Monetary Policy Report to the Congress

Report submitted to the Congress on February 26, 1997, pursuant to the Full Employment and Balanced Growth Act of 1978

Monetary Policy and the Economic Outlook

The economy performed impressively this past year, and the members of the Board of Governors and the Reserve Bank presidents anticipate that 1997 will bring further appreciable economic expansion with relatively low inflation. In 1996, solid advances in the real expenditures of households and businesses led to sizable gains in output. Employment rose briskly, and the unemployment rate edged down to its lowest level of the current expansion. Consumer price inflation increased owing to the likely temporary effects of firmness in food and energy markets, but some broader price measures showed inflation holding steady or even declining. With the economy strengthening, intermediate- and long-term interest rates rose on net, but credit continued to be amply available to businesses and most households, and equity prices soared.

Several factors helped to restrain price increases this past year in the face of high levels of resource utilization. With workers still concerned to some degree about job security, acceleration in hourly compensation was not so pronounced as in comparable periods in the past; wage increases picked up relatively moderately, and further success in controlling health care costs helped to temper the rise in benefits. Moreover, significant declines in the prices of U.S. imports, owing to low inflation abroad and appreciation of the dollar on foreign exchange markets, tended to hold down domestic prices. Damped inflation expectations probably contributed as well to the favorable price performance: A lengthening run of years during which inflation has been in a more moderate range, together with an understanding of the Federal Reserve's commitment to maintaining progress toward price stability, may have discouraged aggressive pricing behavior. Business firms continued to rely on cost control and gains in productivity, rather than on price increases, as the primary channels for achieving profit growth.

Still, the Federal Open Market Committee (FOMC) recognized the danger that pressures emanating from the tight labor market might trigger an acceleration of prices, which could eventually undermine the ongoing economic expansion. Consequently, although conditions last year were not deemed to warrant immediate policy action, the Committee's policy directives starting in mid-1996 reflected a perception that the most likely direction of any policy action would be toward greater restraint in the provision of reserves to the banking system. Forestalling a disruptive buildup of inflationary pressures in the near term and moving toward price stability over time remain central to the System's mission of promoting maximum sustainable growth of employment and production.

Monetary Policy, Financial Markets, and the Economy in 1996

The FOMC eased the stance of monetary policy twice around the beginning of last year—in December 1995 and in January—lowering the federal funds rate ½ percentage point in total, to 5¼ percent. These actions were taken to offset the effect on the level of the real federal funds rate of declines in inflation and inflation expectations in the second half of 1995 and thereby to help ensure the resumption of moderate economic growth after the marked slowdown and inventory correction in late 1995. By the spring, economic growth had become more vigorous than either the Committee or financial markets had foreseen. In response, intermediate-and longer-term interest rates as of mid-May were up around a full percentage point from the two-year lows reached early in the year. In combination with some softening of economic activity abroad and declines in interest rates in major foreign industrial countries, these developments contributed to a further appreciation of the dollar, building on the rise that had started in mid-1995. The Committee anticipated that the increase in the cost of credit, along with the higher

Note. The charts for the report are available on request from Publications Services, Mail Stop 127, Board of Governors of the Federal Reserve System, Washington, DC 20551.

exchange value of the dollar, would be sufficient to foster a downshift in economic expansion to a more sustainable pace and contain price pressures; thus, it left its policy stance unchanged at its spring meetings.

By early summer, however, the continued momentum in demand and pressures on labor resources that were being reflected in faster growth in wages were seen as posing a threat of increased inflation. Core inflation remained moderate, but in light of the heightened risk that it would turn upward, the Committee in its early July directive to the Manager of the Open Market Account indicated its view that near-term economic developments were more likely to lead to a tightening of policy than to an easing. Labor markets continued to be taut over the balance of the year, and this bias toward restraint was included in directives adopted at all of the Committee's remaining meetings in 1996.

After having peaked during mid-summer, interest rates moved down on balance through the fall, as expansion of consumer spending and economic activity in general appeared to be moderating and markets saw less likelihood of a need for Federal Reserve firming action. Equity prices fell back for a time during the summer, reversing some of the substantial increase registered over the first half of the year, but by autumn they had reached new highs. Interest rates and dollar exchange rates turned back up late in the year when signs of rapid growth and more intense use of the economy's resources re-emerged. Since year-end, interest rates have changed little, on net. The foreign exchange value of the dollar has posted further gains, in part reflecting greater-than-expected weakness in Europe and renewed pessimism about economic and financial prospects in Japan. Equity prices have registered new highs since the start of the year. As of mid-February, intermediate- and long-term interest rates were up about ½ to ¾ percentage point, on balance, since early 1996, and the value of the dollar was up around 9 percent against an average of other Group of Ten currencies.

For the nonfinancial business sector, the effect of the higher intermediate- and long-term interest rates on the overall cost of funds last year was offset to some degree by an easing of lending terms at banks and a narrowing of yield spreads on corporate bonds over Treasuries, as well as by declines in the cost of capital in the equity market. Encouraged, perhaps, by the prospects of sustained economic expansion and low inflation, banks, market lenders, and equity investors displayed a strong appetite for business obligations and seemed willing to require less compensation for the possible risks entailed. Some households, by contrast, faced a tightening of standards and terms with respect to credit card debt and some other types of consumer debt last year, as banks reacted to a rising volume of delinquencies and charge-offs on these instruments. However, credit availability under home equity lines increased, particularly from finance companies but also from banks. Overall debt growth slowed slightly but remained near the midpoint of its 3 percent to 7 percent monitoring range. The growth rates of M2 and M3 edged up last year and, as was anticipated in the monetary policy reports to the Congress last February and July, both aggregates ended 1996 near or above the upper end of their growth ranges. Again last year, the growth of M2 relative to nominal income and interest rates was generally in line with historical relationships, in contrast to its behavior during the early years of the decade.

Economic Projections for 1997

With the economy free of serious imbalances, prospects appear favorable for further growth of activity and expansion of job opportunities in the coming year, although resource constraints seem likely to keep the pace of growth below that of 1996. The central tendency of the growth forecasts of gross domestic product put forth by the members of the Board of Governors and the Reserve Bank presidents is from 2 percent to 2¼ percent, measured as the change in real output between the final quarter of 1996 and the final quarter of 1997. Output growth of this magnitude is expected to result in little change in the civilian unemployment rate, which is projected to be between 5¼ percent and 5½ percent in the fourth quarter of this year. These forecasts of GDP growth and unemployment are similar to those of the Admin-

1. Economic projections for 1997

Percent

Indicator	Federal Reserve governors and Reserve Bank presidents		Administration
	Range	Central tendency	
Change, fourth quarter to fourth quarter[1]			
Nominal GDP	4¼–5¼	4½–4¾	4.6
Real GDP[2]	2–2½	2–2¼	2.0
Consumer price index[3]	2¾–3½	2¾–3	2.6
Average level, fourth quarter			
Civilian unemployment rate	5¼–5½	5¼–5½	5.4

1. Change from average for fourth quarter of preceding year to average for fourth quarter of year indicated.
2. Chain-weighted.
3. All urban consumers.

istration. The central tendency of the policymakers' forecasts of the consumer price index for 1997 spans the relatively narrow interval of 2¾ percent to 3 percent, with the lower bound near the inflation forecast of the Administration.

Consumer spending, which accounts for about two-thirds of total GDP, should be supported in coming quarters by further gains in income and the substantial increase in household net worth that has occurred over the past two years; debt problems, although rising of late, do not seem to be so widespread as to threaten the ongoing expansion of household expenditures in the aggregate. In the business sector, balance sheets are strong, profits have been rising, and efforts to bolster efficiency through the use of technologically advanced equipment are continuing at an intense pace. In the commercial real estate market, the supply–demand balance has shifted in many locales to a point at which interest in office building projects has picked up noticeably. These conditions, together with the ready access to a wide variety of sources of finance that businesses currently are enjoying, should keep investment spending on an upward trajectory. Foreign demand for U.S. products should continue to rise with growth of the world economy, even in the wake of the significant appreciation of the dollar since the first half of 1995; however, imports also seem likely to remain on a clear upward trend, given the prospects for continued expansion of the U.S. economy. Government expenditures for consumption and investment probably will follow recent trends, with further cutbacks in real outlays at the federal level and moderate increases in the combined purchases of state and local governments.

Although the risk of increased inflation pressures is significant, especially in view of the tightness of the labor market and the strength in activity that has been evident recently, Federal Reserve policymakers expect this year's rise in the consumer price index to be somewhat smaller than that of 1996. The major reason for expecting a smaller CPI increase this year is a more favorable outlook for food and energy prices. Prices of farm products have dropped back from the highs of last summer, and, barring further weather problems, this year's rise in food prices at retail should be considerably smaller than that of 1996. Oil prices have recently declined and seem likely to ease further in coming months as world production and consumption come back into better balance; this price relief is important not only because of the direct effects on the price of gasoline and other consumer energy items but also because petroleum is a major element in the cost of producing and distributing many other goods. By contrast to the favorable outlook for food and energy prices, some risk exists that core inflation could turn up during the coming year. The minimum wage will be moving up further in 1997, compounding whatever cost pressures might be in train as a result of labor market tightness, and the degree to which businesses can continue to absorb stepped-up increases in labor costs without raising prices more rapidly is not certain.

As noted in the July 1996 monetary policy report, the CPI forecasts of the governors and Reserve Bank presidents incorporate allowances for the technical improvements to this index that have been made by the Bureau of Labor Statistics. These technical changes are estimated to have trimmed the reported rate of CPI inflation slightly in each of the past two years, and additional changes will be affecting the rise in the index in 1997. In view of the remaining difficulties of accurately measuring price change in a highly complex and rapidly changing economy, alternative price indexes will continue to be given substantial weight, along with the CPI, in monitoring progress toward the long-run goal of price stability. Some of the broad measures of inflation derived from the GDP accounts slowed in 1996; the Committee is concerned that, even if the CPI decelerates as expected in 1997, other indexes—with different scope and weights—may pick up in reflection of the pressures on productive resources.

Money and Debt Ranges for 1997

Again in 1997, the Committee has set ranges for M2 and M3 that would encompass monetary growth expected to be consistent with approximate price stability and a sustainable rate of real economic growth, assuming that the behavior of velocity is in line with historical norms. These ranges are unchanged from those for 1996: 1 percent to 5 percent for M2 and 2 percent to 6 percent for M3.

As has been the case for several years, the 1997 ranges for M2 and M3 were set against a backdrop of uncertainty about the stability and predictability of their velocities. A long-run pattern of reasonably

2. Ranges for growth of monetary and debt aggregates

Percent

Aggregate	1995	1996	1997
M2	1–5	1–5	1–5
M3	2–6	2–6	2–6
Debt	3–7	3–7	3–7

NOTE. Change from average for fourth quarter of preceding year to average for fourth quarter of year indicated.

stable velocity behavior broke down in the early 1990s when the public's holdings of monetary assets were depressed by several factors: the contraction of the thrift industry; a tightening of credit supplies and deleveraging by businesses and households; an extremely wide spread between short- and intermediate-term interest rates that heightened the attractiveness of capital market instruments relative to bank deposits; and the expanding availability and growing acceptance of stock and bond mutual funds as household investments.

With the waning of all but the last of these influences, movements in velocity have become more predictable over the past couple of years. This recent evidence of stability, however, covers only a relatively brief period, and its durability remains uncertain. In these circumstances, the Committee has opted to continue treating the ranges as benchmarks for the trends of money growth consistent with price stability rather than as short-run targets for policy. Meanwhile, the actual behavior of the monetary measures will be monitored for such information as it may convey about underlying economic developments.

The central tendency of the Committee's expectations for nominal GDP growth in 1997 is slightly below that registered in 1996. Thus, if velocity behaves as it did last year, M2 and M3 might decelerate a bit but even so would again expand around the upper ends of their growth ranges. Debt of the nonfinancial sectors is anticipated to increase this year at around the pace of last year, remaining near the midpoint of its unchanged 3 to 7 percent range.

Economic and Financial Developments in 1996 and Early 1997

The economy turned in a remarkably favorable performance this past year. Preliminary estimates indicate that real GDP rose more than 3 percent over the four quarters of 1996, one of the larger gains of the past several years and appreciably more than the FOMC was expecting a year ago. Although intermediate- and long-term interest rates moved up, credit remained readily available to most borrowers, and equity prices rose substantially. Expansion of the debt of nonfinancial sectors continued at about the 5 percent rate it has maintained over the past several years, and growth of the stock of money picked up a little to its most rapid pace this decade. These financial developments provided support for strong advances in the real expenditures of households and businesses, and the growth of exports held up well in the face of an appreciating dollar. Tightness of the labor market led to a moderate pickup in wage increases in 1996. However, acceleration of prices was confined largely to the food and energy sectors; prices for other consumer products decelerated, as did prices paid by businesses for capital goods and materials. Economic data for early 1997 show the unemployment rate holding in a low range with the inflation trend still subdued.

Economic Developments

The Household Sector

After having risen less than 2 percent in 1995, real personal consumption expenditures moved up 2¾ percent in 1996. Although debt problems arose with greater frequency this past year, households benefited from healthy increases in real income and another year of sizable gains in wealth. Consumers were relatively optimistic about prospects for the economy at the start of 1996, and they became more so as the year progressed.

Real outlays for consumer durables rose more than 5 percent in 1996 after a gain of only 1¼ percent during 1995. As has been true for many years, real expenditures on computers and electronic equipment outpaced the growth of other household outlays by a wide margin in 1996. Sizable increases were also reported for most other types of consumer durables. However, real expenditures on vehicles changed little on net over the year, as gains achieved during the first half were reversed after midyear. Late in 1996, sales of light vehicles may have been constrained to some degree by supply shortages that arose during strikes in the United States and Canada; early in 1997, vehicle sales strengthened. Consumer purchases of nondurables rose 1¾ percent in 1996 after having increased 1 percent during 1995. Spending for services rose 2½ percent last year, about the same as the average gain in previous years of the expansion.

After-tax personal income increased 5 percent in nominal terms over the four quarters of last year. Wages and salaries rose briskly, and the income of farm proprietors surged. Other types of income generally exhibited moderate gains. Given the low level of price inflation, the rise in nominal income translated into another significant advance in real disposable income—about 2¾ percent over the year.

As in 1995, strong cross-currents continued to shape individual households' willingness—and ability—to spend from current income. Huge increases in stock market wealth provided some

households the wherewithal to boost spending at a pace considerably faster than the growth of disposable income. But a number of households were likely held back by the need to divert income to the servicing of debt, and according to some survey evidence, households have become more concerned about saving for retirement. Responding to these influences, the annual average of the personal saving rate was up slightly from that of 1995; however, it remained relatively low compared with its longer-run average.

Residential investment expenditures posted a gain of 4 percent in real terms over the four quarters of 1996, more than reversing a small decline in the previous year. Demand for single-family housing was especially strong. Although interest rates on longer-term fixed-rate mortgage loans moved up considerably in 1996, a substantial number of homebuyers sidestepped at least the initial costs by using adjustable-rate loans that were available at lower rates. The effects of the rate increases on the single-family market were cushioned by other influences as well, most notably the growth of employment and income. Even for fixed-rate loans, mortgage financing costs held at a level that, by historical standards, was low relative to household incomes. All told, sales of new homes surged to the highest annual total of the current expansion, and sales of existing homes established a historical high. New construction of single-family dwellings also rose but not so dramatically as sales, as builders apparently chose to work off some of their inventories of unsold units, which had climbed in 1995. Mild sluggishness in starts toward the end of 1996—which was probably exacerbated by poor weather in December—was followed by more upbeat indicators of new construction in January of this year.

Construction of multifamily units maintained a path of recovery from the extreme lows of the early 1990s, moving up about 13 percent in terms of annual totals. The number of multifamily units started—about 315,000—was double the number started in 1993, when construction of these units was at a low. However, compared with previous peaks, the 1996 total was less impressive—starts were twice as high in some years of the 1970s and 1980s. Although market conditions for multifamily properties varied considerably from city to city in 1996, the national average vacancy rate for multifamily rental units remained relatively high, and demographic influences were probably less supportive of multifamily housing than they were a decade or so ago. Also, manufactured houses have provided an increased number of families with an alternative to rental apartments in recent years.

The Business Sector

Business fixed investment recorded a fifth consecutive year of strong expansion in 1996, rising about 9 percent according to the initial estimate. As in other recent years, investment was driven by rising profits, favorable trends in the cost of capital, and the ongoing efforts of businesses to boost efficiency. Although much of the investment spending was to replace depreciated equipment, the net addition to the aggregate capital stock appears to have been substantial. The rate of rise in the stock has picked up over the past two or three years after subpar growth through the latter half of the 1980s and first few years of the 1990s; the resulting rise in the level of capital per worker should enhance labor productivity and potential output.

Equipment outlays moved up almost 9½ percent in real terms in 1996. Business purchases of office and computing equipment once again rose much faster than the outlays for other types of equipment. Computer purchases were propelled by many of the same forces that have been at work in other recent years—most particularly, the expansion of networks and the availability of new models of computers embodying substantially improved computing power at highly attractive prices. Outlays for communications equipment also rose quite rapidly in 1996. Gains for other types of equipment were generally more modest.

Investment in nonresidential structures also rose substantially over the four quarters of 1996, posting the largest advance in several years. Business spending on structures went through an extended contraction in the latter part of the 1980s and early 1990s, and until recently the subsequent recovery has been relatively slow. That the 1996 gain in nonresidential investment would be so large was not evident until late in the year, when incoming data began to trace out sizable increases in new construction for many types of buildings. Investment in office buildings scored an especially large gain over the year, amid widespread reports of firming market conditions and reduced vacancy rates, and real outlays for other commercial structures moved up for a fifth consecutive year. Financing appears to be in ample supply for commercial construction, and according to reports from the District Reserve Banks, speculative office building projects—that is, those without precommitted tenants—are becoming more common.

Inventory investment was relatively subdued in 1996. The stock of nonfarm business inventories rose less than 2 percent over the four quarters of the year, the smallest increase since 1992. Businesses had been moving toward a reduced rate of stockpiling over

much of 1995, and the rate of accumulation came almost to a halt in early 1996, when stocks of motor vehicles plummeted in conjunction with a strike at two plants that manufacture auto parts. Thereafter, inventory developments were relatively uneventful. Stocks of vehicles changed little on net over the final three quarters of the year, and accumulation of inventories by other nonfarm businesses was moderate on average. Stocks at year-end generally appeared to be at comfortable levels relative to recent trends in sales.

Business profits turned in another strong performance in 1996. Economic profits of all U.S. corporations rose at an annual rate of more than 10 percent from the final quarter of 1995 to the third quarter of 1996. Profits earned by foreign subsidiaries of U.S. corporations fluctuated from quarter to quarter but remained at high levels, and returns from domestic operations rose substantially, for both financial and nonfinancial firms. Domestic profits of nonfinancial corporations amounted to 10.7 percent of the nominal value of these firms' output in the third quarter, the highest reading of the current expansion.

The Government Sector

Real federal expenditures on consumption and gross investment—the part of federal spending that is included in GDP—rose about 2½ percent, on net, from the fourth quarter of 1995 to the fourth quarter of 1996, but the rise was mostly an artifact of late-1995 real purchases having been pushed to especially low levels by government shutdowns. The underlying trend of federal consumption and investment expenditures probably is better represented by the 2½ percent annual rate of decline from the fourth quarter of 1994 to the final quarter of 1996. Reductions have been apparent over the past two years both in real defense purchases and in real nondefense purchases.

Federal expenditures in the unified budget increased about 3 percent in nominal terms in fiscal 1996 after having increased 3¾ percent in fiscal 1995. Slower growth was recorded across many budgetary categories this past year, and outright declines were reported in some. Combined expenditures on health, social insurance, and income security—items that account for more than half of all federal outlays—moved up 4½ percent, the smallest increase this decade. Defense spending was down about 2¼ percent in nominal terms, and net interest outlays rose much less rapidly than in fiscal 1995. Measured relative to the size of nominal GDP, total outlays in the most recent fiscal year were the smallest since 1979. Legislative restraint has led to cuts in a number of discretionary programs in recent years, and the expanding economy has relieved pressure on those outlays that tend to vary inversely with the strength of activity.

Federal receipts increased about 7½ percent in fiscal 1996, the third year in which growth of receipts outpaced growth of nominal GDP by a significant margin. Receipts from individual income taxes climbed more than 11 percent in the most recent fiscal year, in conjunction with healthy increases in households' taxable earnings from capital and labor. Taxes on corporate profits also continued to rise rapidly, more or less in step with the growth of business earnings. The rapid growth of receipts, coupled with the restrained growth of expenditures, brought the unified budget deficit down to $107 billion in fiscal 1996 from almost $165 billion in fiscal 1995. The deficit as a share of nominal GDP was 1.4 percent, the smallest in more than twenty years.

The aggregate consumption and investment expenditures of state and local governments rose 2¼ percent in real terms over 1996. This gain was about the same as those of the two previous years. Outlays for services, which consist mainly of employee compensation and account for more than two-thirds of all state and local purchases, rose roughly 1¼ percent in real terms last year. Investment expenditures, which make up the next biggest portion of state and local purchases, rose about 4½ percent in real terms. In the aggregate, the budget picture for state and local governments was relatively stable in 1996, as the surplus of nominal receipts over nominal current expenditures changed little from the positive readings of other recent years.

The External Sector

The nominal trade deficit for goods and services widened to $115 billion in 1996 from $105 billion the previous year. For the first three quarters of the year, the current account deficit totaled $165 billion at an annual rate, somewhat greater than the $150 billion deficit recorded in 1995.

The quantity of imports of goods and services rose strongly over the four quarters of 1996—about 8½ percent according to the preliminary estimate—after having expanded only 4¼ percent the previous year. The pickup in U.S. real output growth boosted the demand for imported goods, as did the declines in the prices of non-oil imports. Sizable increases in import volume were widespread among most major

merchandise trade categories, with the notable exceptions of oil and semiconductors.

Very strong export growth in the fourth quarter of 1996 raised the yearly gain in the quantity of exports of goods and services to 7½ percent. Growth in the economies of our major trading partners was only moderate on average but was somewhat faster than in 1995. As a consequence, growth of exports was similar to the 1995 rate despite the appreciation of the dollar. Over the past year, most of the rise in the value of merchandise exports went to Canada and Latin America. Exports to Western Europe and Asia were only marginally higher than they were a year earlier.

In most of the major industrial countries abroad, real economic activity accelerated last year from a relatively weak performance in 1995. In the United Kingdom, real output growth firmed through the year, as growth in consumption spending rebounded from its low 1995 rate. In Germany and France, real GDP growth strengthened but was still too low to prevent a further rise in the unemployment rate in both countries. In Italy, output growth slowed as the rebound in the lira from its previous depreciation sharply reduced the growth of exports and depressed investment spending. For most continental European countries, further fiscal restraint is planned this year as governments hoping to participate in the third stage of European Monetary Union strive to meet the Maastricht Treaty's 1997 reference standard of a budget deficit no larger than 3 percent of GDP. In Japan, fiscal stimulus spurred economic expansion early last year; subsequently, slower private consumption, reduced inventory accumulation, and decreased government investment spending reduced output growth. In contrast, Canada's real output growth rose over 1996 as inventory adjustment was completed during the first half of the year and as exports strengthened.

Except in the United Kingdom, inflation pressures in the foreign industrial countries continued to decline or remained subdued during 1996. Consumer prices in Japan were flat. Consumer price inflation fell sharply in Italy and remained below 2 percent in Germany and France. In the United Kingdom, consumer prices excluding mortgage interest payments accelerated to an annual rate of more than 3 percent.

The Mexican economy continued on a course of recovery that returned GDP to its pre-crisis level in the fourth quarter of 1996. Increases in income and a strengthening of the price-adjusted value of the peso contributed to a reduction in the Mexican merchandise trade surplus over 1996. Argentina and Brazil also continued to recover from recessions. In Chile, real GDP growth moderated from the very high rate recorded in 1995 to about 6 percent in 1996. In Venezuela, windfall oil revenues softened the decline in real GDP in 1996 and improved the prospects for 1997.

In our major trading partners in Asia other than Japan, real output growth generally slowed from its 1995 pace, despite a pickup in many countries toward year-end in response to more accommodative monetary policies and a partial recovery in export markets. In China, the slowdown of growth to about 10 percent last year from the 12 percent to 14 percent annual rates experienced during 1992–94 reflected a substantial deceleration in investment spending, owing to China's efforts to reduce inflation by tightening central bank credit to state-owned enterprises and by restricting investment.

Consumer price inflation in Mexico was about 28 percent in 1996, significantly lower than the 1995 inflation rate of more than 50 percent. Venezuela's inflation rate in 1996 exceeded 100 percent, but inflation in most other Latin American countries was at levels well under 10 percent. Inflation rates generally remained low in Asia.

The Labor Market

The number of jobs on nonfarm payrolls rose more than 2½ million from December 1995 to December 1996, an increase of about 2¼ percent. Employment gains were substantial in each quarter last year, and the labor market report for January of this year showed a further sizable expansion of payrolls.

Employment in the private service-producing sector, in which nearly two-thirds of all nonfarm workers are employed, increased about 3 percent during 1996. Moderate employment gains were posted in retail trade, transportation, and finance, and sizable gains in hiring continued in some other service-producing industries, such as data processing, computer services, and engineering and management. Job growth at suppliers of personnel—a category that includes temporary help agencies—was about 6½ percent, a touch faster than in 1995 but much slower than it had been over 1992–94; with the tightening of labor markets in the past couple of years, longer-lasting commitments in hiring may have come back into greater favor among some employers.

Employment changes among producers of goods were mixed in 1996. In construction, employment climbed about 5½ percent, to a new high that was almost 4 percent above the peak of the last business

expansion. In manufacturing, increases in factory jobs through the latter part of 1996 were not sufficient to reverse declines that had taken place earlier in the year. On net, last year's loss of factory jobs amounted to about ½ percent, a shade less than the average rate of decline since 1979, the year in which manufacturing employment peaked. Manufacturers of durable goods boosted employment slightly last year, but many producers of nondurables implemented further job cuts. As in many other recent years, reductions in factory employment were accompanied by strong gains in worker productivity. Consequently, increases in output were sizable—the rise in the Federal Reserve's index of manufacturing production cumulated to 4¼ percent over the year.

Growth of output per hour in the nonfarm business sector as a whole picked up in 1996, rising about 1¼ percent over the year according to preliminary data. However, coming after a three-year period in which output per hour changed little, this rise left the average rate of productivity growth in the 1990s a bit below that of the 1980s and well below the average gains achieved in the first three decades after World War II. The sustained sluggishness in measured productivity growth this decade is difficult to explain, as it has occurred during a period when high levels of investment in new capital and extensive restructuring of business operations should have been boosting the efficiency of workers. Of course, measurement problems could be distorting the data. As a summary measure that relates aggregate output to aggregate input of labor, the nonfarm productivity index is affected by whatever deficiencies might be present either in adding up the nominal expenditures for goods and services in the economy or adjusting those expenditures for price change. A considerable amount of recent research suggests that growth of output and productivity is in fact understated, but whether the degree of understatement has been increasing over time is less clear.

In contrast to the experience of most other recent years, this past year's rise in employment was accompanied by a sustained pickup in the labor force participation rate. The rise in participation boosted the labor supply and helped to relieve pressures on the labor market. Nonetheless, hiring during 1996 was sufficient to reduce the civilian unemployment rate from a December 1995 rate of 5.6 percent to a December 1996 rate of 5.3 percent. In January of this year, the rate remained low, at 5.4 percent.

Tightness of the labor market appears to have exerted some upward pressure on the cost of labor in 1996, even as some workers continued to express anxiety about job security. The employment cost index (ECI) for the private nonfarm sector of the economy showed compensation per hour moving up 3.1 percent over the year. The index had risen 2.6 percent in 1995. The step-up in hourly pay increases was to some extent the result of a hike in the minimum wage that took place at the start of October. More generally, however, businesses probably had to boost hourly compensation either to attract workers or to retain them at a time when alternative employment opportunities were perceived to be more widely available.

As in 1995, increases in hourly compensation in 1996 came more as wage and salary increases than as increases in fringe benefits. According to the ECI, the rise in wage rates for workers in the nonfarm sector amounted to nearly 3½ percent this past year after a rise of 2¾ percent in 1995. By contrast, the ECI measure of the hourly cost of benefits rose only 2 percent, slightly less than it did in 1995 and much less than it rose on average over the past decade. Increases in the cost of benefits have been held down in recent years by reduced inflation for medical services and by the actions that many firms have taken to shift employees into managed care arrangements and to require them to assume a greater portion of the cost of health insurance and other medical benefits.

Prices

The consumer price index rose more rapidly than in 1995, but the step-up was concentrated in the food and energy sectors—areas in which prices were affected by supply limitations that seemed likely to be of temporary duration. The CPI excluding food and energy—often called the "core" CPI—rose just a touch more than 2½ percent after having increased 3 percent during 1995. Both the total CPI and the core CPI have been affected in the past two years by technical improvements implemented by the Bureau of Labor Statistics that are aimed at obtaining more accurate readings of price change; the rise in the CPI in 1996 would have been somewhat greater if procedures used through 1994 had not been altered.

Other price indexes generally rose less rapidly than the CPI. Like the overall CPI, the chain-type price index for personal consumption expenditures (PCE) accelerated somewhat in 1996, but its rate of rise, shown in the accompanying table, was significantly lower than that of the CPI. The two measures of consumer prices differ to some degree in their weights and methods of aggregation. They also differ somewhat in their selection of price data, with the PCE measure relying on alternative data in some

areas in which the accuracy of the CPI has been questioned. The chain type price index for gross domestic purchases, which takes account of the prices paid by businesses and governments as well as those paid by consumers, moved up 2¼ percent during 1996, about the same as the percentage rise during 1995. By contrast, price measures associated with GDP decelerated in 1996 to thirty-year lows of around 2 percent or less. Conceptually, the GDP measures are indicative of price changes for goods and services that are produced domestically rather than price changes for goods and services purchased domestically—foreign trade accounting for the difference.

The 1996 outcomes for all these measures reflected an economy in which inflation pressures were muted. Sharp declines in non-oil import prices during the year lowered input costs for many domestic firms and likely caused other firms to restrain their product prices for fear of losing market share to foreign competitors. Also important, in all likelihood, were the favorable imprints that several years of moderate and relatively stable rates of inflation have left on inflation expectations. Despite the uptick in hourly compensation and adverse developments in the food and energy sectors, survey data showed little change in consumers' expectations of inflation, and private forecasters' views of the prospects for prices held steady. Businesses commonly described the situation as one in which competitive pressures were intense and the "leverage" for raising prices simply was not present.

Food and energy prices were the exceptions. In the food sector, steep increases in grain prices in 1995 and the first few months of 1996 caused production adjustments among livestock farmers and substantial price increases for some livestock products. Later in the year, grain prices fell back, but livestock production could not recover in time to prevent significant price advances for some retail foods. Consumer prices for pork, poultry, and dairy products registered their largest increases in several years. Retail beef prices also rose but only moderately: Expansion of the cattle herd in previous years had laid the groundwork for a high flow of product to consumers, and herd reductions that occurred in 1996 augmented that flow. Elsewhere in the food sector, acceleration was reported in the price index for food away from home—a category that has a weight of almost 40 percent in the CPI for food; the rise in the minimum wage appears to have been an important factor in the acceleration. All told, the 1996 rise in CPI food prices amounted to 4¼ percent, the largest increase since 1990.

3. Alternative measures of price change

Percent

Price measure	1995	1996
Fixed-weight		
Consumer price index	2.7	3.2
Excluding food and energy	3.0	2.6
Chain-type		
Personal consumption expenditures	2.1	2.5
Excluding food and energy	2.3	2.0
Gross domestic purchases	2.3	2.2
Gross domestic product	2.5	2.1
Deflator		
Gross domestic product	2.5	1.8

NOTE. Changes are based on quarterly averages and are measured to the fourth quarter of the year indicated from the fourth quarter of the previous year.

The energy sector was the other major part of the economy in which significant inflation pressures were evident this past year. Crude oil prices, which had started firming in the latter part of 1995, continued on an upward course through much of 1996, rising more than 30 percent in total. Stocks of crude oil and petroleum products were tight during the year, even after allowing for an apparent downward trend in firms' desired inventories. Inventory building was forestalled by production disruptions at refineries, a string of weather problems here and abroad that boosted fuel requirements for heating or cooling, and a reluctance of firms to take on inventories that seemed likely to fall in value once renewed supplies from Iraq became available. Natural gas, too, was in tight supply at times, and its price surged. With retail prices of gasoline, fuel oil, and natural gas all moving up substantially, the CPI for energy rose about 7½ percent over the four quarters of 1996, the largest increase since the Gulf War.

The CPI for goods other than food and energy rose 1 percent during 1996, one of the smallest increases of recent decades. As in 1995, price increases for new vehicles were moderate last year, and prices of used cars turned down after several years of sizable advances. Prices of apparel and house furnishings also fell; these prices, as well as the prices of vehicles, may have been heavily affected by the softness of import prices. Moderate increases were the rule among most other categories of goods in the CPI. In the producer price index, prices of capital equipment rose less than ½ percent over 1996; computer prices continued to plunge, and the prices of other types of equipment rose moderately, on balance. Materials prices were weak: Prices of intermediate materials excluding food and energy declined about 1¼ percent from the fourth quarter of 1995 to the final quarter of 1996, and the producer price index for crude materials excluding food and energy dropped

more than 6½ percent over that period. Productive capacity was adequate among domestic producers of materials, and supplies of many materials were readily available at competitive prices on the world market.

The CPI for non-energy services increased 3¼ percent in 1996. The rise was somewhat smaller than the increases of most other recent years. Prices of medical services decelerated for a sixth consecutive year, and increases in the cost of shelter were held down by another year of moderate advances in residential rent and owners' equivalent rent. Large increases were evident only in scattered categories: Airfares posted a large increase, and educational costs, maintaining a long-established trend, continued to rise quite rapidly relative to prices in general.

Financial Developments

Debt

Growth of the debt of nonfinancial sectors slowed slightly last year, to 5¼ percent. The growth of household sector debt dropped from 8¼ percent to 7½ percent, a deceleration accounted for entirely by a sharp slowing of consumer credit. The expansion of business borrowing was held below its 1995 pace by an increase in internally generated funds, but at 5¼ percent, it was faster than in any other year since 1989. Its strength reflected robust spending, extremely favorable credit conditions, and financing needs associated with a high level of mergers and acquisitions. Federal government debt grew 3¾ percent, the lowest rate in more than two decades. The debt outstanding of the state and local sectors was unchanged.

The Household Sector. Consumer credit grew 8¼ percent last year, just a bit over half the pace of the preceding two years. The sharp retrenchment likely reflected the burdens associated with a substantial accumulation of outstanding consumer debt over recent years as well as some tightening of lending terms and standards by commercial banks, particularly with respect to credit cards.

The slowing in consumer credit growth also was associated with a shift toward increased use of home equity loans. These loans were marketed vigorously, particularly by finance companies, in part as a vehicle for consolidating credit card and other outstanding consumer debt. Some of the growth in home equity loans reflected moves by finance companies and banks into the "subprime" market—lending either to higher-risk customers or on terms entailing unusually high loan-to-value ratios, or both. The push to expand home equity lending last year offset to some degree the effect of tighter lending standards and terms on credit cards and other forms of consumer credit.

The shift toward home equity loans, along with a strong housing market, led to a pickup in mortgage debt growth last year to a rate of 7½ percent, the largest advance since 1990. Mortgage borrowing for home purchases was restrained surprisingly little by the increase in interest rates over the first half of the year. As noted previously, many borrowers were able to put off, at least for a time, much of the impact of the increase in rates by shifting to adjustable-rate mortgages, the rates on which rose much less last year than those on fixed-rate mortgages.

Although the growth of household sector debt fell off a bit from the pace of recent years, it still exceeded that of disposable income. With loan rates up on average for mortgages and down only a little on consumer loans, debt-service burdens continued to rise last year, and some households experienced difficulties servicing certain kinds of debt. Delinquency rates on banks' consumer loans, particularly credit card loans, posted a second year of considerable increase, although they remained below levels in the early 1990s. At finance companies that are subsidiaries of automakers, auto loan delinquency rates rose to very high levels; but this rise apparently resulted in large part from a business strategy to compete in the vehicle market by easing lending standards. Auto loan delinquency rates at commercial banks also rose but remained well within historical ranges. Delinquency rates on residential mortgages remained low.

In the segment of the finance company market that deals in subprime auto loans, some problems emerged last month. A small firm in this market defaulted on its commercial paper after it restated earlier earnings at lower levels, and another firm filed for bankruptcy. Although the share prices of these and other firms primarily engaged in sub-prime lending declined along with their earnings outlook, this sector constitutes a very small part of the overall auto loan market, and the implications for the availability of credit to the household sector overall appear slight.

Charge-off rates on consumer loans rose at banks in 1996 to around the peak levels of the last recession in 1990–91. According to Federal Reserve surveys of senior loan officers, banks had anticipated some deterioration in the quality of their consumer loan portfolios last year, but they were surprised by its extent. These surveys also showed that banks considered the rate of charge-offs last year to be high relative to the level of delinquencies and that the credit-scoring

models most banks use to evaluate consumer lending decisions have tended to be too optimistic. An important reason for the high level of charge-offs and the apparent shortcomings of the credit-scoring models was a 30 percent increase in personal bankruptcies. This surge stemmed in part from changes in the bankruptcy code that became effective at the beginning of last year against a backdrop of an apparently reduced stigma associated with this method of dealing with financial problems. Banks responded to the deterioration in their consumer loan portfolios by tightening standards and terms, especially on credit cards. In contrast, banks eased terms and conditions on home equity loans.

Despite the rise in delinquencies on consumer debt, household balance sheets appear healthy overall, as growth of household assets over the past two years has more than kept pace with the growth of debt. Although year-end balance sheet figures are not yet complete, the net worth of households appears to have risen approximately $5 trillion from the end of 1994 to the end of 1996, an amount that is equal to almost a full year's personal disposable income. Roughly two-thirds of that gain has been accounted for by the surge in the prices of corporate shares, which has lifted the value of a wide range of household investments, not only directly held stocks but also assets held in other forms such as pension plans. The ratio of household net worth to personal disposable income continued to climb this past year, moving to its highest level in recent decades.

The Business Sector. Although many interest rates rose last year, businesses continued to find credit readily available and at favorable terms. This accommodation likely resulted in part from the strong financial condition of this sector, reflected in minimal delinquency rates on bank loans to businesses and very low default rates on corporate bonds, including those of low-rated issuers. With securitization of household debt instruments proceeding apace and with high levels of capital, banks appeared to have ample room on their balance sheets for business loans. This situation encouraged the development of a highly competitive lending environment in which banks further eased a variety of credit terms, such as covenants and markups over base rates. In capital markets, interest rate spreads of private debt instruments over Treasuries narrowed, particularly in the case of high-yield bonds. Surveys by the National Federation of Independent Business revealed a rising tendency of small businesses to borrow over 1996, with credit availability reported to be in a range more favorable than at any time in the current economic expansion.

On a gross basis, a pickup in bond issuance by nonfinancial firms last year was accounted for mainly by speculative-grade offerings, likely in part a reaction to the improved pricing. In the fourth quarter, however, investment-grade issuance was substantial, responding to the decline in interest rates that began in late summer. Commercial paper declined in the final months of the year, primarily because of paydowns from bond proceeds, but bank lending to businesses was strong, owing in some part to robust merger activity. Despite a marked increase in gross stock issuance—with strong gains both for initial public offerings and for seasoned offerings—equity continued to be retired on net last year, as merger activity remained brisk and businesses used ample cash resources to repurchase their outstanding shares.

The Government Sector. The growth of federal debt was held down in 1996 by legislative constraints on spending and by the boost to tax receipts from both the stronger economy and a booming stock market. Two years of contraction of state and local government debt ended last year. The declines had occurred as issues that were pre-refunded earlier in the decade, when interest rates were unusually favorable, matured or became eligible to be called. Pre-refunded debt continued to be called last year, albeit at a reduced pace, but this decline was just offset by gross issuance, which picked up.

Depository Intermediation. The expansion of depository credit slowed last year, entirely reflecting a slower advance in bank credit. Growth at thrift institutions picked up, benefiting from strong demand for residential mortgages and improved capital positions. Growth of commercial bank loans moderated, as loans to businesses and, especially, consumers decelerated from elevated rates of growth in 1995. Bank portfolio expansion also appears to have been damped somewhat by a faster pace of asset securitization, likely spurred by receptive capital markets. For example, real estate loan growth at banks was a subdued 4 percent last year, despite a robust housing market and a pickup in commercial real estate. At the same time, outstanding securities backed by mortgage pools expanded at a $179 billion annual rate in the first three quarters of last year, well above the pace of 1995. Commercial banks are a major source of securitized mortgages. The outstanding amount of consumer credit that had been securitized by banks also rose at a brisk pace last year, although not so rapidly as in 1995. As a result of the slowing of bank

credit, the share of last year's advance in nonfederal debt that ended up on the books of depositories fell to about 38 percent, down from around 44 percent in the preceding two years.

The balance sheets and operating results of depositories remained strong in 1996. Bank profits through the third quarter were at historically high levels for the fourth consecutive year, reflecting the maintenance of relatively wide interest rate margins, further loan growth, and substantial fee income related to sales of mutual funds as well as to securitization and other off-balance-sheet activities. As of the third quarter, almost 99 percent of commercial bank assets were held at banks classified as "well capitalized." Underlying thrift profits were also stronger last year. However, profits at thrift institutions and at banks with deposits insured by the Savings Association Insurance Fund (SAIF) were held down temporarily by a special assessment on deposits to recapitalize SAIF. (Some bank deposits are SAIF-insured because of mergers with thrift institutions or acquisitions of them.)

The Monetary Aggregates

Despite the slowing of depository credit, growth of the broader monetary aggregates strengthened last year: M3 expanded 7 percent, up 1 percentage point from 1995 and also 1 percentage point above the upper end of its 2 percent to 6 percent annual range. M2 grew 4½ percent, up ½ percentage point and in the upper portion of its 1 percent to 5 percent range. As noted above, the ranges for monetary growth last year had been chosen to be consistent with approximate price stability and a sustainable rate of real economic growth, rather than as indicators of the range of money growth rates likely to prevail under expected economic conditions.

The acceleration of M3 was caused partly by a shift in the way banks financed their credit—specifically, substituting issuance of large time deposits for borrowings from offices abroad. Both foreign and domestically chartered banks paid down net borrowing from foreign head offices and branches last year. For domestic banks, this paydown may have been related to the reduction to zero of insurance assessments on deposits, beginning with the last quarter of 1995. In addition, the greater growth of M3 relative to that of M2 reflected the need to fund particularly strong loan growth at U.S. branches and agencies of foreign banks, which do not offer the retail accounts that dominate deposits in M2.

Growth of both M2 and M3 was supported again last year by continuing robust advances in money market mutual funds (MMMFs). Because the yields on these funds are based on the average return earned on their assets, they lag changes in yields on new market instruments; thus, the funds tend to attract additional inflows when market rates are falling.

4. Growth of money and debt

Percent

Period	M1	M2	M3	Domestic nonfinancial debt
Annual[1]				
1980	7.5	8.7	9.6	9.5
1981	5.4 (2.5)[2]	9.0	12.4	10.2
1982	8.8	8.8	9.7	9.9
1983	10.3	11.8	9.5	11.9
1984	5.4	8.1	10.8	14.5
1985	12.0	8.6	7.7	14.2
1986	15.5	9.1	9.0	13.2
1987	6.3	4.2	5.8	10.0
1988	4.3	5.7	6.3	9.0
1989	.5	5.2	4.0	7.9
1990	4.1	4.1	1.8	6.9
1991	7.9	3.1	1.2	4.6
1992	14.4	1.8	.6	4.7
1993	10.6	1.3	1.1	5.1
1994	2.5	.6	1.7	5.2
1995	−1.6	4.0	6.2	5.5
1996	−4.6	4.6	6.9	5.3
Quarterly (annual rate)[3]				
1996:1	−3.5	5.3	6.6	5.0
2	−1.4	4.5	6.3	5.7
3	−6.5	3.4	5.4	5.3
4	−7.4	5.0	8.5	4.9

1. From average for fourth quarter of preceding year to average for fourth quarter of year indicated.

2. Adjusted for shifts to NOW accounts in 1981.

3. From average for preceding quarter to average for quarter indicated.

Accordingly, MMMFs advanced most rapidly in the early part of last year, when the monetary easings of December and January pulled down short-term rates, and also later in the year, when short-term rates were again declining. However, these instruments expanded briskly even in the third quarter, when short-term rates were rising, suggesting that part of the attractiveness of MMMFs is the convenience they offer those investors engaged in moving funds in and out of stock and bond mutual funds, which expanded at a record pace last year. In addition, institution-only funds seem to be having considerable success in marketing cash management programs that capture excess cash of corporations and municipalities. Likely reflecting the attractiveness of money market and capital market mutual funds last year, deposits in M2 actually showed little growth in 1996. Retail deposit growth also may have been damped by a lack of aggressive pricing of deposits on the part of banks, as demand for their loans slipped and they apparently found it cheaper to finance a larger share of loan originations through securitizations and large time deposits.

The behavior of M2 relative to income last year, as summarized by its income velocity, again bore a fairly systematic relationship to M2's opportunity cost—the return on M2 assets relative to yields available on alternative instruments. The relationship of velocity to opportunity costs was reasonably stable historically, but it broke down in the early 1990s, a period characterized by extensive restructuring of balance sheets by households, businesses, and banks. In the process, M2 velocity rose substantially and, apparently, permanently. Since 1993, velocity no longer appears to be shifting higher, and M2 velocity and opportunity costs are moving together about as they did before 1990. However, the recent period of relative stability in this relationship has been too short for the Federal Reserve to place increased reliance on M2 as a guide to policy at this time.

M1 contracted 4½ percent last year, as the pace at which new arrangements were established to sweep reservable retail transactions deposits to nonreservable nontransaction accounts accelerated. The initial amounts removed from transaction accounts by sweep arrangements established last year amounted to $116 billion, compared with $45 billion in 1995. M1 continued to be supported by currency growth last year, when foreign demands, which were depressed earlier in the year partly in anticipation of the new $100 bill, picked up in the second half. Adjusted for the initial amounts removed from transaction accounts by sweep arrangements, M1 grew 5¼ percent last year. The sweeping of transaction deposits contributed to a contraction of almost 12 percent in required reserves—twice the rate of decline of the previous year. The monetary base decelerated only a little, however, as growth of its major component, currency, was little changed between 1995 and 1996.

Continued declines in the levels of required reserves have the potential to impinge on the Federal Reserve's ability to exert close day-to-day control over the federal funds rate—the overnight rate on reserves traded among depository institutions. Depositories hold balances at Reserve Banks to meet daily clearing needs in addition to satisfying statutory reserve requirements. At low enough levels, reserve balances may provide inadequate protection against adverse clearings, and banks' attempts to avoid overdrafts could generate highly variable daily demands for balances at the Federal Reserve and a volatile federal funds rate. To date, however, no serious problems have emerged, in part because the substantial drop in depositories' required reserve balances attributable to sweeps has been partially offset by increases in their holdings of required clearing balances—an arrangement whereby depositories pay for services provided by the Federal Reserve through the holding of specified amounts in reserve account balances. In addition, advances in banks' techniques of monitoring balances at the Federal Reserve and gauging their clearing needs have enabled them to operate efficiently and smoothly at relatively low levels of balances. Sweeps have had an effect on Federal Reserve earnings and the amounts it remits to the Treasury. The decline in reserve balances of about $12 billion owing to sweeps must be matched by an accompanying lower level of Treasury securities on the books of Reserve Banks. The Federal Reserve continues to monitor sweep activity closely.

Interest Rates, Equity Prices, and Exchange Rates

Interest Rates. Declines in interest rates during the second half of last year on evidence that economic growth had moderated only partially reversed the increases over the first half. Reflecting the surprising strength in economic activity last year, longer-term Treasury rates rose on balance on the order of ½ percentage point over the year, and intermediate rates were up somewhat more. Spreads between most private rates and Treasuries narrowed markedly last year, reflecting the high quality of business balance sheets. Municipal rates moved up comparatively little over the first half of 1996, as earlier relative increases

in these yields associated with discussions of fundamental tax reform were reversed when the likelihood of such changes to the tax code diminished. Movements in interest rates over the year appeared to be basically in their real component, as inflation expectations were little changed, according to surveys.

Equity Prices. The substantial rise in equity prices last year was only a bit below that registered in 1995. However, in contrast to 1995, when bond rates declined substantially, the equity gains last year came despite the net rise in bond rates. Corporate earnings were robust last year, but their advance fell short of share price increases, and price–earnings ratios rose to unusually high levels; dividend–price ratios were even more out of line with historical experience. Market participants appear to be anticipating further robust earnings growth, and they also seem to be requiring much less compensation for the extra risk of holding equities compared to, say, Treasury bonds. Such evaluations may be based on a perceived environment of persisting low inflation and balanced economic growth that would lower the odds of disruptions to economic activity. Other asset prices were generally subdued. Commodity prices were flat to down. Commercial real estate prices, although no longer falling, rose at little more than the rate of inflation. Residential real estate prices increased moderately.

Exchange Rates. The foreign exchange value of the dollar in terms of the currencies of the other G-10 countries rose about 4 percent during 1996. When measured in terms of the currencies of a broader group of U.S. trading partners and adjusted for differences in consumer price inflation, the appreciation of the dollar last year was also about 4 percent. Much of the rise in the exchange value of the dollar occurred during the first half of the year. Indications of greater-than-expected underlying strength in the U.S. economy and signs of weakness in some European economies in the first two quarters reinforced market expectations that U.S. monetary policy was less likely to be eased than was policy in the other industrial countries. These expectations boosted U.S. long-term interest rates relative to those abroad and contributed to upward pressure on the dollar. The dollar fluctuated somewhat from June through December but on balance changed little. Over the course of 1996, the dollar appreciated 12 percent in terms of the yen and 7¾ percent in terms of the mark. During the first weeks of 1997, the dollar's average value against the G-10 currencies has again moved up, appreciating about 7 percent since the end of December, as economic data have suggested additional strength in the U.S. economy and have raised questions about the vigor of economic expansions in several foreign industrial countries.

On average, yields on ten-year government securities in the major foreign industrial countries fell about 80 basis points last year, with most of the decline coming in the second half. In Italy, long-term rates declined much more, about 375 basis points, in response to low growth in real output, substantial progress in lowering inflation, and sizable, credible measures to reduce the government deficit. In contrast, long-term rates in the United Kingdom rose slightly as the economy strengthened. Rates in Japan rose early in the year as the economy spurted, but subsequent indicators of a weakening expansion caused rates to turn back down; over the year, they declined about 40 basis points on net. Long-term rates abroad have moved down slightly further so far this year. Short-term market rates in the foreign industrial countries on average declined about 120 basis points during 1996. Except in Japan, official central bank lending rates were lowered in the foreign G-10 countries last year, contributing to the decline in market rates.

Equity prices in most industrial countries rose strongly last year. The major exception was Japan, where prices on balance fell slightly. The general decline in long-term interest rates abroad and moves toward monetary ease were among the factors contributing to the upward movement in stock prices.

The dollar appreciated in nominal terms about 2½ percent on balance against the Mexican peso during 1996, with much of that appreciation coming over a few weeks in October. After having fluctuated in a narrow range for most of the year, the Mexican peso depreciated in terms of the dollar when market participants became concerned about the loss of competitiveness of Mexican exports during the year and about the partial nature of the government's planned privatization of the petrochemical industry. Peso interest rates rose in October and November, but have since more than retraced that increase as the peso has stabilized. In January, Mexican officials repaid all remaining outstanding obligations to the Exchange Stabilization Fund of the U.S. Treasury, completing repayment to the United States of all borrowings that were made following the peso crisis in late 1994; a partial early repayment was made to the International Monetary Fund as well.

In the first three quarters of 1996, large increases were reported in both foreign ownership of assets in the United States and U.S. ownership of assets abroad. Over the same period, foreign official assets

in the United States increased almost $90 billion. Part of this increase was associated with exchange market intervention by the Japanese authorities to counter a brief strengthening of the exchange value of the yen early in the year, but a larger part reflected the repurchase of reserves by several European countries whose currencies strengthened against the mark. About half reflected increases in reserves of newly industrializing countries.

Private foreigners also added substantially to their assets in the United States in the first three quarters of 1996. Net purchases of U.S. Treasury securities by private foreigners amounted to $85 billion through September, and net purchases of corporate and government agency bonds were equally large. Foreign direct investment in the United States surged to a record $71 billion in the first three quarters, reflecting numerous mergers and acquisitions of U.S. companies by foreigners.

U.S. private investors also added rapidly to their holdings of foreign assets in the first three quarters of 1996. In contrast to foreign investors in the United States, U.S. portfolio investors favored foreign stocks over bonds. Net purchases in Japan were particularly large in the first half of the year. In addition, U.S. direct investment abroad remained strong, reflecting acquisitions and continued privatizations of foreign firms. □