

Introduction

The year 1990 was a difficult one for the U.S. economy and a challenging one for monetary policy. As the year began, policy was aimed at supporting an expanding economy while trying to hold in check, and eventually reduce, the rate of price inflation, which had moved up a notch in the latter part of the 1980s. Through midyear, that delicate balancing act appeared to be succeeding despite problems in some industries and regions. But in early August, Iraq's invasion of Kuwait and a related surge in oil prices bumped the economy off course, giving new impetus to inflation and tilting the economy from a path of slow growth to one of recession. The longest peace-time expansion in the nation's history thus came to an end.

That the oil shock threatened both to raise inflation and to reduce activity was recognized from the outset, but which of those threats posed the greater danger was not immediately clear. The reaction of household and business spending to the oil shock was difficult to predict, as was the degree to which the oil shock would feed more generally into wage and price decisions. Moreover, the extent and duration of the disruption of world oil markets were subject to great uncertainty. By mid-autumn, however, it appeared that the inflationary spillover of the oil shock was being effectively contained and that the risk of an appreciable economic contraction was growing. At that point, the Federal Reserve began to

move forcefully toward a more accommodative policy stance.

Earlier in the second half, policy had been eased slightly on two occasions: in July, to offset the effects on the economy of apparent restraint in private credit supplies, and in October, when prospective reductions in federal budget deficits enabled interest rates to decline. Over the balance of the year, money market rates were reduced aggressively through open market operations and, late in the year, through a half-point decrease in the discount rate. In total, short-term rates at the end of 1990 were down more than 1 percentage point from their levels of midyear, and long-term rates also had moved lower. Falling interest rates contributed to an appreciable decline in the foreign exchange value of the U.S. dollar in the second half of the year.

The Federal Reserve's decisions to ease policy in the latter part of 1990 were influenced not only by developments in the economy but also by the behavior of the monetary and credit aggregates. M2 and M3 ended 1990 within the ranges set by the Federal Open Market Committee (FOMC), but they were in the lower parts of those ranges, and their expansion over the fourth quarter continued to be quite sluggish. The sluggishness of the aggregates during this period was worrisome because it suggested that the economy was weaker than anticipated and because it indicated the possibility of some undesirable restraint on future spending from the constricted flow of credit from depository institutions. In particular, the thrift industry was con-

NOTE. The discussion here and in the following two chapters is adapted from *Monetary Policy*

come increasingly reluctant to lend, raising interest margins and tightening nonprice terms. To bolster lending incentives, the Federal Reserve in December eliminated the reserve requirements on nonpersonal time deposits and net Euro-currency liabilities.

To a significant extent, overall credit flows were sustained in 1990 by sources outside depositories: Debt of the domestic nonfinancial sectors grew about 7 percent over the year and ended in the middle of the FOMC's monitoring range. The shift toward nondepository sources of credit made it possible to achieve a greater amount of growth in nominal income and expenditure for a given expansion of the money stock. One facet of this process was a shifting by the public out of assets that are included in the monetary aggregates and into holdings of Treasury issues and other securities. Velocity, the ratio of nominal GNP to the money stock, thus exhibited strength that was unusual, given the circumstances. Although declines in interest rates ordinarily are associated with falling velocity, M2 velocity was about unchanged in 1990, and M3 velocity registered an exceptionally large increase.

As 1990 drew to a close, the immediate concern was that of bringing the recession to a halt and of getting the economy back on a path of expansion. Support for renewed expansion seemed likely to come from lagged effects of the declines in interest rates over the second half of 1990 as well as from a rise in purchasing power brought on by a sharp drop in the price of crude oil after mid-autumn. The prospects for exports continued to look favorable given the improved competitiveness of U.S. producers. At the same time, however, the confidence of households and businesses was low at the end of 1990, and problems in construction and among some financial institutions

appeared to be deeply rooted; these factors seemed to have the potential to push back the economic recovery or cause it to be distinctly subpar.

Looking beyond the cyclical processes of recession and recovery, monetary policy will need to continue aiming at the longer-run objective of reducing the rate of price inflation over time. In that regard, price increases in 1990 were larger than those of other recent years, a result that reflected both the surge in oil prices and more general inflation pressures. These inflation pressures seemed to be easing a little in the latter part of the year, however, perhaps setting the stage for a more favorable inflation performance in 1991. Such an outcome clearly would enhance the prospects for achieving maximum sustainable economic growth. ■

Introduction

The year 1991 started with the economy in recession. Output fell sharply in the first quarter, and unemployment continued to climb. By early spring, activity had bottomed out, and for a few months recovery seemed to be taking hold in a fashion roughly typical of that seen in the very early phases of previous post-war expansions. But as the year wore on, the incipient recovery lost its momentum. Consumer spending turned down after mid-summer, and business and household sentiment began to erode. Inventories at wholesale and retail trade establishments began to increase relative to sales, inducing a new outbreak of production adjustments and layoffs that continued through year-end. Growth of the economy—as measured by its gross domestic product—came almost to a standstill in the fourth quarter, and the gain over the year as a whole was less than ½ percent.

By contrast, the inflation picture brightened considerably in 1991. After accelerating moderately in 1989 and 1990, the rate of price increase turned down in the first half of 1991, and by the end of the year an underlying trend toward disinflation seemed to have become well-established in the labor and product markets. The consumer price index excluding food and energy—a widely accepted measure of core inflation—rose 4.4 percent in 1991, after an increase of more than 5 percent in 1990. Labor costs also slowed,

as did various measures of inflation expectations.

At the start of 1991 the Federal Reserve already had moved to ease money market conditions in response to the weakening of the economy in the latter part of 1990, and a further progressive easing took place during the first several months of 1991. Then, with the stance of policy seemingly conducive to supporting the upturn in activity that began in the spring, a more neutral money market posture was maintained through the spring and early summer.

The Federal Reserve resumed its easing of money market conditions in the second half of 1991 against the backdrop of flagging economic activity, diminishing inflationary pressures, and a weakening of the broader monetary aggregates—M2 and M3. The federal funds rate fell from 5¾ percent in July to 4 percent by year-end, and most other short-term rates followed suit. The discount rate also was reduced over this period, from 5½ percent to 3½ percent, the lowest rate in nearly thirty years. Long-term interest rates, which had failed to respond to declines in money market rates in the early months of the year, came down significantly in the latter part of 1991, partly in response to the easing in inflationary expectations.

The faltering of the recovery process in the second half of 1991 apparently resulted from the convergence of a variety of forces. Burdened by heavy debts and weak asset values—particularly in real estate—households and corporations restrained spending. In addition, financial intermediaries, chastened by their negative experience with earlier loans, became more hesitant to extend new

NOTE. The discussion here and in the following two chapters is adapted from *Monetary Policy Report to the Congress Pursuant to the Full Employment and Balanced Growth Act of 1978* (Board of Governors, February 1992).

credit; the resultant tightening of lending standards deepened the decline in economic activity early in the year and inhibited the subsequent recovery. In the government sector, where deficits remained large at the federal level as well as in many state and local jurisdictions, efforts to curb spending and increase revenues constituted a further drag on aggregate demand.

The sluggishness of spending in 1991 was accompanied by a striking slowdown in the growth of credit. The volume of outstanding debt in the domestic nonfinancial sector increased 4½ percent in 1991, roughly half the average pace of the three previous years. Excluding federal government debt, which continued to climb briskly, the growth of nonfinancial sector debt over the year was 2½ percent, the smallest rise in decades. Households, nonfinancial businesses, and state and local governments all retrenched in order to buttress deteriorating financial positions.

At the end of 1991, the speed with which the monetary easing might translate effectively into increases in production and employment was still a matter of considerable uncertainty. The low level of consumer confidence evident at year-end seemed likely to exert a negative influence on near-term activity. In addition, severe structural problems still were evident in some sectors. Most notably, the persistent overhang of vacant space in office and other commercial buildings appeared certain to inhibit new construction in that sector for some time, and the budgetary constraints that had capped government spending in 1991 seemed likely to linger.

At the same time, however, some strong positive forces also were evident. With interest rates down sharply in 1991, households and businesses took the opportunity to refinance mortgages and to replace other existing debt with

new, lower-cost credit. Lower interest rates also contributed to an increase in stock prices, which induced firms to boost equity issuance, pay down debt, and thereby strengthen their balance sheets. Through such adjustments, households and businesses were becoming better positioned at year-end to begin providing more active support to the economic recovery. In addition, financial institutions had made considerable progress in strengthening their balance sheets; this strengthening will augment the ability of these institutions to lend and could reduce demands on the federal safety net.

At year-end the nation also had reason to be guardedly optimistic about the ability of American firms to compete in the world economy. The real exports of goods and services registered another solid gain in 1991 despite a further slowing in the growth of foreign industrial economies; the merchandise trade deficit for the year was the smallest since 1983. Cost restraint in manufacturing, associated in part with rapid productivity gains, has enabled U.S. producers to move more aggressively into foreign markets in recent years. That cost restraint and productivity gain will need to be maintained, of course, if domestic producers are to remain at the forefront of a rapidly changing world economy.

Our ability to compete in the world arena—and an improved economy more generally—also will require a shift over time toward higher rates of saving and investment. The rates of personal and corporate saving have been extremely low over the past decade; at the same time, rapid growth of the stock of federal debt has imposed heavy demands on the limited amount of saving that was available. The result has been a higher level of real interest rates than there would have been otherwise. Growth of

the real capital stock, upon which our future incomes depend, has thereby been stunted. A sustained reduction in the size of the federal budget deficit continues to be the most certain way to boost total saving and bring about an easing of the pressure on long-term rates.

Monetary policy also can contribute positively to the long-run performance of the economy, by providing the noninflationary setting in which saving and investment are most likely to flourish. In that regard, it is encouraging that core inflation is slowing—at the end of 1991 it seemed headed for the lowest pace in a generation. Preserving that gain against inflation while helping to lift the economy solidly into sustained expansion is the challenge that monetary policy will have in 1992 and beyond. ■

Introduction

Economic activity accelerated over the course of 1992, and the rise in real gross domestic product during the year cumulated to more than 3 percent, the largest increase since 1988. Inflation continued to trend lower in 1992, with many broad measures of price change showing increases that were among the smallest of recent decades.

Although the rise of real GDP in 1992 was far from robust by the standards of past cyclical upswings in activity, it was a much larger gain than many analysts—both inside and outside government—had thought likely, given the extraordinary headwinds with which the economy had to contend. Chief among the influences restraining growth were budgetary stresses at all levels of government, widespread structural changes in the business sector, both in defense-related industries and elsewhere, exceptional caution among financial intermediaries, and ongoing efforts by businesses and households to strengthen their finances by restricting the growth of their indebtedness. Adding still further to the drag on the economy in 1992 was the sluggish performance of foreign industrial economies, a number of which still were struggling at year-end to regain forward momentum.

The force of the headwinds seemed greatest in the first half of the year. In the second half, their power appeared to abate somewhat. In addition, a number

of important sectors—housing, consumer durables, and business fixed investment—continued to benefit in the second half from the substantial easing of money market conditions that had been implemented over time by the Federal Reserve.

With the firming of the economy, employment turned up in 1992, but the rate of job growth was relatively sluggish. The structural adjustments undertaken by large businesses were accompanied in many cases by permanent cutbacks in employment. More generally, businesses were able to meet their output objectives through hefty increases in productivity, thereby limiting the need for additional workers. The unemployment rate rose in the first half of 1992 in conjunction with a surge in the share of the working-age population in the labor force but turned down thereafter as labor force participation fell back. The unemployment rate in December was 7.3 percent, almost half a percentage point below the peak rate of June, but still a little above the level of a year earlier.

Price developments remained favorable in 1992. The rise in the consumer price index over the four quarters of the year amounted to 3.1 percent, essentially matching the low rate achieved in the previous year. Consumer energy prices turned back up in 1992, but the prices of other goods and services that enter into the CPI generally rose less rapidly than they had in 1991. The success in keeping inflation in check, while restoring growth, had highly salutary effects on financial markets and on the process of financial reconstruction, the continuing progress of which is essen-

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tial to the achievement of renewed and sustainable prosperity.

The hesitant pace of the economy evident in incoming information throughout much of 1992, along with notable weakness in the monetary and credit aggregates and steady gains against inflation, prompted the Federal Reserve to ease monetary conditions three times, bringing short-term rates down another full percentage point over the year. The discount rate was reduced to 3 percent, and short-term rates generally closed the year at their lowest levels since the early 1960s.

Long-term rates also fell, on balance. At times, the declines in long-term rates were limited by concerns about prospective federal budget deficits and about the possibility that inflation might begin to move higher as the expansion proceeded. However, notable decreases in long rates were registered in late 1992, as inflation remained subdued and as statements by the incoming Administration suggested that it might seek only limited near-term fiscal stimulus and were giving serious consideration to proposals aimed at making substantial cuts over time in the federal budget deficit. The trade-weighted foreign exchange value of the dollar in terms of the other Group of Ten currencies appreciated on balance over the course of 1992. The dollar benefited from the improved performance of the U.S. economy relative to conditions in other industrial countries.

Growth of the monetary aggregates slowed in 1992 despite an acceleration in nominal spending and income. For the year, M2 advanced 1.8 percent, below the 2½ percent lower end of its target range. M3 also came in under its 1 percent to 5 percent target range, growing only 0.3 percent. The Federal Reserve did not make greater efforts to boost growth to within these ranges

because, as the year went on, it became increasingly clear that slow growth of the broad money aggregates did not indicate that financial market conditions were impeding the expansion of spending and income. In fact, growth of nominal GDP, which accelerated to 5.7 percent from 3.5 percent in 1991, exceeded that of M2 by nearly 4 percentage points in 1992 and that of M3 by nearly 5½ percentage points. Not only did data on spending itself show a firming trend over the year, but narrow money (M1) and reserves expanded rapidly—suggesting to some that liquidity was quite ample—and the growth of debt, while restrained, was considerably in excess of that of the broader monetary aggregates.

The faster rise of nominal GDP in 1992 was fueled by spending that was financed largely outside banks and other depositories, whose liabilities constitute the lion's share of the monetary aggregates. Spurred in part by advances in equity prices and by declines in longer-term interest rates, businesses and households strengthened their balance sheets by raising funds in bond, mortgage, and equity markets and repaying bank loans and other short-term debt. This shift in the focus of financing efforts toward the capital markets, a process that had been evident in 1991 as well, helped to redress financial distortions that had accompanied the preceding buildup of debt and the rapid rise of some asset prices in the 1980s.

The low level of credit demanded from depositories meant that these institutions did not need to seek large volumes of deposits. As a consequence, rates paid on deposits were adjusted downward rapidly as short-term market rates declined. Savers, reacting to the lower deposit rates and to attractive returns on bonds and equity, shifted funds from M2 deposits into the capital

markets. One notable aspect of this shift toward the capital markets was the purchase of bond and stock mutual funds, which are not included in the monetary aggregates and which together experienced record inflows in 1992. In addition, with consumer loan rates falling by less than deposit rates, households apparently used M2 assets to repay consumer debt or restrain its growth. The combination of rate incentives, desires to strengthen balance sheets, and the greater availability at low transaction cost of a broadened array of savings vehicles beyond traditional deposits appear to have distorted, at least for a time, the traditional relationship between levels of M2 and M3 assets and given levels of spending.

Although growth of M2 and M3 was very weak in 1992, M1 growth accelerated to 14.3 percent, the second fastest annual increase recorded in the official series, which begins with 1959. This pickup owed in part to the expansion of aggregate spending, but it mainly reflected the tendency for rates on liquid deposits to adjust downward less rapidly than those on time deposits. In response, savers shifted substantial volumes of funds from maturing time deposits to NOW accounts. In addition, businesses boosted their demand deposits substantially. To support this growth in transactions deposits, the Federal Reserve added substantial volumes of reserves in 1992. Total reserves increased 20 percent last year, and the monetary base, which includes currency outstanding as well as reserves, increased 10.4 percent, the highest rate ever registered in the official series.

The decisions of households and businesses to strengthen their balance sheets also affected debt growth in 1992, although not as much as the broad monetary aggregates. In total, the debt of nonfinancial sectors expanded 4.9 per-

cent in 1992, somewhat faster than in 1991 but still just above the lower end of its monitoring range. With debt growing less rapidly than aggregate income and with declines in market interest rates allowing higher-cost debt to be rolled over at lower rates, households and businesses made substantial further progress in reducing debt-service burdens over the course of the year.

Some of the financial and economic adjustments that were evident in the economy in 1992 seemed likely to extend into 1993 and perhaps beyond. At year-end, government spending for defense appeared likely to continue on a path of sharp decline. More broadly, balance sheet repair and business restructuring seemed to be still in progress at year-end, and near-term prospects for the foreign industrial economies were far from encouraging. The degree to which these, and other, developments might restrain growth in the coming year remained somewhat uncertain.

This uncertainty notwithstanding, however, the economy clearly ended the year 1992 on stronger footing than it had been on at the start of the year. The improvement in household and business finances over the course of 1992, together with the ongoing efforts of businesses to enhance efficiency, seemed to augur well for sustained expansion of the economy in 1993 and beyond. In addition, the considerable progress that had been made in bringing down inflation provided another of the essential underpinnings for sustained growth of real living standards.

Looking ahead to 1993, the aim of the Federal Reserve will be to promote financial conditions that will help to maintain the greater momentum that the economy developed in 1992, while consolidating the trend toward lower inflation. But, achieving a satisfactory economic performance both in 1993 and

over the long run will depend on government policies in many areas other than monetary policy. The most important, perhaps, is the direction of fiscal policy. The new Administration and the Congress have an opportunity to make a fresh start in coming to grips with the federal government's long-standing budgetary problems. Credible action to reduce the prospective size of future budget deficits would likely yield a direct and meaningful payoff in the form of reduced federal demands on national saving, leading in turn to lower long-term interest rates than would otherwise prevail, increased capital investment, and higher living standards. ■

Introduction

Nineteen ninety-three was a favorable year for the U.S. economy, with notable gains in real output, declines in joblessness, and a further small drop in the rate of inflation. Financial conditions conducive to growth prevailed throughout the year and gave considerable impetus to activity. With the Federal Reserve keeping reserve market pressures unchanged, short-term interest rates held steady during the year at unusually low levels, especially when measured relative to inflation or inflation expectations. In addition, long-term rates declined further, partly in response to actions taken by the Congress and the Administration to put the federal deficit on a more favorable trend.

Against this backdrop, households and businesses were able to take further steps to reduce their burden of debt service, and more expansive attitudes toward spending and the use of credit seemed to take hold. Spending in the interest-sensitive sectors of the economy surged ahead, with particularly large advances in residential investment, business outlays for fixed capital, and consumer durable goods. The growth of real gross domestic product picked up sharply in the second half, and the increases for all of 1993 cumulated to about 3¼ percent according to preliminary estimates. In the labor market, employment moved up at a moderate

pace, and the unemployment rate dropped almost a percentage point over the year. Measured by the consumer price index, the rate of inflation edged lower in 1993, with the rise in prices over the four quarters of the year amounting to only 2¾ percent. The performance of the U.S. economy stood in sharp contrast to the continued sluggish growth in many of the other industrial countries and helped to buoy the trade-weighted value of the dollar on foreign exchange markets.

The strength in spending was supported by increased borrowing by both households and businesses. Continuing declines in a number of interest rates, which sparked considerable refinancing of existing obligations, helped to trim debt service burdens for both sectors, undoubtedly facilitating the pickup in borrowing and spending. Indicators of financial stress, including loan default rates and bankruptcy filings, took a decided turn for the better in 1993. Borrowing by households was robust enough to raise the ratio of debt to disposable income; business debt, held down in part by equity issuance, declined relative to income. All told, the debt of the nonfinancial sectors is estimated to have grown 5 percent, the same as in 1992, as a diminution of the net funding needs of the federal government was about offset by the pickup in private demand. This growth placed the debt aggregate in the lower half of its 4 percent to 8 percent monitoring range.

The growth of M2 slowed in 1993, albeit considerably less than the deceleration in nominal GDP. For the year, M2 advanced 1½ percent, placing it a little above the lower bound of its 1 percent

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to 5 percent annual growth cone. M3 expanded $\frac{1}{2}$ percent, the same pace as in 1992, and a bit above the lower bound of its 0 percent to 4 percent annual range. The ranges had been adjusted down by the Federal Open Market Committee during 1993. The adjustments were technical in nature and reflected the Committee's judgment as to the extent of the ongoing distortions of financial flows relative to historical patterns and of consequent increases in velocities—that is, the ratios of nominal GDP to money.

The special factors shaping the growth of the monetary aggregates included a marked preference by borrowers for capital market financing, rather than bank loans, and a configuration of market returns that enticed investors away from the traditional financial products offered by depositories. Bond and stock mutual funds were the primary beneficiaries of this shift, with inflows into such funds in 1993 setting a new record. This continuing redirection of credit flows has rendered the movements of the broad monetary aggregates less representative of the pace of nominal spending than was evident in the longer historical record. In 1993, nominal GDP grew about $5\frac{1}{2}$ percent, or 4 percentage points above the rate of expansion of M2 and nearly 5 percentage points above that of M3. In light of uncertainties about the relationship between money and nominal income, the Federal Reserve continued to rely heavily on a variety of financial and economic indicators in formulating policy.

Along with the immediate economic gains achieved in 1993 came further progress in putting the economy on sounder footing for the long haul. With the slowing of price increases of recent years, the underlying rate of inflation has been reduced to the lowest level in a

generation. In addition, labor productivity, the ultimate source of rising living standards, appears to be trending up at a stronger pace than it did through much of the 1970s and 1980s.

The prospects for sustained growth also have been bolstered by government actions in the areas of fiscal policy and trade policy. In the fiscal area, steps that were taken in 1993 have been helpful in bringing about a decline in the federal budget deficit and reducing the growth of federal debt, thereby freeing up a greater portion of the nation's limited saving for use in financing investment and growth. In the trade area, the nation's long-standing support of an open world trading system was reaffirmed by the passage of the North American Free Trade Agreement and the agreement in the Uruguay Round—actions that will yield important benefits over time not only to the United States but also to its trading partners.

In the area of monetary policy, the strategies pursued in recent years have been instrumental in achieving progress against inflation and promoting conditions favorable to economic growth. The challenge ahead is to build on that favorable performance in an economy that will likely be operating at higher levels of resource utilization than it has in recent years. With success in keeping the economy on course toward the long-run goal of price stability, the prospects for sustained expansion will be greatly enhanced. ■

Introduction

The U.S. economy turned in a strong performance in 1994. Real gross domestic product increased 4 percent over the four quarters of the year. The employment gains associated with this rise in production outpaced growth of the labor force by a sizable margin, and the unemployment rate thus declined substantially. Price increases picked up in some sectors of the economy in 1994 as labor and product markets tightened, but broader measures of price change showed inflation holding fairly steady: The consumer price index increased about 2¾ percent over the year, the same as in 1993.

Federal Reserve policy during 1994 was aimed at fostering a financial environment conducive to sustained economic growth. As the economy moved back toward high rates of resource utilization, pursuit of this aim necessitated acting to prevent a buildup of inflationary pressures. Federal Reserve policy had remained very accommodative in 1993 in order to offset factors that had been inhibiting economic growth. By early 1994, however, the expansion clearly had gathered momentum, and maintenance of the prevailing stance of policy would eventually have led to rising inflation that, in turn, would have jeopardized economic and financial stability. Taking account of anticipated lags in the effects of policy changes, the Fed-

eral Reserve began to firm money market conditions in February 1994. Additional tightening followed over the course of the year, as economic growth remained unexpectedly strong, eroding remaining margins of unused resources and intensifying price increases at early stages of production. During this period, the economic effects of the tightening of monetary policy may have been muted by developments in financial markets—for example, easier credit availability through banks and a decline in the foreign exchange value of the dollar.

Short-term interest rates increased about 2½ percentage points during 1994, with the federal funds rate rising from 3 percent to 5½ percent. Other market interest rates rose between 1½ percentage points and 3½ percentage points, on net, with the largest increases coming at intermediate maturities. Through much of the year, intermediate- and long-term rates were lifted by more rapid actual and expected economic growth, fears of a pickup in inflation, and market expectations of additional policy moves. However, a further substantial tightening in November and, near year-end, some tentative signs of moderation in economic activity appeared to reduce market concerns about increased inflation pressures and additional Federal Reserve policy actions. As a result, long-term rates declined, on net, from mid-November through the end of December.

The foreign exchange value of the dollar in terms of other Group of Ten currencies declined about 6½ percent during 1994, even as the economy picked up and interest rates rose. The positive effects on the dollar that would

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normally have been expected from higher U.S. interest rates were offset in large part by upward movements in long-term interest rates abroad. Indeed, foreign long-term rates increased as much, on average, as U.S. rates during 1994, because growth abroad, especially in Europe, was more rapid than expected. Concerns about U.S. inflation may have contributed to weakness in the dollar in the middle part of 1994; late in the year, the dollar rallied, as tighter monetary policy apparently reduced investors' inflation fears.

Despite the rise in U.S. interest rates in 1994, private-sector borrowing, abetted in part by more aggressive lending by intermediaries, picked up in support of increased spending. The debts of both households and businesses grew at their fastest rates in five years. The step-up in growth of private debt was accompanied by changes in its composition. As bond yields rose, businesses shifted toward short-term funding sources, increasing their bank borrowing and commercial paper issuance while cutting back on new bond issues. Similarly, households turned increasingly to adjustable rate mortgages as rates on fixed rate mortgages increased substantially. Banks encouraged the shift of households and businesses to bank borrowing by easing lending standards and not allowing all of the rise in market rates to show through to loan rates. In contrast to the trend in private-sector borrowing, federal borrowing was slowed in 1994 by policies adopted in previous years to narrow the federal deficit, as well as by the effects of the strong economy on tax receipts and spending. Taken together, the debt of all nonfinancial sectors expanded $5\frac{1}{4}$ percent, a rise that was the same as the increase of a year earlier and that was in the middle portion of the 1994 monitoring range of 4 percent to 8 percent.

Growth in the broad monetary aggregates remained subdued in 1994. The expansion of M3, about $1\frac{1}{2}$ percent, was well within the 0 percent to 4 percent range established by the Federal Open Market Committee and slightly more than its increase in 1993. M3 was buoyed by growth of 7 percent in large time deposits, as banks turned to wholesale markets to fund credit expansion. For the year, M2 rose about 1 percent, the lower bound of its 1 percent to 5 percent range. In contrast to 1992 and 1993, the slow growth in M2, and the resulting further substantial increase in its velocity (the ratio of nominal GDP to the money stock), was not a consequence of unusually large shifts from M2 deposits to bond and stock mutual funds. Rather, it seemed to reflect behavior similar to that in earlier periods of rising short-term market interest rates. During such periods, changes in the rates available on retail deposits usually lag changes in market rates, providing an incentive to redirect savings from these deposits to market instruments. These shifts tend to have an especially marked effect on M1 because yields on its components either cannot adjust or adjust quite slowly to shifts in market rates. Growth of M1 during the year was $2\frac{1}{4}$ percent; it had been $10\frac{1}{2}$ percent in 1993. Only continued strong growth in currency, much of which likely reflected increased use abroad, supported M1.

In 1995 the Federal Reserve will seek to promote continued economic expansion while avoiding the provision of so much liquidity that a sustained step-up in inflation might begin to develop. Much progress has been made over the past couple of business cycles in reducing the role that inflation plays in the economic decisions of households and businesses. Moving forward, the challenge will be to preserve and extend this progress, given that the Federal Reserve

can best contribute to long-run prosperity by establishing an environment of effective price stability.

Economic prospects for the long run will be further enhanced if the Congress and the Administration succeed in making further progress in reducing the federal budget deficit. An improved outlook for the federal deficit over the remainder of this decade and beyond could have significant favorable effects in financial markets, including a shift in long-term interest rates to a trajectory lower than that which would otherwise prevail. Such a shift in long-term rates would be an essential part of a process in which a larger share of the nation's limited supply of savings would be channeled to productivity-improving investment, thereby boosting growth in output and living standards. ■