

**For use at 10:00 a.m., E.D.T.  
Thursday  
July 18, 1996**

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**

---

July 18, 1996

---

## Letter of Transmittal

---

BOARD OF GOVERNORS OF THE  
FEDERAL RESERVE SYSTEM  
Washington, D.C., July 18, 1996

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", with a stylized flourish at the end.

Alan Greenspan, Chairman

## **Table of Contents**

	<i>Page</i>
<b>Section 1:</b> Monetary Policy and the Economic Outlook	1
<b>Section 2:</b> Economic and Financial Developments in 1996	6

## Section 1: Monetary Policy and the Economic Outlook

The U.S. economy performed well in the first half of 1996. In early February, when the Federal Reserve prepared its last report on monetary policy, there was some concern about the strength and durability of the current economic expansion: The economy was operating at a relatively high level of resource utilization, but it was not exhibiting a great deal of forward momentum. As the year has unfolded, however, economic activity has proven quite robust. After rising only fractionally in the fourth quarter of 1995, real gross domestic product posted a solid gain over the first half of 1996, providing a considerable lift to job growth. Looking ahead, the members of the Federal Open Market Committee (FOMC) anticipate that economic activity will grow more moderately, on average, in coming quarters and that the unemployment rate will remain around the level it has averaged over the past year and a half.

Although overall consumer price inflation was boosted by higher energy prices during the first half of the year, the underlying trend of prices still appears to have been well contained. Over the past twelve months, the consumer price index excluding food and energy items has risen  $2\frac{3}{4}$  percent—near the lower end of the narrow range that has prevailed since early 1994. Moreover, the deflator for personal consumption expenditures on items other than food and energy derived from data reported in the national income and product accounts has continued to show a slowing trend.

The combination of brisk growth and favorable underlying inflation so far this year has, of course, been welcome. Nonetheless, mounting pressures on resources are apparent in some segments of the economy—most notably in the labor market—and these pressures must be monitored closely. Allowing inflationary forces to intensify would ultimately disrupt the growth process. The Federal Reserve recognizes that its contribution to promoting the optimal performance of the economy involves containing the rate of inflation and, over time, moving toward price stability.

### Monetary Policy, Financial Markets, and the Economy over the First Half of 1996

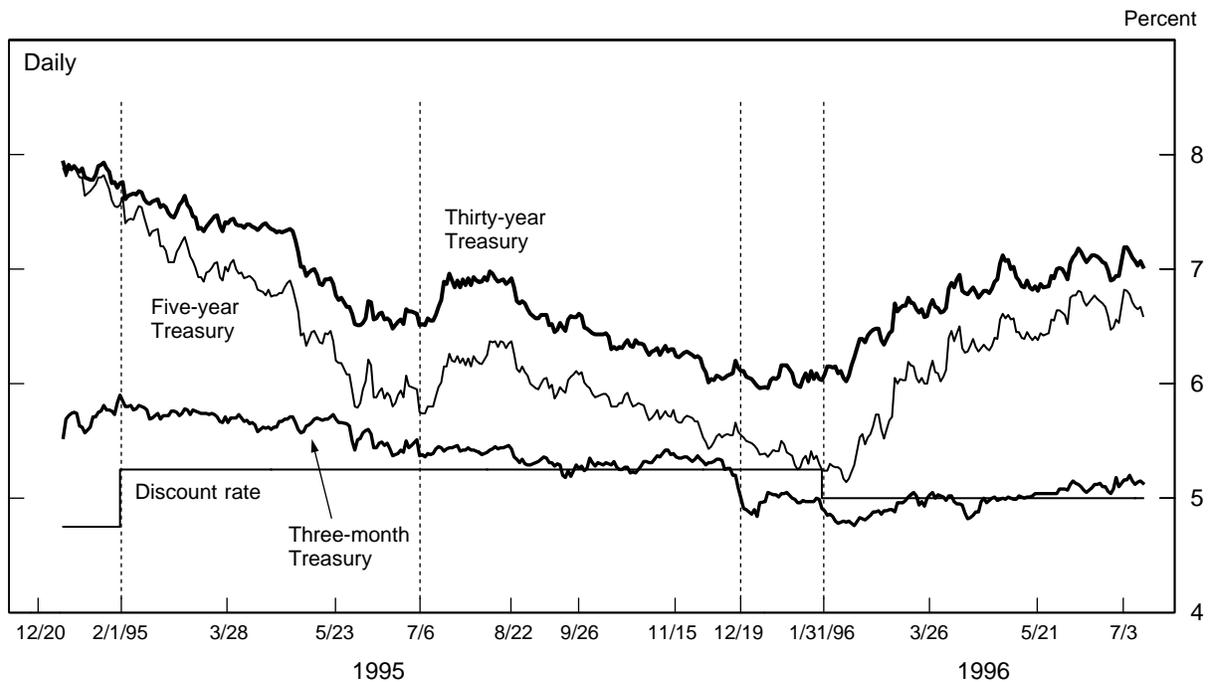
Information available around the turn of the year suggested that the economy had downshifted after posting a strong gain in the third quarter of 1995. The growth of final demand appeared to have slowed,

reflecting importantly a deceleration of consumer spending. In addition, hesitant growth abroad and a strengthening in the foreign exchange value of the dollar relative to the levels prevailing at mid-1995 were seen as limiting the prospects for further growth in exports. The slowdown in the growth of final demand had given rise to inventory buildups in some industries; in turn, the production cutbacks undertaken in response to those buildups were having a further damping effect on economic activity. Meanwhile, data on prices and wages suggested that inflation performance continued to be fairly satisfactory—indeed, better than many members of the FOMC had expected as of midyear 1995. To keep the stance of monetary policy from becoming effectively more restrictive owing to the slowdown in inflation in the second half of last year, and to promote sustainable growth, the Committee eased the stance of policy in December 1995 and again at the end of January 1996, bringing the federal funds rate down a half percentage point in total, to  $5\frac{1}{4}$  percent.

Most participants in financial markets were unsurprised by these policy adjustments, given the economic backdrop. Moreover, they anticipated that there would be scope for additional easing steps in the coming months. Thus, between mid-December and the end of January, interest rates on Treasury securities generally moved lower, especially at short and intermediate maturities, and stock price indexes edged higher on balance. The dollar strengthened slightly on net against the currencies of the other G-10 countries, reflecting in part disappointing news about the pace of activity in Europe and consequently larger declines in interest rates there than in the United States.

The underlying trends in the economy early in the year were obscured to a degree by extraordinarily adverse weather that affected a significant part of the country. Through the course of the next few months, however, it became increasingly clear that the economy had regained vitality. Consumer spending perked up after a lackluster holiday season, and was only temporarily depressed by the severe winter. Business demand for equipment proved quite strong, as did housing demand. The strengthening in sales facilitated businesses' efforts to control their inventories, and as that situation improved, industrial production rebounded smartly. Overall employment growth was brisk, and by June the unemployment rate reached its lowest level in six years.

## The Discount Rate and Selected Market Interest Rates



Note. Dotted vertical lines indicate days on which the Committee announced a monetary policy action. The ticks on the horizontal axis indicate days on which the Committee held scheduled meetings. The last observations are for July 16, 1996.

Inflation during the first half of the year was generally well behaved. Energy prices surged, mainly in response to a runup in the world price of oil, and bad news about grain crops raised the prospect of higher food prices down the road. However, price inflation for consumer items other than food and energy held steady or moved a bit lower. Labor costs presented a mixed picture. The increase in total hourly compensation over the first three months of the year, as measured by the employment cost index, was in line with its recent moderate trend. However, within total compensation, the wage and salary component of the ECI surged in the first quarter, and further signals of wage acceleration came from a more rapid increase in average hourly earnings in the second quarter.

Against the backdrop of stronger activity but subdued inflation trends, the Federal Reserve made no adjustments to its policy stance after January. With economic activity more clearly on the upswing, however, and prospects for a breakthrough on the federal budget seeming to fade, intermediate- and long-term interest rates reversed course in February and trended up over subsequent months. Since the end of December, the yield on the 30-year Treasury bond has increased about 1 percentage point, on net, while the yield on the 5-year note has risen about 1¼ percentage points over the same period. The rate on three-

month bills has edged up only slightly. Despite the backup in bond yields, major stock-price indexes rose considerably further through the first half of the year; most of those gains were erased in late June and the first half of July, however, as company reports raised questions about the pace of earnings growth. The rise in bond yields has boosted the dollar in foreign exchange markets; since mid-April, the dollar has generally traded against an average of the currencies of the other major industrial countries about 4 percent above its level at the end of December.

During the first half of the year, credit remained easily available to most household and business applicants. Interest-rate spreads on private debt over Treasury securities remained narrow. In response to the recent increase in delinquencies on credit-card accounts, many banks have tightened their standards for approval of new accounts, but this appears to have only partially reversed a marked relaxation of such standards earlier this decade, and banks overall remain aggressive in the pursuit of new borrowers, especially business clients. The debt of all domestic nonfinancial sectors combined expanded at about a 4¾ percent annual pace, placing this aggregate near the middle of its monitoring range. M2 and M3 are currently near the 5 and 6 percent upper boundaries of their respective growth ranges, in line with the

## Economic Projections for 1996 and 1997

	Federal Reserve Governors and Reserve Bank Presidents		Administration
	Range	Central Tendency	
<b>1996</b>			
<i>Percent change, fourth quarter to fourth quarter<sup>1</sup></i>			
<b>Nominal GDP</b>	4¾ to 5¾	5 to 5½	5.0
<b>Real GDP</b>	2½ to 3	2½ to 2¾	2.6
<b>Consumer price index<sup>2</sup></b>	3 to 3¼	3 to 3¼	3.2
<i>Average level in the fourth quarter, percent</i>			
<b>Civilian unemployment rate</b>	5¼ to 5¾	About 5½	5.6
<b>1997</b>			
<i>Percent change, fourth quarter to fourth quarter<sup>1</sup></i>			
<b>Nominal GDP</b>	4 to 5½	4¼ to 5	5.1
<b>Real GDP</b>	1½ to 2½	1¾ to 2¼	2.3
<b>Consumer price index<sup>2</sup></b>	2½ to 3¼	2¾ to 3	2.8
<i>Average level in the fourth quarter, percent</i>			
<b>Civilian unemployment rate</b>	5½ to 6	5½ to 5¾	5.7

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

2. All urban consumers.

FOMC's expectation as of last February. In contrast to the experience of the early 1990s, growth in the monetary aggregates relative to nominal GDP has been broadly in line with historical relationships, given the structure of interest rates.

### Economic Projections for 1996 and 1997

As noted previously, 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, generally think it likely that economic activity will return to a moderate growth path in the second half of 1996 and in 1997 after the larger gains in the first half of this year. For 1996 as a whole, this would result in an increase in real gross domestic product in the range of 2½ to 2¾ percent, somewhat above the forecasts in the February report

on monetary policy. For 1997, the central tendency of the forecasts spans a range of 1¾ to 2¼ percent. The civilian unemployment rate, which averaged around 5½ percent in the second quarter of 1996, is expected to stay near this level through the end of this year and perhaps to edge higher during 1997.

Economic activity clearly retains considerable momentum. The trend in final demand is positive, and inventories appear to be well aligned with the current pace of sales—perhaps even a bit lean. Accordingly, the members of the FOMC recognize the possibility that growth could remain elevated a while, with the potential for putting greater pressure on resources. Nonetheless, most members think that some slowing from the rapid growth pace recorded, on average, in the first half is the most likely outcome. Housing construction and other interest-

## Ranges for Growth of Monetary and Debt Aggregates

Percent

Aggregate	1995	1996	Provisional for 1997
<b>M2</b>	1 to 5	1 to 5	1 to 5
<b>M3</b>	2 to 6	2 to 6	2 to 6
<b>Debt<sup>1</sup></b>	3 to 7	3 to 7	3 to 7

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

1. Monitoring range for debt of domestic nonfinancial sectors.

sensitive activity should be restrained to some degree by the rise in long-term interest rates over the past several months. And, although some of the lagging economies abroad are expected to perform better this year, there are still concerns about the solidity of that acceleration and the associated lift to U.S. exports. In addition, growth in real business fixed investment appears to be tapering off, although spending will likely remain buoyant, owing to the rapid rate of product innovation and dramatic price declines in the computer area. Consumer spending is also expected to grow less rapidly in coming quarters. Household wealth has been boosted substantially by the runup in stock prices over the past year and a half, but, for many households, debt burdens have risen significantly in recent years and may represent a constraint on purchases of big-ticket items.

Most members of the FOMC expect the rise in the consumer price index over the four quarters of 1996 to be in the range of 3 to 3¼ percent, about ¼ percentage point higher than they predicted last winter. The projected increase in the CPI is also somewhat larger than that recorded in 1995. However, that stepup would mainly reflect developments in the food and energy sectors, which are likely to add to overall inflation in 1996 after having damped it in 1995. Apart from these volatile sectors, inflation has remained in check so far this year despite high levels of resource utilization and reports that tightness in some parts of the labor market is placing upward pressure on wages. Assuming no further adverse shocks to food and energy prices, and in the context of the Federal Reserve's intent to keep trend inflation well contained, the Committee believes that overall CPI inflation should recede. Accordingly, the central tendency of the FOMC's forecasts shows CPI inflation dropping back to the range of 2¾ to 3 percent in 1997.

The Committee's inflation projections incorporate the technical improvements the Bureau of Labor Statistics is making to the CPI in 1996 and 1997; they are expected to shave a little from inflation in both years. The Committee also recognizes that the remaining biases in the CPI are non-negligible and may not be stable over time. Thus, it will continue to monitor a variety of alternative measures of price change as it attempts to gauge progress toward the long-run goal of price stability.

The Administration has just released its midyear update to its economic and budgetary projections. Its forecasts for real growth and inflation in 1996 and 1997 are broadly in line with the central tendencies of the forecasts of Federal Reserve policymakers.

### Money and Debt Ranges for 1996 and 1997

At its meeting earlier this month, the Committee reaffirmed the ranges for 1996 growth of money and debt that it had established in February: 1 percent to 5 percent for M2, 2 percent to 6 percent for M3, and 3 percent to 7 percent for the debt of the domestic nonfinancial sectors. In addition, the Committee set provisional growth ranges for 1997 at the same levels.

In setting the ranges for M2 and M3, the Committee intended to communicate its expectation as to the growth of these monetary aggregates that would result under conditions of approximate price stability, assuming that the aggregates exhibit the same trends relative to nominal spending that prevailed for many years until the early 1990s and that seem to have reemerged after an intervening period of marked deviation. Based on that reemergence and on Committee members' expectations for the growth of nominal GDP in 1996 and 1997, the Committee

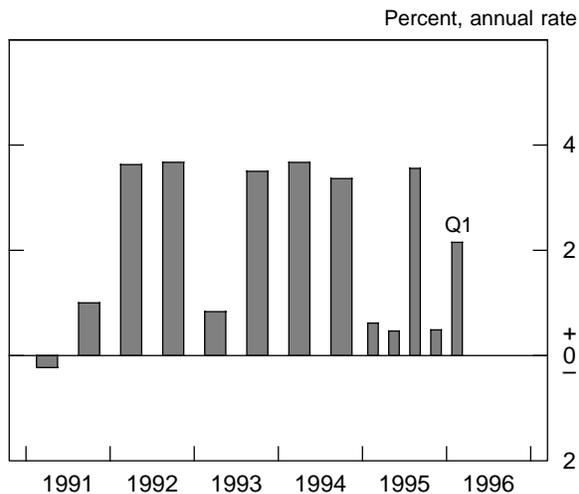
anticipates that both M2 and M3 will probably finish near the upper boundaries of their respective ranges each year. The Committee expects the debt of the domestic nonfinancial sectors to remain near the middle of its monitoring range in 1996 and 1997. In light of the rapid pace of technological change and

innovation still occurring in the financial sector—and the attending uncertainty about the future behavior of the aggregates—the Committee will continue to rely on a wide range of other information in determining its policy stance.

## Section 2: Economic and Financial Developments in 1996

Economic activity has increased substantially thus far this year. Real gross domestic product grew at an annual rate of about 2¼ percent in the first quarter of 1996, and the available data point to a much larger increase in the second quarter. The increases in activity have been facilitated by generally supportive financial conditions: Although long-term interest rates have risen considerably on net since early 1996, intermediaries have continued to supply credit to most borrowers on favorable terms, and interest-rate spreads on corporate securities over Treasury securities have remained narrow. In the foreign exchange markets, the dollar has appreciated on average against the currencies of the other major industrial countries.

Change in Real GDP

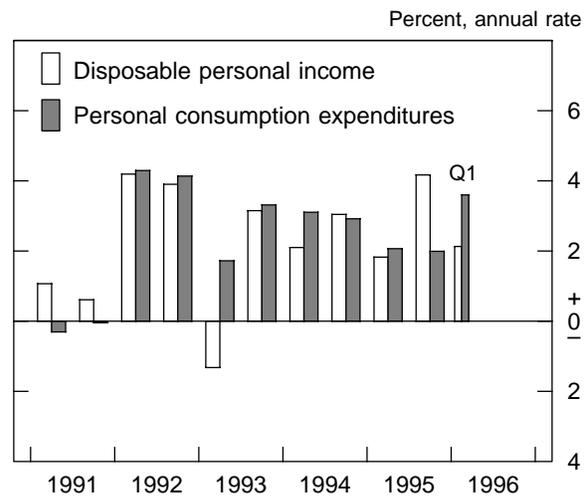


### Economic Developments

#### *The Household Sector*

After a sluggish performance in late 1995, spending by households has picked up noticeably this year. Consumer expenditures increased about 3½ percent at an annual rate in real terms in the first quarter and appear to have posted another sizable gain in the second quarter. In addition, according to indexes such as those compiled by the Survey Research Center at the University of Michigan and the Conference Board, consumer sentiment has generally been relatively upbeat. In the real estate market, sales of new single-family dwellings have posted an average level well above that of last year, encouraging builders to boost housing starts.

Change in Real Income and Consumption



Outlays for durable goods have continued to be the strongest component of spending, extending the long-standing uptrend in the share of durables in total real consumption. Declining relative prices and the availability of innovative products have continued to lift demand for home electronic equipment and software products. In addition, sales of light motor vehicles, bolstered by relatively generous incentives and perhaps by the cash freed up by the surge in mortgage refinancings last winter, averaged a healthy 15 million unit annual rate in the first half of 1996.

After a lackluster performance in 1995, real outlays for nondurable goods have also risen this year; the average level of these expenditures in April and May was nearly 3 percent at an annual rate above that recorded in the fourth quarter. Meanwhile, spending on services has remained on a moderate uptrend, with short-run variations reflecting the effects of weather on household energy use.

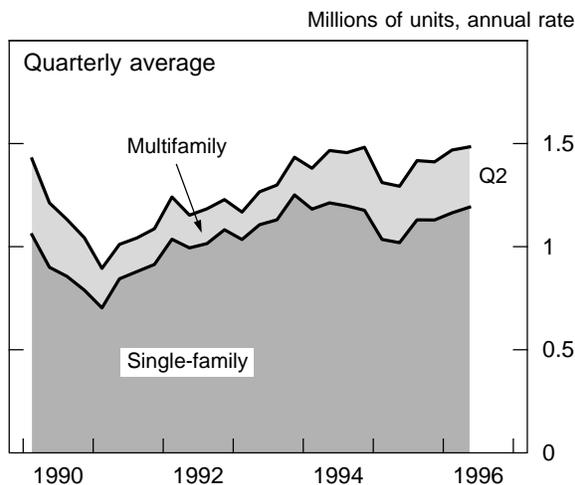
Consumer spending has been supported by brisk gains in wage and salary income associated with the better pace of hiring this year. However, other components of before-tax income, taken together, have risen less rapidly than they did in 1995, and gains in after-tax income were restrained by larger-than-usual tax bills (final payments less refunds) this spring. Accordingly, the level of the personal saving rate in May was somewhat below that recorded in late 1995, although fragmentary data suggest that saving rose sharply in June. In any event, taking a longer perspective, spending and income have grown at roughly similar rates over the past few years, and the

saving rate has generally fluctuated in a fairly narrow band between 4 percent and 5 percent since 1993—a low level historically.

The recent developments in financial markets may have had an important influence on the spending decisions of individual households. In particular, households holding large stock portfolios have enjoyed sizable increases in wealth over the past year and a half, which may be inducing them to consume greater fractions of their incomes than they would otherwise. At the same time, a growing number of households are apparently finding it difficult to meet their debt-service obligations, judging from the appreciable rise in delinquency rates on consumer loans in recent years. In addition, it is possible that job insecurity and longer-run concerns about retirement income have caused many households to raise their targets for asset accumulation. However, the relative stability of the saving rate over the past few years suggests that the net effect of these factors on overall consumption—at least to date—has been limited.

Residential construction has, on the whole, been robust this year. Private housing starts averaged nearly 1.5 million units at an annual rate through June, a pace appreciably above that in 1995. In addition, the volume of shipments of mobile homes (“manufactured housing”), which has doubled over the past five years, now stands around 350,000 units at an annual rate, the highest level since 1974.

### Private Housing Starts



In the single-family sector, starts and sales of new homes were surprisingly firm in the face of severe weather in early 1996, and they moved still higher in the second quarter. Moreover, the regular survey of

the National Association of Homebuilders continued to indicate solid demand through early July, and the Mortgage Bankers Association reported that loan applications for home purchases remained brisk through midyear.

Relative to the lows reached in early 1996, the rate on 30-year conventional fixed-rate home mortgages has risen nearly 1½ percentage points and has been fluctuating around 8¼ percent in recent weeks. However, a number of factors seem to have cushioned the effects of these higher mortgage rates. In particular, rates on adjustable-rate mortgages have risen only about half as much as have those on 30-year fixed-rate loans. Also, house prices have firmed somewhat, which may have raised confidence in the investment value of residential real estate and thus contributed to the recent rise in the homeownership rate, which is now at its highest level since the early 1980s. Probably more important in this regard, however, is the trend in the affordability of housing. One simple measure of affordability is the monthly mortgage payment on a new home having a given set of attributes, divided by average monthly household income. Despite the increase in mortgage rates this year, this measure suggests that the cash-flow burden of homeownership is still only modestly above the lows of the past thirty years.

Construction of multifamily housing averaged about 300,000 units at an annual rate in the first half of 1996, a rate somewhat above that in 1995 but a fairly low one historically. Market conditions vary geographically, but the rental vacancy rate for the nation as a whole seems to have tilted back up, after generally trending down between mid-1993 and mid-1995. Also, the absorption rate, which measures the percentage of apartments that are rented within three months of their completion, edged back down in 1995 after several years of increases.

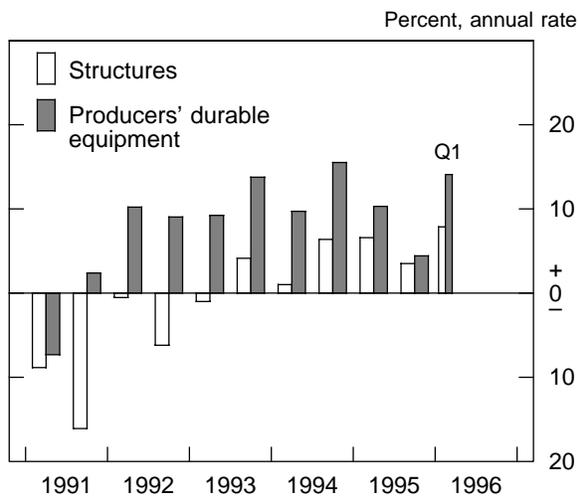
### The Business Sector

Developments in the business sector were quite favorable in the first half of 1996. After decelerating in 1995, real business fixed investment rose at a 12½ percent annual rate in the first quarter of 1996, with sizable advances for both equipment and structures. And, although real investment appears to have decelerated again in the second quarter, it probably posted an appreciable gain. Over the past four years, real investment has grown around 8 percent per year, on average, and now stands at a level that implies quite substantial growth in the capital stock. The updating of capital and the increase in capital per

worker are key to lifting productivity growth and living standards.

Outlays for producers' durable equipment rose at an annual rate of about 14 percent in real terms in the first quarter, after a 7½ percent rise over the course of 1995. As has been true throughout the expansion, much of the first-quarter growth was in real outlays for computers and other information-processing equipment; such investment received particular impetus from extensive price-cutting in virtually all segments of the computer market and from a push to acquire the state-of-the-art equipment needed to take full advantage of popular new software and opportunities for information transfer. However, incoming orders data and recent anecdotal reports suggest that the growth in real computer outlays may be slowing. Meanwhile, demand for other types of capital equipment, which had softened in 1995, firmed somewhat in the first quarter.

#### Change in Real Business Fixed Investment



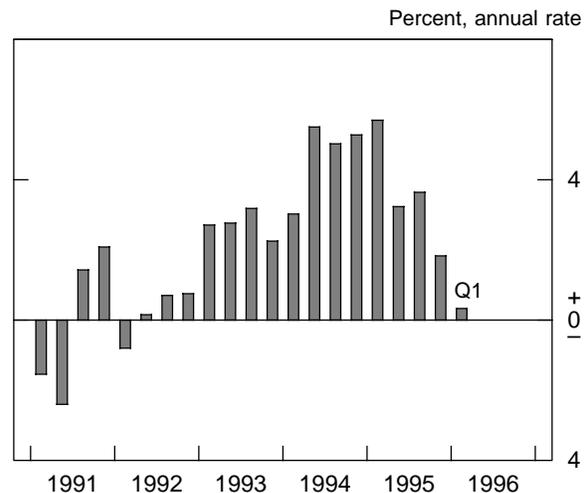
In the nonresidential construction area, real investment continued to expand in the first quarter. However, the monthly data suggest that outlays softened in the second quarter, an occurrence that is consistent with the downturn in contracts—a forward-looking indicator of construction outlays—since late 1995.

Trends within the construction sector have been divergent. In the office sector, the modest recovery that seemed to be under way appears to have waned even though vacancy rates have continued to fall and transactions prices have continued to rise. Outlays dropped noticeably in the fourth quarter of 1995 and the first quarter of 1996, and preliminary data suggest that they remained at a fairly low level in the

second quarter. In contrast, spending for commercial structures other than office buildings, which has been rising briskly since 1992, continued to advance through the first quarter—although further gains may be limited by an emerging excess of retail space in some parts of the country and the recent leveling out of transactions prices. Elsewhere, outlays for industrial construction, which had moved up over 1994 and the first half of 1995, have been nearly flat over the past few quarters, while construction of hotels and motels, which account for less than 10 percent of structures outlays, has boomed.

Investment in nonfarm business inventories slowed dramatically in the fourth quarter of 1995 after running at a fairly rapid pace over much of last year, and it nearly ceased in the first quarter of 1996 as motor vehicle stocks plummeted. Automotive stocks had risen appreciably over the second half of 1995, and some reduction was in train even before a March strike at General Motors curbed production; with the strike, dealer stocks were drawn down sharply. In addition, although firms outside motor vehicles apparently made considerable progress in rectifying inventory imbalances in late 1995, many continued to restrain production in response to continued weak orders in early 1996; producers of household durables and textiles are notable examples.

#### Change in Real Nonfarm Business Inventories

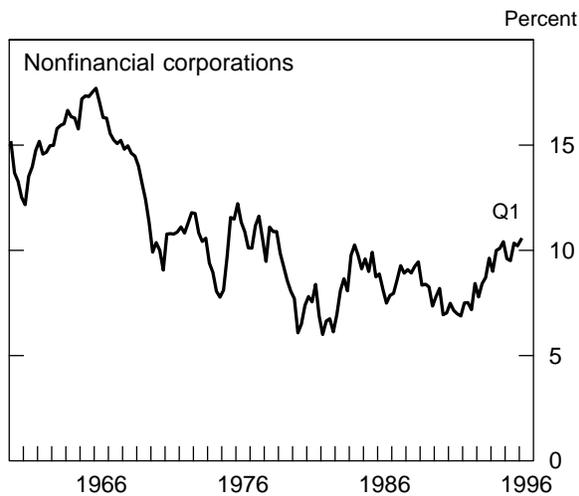


Inventory investment evidently rebounded in the second quarter, mainly because motor vehicle stocks stabilized as sales and production returned to rough balance. Outside of motor vehicles, stocks accumulated moderately, on balance, in April and May. As of May, inventory-sales ratios for all major

sectors were noticeably below their levels in late 1995; the decline in the ratio for retailers was especially steep.

Economic profits of all U.S. corporations continued to surge in the first quarter, extending the steep climb that began in the early 1990s. The strength in profits in recent quarters has been attributable in large part to robust earnings growth at domestic financial institutions and a rebound in profits at foreign subsidiaries of U.S. corporations. In the domestic nonfinancial corporate sector, the profit share—pre-tax profits divided by the sector’s GDP—has been hovering around 10 percent since mid-1994, after having risen appreciably over the preceding few years; its current level is similar to the levels attained in the mid-1980s but well below the highs of the 1960s and 1970s. About half of the increase in the sector’s profit share since the early 1990s has reflected a reduction in net interest expenses.

#### Before-Tax Profit Share of GDP



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

#### The Government Sector

Although the nation continues to grapple with the prospect of growing federal budget deficits in the years ahead, the incoming news on the budget for fiscal 1996 has been extremely favorable. The deficit in the unified budget over the first eight months of the fiscal year—the period from October to May—was only \$109 billion, \$27 billion less than during the comparable period of fiscal 1995. The improvement in the deficit primarily reflected exceptionally rapid growth in receipts; outlays continued to rise at about

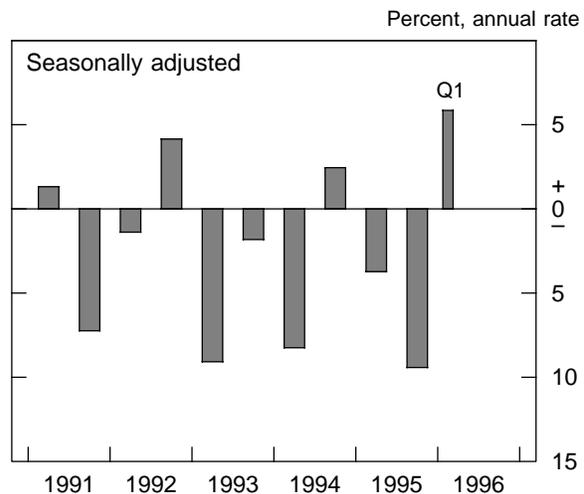
the same pace as had been recorded, on average, over the preceding four years. If present trends continue, the fiscal 1996 deficit, when measured as a percentage of nominal GDP, will be the smallest since 1979.

Federal receipts in the first eight months of fiscal 1996 were 8 percent higher than in the same period a year earlier; the rise was considerably greater than that of nominal GDP. Boosted by the upswing in business profits, corporate taxes have been increasing at double-digit rates since fiscal 1993, and that path has extended into fiscal 1996. Individual income taxes have also risen sharply this year; little information is available on the factors behind the surge in individual payments, but it may have resulted, at least in part, from capital gains realizations associated with the strong performance in financial markets last year.

In total, federal outlays in the first eight months of fiscal 1996 were 4 percent higher than during the corresponding period of fiscal 1995. Outlay growth was damped by the reductions in discretionary domestic spending implied by this year’s appropriations legislation. However, expenditures for “mandatory” programs continued to rise rapidly, and net outlays for deposit insurance were less negative than in 1995 (i.e., insurance premiums and the proceeds from net sales of thrift assets declined). In addition, net interest payments increased moderately, reflecting the growth in the stock of outstanding federal debt.

Federal expenditures on consumption and investment—the part of federal spending included directly in GDP—increased at an annual rate of about 6 percent in real terms in the first quarter of 1996 after declining about 13 percent in the fourth quarter

#### Change in Real Federal Expenditures on Consumption and Investment

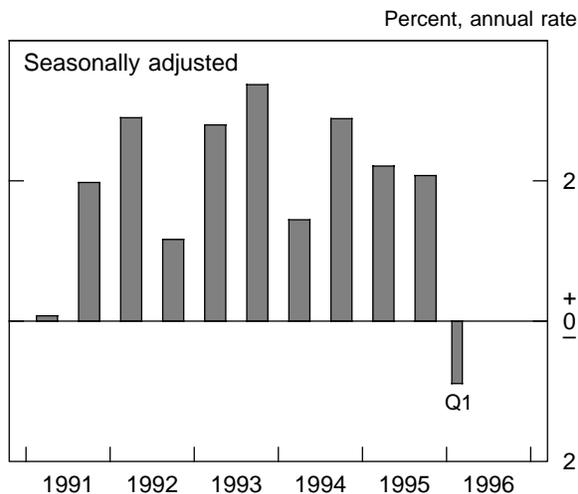


of 1995. In part, real spending rose in the first quarter because the government shutdowns that occurred during the budget crisis depressed real spending less in the first quarter than in the fourth. Even so, given the enacted appropriations, the first-quarter increase was almost surely a transitory spike.

The fiscal position of states and localities has been relatively stable in the aggregate over the past few years. As measured in the national income and product accounts, the surplus (net of social insurance funds) in the sector's operating accounts has fluctuated in the range of \$30 billion to \$40 billion (annual rate) since the beginning of 1994; it stood around the middle of that range in the first quarter. On the whole, these governments are in considerably better shape than they were in the early 1990s. Even so, the sector remains under pressure to balance rising demand for services—especially in education, corrections, and health care—against the public desire for tax relief.

Real expenditures on consumption and gross investment—the part of state and local spending included directly in GDP—declined somewhat in the first quarter of 1996. However, the decrease reflected primarily the effects of the unusually adverse winter weather, and spending appears to have rebounded in the second quarter. State and local employment posted a respectable gain, on net, over the first six months of the year. In addition, outlays for construction rose about 3½ percent in real terms over the year ending in the first quarter, reflecting higher spending on highways and schools; monthly construction data through May suggest that spending rose substantially in the second quarter.

Change in Real State and Local Expenditures on Consumption and Investment

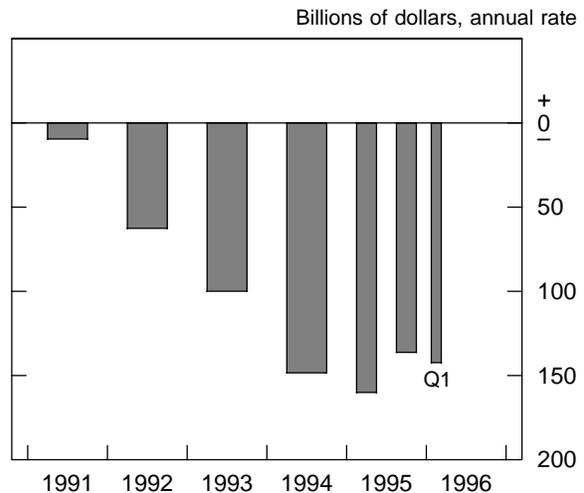


Receipts of state and local governments rose about 4 percent in nominal terms over the year ending in the first quarter, about matching the rise in nominal GDP. The sector's own-source general receipts, which comprise income, corporate, and indirect business taxes, rose about 1 percentage point faster, with solid gains in all major components. Federal grants have changed little, on net, over the past four quarters.

### The External Sector

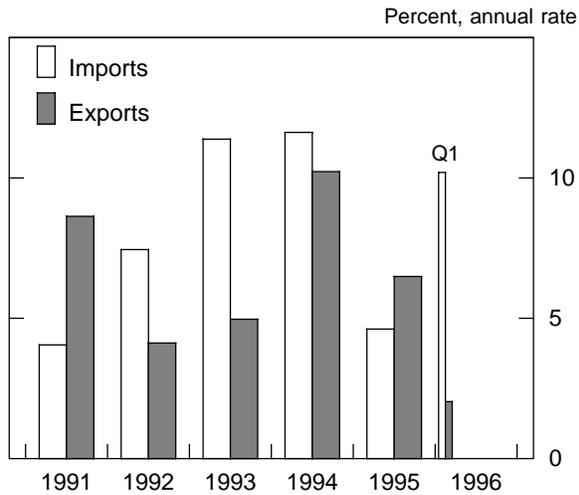
The nominal trade deficit in goods and services widened from its low fourth-quarter level of \$78 billion at an annual rate to \$97 billion in the first quarter of 1996, slightly less than the deficit of \$105 billion for 1995 as a whole. The current account deficit stood at \$142 billion (annual rate) in the first quarter, about the same as the figure for 1995 as a whole. In April, the trade deficit increased from the average level for the first quarter.

U.S. Current Account



After expanding very slowly during the second half of 1995, the quantity of U.S. imports of goods and services rose about 10 percent at an annual rate in the first quarter, and preliminary data for April show another sizable increase. The rebound in imports largely reflected the strengthening of U.S. economic activity. In addition, non-oil import prices have declined somewhat since last fall, after having risen sharply in late 1994 and early 1995. A turnaround in imported automotive vehicles, consumer goods, and non-oil industrial supplies, following more than six months of declines, accounted for most of the increase in imports during the first four months of 1996.

## Change in Real Imports and Exports of Goods and Services



The quantity of U.S. exports of goods and services expanded at a 2 percent annual rate during the first quarter; it also appears to have expanded at about this pace in April. The somewhat subdued pace of export growth so far this year reflects in part a bunching of shipments, particularly of machinery, that resulted in an unusually strong increase in exports in the fourth quarter of last year.

Trends in economic activity have varied across the major foreign industrial countries so far in 1996. In Japan, economic recovery appears to have taken hold, although the underlying pace of real GDP growth is clearly less than the nearly 13 percent annual rate reported for the first quarter; the first-quarter growth rate was boosted in part by a temporary surge in government spending and measurement practices associated with the leap year.<sup>1</sup> In Canada, growth remained subdued in the first quarter as real GDP rose only 1¼ percent at an annual rate despite much stronger growth in domestic demand; indicators for the second quarter suggest some strengthening.

Economic performance so far this year in Europe has been mixed. In Germany, real GDP declined another 1½ percent at an annual rate in the first quarter, largely because severe weather caused a substantial contraction in construction spending; preliminary data suggest that construction activity rebounded in the second quarter with the return to more normal weather. In contrast, French real GDP

1. Although the statistical agencies in many countries take the number of working days in the quarter into account when seasonally adjusting data, the statistical agencies in Japan, France, and Italy among the G-10 countries do not make working-day adjustments.

expanded nearly 5 percent at an annual rate in the first quarter, supported by a very sizable rebound in consumption as well as leap-year effects; strikes during the fourth quarter of last year depressed economic activity and contributed to a decline in private consumption spending. Indicators for the second quarter suggest that output growth moderated from its first-quarter pace. In the United Kingdom, real GDP grew at an annual rate of 1½ percent during the first quarter, somewhat more slowly than during the second half of 1995. On the policy front, most European countries are seeking to rein in their fiscal deficits during 1996 and 1997, in part to comply with the criterion in the Maastricht Treaty that countries participating in the third stage of the European Monetary Union, now scheduled to begin on January 1, 1999, not have excessive fiscal deficits. As a reference value, the treaty specifies that deficits greater than 3 percent of a country's GDP are excessive, but it also provides scope for accepting deficits above that level in some circumstances.

In Mexico, robust growth of real GDP in the first quarter extended the recovery in economic activity that began in the second half of 1995. Through June, the Mexican trade balance remained roughly stable at the level reached toward the end of last year, after having improved markedly over the course of 1995. Argentina also appears to be emerging from the steep declines in output experienced during the first half of 1995, while Chile continues to enjoy steady growth. Activity in Brazil has begun to expand again in recent months, following a sharp contraction in mid-1995.

Economic growth in our major Asian trading partners (other than Japan) appears to have picked up again this year after slowing noticeably during the second half of 1995 from the extremely rapid rates recorded in 1994 and the first half of 1995. The recent pickup in activity was associated with an easing of monetary policy in some of these countries in the second half of last year and the early part of this year. In China, output appears to have expanded during the first quarter at around the 10 percent annual rate recorded in 1995, with a pickup in consumption spending compensating for weaker growth in the external sector.

Consumer price inflation generally stayed low in the major foreign industrial countries and declined or remained moderate elsewhere. In Japan, prices in the second quarter, on average, were slightly above their year-earlier levels because of the effects of yen depreciation on import prices; this upturn followed a year of deflation. In western Germany, inflation slowed

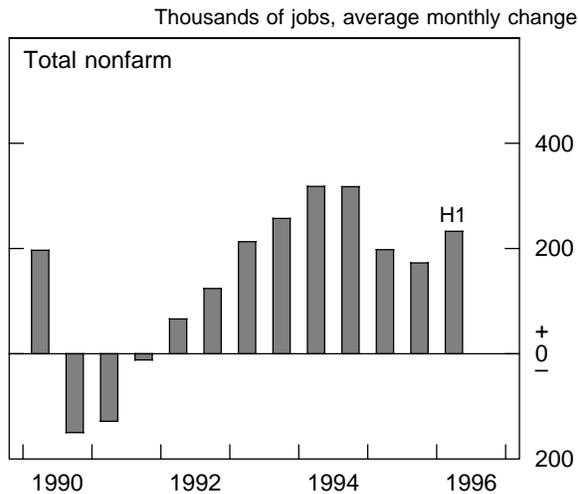
through June to only about 1¼ percent. Inflation in Italy remained higher than in the other major foreign industrial countries but slowed to below 4 percent through June. In Canada, inflation also moved down further this year, to about 1½ percent in May.

Inflation trends in Latin America have been mixed. In Mexico, the twelve-month change in consumer prices diminished to about 32 percent in June, compared with a reading of 52 percent for the twelve months ending in December 1995. Consumer price inflation has also declined further in Brazil and remained low in Argentina. In contrast, prices have picked up in Venezuela in response to the depreciation of its currency associated with the adoption of a program of macroeconomic stabilization. In Asia, inflation has decreased so far in 1996 in China and remained moderate to low elsewhere.

### Labor Market Developments

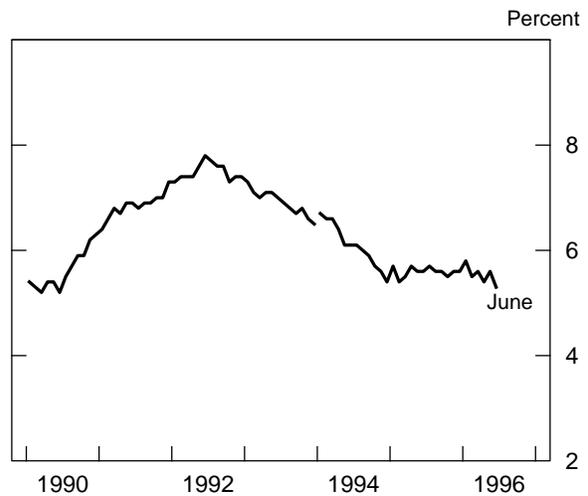
Labor demand was strong over the first half of 1996. Growth in nonfarm payroll employment exhibited considerable month-to-month variability but averaged a hefty 235,000 per month. In addition, the civilian unemployment rate remained low, holding in the narrow range around 5½ percent that has prevailed since late 1994.

### Net Change in Payroll Employment



Employment gains were fairly broadly based over the first half of the year. The services sector, which now accounts for nearly 30 percent of nonfarm employment, continued to be a mainstay of job growth, showing increases of nearly 120,000 per month, on average, over the first half. Within ser-

### Civilian Unemployment Rate



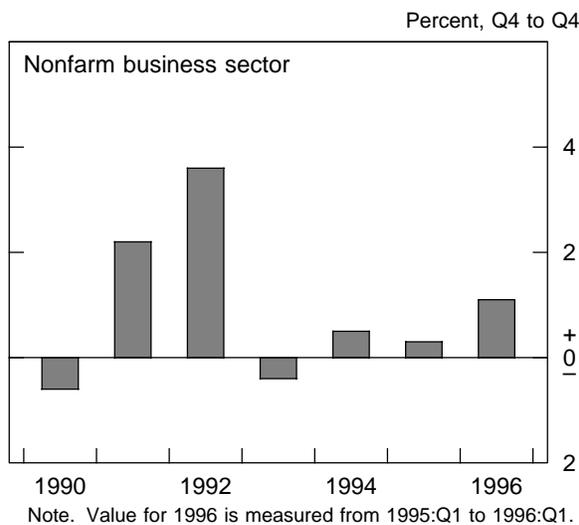
Note. The break in data at January 1994 marks the introduction of a redesigned survey; data from that point on are not directly comparable with the data of earlier periods.

vices, growth in employment in business services remained rapid, with large gains at computer and data processing firms as well as at temporary help agencies, and employment in health services trended up further. In addition, construction payrolls rose a brisk 30,000 per month, on average—an annual rate of about 7 percent. Elsewhere, payrolls at wholesale and retail trade establishments continued to increase at about the same pace as that in 1995, and employment in the finance, insurance, and real estate category picked up after having been nearly flat over 1994 and 1995.

Developments in manufacturing were uneven but showed some improvement in the second quarter. As 1996 started, firms were still adjusting employment to the slower path of output that had been evident since early 1995, and payrolls—especially at firms producing nondurable goods—were reduced further. In the past three months, manufacturing employment has held fairly steady, buoyed by the pickup in industrial activity, and the average factory workweek, which had contracted appreciably in 1995, trended up through June.

For the nonfarm business sector as a whole, productivity rose at an annual rate of about 2 percent in the first quarter of 1996, echoing the acceleration in output. However, productivity had posted an outright decline in the fourth quarter of 1995; all told, productivity rose about 1 percent over the year ending in the first quarter of 1996, in line with the average pace this decade. In the manufacturing sector, productivity rose 4¼ percent over the past

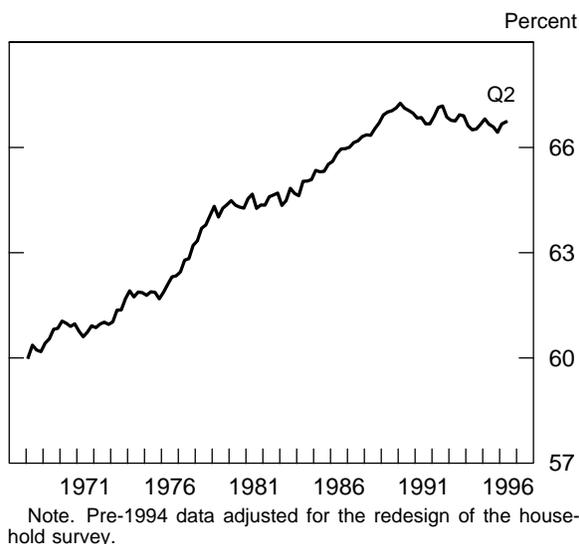
## Change in Output per Hour



year, although the reported increase was probably overstated because firms in this sector have been relying increasingly on workers supplied by temporary help firms, who are counted as service industry employees rather than as manufacturing employees in the establishment survey of the Bureau of Labor Statistics.

Labor force participation has remained sluggish this year. The participation rate, which measures the percentage of the working-age population that is either employed or looking for work, did retrace the dip that occurred in late 1995. But, taking a longer perspective, the overall participation rate (adjusted

## Labor Force Participation Rate



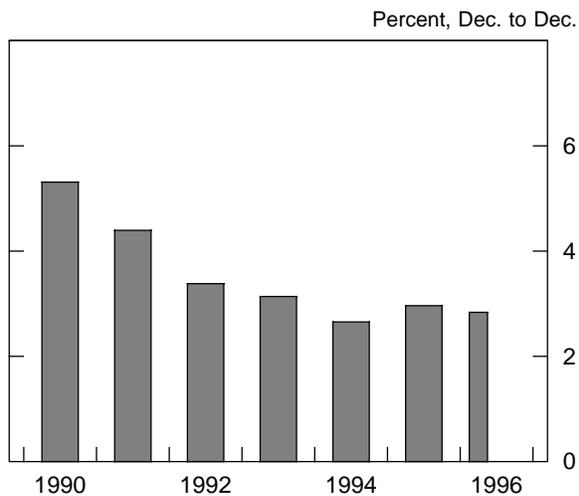
for the redesign of the household survey in 1994) has changed little, on net, since 1989, after rising fairly steadily from the mid-1960s to the late 1980s. The flattening reflects mainly a marked deceleration in women's participation, owing both to a leveling off in the percentage of women who are in the labor force for at least part of a given year and slower growth in the average number of weeks they spend in the labor force that year. Moreover, with the average number of weeks these women spend in the labor force having risen to a level only slightly below the average for men, a significant rebound in participation does not seem very likely over the near term. The sluggishness in participation tends to restrain the growth of potential output unless it is offset by a better productivity performance or by faster growth in the working-age population—neither of which has yet been in evidence.

Despite the tightness in labor markets in recent quarters, the broad trends in hourly compensation appear to have held fairly steady. The employment cost index for private industry—a measure that includes wages and benefits—rose at an annual rate of about 3 percent over both the first three months of 1996 and over the twelve months ending in March; the ECI had also increased about 3 percent over the twelve months ending in March 1995. Compensation growth has continued to be damped by a marked deceleration in employer-paid benefits—especially payments for medical insurance, which have been restrained by the slowing in medical care costs, the switch in insurance arrangements from traditional indemnity plans to HMOs and other managed care plans, and changes in the provisions of health plans (including greater sharing of health care costs by employees). On the whole, wages also seem to have been held in check, although the most recent data may be hinting at some acceleration. Notably, the wage and salary component of the ECI rose sharply in the first quarter; although the data are volatile and the first-quarter figure likely overstates current wage trends, the twelve-month change in the series moved up to 3¼ percent, nearly ½ percentage point larger than the increases in the preceding two years. Separate data on average hourly earnings of production or nonsupervisory workers also show a recent acceleration in wages; the twelve-month change in this series moved up to about 3½ percent in June.

## Price Developments

The underlying trend of prices has remained favorable this year—notably, the CPI excluding food and

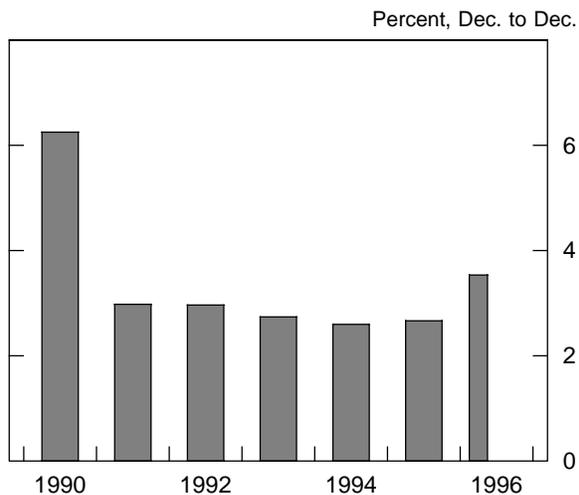
### Change in Consumer Prices Excluding Food and Energy



Note. Consumer price index for all urban consumers. Value for 1996 is measured from December 1995 to June 1996, at an annual rate.

energy rose at an annual rate of  $2\frac{3}{4}$  percent over the first six months of the year, near the lower end of the narrow range than has been evident since early 1994. Developments in food and energy markets boosted overall inflation, however, and the total CPI rose at an annual rate of  $3\frac{1}{2}$  percent over the first half; this pattern was the reverse of that seen in 1995, when a small drop in energy prices, combined with only a modest increase in food prices, held the rise in the total CPI to just  $2\frac{1}{2}$  percent. Meanwhile, the producer price index for finished goods rose

### Change in Consumer Prices



Note. Consumer price index for all urban consumers. Value for 1996 is measured from December 1995 to June 1996, at an annual rate.

about  $2\frac{3}{4}$  percent over the twelve months ending in June; excluding food and energy, the PPI rose  $1\frac{1}{2}$  percent, a bit less than over the preceding year.

Consumer energy prices picked up around the turn of the year and rose at an annual rate of about 12 percent, on net, over the first six months of 1996. With crude oil stocks drained by strong worldwide demand for heating oil and weather-related supply disruptions in the North Sea and elsewhere, the spot price of West Texas intermediate (WTI) soared from around \$18 per barrel, on average, in the second half of 1995 to a high of around \$25 per barrel in mid-April; the WTI price has since retraced much of that runup. Reflecting the surge in crude oil prices, retail prices of refined petroleum products rose sharply through May, on balance. However, they fell markedly in June, and private surveys of gasoline prices imply a further decrease in early July.

Retail food prices rose at an annual rate of about 4 percent over the first six months of 1996, somewhat above the pace of the preceding few years. At the farm level, prices of grains and other commodities rose to exceptionally high levels as adverse crop conditions in some parts of the country exacerbated an already tight stock situation. For some foods—notably, dairy products, cereals and bakery products, poultry, and pork—the pass-through tends to occur relatively rapidly, and retail prices of such items have already risen appreciably. Beef prices fell through May as producers sold off herds in response to higher feed costs and poor range conditions; they turned around in June and will likely rise further over the next several quarters as the sell-off of breeding stock will eventually lead to tighter supplies.

Price increases for consumer goods other than food and energy slowed to 1 percent at an annual rate over the first half of 1996, after averaging about  $1\frac{1}{2}$  percent per year over the preceding three years. Increases in goods prices have been restrained in part by the uptrend in the dollar since mid-1995, which has helped to damp import prices. In addition, with the operating rate in the manufacturing sector having fallen to about its long-term average, pressure from the materials side has been limited. Indeed, the PPI for intermediate materials (excluding food and energy) actually fell a bit over the past twelve months, after having risen  $7\frac{1}{2}$  percent over the preceding year. Looking ahead, however, the latest report from the National Association of Purchasing Managers suggests that vendor performance deteriorated markedly in June, a development that

could portend some firming of prices of materials and supplies over the near term.

Prices of non-energy services rose  $3\frac{3}{4}$  percent at an annual rate over the first half, about the same as the rise over 1995 as a whole. Airfares accelerated significantly in the first half. However, shelter costs increased less rapidly than they had in 1995, and prices of medical care continued to decelerate; over the six months ending in June, the CPI for medical care services rose at an annual rate of only about  $3\frac{1}{4}$  percent, roughly 1 percentage point below the 1995 pace. Moreover, there is some evidence that the CPI may be understating the recent slowing in medical care inflation, in part because it does not fully capture the discounts negotiated between medical providers and insurers, including managed care plans. The price measure used to deflate consumer expenditures on medical care in the NIPA better reflects such factors; it rose less than 2 percent over the year ending in the first quarter of 1996, after having risen  $4\frac{1}{2}$  percent over the preceding year.

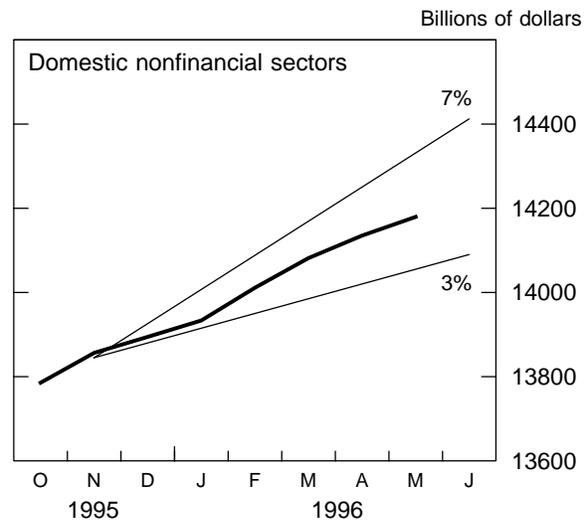
Judging from the various surveys of consumers and forecasters, expectations of near-term CPI inflation deteriorated slightly in the first half of 1996. Notably, although both the University of Michigan and the Conference Board had reported a noticeable drop in their one-year-ahead measures in the second half of 1995, that improvement was not sustained in 1996; the recent monthly readings have bounced around, but the June results from both surveys were similar to those recorded, on average, in the first half of 1995. In contrast, longer-run inflation expectations, which have presumably been less affected by the recent news in food and energy markets, have held fairly steady. Smoothing through the monthly data, the University of Michigan's measure of expected CPI inflation over the next five to ten years has not changed much since late 1994, and the survey of professional forecasters conducted by the Federal Reserve Bank of Philadelphia during the second quarter of 1996 produced the same expectation for the ensuing ten years as that in the survey taken in the fourth quarter of 1995.

## Financial Developments

### Credit

Financial conditions in the first half of 1996 supported the pickup in the growth of spending. For the most part, lenders continued to pursue credit applicants aggressively as reflected, for example, in nar-

## Debt: Annual Range and Actual Level



row spreads of interest rates on corporate securities over those on Treasury securities. The debt of domestic nonfinancial sectors increased about  $4\frac{3}{4}$  percent at an annual rate from the fourth quarter of 1995 through May of this year, a bit more slowly than last year but still sufficient to place the level of this aggregate in the middle of its monitoring range for 1996.

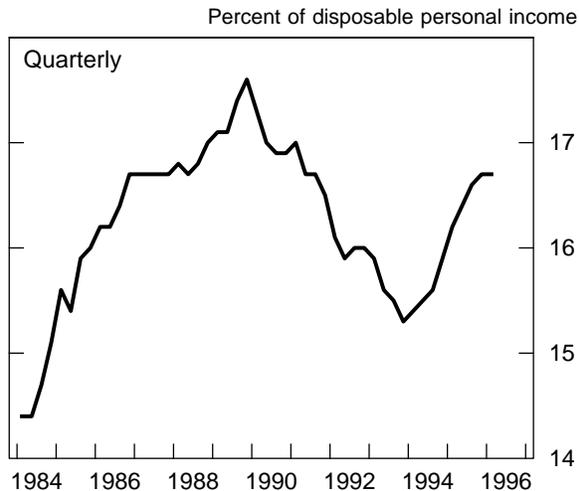
**The Government Sector.** Federal debt outstanding increased about 4 percent at an annual rate over the first half of 1996, a shade below the average rate of increase last year. The impasse over the debt ceiling disrupted the timing and size of some Treasury auctions but did not alter the longer-term trajectory of federal debt.

The pattern of net borrowing by state and local governments in the last several years has been heavily influenced by their efforts to retire debt issued at relatively high interest rates in the mid-1980s. They have pursued these efforts through a strategy of advance refunding: In the early 1990s, when bond yields were seen as especially favorable, state and local governments issued new debt, even before call provisions on the older bonds could be exercised, and placed the proceeds in escrow accounts. As it became possible to do so, the issuing governments began calling the older debt, using the contents of the escrow accounts to complete the transactions. Reflecting these retirements, the amount of state and local government debt outstanding declined about 4 percent per year in 1994 and 1995. This process is still in train but evidently on a smaller scale; available information suggests that state and local government debt outstanding declined only marginally during the first half of this year.

**The Household Sector.** The pace of borrowing by households appears to have moderated somewhat from the elevated rates of 1994 and 1995, but it remains substantial. In particular, consumer credit expanded at a 9½ percent annual rate from the fourth quarter of 1995 through May of this year, down from 14½ percent over the four quarters of 1995. Mortgage debt actually expanded somewhat more rapidly during the first quarter than in 1995 (7¾ percent at an annual rate versus 6½ percent), and available indicators suggest that growth during the second quarter dropped back only to about last year's pace. The recent backup in mortgage rates, which only began in February, has had little effect on borrowing thus far, and might even have increased it temporarily by accelerating transactions.

The rapid growth in household debt during the past few years has resulted in a sizable increase in the estimated ratio of scheduled payments of principal and interest to disposable personal income. This measure of debt-servicing burden has trended up over the past two years, and as of the first quarter of 1996, was approaching—but still short of—the levels attained toward the end of the last business cycle expansion.

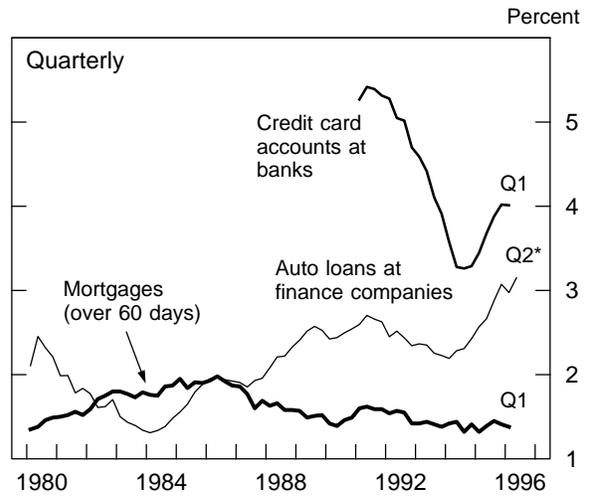
**Household Debt Service Burden**



Note. Debt service is the sum of required interest and principal payments on household-sector mortgage and consumer debt.

Several other recent indicators suggest that some households are experiencing financial strains. For example, the Consolidated Report of Condition and Income shows that the delinquency rate on credit-card receivables at commercial banks has increased significantly in recent quarters, retracing about one-third of the improvement that took place during the

**Delinquency Rates on Household Loans**



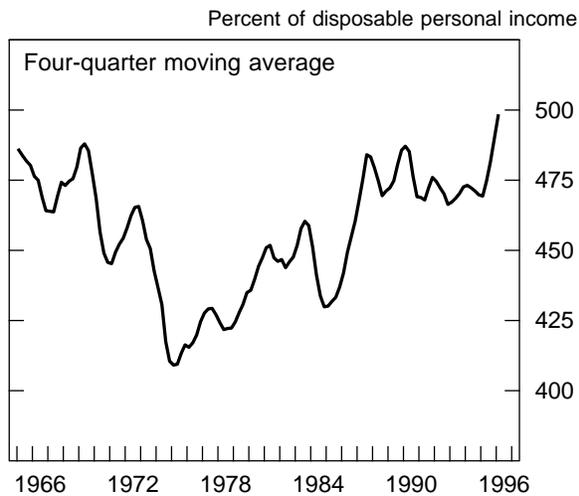
\*The last data point is an average of the delinquency rates for April and May 1996.

first few years of the current economic expansion. The delinquency rate on auto loans at the finance companies affiliated with the major manufacturers moved up sharply beginning about two years ago, and since late last year has hovered around historically high levels. Anecdotal evidence suggests that the rise in both credit-card and auto-loan delinquency rates reflects a strategy to liberalize lending standards as part of an overall marketing effort. The auto loan delinquency rate has also been boosted a bit by the increased prevalence of leasing. Lease customers tend to be better credit risks than the average conventional borrower, and the shift toward leasing has had the effect of skimming the more financially secure car buyers and thus degrading somewhat the remaining pool of people financing their purchases through conventional loan contracts.

The personal bankruptcy rate also surged to a new high this year. The extent to which this development reflects mounting financial difficulties of households is clouded, however, by changes in federal law (effective at the start of 1995) that may have increased the attractiveness of bankruptcy by increasing the value of assets that can be protected from liquidation in bankruptcy proceedings. The “cost” of bankruptcy to households also has been effectively lowered by the greater willingness of lenders to extend credit to riskier borrowers—even those with a previous bankruptcy on their records.

Other indicators are less suggestive of a deterioration in the financial condition of households. For example, the delinquency rate for mortgage loans sixty days or more past due at all lenders is near its

## Household Net Worth



lowest level in two decades, while the rate on closed-end consumer loans—despite having moved up over the past eighteen months—remains low by historical standards. Moreover, the aggregate balance sheet of the household sector clearly is in very good shape; owing in large part to the surge in equity prices over the past year and a half, the ratio of household net worth to disposable personal income moved up into record territory recently.

Apparently in response to the recent runup in delinquency and charge-off rates on consumer loans, banks have selectively tightened their standards for consumer lending. These actions reversed steps taken earlier in the decade, when many card issuers increased the growth of their credit card receivables by offering accounts to customers who previously would have been denied credit. The belief was that more sophisticated credit scoring techniques would control risks adequately, but it appears that some “adverse selection” occurred and that the uptick in delinquencies has been larger than at least some banks had planned. About 20 percent of the respondents in the Federal Reserve’s most recent survey of senior loan officers reported having tightened standards for approving applications for credit cards, and 10 percent reported tightening standards for other consumer loans. Notwithstanding the recent tightening of standards, supply conditions for loans from banks to consumers still appear accommodative.

**The Business Sector.** The debt of nonfinancial businesses also appears to have expanded somewhat less rapidly during the first half of 1996 than it did last year. In part, the moderation in borrowing can be

traced to the behavior of the financing gap for incorporated nonfinancial enterprises—the excess of their capital expenditures (including inventory investment) over their internally generated funds. During 1995, this gap narrowed quite substantially, reflecting strong profits and a marked reduction in inventory investment. Available indications are that the gap has remained small this year.

External funding for business spending has been in plentiful supply thus far this year. One piece of evidence on this point is that interest-rate spreads on investment-grade bonds have edged down slightly since the beginning of the year. Additionally, spreads on high-yield bonds have declined markedly, and are as low as they have been in at least a decade. Also, supply conditions for loans from banks to businesses continue to look quite favorable. According to the Federal Reserve’s most recent survey of bank lending officers, standards for approval of commercial and industrial loans were about unchanged from January to May of this year, and terms on such loans were eased on net. Surveys by the National Federation of Independent Business indicate that small businesses have not faced difficulty getting credit, and stories abound of new small-business lending programs of banks.

Gross offerings of long-term bonds by nonfinancial corporations have been running about in line with last year’s pace. However, the mix of issuers has shifted somewhat, reflecting the changing structure of rates. Late last year and early this year, investment-grade corporations were issuing a hefty volume of bonds in order to pay down commercial paper and to refinance existing long-term debt. As the rates on investment-grade bonds increased this year, issuance of such debt dropped off. Rates on high-yield bonds moved up less, however, and issuers of those bonds continued to offer new debt at a rapid pace.

Gross issuance of equity shares by nonfinancial corporations has been exceedingly strong this year. Indeed, total offerings in each of the three months of the second quarter set successive monthly records. This activity has been fueled by initial public offerings and other equity issuance by relatively young companies. Share retirements by nonfinancial corporations have also been very heavy. Announced stock buybacks by such firms in both the first and second quarters ran at \$28 billion per quarter—the fastest pace since the late 1980s. On net, available information suggests that nonfinancial corporations retired even more equity during the first half of 1996 than they had in 1995.

Share retirements and merger activity have generated much less issuance of debt recently than they did in the 1980s. Recent share repurchases have been undertaken mostly by companies seeking to return the excess cash on their balance sheets to stockholders. And recent mergers and acquisitions have mainly been accomplished through stock swaps between companies in similar lines of business, rather than the leveraged transactions commonplace in the 1980s. In line with the limited extent of debt financing, the mergers executed thus far in 1996 have resulted in little net change in bond ratings—again in marked contrast to the experience of the 1980s.

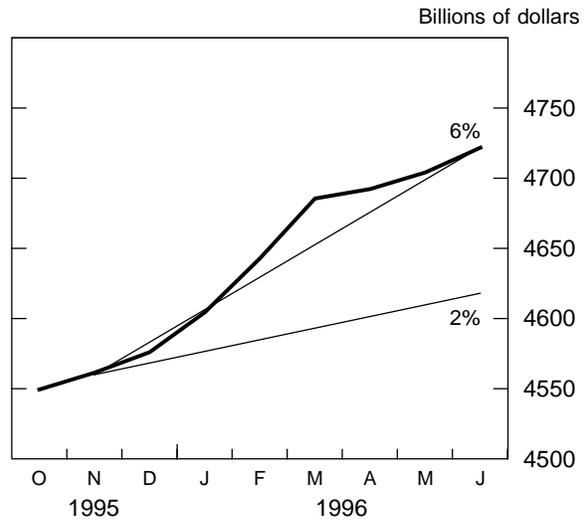
**Depository Intermediation.** The growth of credit provided by depository institutions slowed sharply in the fourth quarter of last year and first quarter of this year, and commercial bank credit—a component of total depository credit for which more recent data are available—slowed further in the second quarter. The share of thrift institutions in total depository credit has continued to decline in recent quarters. This long-standing trend may have been given additional impetus last summer by the opening up of a differential between the premium rates paid by banks and thrifts for their deposit insurance; this differential has reduced the cost of funds for banks relative to the cost of funds for thrift institutions.

The reduction and subsequent elimination of the deposit insurance premium for financially sound banks probably played a role in shifting bank funding toward deposits. During the first half of 1996, banks increased their deposit liabilities more rapidly than their nondeposit liabilities—a contrast from the preceding few years when banks relied disproportionately for their funding on nondeposit sources, including borrowing from their foreign offices.

**The Monetary Aggregates**

The increased reliance on deposit sources of funding by banks has helped support the growth of the broad money aggregates of late. Between the fourth quarter of last year and June of this year, M3 expanded at an annual rate of about 6 percent, putting it at the upper boundary of its annual growth cone. As in 1995, the growth in M3 this year was led by those components not included in M2. In aggregate, these components increased about 11 percent at an annual rate between the fourth quarter of last year and June of this year, only moderately below the 1995 average pace of 14½ percent. Institution-only money-

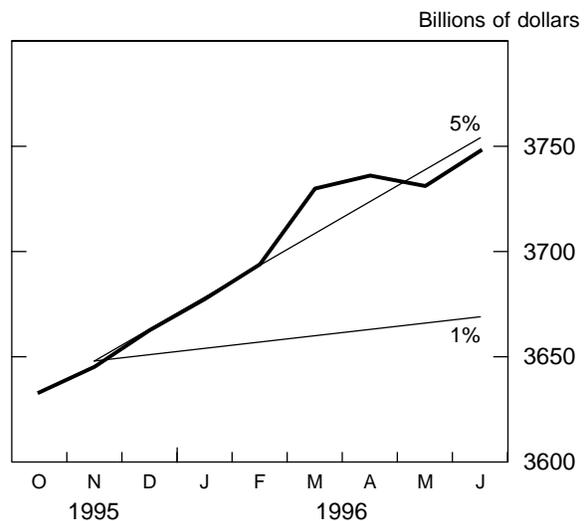
M3: Annual Range and Actual Level



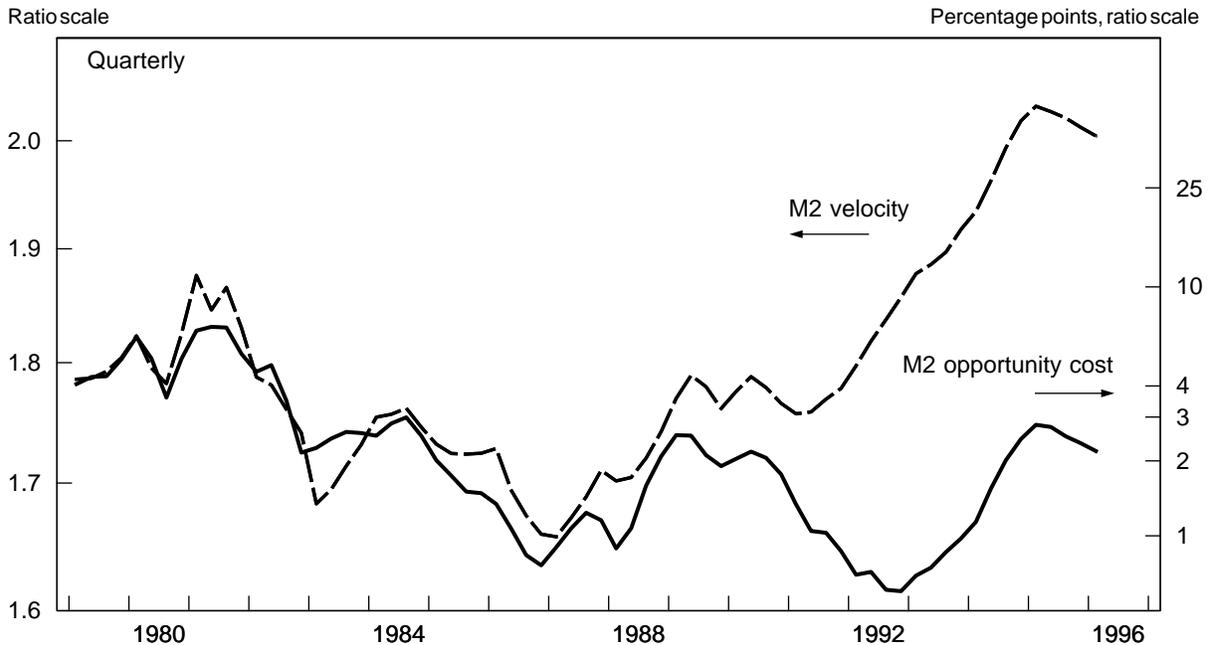
market mutual funds increased about 18 percent at an annual rate over this period. This component of the money stock increased especially rapidly during the first three months of the year. Often, the yields on these funds lag changes in short-term market interest rates, making them particularly attractive investments when short-term market rates are declining, as they were around the turn of the year when the Federal Reserve eased policy.

M2 increased 4¾ percent at an annual rate between the fourth quarter of 1995 and June of this year, leaving it near the upper boundary of its growth range. For many years before the early 1990s, the velocity of M2 (defined as the ratio of nominal GDP to M2) moved roughly in tandem with the opportunity cost of

M2: Annual Range and Actual Level



## M2 Velocity and the Opportunity Cost of Holding M2



Note. M2 opportunity cost is two-quarter moving average of three-month Treasury bill less weighted average rate paid on M2 components.

holding M2—that is, the interest earnings forgone by holding M2 assets rather than market instruments such as Treasury bills. This relationship implied that M2 tended to move in proportion to nominal GDP, except as it was influenced by changes in the opportunity cost of holding it. When the opportunity cost rose, owners of M2 tended to economize on their holdings, driving up the velocity of M2.

Beginning around the early 1990s, however, this historical relationship began to break down. Indeed, in 1991 and 1992, the velocity of M2 rose sharply even as the opportunity cost of holding M2 declined. A number of reasons for this development have been adduced, including the unusually steeply sloped yield curve and very low level of short-term interest rates, which helped to attract the public out of liquid balances and into more readily available long-term mutual funds; the credit crunch at banks and the resolution of troubled thrifts, which reduced the aggressiveness with which these institutions sought retail deposits; and household balance-sheet restructuring, which entailed in part repayment of loans out of liquid money balances. The divergent movement of the velocity of M2 and its opportunity cost continued until the end of 1992. More recently, the variables have once again been moving essentially in parallel. In light of the rapid ongoing pace of innovation and technological change in financial ser-

VICES, however, it is impossible to know whether the new parallel movement of velocity and the opportunity cost will persist into the future.

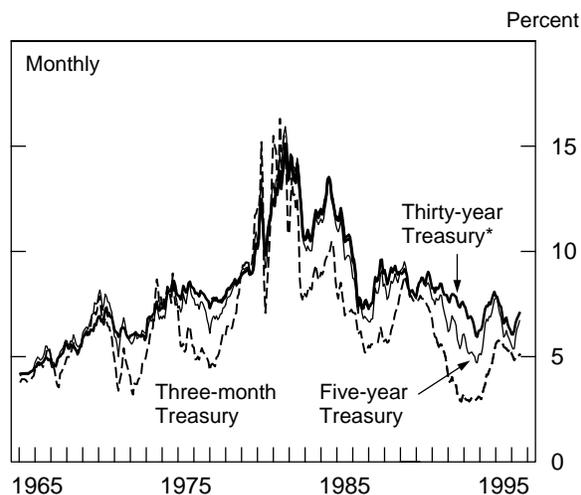
M1 declined about  $1\frac{3}{4}$  percent at an annual rate during the first half of 1996, just as it had done over the four quarters of 1995. The recent sluggish behavior of M1 reflects the ongoing spread of so-called sweep programs, under which idle reservable deposits are “swept” into money-market-deposit accounts (MMDAs). (An appendix provides additional information on sweep accounts.) Estimates based on initial amounts swept suggest that M1 would have expanded at about a 7 percent annual rate during the first half of 1996 in the absence of these programs. Another factor contributing to the recent weakness in M1 has been the growth of currency, which has been sluggish by the standards of the early 1990s. Foreign demand for currency apparently has tailed off somewhat. In large part, the slackening in net foreign demand owes to substantial reflows from Argentina and Mexico, where earlier worst-case fears about the stability of the financial system have not been realized. Reflows from Western Europe and Asia have also been significant, but net shipments to the former Soviet Union remain sizable. On the whole, demand for the new \$100 bill has been substantial, but this has not had any detectable effect on the stock of currency outstanding.

The sluggish growth of currency has held down expansion of the monetary base to only about 2 percent at an annual rate thus far this year. The other restraint on the growth of the base has been the turnaround in the behavior of required reserves. After surging at double-digit rates in 1992 and 1993, required reserves have been on a downward trend, and at an increasing rate. Thus far this year, required reserves have contracted about 7½ percent at an annual rate. The emergence of this trend is perhaps the most direct consequence of the spread of sweep programs. Absent such programs, required reserves probably would have increased about 10 percent over the same period, owing to strong growth in demand deposits. Continued spread of sweep programs could affect the federal funds market, perhaps leading to greater volatility like that experienced in early 1991 following the elimination of reserve requirements on non-transactions deposits. Thus far, such instabilities have not been realized, but the Federal Reserve is monitoring the situation carefully.

### **Interest Rates, Equity Prices, and Exchange Rates**

**Interest Rates.** Interest rates on Treasury securities rose over the first half of 1996, with the most pronounced increases occurring for intermediate-term securities. Between the end of December 1995 and the middle of July, the rate on three-month bills increased somewhat less than ¼ percentage point, the rate on 5-year notes rose about 1¼ percentage points, and the rate on 30-year bonds rose about 1 percentage point. Despite these increases, nominal Treasury

Selected Treasury Rates

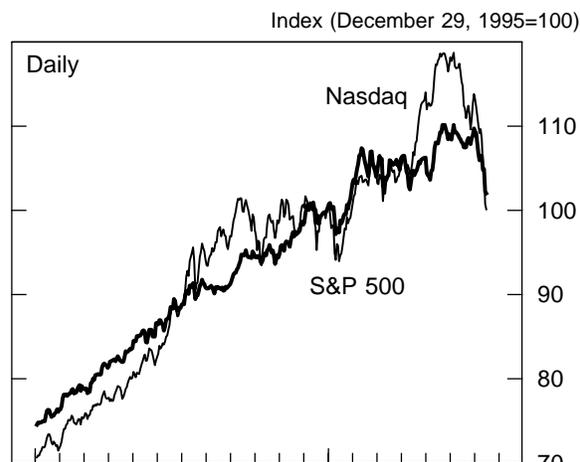


\*The twenty-year Treasury bond rate is shown until the first issuance of the thirty-year Treasury bond in February 1977.

rates overall continued to be relatively low by the standards of the past twenty years.

The spread between interest rates on investment-grade private bonds and those on comparable-maturity Treasury securities remained narrow during the first half of the year. In particular, the average spread on Baa-rated industrial bonds over 30-year Treasury bonds continued to fluctuate near where it has been for the last several years and well below the levels typical of the 1980s. The spread on investment-grade utility bonds continued to drift upward, but this appeared to reflect the market's increasing perception that some firms in that industry might become riskier as a result of deregulation and new competitive pressures. The rate spread on high-yield bonds over the comparable Treasury notes narrowed sharply, reversing the upward drift of 1995, and returning this measure to the low end of its range over the last decade. The continuing low level of spreads on most investment-grade securities, as well as the marked decline of the spread on high-yield securities, appeared to reflect in part market participants' increasing confidence in the durability of the economic expansion and consequent optimism about the creditworthiness of corporate borrowers.

### Major Stock Price Indexes



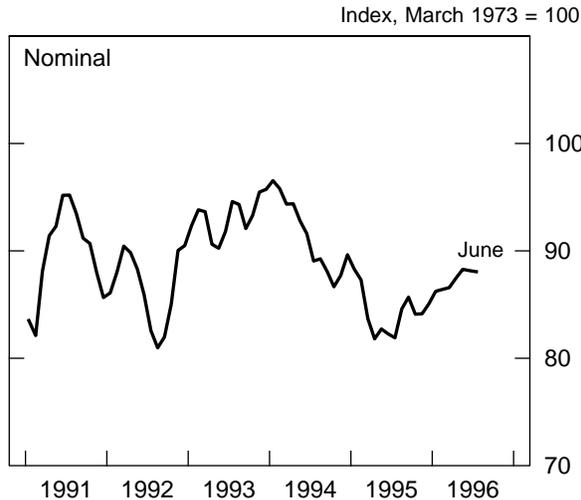
Note. Last observations are for July 16, 1996.

**Equity Prices.** Share prices have fallen in recent weeks, most notably those of "high-tech" companies whose ability to maintain steep earnings trajectories has come into question. On net, though, broad indexes of equity prices have held steady or moved up slightly since the end of 1995. As of July 16, the S&P 500 composite index of stock prices

had increased 2 percent thus far this year, while the NASDAQ had returned to its beginning-of-year level. Even this performance has been impressive, given that it occurred in the face of appreciable upward movement in long-term interest rates.

**Exchange Rates.** Since mid-April, the weighted average value of the dollar in terms of the other G-10 currencies has generally been about 4 percent above its level at the end of December, although the dollar has moved down somewhat in mid-July. When compared with an index of currencies from a somewhat broader group of U.S. trading partners, the dollar has appreciated 3 percent since December after adjustment for changes in relative consumer prices. The dollar has risen on balance about 4 percent in terms of the German mark and about 6 percent in terms of the Japanese yen.

**Exchange Value of the U.S. Dollar**



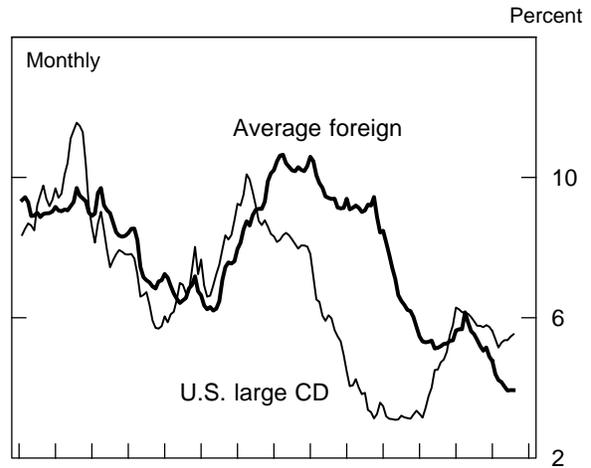
Note. In terms of the currencies of the other G-10 countries. Weights are based on 1972-76 global trade of each of the ten countries.

The dollar has been supported by perceptions of a disparity in the performance of the U.S. economy relative to that of many of our major trading partners and the resulting expectations for the course of relative interest rates. Specifically, while data suggesting robust growth in the United States caused interest rates to rise, questions remained about the strength of expansions in a number of other industrial countries, particularly in Europe. Average long-term (ten-year) interest rates in the other G-10 countries have risen only slightly, about 20 basis points, since the end of December. With U.S. rates rising substantially more than that, the appreciation of the dollar over this period is consistent with the shift in

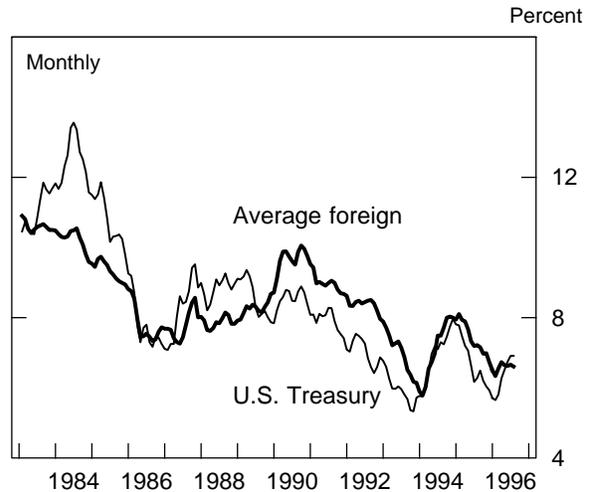
the long-term interest differential in favor of the dollar. In addition, the dollar was lifted to an extent against the yen by data early in the year showing that the Japanese external surpluses were narrowing.

Despite a weak output performance, long-term interest rates in Germany have risen about 50 basis points, with much of that increase coming during the first quarter. Long-term interest rates have actually

**U.S. and Foreign Interest Rates**  
**Three-month**



**Ten-year**



Note. Average foreign rates are the global trade-weighted average, for the other G-10 countries, of yields on instruments comparable to U.S. instruments shown.

fallen since the end of last year in some European countries, such as France and Italy, where political and economic policy uncertainties have been reduced. In Japan, long-term interest rates have risen about 30 basis points, on balance. Short-term market interest rates abroad are generally lower than they were at

the end of last year. German short-term market rates are down nearly 50 basis points while rates in France are down more than 100 basis points and those in the United Kingdom are down 70 basis points. Official lending rates have been reduced by the central banks in Germany, France, the United Kingdom, and several other European countries in 1996. In Japan, short-term market interest rates remain near the historically low levels reached during the second half of 1995 as the Bank of Japan's official rates have been unchanged. Stock markets in the foreign G-10 countries have risen 3 to 15 percent since the end of December, except in the United Kingdom, where stock prices, on balance, are about unchanged.

The Mexican peso traded during the first half of 1996 in a range somewhat stronger than that which prevailed at the end of 1995. Mexican 28-day treasury bill (cetes) rates have declined from nearly 50 percent in December to around 30 percent as the rate of inflation has fallen. The economic positions of Mexican households and firms have improved since early 1995, but problems in the financial system remain, as evidenced by increasing non-performing loans at banks. Stock prices have risen, on balance, about 5 percent in peso terms since December, buoyed by the interest rate declines and evidence of recovery in the Mexican economy.

The pace at which private foreigners acquired U.S. assets increased markedly in the first quarter.

Although private net purchases of U.S. Treasury securities were small, there were large increases in the private holdings of U.S. government agency bonds and U.S. corporate bonds, as U.S. corporations issued heavily in the Eurobond market. In addition, direct investment capital inflows surged to almost \$30 billion in the first quarter, reflecting a pickup in foreign acquisitions of U.S. firms. Together, these gross inflows totaled nearly \$80 billion, roughly twice the U.S. current account deficit for the quarter. U.S. net purchases of foreign stocks and bonds were also sizable in the first quarter, with net purchases of foreign stocks from Japan particularly large. U.S. direct investment abroad slowed somewhat between the fourth quarter of 1995 and the first quarter of 1996, but remained near the record pace for all of last year. In April and May, private foreign interest in U.S. securities continued to be strong while U.S. investor interest in foreign stocks cooled somewhat from the strong first-quarter pace.

Foreign official holdings in the United States increased about \$52 billion in the first quarter of 1996, after a record \$110 billion rise in 1995. These increases reflected both intervention to support the foreign exchange value of the dollar by certain industrial countries and substantial reserve accumulation by several developing countries. Data for April and May indicated continued increases in official holdings in the United States, but on a much more modest scale.

## Appendix: Sweeps of Retail Transaction Deposits

In January 1994, depository institutions began implementing sweep programs for retail customers.<sup>2</sup> In such programs, balances in household transaction accounts (typically NOW accounts, but also some demand deposits, both of which are included in M1) are swept into savings deposits, which are part of the non-M1 portion of M2. Such sweeps shift deposits from reservable (transactions) accounts to nonreservable (savings) accounts without impairing depositors' ability to access the funds for transactions purposes. Depositories have an incentive to establish these programs because reserves held at the Federal Reserve earn no interest. Retail sweep programs reduce reported reserves, the monetary base, and M1. They have no effect on M2, since both transactions and savings accounts are in M2.

Retail sweep programs have been established either as daily sweeps or as weekend sweeps. Under a daily sweep, a depositor's transaction balances above a target level are shifted each night into a special savings account created for the purpose. If debits threaten to reduce the remaining transaction account balances below zero, enough funds are transferred back from the savings account to reestablish the target level of transaction balances. Because only six transfers are allowed out of a savings account within a statement month, on the sixth transfer, the entire savings balance is returned to the transaction account. Alternatively, in a weekend sweep program, all affected transaction account balances are swept into the special purpose savings account over the weekend, and then returned on Monday. Some "weekend sweep" programs undertake sweeps on certain holidays as well.

No information is available on the current amounts of transaction balances that are being swept into savings accounts. The Federal Reserve has obtained data from depositories only on the initial amounts swept on the date each program was established. The table below, which is updated and made available to the public on an ongoing basis, shows that the initial amounts swept under programs implemented through May 1996 have cumulated to \$98 billion. With a marginal reserve requirement of 10 percent on most of these balances, the cumulative reduction of required reserves attributable to the initial amounts swept has been nearly \$10 billion.

2. Sweep accounts for business customers of banks became widespread in the mid-1970s. They involve sweeps of demand deposits into RPs or other money market instruments whose minimum sizes are too large to accommodate households.

## Sweeps of Transaction Deposits into Savings Accounts\*

Billions of dollars

	Monthly averages of initial amounts	Cumulative total
<b>1994</b>		
January	5.3	5.3
February	2.2	7.5
March	0.0	7.5
April	0.0	7.5
May	0.0	7.5
June	0.0	7.5
July	0.0	7.5
August	0.0	7.5
September	1.5	9.0
October	0.6	9.6
November	0.3	9.9
December	0.0	9.9
<b>1995</b>		
January	0.0	9.9
February	0.0	9.9
March	0.0	9.9
April	0.0	9.9
May	5.0	14.9
June	7.3	22.2
July	0.6	22.8
August	4.6	27.4
September	5.9	33.3
October	7.7	41.0
November	4.3	45.3
December	9.2	54.5
<b>1996</b>		
January	13.7	68.2
February	7.0	75.2
March	6.4	81.6
April	7.8	89.4
May	8.4	97.8

\*Figures are the estimated total of transaction account balances initially swept into savings accounts owing to the introduction of new sweep programs. Monthly totals are averages of daily data.

Regular monthly updates of initial amounts swept may be obtained by email by sending an email address along with a phone number to [sweeps\\_frb@frb.gov](mailto:sweeps_frb@frb.gov). Those without access to email may request data by calling (202) 872-7577.

**Growth of Money and Debt**  
Percent

Period	M1	M2	M3	Domestic nonfinancial debt	
<i>Annual</i> <sup>1</sup>					
1980	7.5	8.7	9.6	9.5	
1981	5.4 (2.5) <sup>2</sup>	9.0	12.4	10.2	
1982	8.8	8.8	9.7	9.8	
1983	10.3	11.8	9.5	11.9	
1984	5.4	8.1	10.8	14.6	
1985	12.0	8.6	7.7	14.4	
1986	15.5	9.2	9.0	13.3	
1987	6.3	4.2	5.9	10.0	
1988	4.3	5.7	6.3	8.8	
1989	0.6	5.2	4.0	7.9	
1990	4.1	4.1	1.8	6.8	
1991	7.9	3.1	1.2	4.6	
1992	14.3	1.8	0.6	4.7	
1993	10.5	1.4	1.0	5.2	
1994	2.4	0.6	1.6	5.2	
1995	-1.8	4.0	5.9	5.6	
<i>Quarterly (annual rate)</i> <sup>3</sup>					
1995	Q1	-0.1	1.0	4.5	5.4
	Q2	-0.5	3.8	6.3	7.1
	Q3	-1.5	6.9	7.9	4.9
	Q4	-5.1	4.1	4.5	4.7
1996	Q1	-2.7	5.9	7.2	4.7
	Q2	-0.5	4.1	5.3	n.a.

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.