consumer spending accounts for two-thirds of the spending stream constituting GDP, its growth is crucial to a sustained economic expansion.

SECOND-HALF REVIVAL

The economy revived in the second half of the year, with real GDP growing at a 3.4-percent annual rate in the third quarter, the highest rate in over 3½ years. The performance of the major components of real GDP shows that the revival was broad based in the domestic economy. Consumer expenditures rose at an annual rate of 3.7 percent, with solid contributions from increased spending on services and both durable and nondurable goods. Investment spending also made a significant contribution to third-quarter growth, rising at an annual rate of 6.5 percent as producers increased purchases of durable equipment and inventories surged, offsetting a decline in spending on structures. Government purchases more than made up for the second-quarter decline, rising at a 3.8-percent annual rate. The only major component to have a negative effect on growth was net exports, which continued to decline because of an increase in imports that more than offset an increase in exports. Commerce Department estimates for the fourth quarter had not been released when this *Report* was written. Initial data and private forecasts indicate that real GDP likely continued to grow at a moderate pace in the fourth quarter, supported primarily by a further large increase in consumer spending.

In the second half of the year, various indicators pointed to an improving economy. Retail sales climbed steadily. Consumer confidence declined slowly into the fall but then rose strongly in the final months of the year. After having slipped back in the summer, housing starts increased into the fall. New orders for durable goods and industrial production picked up. Initial claims for unemployment insurance trended down and by the end of the year had reached their lowest level in over 3½ years. The index of leading

indicators increased in the fall after having been flat during the summer.

SPECIAL FACTORS—HURRICANES

The effects of Hurricanes Andrew and Iniki were among the most important of the special factors affecting the economy in 1992. In August, Hurricane Andrew swept across southern Florida, the Gulf of Mexico, and into Louisiana, causing enormous damage. In September, Hurricane Iniki struck Hawaii. Department of Commerce estimates show that Hurricane Andrew destroyed or severely damaged over 100,000 private residences, Hurricane Iniki over 6,500. Insurance covered three-fourths of the more than $9.1 billion in residential property losses, one-half of the $1.2 billion in proprietors' property losses, and four-fifths of the $3.5 billion in corporate property losses. Hence, total property loss was nearly $14 billion, of which about three-fourths was covered by insurance. Hurricane Andrew also disrupted several major industries—oil and gas extraction, petroleum refining, and petrochemicals—contributing to a reduction in industrial production. The hurricanes also initially reduced personal income through lost wages, uninsured losses of personal and business property, and crop damage. The cost of benefit payments made by insurance companies had a significant negative effect on corporate profits in the third quarter.

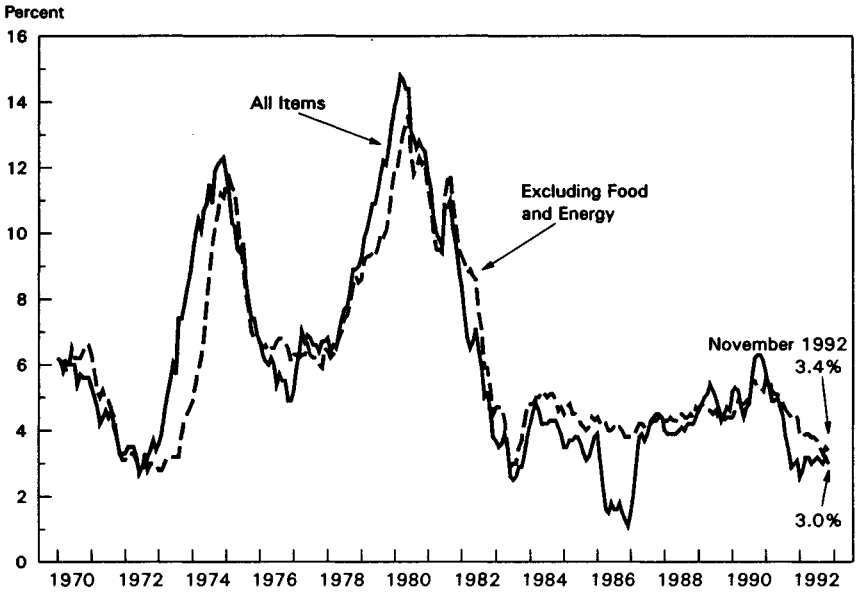
Ironically, the subsequent rebuilding and new purchases resulting from the hurricanes will have a net positive effect on real GDP. GDP measures production, not the stock of wealth or capital. While the hurricanes destroyed wealth and capital and, in the short run, disrupted production and income, the increased expenditures and production required by rebuilding will boost real GDP. Given the magnitude of the rebuilding effort, the contribution to real GDP growth at the end of 1992 and in early 1993 could be as high as 0.25 to 0.5 percentage point of growth at an annual rate per quarter over several quarters. The effect on real growth in each quarter will depend on how the purchases and rebuilding are distributed through time.

LOW INFLATION

During 1992 inflation fell to the lowest rate in a generation. Through November consumer price inflation during 1992 was 3.1 percent at an annual rate, and core inflation was 3.5 percent (Chart 2-5), the lowest yearly rate since 1972. Producer price inflation was somewhat higher during 1992 than during 1991; it had been unusually low during 1991 as a result of declining oil prices from their peaks during the Gulf conflict.

Various fundamentals helped keep consumer and producer price inflation low and contributed to the decline in core inflation. The

Chart 2-5 Consumer Price Inflation
Consumer price inflation has fallen over the past 2 years, with core inflation nearing its lowest level in two decades.



Note: Percent change in CPI-U from 12 months earlier.
Source: Department of Labor.

recession and slow recovery in the United States and the sluggish international economy have resulted in only modest growth of aggregate demand. Slow money growth over the past several years contributed to, as well as reflected, the sluggish economy and waning inflationary pressures. Primary commodity prices have not increased as they typically do during a recovery. These fundamentals are likely to keep inflation well below the 4.5- to 5-percent range of the mid- to late-1980s. In fact, the average expected 12-month change in consumer prices, measured by the Michigan Surveys of Consumers, has declined over the past several years, falling from over 5 percent in early 1989 to about 3½ percent in late 1992.

Low inflation not only benefits the economy but helps set the stage for sustained economic expansion. Lower inflation helps to maintain the purchasing power of Americans' savings and wealth. Low inflation has also helped bring nominal interest rates to their lowest levels in a generation. Low interest rates have helped households and businesses reduce the cost of paying off existing debt. Low mortgage rates helped to make housing more affordable in 1992 than it had been at any time in the past 18 years and created a burst of refinancing activity. Over the past 4 years, the interest

rate on 30-year fixed-rate mortgages declined by over 2½ percentage points; for a $100,000 30-year mortgage, that interest rate decline translates into savings of over $2,000 per year. Household debt-service payments as a percent of disposable income have fallen from a high of over 18 percent in late 1990 and early 1991 to about 16½ percent, improving household finances and freeing up funds for spending or saving. These lower interest rates also mean that interest income will be lower and that some of the economic benefits of lower interest rates will be offset. For some specific groups such as retirees, lower interest rates mean a significant decline in income.

THE INTERNATIONAL SLOWDOWN

Even though U.S. export growth has slowed gradually over the last several years, exports have made a significant contribution to economic growth, rising from 8 percent of real GDP in 1987 to over 11 percent in 1991. In 1992 slower export growth and a significant increase in imports caused the Nation's trade balance to deteriorate. Because the dollar's low foreign exchange value has bolstered the economy's international competitive position, the slowdown in export growth and deterioration of the U.S. trade balance appear to be the result of the sluggish economic performance of our major trading partners and the recent growing demand within the United States.

Despite the economic difficulties that the U.S. economy has had to face, over the past year and a half it has performed better than the economies of the other large industrial economies that belong to the Group of Seven (G-7)—Canada, France, Germany, Italy, Japan, and the United Kingdom. The German and Japanese economies, which grew strongly in 1990 and 1991 (with average annual real growth exceeding 4 percent) slowed markedly and entered recession during 1992. Canada and the United Kingdom were in recession in 1991, with real output declining by about 2 percent in each country; in 1992, growth in the Canadian economy resumed at a slow pace, but the United Kingdom continued in recession. France and Italy experienced sluggish economic performance in both 1991 and 1992, with real annual growth rates in the 1- to 2-percent range. Because the other G-7 countries account for almost one-half of all U.S. merchandise exports, slow growth or recessions in their economies can have a significant negative effect on U.S. exports.

U.S. exports to the newly industrialized economies of the Pacific Rim have been increasing, with the share to Korea, Taiwan, Singapore, and Hong Kong increasing from 8 percent in 1986 to nearly 11 percent in 1991. The outlook for real growth in those four economies is good and to some degree may offset the decline in demand

for U.S. goods and services among G-7 members. Prospects also are good for expanded trade with Latin and South America, and the North American Free Trade Agreement (NAFTA) should boost trade with Mexico. In the past 6 years, U.S. exports to Mexico have roughly tripled. While real growth in Mexico has slowed over the past 2 years, growth in 1992 and 1993 likely will compare favorably to the stagnant performance of the mid-1980s. (Chapter 7 of this *Report* has a detailed discussion of international financial and trade issues.)

LONGER TERM STRUCTURAL ADJUSTMENTS AND SHORT-TERM PERFORMANCE

As discussed earlier, the structural imbalances and adjustments of the past several years have been a major cause of the sluggish performance of the economy. In the 1970s and early 1980s, shifting demographic trends related to the postwar baby boom boosted household formation, increasing residential investment and spending on big-ticket durable goods such as cars, appliances, and furniture. However, by the late 1980s the share of the population in the age groups that traditionally form households had begun to decline, reducing the demand for new housing and related durable goods relative to other goods and services.

As the Cold War wound down, so did the defense buildup of the mid-1980s; moderate cuts in defense have been followed by more significant cuts that are likely to continue through the mid-1990s. Federal defense spending shifted from being a large net stimulus to the economy to being a sizable drag. Over the 1982–87 period Federal defense purchases directly contributed an average 0.35 percentage point annually to real GDP growth. Over the 1987–91 period, however, the direct effect was negative: -0.05 percentage point. In 1992 real Federal defense purchases were running nearly $20 billion (in 1987 dollars) below their 1991 level, resulting in a direct negative effect of nearly 0.4 percentage point on the growth rate of real GDP. Yet the actual impact of defense cutbacks has been greater than these data indicate. Because the data on purchases relate primarily to the delivery rather than the production of goods, the decline in purchases in 1992 from 1991 does not account for the additional decline in manufacturers' inventories of defense capital goods, which fell by $6 billion from October 1991 to October 1992. In addition, the data reflecting the effect on the Nation as a whole understate the short-term effect on local communities in the regions where defense industries are concentrated. Indirect effects contribute significantly to the overall effect of defense cutbacks.

Problems in the financial sector have had a significant effect on the recent economic situation because of the integral role

the sector plays in ensuring a growing, healthy, and flexible economy. When functioning properly, financial institutions help allocate capital efficiently and thus promote economic growth. Structural problems, like the recent constraints on credit that have resulted in a "credit crunch," impair the ability of financial institutions to function efficiently and, as a result, reduce growth. Credit crunches used to occur from time to time because regulations fixed an upper limit on the interest rates that could be paid on deposits. Those interest rate caps made it more difficult for depository institutions to attract deposits and forced them to cut back on loans. Over the past several years, however, restructuring of depositories' balance sheets—in part market driven and in part to meet new capital standards—as well as the overreaction of examiners to the earlier excesses of banks and savings and loans, have contributed to credit constraints. In addition, the Congress passed two bills—the Financial Institution Reform, Recovery, and Enforcement Act of 1989 and the FDIC Improvement Act of 1991—which contained several features that inadvertently contributed to the credit crunch and restricted bank lending (Chapter 5). Balance sheet restructuring, in combination with an unusually steep yield curve, resulted in declining commercial and industrial loans by banks and increased growth of bank holdings of government securities (Chapter 3). The reduced lending created particular difficulties for small and medium-sized businesses that typically rely heavily on banks as a source of funds. In addition, a variety of other financial intermediaries have suffered asset quality and capital problems that have reduced their willingness and ability to lend at precisely the same time that banks and thrifts have reduced lending.

Other factors, including the overbuilding of commercial real estate and high levels of consumer and corporate debt, have constrained both private investment and consumption. As these imbalances are gradually worked off, the drag on the economy will be reduced, allowing the economy to operate closer to its potential. (Chapter 3 contains an in-depth discussion of these issues.)

MONETARY AND FISCAL POLICY IN 1992

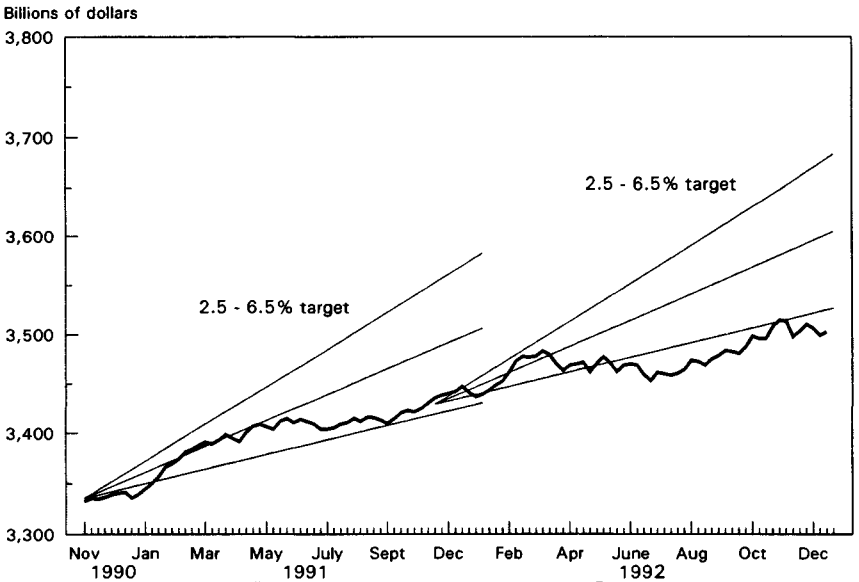
Desires to balance the need for short-term stimulus with long-term objectives governed monetary and fiscal policies in 1992. The Federal Reserve lowered interest rates in response to accumulated evidence of abating inflationary pressures and continued sluggish economic performance. Interest rates fell during the year, while the reserves of banks and other depository institutions grew rapidly. However, growth rates for the broader monetary aggregates were below the lower bound of the Federal Reserve's target ranges for most of the year. When the need for a fiscal policy that would provide immediate stimulus became increasingly clear in late 1991,

the President, in January 1992, responded by proposing tax incentives and other measures to encourage short-term growth and job creation as well as long-term investment and productivity (the program was not adopted by the Congress). (A broader discussion of monetary and fiscal policies in an historical context is presented in Chapter 3.)

Monetary Policy and Interest Rates

As a result of sluggish economic performance and monetary policy actions, short-term interest rates have been on a downward trend over the last 3½ years. Growth of the broader monetary aggregates, however, has remained consistently weak. The M2 monetary aggregate—which includes currency, checking accounts, money market accounts and funds, savings and small time deposits, and a few other items—stayed below the lower bound of the Federal Reserve's target range for much of 1992 (Chart 2-6).

Chart 2-6 **M2 Money Stock and Growth Target Ranges**
Growth in the M2 money stock has been near or below the lower bound of the Federal Reserve's target range for much of the past 2 years.



Note: Percentage growth lines indicate growth target ranges set by the Federal Reserve each year.
Source: Board of Governors of the Federal Reserve System.

While the long-term relationships between money—specifically M2—and nominal GDP have been relatively stable in the past, the short-term relationships have not been as stable. Furthermore, particularly in the short and medium terms, the Federal Reserve can only influence, not control, the quantity of money. However, because it can directly affect the Federal funds rate—the rate banks

charge each other for overnight loans— this rate tends to be the focus of short-term monetary policy. The Federal Reserve generally increases the Federal funds rate when inflationary pressures appear to be rising and lowers it when inflation appears to be waning and the economy is weak. Changes in the Federal funds rate, however, do not necessarily signal a fundamental shift in policy toward loosening or tightening because of the natural tendency for market interest rates to decline when the demand for credit falls during a period of sluggishness or to rise when demand for credit increases in a strong economy.

The slow growth of money and credit in recent years, at a time when the Federal Reserve has been lowering interest rates and boosting bank reserves, reveals significant changes in the relationship between short-term interest rates and the growth of money and credit. Traditionally, reductions in Treasury bill and other money market interest rates have led people to want to hold more of the deposits and currency included in M2, since the income forgone by holding M2 balances is reduced. But during 1992 nominal GDP grew at a rate of around 5 percent, while the M2 monetary aggregate grew at a much lower rate—less than 2½ percent—demonstrating that the relationship between the growth of money and credit and the growth of the economy had changed during this period.

Economists have not been able to agree on the reasons for the slow growth of M2 in the presence of falling short-term interest rates and rapidly rising bank reserves. M2 growth may have been constrained as households and firms moved funds away from low-yielding M2 assets to seek higher returns in long-term bonds and equities or to repay outstanding debts. Because the gap between long-term bond yields and short-term deposit rates has become especially large—and because of increased investment opportunities for small investors—M2 assets may be less responsive to short-term interest rates than they have been in the past. Additionally, the decrease in bank lending that has occurred due to more cautious lending by banks as well as to reduced loan demand by firms and households may have led banks to compete less aggressively for time and savings deposits by lowering interest rates, reducing advertising, or taking other actions to lower the growth of these components of M2.

Declining interest rates on time and savings deposits and money market accounts not only have weakened demand for M2 assets in total but also have reduced the opportunity cost of holding checking deposits or currency—included in the narrower M1 aggregate—that pay lower interest rates or no interest at all. Holdings therefore have shifted from time deposits and money market accounts (included in M2 but not in M1) to transactions accounts within M1,

as well as to bonds and equities not included in M2, as noted above. In consequence, M1 growth has been very strong in the past few years, also reflecting increased currency demand from abroad and the higher demand deposits associated with mortgage refinancings, even as M2 growth has lagged. Depository institutions are required to hold reserves of 10 percent against the bulk of deposits included in M1, but the reserve requirements do not apply to the nontransactions deposits included in M2. Hence, banks have needed the large increases in reserves over the past year in order to meet their reserve requirements on rapidly growing M1 deposits; excess reserves have been low and stable.

The changing relationship between M2 and economic activity has complicated the process of monetary policymaking, making it harder to judge the extent to which current monetary policy is stimulating or restraining the economy, and added to uncertainties about the impact prospective monetary policy actions will have on the economy in the future.

These complications may have been all the more important because it was difficult at the time to perceive the changing relationship between M2 and the level of economic activity. As in most economic relationships, the link between M2 and the economy has been variable, so that a period of a few months in which M2 is lower than expected is not sufficient to indicate that the fundamental relationship between M2 and the economy has changed. In fact, the growth of M2 did not fall substantially and consistently below what the Federal Reserve Board staff's statistical models predicted until late 1990, after the recession already had started. Even now, there is no definitive explanation as to why M2's relation to nominal GDP changed.

Given these difficulties, concerns have been raised as to whether M2 was the appropriate monetary aggregate to target in recent years—and whether it is the best aggregate to target at present. The most important criterion used to evaluate the appropriateness of an aggregate for monetary targeting is the predictability of its relationship to GDP. Recent research indicates that M2 continues to be the most useful aggregate available; in spite of recent changes, its relationship to GDP is still more predictable than that of other monetary aggregates. While the Federal Reserve always looks at a set of indicators for implementing monetary policy, it may be appropriate in this uncertain environment for the Federal Reserve to place greater weight on more direct indicators of production, income, and prices in addition to monetary aggregates. If a more predictable relationship between M2 or some other aggregate and GDP is reestablished in the future, the Federal Reserve could return to placing greater emphasis on that aggregate.

During 1992, following the sizable reductions at the end of 1991, the Federal Reserve initially held short-term interest rates relatively steady but near midyear began to lower them again in response to accumulating evidence that the economy remained sluggish and as the growth of the broader monetary aggregates continued to be slow. The most significant cut in interest rates took place in early July, when the Federal Reserve cut both the discount rate—the rate the Federal Reserve charges banks for loans to cover shortfalls in monetary reserves—and the target for the Federal funds rate by 0.5 percentage point, to 3 percent and about 3.25 percent, respectively. Those cuts, which brought interest rates to their lowest levels in nearly three decades, were followed by an additional reduction of 0.25 percentage point in the targeted Federal funds rate in September.

Other interest rates that also have been falling for several years were at low levels in 1992. The prime rate—the interest rate banks charge for loans to their best business customers—ended the year at its lowest level in nearly 20 years, falling from more than 11 percent in mid-1989 to just 6 percent. The rate on 30-year fixed-rate mortgages also fell to a 20-year low in September, declining below 8 percent from its mid-1989 high of more than 11 percent. Yields on long-term government and corporate bonds also dropped, although the decline was less pronounced than it was for short-term securities. As a result, the yield curve—a curve plotting the yields of comparable securities according to their term to maturity—became much steeper as the difference between long-term rates and short-term rates increased. Such a result is typical during recessions and early recoveries, although the yield curve has been unusually steep recently.

Fiscal Policy in 1992

During periods of slow growth or recession, fiscal policy typically shifts to assume a more stimulative role in the economy. To compensate for reduced private spending, government spending increases and tax collections are reduced. Some of this happens because of automatic stabilizers; spending for some programs (such as unemployment compensation) automatically increases during recessions, and tax collections are reduced as incomes and expenditures grow slower or even decline. In addition, Federal spending can be boosted or taxes lowered through discretionary changes to existing programs and policies. Typically, these actions provide a significant stimulus to the economy. During the recent recession and early recovery, Federal spending and taxes were modestly stimulative, mainly because of the automatic stabilizers. However, Federal spending and taxes did not provide as large a boost as typically occurred in earlier recessions and recoveries. The Budget Enforcement Act of 1990, the ongoing defense downsizing, and a political

stalemate between the Administration and the Congress played important roles in keeping fiscal policy from being more stimulative (Chapter 3).

The need for a fiscal policy that would provide more direct economic stimulus became increasingly apparent when the already sluggish recovery showed signs of faltering in late 1991. In January 1992 the President submitted a set of proposals designed to provide a short-term stimulus to the economy as well as to enhance long-term growth. The proposals for short-term stimulus included a cut in the capital gains tax rate, a temporary investment tax allowance, simplified and enhanced depreciation for companies paying taxes under the corporate alternative minimum tax (AMT) rules, a temporary tax credit for first-time homebuyers, allowing individual retirement account (IRA) balances to be used for first-time home purchases, and two additional proposals aimed at providing a boost to real estate investment and values. Additional proposals were directed at boosting the Nation's long-term economic performance through higher investment and enhanced productivity. The Congress did not pass the President's proposals.

The President was, however, able to take unilateral steps that did not require the consent of the Congress, including the reduction of tax withholding and the acceleration of spending for certain programs already in place. If the President's broad set of proposals had been adopted, growth and employment would have been higher—and unemployment lower—than they actually were during 1992. The positive benefits of the proposals would have carried through to future years, boosting investment, productivity, economic growth, and the Nation's standard of living.

A key factor in preventing fiscal policy from being more stimulative in the recent downturn has been the mounting concern over the budget deficit. The size of the deficit and the level of public debt in recent years has given rise to fears of a resurgence of inflation or of dramatic tax increases if the growth of government spending is not controlled. These fears are manifested in higher long-term interest rates and would be heightened if a fiscal policy were adopted that increased the short-term deficit without simultaneously legislating a credible program to reduce future deficits substantially. Hence, if the economy's recovery falters in the coming months and a period of very sluggish growth and rising unemployment appears likely, an appropriate response might be to adopt tax cuts and incentives to spur growth immediately, while at the same time adopting larger reductions in future government spending. Such a policy combination would allay concerns in financial markets about future budget deficits and prevent the rise in long-term interest rates that could otherwise offset much of a direct fiscal stimulus.

SUMMARY

- The economy experienced modest and uneven growth during 1992. Consumer spending provided a significant boost to the economy. Investment spending also contributed to growth, but government purchases made little or no contribution, and a significant decline in net exports subtracted from growth.
- The labor market was sluggish throughout the year, with employment remaining relatively stagnant and the unemployment rate rising until the summer, when it began declining.
- In 1992 core inflation and interest rates were at their lowest levels in a generation. Low inflation and interest rates help put the economy on track for a sustained expansion.
- Slow growth in the international economy could limit U.S. export growth and reduce prospects for a return to strong economic growth in the near term.
- The Federal Reserve lowered interest rates during 1992, but growth of the broad monetary aggregates remained sluggish. Various structural changes as well as weak demand for funds have restricted M2 growth. Historical relationships among interest rates, the monetary aggregates, and GDP have shifted, making the implementation of policy more difficult.
- Fiscal policy recently has provided only a modest stimulus to the economy. The President proposed a set of tax incentives and other initiatives in January 1992 designed to provide further short-term stimulus to the economy as well as to boost investment and productivity. Additional fiscal stimulus, if needed, should be coupled with simultaneously enacted future reductions in government expenditures.

RECENT ECONOMIC PERFORMANCE IN HISTORICAL CONTEXT

Following the longest peacetime expansion in history, the Nation has been through difficult economic times over the last several years, with a slow and protracted recovery following a recession that was somewhat shorter and shallower than average. Comparisons with the average of previous recessions and recoveries are informative, even if there is no such thing as a typical or average recession or recovery. For example, the regional pattern of economic activity or the relative contributions to growth from increased labor hours and increased productivity can vary significantly across business cycle experiences.

SLOW RECOVERY

As the forecasts of this Administration correctly anticipated, the pace of growth during the recent recovery has been much slower than it was during other postwar recoveries (Table 2-1). In the first year and a half following previous troughs, growth in real GDP averaged nearly 10 percent; growth ranged from a low of 3.4 percent during the short four-quarter recovery of 1980-81 to a high of 16 percent in 1949-51. If the extraordinary recovery of 1949-51 is excluded, growth averaged about 9 percent during the first year and a half after previous troughs. In the year and a half following the most recent trough, however, real GDP increased only 2.9 percent, less than one-third the postwar average.

TABLE 2-1.—*Recovery Comparisons*

First Year and a Half of Recovery [1]

Recovery	Real Output[2]	Payroll Employment	Unemployment Rate Change
	Percent Change	Percent Change	Percentage Points
1949-51	16.0	11.7	−4.8
1954-55	11.6	5.4	−1.7
1958-59	9.3	4.8	−1.7
1961-62	10.5	4.5	−1.2
1970-72	8.6	4.4	−.2
1975-76	8.0	4.5	−1.0
1980-81[3]	3.4	2.0	−.6
1982-84	11.1	6.1	−3.4
Recovery Average	9.8	5.4	−1.8
1991-92	2.9	.1	.7

[1] Changes in variables determined from NBER designated trough.

[2] Real output changes are determined from historical GNP or GDP series with base year near the recovery period: for 1949-51 and 1954-55, GNP measured in 1954 dollars was used; for 1958-59 and 1961-62, GNP in 1958 dollars; for 1970-72 and 1975-76, GNP in 1972 dollars; for 1980-81 and 1982-84, GNP in 1982 dollars; for 1991-92, GDP in 1987 dollars. A fixed-weight measure of real output based on the prices of a more recent year (for example, GDP in 1987 dollars) generally changes less than one based on prices of an earlier year. This property creates problems in long-term comparisons of real output. See 'Alternative Measures of Change in Real Output and Prices,' Survey of Current Business, April 1992. Caution should be used in interpreting these data because of definitional changes made to the output measures over time.

[3] Recovery after 1980 recession is through peak in July 1981 (four quarters).

Note.—Upcoming data revisions may affect the values reported in this table.

Sources: Department of Commerce, Department of Labor, and National Bureau of Economic Research.

The sluggish nature of the recovery was particularly evident in the labor market. During the first 18 months after previous postwar troughs, nonfarm payroll employment increased, on average, by 5.4 percent, ranging from a low of 2 percent in 1980-81 to a high of nearly 12 percent in 1949-51. In comparison, for the 18 months following the March 1991 trough, nonfarm payroll employment was essentially flat, increasing only 0.1 percent. Unemployment rate data also show the effects of the slow recovery in the labor market. After 18 months of expansion in previous postwar recoveries, the unemployment rate was, on average, 1.8 percentage points below its level at the trough, with a range of declines from 0.2 percentage point in 1970-72 to 4.8 percentage points in 1949-51. In contrast, from March 1991 to September 1992, the unemployment rate *increased* by 0.7 percentage point.

THE RECESSION IN HISTORICAL CONTEXT

The slow recovery followed a recession that was somewhat shorter and shallower than average (Table 2-2). Initial data had suggested that the 1990-91 recession was relatively mild, but subsequent data revisions—released more than a year after the end of the recession—showed that real GDP fell by 2.2 percent (Box 2-2). The decline was less than the average of previous postwar recessions and less than those of the previous three recessions of 1973-75 (4.9 percent), 1980 (2.3 percent), and 1981-82 (3.3 percent). In terms of duration, the 8-month recession of 1990-91 was shorter than the average of 11 months for previous postwar recessions.

TABLE 2-2.—*Recession Comparisons*

Recession	Duration[1]	Real Output[2]	Payroll Employment	Unemployment Rate		
				Change	High	
	Months	Percent Change	Percent Change	Percentage Points	Percent	Months After Trough
1948-49	11	−1.4	−5.2	4.5	7.9	0
1953-54	10	−3.7	−3.5	3.6	6.1	4
1957-58	8	−3.9	−4.3	3.8	7.5	3
1960-61	10	−1.6	−2.2	2.3	7.1	3
1969-70	11	−1.0	−1.5	2.7	6.1	9
1973-75	16	−4.9	−2.9	4.4	9.0	2
1980	6	−2.3	−1.4	2.2	7.8	0
1981-82	16	−3.3	−3.1	3.6	10.8	1
Recession Average	11	−2.8	−3.0	3.4	7.8	3
1990-91	8	−2.2	−2.0	2.7	7.7	15

[1] Duration based on National Bureau of Economic Research dating of business cycle peaks and troughs.

[2] Real output changes are determined from historical GNP or GDP series with base year near the recession period: for 1948-49 and 1953-54, GNP measured in 1954 dollars was used; for 1957-58 and 1960-61, GNP in 1958 dollars; for 1969-70 and 1973-75, GNP in 1972 dollars; for 1980 and 1981-82, GNP in 1982 dollars; for 1990-91, GDP in 1987 dollars. A fixed-weight measure of real output based on the prices of a more recent year (for example, GDP in 1987 dollars) generally changes less than one based on prices of an earlier year. This property creates problems in long-term comparisons of real output. See 'Alternative Measures of Change in Real Output and Prices,' Survey of Current Business, April 1992. Caution should be used in interpreting these data because of definitional changes made to the output measures over time.

Note.—Changes determined from series-specific peaks and troughs. Upcoming data revisions may affect the values reported in this table.

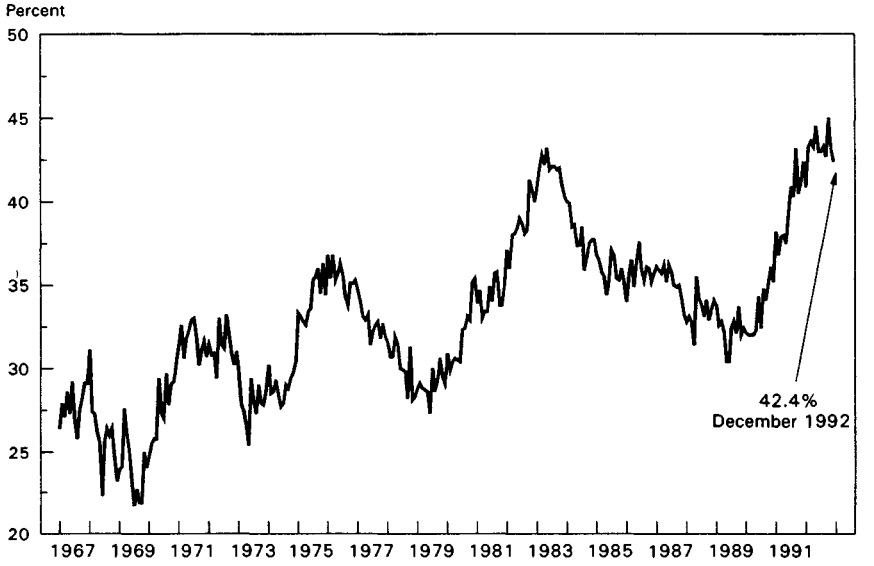
Sources: Department of Commerce, Department of Labor, and National Bureau of Economic Research.

The 1990-91 recession also had a somewhat less severe effect on payroll employment and the unemployment rate than on average in previous postwar recessions. The decline in nonfarm payroll employment associated with the 1990-91 recession was 2 percent, about two-thirds the average decline of previous recessions (but the Bureau of Labor Statistics recently reported that this likely overstates the true decline). Similarly, the increase in the unemployment rate resulting from the 1990-91 recession was 2.7 percentage points, below the recession average of 3.4 percentage points.

However, other measures indicate that the effect of the 1990-91 recession and subsequent slow growth period on labor markets was more severe than the absolute change in employment or the unemployment rate indicated. The unemployment rate peaked at 7.7 percent—slightly below the average peak for previous recessions—15

months after the end of the recession. Typically, the unemployment rate hits its peak an average of only 3 months after the end of a recession. In addition, the percentage of unemployed who lost their jobs permanently rather than being temporarily laid off, reached its highest level on record, eroding workers' long-term job security and limiting prospects for the quick rebound in employment that usually occurs during a recovery (Chart 2-7).

Chart 2-7 **Ratio of Permanent Job Losers to Total Unemployed**
The fraction of unemployed workers not expecting to be recalled to a job has been on an upward trend over the past several decades. In 1992 it rose to its highest level on record.



Source: Department of Labor.

Additionally, as highlighted in last year's *Report*, the relative proportions of unemployment among white-collar, blue-collar, and sales and services workers has shifted, making the relative effect on white-collar workers somewhat more severe. Because of job losses in finance, insurance, and real estate, white-collar workers recently have accounted for a larger proportion of total unemployment—relative to blue-collar or sales and services workers—than they did in recent recessions. Nonetheless, blue-collar unemployment still accounted for a larger share of total unemployment than white-collar unemployment.

REGIONAL DISPARITIES

The regional disparities in labor market performance also indicate that the effects of the recession and slow recovery were widely

Box 2-2.—Data Revisions and the Severity of the Recession

Various government agencies and private groups release a steady stream of data about the economy. Typically, the data are released in preliminary form, subject to subsequent revision. Most monthly data, for example, are released in preliminary form, and are subject to revision for 2 or 3 months. Also, once a year, data series are usually revised to take account of additional information from comprehensive annual surveys and to reestimate the regular seasonal patterns in the data.

During 1992, the annual revisions to several key data series showed that the recession was more severe than initial data had indicated. In July the Department of Commerce released revised data for real GDP as part of its regular revisions to the national income and product accounts (NIPAs). Prior to the revisions Department of Commerce estimates had shown a total decline in real GDP (measured in 1987 dollars) over two consecutive quarters—the fourth quarter of 1990 and the first quarter of 1991—of 1.6 percent. The revised estimates showed a decline over three consecutive quarters totaling 2.2 percent, with the estimated change in real GDP in the third quarter of 1990 revised down from a small increase to a significant decline.

In a separate set of annual revisions, the Department of Labor reported that nonfarm payroll employment declined in early 1991 by much more than was originally estimated. The revised data resulted in a larger estimated decline in nonfarm payroll employment during the recession; the absolute size of the decline increased by about 0.5 percentage point. However, recent research by the Bureau of Labor Statistics indicates that the bulk of the revisions resulted from non-economic factors—mainly, improved employment reporting procedures instituted in early 1991.

The data discussed above represent important sources of information for policymakers and the general public, and their reliability is crucial. Policy might have been conducted in a different fashion if the true severity of the recession had been known earlier. At a time of fiscal constraint, government statistical agencies often must attempt to handle an increased workload with dwindling resources. The need for improved quality of statistics was the motivation behind the Economics Statistics Initiative developed by an interagency working group and approved by the President in November 1989. Work began on the programs in 1991, although the lack of full funding will delay their full implementation.

334-230 O—92——3 (QL3)

dispersed and differed from the regional effects of the 1981-82 recession. Chart 2-8 plots the average unemployment rate in each State for November 1982, the month the unemployment rate peaked at the end of the 1981-82 recession. Unemployment rates generally were much lower on the East Coast (with the exception of the Carolinas and Rhode Island) than in the Midwestern industrial States and some parts of the South, which were hit hard by problems in manufacturing.

Chart 2-9 plots unemployment rates for June 1992, the month of the recent unemployment rate peak. The unemployment rate for the Nation as a whole was lower than it was during the 1981-82 recession. Following the 1981-82 pattern, several States in the industrial heartland fared worse than other parts of the country, especially Illinois and Michigan. The Northeast (Massachusetts, New York, and Rhode Island, in particular) and other widely dispersed states such as Alaska, California, Florida, Mississippi, New Jersey, and West Virginia experienced relatively high unemployment rates. This regional distribution reveals the structural adjustments underway in the economy. Restructuring in the domestic auto industry hurt Michigan and Illinois. New England and California were particularly hard hit by ongoing defense cutbacks. Overbuilding in commercial real estate and restructuring in the finance and insurance industries had disproportionately negative effects on California, Florida, and the Northeast.

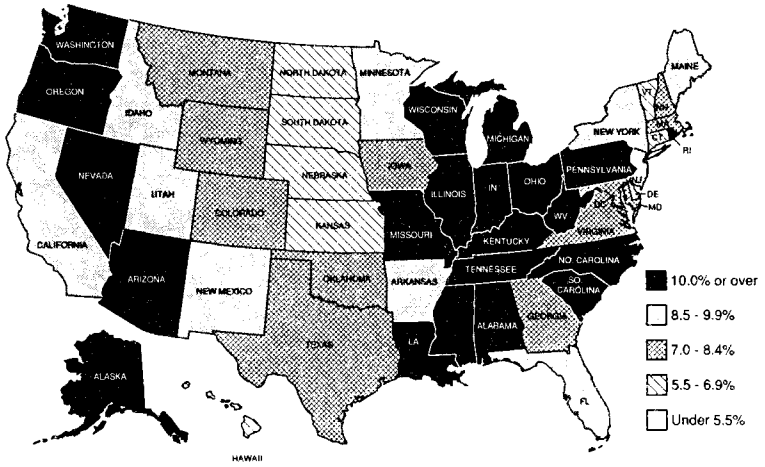
EMPLOYMENT AND PRODUCTIVITY TRENDS

The relatively stagnant labor market performance at a time when output was increasing reveals that *real growth during the recovery resulted exclusively from labor productivity gains.* It is not unusual to see labor productivity surge when the economy is in a recovery phase because firms tend to keep their most productive workers on the payroll during downturns and use the existing workforce more intensively during the initial phase of an upturn. In the first year and a half of previous recoveries, labor productivity growth averaged 3.0 percent at an annual rate, about twice the average annual rate of labor productivity growth of the past three decades.

Over the first six quarters of the recent recovery, labor productivity in the nonfarm business sector grew at an annual rate of 2.5 percent, only slightly less than the average for previous recoveries (Chart 2-10). However, the unusual thing about the past year and a half is that all of the gain in output resulted from labor productivity gains. In previous recoveries, the split between the increase in labor productivity and the increase in labor hours worked was much more balanced, with labor productivity gains and the in-

Chart 2-8 **Unemployment Rates by State, November 1982**

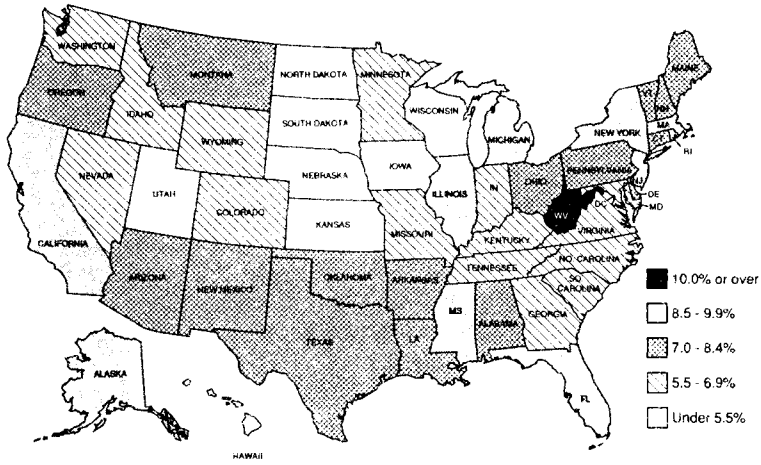
November 1982
United States = 10.8%



Source: Department of Labor.

Chart 2-9 **Unemployment Rates by State, June 1992**

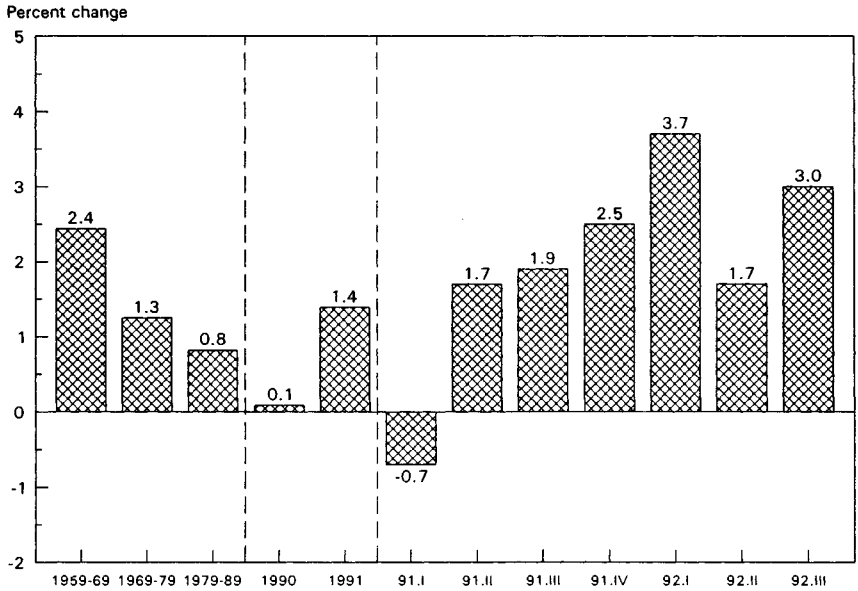
June 1992
United States = 7.7%



Source: Department of Labor.

crease in labor hours accounting for roughly equal shares, on average.

Chart 2-10 **Growth in Output per Hour, Nonfarm Business Sector**
Productivity has rebounded strongly over the past year and a half, typifying the strong gains that usually occur during a recovery.



Note: Annual values are IV/IV change. Quarterly values are seasonally adjusted at an annual rate.
Source: Department of Labor.

The increase in labor productivity is expected to continue as the economy settles into a sustained expansion and higher investment boosts the stock of productive capital. Labor productivity growth had been slipping in recent decades, but several factors suggest that it is likely to improve over the experience of the past two decades. The average age of the population and the workforce will continue to increase, and evidence suggests that a move toward a more experienced work force is usually associated with higher productivity growth. Also, during the past two decades, oil price shocks diverted spending into energy-saving rather than labor-saving capital equipment and, as a result, the economy is less vulnerable now to energy shocks than it was during the 1970s. The labor force is expected to grow slowly, making labor relatively less abundant. Over time, this likely will increase real wages, promoting higher capital investment and faster growth in labor productivity. In addition, low real interest rates reduce capital costs and the anti-inflation credibility that the Federal Reserve has earned reduces uncertainty premiums in interest rates. Prospects for reducing the structural budget deficit over time would also likely promote lower interest

rates and borrowing costs, helping to boost investment and contributing to labor productivity.

SUMMARY

- In terms of output and employment, the recovery of 1991–92 has been the slowest of the postwar era.
- Compared with previous postwar recessions, the recession of 1990–91 was somewhat shallower and shorter. In labor markets, however, the effects of the recession were less straightforward. While the effects on employment and the unemployment rate were milder than average, nonfarm payroll employment remained relatively stagnant for over a year following the trough, and the unemployment rate peaked more than a year after the decline in real GDP had ended.
- State unemployment rates show that the coastal States and the Northeast were hit relatively hard in the recent recession and slow recovery, while the heartland was disproportionately affected by the 1981–82 recession.
- All of the gain in output during the past year and a half resulted from increases in labor productivity. The outlook for continued productivity gains is good.

THE ECONOMIC OUTLOOK

Factors such as low interest rates and low inflation provide a strong foundation for continued short- and long-term economic growth. While structural adjustments have slowed the economy for the last several years, economic performance is expected to improve as structural imbalances are resolved.

THE ADMINISTRATION'S ECONOMIC PROJECTIONS

Table 2–3 shows Administration projections for key economic variables for the period from 1992 through 1998. At the time of this writing, estimates of GDP for the fourth quarter of 1992 and for 1992 as a whole were not available. Data from the first three quarters and preliminary information for the fourth quarter indicate that real GDP grew at a rate of around 2.5 to 3 percent from the fourth quarter of 1991 to the fourth quarter of 1992. During 1993, the economy is expected to grow at a moderate pace early in the year and then pick up later in the year, with real GDP growing around 3 percent during the year. Growth is expected to continue in the 3-percent range through the mid-1990s but then to slow slightly in the second half of the decade. The slight slowing of growth later in the decade reflects the movement of the economy toward full employment of available resources without increased inflationary pressure.

TABLE 2-3.—*Administration Forecasts*

Item	1992	1993	1994	1995	1996	1997	1998
	Percent change, fourth quarter to fourth quarter						
Real GDP	2.6	2.9	3.1	3.0	2.9	2.8	2.7
GDP deflator, 1987 = 100	2.5	2.6	2.7	2.8	2.8	2.8	2.8
Consumer price index, CPI-U	2.9	2.8	2.9	3.0	3.0	3.0	3.0
	Calendar year average						
Unemployment rate, percent	7.4	6.9	6.2	5.7	5.4	5.3	5.3
Interest rate, 91-day Treasury bills, percent	3.4	3.5	4.2	4.4	4.4	4.4	4.4
Interest rate, 10-year Treasury notes, percent	7.0	6.4	6.1	6.0	6.0	6.0	6.0
Civilian employment, millions	117.7	119.9	122.3	124.6	126.6	128.4	130.1

Sources: Council of Economic Advisers, Department of the Treasury, and Office of Management and Budget.

Sustained higher economic growth will improve employment prospects. The unemployment rate is expected to decline during 1993, averaging 6.9 percent for the year, down from 7.4 percent for 1992. In the mid-1990s, with the economy expected to continue in a sustained expansion, the unemployment rate is expected to decline steadily, reaching a level of 5.3 percent by 1997.

Inflation is expected to remain low in 1993 and in coming years, not only because of excess capacity and underemployment of resources in the immediate future, but also because of the Federal Reserve's ongoing efforts to keep inflation in check. The Administration projections show consumer prices rising about 3 percent annually; the implicit price deflator for GDP is expected to rise at a rate slightly below 3 percent annually.

With moderate growth and low inflation, short-term interest rates are expected to remain low in 1993 and long-term interest rates are expected to decline. As the economy moves back toward full employment of resources, short-term rates are likely to rise. In the middle and later years of the projection, long-term rates are expected to stabilize as inflation remains low. However, the outlook for interest rates in general—and long-term rates in particular—depends critically on the outlook for fiscal policy. The adoption of policies that would lead to higher structural budget deficits, relative to what is currently expected likely would boost long-term interest rates and retard economic growth in subsequent years.

Economic forecasting is an imprecise science. Unexpected developments can cause forecasts to go awry, and changes in policies can cause actual events to differ substantially from the forecast. Ultimately, economic forecasts are based largely on predictions about human behavior, usually taking the previous patterns of behavior as a guide. But human behavior is complex, difficult to predict, and subject to change. People do not always respond in the same way,

or with the same speed, in what appear to be similar circumstances.

Changes in the general state of the economy can also affect the relative accuracy of forecasts. Forecasting becomes much more difficult when the economy shifts from expansion to recession or from recession to recovery. Despite a difficult forecasting environment, this Administration's forecasts generally have been accurate by forecasters' standards. Using a broad set of variables—real growth, consumer price inflation, the unemployment rate, and the Treasury bill rate—from the annual forecasts presented in the *Budget of the U.S. Government*, this Administration's (1990–92) short-term forecasts for the year under consideration have been more accurate than either the Carter (1978–81) or Reagan Administration (1982–89) forecasts. The average absolute error of Bush Administration forecasts is over 20 percent smaller than Reagan Administration forecasts and over 30 percent smaller than Carter Administration forecasts. Each Administration—in its entirety—had to forecast in periods of comparable difficulty, as there were business cycle turning points at some point during each of their terms. However, forecasts for the individual terms of the Reagan Administration were produced during significantly different economic environments. There was a deep recession following high and volatile inflation during the early years of the first Reagan term, while during the second Reagan term, the economy was in the midst of a sustained expansion with moderate inflation. This Administration's forecasts were about 30 percent more accurate than those of the first Reagan term and about 10 percent more accurate than those of the second Reagan term.

This Administration's short-term forecasts also have matched up relatively well with the individual and "consensus" (really the average) Blue Chip forecasts, although the accuracy of specific forecasts of this Administration relative to individual Blue Chip forecasts, has varied. The first forecast of this Administration—the mid-session forecast in 1989—was more accurate than any of the individual Blue Chip forecasts as well as the consensus. The Budget forecast for 1990, prepared in late 1989, was less accurate than the consensus and the bulk of individual Blue Chip forecasts. However, the mid-session forecast prepared in mid-1990 was as accurate as the consensus and in the middle of the pack of individual forecasts. The Budget and mid-session forecasts for 1991 also were as accurate as the consensus and in the middle of the pack of individual forecasts. Both the Budget and mid-session forecasts for 1992 (prepared in late 1991 and mid 1992 respectively) were more accurate than the consensus and the vast majority of individual forecasts (based on data currently available).

General interpretations of the economic situation and public comments also matter. In late 1990, when the Council of Economic Advisers reported that the Nation was in a recession, it was the first time in any of the nine postwar recessions that an Administration had acknowledged that the Nation was in a recession before the data on even one quarter of decline in real output were available. At that time the Administration forecast for 1991 correctly predicted that real output would continue to decline in the first quarter of 1991 and then grow slowly in the remaining quarters of the year. That forecast also correctly predicted that the recovery would be the slowest on record.

The uncertainties of forecasting can be seen in the range of projections provided in Table 2-4. The higher growth alternative is consistent with a sharper and faster rebound in economic activity than in the Administration's projection, reflecting the uncertainty about the positive potential for growth. Over the past several years, the recession and slow growth have pushed the economy well below its potential level of output. A high level of excess capacity of productive plant and equipment currently exists in the economy and labor is less than fully utilized, as indicated by the current level of the unemployment rate. Because of the underutilization of resources, there is significant upside potential for growth. The economy has been working its way through many structural problems for several years, and as the drag from those structural difficulties is reduced, economic growth likely will improve further; the extent and timing of that improvement are uncertain. Consumer and business confidence have been lower than justified by economic fundamentals, and as consumer and business confidence rebound, consumer spending and business investment may pick up more strongly than expected.

The lower growth alternative is consistent with continued sluggish activity, reflecting uncertainty about the downside risks for growth. The drag from ongoing defense downsizing and other structural adjustments may be larger and more persistent than expected. Slower-than-expected growth in the international economy may hinder U.S. exports, increase the trade deficit, and reduce economic growth in the United States relative to what is expected in the Administration projection. Adoption of improper policies could adversely affect the performance of the economy.

The lower section of Table 2-4 shows projections for the Federal budget deficit for the Administration forecast and the higher and lower growth alternatives. The deficit projections are significantly affected by changes in the projected rate of economic growth. Under the higher growth alternative, the Federal budget deficit is projected to decline somewhat faster than under the Administration projection and then to stabilize at a level about $40 to $60 bil-

TABLE 2-4.—*Alternative Forecasts and Deficit Projections*

Item	1992	1993	1994	1995	1996	1997	1998
	Percent change, fourth quarter to fourth quarter						
Alternative Forecast							
Real GDP							
Higher growth	2.6	3.5	4.0	3.7	3.4	3.2	3.0
Lower growth	2.6	2.0	2.2	2.4	2.5	2.5	2.5
Consumer Price Index, CPI-U							
Higher growth	2.9	3.1	3.5	4.0	4.5	4.7	5.0
Lower growth	2.9	2.3	2.2	2.3	2.3	2.3	2.3
	Percent, annual average						
Unemployment rate, civilian							
Higher growth	7.4	6.7	6.0	5.6	5.3	5.1	5.0
Lower growth	7.4	7.6	7.6	7.4	7.0	6.7	6.5
Interest rate, 91-day Treasury bill							
Higher growth	3.4	4.0	5.0	5.6	6.3	7.0	7.5
Lower growth	3.4	2.7	2.7	2.8	2.8	2.9	3.0
	Billions of dollars, fiscal years						
Deficit projections							
Higher growth	290	328	287	240	201	207	194
Administration	290	332	297	265	241	266	265
Lower Growth	290	340	322	307	300	338	344

Sources: Council of Economic Advisers, Department of the Treasury, and Office of Management and Budget.

lion below that of the Administration projection; the cumulative effect on the debt is about $200 billion over the 6 years of the projection. Under the lower growth alternative, the Federal budget deficit remains at much higher levels—in excess of $300 billion—throughout the projection, with a cumulative effect approaching $300 billion of additional debt relative to the Administration projection.

ACCOUNTING FOR GROWTH

Overall growth of real GDP can be decomposed into four components: (1) labor force growth, or growth in the number of people available for work each year; (2) the change in the share of the labor force that is employed, or the employment rate; (3) the growth in the number of hours an employed person works each year, represented as the growth in average weekly hours; and (4) labor productivity growth, or the growth in the average amount of goods and services produced per hour of labor.

Table 2-5 shows the contribution of these factors in average real GDP growth for various periods. The first three columns provide historical comparisons for periods from business cycle peak to business cycle peak. The final column shows the contributions for the period, incorporating actual data since the recent business cycle peak (in the third quarter of 1990) along with estimates for the forecast period to 1998. Economic growth is projected to average 2.3 percent a year from the business cycle peak in 1990 through the end of the forecast in 1998.

TABLE 2-5.—*Accounting for Growth in Real GDP, 1960-98*

[Average annual percent change]

Item	1960 II to 1981 III	1973 IV to 1981 III	1981 III to 1990 III	1990 III to 1998 IV
1) Civilian noninstitutional population aged 16 and over	1.8	1.8	1.1	0.9
2) PLUS: Civilian labor force participation rate	.3	.5	.4	.3
3) EQUALS: Civilian labor force	2.1	2.4	1.6	1.2
4) PLUS: Civilian employment rate	-.1	-.4	.2	.0
5) EQUALS: Civilian employment	2.0	2.0	1.8	1.3
6) PLUS: Nonfarm business employment as a share of civilian employment[1]	.1	.1	.2	-.1
7) EQUALS: Nonfarm business employment	2.1	2.1	2.0	1.1
8) PLUS: Average weekly hours (nonfarm business sector)	-.6	-.7	.0	.0
9) EQUALS: Hours of all persons (nonfarm business)	1.5	1.3	2.0	1.2
10) PLUS: Output per hour (productivity, nonfarm business)	1.7	.6	.8	1.4
11) EQUALS: Nonfarm business output	3.3	1.9	2.8	2.6
12) LESS: Nonfarm business output as a share of real GDP[2]	.1	-.2	.2	.3
13) EQUALS: Real GDP	3.2	2.1	2.6	2.3

[1] Line six translates the civilian employment growth rate into the nonfarm business employment growth rate.
[2] Line 12 translates nonfarm business output back into output for all sectors, or GDP, which includes the output of farms and general government.

Note.—Data may not add due to rounding.
Time periods are from business cycle peak to business cycle peak to avoid cyclical effects.

Sources: Council of Economic Advisers, Department of Commerce, Department of Labor, Department of the Treasury, and Office of Management and Budget.

This projection assumes an average rise of 1.2 percent a year in the labor force over the 1990-98 period, a lower rate than during the prior three decades. Slower labor force growth results from slower growth in the working-age population and from smaller increases in projected labor force participation rates.

The civilian unemployment rate is projected to fall to 5.3 percent at the end of the forecast, only slightly below the unemployment rate at the business cycle peak in the third quarter of 1990. Hence, only a slight contribution (rounded to 0.0 in Table 2-5) is attributed to changes in the civilian employment rate from the previous peak of the business cycle through the end of the forecast. The largest contribution from a falling unemployment rate during the forecast occurs between 1992 and 1995. As the economy nears full employment in the later years of the forecast, increases in the employment rate make smaller contributions.

A key assumption underlying the 2.3-percent forecasted average growth rate of real GDP is that the increase in labor productivity will average 1.4 percent a year. That rate of productivity growth is higher than the rates experienced during the 1970s and 1980s, but substantially lower than those of the 1960s. As discussed earlier in this chapter, labor productivity growth has been quite strong over the past year and a half, and various factors—including a more experienced and slower growing labor force and likely higher investment resulting from low real interest rates and lower and less volatile inflation—point to a higher rate of productivity growth in

coming years in comparison with the low rates of the past two decades.

SUMMARY

- In the short term, the economy is expected to show continued gradual improvement, with real growth at about 3 percent during 1993. During 1993 the unemployment rate is expected to decline gradually as the economy improves, and inflation and interest rates are expected to remain relatively low.
- Real growth is expected to continue in the 3-percent range through the mid-1990s before slowing gradually to the 2¾-percent range later in the decade. The unemployment rate is expected to show steady but gradual declines over the next 4 years. Current fundamentals point to only slight increases in inflation and short-term interest rates, with long-term interest rates declining slightly before stabilizing.
- The uncertainties of economic forecasting indicate that growth could be higher or lower than currently anticipated. With higher real growth, the projected level of the Federal budget deficit falls significantly; with lower growth, the Federal budget deficit increases.

CONCLUSION

Following 8 months of recession and 1½ years of recovery, there are signs that the economy is entering a period of solid and sustained expansion. The extended period of slow growth—which appears to be largely over—reflected the economy's response to serious structural imbalances and long-term trends. The process of improving household and corporate balance sheets, adjusting to reductions in defense expenditures, and bringing the supply of commercial and multifamily residential real estate into balance with demand resulted in a protracted period of sluggish economic growth. As well, the implementation of the second round of disinflation since 1980, which brought inflation to its lowest level since the early 1970s, was also accompanied by painful adjustments.

These adjustments, costly as they were and as they continue to be for millions of Americans, have laid the foundation for strong and sustained economic growth. In particular, a more secure outlook for low inflation will provide enhanced incentives to save and invest during the economy's future expansion.

However, the Nation cannot take this expansion for granted. Even as the recovery appears to be picking up steam, unemployment continues to be too high and job growth too low. This sluggish performance in the labor market reflects the continued process of adjustment by firms to more competitive conditions and changing

patterns of product demands. To put Americans back to work, it is necessary to continue to strengthen the fundamental dynamism and resilience of the Nation's economy in the face of change, to create an environment conducive to new business formation and small business expansion, and to promote the entrepreneurial process that only a sound market economy can produce.

The gains from recent adjustments can only be fully exploited if they are coupled with appropriate policies. These include provision of sufficient money for sustained growth consistent with maintaining low inflation; a fiscal policy directed toward the long-term control of government spending and tax incentives to save, innovate, and invest; continued movement toward free and open trade throughout the world; and growth-enhancing regulatory reform to ensure sustained progress toward more smoothly functioning markets at home.