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February 22, 1995

Board of Governors of the Federal Reserve System



Monetary Policy Report to the Congress
Pursuant to the
Full Employment and Balanced Growth Act of 1978

February 21, 1995

Letter of Transmittal

BOARD OF GOVERNORS OF THE
FEDERAL RESERVE SYSTEM
Washington, D.C., February 21, 1995

THE PRESIDENT OF THE SENATE
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES

The Board of Governors is pleased to submit its Monetary Policy Report to the Congress, pursuant to the Full Employment and Balanced Growth Act of 1978.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Greenspan", written in a cursive style.

Alan Greenspan, Chairman

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Section 1: Monetary Policy and the Economic Outlook for 1995

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 the rise during 1993. Signs that growth is moderating have emerged in the past month or so, but the bulk of the evidence suggests the economy continues to advance at an appreciable pace.

Federal Reserve policy during 1994 and early 1995 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 Federal Reserve began to firm money market conditions last February. The Federal Reserve continued to tighten policy over the course of the year and into 1995, as economic growth remained unexpectedly strong, eroding remaining margins of unused resources and intensifying price increases at early stages of production. Developments in financial markets—for example, easier credit availability through banks and a decline in the foreign exchange value of the dollar—may have muted the effects of the tightening of monetary policy.

Short-term interest rates have increased about 3 percentage points since the start of 1994, with the federal funds rate rising from 3 percent to 6 percent. Other market interest rates have risen between 1½ percentage points and 3 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 some tentative signs of moderation in economic activity around year-end and in early 1995 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 mid-February.

The foreign exchange value of the dollar in terms of other G-10 currencies declined almost 6½ percent last year, even as the economy picked up and interest rates rose. The positive effects on the dollar that would 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, owing to much more rapid than expected growth abroad, especially in Europe. Concerns about U.S. inflation may have contributed to the weakness in the dollar in the middle part of last year; late in the year, the dollar rallied for a time, as tighter monetary policy apparently reduced investors' inflation fears. The dollar weakened again, however, in early 1995, perhaps reflecting the emerging indicators of moderating growth in the United States. In addition, financial markets were roiled early this year by severe financial difficulties in Mexico. A sharp depreciation of the peso had adverse effects not only in Mexico but also in a number of other countries, and these developments also may have contributed to the weakness of the dollar.

Despite the rise in U.S. interest rates in 1994, private sector borrowing picked up in support of increased spending, abetted in part by more aggressive lending by intermediaries. 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. Businesses shifted toward short-term funding sources as bond yields rose, 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. By contrast, 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

Ranges for Growth of Monetary and Debt Aggregates¹

Percent

Aggregate	1993	1994	1995
M2	1-5	1-5	1-5
M3	0-4	0-4	0-4
Debt ²	4-8	4-8	3-7

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

2. Monitoring range for debt of domestic nonfinancial sectors

spending. Taken together, the debt of all nonfinancial sectors expanded 5¼ percent, about the same as the increase of a year earlier and a figure 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. M3 expanded about 1½ percent, well within its 0 percent to 4 percent target range and slightly more than its increase in 1993. M3 was buoyed by growth of more than 7 percent in large time deposits, as banks turned to wholesale markets to fund credit expansion. For the year, M2 rose only 1 percent, an increase that was at the lower bound of its 1 percent to 5 percent target 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. M1 growth last year was 2¼ percent; it had been 10½ percent in 1993. Only continued strong growth in currency, much of which likely reflected increased use abroad, supported M1.

Money and Debt Ranges for 1995

At its most recent meeting, the Federal Open Market Committee (FOMC) reaffirmed the 1995 growth ranges for money and debt that were chosen

on a provisional basis last July. The money ranges—1 percent to 5 percent for M2 and 0 percent to 4 percent for M3—are consistent with the Committee members' expectations of a slowing of nominal income growth as the expansion moves to a more sustainable pace, but also rest on the anticipation of further increases in the velocities of these aggregates. The velocity of M2 is likely to be boosted by lagged effects of the increases in short-term interest rates during 1994 and early 1995 and possibly by increased flows from M2 deposits into long-term mutual funds, as investor concerns about capital market volatility recede. The M2 range also provides an indication of the longer-run growth that could be expected under conditions of reasonable price stability if that aggregate's velocity resumes its historical pattern of no long-term trend. M3 velocity has been on a steep upward path in recent years, but the rate of increase might be expected to slow in the near term. Part of the increase in M3 velocity in the early 1990s resulted from weak growth of bank credit, in part reflecting substantial loan losses and consequent capital impairment, and the contraction of the thrift sector as failed institutions were liquidated. However, the recent strength in bank credit and the end of the contraction in thrift sector credit suggest that M3 growth could pick up, perhaps appreciably, and its velocity could begin to level out. The resumption of a more normal relationship between M3 and nominal income might call for a technical adjustment of the target range for M3 at mid-year or in 1996.

The monitoring range for growth in the debt aggregate in 1995 is 3 percent to 7 percent. This range is 1 percentage point lower than the monitoring range in 1994, reflecting the more moderate path anticipated for expansion in nominal spending and borrowing. Private sector debt growth will likely remain fairly strong in the coming year, boosted by substantial

Economic Projections for 1995

Percent

Indicator	Federal Reserve Governors and Reserve Bank Presidents		Administration
	Range	Central Tendency	
<i>Change, fourth quarter to fourth quarter¹</i>			
Nominal GDP	4¾–6½	5–6	5.4
Real GDP	2–3¼	2–3	2.4
Consumer price index ²	2¾–3¾	3–3½	3.2
<i>Average level, fourth quarter</i>			
Civilian unemployment rate	5¼–6	About 5½	5.5–5.8 ³

1. Change from average for fourth quarter of 1994 to average for fourth quarter of 1995.

2. All urban consumers.

3. Annual average.

capital investment as well as merger and acquisition activity. Credit availability is unlikely to constrain private sector borrowing, as banks continue to be eager to lend and as quality spreads in financial markets remain relatively narrow. The outlook for the federal deficit suggests that Treasury borrowing will be comparable to that in 1994.

The monetary and debt aggregates will continue to be among the variables monitored by the Committee to inform its policy deliberations. Given the uncertainties about the behavior of the velocities of the aggregates, however, the Committee will also need to continue assessing a wide variety of other financial and economic indicators.

Economic Projections for 1995

The members of the Board of Governors and the Reserve Bank presidents, all of whom participate in the deliberations of the Federal Open Market Committee, expect the economy to settle into a pattern of more moderate expansion in 1995, after a burst of growth that has brought rates of resource utilization to the highest levels since the latter part of the 1980s. Most of the Board members and Reserve Bank presidents expect the rise in real GDP over the four quarters of 1995 to be in a range of 2 percent to 3 percent.

Effects of the past year's increases in interest rates probably will show through more strongly in the coming year, reflecting the typical lags between Fed-

eral Reserve policy actions and changes in the pace of economic growth. Residential building, especially of single-family units, is the part of the economy in which those effects are likely to emerge earliest and stand out most clearly, but reactions to the higher rates probably will be showing up in other interest-sensitive sectors as well.

Other influences also will be working to moderate the rate of growth. For example, large increases in real outlays for consumer durables over the past three years, partly financed in recent quarters by unsustainably rapid growth in the volume of consumer credit, probably have exhausted most of the pent-up demand that had accumulated when the economy was sluggish early in the 1990s. Similarly, business investment in new equipment has been rising extremely rapidly for some time and has moved to quite a high level; businesses likely will be shifting to more moderate rates of spending growth before too long. Inventory investment seems likely to moderate as well, as sustained additions to stocks at the pace of recent quarters would almost surely generate an unwanted backup of inventories at some point.

In other areas, however, increased strength may be forthcoming. Nonresidential construction, which often tends to lag other sectors of the economy over the course of the business cycle, now appears to be picking up steam. In addition, net exports may be a less negative factor in coming quarters than they were in 1994. Many foreign industrial economies entered the new year with considerable forward momentum; that

should keep real exports of goods and services on a solid uptrend, even allowing for lower exports to Mexico as a consequence of the peso's devaluation and the likelihood of little or no growth in that country in 1995. Imports, meanwhile, should begin to slow as growth of demand in this country eases.

The Board members and Reserve Bank presidents expect that output growth of the magnitude they anticipate will be accompanied by moderate increases in employment and little change in the unemployment rate. Forecasts of the unemployment rate for the fourth quarter of 1995 are tightly clustered around 5½ percent.

An especially encouraging development in 1994 was that inflation remained relatively quiescent even as the economy moved to high rates of resource utilization. However, the costs of materials and components have been rising rapidly, squeezing profit margins in some sectors, and anecdotal reports of pressures on wages and finished goods prices have proliferated in recent months; increases in average hourly earnings and consumer prices picked up in January. Assessing the prospects, members of the Board of Governors and the Reserve Bank presidents think the most likely outcome for this year is that inflation will run somewhat higher than in 1994. Such an outcome would be consistent with patterns of price change during earlier periods when the economy was operating at levels of resource utilization like those seen recently. The central tendency of the Federal Reserve officials' CPI forecasts, measured in terms of the change from the final quarter of 1994 to the final quarter of 1995, spans a range of 3 percent to 3½ percent.

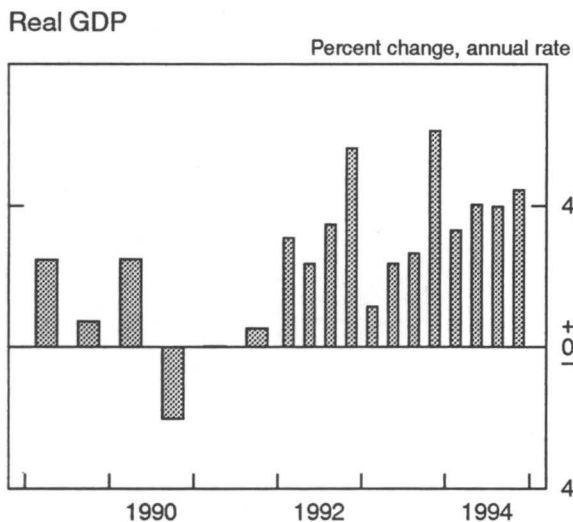
The economic prospects anticipated by the governors and Reserve Bank presidents for 1995 appear to be closely in line with those of the Administration. The Administration's forecasts of real GDP growth and inflation are in the middle of the Federal Reserve's central tendency ranges, and the Federal Reserve forecasts of the unemployment rate are centered near the low end of the annual range that was published in the *Economic Report of the President*.

Over the coming year, the Federal Reserve will seek to foster continued economic expansion while avoiding the provision of so much liquidity that the expected near-term step-up in inflation develops sustained momentum. 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 ahead, 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 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.

Section 2: The Performance of the Economy

The economy recorded a third year of strong expansion in 1994. Real GDP grew 4 percent over the four quarters of the year, industrial output rose nearly 6 percent, and the number of jobs on nonfarm payrolls increased about 3½ million, the largest gain in ten years. Labor and product markets tightened appreciably. Price pressures intensified in the markets for materials, but broader measures of price change showed inflation holding steady.



As in 1992 and 1993, the economic advance during 1994 was driven mainly by sharp increases in the real expenditures of households and businesses. Consumer purchases of motor vehicles rose further in 1994, and purchases of other consumer durables increased even faster than they had in the two previous years. Residential investment posted a small gain, on net, over the four quarters of the year, despite sharp increases in mortgage interest rates. Business investment in office and computing equipment slowed from the spectacular pace of 1993 but continued to rise rapidly nonetheless, and business investment in other types of equipment accelerated. Real outlays for nonresidential construction, which had been a weak sector of the economy in previous years, picked up in 1994; outlays for office construction ended a long slide that had stretched well back into the 1980s. Business investment in inventories, which had been quite restrained in previous years of the expansion, increased appreciably in 1994. Much of the inventory buildup apparently was intentional and reflected the desires of firms to stock up in anticipation of continued strength in sales or to build stronger buffers against potential delays in supply.

In contrast to the strength in private expenditures, government purchases of goods and services edged down on net over the four quarters of 1994. Federal purchases of goods and services, which had declined sharply in 1993, fell further in 1994 as a consequence of actions taken in recent years to reduce the size of the federal deficit. Meanwhile, the real purchases of state and local governments rose only modestly. Although the expanding economy has provided states and localities with a stronger revenue base, many of these jurisdictions are striving to hold spending in check; a number of states have chosen to cut taxes.

As in the two previous years, a significant portion of the rise in domestic spending in 1994 went for imports of goods and services, which increased about 15 percent in real terms during the year. Meanwhile, growth of real exports of goods and services picked up noticeably, with gains cumulating to about 10 percent over the year. Foreign economies strengthened in 1994, and the price competitiveness of this country's products in world markets was aided by a subdued rate of rise in production costs and a somewhat lower exchange value of the U.S. dollar.

Labor and product markets tightened in 1994. After ticking up in January of last year in conjunction with the introduction of a new labor market survey, the civilian unemployment rate fell sharply over the remainder of the year, to 5.4 percent in December. The level of the unemployment rate in January of this year—5.7 percent—was a full percentage point below that of a year earlier. In manufacturing, gains in production exceeded the growth of capacity by a sizable margin during 1994, and the rate of capacity utilization climbed nearly 3 percentage points. Its level in recent months has been essentially in line with the highest level achieved during the economic expansion of the 1980s.

Inflation pressures picked up in some markets in 1994. Prices of raw industrial commodities rose even more rapidly than in 1993, and price increases for intermediate materials accelerated sharply, especially after midyear. However, the inflation impulse in these markets did not carry through with any visible force to the consumer level, probably because unit labor costs, which make up by far the largest part of value added in production and marketing, continued to rise at a modest rate. The employment cost index of hourly compensation in private nonfarm industries actually slowed noticeably from the pace of 1993, and productivity gains in 1994 held close to the pace of

the previous year. As for retail prices, 1994 was the fourth year in a row in which the rise in the total CPI has been around 3 percent. The CPI excluding food and energy rose just 2.8 percent over the four quarters of 1994, after an increase of 3.1 percent in 1993; the rate of rise in this index, which is widely used as an indicator of underlying inflation trends, fell by almost half from 1990 to 1994.

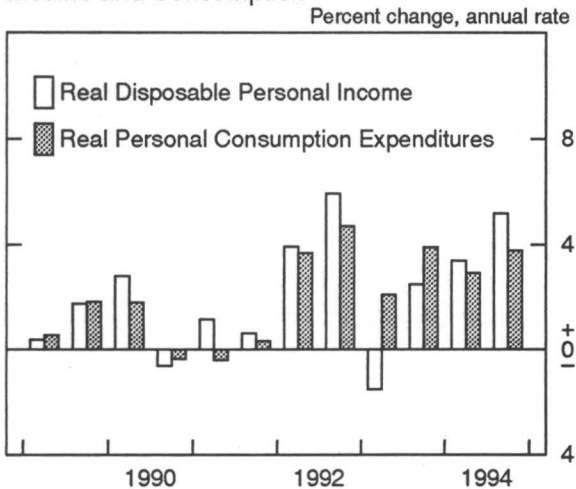
The Household Sector

Real personal consumption expenditures advanced nearly 3½ percent over the four quarters of 1994, about in line with the average pace of the two previous years. Support for the rise in spending came from rapid income growth, and, according to surveys, sharp increases in consumer confidence. Outlays for durable goods continued to rise especially rapidly, seemingly little affected by rising interest rates. Nor did spending appear to be much affected, in the aggregate, by poor performance of the stock and bond markets, which cut into the real value of household assets. Credit generally was readily available during 1994, and growth of consumer installment debt picked up substantially, to a pace comparable with some of the larger increases that were observed during the expansions of the 1970s and 1980s.

been put off earlier in the 1990s when the economy was sluggish and concerns about job prospects were widespread. Real expenditures for motor vehicles moved up an additional 3 percent over the four quarters of 1994, after gains of about 9 percent in each of the two preceding years; increases in sales of vehicles in 1994 might have been a bit stronger still but for capacity constraints and various supply disruptions that sometimes limited the availability of certain models. Real outlays for durable goods other than motor vehicles rose about 11½ percent over the four quarters of 1994, a pickup from the already rapid rates of expansion of the two previous years. Purchases of personal computers and other electronic equipment continued to surge in 1994, and spending on furniture and household appliances moved up further.

Consumer expenditures for nondurables and services exhibited mixed patterns of change in 1994. Real outlays for nondurables increased 3 percent over the year, a pickup from the subdued rate of growth recorded in the previous year and, for this category, a larger than average advance by historical standards. By contrast, real expenditures for services increased roughly 2¼ percent, a slightly smaller gain than that of 1993; growth of outlays for services was held down, to some degree, by a decline in real outlays for energy, as warm weather late in 1994 reduced the amount of fuel needed for heating.

Income and Consumption



Real consumer expenditures for durable goods increased about 8 percent in 1994, bringing the cumulative rise in these outlays over the past three years to nearly 30 percent. The stock of durable goods that households wish to hold apparently continued to rise quite rapidly in 1994, and at least some households probably were still making up for purchases that had

Real disposable personal income rose 4¼ percent during 1994. Except for a couple of occasions in previous years when income growth was boosted temporarily by special factors, the rise in real disposable income in 1994 was the largest increase since the 1983–84 period. Growth of wages and salaries accelerated in 1994 in conjunction with the step-up of employment growth. Income from capital also rose: Dividends moved up along with corporate profits, and interest income turned back up after three years of decline. By contrast, transfer payments, the growth of which tends to slow as the economy strengthens, registered the smallest annual increase since 1987. The net income of nonfarm proprietors appears to have about kept pace with the average rate of growth in other types of income. Farm income rose moderately on an annual average basis, as an increase in the volume of output more than offset the effects of sharp declines in farm output prices that developed over the course of the year.

Consumers' perceptions of economic and financial conditions brightened considerably during 1994. By year-end, the composite measures of consumer confidence that are prepared by the Conference Board and

the University of Michigan Survey Research Center had both moved to new highs for the current business expansion. Consumers became more optimistic over the year in regard to both current economic conditions and future economic conditions. Perceptions of employment prospects also improved, with a growing proportion of respondents saying that jobs were plentiful and a reduced proportion saying that jobs were hard to find. Surveys taken early this year indicate that confidence remains high.

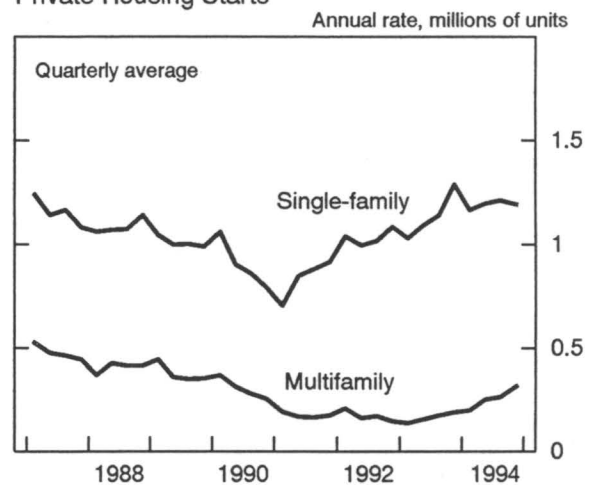
In contrast to most other indicators for the household sector of the economy, household balance sheets—which had strengthened appreciably in previous years—showed no further improvement in 1994. According to preliminary data, the aggregate net worth of households appears to have recorded a relatively small increase in nominal terms over the year, and, in real terms, net worth probably declined slightly. Household assets rose only moderately in nominal terms, and the growth of nominal liabilities picked up somewhat, as a result of the sharp increase in use of consumer credit. Early this year, stock and bond prices have risen, on net, giving some renewed lift to household wealth.

With personal income growing faster than net worth during 1994, the ratio of wealth to income fell over the course of the year. In the past, declines in this ratio sometimes have prompted households to boost the proportion of current income that is saved, in an attempt to restore wealth to more desirable levels, and this same tendency may have been at work, to some extent, in 1994. After dipping in the first quarter of the year to the lowest level of the current expansion, the personal saving rate rose a full percentage point over the remainder of the year, to a fourth-quarter level of 4.6 percent. Even then, however, the saving rate remained quite low by historical standards. Rising levels of income and employment and increased confidence in the outlook apparently convinced consumers to push ahead with increases in outlays, most notably those on consumer durables. In addition, although improvement in household balance sheets apparently flagged, signs of outright stress in household financial conditions were not much in evidence: Delinquency rates on mortgages and other household loans generally remained quite low relative to their historical ranges.

Residential investment held up remarkably well in 1994 in the face of sharp increases in mortgage interest rates. Preliminary data indicate that, in real terms, these investment outlays were up about 2 percent, on net, over the four quarters of the year, after gains of

17 percent and 8 percent, respectively, in 1992 and 1993. Although starts and sales of single-family houses fell back from the exceptionally high peaks that were reached briefly in late 1993, they remained at elevated levels. In total, 1.20 million single-family units were started in 1994, topping, very slightly, the highest annual total of the 1980s. Sales of existing homes were about the same as the previous annual peak, set in 1978, and although sales of new homes remained well short of previous highs, their annual total was closely in line with the brisk pace of 1993. Only in the past month or so have indications of a weakening in housing activity started to show up more consistently in the incoming data.

Private Housing Starts



Declines in the starts and sales of single-family houses in early 1994 basically reversed the huge gains of late 1993. Whatever tendency there may have been for these indicators to exhibit at least a temporary setback after a period of unusual strength was probably reinforced by the initial reactions of builders and homebuyers to increases in mortgage interest rates that had begun in the final quarter of 1993. Exceptionally severe winter weather in the Northeast and Midwest early in 1994, coming on the heels of favorable conditions in late 1993, probably also helped to account for the sharpness of the downturn. In any event, starts of single-family homes ticked back up a bit in the second quarter of the year, sales of existing homes flattened out, and the rate of decline in sales of new homes slowed.

In the second half of the year, the signals were mixed: Sales of existing homes trended down at a moderate pace during this period; however, single-family starts and sales of new single-family homes changed little, on net, from the second quarter to the fourth quarter. Sizable gains in employment and

income and rising optimism about the future of the economy apparently helped to blunt the effects of increases in interest rates during the second half of the year. In addition, the availability of a widening variety of alternative mortgage instruments and, perhaps, some easing of loan qualification standards may have permitted some buyers who otherwise would not have been able to obtain financing to go ahead with their purchases.

Late in 1994 and in early 1995, a softer tone seems to have taken hold in key indicators of single-family housing activity. Sales of new homes tailed off toward the end of last year, and the ratio of the number of unsold homes to the number of sales, which had turned up early in 1994, continued to rise. The ratio in December was slightly to the high side of the long-run average for this series. Starts of new single-family houses, which had increased in November and December, fell sharply in January, to a level noticeably below the lower bound of the range of monthly readings reported during 1994.

Various measures of house prices showed small-to-moderate increases in 1994. The median transactions prices of new and existing homes that were sold in the first half of the year were roughly 3½ percent above the level of a year earlier, and a similar rise was reported during that period in price indexes that adjust for changes in the quality and regional mix of homes that are sold. After mid-year, the four-quarter changes in transactions prices slowed, but the rate of rise in the quality-adjusted indexes picked up somewhat. All told, prices have been firmer in the past couple of years than they were earlier in the 1990s.

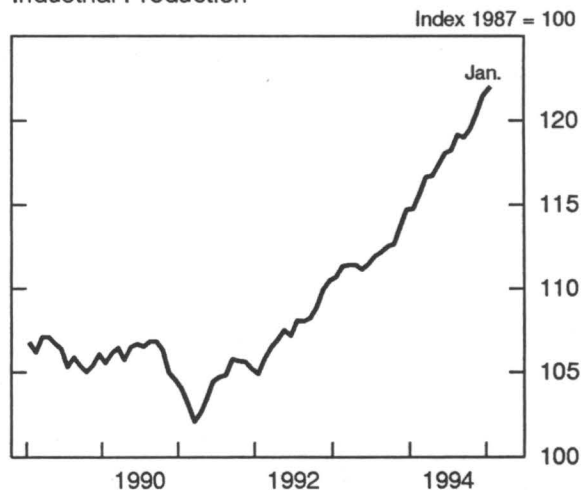
After falling to exceptionally low levels in late 1992 and early 1993, construction of multifamily housing units increased throughout 1994. Although the level of activity in this part of the housing sector was not especially high, gains during the year were large in percentage terms: Starts of these units moved up about 65 percent from the fourth quarter of 1993 to the fourth quarter of 1994, at which point they were more than double the lows of a couple years ago. The national average vacancy rate for multifamily rental units remained relatively high in 1994, but markets in some areas of the country had tightened enough to make construction of new multifamily units economically attractive. Reauthorization in August 1993 of a tax credit on low-income housing units also provided some incentive for new construction. The financing of multifamily projects was facilitated through more ready availability of credit and increased equity investment.

The Business Sector

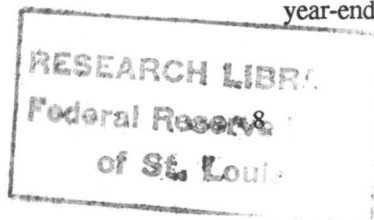
Robust expansion was evident in 1994 in most of the economic indicators for the business sector of the economy. Real output of nonfarm businesses increased about 4¼ percent over the four quarters of the year, nearly matching the large gain of 1993. For a second year, business investment in fixed capital advanced exceptionally rapidly. Inventory investment also picked up appreciably, spurred by large, sustained increases in sales. Business finances remained on a sound footing: Investment expenditures continued to be financed predominantly with internal funds, and signs of financial stress were largely absent.

Industry entered 1994 with considerable momentum, and expansion was maintained at a rapid pace throughout the year. Industrial production rose nearly 6 percent over the four quarters of 1994, a rate of expansion exceeded in only one of the past ten years. The production of business equipment advanced especially rapidly, buoyed by rising investment in the domestic economy and further large increases in exports of capital goods. Production of intermediate products—which consist mainly of supplies used in business and construction—also moved up substantially during 1994, as did the output of materials, especially those used as inputs in the production of durable goods. The industrial sector also appears to have had a strong start in 1995, as industrial production rose 0.4 percent in January.

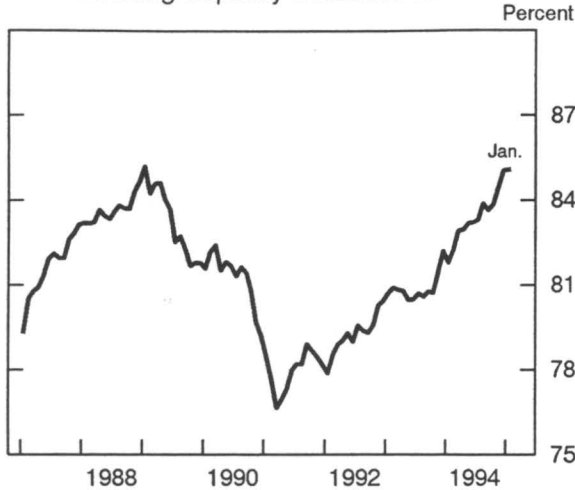
Industrial Production



The rate of capacity utilization in industry increased about 2½ percentage points over the twelve months of 1994. In manufacturing, the operating rate rose about 3 percentage points during the year. By year-end, utilization rates in some industries had



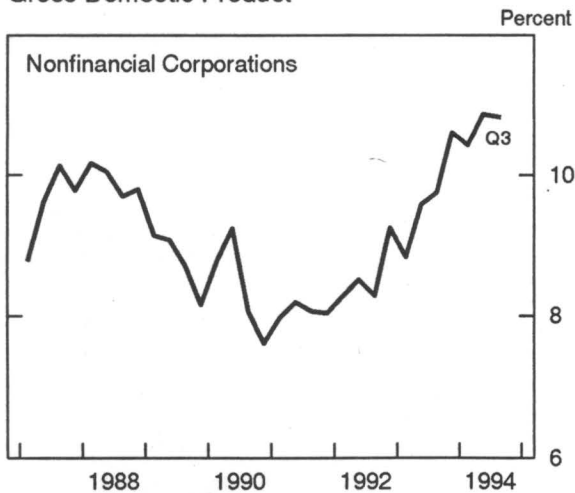
Manufacturing Capacity Utilization Rate



moved to exceptionally high levels. Most notably, the average operating rate among manufacturers engaged in primary processing (basically, the producers of materials) had climbed to the highest level since the end of 1973, surpassing, by small margins, the peaks of the late 1970s and late 1980s.

After rising 23½ percent over the four quarters of 1993, corporate profits increased another 4 percent over the first three quarters of 1994. The profits earned by nonfinancial corporations from their domestic operations increased about 7½ percent over the first three quarters of 1994, after a gain of 21½ percent in 1993. Although the 1994 gain in these profits was partly the result of increased volume,

Before-tax Profit Share of Gross Domestic Product*

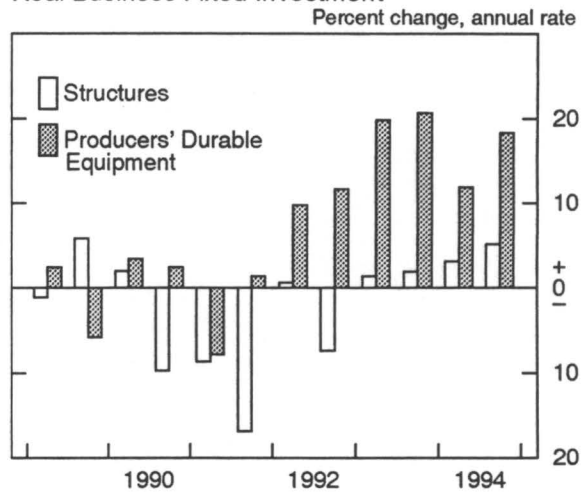


* Profits from domestic operations with inventory valuation and capital consumption adjustments divided by gross domestic product of nonfinancial corporate sector.

profits per unit of output also rose. In the second and third quarters, before-tax profits of nonfinancial corporations amounted to nearly 11 percent of the gross domestic output of those businesses—the highest that this measure of the profit share has been since the late 1970s. A shift in the capital structure of corporations toward reduced reliance on debt, as well as cyclical recovery of the economy, has helped to push the profit share to this high level. In contrast to the experience of nonfinancial corporations, the profits of private financial institutions from their domestic operations fell about 7 percent on net over the first three quarters of the year, as net interest margins narrowed. The decline reversed some of the large rise in profits that these institutions had reported in 1993.

Business fixed investment increased 13 percent in real terms over the four quarters of 1994, after a gain of 16 percent during 1993. Outlays for office and computing equipment, which had registered an astonishing gain in 1993, slowed in 1994, but the rise in these outlays still amounted to nearly 20 percent in real terms. Meanwhile, the growth of real expenditures for most other types of business equipment picked up.

Real Business Fixed Investment



Business investment in motor vehicles rose about 18½ percent over the four quarters of 1994. With the gains of 1994 coming on the heels of big increases in each of the two previous years, annual business outlays for vehicles reached a level about one-third higher than the peak year of the 1980s. Outlays for communications equipment also scored an especially big gain in 1994, more than 25 percent in real terms. Business purchases of industrial equipment advanced about 13 percent during 1994, one of the larger gains of the past two decades. By contrast, commercial

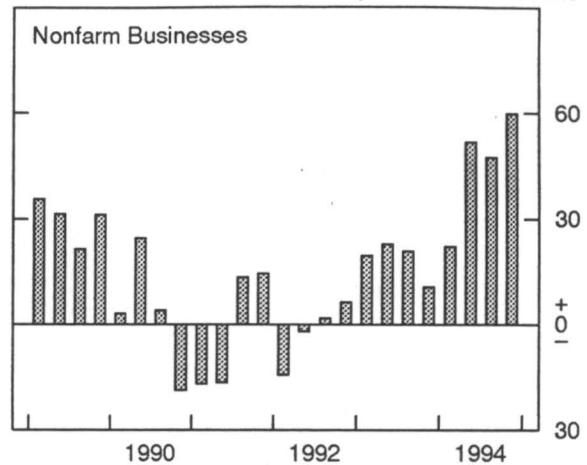
aircraft once again was a notable area of weakness; the investment cycle in that sector has been sharply out of phase with those of most other industries, owing to persistent excess capacity and poor profitability in the airline business.

Business investment in nonresidential structures rose about 4 percent during 1994, after an increase of 1½ percent in 1993 and declines in each of the three years preceding 1993. Investment in industrial structures rose for the first time since 1990, a response, more than likely, to high—and rising—rates of capacity utilization. Investment in office buildings also turned up in 1994, after a long string of declines that, in total, had brought spending on these structures down about 60 percent from the peak of the mid-1980s; declining vacancy rates and a firming of property values provided additional evidence of improvement in this sector of the economy in 1994. The investment data for other types of structures showed a mix of pluses and minuses: Expenditures on commercial structures other than offices moved up further, after large gains in 1992 and 1993; however, outlays for drilling declined for a fourth year, to the lowest level since the early 1970s.

Because a large share of the growth in business fixed investment in recent years has gone for items that depreciate relatively quickly—computers being a prime example—net additions to the stock of productive capital have not been as impressive as the data on gross investment expenditures might seem to indicate. Nonetheless, with the further increase in gross investment in 1994, net additions to the capital stock appear to have become more substantial. Still unclear is the degree to which these increases in the capital stock will ultimately translate into higher rates of increase in output per worker and faster rates of increase in living standards; as discussed in more detail below, the trend of growth in labor productivity, which is affected by the amount and quality of capital that workers have available, seems to have picked up in recent years but by a relatively small amount.

Business investment in inventories picked up sharply in 1994. Earlier in the expansion, firms had refrained from building stocks, even as the economy strengthened. Increased reliance on “just-in-time” systems of inventory control reduced the level of stocks that firms needed to maintain their normal operations, and, with a degree of slack still present in the economy, businesses usually were able to obtain goods quickly from their suppliers and thus were probably reluctant to hold stocks in house. At the end of 1993, the level of real inventories in the nonfarm

Changes in Real Business Inventories
Annual rate, billions of 1987 dollars



business sector was only 2 percent larger than it had been at the start of the recovery in early 1991.

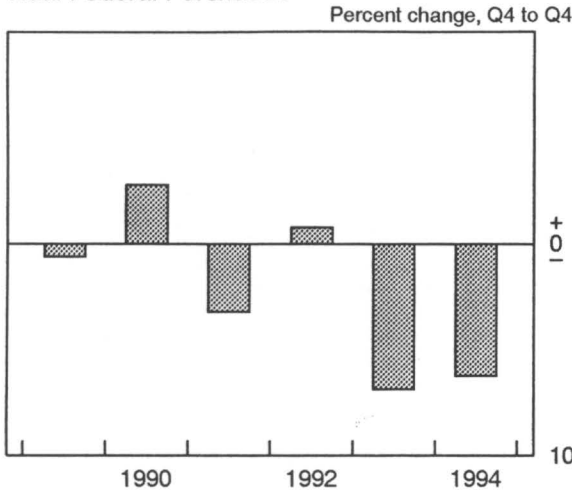
Circumstances changed in 1994, however. Markets tightened as demand continued to surge, and supplies became more difficult to obtain on a timely basis. Anticipation of further growth in demand and increased concern about possible bottlenecks apparently prompted businesses to begin investing more heavily in inventories. Some firms may also have been trying to stock up on materials in advance of anticipated price increases. For the year as a whole, accumulation of nonfarm inventories was more than twice what it had been in 1993. This additional accumulation brought to a halt the previous downtrend in the ratio of nonfarm inventories to business sales, but the ratio remained quite low by the standards of the past quarter-century.

Inventory accumulation in the farm sector of the economy also picked up in 1994. Stocks of farm products had been drawn down in 1993, when farm production fell sharply because of floods in the Midwest and droughts in some other regions of the country. However, crop conditions in 1994 were unusually favorable throughout the year, and the output of some major crops climbed to levels considerably above previous peaks. With the demand for farm output rising much less rapidly than production, inventories of crops increased sharply. Livestock production also rose appreciably in 1994; inventories of livestock, which consist mainly of the cattle and hogs on farms and ranches, continued to expand.

The Government Sector

Federal purchases of goods and services, the part of federal spending that is included in GDP, fell

Real Federal Purchases



6.2 percent in real terms over the four quarters of 1994. Real outlays for defense remained on a sharp downtrend, and nondefense outlays, which had risen rapidly early in the 1990s, declined moderately for a second year.

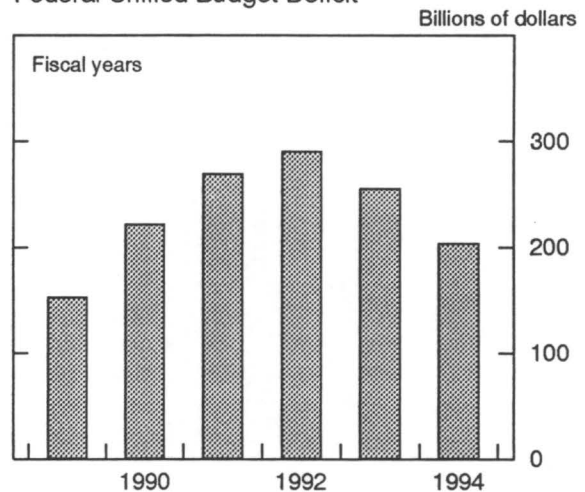
Total federal outlays, measured in nominal dollars in the unified budget, increased 3.7 percent in fiscal 1994, after a rise of 2.0 percent the previous fiscal year. These increases are among the smallest of recent decades. Nominal outlays for defense fell again in fiscal 1994. In addition, the growth of outlays for income security (a category that includes the expenditures on unemployment compensation and welfare benefits) slowed further as the economy continued to strengthen. Increases in social security outlays also slowed somewhat in fiscal 1994; the rise was about a percentage point less than that of nominal GDP. Outlays for Medicaid slowed as well, but the rate of rise in those expenditures continued to exceed the growth of nominal GDP by a large margin.

Federal receipts were up 9 percent in fiscal 1994, the largest rise in several years. With rapid expansion of the economy giving a strong boost to almost all types of income, the major categories of federal receipts all showed sizable gains. Combined receipts from individual income taxes and social insurance taxes increased a bit more than 7 percent in fiscal 1994, after moving up 5.4 percent in the previous fiscal year. Receipts from taxes on corporate profits increased nearly 20 percent, slightly more than the gain of 1993.

The federal budget deficit declined to \$203 billion in fiscal 1994, an amount that was equal to 3.1 percent of nominal GDP. Earlier in the 1990s, when the economy was sluggish, the federal deficit had climbed

to a cyclical peak of 4.9 percent of nominal GDP. The previous cyclical low in the ratio of the deficit to nominal GDP, 2.9 percent, was reached in fiscal 1989. Since fiscal 1989, defense spending as a share of GDP has dropped appreciably, but this source of deficit reduction has been essentially offset by increased outlays for health and social insurance. Thus, the ratio of total federal outlays to GDP has changed little, on net; it was about 22 percent in both fiscal 1989 and fiscal 1994. The ratio of federal receipts to nominal GDP was about 19 percent in both of those fiscal years.

Federal Unified Budget Deficit

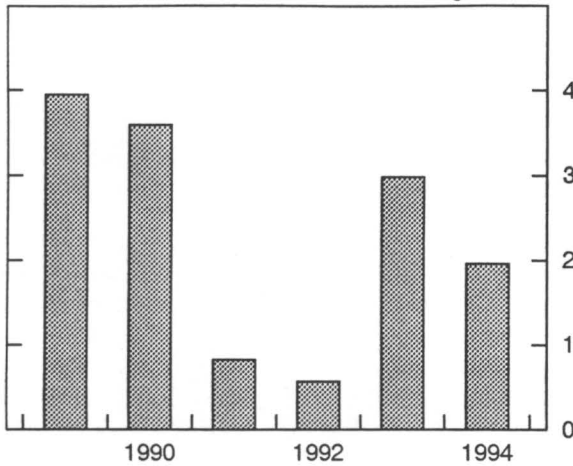


The stronger economy of recent years has provided state and local governments with a growing revenue base and a broadening set of fiscal options. Some governments have responded to these developments by cutting taxes, in most cases by small amounts. Effective tax rates of state and local governments appear to have edged down a bit, on average, over the four quarters of 1994, and nominal receipts apparently rose somewhat less rapidly than nominal GDP over that period.

Many states and localities also have been trying to restrain the growth of expenditures, but success on that score has been difficult to achieve because of increased outlays for entitlements and rising demand for many of the public services that traditionally have been provided by state and local governments. Transfers of income from state and local governments to persons rose about 9 percent in nominal terms over the four quarters of 1994, roughly the same as the rise during 1993 but less than the increases of previous years; from 1988 to 1992, the average compound rate of growth in these transfers was about 15 percent a year. In categories other than transfers, increases in spending have been fairly restrained in recent years;

Real State and Local Purchases

Percent change, Q4 to Q4



nominal purchases of goods and services (which account for about 80 percent of the total expenditures of state and local governments) have been trending up less rapidly than nominal GDP since the early 1990s.

In real terms, the 1994 rise in purchases of goods and services by state and local governments amounted to just 2 percent. Compensation of employees, which accounts for about two-thirds of total state and local purchases, increased 1½ percent in real terms over the four quarters of 1994, a gain that was roughly in line with the growth of state and local employment over that period. Construction outlays declined slightly in real terms during 1994, as gains over the final three quarters of the year were not sufficient to offset a first-quarter plunge. Nonetheless, real outlays for structures remained at high levels; a strong uptrend in construction expenditures over the past ten or twelve years has more than reversed a long contraction that began in the latter half of the 1960s and bottomed out in the first half of the 1980s.

The deficit in the combined operating and capital accounts of all state and local governments (a measure that excludes the surpluses in state and local social insurance funds) amounted to about 0.6 percent of nominal GDP in calendar 1994, little changed from the corresponding figure for 1993 and down only slightly from a cyclical peak of 0.8 percent in 1991. The recent cyclical peak in this measure was larger than the peaks reached in recessions of the 1970s and 1980s, and declines in the deficit during this expansion have not been as large as the declines that occurred during other recent expansions. Historically, the combined operating and capital accounts of state and local governments have been in deficit more often than they have been in surplus; as a share of nominal

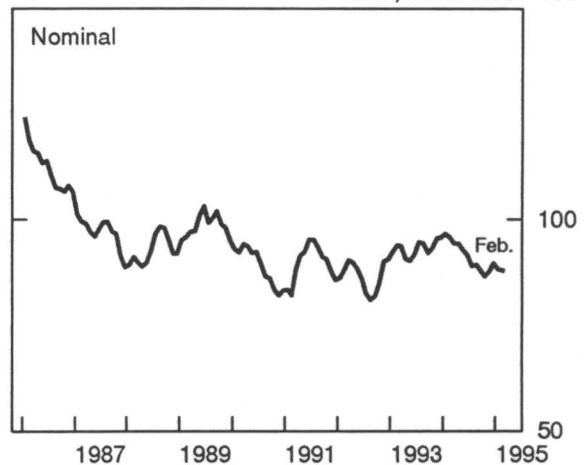
GDP, the annual surpluses and deficits since World War II have averaged out to a deficit of 0.3 percent.

The External Sector

When adjusted for differing rates of increase in consumer prices, the trade-weighted average foreign exchange value of the U.S. dollar declined 5½ percent against the currencies of the other G-10 countries in 1994. This depreciation was slightly smaller than the almost 6½ percent nominal depreciation of the dollar, as U.S. inflation exceeded foreign inflation by a small amount. An index of exchange rates that also includes the currencies of several of the major U.S. trading partners in Latin America and East Asia showed about the same degree of real depreciation as did the index for the currencies of the G-10 countries. In the first few weeks of 1995, the dollar has weakened, on balance, in nominal terms against the currencies of the G-10 countries, but it has moved up in terms of the Mexican peso.

Foreign Exchange Value of the U.S. Dollar *

Index, March 1973 = 100



*Index of weighted average foreign exchange value of the U.S. dollar in terms of currencies of other G-10 countries. Weights are based on 1972-76 global trade of each of the 10 countries.

Growth of real GDP in the major foreign industrial countries rebounded sharply during 1994, significantly exceeding the pace of recovery widely expected at the start of the year. In the United Kingdom and Canada, where recovery was already well established, growth continued to be vigorous. In Germany, France, and other continental European countries, where activity had been sluggish during 1993, strong expansion of real GDP resumed and strengthened as the year progressed. Recovery was evident in Japan as well, but the pace of expansion there remained somewhat subdued relative to that of the other indus-

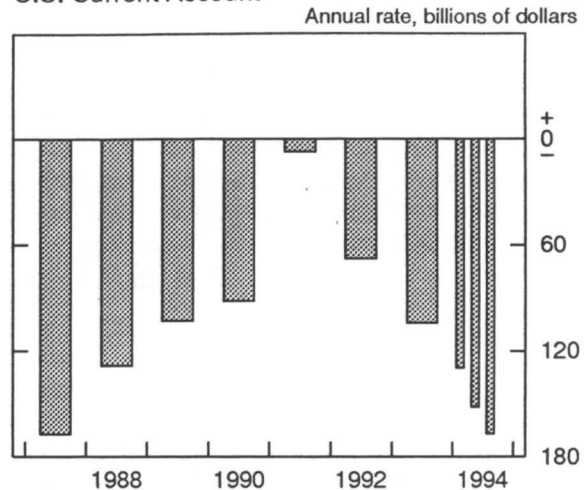
trial countries. Although most of these economies clearly had moved past the troughs of their recessions, considerable slack remained. As a result, consumer price inflation remained low and, in some cases, fell further. On average, in the ten major foreign industrial countries, consumer prices rose 2 percent during the year, even less than the price increase in the United States.

Economic growth in the major developing countries in 1994 continued at about the strong pace of 1993. In Asia, the newly industrializing economies grew rapidly, as external demand was sustained by lagged effects of depreciation of their currencies against the yen and by recovery in the industrial countries. Growth in China, although still quite rapid, was somewhat slower than that in 1992-93, as credit conditions were tightened somewhat further and various controls were imposed to damp demand.

In Mexico, real GDP growth rose markedly during the second and third quarters of 1994 from its near-zero rate in 1993, in part because of fiscal stimulus. However, the economic policy program put in place at the end of the year in response to the peso crisis is likely to restrain growth once again in the coming year. The Mexican macroeconomic stabilization program is designed to maintain wage restraint, reduce government spending and development bank lending, and result in significant improvement in the current account deficit in 1995. The program includes guidelines on increases in wages, guidelines on increases in final energy product prices to consumers and to industry, net cuts in public expenditures, and a reduction of lending by development banks. Mexico has committed to maintain the current floating exchange rate regime, and the Bank of Mexico has agreed to restrain the growth of money. Structural reform measures include continued privatization and lessened restrictions on foreign investment. Further measures could be required if inflation and the exchange rate do not respond as projected.

The nominal U.S. trade deficit in goods and services increased to about \$110 billion in 1994, compared with \$75 billion in 1993. Imports grew noticeably faster than exports, as U.S. growth about equaled that of U.S. trading partners and as the lagged effects of dollar appreciation during 1993 continued to be felt. The current account deficit averaged about \$150 billion at an annual rate over the first three quarters. Net investment income moved from a small positive to a moderately negative figure in 1994, reflecting recovery of foreign earnings on direct investment in the United States and the effects of

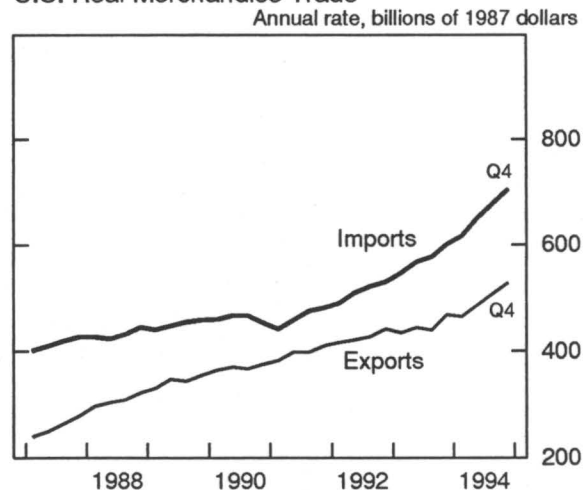
U.S. Current Account



higher interest rates on high and rising U.S. net external indebtedness.

Based on initial estimates for the fourth quarter, exports of goods and services grew 10 percent in real terms during 1994. Computer exports continued to rise rapidly in real terms, about 30 percent for the year; this gain contributed significantly to the double-digit growth in total exports. After declining in 1993, agricultural exports bounced back last year; the much-improved harvest of 1994 eased supply constraints that previously had been limiting shipments of farm products. Other categories of merchandise exports averaged more than 8 percent real growth during the year, as the pace of activity in the economies of U.S. trading partners improved significantly. Geographically, the increase in U.S. merchandise exports was accounted for by increased shipments both to developing countries in Latin America and Asia and to Canada and Japan.

U.S. Real Merchandise Trade



Imports of goods and services rose about 15 percent in real terms over the four quarters of 1994, reflecting the vigorous growth of U.S. income during the year. Imports of computers continued to expand extremely rapidly in real terms. Of the other import categories, imports of machinery and automotive products were particularly buoyant. Import prices rose about 4 percent in 1994, influenced by depreciation of the U.S. dollar, increases in world commodity prices, and a rebound in oil prices, which had declined in 1993 and early 1994.

In the first three quarters of 1994, recorded net capital inflows were substantially larger than those of 1993, an increase that coincided not only with the growing current account deficit, but also with a sharp swing in unrecorded transactions in the U.S. international accounts, from a positive figure in 1993 to a negative one in the first three quarters of 1994.¹

Among the recorded capital flows, increases in foreign official assets in the United States were substantial in 1994, but somewhat smaller than in 1993. In particular, the large reserve accumulations in 1993 by certain developing countries in Latin America experiencing massive private capital inflows were not repeated in 1994.

U.S. net purchases of foreign securities, particularly bonds, fell sharply from record 1993 levels. Private foreign net purchases of U.S. securities also fell, but only slightly. Rising interest rates on bonds denominated in dollars and many other major currencies produced capital losses for U.S. holders of long-term bonds and resulted in flows out of U.S. global bond funds. In the first three quarters of 1994, U.S. investors made heavy net purchases of stocks in Japan; Japan alone accounted for more than one-third of all U.S. net foreign stock purchases. In developing countries, those that received the largest net equity inflows from U.S. investors in 1993 (Hong Kong, Mexico, Argentina, Brazil, and Singapore) were less favored by investors in 1994, while interest picked up in a wide assortment of other developing countries, including South Korea, Chile, Indonesia, China, India, and Peru.

The first three quarters of 1994 also witnessed a revival of foreign direct investment in the United

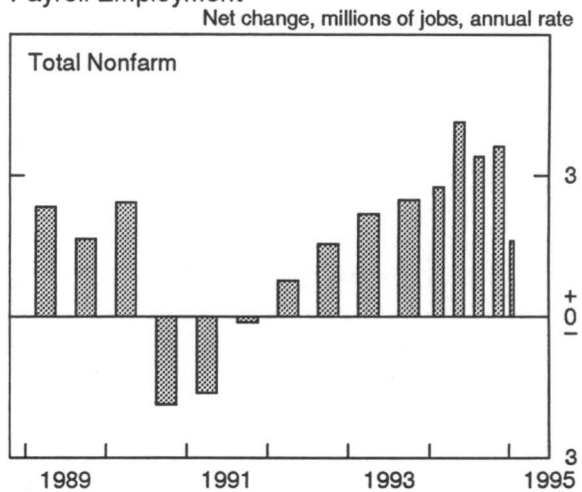
1. In effect, recorded net capital inflows in the first three quarters of 1994 were larger than necessary to balance the rising current account deficit. Moreover, outflows of currency to foreigners, an item that is not reflected in recorded transactions and, therefore, is a part of unrecorded net inflows in the international accounts, increased substantially in 1994, suggesting that the other unrecorded outflows of capital may have been even larger than the published data on errors and omissions indicate.

States while U.S. direct investment abroad remained at near-record levels. The direct investment inflow was swelled by takeovers of U.S. companies and by the revival of profits and reinvested earnings reported by affiliates of foreign companies in the United States.

Labor Markets

Employment rose substantially in 1994. The total number of jobs in the nonfarm sector of the economy increased 3.5 million over the twelve months ended in December, after a gain of 2.3 million during 1993.² About a quarter of a million of the rise in jobs during 1994 was in the government sector, mostly at the local level. Job growth in the private nonfarm sector amounted to 3.2 million, the largest gain since 1984. Increases in employment at nonfarm establishments were sizable in each quarter of 1994. A further gain in payroll employment, smaller than the average increase of the past year, was reported in January of this year; however, total labor input rose considerably faster than employment in January as the workweek lengthened.

Payroll Employment



Producers of goods boosted employment more than half a million in 1994. The job count in construction increased about 300,000 over the year; employment at general building contractors rose briskly for a second year, as did the number of jobs at firms involved in

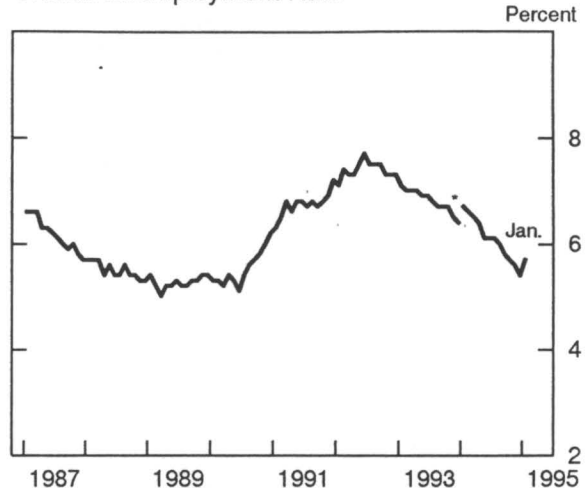
2. The Bureau of Labor Statistics has announced that the level of nonfarm payroll employment in March 1994 will be raised 760,000 when revised estimates are released this summer. The revision may lead to larger estimates of job growth in both 1993 and 1994.

special trades related to construction. The number of jobs in manufacturing increased about 275,000 during 1994, after five years of decline. Producers of durables accounted for most of the rise in manufacturing employment; among these producers, job gains were widespread. Employment at factories that produce nondurables rose slightly in total, as advances in some industries—such as printing and publishing and rubber and plastics—were partly offset by continued secular declines in the number of jobs in industries such as apparel, tobacco, and leather goods. The average workweek in manufacturing, which had stretched out in 1992 and 1993 when factory employment was declining, lengthened further in 1994, rising to new highs for the postwar period. The high fixed costs that are associated with adding new workers probably continued to be an important factor in firms' decisions to rely still more heavily on a longer workweek as a way to boost labor input. Growth of factory output surpassed the rise in labor input by a sizable amount in 1994, a reflection of substantial gains in productivity that were realized in this sector of the economy in the most recent year.

Employment in the private service-producing sector rose nearly 2¾ million during 1994, after a gain of 2 million in 1993. The number of jobs in retail trade increased about 800,000 over the year. Auto dealers, stores that sell building materials, and those that sell general merchandise were among the retail outlets that reported impressive gains. Hiring at eating and drinking places also moved up briskly; after three years of slow growth around the start of the decade, hiring at these establishments has increased substantially in each of the past three years. Employment at firms that supply services to other businesses rose about 710,000 in 1994, even more than in 1993. Once again, job growth within this category was especially rapid at personnel supply firms—those that essentially lease the services of their workers to other employers, often on a temporary basis. Employment at businesses that supply health services increased a quarter of a million in 1994, about the same as the gain in 1993; hiring at hospitals has flattened out over the past couple of years, but elsewhere in the health sector job growth has continued at a rapid clip.

Strength also was evident in 1994 in data from the monthly survey of households. After ticking up in January of 1994, when a redesigned household survey was implemented and new population estimates were introduced, the civilian unemployment rate turned back down in February and declined in most months thereafter. The rate increased last month, to 5.7 percent, but was still a full percentage point below that of

Civilian Unemployment Rate*



* A redesigned survey and revised population estimates were introduced in January 1994; data from that point on are not directly comparable with those of earlier periods.

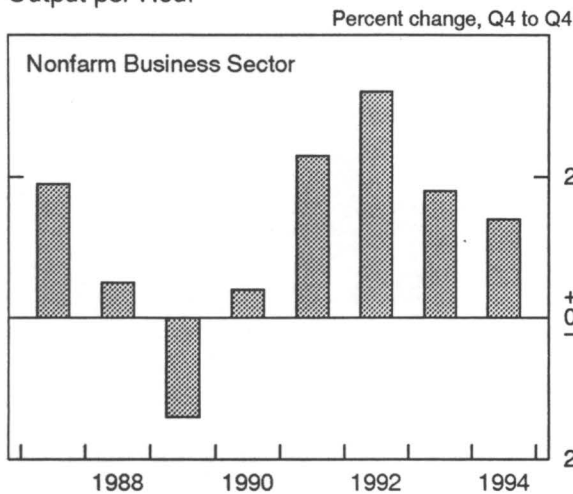
a year earlier.³ Appreciable net declines in unemployment rates have been reported over the past year for nearly all occupational and demographic groups.

Data on the reasons why individuals are unemployed seem to be tracing out patterns fairly similar to those seen in previous business cycles. Most notably, the number of persons who are unemployed because they lost their last job has declined sharply, on net, over the past year. The number of individuals in this category had soared earlier in the 1990s, when the economy was struggling to gain momentum and many large companies were restructuring their operations. However, with the more recent decline, the number of these “job losers,” measured as a percentage of the labor force, has moved back toward the lows of the late 1980s. Much of the decline in the number of job losers this past year has been among workers who were permanently separated from their previous jobs. The number of persons unemployed for reasons other than the loss of a job (that is, the sum of “job leavers” and new entrants or re-entrants unable to find work) also has declined over the past year. As in other business cycles, the number of these individuals, measured relative to the size of the labor force, has been displaying a cyclical pattern considerably more muted than that of job losers.

3. Research undertaken by the Bureau of Labor Statistics suggests that the unemployment rate would have run about two-tenths of a percentage point lower in 1994 but for the changes that were introduced in January of last year. Other series from the household survey also were affected by the introduction of the new survey and the revised population estimates; therefore, data for the period starting in January 1994 are not directly comparable with those for the period ended in December 1993.

Growth of the civilian labor force—which consists of the individuals who are employed and those who are seeking employment but have not yet found it—picked up a bit in the second half of 1994 and in early 1995. However, even with these increases, the cumulative rise in the labor force in the current business expansion has been relatively small compared with the gains recorded in other recent expansions; growth of the working-age population has been slower this decade than it was in the expansions of the 1970s and 1980s, and the share of the population participating in the labor force, which trended up in earlier expansions, has changed little, on net, during this one.

Output per Hour

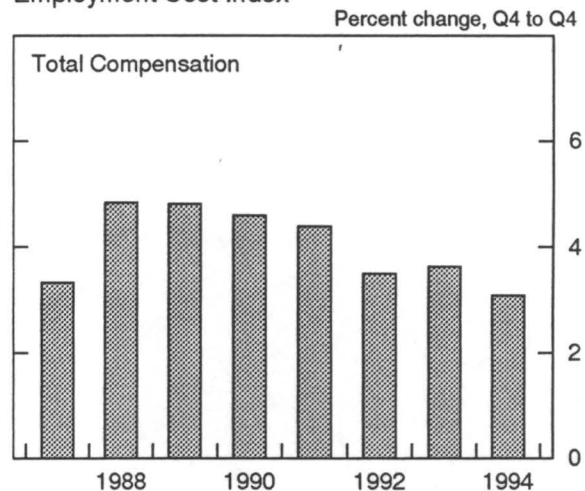


According to preliminary data, output per hour of labor input in the nonfarm business sector increased 1.4 percent over the four quarters of 1994, after a rise of 1.8 percent in 1993 and still larger gains in 1992 and 1991. Over the business cycle, productivity gains typically are largest in the early years of expansion, and, in that regard, the recent experience does not appear to be unusual. Abstracting from cyclical variation, the trend of productivity growth in recent years seems to have picked up somewhat from the unusually sluggish pace that prevailed through much of the 1970s and 1980s, but, at the same time, the pickup has not been nearly so large as some anecdotal reports might appear to suggest. For example, from late 1988 to late 1994, an interval of time that is long enough to capture all the phases that productivity goes through during the business cycle, the average rate of rise in output per hour in the nonfarm business sector amounted to slightly more than 1¼ percent, up only modestly from an average rate of rise of about ¾ percent during most of the 1970s and 1980s.⁴

4. Whether even this small degree of improvement in the productivity trend will stand up through future revisions of the data is

The rate of increase in hourly compensation moved down another notch in 1994. The employment cost index for private industry, a measure of hourly labor costs that comprises both wages and benefits, rose 3.1 percent during the twelve months ended in December of 1994, after increases of 3.6 percent in 1993 and 3.5 percent in 1992. The rise in the wage component of compensation was slightly less than that of 1993, and the rate of increase in hourly benefits slowed appreciably. Increases in benefits were restrained, in large part, by another year of deceleration in health care costs and a further slowing in workers' compensation insurance costs. The rise in nominal compensation per hour in 1994 was the smallest yearly increase in the fifteen-year history of the series, the previous low of 3.2 percent having come midway through the expansion of the 1980s. Toward the end of that decade, as bidding for labor resources intensified, increases in compensation moved up for a time to around 5 percent a year.

Employment Cost Index*



*Employment cost index for private industry, excluding farm and household workers.

Unit labor costs in the nonfarm business sector rose 2.0 percent over the four quarters of 1994, after an increase of just 0.6 percent over the four quarters of 1993. In manufacturing, a sector of the economy in

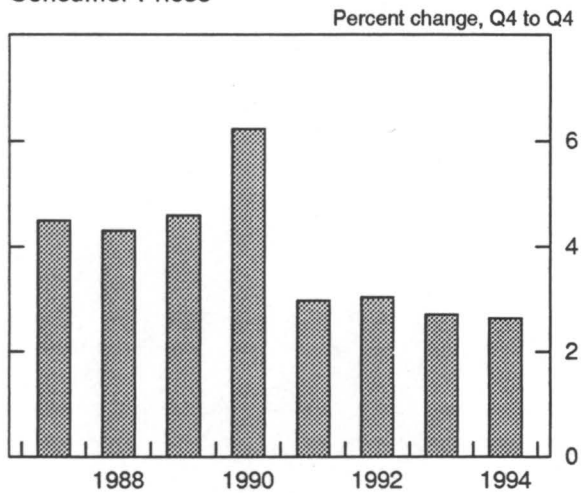
not clear. For example, among the many difficult issues that are involved in the measurement of productivity is the choice of an appropriate set of prices to be used in valuing the output of goods and services. Currently, aggregate output is tallied using the prices of 1987, but some major changes in relative prices have taken place since then, the most notable of which is a huge decline in the price of office and computing equipment. Using the prices of a more recent year to gauge real output would result in less weight being given to office and computing equipment and, in turn, a smaller contribution from this rapidly growing category to growth of real output. All else equal, the growth of productivity also would be negatively affected by switching to the prices of a more recent year.

which productivity has advanced quite rapidly in recent years, a rise in output per hour of 4.6 percent during 1994 more than offset a modest increase in hourly compensation, and unit labor costs declined noticeably for a second year.

Price Developments

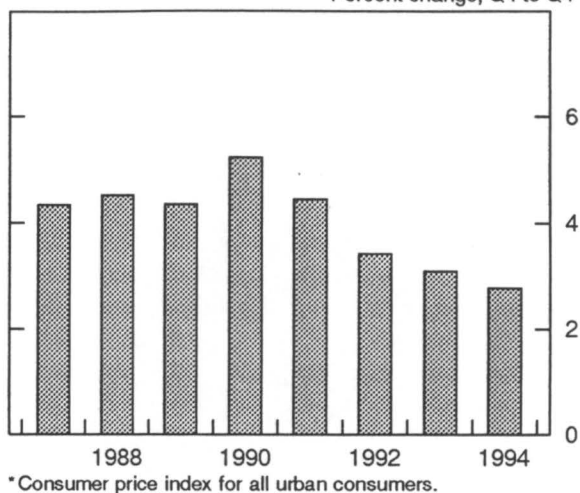
Although price increases picked up in some parts of the economy in 1994, the broader measures of price change continued to yield readings that were quite favorable. The rise in the total CPI was about 2¾ percent in 1994, the same as the increase during 1993. The CPI excluding food and energy also rose about 2¾ percent over the four quarters of 1994, after increasing slightly more than 3 percent in 1993. The producer price index for finished goods increased 1¼ during 1994, after edging up just ¼ percent during the previous year. As in 1992 and 1993, the past year's increases in all these price indexes were among the lowest readings of the past quarter-century. Measures of inflation expectations held steady in 1994, but continued to show readings that were somewhat higher, on average, than the actual rates of price increase. Price data for January of this year were less favorable than those of 1994: The total CPI moved up 0.3 percent last month, and the CPI excluding food and energy jumped 0.4 percent, the largest monthly rise in that measure since late 1992.

Consumer Prices *



The pickup of price increases last year was confined largely to markets for materials. Prices of primary industrial inputs, which had moved up sharply during 1993, continued to surge in 1994, and price increases for intermediate materials accelerated as the year progressed. Prices of imports also picked up

Consumer Prices Excluding Food and Energy *



somewhat, influenced by the depreciation in the exchange value of the dollar; as was true in the domestic economy, the largest price increases for imported goods were those for materials. Gains in productivity apparently enabled manufacturers of finished goods to absorb these increases in the costs of domestically produced and imported materials without raising their own prices very much.

Early this year, materials prices continued to surge. The producer price index for crude materials other than food and energy jumped 3 percent in January, to a level about 17½ percent above that of a year earlier. Further along in the production chain, the PPI for intermediate materials other than food and energy rose 1 percent last month; the index has moved up 6 percent during the past twelve months, the largest such rise since the late 1980s, when the twelve-month rate of increase in intermediate materials prices topped out at slightly more than 7 percent. By contrast, the PPI for finished goods other than food and energy again showed only a modest increase in January. Since mid-January, the prices of a number of industrial commodities have backed away from earlier highs, but, given the volatility that these prices sometimes exhibit, the experience of a few weeks may not signal the emergence of a new trend.

In the CPI, the prices of commodities other than food and energy rose 1½ percent over the four quarters of 1994, about the same as the rise of 1993. Prices of new cars and new trucks, responding to strong demand and, at times, shortages in the supply of some models, moved up faster than prices in general; prices of used cars rose especially rapidly for a third year. The prices of tobacco products, which had fallen sharply in 1993 when producers made steep

one-time price reductions, turned back up in 1994, rising moderately over the four quarters of the year. By contrast, prices of home furnishings changed little over the year, and the CPI for apparel fell noticeably. In January of 1995, the CPI for goods other than food and energy jumped 0.4 percent; this rise followed a string of months in which the index had increased very slowly.

The CPI for non-energy services, a category that accounts for about half of the total CPI, rose slightly less than 3½ percent over the four quarters of 1994, after an increase of about 3¾ percent in 1993. The increase in these prices in 1994 was just a bit more than half the rise that was recorded in 1990, when CPI inflation hit its most recent peak. Prices of medical services continued to slow in 1994, and airline fares, which have been an especially volatile category in the CPI in recent years, fell appreciably after having risen sharply the previous year. However, auto finance charges turned up, and the rate of rise in owners' equivalent rent, a category that has a weight of nearly 20 percent in the total CPI, rose slightly faster over the four quarters of 1994 than it had during the corresponding period of 1993. Like the prices of goods, the CPI for non-energy services accelerated sharply in January of this year.

In 1994, for a fourth year, neither food prices nor energy prices provided much impetus to the inflation process. The consumer price index for food rose a shade more than 2½ percent over the four quarters of 1994, about the same as the rise of 1993. Food prices in 1994 were restrained, in part, by sharp declines in the prices of domestically produced farm products, which, in turn, were pulled down by the huge increases in crop and livestock production noted previously. With beef and pork prices declining over the year, the CPI for meats, poultry, fish, and eggs changed little in total. Retail prices of dairy products rose only a small amount. Prices of foods that are more heavily influenced by the costs of nonfarm inputs also showed only small to moderate advances in 1994: The increase in the CPI for prepared foods amounted to about 2½ percent, slightly less than the previous year's increase, and, for a third year, the rise in the price index for food away from home was less than 2 percent. Coffee was the only item in the CPI for food to show sustained price acceleration; freeze damage to the crop in Brazil caused world prices of raw coffee to surge and led to a price rise of more than 50 percent at retail over the four quarters of 1994. Fresh vegetable prices, which tend to be especially sensitive to short-run supply developments,

took a jump toward year-end after Hurricane Gordon had damaged crops in Florida, but the run-up was partly reversed last month.

The CPI for energy rose about 1½ percent during 1994, after edging down ½ percent in 1993. Gasoline prices increased 4½ percent over the four quarters of 1994, reversing the decline of the previous year. Much of the increase in gasoline prices came in the third quarter and followed, with a short lag, a second-quarter rise in crude oil prices, which were moving back up from the low levels of late 1993 and early 1994. Prices of other energy products exhibited brief periods of rapid increase, but sustained upward pressures in these prices did not materialize. Fuel oil prices shot up temporarily early in 1994, when stocks were pulled down for a time by cold weather in the Midwest and the Northeast; later in the year, however, stocks were replenished and the earlier price increases were more than reversed. Natural gas prices followed a pattern similar to the price of fuel oil, rising sharply in the first quarter of the year but falling back thereafter, to a fourth-quarter level that was about 2¼ percent lower than that of a year earlier. Electricity prices rose only slightly during the year. In January of this year, energy prices were up moderately in the CPI.

With the favorable inflation performance of the past year, the average rate of rise in the total CPI since the business cycle trough in early 1991 has been 2.9 percent at an annual rate. Excluding food and energy, the rate of rise has been 3.3 percent at an annual rate. Inflation rates lower than these have not been sustained through the first few years of any business expansion since that of the 1960s, when both the CPI and the CPI excluding food and energy showed average rates of increase of less than 1.5 percent during the first four years after the business cycle trough of early 1961. Average rates of price increase during the current expansion have been much smaller than those reported during the expansion that began in the mid-1970s. They also have been somewhat smaller than those reported during the first few years of the expansion that began in late 1982, a period when price increases were braked in part by unusually steep declines in oil prices. In measuring the progress that has been made toward bringing the economy closer to the goal of long-run price stability, the ratcheting down of the rate of price advance from cycle to cycle since the 1970s is perhaps an even more meaningful indicator than the favorable trends in the annual price data of recent years.

Section 3: Monetary and Financial Developments

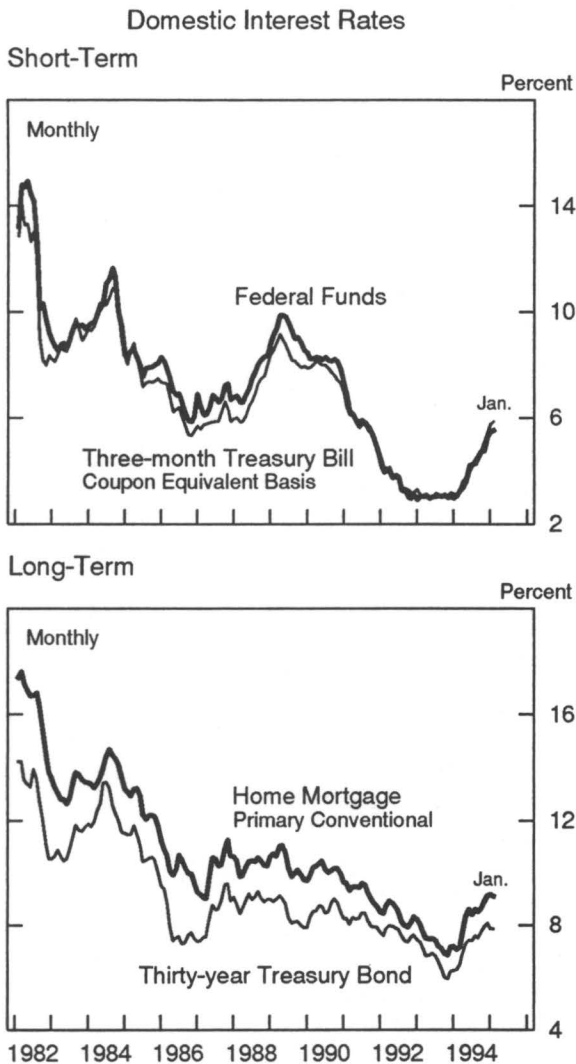
With the economy generally strong, financial markets in 1994 and early 1995 have been characterized by somewhat more rapid growth in private debt and by higher interest rates. The increase in interest rates reflected, in part, the policy actions of the Federal Reserve. Concerned about inflationary pressures resulting from rapid economic growth and dwindling margins of available resources, the Federal Reserve firmed policy on seven occasions. These actions were

hiked the discount rate on four occasions by a total of 2¼ percentage points.

Longer-term rates increased 1½ percentage points to 3 percentage points on balance since January of 1994, with the largest increases posted at intermediate maturities. In addition to the policy actions, these rates were boosted through much of 1994 by greater-than-expected underlying strength in the economy and the resulting higher demand for credit, as well as by upward revisions to expectations in financial markets about the policy tightenings that would be required to counter an incipient increase in inflation. Since late last fall, however, the extent of Federal Reserve actions, along with incoming data suggesting some moderation in the pace of expansion, have calmed inflation fears and trimmed estimates of the eventual rise in short-term interest rates. As a consequence, longer-term rates have retraced some of their earlier upward movements.

Increases in intermediate- and long-term rates over the course of the year caused significant capital losses for some investors. Well-publicized losses at a number of investment funds in the first half of the year, along with substantial portfolio reallocations in view of the changed economic and financial outlook, may have contributed to increased financial market volatility at that time. On the whole, however, risk premiums remained modest, and volatility ebbed over the course of the year. Late in the year, the tax-exempt securities market dipped following the bankruptcy of Orange County that resulted from mounting losses in its investment fund, but the effects, beyond those on the fund's investors, proved to be small and short-lived.

One consequence of the higher and more volatile long-term interest rates was a shift in business borrowing away from the capital markets and toward shorter-term sources, such as banks. This shift, which reversed the move toward long-term financing that occurred as bond yields fell in 1992 and 1993, was marked by the first annual increase in bank business loans in several years. Consumer lending also accelerated in 1994, as the improved economic outlook encouraged increased use of consumer credit. Higher interest rates likely held down household mortgage debt growth, in that the resulting decline in refinancing activity limited the ability of households to "cash out" some of the equity in their homes. Higher rates also encouraged households to shift to adjustable-rate mortgages, which offered lower initial interest costs.



taken to foster a financial environment more likely to be consistent with sustained economic growth and low inflation. In total, the policy tightenings raised the federal funds rate by a cumulative 3 percentage points between early February 1994 and early February 1995. Other short-term rates rose by similar amounts. Over this span, the Board of Governors

The debt of all nonfinancial sectors increased 5¼ percent in 1994, about the same increase as in 1993, as the pickup in business and household borrowing was offset by lower growth in government debt. The effects of the strong economy on government expenditures and receipts, policy moves to reduce the federal deficit, and retirements of tax-exempt securities that had been advance-refunded all contributed to the slowdown in government borrowing.

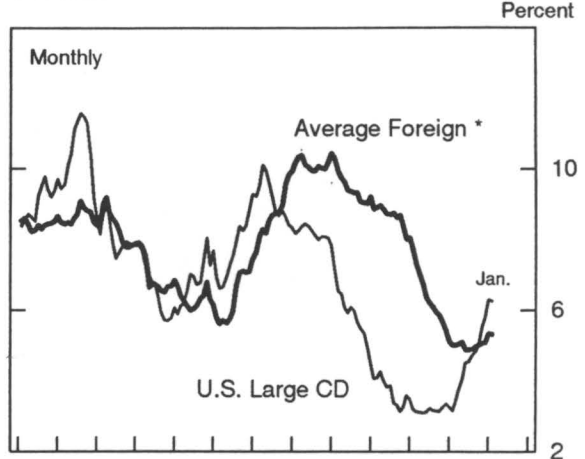
Banks funded much of the pickup in their loans with nondeposit funds and, in the second half of the year, with sales of securities. As a result, the doubling of loan growth was not reflected in significantly stronger expansion of the monetary aggregates. M3, which was boosted by relatively heavy issuance of large CDs, rose 1½ percent, a somewhat larger increase than in 1993. With banks pricing savings and small time deposits unaggressively as market interest rates rose, M2 grew 1 percent over the year, somewhat below its 1¾ percent pace in 1993. The increase in market interest rates relative to rates on transaction deposits slowed the growth of M1 to just 2¼ percent from the double-digit increases posted in 1992 and 1993.

The foreign exchange value of the dollar declined in terms of the other G-10 currencies last year, even as the U.S. economy expanded briskly and interest rates rose. In part, the weakness was the result of unexpectedly strong growth abroad, especially in Europe, where the recovery in many countries was more rapid than had been anticipated. As a result, long-term interest rates in many of the other G-10 countries increased by amounts similar to rates in the United States. Heightened concerns about inflation prospects in the United States may also have contributed to the weakness of the dollar. Indeed, the dollar rebounded late in the fall when tighter monetary policy evidently eased those concerns. The dollar declined, however, in early 1995 amid the signs of slower U.S. growth and concerns about the implications for the United States of turmoil in Mexican financial markets.

The Course of Policy and Interest Rates

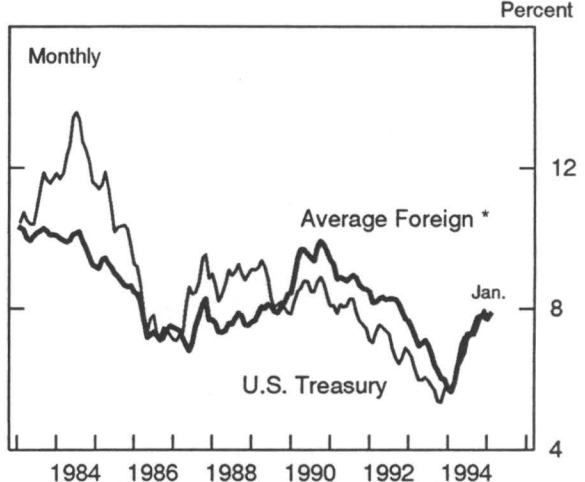
In early 1994, short-term interest rates remained at the very low levels reached in late 1992, with the federal funds rate fluctuating around 3 percent—roughly in line with the rate of inflation. The Federal Reserve had maintained an accommodative policy stance throughout 1993. This stance was unusual so far into the expansion phase of a business cycle, but it was believed to be necessary because of a number of

U.S. and Foreign Interest Rates
3-Month



* Trade-weighted average of comparable bank rates in the other G-10 countries.

10-Year

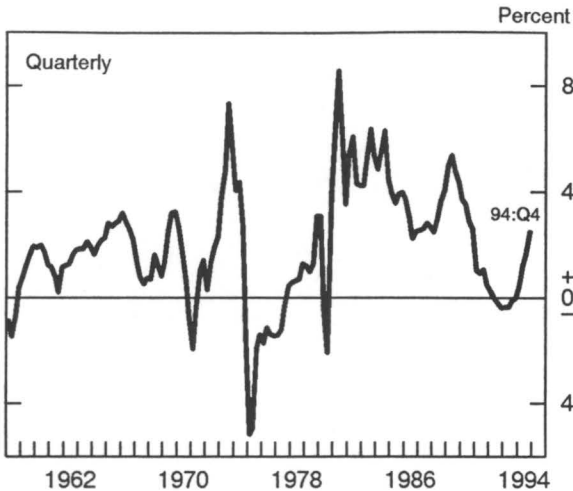


* Trade-weighted average of comparable government bond yields in the other G-10 countries.

extraordinary factors that seemed to be inhibiting growth. These factors included efforts by households, firms, and financial intermediaries to repair strained balance sheets, business restructuring activities, and the fiscal contraction associated, in part, with the downsizing of defense industries.

During the recovery and expansion, however, considerable progress had been made by households and businesses in decreasing their debt-service burdens, and lending institutions had succeeded in rebuilding their capital positions. By late 1993, the economy was expanding rapidly, and incoming data early last year suggested that much of that momentum had likely carried over into 1994. In the circumstances, continued accommodative policy risked pushing the demands on productive resources to levels that ultimately would be associated with increased inflation.

Real Federal Funds Rate *



* Real federal funds rate is the nominal federal funds rate minus the change in the CPI less food and energy over the last four quarters.

Consequently, the FOMC, at its meeting in early February 1994, agreed that policy should be moved to a less stimulative stance.

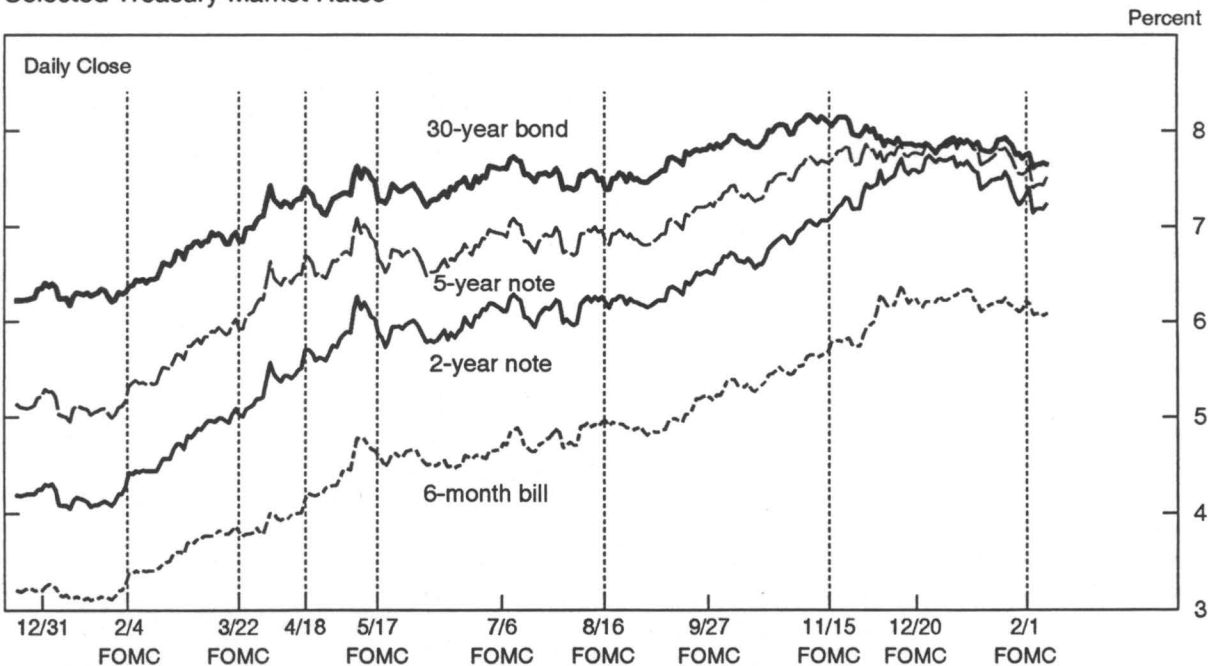
The pace at which the adjustment to policy should be made was less clear: A rapid shift in policy stance would minimize the risk of allowing inflation pressures to build, while a more gradual move would allow financial markets time to adjust to the changed environment. Although many market participants seemed to anticipate a firming move fairly soon, it

would be the first tightening in many years, and some investors would undoubtedly reconsider their portfolio strategies, possibly causing sharp movements in bond and stock prices. In addition, a slower initial shift would allow more time to assess the strength of the economy and the effects of the change in policy.

In the event, the Committee tightened policy gradually through the winter and early spring. Pressures on reserve positions were increased by relatively small amounts in February, March, and April; once market participants seemed to have made substantial adjustments to the new direction of policy, a larger tightening move was implemented in May. Taken together, the four policy actions raised the federal funds rate about 1¼ percentage points. The May policy action was accompanied by an increase of ½ percentage point in the discount rate, voted by the Board of Governors.

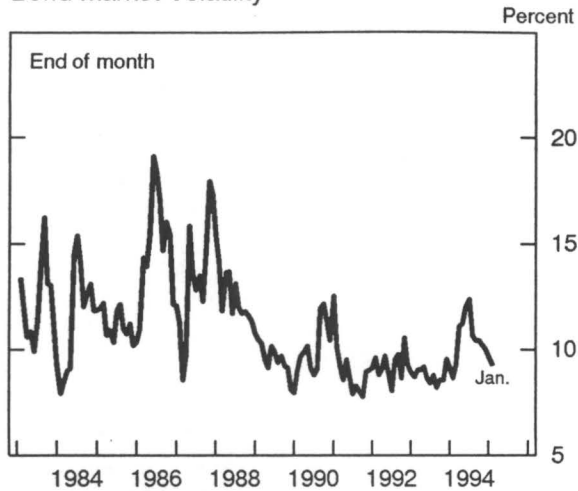
Other interest rates moved up between 1 percentage point and 2 percentage points as a result of these policy moves, with the largest increases coming at intermediate maturities. Besides the effect of the policy actions, longer-term rates were boosted by incoming data suggesting continued robust growth, which heightened market concerns about a pickup in inflation and expectations of further tightening by the Federal Reserve. In addition, uncertainty about the timing and magnitude of future policy actions, as well as the capital losses that followed the tightenings,

Selected Treasury Market Rates



* Dotted vertical lines indicate days on which a monetary policy move was announced.

Bond Market Volatility *



* Expected volatility derived from prices of options on Treasury bond futures.

encouraged investors to shorten the maturity of their investments and reduce their degree of leverage. The resulting portfolio adjustments likely contributed to increased market volatility and may have intensified the upward pressure on longer-term interest rates.

Incoming data in the late spring and early summer suggested that the economy continued to expand significantly, led by sales of business equipment, a rebound in nonresidential construction following bad weather earlier in the year, and a pickup in inventory investment. Inflation was of growing concern, as commodity prices increased rapidly, and measures of slack suggested that the economy was entering a range in which pressures on broad price indexes might begin to build. In part reflecting this concern, long-term rates moved up, and the dollar weakened. Given the relatively large policy action in May, however, the Committee decided to take no action at the July meeting and to wait for more information on the performance of the economy. The Committee saw the possible need for tighter policy, however, and issued an asymmetric directive to the Federal Reserve Bank of New York suggesting that policy would respond promptly to evidence of increased inflation pressures.

In the interval between the Committee meetings in early July and mid-August the economy continued to expand robustly, and, coming into the August meeting, it appeared that the markets expected a small further increase in reserve pressures. At its meeting, the Committee agreed that a prompt further tightening move was needed to provide greater assurance that inflationary pressures in the economy would remain subdued, and the members chose a tightening action somewhat larger than had been expected by the markets. A rise of $\frac{1}{2}$ percentage point in the discount rate,

voted by the Board of Governors, was allowed to show through fully to the federal funds rate. Short-term market rates rose following the policy move, while long-term yields declined slightly, perhaps as a result of downward revisions to expectations of future tightening.

In advance of the meeting in late September, most market rates increased as incoming economic data were seen in the market as raising the likelihood of higher inflation and the resulting need for tighter reserve conditions. The data suggested that the economy had not yet been greatly affected by the tightening in monetary policy: Employment was growing strongly, and final sales, especially of consumer goods, appeared to have firmed. Manufacturing activity had continued to expand rapidly, boosted in part by an increase in motor vehicle production. Given the uncertain duration of lags between changes in monetary policy and the resulting effects on the economy, however, it was not clear whether the effects of the earlier interest rate increases were smaller than had been expected or were still in train. Another possibility was that the underlying momentum of the expansion was greater than had been evident earlier. Given these uncertainties, the Committee took no immediate tightening action at its September meeting. As in July, however, the Committee agreed to an asymmetric directive suggesting that the likely direction of any move over the intermeeting period was toward additional restraint.

Broad measures of inflation remained moderate through the fall in spite of continued substantial economic growth in an economy that was running close to its estimated potential. Nonetheless, strong economic data and continued upward pressure on prices at earlier stages of production apparently heightened investors' inflation concerns, as well as expectations of future policy tightenings. Consequently, most market interest rates rose appreciably between the September and November meetings, with the largest increases occurring at intermediate maturities. At the November meeting, the Committee members agreed that the stance of policy was not sufficiently restrained given the clear risks of higher inflation. As a result, they chose a sizable firming of monetary policy, tightening reserve conditions in line with the increase of $\frac{3}{4}$ percentage point in the discount rate approved by the Federal Reserve Board.

The yield curve flattened appreciably in response to the larger-than-expected policy action. The increase in the federal funds rate pushed up most short-term interest rates. Long-term rates increased initially, but

in late November and early December these rates more than reversed the earlier increases. Evidently, market participants ultimately interpreted the substantial policy tightening as demonstrating the Committee's intention to take the actions necessary to contain inflation at relatively low levels. By contrast, intermediate-term rates increased over the weeks following the November meeting as a variety of incoming data indicated that the economy's growth had accelerated further in the fourth quarter and additional tightenings might be required to slow growth to a more sustainable pace. By the time of the December meeting, rates on two-year Treasury notes were only a little below those on thirty-year Treasury bonds, although both yields remained well above short-term rates.

Financial markets were focused in early December on the failure of an investment fund run by Orange County, California, and the subsequent bankruptcy of the county itself. The municipal securities market bore the brunt of these developments, with rates rising for a time relative to those on comparable Treasury issues. The failure had a substantial effect on the finances of the municipalities that had invested in the fund. In addition, investors had to consider the likelihood of other state and local governments having similar investment difficulties. Over the following days and weeks, however, only a few other problem situations emerged, and they were on a much smaller scale.

In the period leading up to the December meeting, incoming data continued to show robust growth and subdued inflation. The Committee felt that the effect on economic activity of the policy actions during the year, and especially the substantial tightening moves in the second half of the year, were not yet visible, owing to the lags in the effects of monetary policy on the economy. As a result, the Committee decided to take no further policy action at the meeting, and to await additional information on the underlying strength in the economy and the effects of the earlier policy actions. This decision was reinforced by concerns that the financial markets might be somewhat unsettled owing both to the usual year-end adjustments and to uncertainty about the effects and incidence of the sizable market losses sustained by some investors over the year. In view of the substantial strength evident in the incoming data, however, the Committee again chose an asymmetric directive pointing toward further restraint.

In advance of the Committee meeting at the end of January, broad measures of inflation remained mod-

est, although anecdotal reports suggested that some firms intended to raise prices early in the new year. Incoming data on production and employment continued to be upbeat, with healthy growth reported in virtually all industries and regions. Some indicators, however, raised the possibility of a slowing in the pace of the expansion. Nonetheless, output growth in the fourth quarter was the fastest of the year, and the Committee felt that, with output and employment at or even beyond estimates of their sustainable levels, the risks of rising inflation were still considerable. As a result, the Board of Governors voted an increase of $\frac{1}{2}$ percentage point in the discount rate, and the Committee agreed to allow the increase to be fully reflected in the federal funds rate. Because it had been widely anticipated in the financial markets, other interest rates and the foreign exchange value of the dollar were little affected by the policy action. Interest rates turned down subsequently, as additional information on the economy seemed to reinforce the possibility that a slowdown was in process.

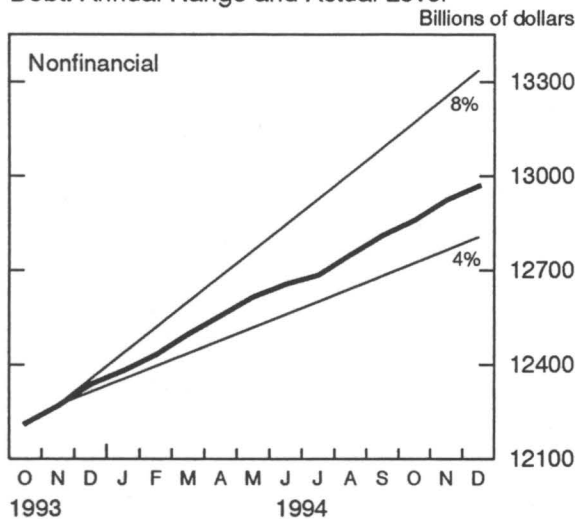
At the same meeting, the Committee also formally adopted two practices that had been followed on a provisional basis during 1994. First, the Committee voted to continue to announce any change in the stance of policy on the day the decision is made. These announcements, which had followed each of the policy tightenings agreed to in 1994, are intended to minimize any confusion and uncertainty about the stance of policy. In addition, a public announcement ensures that all financial market participants have the same access to information regarding changes in monetary policy. Second, the Committee agreed to continue releasing the transcripts of Committee meetings with a five-year delay. The published minutes of Committee meetings, which are available soon after the subsequent meeting, provide a relatively complete summary of the arguments presented and the reasons for a policy choice. The transcripts provide additional information, however, that may be of use to those interested in the details of the policy process. The Committee decided that a five-year delay struck an appropriate balance between the right of interested members of the public to obtain this added detail and the Committee's need to debate policy issues openly and without the sort of restraint that more rapid disclosure might generate.

Credit and Money Flows in 1994

The debt of all nonfinancial sectors grew $5\frac{1}{4}$ percent in 1994, somewhat below the middle of its monitoring range of 4 percent to 8 percent, and

about the same increase as a year earlier. More rapid growth of private sector debt was offset by slower growth of public sector debt. As long-term rates rose well above their late 1993 lows, private sector borrowing shifted toward shorter-term sources of funds. In part as a result of this shift, financial intermediaries supplied a larger share of new debt than they had for several years. Much of the depository credit growth was funded with nondeposit funds, however, and growth in the broad monetary aggregates, which consist primarily of deposits, remained subdued.

Debt: Annual Range and Actual Level



Debt growth both in the federal and in the state and local government sectors slowed last year. Growth of federal government debt was smaller because of the narrowing of the federal budget deficit. The outstanding volume of state and local government debt actually declined as bonds that previously had been refunded in advance of their earliest call date were retired. Much of the bulge in tax-exempt issues in 1993 had been for the advance refunding of higher-cost debt issued in the 1980s. These offerings subsided early in 1994, as the amount of bonds eligible for advance refunding dwindled and borrowing costs rose.

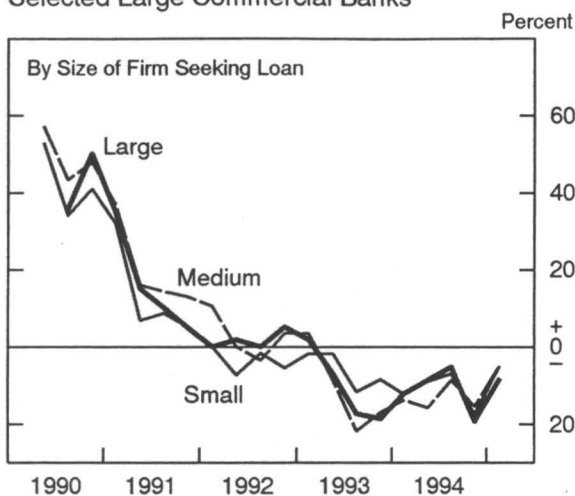
Household debt growth increased modestly in 1994, as an acceleration in consumer credit was partly offset by slower growth in mortgage debt. The pickup in consumer debt reflected, in part, increased demand for consumer durables. In addition, responses to Federal Reserve surveys of banks indicated that many respondents were more willing to extend credit to households last year, which may have led them to ease terms and standards on consumer loans. Indeed, spreads between consumer loan rates and market rates narrowed significantly last year, as increases in loan

rates lagged those in market interest rates. Consumer credit may also have been boosted somewhat by the increased use of credit cards offering rebates or other incentives. Rising mortgage rates in 1994 greatly reduced the volume of mortgage refinancings from the very high levels reached in 1993. The refinancings had contributed to an increase in mortgage debt because some households had taken the opportunity afforded by refinancing to cash out a portion of the equity in their properties. Higher rates on fixed-rate mortgages also induced many borrowers to shift to adjustable-rate mortgages that carried much lower initial rates. Concessional starting rates and the growing use of adjustable-rate contracts with initial fixed-rate periods lasting several years also may have contributed to this shift. Over the last few months of the year about half of all new home mortgages were of the adjustable rate variety. The shift to adjustable-rate mortgages and the sluggish adjustment of consumer loan rates mitigated the effect of higher market interest rates on household debt-service burdens.

The debt of nonfinancial businesses expanded in 1994 after three years of stagnation. Earlier efforts to restructure balance sheets by increasing equity capital and refinancing higher-cost credit appeared to leave businesses in a better position to increase debt in 1994, as the sector's debt-service burden had fallen about one-third from its peak five years earlier. A decline in equity issuance, perhaps resulting from the lackluster performance of the stock market, may also have boosted business borrowing. Business financing needs were strengthened by increased spending on capital and inventories, as well as merger and acquisition activity. The total value of mergers and acquisitions increased substantially last year, and the share of such activity requiring cash payments to shareholders—rather than swaps of shares—rose sharply, although it remained below the levels reached in the late 1980s.

Rising and more volatile long-term interest rates encouraged businesses to rely more heavily on short-term debt in 1994. This shift was reinforced by changes in supply conditions in various markets. Capital losses early in the year likely caused some of those supplying long-term funds to become more cautious; for example, some savers backed away from bond mutual funds. At the same time, banks were loosening terms on business loans as well as easing their underwriting standards. Banks attributed the easing of loan terms and standards to increased competition for business customers from other banks and also from nonbank lenders. The competitive posture of banks likely reflected, in part, the high level of profits

Changes in Business Lending Standards at Selected Large Commercial Banks *



Source: Federal Reserve's Senior Loan Officer Opinion Survey on Bank Lending Practices.
* Percentage of domestic respondents reporting tightening standards over the past three months less the percentage reporting easing standards.

earned by banks in recent years and the resultant strengthening of their balance sheets. As a result of these factors, bank business loans increased more than 9 percent, their first annual increase in several years. Other sources of short-term business finance, including commercial paper and finance company loans, also expanded on the year.

The effect of the pickup in business and consumer loans on bank credit growth was partially offset by slower growth in bank securities holdings. Early in the year, banks purchased a significant volume of government securities, and reported levels of other securities holdings were boosted by an accounting change.¹ Much of this growth was reversed later in the year, however, as banks used sales of securities to fund loan growth. Reported securities growth also was damped by declining securities prices.²

In 1994 thrift sector credit expanded for the first time in several years, as the Resolution Trust Corporation virtually completed its liquidation of insolvent thrift institutions. In part, the increase in thrift sector

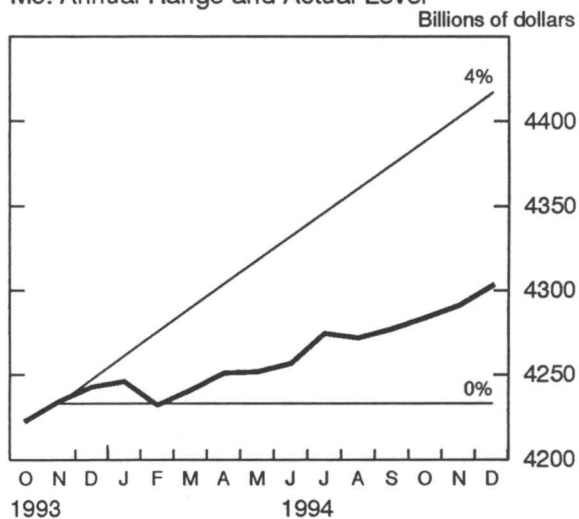
1. New Financial Accounting Standards Board rules, effective at the start of the year, limited the ability of banks to net off-balance-sheet items for reporting purposes. The new rules affected items such as swaps and options, the cash values of which are reported on balance sheets in the other securities category.

2. A Financial Accounting Standards Board rule implemented at the start of the year required each bank to divide its investment account securities into those that it intended to hold to maturity, which could be reported at book value, and those that were available for sale, which had to be marked to market.

credit also likely reflected the shift by households toward adjustable-rate mortgages. Thrift institutions and banks find holding adjustable-rate mortgages less risky than holding fixed-rate mortgages, and so adjustable-rate loans are less likely to be securitized and sold.

With bank credit growth picking up and thrift sector credit rising, growth of depository credit in 1994 nearly matched that of total nonfinancial debt. Thus, the share of credit provided by these intermediaries stabilized last year after having declined substantially since 1988. Despite the growth in depository credit, the broad monetary aggregates continued to expand sluggishly. Domestic banks funded much of their credit expansion from nondeposit sources, such as borrowings from their foreign offices, that are not included in the monetary aggregates. Funds from these sources are not subject to deposit insurance premiums, which may help account for their recent rise.

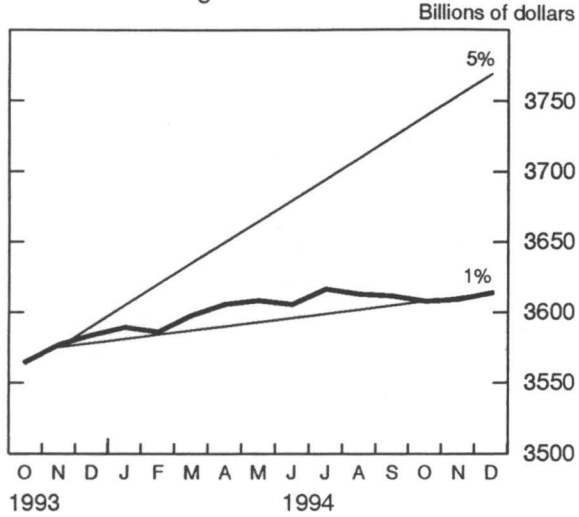
M3: Annual Range and Actual Level



The broadest monetary aggregate, M3, did pick up a bit as banks turned, in part, to large time deposits to fund asset growth. M3 expanded about 1½ percent, well above the lower bound of its 0 percent to 4 percent annual range and a somewhat larger increase than in 1993. Growth in large time deposits topped 7 percent for the year, marking the first annual increase in this component since 1989. Much of the increase in large time deposits was in senior bank notes, which are not subject to deposit insurance premiums.

M2 grew 1 percent in 1994—the lower bound of its annual range. The slow growth reflected, in part, relatively sluggish upward adjustment of retail deposit

M2: Annual Range and Actual Level

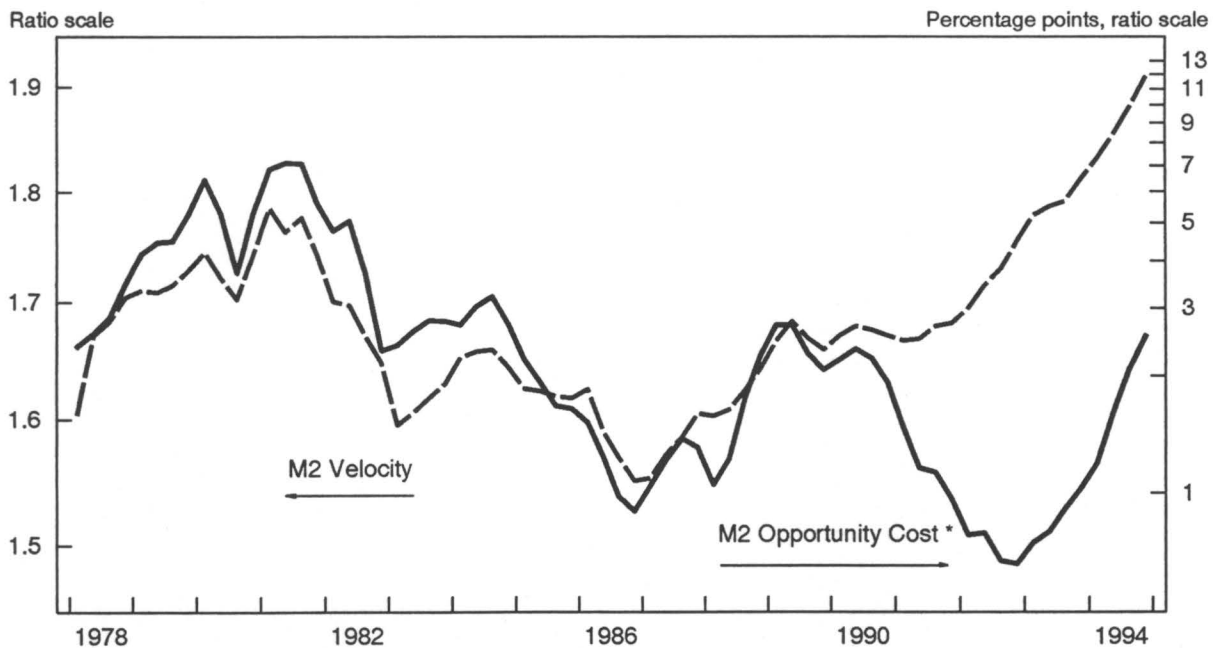


rates. Rates on savings accounts and other checkable deposits (OCDs), including NOW accounts, responded about as slowly as they have in the past to the increase in market rates, while the response of rates on small time deposits was sluggish relative to historical norms. Evidently, banks believed that generating increased retail deposits would be more expensive than raising wholesale funds given that higher retail rates would have to be paid on existing liquid deposits and on time deposits as they were rolled over, as well as on any new deposits. Increasing

retail deposits would also require higher advertising, administrative, and deposit insurance costs.

In contrast to the previous several years, M2 behavior in 1994 was roughly consistent with its long-run historical relationship with movements in nominal income and opportunity costs as traditionally defined—that is, the difference between rates on short-term instruments (for example, Treasury bills) and those offered on retail balances. This consistency suggests that, unlike the past few years, the slow growth in M2 last year was not the result of portfolio shifts toward bond and equity mutual funds. Indeed, the growth in M2 plus long-term mutual funds ran slightly below the 1 percent pace of M2 growth. Net sales of equity mutual funds continued at a high level in 1994, although the pace of sales slowed somewhat late in the year. Equity fund sales were partly offset, however, by outflows from bond mutual funds in the last three quarters of the year. Apparently, falling bond prices and greater market uncertainty, and, perhaps, reports of derivatives losses at some funds, led households to scale back their holdings of bond mutual funds in favor of investments that posed less risk of capital loss. With deposit rates lagging, however, these outflows did not translate into faster M2 growth. Some of the withdrawals from bond funds may have been invested directly in Treasury securities. Reflecting such portfolio shifts, net noncompetitive tenders for Treasury bills, which had been negative in 1993,

M2 Velocity and M2 Opportunity Cost



* Two-quarter moving average of 3-month Treasury bill rate less average rate paid on M2 components.

**Net Sales of Shares
in Long-Term Mutual Funds***
Millions of dollars (monthly average)

Period	Total	Equity funds	Bond funds
<i>Year</i>			
1991	10,820	3,821	7,000
1992	16,844	7,268	9,576
1993	23,445	11,832	11,634
1994	9,674	11,073	-1,399
<i>Quarter</i>			
1994:Q1	17,438	13,744	3,694
Q2	10,128	10,935	-808
Q3	9,826	11,166	-1,340
Q4	1,306	8,447	-7,141

Source. Investment Company Institute.
*Gross sales of shares less redemptions.

totaled more than \$16 billion last year, and net non-competitive tenders for Treasury notes also increased substantially.³

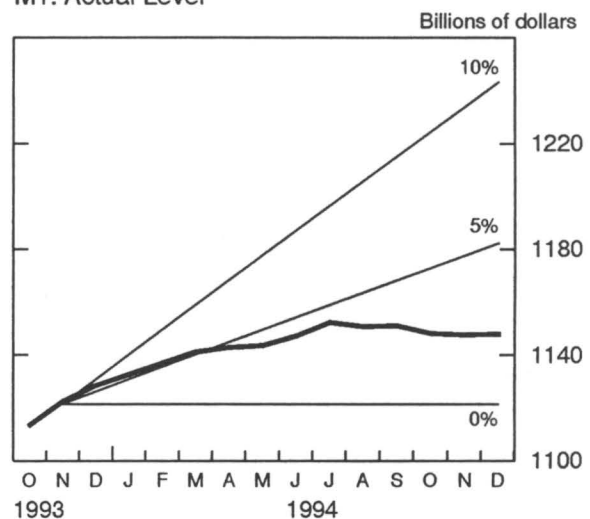
Consistent with its historical behavior, M1 growth slowed sharply last year in response to widening differentials between market interest rates and those offered on transaction deposits. M1 expanded only 2¼ percent—down substantially from the double-digit increases recorded the previous two years. Following the typical pattern, demand deposits and OCDs were especially responsive to the rise in short-term interest rates. On balance, demand deposits edged up only ½ percent, compared with growth of 13¼ percent in 1993, as higher market rates encouraged deposit holders to economize on these non-interest-earning assets. In addition, the turnaround reflected the decline in home mortgage refinancing activity last year: Demand deposits had been boosted in 1993 because prepayments of securitized mortgages were held primarily in such deposits for a time before they were distributed. The rates offered on OCD accounts adjusted slowly to higher market rates

3. The Treasury permits noncompetitive bids at its auctions to make it easier for smaller, less sophisticated bidders to participate. Those submitting noncompetitive tenders are assured of receiving the security, and the yield on the security they obtain is the average issue rate established at the auction. The level of net noncompetitive tenders during a period is the dollar volume of securities purchased under noncompetitive tenders less the volume of repayments of maturing securities that had been purchased under non-competitive tenders.

last year, encouraging households to shift funds into higher-yielding assets. OCD growth also was depressed by the introduction of sweep account programs at some large banks. In these programs, the portion of customers' OCD balances in excess of a predetermined level are swept into money market deposit accounts at the end of each day.

In contrast to transaction deposits, the currency component of M1 continued to register strong growth last year. Currency increased 10¼ percent, the same rise as 1993 and close to the record increase in 1990. As has been the case since 1990, much of the currency growth appeared to reflect rapid expansion in U.S. currency circulating abroad. Informal reports suggest that foreign demand was particularly strong in 1994 in Russia and the other former Soviet republics.

M1: Actual Level

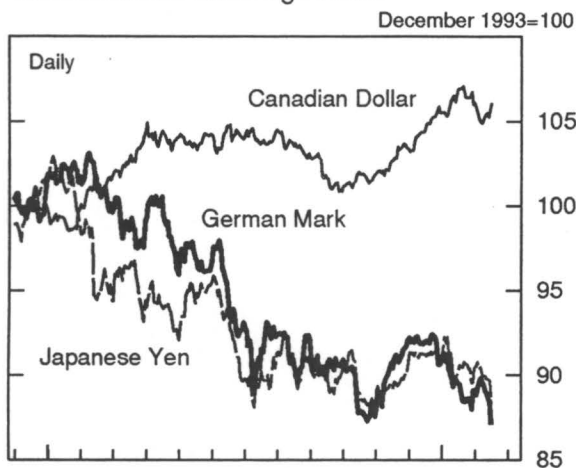


Foreign Exchange Developments

The trade-weighted foreign exchange value of the dollar in terms of the other G-10 currencies declined nearly 6½ percent on balance from December 1993 to December 1994. After displaying some strength at the start of 1994, the weighted-average foreign exchange value of the dollar fell about 10 percent from February through early November. Although U.S. growth continued to be stronger than expected, market perceptions about the strength of economic activity in the other industrial countries were also revised sharply higher as the year progressed. These changed perceptions led market participants to raise their expectations of market interest rates abroad, which, together with increased concerns over potential inflation pressures in the U.S. economy, put downward

pressure on the dollar against most foreign currencies. The dollar rebounded somewhat at the end of the year as the greater-than-expected tightening action by the Federal Reserve in November reassured market participants that U.S. inflation risks were being addressed. In early 1995, however, with U.S. growth appearing to moderate, and the turmoil in Mexican financial markets raising concerns about possible implications for the United States, the dollar declined on balance, nearly reaching its fall 1994 low.

Selected Dollar Exchange Rates



Weighted Average Foreign Exchange Value of the U.S. Dollar *



* Index of weighted average foreign exchange value of the U.S. dollar in terms of currencies of other G-10 countries. Weights are based on 1972-76 global trade of each of the 10 countries.

Long-term interest rates in major foreign industrial countries generally rose during the year. On average, yields on foreign government issues with maturities of ten years increased 200 basis points in the twelve months to December, about the same as in the United

States. In Japan, where the evidence for a buoyant recovery remained somewhat mixed, long-term rates rose less. In contrast to long-term rates, foreign short-term rates were little changed on average and even declined slightly in several countries, including France and Germany. Major exceptions were Canada, where short-term market rates rose about 300 basis points, and the United Kingdom, where they rose 100 basis points. In both countries, official lending rates were increased during the year to contain inflation risks in the face of vigorous economic growth. During the first few weeks of this year, foreign long-term rates on average rose slightly further, but they have since retraced most of that rise.

During 1994, the dollar depreciated 8 percent in terms of the mark and declined by similar amounts in terms of the other currencies in the exchange rate mechanism (ERM) of the European Monetary System. The German economy expanded over the year, and the growth of the targeted monetary aggregate, M3, remained above target until the very end of the year. Market participants trimmed their expectations of further declines in official Bundesbank lending rates, and German long-term interest rates rose. The dollar depreciated by lesser amounts in terms of sterling and the lira, both of which had been withdrawn from the ERM in 1992. The persistent strength of the U.K. recovery raised concerns of renewed inflation pressures there, and the political uncertainties in Italy and, to a lesser extent, in the United Kingdom held back market enthusiasm for the two currencies.

The dollar also depreciated about 8 percent in terms of the yen during the year. At times, the dollar-yen rate fluctuated in response to developments in U.S.-Japanese trade talks. The dollar reached a historic low of 96.11 yen in November and was very weak against the German mark as well, and the Federal Reserve joined the U.S. Treasury in intervention purchases of dollars against yen and marks at that time. Subsequently, the dollar rebounded somewhat in terms of the yen and European currencies. In early 1995 the dollar weakened further, especially against the mark, in part because that currency attracted funds from markets upset by the peso crisis.

In contrast to its experience in terms of the ERM currencies and the yen, the dollar appreciated in terms of the Canadian dollar nearly 4½ percent during 1994. The relative weakness of the Canadian currency appeared to reflect pressures arising from the increases in U.S. short-term rates, concerns over the large fiscal deficits of the central government and the

provinces and, at times, perceived risks associated with possible secession by Quebec. In the first few weeks of 1995, the Canadian dollar weakened further, as markets apparently became more concerned about the large outstanding Canadian federal and provincial debt and the persistent federal government deficit. As a result, market interest rates have risen further, and the Bank of Canada has moved up overnight rates several times, including an increase to match the upward shift in the U.S. federal funds rate following the most recent FOMC meeting. In response, the Canadian dollar strengthened, but more recently, has given up some of these gains.

The dollar depreciated nearly 5 percent in 1994 against the currencies of major U.S. trading partners in Latin America and East Asia when adjusted for relative changes in consumer prices. The dollar appreciated sharply against the Mexican peso, however, first in March and more significantly during the final two weeks of the year and in early 1995.

In response to continuing downward pressures on the peso and sizable losses of international reserves over the course of 1994, the Bank of Mexico announced on December 20 a 13 percent change in the lower bound of the range that it unilaterally had set for the peso-dollar exchange rate. The peso immediately fell to the new lower limit, from about 3.5 to 4 pesos per dollar, and reserve losses continued. As a consequence, the Bank of Mexico on December 22 permitted the peso to float and activated the North American Swap Facility, which provides up to \$6 billion of short-term funds to the Bank of Mexico, evenly split between the Federal Reserve and the Treasury, and an additional C\$1 billion from the Bank of Canada.

During the following days the peso remained volatile on exchange markets, fluctuating in a range between 5 and nearly 6 pesos to the dollar. On January 2, a package was announced totaling \$18 billion in international financial support for Mexico, including an increase from \$6 billion to \$9 billion in the swap facilities extended by the United States (again split between the Federal Reserve and the Treasury), an additional C\$500 million in the swap facility of the Bank of Canada, \$5 billion in credit supported by other central banks acting through the Bank for International Settlements (BIS), and \$3 billion in credit from commercial banks. On January 6 the IMF began talks with Mexico on a stand-by arrangement in sup-

port of Mexico's economic reform program, and on January 12, against the background of increased turbulence in international capital markets, the Clinton Administration, with the support of the bipartisan leadership of Congress, announced a proposal to provide \$40 billion in guarantees on securities to be issued by Mexico in an effort to restore investor confidence.

Subsequently, the peso weakened further as support within the Congress for the guarantee proposal appeared to decline. The Mexican stock market also continued to slide, and short-term peso interest rates rose sharply. In late January the peso reached a new low of 6.55 pesos to the dollar amid signs that problems in Mexico were having effects on financial markets in other countries. In particular, equity markets in Argentina and Brazil had declined in volatile trading. More generally, investors appeared to be retreating from investments in a variety of emerging market economies, some of which have substantial current account deficits, while others maintain fixed exchange rates that pose the risk of becoming overvalued. On January 31 the Administration withdrew the request for approval of the guarantee program and, with the support of the bipartisan leadership of Congress, announced a new plan to provide \$20 billion to support financial stabilization in Mexico using the resources of the Exchange Stabilization Fund (ESF) and, in the short run, the Federal Reserve. On February 1, the Federal Reserve's swap line with the Bank of Mexico was increased further to \$6 billion as part of this package. The package will consist of short-term swaps, which will be provided by the Federal Reserve and the ESF, and swaps with maturities of three to five years and securities guarantees with maturities of five to ten years provided by the ESF. Repayment will be assured from the proceeds of exports of Mexican oil. Additional multilateral support for Mexico included an increase from \$7.8 billion to \$17.8 billion in the funds provided by the IMF under a stand-by arrangement that was approved on February 1 and an increase from \$5 billion to \$10 billion in the short-term credit supported by the central banks of a number of major industrial countries acting through the BIS.

The peso rebounded during the week following the announcement of the January 31 program and, on net, has since held most of that gain in volatile trading. Through mid-February, the dollar on balance has appreciated substantially against the peso since December 19, the day before the peso's devaluation.

Growth of Money and Debt

Percent

Period	M1	M2	M3	Domestic Nonfinancial Debt
<i>Year</i> ¹				
1980	7.4	8.9	9.6	9.1
1981	5.4 (2.5) ²	9.3	12.4	9.9
1982	8.8	9.2	9.9	9.6
1983	10.4	12.2	9.9	11.8
1984	5.5	8.1	10.9	14.4
1985	12.0	8.7	7.6	14.1
1986	15.5	9.3	8.9	13.5
1987	6.3	4.3	5.7	10.2
1988	4.3	5.3	6.3	9.0
1989	.6	4.8	3.8	8.0
1990	4.2	4.0	1.7	6.5
1991	7.9	2.9	1.2	4.6
1992	14.3	2.0	.5	4.7
1993	10.5	1.7	1.0	5.2
1994	2.3	1.0	1.4	5.3
<i>Quarter (annual rate)</i> ³				
1994:Q1	5.5	1.8	.6	5.3
Q2	2.6	1.7	1.3	5.6
Q3	2.4	.8	2.0	4.4
Q4	-1.2	-4	1.7	5.5

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.