CHAPTER 3

Monetary and Fiscal Policy in the Current Environment

THE EFFORTS AND ACCOMPLISHMENTS of households and businesses produce the economic growth that leads to improved living standards. An environment that includes an open trading system, a strong market system with well-designed and efficient regulation where necessary, and legal protection of property rights fosters such progress. Monetary and fiscal policies also shape the environment within which households and businesses make their decisions. These policies are important tools used to pursue the goals of the Employment Act of 1946, which charges the Federal Government with promoting “maximum employment, production, and purchasing power.”

Monetary and fiscal policies can be best understood in the context of the events, both historical and recent, that shaped them. Such an analysis can assist in choosing policies that improve rather than disrupt short- and long-term economic performance. Of particular interest are the circumstances and policies surrounding the recent recession, which began in July 1990 and lasted until March 1991. While the decline in output was less than the average for other post-World War II recessions, by most measures the recovery was the weakest in postwar history.

Monetary policy refers to actions taken by the Federal Reserve (the Fed) that influence bank reserves, the money stock, and interest rates. An expansionary monetary policy tends initially to lower short-term interest rates by increasing the availability of money and credit. Lower interest rates encourage spending, particularly on investment projects. When the economy is operating well below capacity, increased spending is likely to lead to increased output. Once the economy is at or near capacity, however, rapid monetary expansion is likely to lead to inflation (a sustained increase in prices) rather than output growth. Conversely, contractionary, or tight, monetary policy reduces the growth rate of the money stock, increases short-term interest rates, and eventually lowers inflation.

Fiscal policy refers to the spending and taxing policies of the Federal Government. Fiscal policy can influence total demand in the economy by changing taxes and government spending. Expansionary fiscal policy, for example, implements tax cuts, government
spending increases, or both, in order to increase economic activity during downturns. Fiscal policy can also affect incentives to work, save, invest, and innovate. Changes in taxes on capital, for example, affect the after-tax return on investment in physical assets and thus the incentive for capital accumulation. Evaluations of fiscal policy changes must take into account the effects of both consumer and business demand and supply-side incentive effects.

MACROECONOMIC POLICY IN HISTORICAL CONTEXT

The dominant feature of per capita real gross national product (GNP), or output, since 1870 has been its steady growth, but there have been noticeable interruptions in growth as well (Chart 3-1). The “business cycle” refers to fluctuations of output around a long-term trend—that is, recessions followed by recoveries and expansions. However, nothing is very regular about the timing and magnitude of these fluctuations.

Chart 3-1 Gross National Product Per Capita, 1870-1990
While there have been occasional interruptions, real GNP per capita has been rising since 1870.

In the long run, aggregate output grows because of increases in the quality and quantity of physical capital, the knowledge and skill of workers, the size of the labor force, advances in technology,
improved resource allocation through trade expansion and a more
dynamic market system, and the entrepreneurial process that cre-
ates new businesses and products. These factors do not grow at a
constant rate; this explains a small part of the variations in output.
The major short-term fluctuations, however, do not reflect primari-
ly changes in the productive capacity of the economy, but changes
in its rate of utilization. For example, during economic declines the
labor force is not fully utilized, as indicated by high unemployment
rates.

The Great Depression, which began in late 1929, was the largest
decline in economic activity in recorded U.S. history. Output fell by
nearly 30 percent during the first 3 years of the Depression. The
unemployment rate had risen to 25 percent by 1933 and remained
well above 10 percent until the early 1940s (Chart 3–2). By compar-
ison, output has fallen an average of 2.7 percent during post-World
War II recessions. In the most severe of these, which began in the
fourth quarter of 1973, real output fell 4.9 percent and the unem-
ployment rate peaked at 9.0 percent. The 1981–82 recession, which
began in an already weak economy, involved a smaller decline in
output of 3.3 percent, but the unemployment rate reached 10.8 per-
cent. In contrast, in the recent recession, output declined 2.2 per-
cent and the unemployment rate later peaked at 7.7 percent. (The
basis for cyclical comparisons is discussed in detail in Table 2–2.)

The relative stability of the postwar era may reflect fewer or less
severe disturbances. But it also may be due to the development of
public and private institutions and policies designed to offset tem-
porary disruptions or to help the economy adjust. These institu-
tions are particularly important in light of the fact that the costs
of recessions are not shared evenly across the population. For most
families, incomes remain roughly the same or continue to grow
during a recession; the economic and social costs of recessions fall
disproportionately on those who experience or are threatened with
unemployment or reduced employment.

The experience of the United States is not unique. All modern
industrial economies grow at uneven rates. Recessions in the
United States often coincide with slowdowns in the economies of its
trading partners because many of the factors affecting the econo-
my, such as oil price changes, affect other economies as well. Trade
and capital flows that link national economies also transmit purely
domestic economic shocks from one country to others.

CAUSES OF RECESSIONS

Can carefully chosen policies eliminate recessions entirely? The
answer, unfortunately, is that they almost certainly cannot, al-
though well-designed policies may reduce the frequency and severi-
ty of economic downturns. To understand the limitations of policy,
the factors that contribute to recessions must be taken into account. They can be broadly classified as structural adjustments, external events (also called shocks), and policy mistakes. At any given time, the economy may be struggling to overcome one or more of these adverse factors. Recessions occur when a number of unfavorable factors exist simultaneously or an unusually large problem arises.

A sharp reduction in expenditures on national defense, for example, gives rise to structural adjustments in production and employment. Such reductions followed World War II, the Korean and Vietnam wars, and are now taking place in response to the end of the Cold War. The Nation on the whole is better off when a conflict ends and the resources devoted to national defense can be put to other uses. Nonetheless, large decreases in military spending disrupt production and employment as production patterns adjust to meet changing demands. The temporary declines in output and increases in unemployment following World War II and the Korean war illustrate the costs that are incurred while resources are reallocated.
External shocks in the form of large and sudden oil price increases have been an important factor in several recent recessions. The partial embargo on oil exports by the Organization of Petroleum Exporting Countries in 1973 tripled world oil prices. Since oil is an important input in production, oil price shocks may lead industries to change their production patterns. For example, oil-fueled plants may be refitted to run on coal. Further, since the United States is a net oil importer, it would pay more for its imported oil, thereby transferring income and wealth to oil exporting countries and reducing the overall demand for domestic output.

In some instances policy mistakes have contributed to economic downturns. The Great Depression is perhaps the best example. Even after production and prices had begun to decline sharply, monetary policy remained contractionary by most measures. The 1930 passage of the Hawley-Smoot Tariff Act raised tariffs on many imports, leading our trading partners to retaliate and disrupting global trade flows. With the economy still mired in depression in 1932, a tax increase was enacted in an effort to balance the budget. But by reducing disposable income and household spending, the tax increase deepened the Depression. This series of policy blunders turned what could have been a moderate or severe recession into the Great Depression.

Even if no policy mistakes are made, however, structural adjustments and external shocks may cause occasional periods of declining output. It is unrealistic to expect that well-chosen policies can always compensate completely for all types of disturbances and eliminate recessions entirely.

THE LIMITS OF POLICY

The extent to which fiscal and monetary policies can mitigate short-term economic fluctuations has been the subject of debate. Views on this subject have evolved considerably in recent decades, and will undoubtedly continue to evolve as circumstances change and new policies are tried.

The Activist Approach

The Keynesian view, which reached its peak of influence in the 1960s, advocated government spending increases and tax cuts, supported by expansionary monetary policy, to stimulate overall demand whenever output fell below the economy’s estimated capacity to produce. More restrictive policies were advocated when inflation became a greater concern. Many economists believed that a stable tradeoff existed between unemployment and inflation rates: Expansionary policies would lower unemployment at the cost of somewhat higher—but not continually rising—inflation. It was believed that “activist” or “fine-tuning” policies could increase demand whenever the economy was below capacity, reducing busi-
ness cycle fluctuations and at the same time increasing long-term growth in the economy's capacity. Such policies frequently changed course in response to short-term economic developments.

Impediments to Fine-Tuning

The foundation of the activist approach was discredited by the historical experience of the 1960s and 1970s. Output grew rapidly in the 1960s, but inflation, as measured by the rate of change in the consumer price index, rose from 0.7 percent during 1961 to 6.2 percent during 1969. In the 1970s the economy experienced many difficulties, including large simultaneous increases in both inflation and unemployment. This development contradicted the idea that a stable tradeoff existed between inflation and unemployment and led to a rethinking of the efficacy of fine-tuning.

It has become clear that a number of factors, including delays, forecasting difficulties, and uncertainty about the economy's response, make fine-tuning unreliable at best. Furthermore, well-intentioned policies may actually increase business cycle fluctuations.

Policymaking is complicated by a number of delays, or lags. The information available on the current state of the economy is imperfect; most data for a particular month or quarter are not available until the next month or quarter and are often revised substantially. As a result, policymakers learn that the economy has changed direction only after the fact, resulting in a recognition lag. But even after it becomes clear that the economy has weakened, delays in the political process create lags in implementing specific policies. For instance, most fiscal policies require time-consuming congressional action and then must be approved by the Administration, creating an action lag between the time problems develop and action is taken. Finally, even after new policies are implemented, further lags may occur before economic activity is affected. A reduction in tax rates, for example, may initially have little effect on consumption or investment because time elapses before consumers and businesses can respond fully. Thus, expansionary countercyclical actions will have their intended effect only if the economy would have remained weak well into the future.

Because of the various lags, policymakers must rely on economic forecasts in setting policies. Economic forecasting is an imprecise science; it is particularly difficult around business cycle turning points. Fortunately, market economies have many self-correcting tendencies that eventually reduce the effects of external shocks or structural imbalances. As noted, disturbances such as oil price shocks or reductions in defense spending create a need for changes in patterns of production. Growth in output tends to fall as these adjustments begin but resumes as they are completed. While these self-correcting tendencies are a desirable feature of market economies, the pace at which adjustments occur is unpredictable, compli-
eating the forecasting process and raising the possibility that a recovery may be well under way before the economy receives significant stimulus from policies introduced to fight the recession. In this case, such policies may cause higher inflation but only small gains in production.

A further impediment to fine-tuning is uncertainty about how the economy will respond to changes in fiscal and monetary policy. The economic response to a particular policy change depends in part on people's expectations about future policies. For instance, firms and households may view economic policies as temporary under a fine-tuning regime because policy changes can be expected to occur relatively frequently. Unpredictable policies may complicate the task of long-term planning for firms and households, discouraging investment and undermining long-term economic growth.

**Fine-Tuning and Inflation**

The costs of high and variable inflation are considerable but more subtle than the costs of recessions. In a market economy, prices provide essential information about the relative scarcity of goods and services. High and volatile inflation obscures this information and distorts the allocation of resources. Furthermore, unexpected inflation arbitrarily redistributes income and wealth. It hurts lenders and people on fixed incomes and helps borrowers, since the real value of interest and principal payments is eroded by inflation.

Inflation also has unintended effects on the tax structure that affect incentives to work, save, and invest. The Economic Recovery Tax Act of 1981 indexed income tax brackets for inflation beginning in 1985, but some taxes on capital income are still affected by inflation. For example, capital gains are not indexed for inflation, and depreciation allowances are effectively reduced by inflation because they are based on original rather than replacement cost. These features of the tax system cause inflation to both reduce the real after-tax return on capital assets and discourage investment.

The late 1940s and early 1950s were marked by dramatic changes in inflation rates associated with the aftermath of World War II and the beginning of the Korean war (Chart 3–3). From 1952 into the mid-1960s, however, inflation never exceeded 3 percent. The rate of inflation then began to increase, albeit erratically, reaching double digits in 1974 and again in 1979 and 1980. In fact, from 1960 to 1980 inflation was higher at each successive business cycle peak, and each recovery also began with a higher inflation rate than the preceding one.

Why did the fine-tuning policies pursued during this period contribute to rising and variable inflation? If expansionary policies stimulate demand when the economy is already approaching capaci-

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During the 1960s and 1970s the inflation rate reached a higher level at each successive business cycle peak. This upward trend was reversed in the 1980s.

Percent change from same quarter year ago

-5

Note: Quarterly data; CPI-U, all items. Shaded areas represent recessions from peak (P) to trough (T).

Source: Department of Labor.

ity, they may increase output temporarily but then, after some lag, increase prices. In particular, a monetary policy that produces growth in money that persistently exceeds growth in real output inevitably leads to inflation. If expansionary policies are expected to continue, people may anticipate higher future inflation rates as well, complicating the process of reversing inflation.

One danger of fine-tuning is that expansionary policies may become addictive. Political considerations can cause policymakers to favor short-term stimulus to expand output and employment relative to policies to control inflation. This is one of the reasons why inflation was higher at the end of each recession between 1960 and 1980. Policymakers may also simply overestimate the economy's capacity, especially when structural adjustments or external shocks are temporarily slowing the growth of capacity. If expansionary policies persist after the economy is near capacity, output and employment will increase very little, but inflation will continue to rise.

Because of the considerable costs of inflation, episodes of high and variable inflation lead to policy actions to contain or reverse it. Reducing inflation—that is, disinflating—after an extended period
of rising or high inflation tends to result in reduced output growth and increased unemployment. The recession of 1981–82, during which unemployment rates rose to almost 11 percent, was in part a consequence of the policies introduced to reverse the rising inflation that had developed throughout the 1960s and 1970s. An important accomplishment of the past 12 years has been the reduction and subsequent containment of inflation, achieved in part by adherence to a credible, systematic monetary policy.

**Alternatives to Fine-Tuning**

Fine-tuning is complicated by a number of factors such as variable and uncertain lags, the need for accurate forecasts, and the temptation to pursue overly expansionary policies. Furthermore, frequent policy changes complicate the task of long-term planning for firms and households, discouraging investment and undermining long-run economic growth.

An alternative to fine-tuning that avoids some of these difficulties is the establishment of systematic and clearly stated policy plans consistent with the long-term objectives of high and stable output growth and low and stable inflation. Credibility is achieved over time both as plans are carried out and long-term objectives are accomplished. Even if policymakers aim to follow a systematic policy, however, it is not always possible to specify all contingencies, and changes in the economy may occasionally require that plans be revised. For example, if the relationship between money growth rates and output shifts, the targets for monetary growth will need to be adjusted. Similarly, high and persistent budget deficits may necessitate changes in fiscal policies.

Fine-tuning policies can be likened to a weathervane. Just as the weathervane changes direction with the wind, fine-tuning policies frequently shift in response to changes in the economy. Adhering to systematic policies, on the other hand, is much like following a course laid out by a compass. Just as travellers deviate from the compass headings only if an obstacle such as a mountain lies in their path, policymakers deviate from their plans only if a severe or protracted economic contraction or rising inflation is at hand. In contrast to fine-tuning, systematic policies do not change in response to small, temporary variations in the rate of growth. Any deviations from the announced plans are explained in the context of long-term policy goals, so as not to undermine future credibility. One might call such a policy "gross-tuning," to distinguish it from both fine-tuning and from the notion that policies should be set according to rigid rules which are mechanically followed regardless of actual and prospective developments in the economy.
SUMMARY

• The United States and other modern industrial economies experience occasional periods of recession when output declines and unemployment rises.

• Recessions can result from a number of factors that impede growth, including unavoidable structural imbalances, external disturbances, and government policy errors.

• Monetary and fiscal policies may be able to mitigate recessions, but they cannot eliminate business cycle fluctuations completely. Overly aggressive attempts to do so are likely to lead to higher inflation and impede long-term growth in output.

RECENT ECONOMIC DEVELOPMENTS

Recent monetary and fiscal policies have been heavily influenced by the legacy of the preceding two decades, most notably by the rising inflation of the late 1960s and 1970s and the emergence of large budget deficits during the long expansion of the 1980s. Many structural imbalances, some of which had their roots in the 1970s, worsened the recent recession and slowed the subsequent recovery. In addition, the economy was buffeted by an oil price shock after Iraq invaded Kuwait in August 1990.

MACROECONOMIC POLICIES AND ECONOMIC PERFORMANCE IN THE 1980s

The economy entered the 1980s with declining production and high inflation. After rising rapidly in the late 1970s, inflation reached a peak of 13.3 percent during 1979—the highest rate since the aftermath of World War II. Faced with high and rising inflation, the Federal Reserve announced new measures that were intended to signal its unwillingness to finance a continuing inflationary process. The 1979 Annual Report of the Board of Governors of the Federal Reserve System noted that “the System’s day-to-day operating procedures would be altered in a way expected to make the achievement of growth targets for the monetary aggregates more certain. Specifically, policy would be conducted with greater emphasis on supplying reserves to member banks at a rate believed consistent with growth objectives for monetary aggregates; and less attention would be focused on short-term interest rates as a guide for open market operations.” Focusing on short-term interest rates “had become less reliable in an environment of rapid and variable inflation.”

Efforts to curb inflation were costly. The economy suffered a brief but steep recession from January to July of 1980, during which output fell by 2.3 percent and unemployment rose to 7.8 per-
cent. Inflation edged downward slightly to 12.5 percent during 1980. After a brief period of growth, the economy entered another recession in July 1981 that lasted until November 1982. This recession was unusually severe, with unemployment rates climbing above 10 percent for the first time since 1941.

While the recession was painful, the loss of output was actually far below the levels that many models had predicted would be necessary to achieve the dramatic reduction in inflation that occurred. By the time the economy emerged from the recession of 1981–82, core inflation—which excludes the volatile food and energy components—had fallen below 5 percent. One reason models overestimated the loss in output was that they neglected to take into account the fact that credible policies could lower inflationary expectations and lead to a faster and less costly reduction in inflation.

After a difficult 3-year period, the longest peacetime expansion in modern U.S. history began in late 1982. As is often the case, the early phase of recovery was marked by rapid growth in output as idle resources came back into use. In 1983 real gross domestic product (GDP) grew by 3.9 percent. GDP growth increased to 6.2 percent in 1984, faster than during any year since 1951. By the end of 1984, many of the previously idle resources had been brought back into use and real output expanded at a rate of about 3 percent from 1985 to 1989. Job growth in the 1982–89 period was remarkable. Nonagricultural payrolls increased by 18 million, from 90 million in 1982 to 108 million in 1989, exceeding the combined increase in employment in Western Europe and Japan, with their much larger total population, over the same period.

**Fiscal and Monetary Policy in the 1980s**

Growth in government expenditures on programs such as defense and medicare contributed to demand during the 1980s. Federal Government spending as a share of GDP rose from 20.2 percent in 1979 to 23.4 percent by 1985. Substantial changes in the tax structure in 1981 increased incentives to work and invest. Total tax receipts, however, changed little as a percentage of GDP. By the mid-1980s, the combination of growing government spending and stable tax receipts had resulted in budget deficits that were large relative to the size of the economy, particularly for a peacetime expansion. The Federal budget deficit averaged about 5 percent of GDP from 1984 to 1986.

In response to growing concern about the deficit, the Federal Government in 1985 adopted (and later amended) the Balanced Budget and Emergency Deficit Control Act, known as Gramm-Rudman-Hollings (GRH), which seemed to be somewhat successful in slowing the growth of government expenditures. While the original deficit targets under the GRH were never met, deficits did fall to about 3 percent of GDP by 1989. Still, containing spending
growth and reducing the deficit remained major fiscal policy issues as the economy entered the 1990s.

While real output and employment grew steadily following the 1981–82 recession, the rate of inflation—in contrast to the 1970s—remained relatively stable. Core inflation hovered around the 4- to 5-percent range from 1982 to 1988. While low compared to the rates of the late 1970s, these rates would have been deemed unacceptable just two decades earlier. Many argued in favor of a second round of disinflation. However, the Fed had eased credit conditions in late 1987 and early 1988 in order to counter any economic weakness and to ensure the smooth functioning of financial markets in the wake of the stock market crash of October 1987. It soon became clear that the economy had remained strong in spite of the crash, with unemployment rates hovering around 5½ percent and monetary aggregates growing at rates near the top of their target ranges in early 1988. Concerns about inflationary pressures rose relative to concerns about the possibility of recession.

A Shift in Policy

Mindful of the cost of reversing rising inflation in the early 1980s, the Fed tightened reserve conditions in a series of steps beginning in March 1988 and continuing into 1989. The Fed target for growth in M2, a key measure of the money stock, was lowered from the 4- to 8-percent range in 1988 to the 3- to 7-percent range in 1989. The Federal funds rate (a key short-term interest rate) rose by more than 3 percentage points between March 1988 and March 1989. This policy change is often referred to as the “soft-landing” strategy. Its presumed objective was a slow deceleration of the economy that would head off an incipient rise in inflation, and possibly even lower it, without causing a recession. This strategy represented a welcome break from the policies of the 1960s and 1970s, which typically had reacted to inflation only after it had risen significantly, thereby imposing greater costs in terms of lost output and higher unemployment during the disinflation process.

The soft-landing strategy was laudable but went unappreciated by many observers. Preemptive measures to contain inflation may go unnoticed whereas measures to reduce inflation after it has already risen are painfully obvious. The latter may receive more praise, even though the former may reflect a much wiser policy.

STRUCTURAL IMBALANCES IN THE ECONOMY

Even though the economy experienced strong growth in the mid-to late-1980s, several structural imbalances were building that would contribute to the most recent recession and subsequent slow recovery. Problems in the financial sector led to a credit crunch, high debt levels burdened households and corporations and inhibited spending, the end of the Cold War led to reductions in defense
spending, corporate restructuring hindered employment growth, overcapacity in commercial real estate discouraged new construction, and budget problems constrained the spending of State and local governments.

The Credit Crunch

After a period of relatively easy credit in the mid-1980s, bankers and bank regulators appear to have adopted much more stringent standards near the end of the decade, although regional credit problems had occurred earlier. Companies that could easily obtain financing in the past had difficulty finding new bank loans; they faced a "credit crunch." In practice, it is difficult to quantify a credit crunch. A reduction in bank lending during a recession can be caused by weak demand, limited supply, or a combination of the two. Nevertheless, there is evidence that a credit crunch has been at work in the latest recession and recovery.

Banks play a unique role in financial markets, specializing in obtaining and analyzing information on the creditworthiness of small firms that often have difficulty obtaining credit elsewhere. As a result, the effects of the recent credit crunch were concentrated on small businesses and some types of commercial real estate that have limited alternative funding sources. Medium-sized and large corporations appear to have been less affected, since they can borrow in the commercial paper and bond markets, where firms obtain financing by issuing securities directly to investors. The effects were also concentrated geographically, with California and the Northeast experiencing the tightest credit conditions.

One reason for the shift in bank lending practices was a shift in regulatory policy. During the steady growth of the 1980s, regulators were perhaps too sanguine, exerting insufficient control on risk-taking by banks and savings and loans (S&Ls). By the late 1980s, however, the situation had changed. The magnitude of the S&L problems had come to light, and it became clear that the government-backed insurance fund for savings and loans (the Federal Savings and Loan Insurance Corporation, or FSLIC) would go bankrupt, causing heavy taxpayer losses. The economy was beginning to slow, and bad loans were weakening many banks. Recognizing that banks were also susceptible to large losses, regulators became concerned about the strength of all insured financial institutions. 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).

Regulators worldwide focused on the need to rebuild bank capital (Box 3–1). A bank's capital is the difference between the value of its assets (reserves, loans, and securities) and the value of its liabil-
ities (primarily deposits). In 1988 the industrialized nations agreed to a common set of capital standards for financial institutions, known as the Basle Accords. While most U.S. banks already met the new risk-based capital standards, some fell short. Furthermore, the new rules failed to mandate adequate reserves for government bonds in comparison with commercial loans, unintentionally providing an incentive for banks to shift their assets into government bonds and away from commercial loans—a tendency some have suggested contributed to the decline in commercial lending (Chart 3-4).

Chart 3-4  Loans and Securities Held by U.S. Commercial Banks
Commercial banks have shifted their assets into government securities and away from commercial loans.

![Chart 3-4](http://fraser.stlouisfed.org/)

The combination of higher capital standards and lower asset values created a "capital crunch" for banks. To increase capital, banks had to reduce their asset holdings, raise more capital, or both. Since raising capital quickly is often expensive, many banks chose to reduce assets by cutting back on lending, which increases the ratio of capital to assets because capital remains approximately the same while assets shrink. In this sense, the capital crunch for banks appears to have contributed to the credit crunch for businesses.
Box 3-1.—The Role of Bank Capital

Bank regulators set minimum capital standards for two reasons. First, capital absorbs losses that would otherwise have to be paid by the Federal Deposit Insurance Corporation (FDIC) or taxpayers (if the losses were large enough). Another important motive for ensuring that banks have sufficient capital is to reduce the perverse incentives caused by deposit insurance. When a bank is close to bankruptcy, it may invest in risky projects that have a high rate of return if they succeed. Because the FDIC will absorb any insured losses, the bank is willing to take a gamble that could keep it from failing.

The underlying weakness in the capital position of U.S. financial institutions in recent years can be traced to a number of causes. For the S&Ls, the problems can be traced back to losses suffered in the late 1970s, when rising inflation and rising interest rates caused the value of their mortgage loans to plummet and their funding costs to rise. These difficulties were compounded by losses on risky investments made in the 1980s following deregulation, a situation discussed in Chapter 5.

The problems facing commercial banks were more varied and on the whole not as severe. In the early 1980s, large banks suffered major losses on loans to Third World countries. While these had become less of a problem by 1990, the banks soon experienced a new wave of losses. The average commercial bank loan has become more risky in recent years, in part because established firms can borrow at more favorable terms from sources such as the commercial paper market. Losses from defaults on real estate loans, particularly in regions where property values were falling, further eroded bank capital. Conversely, many believe that tighter credit conditions contributed to the fall in property values by creating a shortage of financing for real estate investments.

Bank capital increased markedly in 1992 due to record banking industry profits and improvements in loan performance. However, a continuing challenge for bank regulators is to strike a balance between the need to ensure that banks have sufficient capital and the need to allow banks the necessary flexibility to provide the credit essential for economic growth.

The Buildup of Household and Corporate Debt

In addition to the constraints on the supply of credit, a number of factors contributed to unusual softness in the demand for credit.
Consumers entered the 1990s with high levels of outstanding debt relative to their income. The ratio of household interest payments to income remained between 14 and 16 percent from mid-1960 until 1983 but had grown to 18 percent by the end of the 1980s (Chart 3-5). An increase in corporate indebtedness in the 1980s was brought about by a wave of financial restructurings. Tax laws that continued to heavily favor debt over equity encouraged this trend. The rise in the share of income devoted to interest payments began to act as a constraint on private sector spending as income declined and prospects for future growth dimmed.

Chart 3-5  Debt Service Payments as Percent of Disposable Income
Household interest payments climbed from 14.2 percent of disposable income in 1983 to 18.1 percent in 1990.

Recently corporate and household balance sheets have begun to strengthen. In 1992 corporations issued a record volume of new equity, increasing their ability to borrow in the future. Much existing corporate debt has been refinanced at lower rates, and new bond issues have been on the rise. The ratio of household interest payments to income has fallen back to approximately 16½ percent.

Defense Spending Reductions
Outlays on defense, which had increased substantially during the first half of the 1980s, peaked at 6.5 percent of GDP in 1986, then flattened and began to decline slightly (Chart 3-6). Soon thereafter,
it became apparent that defense spending was likely to be cut substantially during the 1990s due to reforms in the Soviet Union and Eastern Europe. The President’s budget for fiscal 1993 calls for defense outlays in fiscal 1997 to fall to an estimated 3.7 percent of GDP.

Reductions in defense spending have many ramifications. Overall the Nation will benefit, since more resources will be available to provide other goods and services. As mentioned earlier, however, certain transitional problems are associated with drawdowns. Workers no longer needed in the defense industry will not be hired immediately by nondefense firms, resulting in some transitional unemployment.

Some have argued that the recent and prospective reductions in defense spending will have little effect on economic performance, even in the short run, since they represent a smaller share of GDP than previous reductions and are scheduled over a longer period of time. However, the short-term impact of defense spending reductions is evident in the changes in unemployment rates across States. Unemployment in the four States most heavily dependent on defense industry purchases—Connecticut, Virginia, Massachusetts, and California—rose by 4.1 percentage points between 1988
and September 1992. Meanwhile, the combined unemployment rate for all other States rose by only 1.5 percentage points. These figures indicate that defense reductions are a substantial drag on the economy today. Although the level of defense spending should be shaped by national security needs rather than concern about temporary economic dislocations, such dislocations will increase in the event of even deeper budget cuts.

The short-term impact of current defense reductions may be larger than many expected for several reasons. First, the relatively gradual rate of spending reductions may be misleading. Because businesses plan for the future, they are likely to adjust their work forces and equipment purchases as soon as they are aware of impending reductions, rather than waiting until the cuts actually occur. In addition, defense industry workers fearing the possibility of permanent job loss are likely to reduce their spending today. Uncertainty about the nature and size of the reductions increases the number of workers who feel vulnerable. Finally, the increasingly specialized nature of defense and commercial production suggests that defense industry workers—including highly skilled scientists and engineers—and perhaps some military personnel may have greater difficulty finding comparable nondefense employment now than they would have 20 years ago.

The changes in State unemployment rates show that the short-term impacts of defense reductions will be severe in some regions. In some instances, defense spending reductions have coincided with property deflation and banking problems. Southern California is a prime example. By reducing employment opportunities and income substantially in certain regions, the defense drawdown exacerbated declines in property values. As noted in Box 3–1, falling property values combined with increased default rates on real estate loans have eroded bank capital. Until these structural problems begin to be resolved and credit conditions ease, high unemployment may persist in regions such as Southern California.

**Industry Restructuring**

Defense downsizing is an example of industry restructuring in which long-term adjustment occurs in response to changing conditions. In this case, restructuring is a response to a lessening of the threat to national security. Although in other cases the underlying sources of change may be more difficult to identify, restructurings occur continuously in a market economy; some industries grow rapidly while others decline. Technological breakthroughs, shifts in consumer preferences, fluctuations in input prices, changes in domestic and international competition, and countless other influences require firms and industries to adjust constantly in order to remain profitable.
The degree of industry restructuring appears to have been unusually great during the recent recession. Chart 2-7 in Chapter 2 shows that the percentage of unemployed workers who have permanently lost their current jobs rather than just being laid off reached an all-time high of over 45 percent in October 1992. This job loss is in part a result of the weak economy, but it is also an indication that U.S. industries are making the painful long-term adjustments necessary to increase their productivity and remain competitive in international markets. Productivity in the nonfarm business sector has been rising rapidly in the last six quarters, partly because of these restructurings (Chart 3-7). History shows that the Nation's living standards are ultimately linked to productivity levels, so these adjustments are a positive long-term development. In the short run, however, restructurings are likely to increase the length of time workers remain unemployed, since displaced workers must find new employment rather than simply waiting to be recalled to their former jobs.

Chart 3-7  Output per Hour, Nonfarm Business Sector
The recent period of strong productivity growth is the largest six-quarter gain in nonfarm business productivity since 1982-83.

Index, 1982 = 100

114
112
110
108
106
104
102
100
98
96


Source: Department of Labor.

Slowdown in Commercial Construction
Investment spending in general and construction in particular undergo more severe fluctuations than the rest of the economy. Be-
cause of the long life of structures, small changes in interest rates or tax policies strongly affect demand for this type of investment.

Commercial real estate has recently undergone a pronounced cycle of "boom and bust." Changes in the tax code in 1981 greatly increased the incentive to invest in new commercial real estate. The annual average rate of spending on nonresidential structures from 1981 through 1985 rose 25 percent in real terms over the previous 5-year period, in spite of the steep recession of 1981–82. The 1986 tax act reversed and in fact further reduced the incentives for commercial real estate introduced in the 1981 law. As the new measures were phased in, the real estate boom gradually ended. The overbuilding that occurred during the first half of the 1980s and the credit crunch in recent years would probably have ended this boom even without the tax changes. Vacancy rates for commercial office space, for example, had risen sharply by the mid-1980s in many metropolitan areas.

Changes in tax laws, interest rates, and demographics contributed to a slowdown in the construction of multifamily housing units. The 1986 tax reforms reversed the incentives not only for commercial real estate but also for multifamily housing units. Increases in interest rates in the late 1980s raised the cost of financing new construction projects. Furthermore, as the "baby-boom" generation matured, the rate of household formation declined. The number of multifamily housing units under construction rose from 379,000 in 1981 to 670,000 in 1985, before falling back to 373,000 in 1989.

Reduced residential construction tends to reduce the purchase of consumer durables, such as furniture and home appliances, as well. Housing starts and building permits in 1992 were well above their 1991 levels, but demographic trends suggest that neither household formation nor housing starts will return to the levels of the 1960s and 1970s anytime soon.

State and Local Fiscal Developments

Most States are prohibited from running a budget deficit, and local budgets showed relatively large surpluses in the mid-1980s. However, State and local government expenditures have risen substantially in recent years. Because tax revenues failed to keep pace with expenditures, combined State and local government surpluses had fallen to half the level of the mid-1980's by 1990. These budget problems meant that expenditures could not easily be increased and taxes could not easily be reduced.

EXTERNAL EVENTS

By 1990 many structural adjustments were adversely affecting output growth: Banks had grown more cautious in their lending policies, high debt levels had reduced household and business spending, the defense industry was contracting, industry restruc-
turing was hindering employment growth, construction had slowed considerably, and State and local fiscal spending was constrained. Of these factors, it was clear that at least two—reduced defense spending and the glut of commercial real estate—would be continuing drags on the economy for some time to come.

The effects of these structural adjustments were aggravated by external events. The Iraqi invasion of Kuwait in August 1990 caused world oil prices to double. This oil price shock was a further drag on growth in the United States and other oil-importing industrial economies. Economic slowdowns that developed in some foreign countries made economic recovery in the United States more difficult by reducing demand for U.S. exports.

**The Oil Price Shock**

In the wake of the Iraqi invasion, the world price of oil soared, roughly doubling between July and October 1990. Consumer and business confidence plummeted, reflecting uncertainty about the standoff in the Persian Gulf. In October 1990 the Conference Board's index of consumer confidence reached its lowest level since 1974 (Chart 3-8). In an uncertain environment, it is natural for firms to postpone spending until they begin to feel more confident about the future. Similarly, many households postpone purchasing big-ticket items until they have solid information about their own employment situation. Oil price increases also disrupt the production process as firms seek to economize on energy.

Real output in the economy declined in the third and fourth quarters of 1990 and the first quarter of 1991. Civilian nonagricultural employment peaked at just over 115 million in May 1990 and then fell gradually below 114 million by January 1991. The oil price shock put upward pressure on energy prices, but weak demand muted the impact on other prices. The annual rate of core inflation rose by less than one-half percentage point between the first and second half of 1990.

As the Persian Gulf conflict was resolved, oil prices fell back to pre-crisis levels and consumer and business confidence increased sharply. These developments led to a sudden burst of consumer spending (Chart 3-8) and gains in production. The short-lived euphoria after the Persian Gulf crisis was not sufficient to generate a strong recovery, however, because the structural problems had not been satisfactorily resolved. Debt burdens remained high, commercial and industrial lending were declining, and it became apparent that defense reductions would accelerate due to marked changes in the relationship between the United States and the Soviet Union.

Although real output began to grow again in the second quarter of 1991, employment hovered between 113 and 114 million for the rest of the year. Output grew slowly, but only because output per worker increased; employment changed little.
The Worldwide Slowdown

Exports provided a source of growth in output in the United States throughout the 1980s and even during the recession of 1990-91. Unfortunately, many major U.S. trading partners began experiencing recession or slower growth just as the U.S. economy was beginning to recover (Chart 3-9). Recessions in Canada and the United Kingdom that were associated with, among other causes, very tight monetary policies intended to secure large reductions in inflation, began about the same time as the U.S. recession, but have been much more severe, with unemployment rates exceeding 10 percent. Although Germany and Japan continued to grow faster than the United States in 1990 and 1991, recent data indicate that they have both entered recession. As a result of these foreign economic slowdowns, the demand for U.S. exports has been lower than it otherwise would have been.

Some of the same structural problems that slowed the U.S. economy were affecting foreign economies as well. In Japan, the huge increase in stock prices during the 1980s was reversed at the end of the decade, with the Nikkei stock market average plummeting 58.6 percent between December 1989 and August 1992. Real estate
prices also fell: Residential land prices in the six largest cities decreased 20.6 percent from the second half of 1990 to the first half of 1992. These developments may depress Japanese spending by lowering household wealth and could constrain lending since many loans are collateralized with real estate. The Japanese slowdown appears to be worsening; output declined 0.4 percent in the third quarter of 1992.

Germany has had to confront the high costs of unification. Government spending on income assistance programs has soared since east and west were united in 1990, putting upward pressure on both output and prices. Union wage demands have exceeded productivity growth, putting more upward pressure on costs and prices. Fearing an increase in inflation, the Bundesbank (Germany's central bank) pursued a tight monetary policy, forcing other European countries to adopt tighter monetary policies in order to maintain parities under the European Monetary System. Output growth has slowed significantly throughout Europe in recent years.

**Recent Developments**

As indicated in Chapter 2, the U.S. economy has made modest improvements over the past year. Output has grown in each quar-
Since the first quarter of 1991, although the somewhat erratic growth has been insufficient to support substantial increases in employment. Meanwhile, the rate of core inflation has fallen to levels not seen in this country for 20 years. These recent developments, viewed against the backdrop of the structural adjustments and external shocks that have affected the economy, provide the context in which recent policy choices must be evaluated.

**SUMMARY**

- Output grew rapidly during 1982-86, but the development of a relatively large Federal budget deficit during this period placed constraints on fiscal policy.
- Although inflation was reduced dramatically at the beginning of the 1980s, the Fed became concerned about a possible resurgence in 1988, leading to the adoption of a more restrictive monetary policy.
- Many structural imbalances were contributing to a slowdown in growth by mid-1990, including problems in financial markets, heavy debt burdens, the defense drawdown, industry restructuring, commercial overbuilding, and State and local government budget problems.
- The oil shock contributed to a recession beginning in the summer of 1990. The persistence of several structural problems and the slowdown in foreign economies weakened the recovery.

**THE CHANNELS OF MONETARY POLICY**

The goals and limitations of monetary policy can be best understood by first considering the basic channels through which monetary policy operates. Monetary policy is conducted by the Federal Reserve System (the Fed), which is the central bank of the United States. The Full Employment and Balanced Growth Act of 1978 directs the Fed to set ranges for the growth of monetary and credit aggregates (the money supply) taking into account “past and prospective developments in employment, unemployment, production, investment, real income, productivity, international trade and payments, and prices.” The Fed is also responsible for maintaining the orderly functioning of the payments system and is one of several Federal banking regulators.

The Fed, whose 7 governors are chosen by the President with the consent of the Congress to serve staggered 14-year terms, is independent in the sense that its decisions do not have to be ratified by either the Administration or the Congress. This independent status allows the Fed to pursue the goal of low and stable inflation more effectively (Box 3-2). Nevertheless, the Fed sets policies that reflect
the government's overall policy objectives and makes periodic reports to the Congress.

**Box 3-2.—The Merits of an Independent Central Bank**

An independent central bank is one important component of the American political system of checks and balances. Studies have shown that since World War II, countries with independent central banks have had lower and more stable inflation rates. For instance, between 1955 and 1988, Italy, New Zealand, and Spain, which had the least independent central banks, had average inflation rates of 7.3, 7.6, and 8.5 percent, respectively. In comparison, Germany and Switzerland, which had the most independent central banks, had average inflation rates of 3.0 and 3.2 percent, respectively. Their lower inflation rates did not come at the expense of reduced real output. In fact, the average growth rate of real GDP appears to be unrelated to the central bank’s degree of independence.

Why are independent central banks more successful at avoiding inflation? The main reason is that an independent central bank is less vulnerable to short-term political pressures to inflate than are those with closer links to the government. Particularly during recessions, governments may try to rely on an overly expansionary monetary policy to hasten a recovery. Of course, it sometimes appears that a central bank should have chosen a different course. But such isolated incidences do not justify reducing central bank autonomy. The relevant question is whether, on balance, allowing the Congress or the Administration to set monetary policy would result in better economic performance. The weight of evidence suggests that it would not.

**SHORT-TERM EFFECTS OF MONETARY POLICY**

In setting monetary policy, the Fed states its objectives in terms of targets for short-term interest rates and target ranges for the growth rate of several measures of the money supply. Short-term interest rate targets are called “operating targets” because the Fed monitors interest rates almost continuously and generally can exert a high degree of control over them.

**Interest and Exchange Rates**

The Fed most frequently uses open market operations to influence short-term interest rates and credit conditions. To put downward pressure on interest rates, it buys U.S. Treasury securities in the open market. The increased demand for securities causes their prices to rise, or equivalently, their rates of return to fall.
paying for these purchases, the Fed increases the monetary base—the money financial institutions have on deposit at the Fed plus the currency in circulation.

While lower interest rates tend to stimulate spending on average, some groups cut spending in response to lower rates. Lower rates benefit borrowers but hurt savers. For example, senior citizens living off interest income from their savings suffer when interest rates fall.

As well as spurring increased domestic investment and spending, lower interest rates tend to increase demand by lowering the exchange value of the dollar. Lower U.S. interest rates encourage investment to be shifted to other countries where rates of return are higher, causing demand for U.S. dollars to drop and reducing the dollar's exchange value against foreign currencies. U.S. goods become cheaper for foreigners, encouraging U.S. exports, and foreign goods become more expensive for Americans, encouraging consumption of domestic products.

LONG-TERM CONSEQUENCES OF MONETARY POLICY

Expansionary policies increase nominal GDP, which is the total dollar value of goods and services produced in a year. Because the change in nominal GDP is the sum of the change in the price level and the change in the quantity of real output, an increase in nominal GDP may reflect higher output, higher prices, or a combination of the two. When the Fed pursues an expansionary monetary policy, the hope is, of course, to increase real output rather than inflation.

As discussed earlier, in response to an increase in demand firms tend, on average, to increase production when they have excess capacity and to increase prices when production approaches capacity. In a recession, many firms find themselves with excess capacity, so that monetary expansion is likely to show up predominantly as an increase in output. The closer the economy is to its capacity, the more likely it is that an increase in aggregate demand will increase inflation. But because monetary policy has long and variable lags, excessively high money growth today may not show up as inflation for many months or even years.

Monetary policy affects both current and future interest rates, in part because it affects people’s expectations about future inflation. Distinguishing between real and nominal interest rates is essential to understand the effect of inflation on interest rates (Box 3-3). Nominal, or market, interest rates increase with the rate of anticipated inflation. Although the Fed may be able to temporarily reduce short-term interest rates by adding reserves to the banking system, this action may cause an increase in inflationary expectations that results in higher short-term interest rates in the future.
Box 3-3.—Real and Nominal Interest Rates

The promised return on a corporate bond, a mortgage, a government security, or a savings account is called a “nominal interest rate.” A nominal interest rate is simply a promised rate of return, or dollars received tomorrow per dollar invested today. The expected real interest rate is the return after adjusting for expected inflation, or the nominal interest rate less the expected rate of inflation. For instance, if the bank offers a return of 10 percent on 1-year certificates of deposit, but prices are expected to increase by 6 percent over the course of the year, the expected real return is only about 4 percent, since it is anticipated that the money received will buy 6 percent less than it did when it was deposited. When inflation rates declined at the beginning of the 1980s, the gap between nominal and real interest rates declined as well (Chart 3-10).

Although the Fed may be able to use monetary policy to influence real interest rates in the very short run, broader market forces are generally believed to be the fundamental determinants of real interest rates. For instance, the destruction caused by Hurricane Andrew put upward pressure on real interest rates as firms and households sought funding to rebuild the damaged areas. The large federal deficit also puts upward pressure on real interest rates, because the government competes with private borrowers for limited savings. The real interest rate is also affected by international developments such as the increased demand for capital due to German unification. Finally, tax policy affects the real after-tax return received by investors.

At any point in time, interest rates vary with the maturity of the debt obligation. For instance, on November 13, 1992, the market rate for 6-month Treasury bills was 3.3 percent, for 5-year Treasury bonds 6.0 percent, and for 30-year Treasury bonds 7.6 percent. This relationship between maturity and interest rates is called the “yield curve.” Expansionary monetary policy tends to depress very short-term rates, such as the overnight Federal funds rate. Medium- and long-term rates respond less predictably to changes in monetary policy, in part because they reflect expectations about future inflation.

Concern about how policy changes will influence expectations and, hence, long-term interest rates is a factor the Fed must consider in setting policy. Since both short-term and long-term rates affect the economy, the Fed must be careful that in lowering short-term rates it does not inadvertently increase long-term rates. In
fact, over the last 3 years, virtually every time the Fed lowered the short-term Federal funds rate, long-term interest rates either declined or were unchanged, although the declines in long-term rates were substantially less than the declines in short-term rates.

Some observers focus almost exclusively on relatively high long-term interest rates as the reason for the limited effectiveness of the recent loosening of monetary policy. Since November 1990, the Federal funds rate has fallen by 4.7 percentage points, while the 10-year Treasury bond rate has fallen by only 1.8 percentage points. The relatively high long-term rates may slow the growth of long-term business investments and mortgage borrowing. On the other hand, evidence suggests that many borrowers easily substitute short-term financing for long-term debt. For instance, many firms finance a large proportion of their capital expenditures with short-term bank debt, and many families now finance their homes with adjustable rate mortgages. Furthermore, at the beginning of past recoveries, relatively high long-term rates did not appear to discourage increased investment spending. For these reasons, it is doubtful that the weaker-than-expected demand for credit is due exclusively to the level of long-term rates.
INDICATORS OF MONETARY POLICY

The Fed uses several measures, or monetary aggregates, to quantify what is popularly called money. The monetary base, or M0, is the only monetary aggregate that can be controlled with precision through open market operations. In setting target ranges for money growth rates, the Fed focuses on several broader aggregates. Until 1982 the Fed’s primary target was M1, the funds generally used for transactions, including currency in circulation, checking accounts, and travelers checks. Since 1982, the primary monetary target has been M2—M1 plus a number of short-term financial assets such as savings accounts.

Monetary aggregates are “intermediate targets.” Unlike operating targets such as short-term interest rates, monetary targets are adjusted infrequently. They are intermediate to more fundamental goals such as maintaining a low and stable inflation rate. An important consideration in choosing a monetary target is whether it exhibits a predictable relationship with nominal GDP; that is, a predictable velocity. The velocity of money is the ratio of nominal GDP to the money stock. Velocity measures the average number of times the money stock is spent each year in generating the transactions that constitute nominal GDP. If velocity were perfectly predictable for a monetary aggregate under Fed control, then the Fed could set the growth rate of nominal GDP.

In addition to interest rates and monetary aggregates, the Fed relies on many other types of information to judge whether its policy is having the intended effect, including exchange rates, the unemployment rate, the level of inventories, the capacity utilization rate, commodity prices, and changes in the price level. Statistical data that provide information about the current situation and the effects of past policies also provide some insight into the future. For instance, an increase in inventories often reflects a cutback in sales and signals a fall in future production, and gold prices and long-term interest rates reflect the market’s expectations about inflation. Unfortunately, no perfect indicator or set of indicators exists that can accurately predict the future consequences of current policies under all circumstances.

SUMMARY

• In the short run, the Fed can use monetary policy to increase the availability of credit and to lower interest rates. In the long run, an excessively expansionary monetary policy will lead to inflation and higher nominal interest rates.
• Interest rates, monetary aggregates, and many other indicators help the Fed assess the effects of its actions. No set of indicators, however, provides a reliable forecast of the future consequences of current policy choices.
An important indicator of Fed policy is the growth rate of monetary aggregates, although these do not always move together over time (Chart 3-11). Prior to 1982 the Fed’s primary target was M1 but since then it has dropped its M1 target and focused on M2. The reason is clear from Chart 3-12: After a steady increase, the velocity of M1 dropped sharply in 1981 and became much more variable, making its relationship with nominal GDP much less predictable. The velocity of M2, on the other hand, has generally been more predictable, although its velocity also dropped sharply in 1980-82.

Starting in late 1979 the Fed made a strong commitment to reducing inflation. Although monetary policy was perceived as tight during this period, in fact the growth rates of both M1 and M2 were approximately the same as they had been in the late 1970s (Chart 3-11). This episode illustrates that monetary policy cannot be evaluated simply by looking at the growth rate of the money supply in the abstract; rather, it must be evaluated relative to the current economic situation. Given that the economy was in the midst of a sharp recession during this period, some would argue that, by maintaining the previous growth rate of money, the Fed was running a tight policy.

As mentioned earlier, fear of growing inflationary pressure in the late 1980s led the Fed to try to engineer a soft landing. To do this, the Fed had to balance the risk that reducing the growth rate of money would increase the chances of a recession against the risk that maintaining money growth at the same rate would increase inflation. Starting in early 1988, the Fed began to raise short-term interest rates. The target growth range for M2 was revised downward in 1989, and its growth rate often remained near the bottom of the target range and sometimes even below it (Chart 3-13). As inflationary pressures eased and inflation in fact declined in a soft economy, the Fed cut short-term interest rates gradually from mid-1989 to late 1990 and then cut rates more aggressively, for a cumulative decline of about 4 percentage points since December 1990.

Some have argued that the Fed’s policy in these years was the primary cause of the most recent recession and slow recovery, but this conclusion appears to be unwarranted. Although a somewhat more expansionary policy may have been appropriate during the recession and early in the recovery, many other factors—some unforeseeable, others of a severity and duration that would have been hard to predict—were acting as a drag on the economy. Furthermore, the fact that the growth of M2 remained at the low end of the target range came as somewhat of a surprise to the Fed. From January 1991 to October 1992, M1 grew at an annual rate of 12.0 percent, but M2 lagged behind, growing at an annual rate of only
The growth rates of the various monetary aggregates are quite variable. In the past 2 years, M1 growth has accelerated, while M2 growth has declined.

Source: Board of Governors of the Federal Reserve System.

In the early 1980s, the predictability of the relationship between M1 and GDP weakened significantly. As a result, M2 became the Federal Reserve's primary monetary target.

Sources: Department of Commerce and Board of Governors of the Federal Reserve System.
Since the mid-1980s, the Federal Reserve repeatedly has lowered the target range for M2 growth. M2 generally has been in the lower part of the target cones.

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

about 2.6 percent. This divergence in growth rates was accompanied by an increase in the velocity of M2 and a decrease in the velocity of M1 (Chart 3-14).

Although there is no simple explanation for the divergence in the growth rates and velocities of M1 and M2, the fall in the general level of interest rates and the steep yield curve appear to have been contributing factors. When interest rates drop, the difference between the returns on checking accounts and savings accounts generally narrow, so investors become less inclined to move money from checking to savings, explaining in part the recent drop in the velocity of M1, which consists largely of checking accounts. When long-term rates rise above short-term rates, people tend to shift savings out of the short-term assets included in M2 and into assets with higher yields, such as Treasury bonds, reducing the M2 money stock and increasing its velocity.

The change in M2's velocity has again raised the question of whether it is appropriate for the Fed to focus on a single monetary aggregate or whether it should attach some weight to a range of other indicators. Researchers have examined a number of alternatives, including the behavior of MZM (M2 less time deposits such as...
As the growth rates of M1 and M2 diverged, the velocity of M2 began to increase while the velocity of M1 dropped sharply.

Index, 1988 = 100

Sources: Department of Commerce and Board of Governors of the Federal Reserve System.

certificates of deposit). MZM is intended as a fairly broad measure of money that includes only accounts which can be withdrawn immediately without penalty. Unfortunately, the velocity of MZM is more variable than that of either M1 or M2, and it does not appear to be a better predictor of GDP.

Others have suggested a nominal GDP target, under which the Fed would increase the growth rate of the monetary base when nominal GDP growth falls below the target range and reduce it when GDP growth exceeds the target range. Since nominal GDP is measured infrequently and responds to monetary policy often with a considerable lag, however, nominal GDP targeting would increase the risk that policy actions would be taken too late. More fundamentally, even if nominal GDP growth could be controlled fairly precisely, the division of nominal GDP growth between price increases and real output increases is difficult to predict or control. None of the other alternatives to an M2 target is obviously superior or either, making it likely that the Fed will have to rely on a variety of imperfect measures that include M2, other monetary aggregates, and other indicators of the future path of inflation and output.
RECENT COMPLICATIONS FOR MONETARY POLICY

How much and how quickly spending increases in response to lower interest rates depends on a number of factors, most of which are beyond the Fed's control. Although short-term interest rates have fallen a total of about 4 percentage points since December 1990, demand has grown at a disappointingly weak pace for most of this period.

A number of factors appear to have tempered the response to interest rate cuts in the last few years relative to previous recoveries. Despite lower market interest rates, borrowers had difficulty obtaining loans because of the troubled condition of many financial institutions. The high business and household debt levels accumulated in the 1980s weakened demand for new borrowing. The capital-intensive sectors that usually respond most rapidly to interest rate reductions were beset by other problems that hampered growth. In particular, the excess supply of and high vacancy rates in commercial real estate damped the demand for new buildings, and a slowdown in the rate of household formation lowered the demand for residential construction. As a result, it appears that lower interest rates have so far failed to generate as much new spending as expected. Firms and households have benefited from lower rates, however, as interest burdens have been reduced by record levels of refinancing of corporate debt and mortgages in the last few years.

While problems such as the credit crunch and overbuilding are likely to diminish over time as the economy adjusts, other developments may have a more lasting impact on the effectiveness and channels of monetary policy. One such development is the increased integration of world capital markets.

First, monetary policy cannot control interest rates and exchange rates independently because the two are interrelated. Decreases in U.S. interest rates lower the dollar's value as investors seek higher returns in other countries. In the early 1980s, our relatively tight monetary policy was one of the factors that strengthened the dollar. Now, the tough anti-inflationary policies of the German Bundesbank have had the effect of strengthening the deutsche mark and the currencies linked to it. These exchange-rate swings may lead to unwanted effects on both the balance of trade and price levels, limiting monetary policy options. For instance, a sharp appreciation of the dollar could raise the trade deficit and cause job losses in export-producing and import-competing industries.

Second, as capital markets become more integrated, capital tends to flow more quickly into those countries that offer the highest rate of return. The Fed has an increasingly limited ability to control real U.S. interest rates, since attempts to unilaterally lower rates
cause foreign investors (and some American investors) to move their money abroad (Box 3-4). This outflow tends to push U.S. interest rates back up, since new investors must be found.

**Box 3-4.—International Interest Rate Differences and Capital Flows**

Investors deciding between different types of assets will choose those investments offering the highest rate of return after risk is taken into account. Capital tends to flow from countries offering lower expected rates of return to those offering higher expected rates of return. By reducing the supply of capital in the countries offering low returns and increasing it in those with higher rates, this process tends to equalize expected returns across national borders.

Investors consider expected exchange-rate movements as well as relative interest rates when comparing international investments. For example, a 1-year bond in the United Kingdom may offer an 8-percent interest rate, while an American bond may offer only 4 percent interest. However, if the pound's value in terms of dollars is expected to decline by 5 percent over the year, the British bond's return, in dollars, would be only about 3 percent, making it the less attractive investment. Since investors compare investments in different countries taking into account expected changes in exchange rates, the exchange-rate adjusted expected returns on similar assets tend to be equalized across countries.

Finally, not all of the increased demand generated by reduced interest rates will benefit domestic producers. Both foreign and domestic companies can borrow in the United States to finance operations abroad that do not contribute to U.S. GDP. At the same time, some domestic borrowing will be used to finance expenditures on imports. Similarly, U.S. borrowers benefit when foreign interest rates fall, because money can then be borrowed abroad to finance domestic investment.

**SUMMARY**

- The goal of using monetary policy to increase output without increasing inflation is inherently difficult to achieve. When the Fed increases or decreases bank reserves, the path from reserve changes to interest rates to output and prices is often unpredictable.
- In recent years, a number of factors have further complicated the task of setting monetary policy. The weakening in the relation among M2, interest rates, and nominal GDP has decreased
the reliability of monetary aggregates as indicators of policy, at least in the recent period.

- Transitory problems in financial markets and structural changes in the global economy have altered the response of the U.S. economy to the Fed's policies.

FISCAL POLICY

In light of the economy's performance over the last 2 years, it is natural to ask what role Federal fiscal policy played in the recession and slow recovery. Was policy in part responsible for the poor economic performance, or did policy make the economy stronger than it otherwise would have been?

TOOLS OF FISCAL POLICY

As mentioned earlier, fiscal policy refers to changes in Federal spending and the tax system that influence demand and incentives to work, save, and invest. Federal purchases of goods and services, which make up nearly 8 percent of GDP, contribute directly to total spending. Changes in transfer payments and income taxes affect spending indirectly through their impact on disposable (after-tax) income. Since households typically save a portion of additional income, their spending tends to change by less than their disposable income. Consequently, changes in transfers and taxes affect total spending less than changes in purchases of an equal magnitude.

The Federal budget distinguishes between two main types of expenditures: mandatory and discretionary. Nearly all mandatory spending is in the form of "entitlements," or programs such as medicaid, medicare, and unemployment insurance which use preset criteria to determine eligibility and benefit levels. Discretionary spending, on the other hand, refers to government spending that requires annual budget appropriations. The distinction is important for fiscal policy, because short-term changes in mandatory spending are heavily affected by short-term economic conditions.

Automatic Stabilizers

Discussions of fiscal policy often divide Federal taxing and spending activities into two kinds: automatic stabilizers and discretionary policy. Automatic stabilizers act as buffers when the economy weakens by automatically reducing taxes and increasing government spending. Mandatory spending for programs such as unemployment insurance, food stamps, welfare programs, and medicaid increases when the economy slows down since benefit criteria depend on income or employment status. These transfer payments help consumers maintain spending.
The tax system as a whole also acts as an automatic stabilizer. In an economic slump, personal income and corporate profits are lower, so tax payments fall, helping to reduce the decline in after-tax incomes that would otherwise occur. Likewise, government revenues from excise and other sales-based taxes fall when purchases decline. In fact, taxes typically change by a larger proportion than GDP, primarily because average income tax rates fall with income levels. This feature of the tax system makes after-tax income more stable than pretax income, which helps insulate consumption spending from changes in income.

**Discretionary Fiscal Policy**

Discretionary fiscal policy refers to changes in discretionary spending and new tax legislation. Many classic examples of discretionary fiscal policy are new tax initiatives. For example, tax cuts in 1964 were intended to stimulate spending and economic expansion, while the income tax surcharge of 1968 was designed to curb rising inflation.

Since the change in total annual expenditures determines whether policy has been expansionary or contractionary, it is difficult to attribute expansionary fiscal policy to specific acts of spending. For example, increased spending on highways in a given year is expansionary only if it is not offset by a decline in some other part of the annual appropriations. Nonetheless, changes in discretionary spending have potentially significant effects on the economy, as evidenced by the economic responses to the defense buildups and drawdowns over the past 50 years.

**RECENT BEHAVIOR OF EXPENDITURES AND TAX RECEIPTS**

While expansionary and contractionary policies are easy to describe, they are difficult to measure. Automatic stabilizers cause the Federal budget deficit to rise during recessions and fall during expansions, even without discretionary fiscal actions. For this and other reasons discussed in Chapter 6, changes in the budget deficit are an imperfect measure of discretionary fiscal policy.

More than in the past, large Federal budget deficits and budget problems at the State and local levels have constrained fiscal policy. Real Federal purchases, which fell 0.8 percent during the recent recession and recovery, rose an average of 2.1 percent during earlier recessions and recoveries (Chart 3-15). Real Federal purchases have fallen only once before during a similar business cycle phase—the recession and recovery of 1969–71—and then by a much greater amount, 15.4 percent. In both cases, defense drawdowns were occurring; recently because of the end of the Cold War, and earlier because of the winding down of the Vietnam conflict.
Real defense purchases fell by 4.2 percent during the recent period, well below the decline of 20.3 percent during 1969-71.

Chart 3-15  Real Federal Spending and Taxation in Recent Recoveries
During the recovery of 1991-92, Federal Government purchases and transfers did not increase as much as they had in past recoveries.

Federal nondefense purchases increased 8.6 percent in the recent period, almost twice the average for previous recessions and recoveries. This increase only partially offset the defense cuts, however, since defense purchases are 2 1/2 times the level of nondefense purchases. Increases in State and local government purchases, which are about 1 1/2 times greater than Federal purchases, were also below average. Federal, State, and local government purchases combined rose just over 1 percent during the recession and recovery of 1990-92—about 40 percent of the average increase during other recessions and recoveries since 1959. Federal transfers have also grown more slowly recently than they did during earlier slowdowns, but State and local transfers have grown at twice their normal rate. The combined change in transfer payments for all levels of government during the recent period was 15.5 percent, compared to the 18.6 percent average increase during previous recessions.

While the bottom line is that recent fiscal policy has been less expansionary than fiscal policy during previous recessions and early recoveries, it does not necessarily follow that more expansion-
ary policies were either possible or desirable. Growing government expenditures and large Federal budget deficits acted as a constraint on traditional forms of fiscal stimulus.

THE BUDGET PROCESS

The budget process itself also limits the potential of fiscal policy to stimulate the economy. Each January or February the President submits a budget for the fiscal year beginning in October, with 13 appropriations proposals for discretionary spending. Mandatory program expenses and interest payments on outstanding debt do not require annual appropriations but are estimated in the budget. Both houses of the Congress make separate modifications to the President's proposal and then meet to resolve their differences on any appropriations bills. Once this is done, the House and Senate must pass the appropriations bills and forward them to the President to be signed into law or vetoed.

Because the Federal budget process begins well in advance of actual spending, and because downturns are difficult to forecast, annual appropriations are usually not an effective means of fighting recessions. New legislation can be introduced to modify appropriations during the fiscal year, but there may still be legislative delays in the Congress and further delays between appropriation and actual expenditure. For example, government procurement procedures can involve time-consuming regulations intended to ensure fairness in contract awards. In contrast, monetary policy changes can be implemented more rapidly, since open market operations do not require congressional action and the extended delays it sometimes imposes.

Reducing growth in government expenditures and budget deficits were important long-term objectives of this Administration's fiscal policy. Escalating government spending and budget deficits are believed to be partly responsible for the decline in conventional measures of national saving and investment rates during the 1980s. Modifications to the budget process introduced as part of the Omnibus Budget Reconciliation Act of 1990, known as the Budget Enforcement Act (BEA), were intended to improve on the GRH and bring government spending and budget deficits under control. Like any credible deficit reduction plan, however, the BEA restricted expansionary countercyclical policy actions by placing constraints on new mandatory spending programs, tax decreases, and all discretionary spending. These restrictions help explain the recent behavior of expenditures and receipts.

Absent special circumstances, the BEA requires that any new mandatory spending program be offset by some combination of decreases in other mandatory spending programs or by a tax increase. Similarly, any tax bill projected to decrease total govern-
ment revenue would trigger across-the-board spending cuts unless it was matched by specific cuts in spending programs. These constraints on new mandatory spending programs and tax initiatives are known as the "pay-as-you-go" provisions of the BEA.

A problem with these provisions is that the method used to estimate the effects of tax changes on revenues is very imprecise. A change in tax law can cause a series of changes—often referred to as feedback effects—in the consumption, investment, and saving decisions of individuals and firms. Current government methods of estimating changes in revenue allow for a very narrow range of feedback effects. While a full accounting of the feedback effects that new tax proposals could have is currently impractical, the absence of fully dynamic estimates has limited the usefulness of the estimating process in tax policy debates.

The BEA also established legally binding caps (adjusted for inflation and certain technical factors) that impose a "flexible freeze" on discretionary spending growth. Originally, separate caps prohibited transfers of funds across three categories of spending: domestic, defense, and international. These "firewalls" expire after fiscal 1993, when a single cap will be applied to total discretionary spending.

The discretionary spending caps and pay-as-you-go rules in the BEA are much more difficult to circumvent than the GRH budget deficit targets. The GRH required the Administration to estimate total receipts and expenditures at the start of the fiscal year to determine if the deficit would be below the target for the upcoming year. However, it was not difficult to pass legislation later in the year that increased the deficit. Another weakness of the GRH was that the deficit was estimated only for the upcoming year, so that legislation significantly increasing deficits in subsequent years did not conflict with the provisions of the GRH. For the most part, the BEA solved both of these problems by requiring the Administration to show, within days of its passage, whether legislation signed by the President increased or decreased the deficit over both 1- and 5-year time horizons. Legislation that violated the BEA targets resulted in across-the-board spending cuts to restore compliance.

Although an effective deficit reduction plan necessarily requires constraints on fiscal expansion, the BEA does not eliminate expansionary actions completely. First, the automatic stabilizers implicit in mandatory spending programs and the tax code are allowed to operate, since the BEA deficit targets are adjusted for changes in short-run economic conditions. Second, the BEA constraints on policy changes can be waived under either of two conditions: (1) in the event of a "low-growth scenario"—two consecutive quarters of less than 1 percent growth or a forecast of two or more consecutive quarters without growth or (2) when the President declares an
emergency (such as a weak economy that does not qualify as a low-growth scenario or humanitarian relief efforts). Finally, economic activity can be stimulated by policy changes that strengthen economic incentives without increasing spending or reducing total receipts, such as an appropriately designed reduction in capital gains tax rates.

LIMITATIONS OF COUNTERCYCLICAL FISCAL POLICY

Even in the absence of procedural constraints, the ability of countercyclical fiscal policy to stimulate a weak economy may be limited. The effect of changes in purchases, transfers, and taxes on total spending is complex and uncertain.

Expectations

People's actions depend not only on their current situation but also on their expectations for the future. For example, many people in their 50s and early 60s, anticipating retirement, save a large share of their incomes. Fiscal policy can affect people's behavior by changing their current disposable income, but changes in spending will also depend on people's expectations about their future disposable income. For instance, a temporary income tax cut will affect consumption less than a permanent cut. If people think a cut in income tax rates will last, they are likely to respond by consuming most of their additional after-tax income. They have little reason to save more, because they expect the higher after-tax income to last into the future. But if they expect that a tax cut will soon be reversed, they may save most of their temporary windfall to spend when taxes rise again and their disposable income falls. Given current concerns about large budget deficits, unless income tax cuts are linked to reductions in future government spending, people may be more likely to believe any current tax cut will be offset by higher taxes in the future. If so, tax cuts will have little effect on current spending.

People's expectations about the future can affect other tax initiatives as well. For example, when the government introduces a temporary investment tax allowance, businesses have an incentive to shift investment expenditures to the period in which the temporary tax credit applies. In contrast to a cut in personal income taxes for families—which will have little effect on spending if it is temporary—an investment tax allowance will have a stronger short-run effect if it is temporary. If businesses know the investment tax allowance is permanent, they have no reason to change the timing of expenditures. The long-term effects of a permanent investment tax credit or more neutral depreciation are discussed in Chapter 6.

The amplified response to a temporary investment tax allowance may appear to make it an excellent tool for fiscal policy. But the role of people's expectations in determining the response to an in-
vestment tax allowance has far-reaching implications for policy. Once businesses know that an investment tax allowance is being considered, they may defer investment spending so that they are better able to take advantage of the investment tax allowance at a later date. Similarly, if in the past the government has introduced a temporary investment tax allowance during recessions, people may defer investment at the first hint of a slowdown in the future, hoping to benefit from another tax credit. This deferral of spending may exacerbate fluctuations in output.

Crowding Out

Changes in government purchases may also have limited effects on total spending. For example, if the appropriation for the construction of a new highway system is not accompanied by a corresponding increase in tax revenues, the budget deficit and government borrowing will increase. Increased government borrowing may put upward pressure on interest rates and discourage investment spending, offsetting at least part of the increase in total demand resulting from the construction project. This reduction in private investment associated with an increase in government spending is known as “crowding out.”

How important is crowding out? Unfortunately, it is difficult to distinguish the effect of changes in government spending from the many other factors that influence interest rates and private investment. At present, interest rates may be particularly sensitive to changes in fiscal policy, raising concern about crowding out. Given the already large budget deficit, further increases in spending now may seriously undermine the credibility of fiscal policy and create expectations of higher future deficits and tighter conditions in credit markets, resulting in higher long-term interest rates now.

Actions need not increase the current government budget deficit in order for crowding out to occur. Actions that make higher spending more likely in the future may increase interest rates now, even if they have no effect on current deficits. For example, if a law passed today increased government spending beginning in the year 2000, expectations of tighter conditions in credit markets in the future could raise long-term interest rates and reduce investment today.

Resource Allocation

Countercyclical fiscal policies also have long-term effects on the allocation of resources that should be taken into account. For example, policymakers may decide to construct a highway system to stimulate spending in an economic downturn. The benefits the highway system will provide may not justify the costs incurred; if they did, the project should have been undertaken long before the idle resources provided additional incentive. History shows that, in
a market economy, idle resources typically are brought back into use in the private sector after a period of transition. And unlike government projects, these private activities are sustainable only if they meet the stringent test of the market: sufficient consumer demand to ensure that the value of the activity exceeds its cost. If a downturn is expected to be brief, relying on the safety net of unemployment insurance and other programs while waiting for idle resources to be brought back into private activities could maximize their economic value. If, on the other hand, a recession is expected to be long or severe, there is a stronger case for short-run fiscal stimulus.

SUMMARY

- Automatic stabilizers increase spending and reduce taxes automatically when the economy weakens.
- During the recent recession and recovery period, fiscal policy appears to have been less expansionary than it was in previous recession and recovery periods.
- The Budget Enforcement Act places constraints on spending growth and tax reductions. Expansionary measures are limited to automatic stabilizers, increases in spending or tax cuts that are allowed under special circumstances, and initiatives that increase incentives.
- Factors such as expectations and crowding out increase uncertainty about the response of the economy to fiscal policy. Short-term stimulus is likely to be effective only in the event of a downturn that is expected to be long-lived or severe.

WOULD DIFFERENT POLICIES HAVE HELPED?

During the past 4 years, the economy experienced a slowdown in growth in 1989, a recession in late 1990 and early 1991, and then an unusually weak recovery beginning in March 1991. Only recently has the economy shown sufficient vigor to reduce the unemployment rate for several consecutive months. In light of this experience, would earlier and more expansionary fiscal or monetary policies have been desirable during the recession and early recovery? The answer, in our opinion, is a qualified yes. Given that many of the factors responsible for the slow growth in the U.S. economy—defense reductions, commercial overbuilding, and the slowdown in foreign economies—were expected to persist into the future, there appeared to be little danger that inflation would rise as a result of a moderately more expansionary policy, although it may well have fallen more slowly.

The conclusion that more stimulative policies would have been desirable does not come simply with hindsight. The Administration
proposed fiscal policies in early 1992 that would have provided a modest stimulus to the economy. These initiatives included unilateral measures such as a reduction in excess income tax withholding and several proposals requiring congressional action, including a temporary investment tax allowance to speed up spending on productive assets, a temporary tax credit for first-time homebuyers, and a reduction in the tax rate on capital gains.

The Administration’s proposals would have provided short-term stimulus to the weak economy primarily by using tax incentives to encourage business and residential investment. Reductions in excess withholding taxes were intended to stimulate household spending, while the temporary investment tax allowance would have stimulated business investment. The cut in capital gains taxes would have increased the value of capital assets and thus, wealth, thereby providing short-term stimulus to spending in addition to long-term incentives for investment and entrepreneurship.

The Administration’s proposals were designed to avoid increasing the already large deficit. By emphasizing investment incentives, the fiscal proposals would have increased capital formation and the potential for long-term growth. Unfortunately, only the unilateral measures were implemented, since the Congress did not pass the President’s proposals in an acceptable form.

A fiscal plan with even stronger tax incentives merited consideration, subject to one very important condition—that legislative action (not just the development of general plans) be taken at the same time to reduce both future government spending growth and future budget deficits. Any policy initiative had to take into account both the short-term problem of recession and slow recovery and the long-term problem of low productivity growth that is due, in part, to insufficient national saving and investment. While the recession could have provided an argument for short-term fiscal expansion, such action would have been both less effective and inappropriate if it had sacrificed long-term goals by increasing expectations of future government spending and budget deficits.

Some have argued that, given the slow growth of M2 and the overall weakness in the economy, monetary policy has been the predominant cause of the recent recession and weak recovery. As noted earlier, a number of unforeseen problems complicated the task of setting monetary policy. It is not clear to what extent the slow growth of M2 reflected inadequate expansion of the monetary base, weak demand, or portfolio shifts away from the assets that constitute M2 (undermining its usefulness as an indicator of monetary policy).

While it would have been desirable for monetary policy to have been somewhat more expansionary than it in fact was during the recession and early recovery in order to further cushion the de-
clines in output and employment, such a policy could have delayed progress on reducing inflation. Furthermore, in the presence of uncertainty about the effectiveness of fiscal and monetary policy tools, there are advantages to using both to reduce the uncertainty about the overall response of the economy. During this period, too much responsibility for strengthening the economy was left to monetary policy. Greater help from fiscal incentives, regulatory relief, and trade liberalization was needed.

Overall, it appears that recent fiscal and monetary policy have been less expansionary than in the typical postwar recession and early recovery. It should be remembered, however, that in many cases past policies proved to be too expansionary and worsened inflation in the subsequent recovery. Nonetheless, the weakness of the economy—indicated by both the fall in output during the recession and the substantial decline in core inflation over the past year—and the prospects that the weakness would continue made a case for somewhat greater stimulus from fiscal and/or monetary policies during the recession and early recovery. Even perfect policies probably could not have prevented a recession, given the myriad factors impeding growth during this period, but they may have softened the recession and speeded up the recovery.

CONCLUSION

This chapter has emphasized the difficulties inherent in using monetary and fiscal policies to offset short-term fluctuations in the economy. The experience of the 1960s and 1970s has shown that fine-tuning can be destabilizing and may even erode long-term growth rates by increasing the uncertainty associated with long-term planning and impeding the reallocation of resources.

In response to the apparent failure of fine-tuning, some have taken the opposite position that there is no benefit to countercyclical policies, even when the economy experiences a protracted recession. This argument is based on the belief that the primary effect of policy changes in response to short-term conditions is increased uncertainty among private decision-makers, with possible negative impacts on output.

A more balanced view recognizes the limitations of fine-tuning, without precluding the possibility that policy may need to be adjusted occasionally. In this view, policies are designed primarily with long-term objectives in mind. Because sound money is indispensable to a well-functioning economy, monetary policy targets are guided by the goals of maintaining low and stable rates of inflation and facilitating the reliable provision of credit. Spending policies are guided by cost-benefit analysis, taking into account future effects as well as short-run economic conditions. Tax policies
are structured to minimize interference with market incentives to work, save, invest, and innovate. In the present situation, fiscal policy should also aim for gradual reduction in the growth of government expenditures and the budget deficit.

In certain circumstances, however, it may be necessary to change policies. First, it is possible that relationships between policy targets, such as the growth target for M2, and policy objectives, will change. In that case, targets for M2 may need to be adjusted and/or supplemented or replaced by targets for other monetary aggregates or other indicators. Second, if structural adjustments, external shocks, or other factors are expected to weaken the economy for an extended period, then more expansionary policies may be appropriate to facilitate the economic adjustment process. To the greatest extent possible, the circumstances under which policies might change should be specified in advance, so that credibility is enhanced rather than compromised by such deviations. The low-growth scenario provisions of the BEA are an example of this kind of "recession escape clause." When policy must deviate from the established targets, actions should be consistent—and understood to be consistent—with the long-term objectives of high and stable output growth and low and stable inflation.

While the economy has endured a period of protracted weakness during which more expansionary policies would, in our judgment, have been desirable, economic developments in 1992 and current indicators of future activity suggest that a more self-sustaining recovery consistent with maintaining low inflation is finally underway and that additional short-term fiscal and/or monetary stimulus may be unnecessary. If the modest recovery were to falter, any short-term fiscal stimulus should be tied to long-term spending reductions in order to minimize upward pressure on interest rates, thereby increasing the effectiveness of the short-term stimulus and reducing future deficits. Monetary policy should remain focused on sustaining a recovery consistent with low and stable inflation. Interest rates and inflation rates are now at their lowest levels in two decades, providing the foundation for long-term, noninflationary growth in output and employment.