

CHAPTER 1

Progress and Problems in 1978

THE U.S. ECONOMY LAST YEAR maintained substantial momentum in its fourth year of expansion. Output and employment rose and unemployment fell. But the year was marred by a serious acceleration in the rate of inflation and a decline in the value of the dollar that was sharper than fundamental economic conditions warranted. Although economic growth slowed from $5\frac{1}{2}$ percent over the 4 quarters of 1977 to $4\frac{1}{4}$ percent during 1978, real income rose in all sectors, and all demographic groups experienced employment gains. A reasonable balance was maintained among sectors of real spending. Business fixed investment grew vigorously and residential construction remained strong despite sharply rising interest rates.

During the years immediately preceding 1978, the rapid growth associated with economic recovery had absorbed many of the capital and labor resources idled by the 1974-75 recession. Thus it became appropriate that growth should slow to a pace more in line with the long-term potential of the economy. The decline in the growth rate during 1978 was the first step in that transition.

Much remains to be done to provide adequate employment opportunities for those who cannot find jobs even in a high-employment economy. This task cannot be accomplished solely through aggregate demand policy, however, without risking further acceleration of inflation. Aggregate demand management must now aim at a more moderate rate of economic expansion to combat inflation while structural measures are developed to attack remaining pockets of unemployment.

AN OVERVIEW OF THE YEAR

The quarterly pattern of growth during the year was once again uneven. Unusually severe winter weather and a major strike in coal mining reduced output growth to zero in the first quarter. Both consumer spending and construction activity were curtailed by the adverse weather. In the second quarter, both of these sectors rebounded strongly, and virtually all of the sales and production lost in the first quarter were regained. Taking a 2-quarter average, real gross national product (GNP) rose at a $4\frac{1}{4}$ percent annual rate in the first half of the year. In the second half of the year, there was again substantial disparity between the 2 quarters. Growth slowed

in the third quarter and accelerated in the final quarter. Over the 2 quarters together the annual rate of growth of real GNP averaged $4\frac{1}{4}$ percent, the same as for the first half.

The increase in employment over the 4 quarters of last year was slightly less than in 1977—3.3 million compared to 3.9 million. It remained very large by historical standards, however, as the growth of productivity slowed significantly. The unemployment rate continued the marked decline begun in the latter part of 1977, falling from 6.6 percent in the fourth quarter of 1977 to 5.8 percent by the final quarter of 1978.

All sectors achieved further increases in real income in 1978. Aside from the farm sector, however, the gains were more modest than in the previous 3 years of stronger fiscal stimulus and rapid recovery in real output. The growth of real per capita disposable income, for example, slowed from 4.6 percent in 1977—a year when personal income taxes were reduced—to 2.5 percent over the 4 quarters of 1978. During the 3 years since the first year of cyclical recovery from the 1974–75 recession, the growth rate has averaged 3.2 percent, slightly above the $2\frac{1}{2}$ percent trend for the two decades from 1953 through 1973. Corporate profits, in 1972 dollars, rose moderately further in 1978, following larger gains earlier in the recovery. Rising capacity utilization has lifted real profits at an average annual rate of 18 percent since the cyclical low in 1975. Both the rise in capacity utilization and the improvement in profitability helped to spur a recovery of business capital investment to a 10 percent share of GNP.

Farm income is, of course, less sensitive to fluctuations in overall economic growth but very sensitive to other factors such as weather, foreign demand, and agricultural policy. Farm income rose to an exceptionally high peak in 1973–74 from which it drifted down until 1977. A sharp recovery occurred last year, with farm proprietors' income reaching \$25.1 billion for the year as a whole (national income and product accounts basis). In 1972 dollars, farm income in 1978 was \$16.5 billion, or 14 percent higher than a year earlier.

The division of income among employee compensation and other shares has remained relatively constant during the most recent 3 years of expansion, as shown in Table 1. The share received by employees as wages and fringe benefits has risen slightly from the earlier part of the decade and is up substantially from the 1960s. The corporate profits share has improved significantly from recession lows although it remains well below the high level of the preceding decade.

One of the most discouraging developments of 1978 was the very slow growth of productivity. Output per hour in the private nonfarm business sector grew by only three-fourths of 1 percent during the year. (The reasons are explored in Chapter 2.) Weakness in productivity growth did much to exacerbate inflation. Since increases in nominal wage costs were offset to a lesser degree by productivity gains, unit labor costs rose more rapidly than was anticipated, and prices were pushed up faster. Furthermore, labor de-

TABLE 1.—*Shares of national income, 1959–78*

[Percent]

Item	1959–68 average	1969–73 average	1974–78 average ¹	1976	1977	1978 ¹
Compensation of employees.....	71.2	75.3	76.5	76.3	76.1	76.4
Proprietors' income: ²						
Farm.....	2.3	2.0	1.6	1.4	1.3	1.5
Nonfarm.....	8.1	6.2	5.2	5.2	5.2	5.2
Corporate profits ²	12.3	9.4	8.8	9.3	9.5	9.4
Other ³	6.1	7.0	7.9	7.9	7.8	7.6

¹ Preliminary.² With inventory valuation and capital consumption adjustments.³ Rental income of persons (with capital consumption adjustment) and net interest.

Note.—Detail may not add to 100 percent because of rounding.

Source: Department of Commerce, Bureau of Economic Analysis.

mand strengthened more rapidly than it would have done if productivity growth had been better, and this may have been a factor in the acceleration in hourly earnings early in the year.

Unlike earlier years of the recovery, when price indexes excluding food and energy rose at a fairly steady rate of around 6 to 6½ percent, 1978 witnessed a pervasive acceleration of prices and labor compensation. Compensation per hour in the fourth quarter of last year was almost 10 percent higher than a year earlier, in contrast to the 8 to 8½ percent rate of increase during the preceding 3 years. And price increases were larger in 1978 than in earlier years for almost all categories of goods and services. The GNP deflator increased 8.3 percent over the 4 quarters of 1978, compared to 6.1 percent in 1977. The consumer price index (CPI) rose by 9.2 percent over the 12 months ending in November compared with 6.8 percent in 1977. This more rapid rise of prices, especially consumer prices, was attributable not only to poor productivity performance but also to adverse developments in particular markets.

Food prices rose sharply, since supplies of red meats were even more limited than had been expected and adverse weather damaged fruit and vegetable crops. Moreover, the substantial depreciation of the dollar in international exchange markets was accompanied by higher prices of imports and of competing domestic products.

In view of the worsening of inflation, the Administration in May postponed the effective date for its proposed tax reduction from October 1978 to January 1979 and reduced the proposed cut from \$25 billion to about \$20 billion. Growth in Federal outlays was also slower than had been estimated. For fiscal 1978, unified budget outlays were \$12½ billion below the estimate contained in last January's budget, and the estimate for fiscal 1979 has been revised down by \$7.6 billion. Real purchases of goods and services by all levels of government rose 2 percent over the 4 quarters of 1978, in contrast to the 3¾ to 4¼ percent that had been anticipated at this time last year.

Both domestic and international conditions in 1978 also prompted a more restrictive monetary policy. The Federal funds rate increased from 6½ percent to about 10 percent during the year. Other short-term interest rates rose commensurately. As is typical, long-term rates rose less than those on short-term securities.

Tightening fiscal and monetary policies were one cause of the slower economic growth in 1978 than in 1977. The postponement of the tax cut and slower growth of Federal purchases contributed to a more moderate rise in consumer incomes and expenditures during 1978 than had been foreseen a year earlier. The inflation itself also played a part in slowing growth. Increases in food and import prices siphoned purchasing power away from most domestic consumers.

The largest single reason for the slower growth in 1978 than in 1977 was the leveling out of residential construction after a prolonged rise in housing starts beginning early in 1975. This leveling may have been partly the result of the increased restraint that developed in financial markets over the year. The more important influences were probably a filling of backlogs of demand and the fact that the home-building industry was operating at nearly full capacity.

The economy at the end of 1978 still showed substantial momentum, but the serious inflation problem and its interaction with the international value of the dollar have created a marked degree of uncertainty. Nominal interest rates are approaching historically high levels, to some extent as a result of the necessary steps taken at the beginning of November as part of the dollar support package. Financial restraint has not yet had significant adverse effects on spending, but it is difficult to predict how consumers and businesses will respond to rising interest rates in the current environment. Furthermore, the continuation of inflation casts a shadow on the economic horizon. Compliance with the anti-inflation program announced by the President in October is fundamental to maintaining a strong economy. This program is discussed in detail in Chapter 2.

If success is achieved in containing inflation this year, the prospects are favorable for maintaining a satisfactory growth rate and avoiding a recession. There are no major imbalances plaguing us. Capacity bottlenecks are relatively rare; capacity has been growing at a sustainable pace; inventories in most lines of business are reasonably balanced with sales; and liquidity positions, although declining, are not severely strained. The international trade position has been improving.

Continued strength in the near term seems assured. Employment and output rose strongly in the fourth quarter. Orders for durable goods have increased substantially. And the January 1 tax cut will help to sustain consumer spending early in the year. But the outlook for the latter part of 1979 will depend heavily on moderating inflation and on careful coordination between fiscal and monetary policies.

THE MAJOR SECTORS OF AGGREGATE DEMAND IN 1978

Private demand sustained the economic expansion through its fourth year. The continued strength of business fixed investment last year was a notable aspect of the composition of demand (Table 2). Housing starts demonstrated remarkable resilience; despite tightening credit conditions they remained near the high level that had been reached at the end of 1977. Consumption expenditures grew somewhat faster than disposable income during the year, and the saving rate declined from its already relatively low level at the end of 1977. In contrast, growth in State and local spending over the 4 quarters of 1978 was at a slower pace than in 1977; the effects of the 1977 economic stimulus measures—many channeled through the State and local sector—gradually diminished. Federal purchases in real terms declined slightly due to a variety of special factors.

TABLE 2.—*Growth in the major components of real gross national product, 1975–78*

[Percent change, seasonally adjusted annual rate]

Component	1975 IV to 1976 IV	1976 IV to 1977 IV	1977 IV to 1978 IV ¹	1977 IV to 1978 II	1978 II to 1978 IV ¹
Gross national product.....	4.6	5.5	4.3	4.2	4.3
Personal consumption expenditures.....	5.7	4.8	3.8	2.2	5.4
Nonresidential fixed investment.....	8.6	9.1	8.3	12.4	4.3
Residential investment.....	23.6	15.3	-8.8	-1.3	-3
Government purchases:					
Federal.....	.2	6.3	-3	² -12.2	13.2
State and local.....	-2.7	4.3	3.5	4.6	2.3
Domestic final sales ³	5.0	5.7	3.7	2.2	5.2

¹ Preliminary.

² Largely attributable to fluctuations in Commodity Credit Corporation expenditures.

³ Gross national product excluding change in business inventories and net exports of goods and services.

Source: Department of Commerce, Bureau of Economic Analysis.

PERSONAL CONSUMPTION EXPENDITURES

Personal consumption is typically a major source of stimulus in the early stages of recovery. The current expansion is no exception. Between mid-1975 and the end of 1976 the personal saving rate declined substantially, and the fraction of disposable income spent on durable goods rose. Consumption subsequently became a less important source of stimulus, but it remained an expansionary factor in 1978. The increase in consumption came to 3.8 percent in real terms during the last year, one-half percentage point more than the increase in real disposable income.

Since 1975 the household sector has significantly increased its stocks of durable goods. In the process, outstanding consumer debt rose enough to lift the ratio of debt repayments to disposable income from a 1975 low of 15.6 percent to 16.8 percent at the end of 1977. It is therefore not surprising that the rate of growth of spending (in 1972 dollars) for durable goods declined substantially to 5.0 percent in 1978, compared to 11.3 per-

cent in 1977. Nonetheless, durable goods purchases in real terms held at about 15 percent of real disposable income, the level reached late in 1977. Auto sales remained at a high rate of $11\frac{1}{4}$ million units a year but did not rise further. Despite steep price increases for foreign cars, the foreign car share of the new car market declined relatively little during the year.

With durable goods sales remaining comparatively high, the volume of outstanding consumer installment credit rose substantially further in 1978; during the year the net increase amounted to \$44 billion. In the fourth quarter, repayments of consumer installment debt had reached 17.7 percent of disposable personal income, four-tenths of a percentage point above the 1971 peak (the earliest available data for the present series). Total repayments, including mortgage repayments, amounted to almost 23 percent of disposable income in the third quarter.

The high fraction of consumers' income absorbed by debt repayment has created some concern that a downturn in consumer demand might ensue. Survey data on the use of consumer installment credit suggests, however, that the increase in the ratios of installment credit extensions and repayments to disposable income may have been due to rapid growth in the number of households in the age bracket associated with relatively heavy credit usage. Rapid growth has occurred in the number of young adults in the 18- to 34-year age bracket; this group uses credit the most heavily. An absence of excessive debt burdens is also suggested by the fact that delinquency rates on installment loans did not rise during the year.

At the start of last year the Administration forecast a rise of real consumption of about $4\frac{1}{2}$ percent, measured fourth quarter to fourth quarter, or about three-fourths percentage point more than the 3.8 percent actually realized. The reason for this difference was slower growth of real disposable income. This slowdown, in turn, is partly explained by the postponement of the effective date of the proposed tax cut from October 1, 1978, to January 1, 1979. A more important cause, however, was the increase in the rate of inflation that occurred during the course of 1978. Effective tax rates were increased as households were moved into higher tax brackets. Furthermore, the 11 percent rise in food prices reduced the growth of real incomes for most consumers, as did the price increases associated with the decline of the dollar's value in foreign exchange markets.

In the past, sharp unexpected increases in the rate of inflation have increased the personal saving rate. Inflation generally tends to raise the cost of borrowing and curtail the growth of real wealth. In addition, consumers may become less confident of their future prospects. In contrast, the saving rate declined in 1978. The continued strength of consumer expenditures in the face of high actual inflation rates and rising nominal interest rates may to some extent have stemmed from anticipatory buying in advance of expected price increases. Evidence from surveys suggests that some consumers considered the present time to be propitious for buying because they expected

prices to rise further. This may have helped sustain the already high level of durable goods purchases.

Relative price changes appear to have contributed to changes in the composition of consumption during 1978. For example, real purchases of transportation services and clothing and shoes rose more sharply than total consumption. In these areas, price increases were below the average for all consumer goods and services. A shift in the composition of food consumption, as a result of the rapid rise in food prices, was probably the major reason for the decline in the measured real value of food consumption. Whenever food prices rise steeply consumers tend to shift toward less costly foods, although they do not necessarily eat smaller quantities of food. For example, the sharp reduction in supply and sharp increase in the price of red meats generated a significant shift of consumption to poultry and dairy products.

HOUSING

Housing activity remained on a plateau throughout last year, following nearly 3 years of steady advance. Real residential construction, on a calendar year basis, was 3.5 percent above that in 1977, and there were 2.0 million housing starts last year. The number of single-family starts was just below the 1½-million record level of 1977, while multiunit starts rose to 592,000. Over the 4 quarters of 1978, however, residential construction in real terms declined slightly, in contrast to a rise of 15 percent in the previous 4 quarters. This flattening out of residential investment outlays was a dominant element in the slower growth of real GNP in 1978.

In the first quarter, housing starts fell about 20 percent as a result of the inclement winter in the North Central and Northeast regions. The shortfall was largely made up in the second quarter; then housing starts leveled out at an annual rate of around 2 million units.

This leveling of housing starts and residential construction in 1978 was not surprising. Three years of strongly rising building activity had filled backlogs of demand created by the depressed level of new construction during the 1973-74 period of credit restraint and low income. Moreover, the sharp rise in prices of a wide range of building materials suggests that the building industry was operating at close to capacity in 1978. Indeed, the striking feature of the housing sector last year was its continued high level of activity in the face of sharply rising interest rates.

The resilience of housing in a year of tightening financial markets is largely attributable to the ability of specialized mortgage lenders to compete more effectively for savings. Beginning in June, new regulations permitted commercial banks and thrift institutions to issue 6-month certificates of deposit on which rates paid are tied to those on 6-month Treasury bills. These new money market certificates sustained the supply of mortgage credit, but they did not prevent interest rates on mortgages from rising along with other rates. The national average effective mortgage rate for new houses

reached 10 percent by the end of the year. The strength of demand, particularly for single-family units, in the face of such high mortgage interest rates results partly from the large number of people who were born in the baby boom of 1946-57 and are now reaching age brackets where the rate of homeownership is traditionally high. Demand may also be stimulated by the expectation that houses will continue to be a good inflation hedge. Over the past 7 years purchase prices for new homes, adjusted for changes in quality and size, have risen at an annual rate about one-third faster than other prices. The tax deductibility of mortgage interest and the favorable tax treatment of capital gains from home sales add to the attractiveness of such investment.

Multifamily housing starts rose 2.9 percent in 1978. They were still about 400,000 below the 1972 peak of 1 million, which included close to 200,000 publicly subsidized starts. The number of subsidized starts last year was almost 165,000, up substantially from the lows of 1975 and 1976. For all rental housing the vacancy rate remained close to 5 percent through the third quarter of last year, a historically low figure. Rents rose 7.3 percent, almost 1 percentage point more than in 1977. This probably contributed to an improvement in profits and helped to stimulate multiunit building.

BUSINESS FIXED INVESTMENT

A year ago there was widespread concern that business fixed investment was not demonstrating its usual cyclical response to improvement in such basic determinants as the rate of growth of output, business profits and cash flow, and the cost of capital. In fact, revised data for 1977 that became available last July showed a much stronger rise of investment than had appeared earlier, and growth last year continued to be relatively strong. The rate of real growth of business fixed investment over the 4 quarters of last year was 8.3 percent (Table 3). For the year as a whole investment rose to 10 percent of GNP, close to its share in the high investment periods of the 1960s and early 1970s.

Investment in structures, which had been disturbingly weak earlier in the recovery, climbed 12.7 percent in 1978, and by year-end it ex-

TABLE 3.—*Changes in real business fixed investment, 1975-78*

[Percent change, fourth quarter to fourth quarter]

Component	1975	1976	1977	1978 ¹
Nonresidential fixed investment	-9.9	8.6	9.1	8.3
Structures	-7.2	3.0	7.0	12.7
Producers' durable equipment	-11.2	11.4	10.1	6.4
Autos and trucks	2.9	21.5	27.0	11.0
Other	-14.8	8.3	4.2	4.5

¹ Preliminary.

Source: Department of Commerce, Bureau of Economic Analysis.

ceeded its previous peak reached in the fourth quarter of 1973. Growth of real spending for producers' durable equipment, on the other hand, slowed to 6.4 percent during the year, in contrast to 10.1 percent during the preceding year. Business purchases of autos and trucks grew much less rapidly than earlier. Strength in investment was greatest in durable goods manufacturing—particularly in machinery and in stone, clay, and glass—and also in electrical utilities and petroleum refineries.

The increased strength in investment during the past 2 years reflected a response to growth in profits and increases in capacity utilization in manufacturing during the course of the recovery. Corporate profits (with inventory valuation and capital consumption adjustments) rose 6.7 percent over the 4 quarters ending in the third quarter of last year and amounted to 7¾ percent of GNP at the end of the period. This shows a substantial improvement from the 6 percent average ratio in 1974–75 though little change from 1977.

Capacity utilization in manufacturing rose from 83 percent in the latter part of 1977 to almost 86 percent at the end of 1978. In general, utilization rates were higher in the primary processing industries than in the advanced processing industries. Utilization in basic metals industries, which had been relatively low at the beginning of the year, rose dramatically and greatly improved profits in those industries.

Thus the rate of investment has been relatively high in the past 2 years, and the structure of investment has begun to shift toward longer-lived assets. Nevertheless, a further rise in the share of GNP directed to business fixed investment would be desirable, in order to maintain growth of the capital stock in line with the rapidly rising labor force and to meet environmental and other regulatory requirements. This issue is discussed further in Chapter 3.

NET EXPORTS

Real net exports fell substantially during the first 2 years of the current expansion. During 1977 net exports in 1972 dollars appeared to be leveling out at about \$11–\$12 billion, a little less than 1 percent of real GNP. Late in 1977 and early last year, however, our net export position deteriorated further, although the magnitude of this deterioration was exaggerated by the effects of the East Coast dockworkers' strike.

Throughout much of the 1977–78 period exports grew slowly while imports of both oil and other goods increased sharply. By mid-1978, however, reversals of these trends became evident; net exports in 1972 dollars in the last half of 1978 were \$3 billion higher than in the first half.

Agricultural products were once again one of the leading export sectors. Agricultural exports, in 1972 dollars, reached a relatively high level of \$15.8 billion in 1978, well above the \$12.9-billion average in 1977. Poor crops in the Southern Hemisphere last spring and income growth in the rest of the

world were the main reasons for the increased demand for U.S. farm products.

The volume of nonagricultural exports in the second quarter rebounded from depressed levels early in the year and continued to rise strongly through the rest of 1978. Accelerating growth in other countries made a significant contribution to this advance. The depreciation of the dollar in late 1977 and early 1978, which lowered U.S. export prices in foreign currencies, also encouraged exports, but its principal effect on exports will occur in 1979.

Import volume grew at an annual rate of 11.6 percent from the beginning of the expansion until the end of 1977. This is somewhat more rapid than past experience would suggest, given the growth of U.S. income. That trend has since been reversed. Oil imports were 5.6 percent lower in 1978 than in the year before. The startup of 1.2 million barrels per day of Alaskan oil production displaced imported oil and more than offset the increase in U.S. oil consumption last year. The volume of non-oil merchandise imports grew more slowly during 1978 than in 1977, because of less rapid U.S. growth and higher import prices due to dollar depreciation.

INVENTORY ACCUMULATION

The cautious inventory policy that has characterized the current expansion continued in 1978. This caution was reinforced by sharply rising short-term interest rates, which increased the cost of holding inventories. The rate of inventory accumulation in 1972 dollars last year was about three-fourths of 1 percent of GNP. The ratio of inventories to final sales (in 1972 dollars) for the nonfarm sector was nearly constant. The stability of the inventory-to-sales ratio is especially noteworthy in the face of the 10 percent share of GNP absorbed by business fixed investment. Such a high investment share tends to raise the ratio of stocks to sales by virtue of its significant contribution to inventories of work in progress.

One exception to this stability of inventory-to-sales ratios was at general merchandise stores. The ratio of real inventories to sales in this sector, which has shown a slight uptrend in the past decade, appeared to be moving up sharply during the summer and early fall months. A stronger pace of sales at these stores late in the year helped to alleviate this problem.

GOVERNMENT SPENDING

Government purchases rose less during 1978 than was expected a year ago. In real terms the actual increase was 2.0 percent.

Slower than expected growth was confined principally to the Federal sector, where the real value of purchases declined 0.3 percent. Commodity Credit Corporation purchases had been expected to decline. The shortfall in other purchases was about evenly divided between delays in the buildup of the Strategic Petroleum Reserve and shortfalls in numerous other categories of nondefense purchases, which rose, in nominal terms, 4 percentage

points less than anticipated. The slow accumulation of petroleum reserves meant lower oil imports and, on balance, had no effect on aggregate demand, in contrast to the other shortfalls.

State and local government purchases, in real terms, grew rapidly in the first half of last year but slowed in the second half. From the second quarter of 1977 through the second quarter of 1978—a common fiscal year for these units of government—the real value of State and local purchases rose by 4.9 percent. This was a significant contrast to the virtual stability in 1975–77. In nominal terms compensation of employees rose by 10.2 percent over this period while other purchases rose by 16.4 percent. Construction activity in this sector (about one-third of other purchases) had been declining in real terms between the last quarter of 1975 and the first quarter of 1977, but it appears to have risen substantially in 1978. In the 3-month period ending in October the real value of street and highway construction was 5 percent higher than a year earlier, sewer system construction was up 14 percent, and water supply construction was up 33 percent.

The acceleration of spending by State and local governments in 1977–78 primarily reflects two forces: the rise in revenues during the economic expansion and a sharp increase in Federal aid. A substantial part of the 1977–78 stimulus package was funneled through State and local governments, augmenting special countercyclical programs that had been initiated earlier. The principal components of the package were an expansion of public service employment, authorization of a second round of local public works grants, and expansion of antirecession fiscal assistance grants to State and local governments. Public service employment exceeded its target of 725,000 jobs by the spring of 1978 and subsequently declined somewhat. Local public works grants were fully committed by the end of 1977, but the expanded value of outlays followed with a lag. Distribution of antirecession fiscal assistance peaked in the third quarter of 1977 and ended a year later.

Real growth slackened in the second half of last year, in part because States and localities entered new fiscal years in an environment influenced by public sentiment for tax reductions and restraint in government spending.

As a result of the increased growth in purchases and the pressure for tax reduction, the aggregate budget surplus in the State and local sector declined sharply in 1978. The surplus on current and capital account (but excluding social insurance trust accounts) fell from a peak of \$12.8 billion (annual rate) in the third quarter of 1977 to \$1.8 billion a year later. Of the \$7.5-billion decline that occurred between the second and the third quarters, roughly \$5¼ billion is attributable to California's Proposition 13, which mandated a reduction of about 50 percent in local property taxes, or about one-fourth in total local revenues. This local tax cut was followed by a substantial redistribution of funds from the State government, which had been incurring a surplus, to the local governments.

Proposition 13 and similar measures in other States suggest the likelihood of significantly slower growth in State and local spending in the near future and an approximate balance or a deficit in the aggregate current and capital account of this sector. In the fall elections, 11 States had proposals on their ballots that would immediately limit State and local taxes or expenditures or both. Such measures passed in eight of these States. Referenda mandated substantial reductions of property taxes in Idaho and personal income taxes in North Dakota. The measures in other States differ in their form and the degree to which they will constrain taxes and expenditures, but their enactment—by large margins in some cases—clearly indicates public sentiment for budgetary restraint. This is likely to put downward pressure on both spending and the current and capital account surplus.

Movements in this aggregate State and local surplus or deficit are dominated by national trends but conceal great diversity across States and among cities and areas within States. Per capita personal income—perhaps the best single measure of taxable resources—varies widely among States, but the growth trends in various regions have been narrowing these differentials throughout the twentieth century. The regions with the highest income levels have tended to experience the slowest growth. These same regions have the highest per capita public sector expenditures, the highest tax effort, and the highest level of per capita Federal aid. Many forces help to create this pattern: high-income localities may choose to spend more on public services as well as on private goods and services; where the cost of living is high, more must be spent to obtain the same level of services; and some high-income areas also contain significant concentrations of poverty and have greater needs. Extreme care must therefore be used in drawing general conclusions about the fiscal condition of the State and local sector, or of individual areas within it, from the aggregate surplus or deficit.

The social insurance accounts of State and local governments continued to show a moderately growing surplus throughout last year. By the end of the year the surplus had risen to \$22.8 billion, up \$3.7 billion from a year earlier. Growth in this surplus has been augmented by strong earnings on investments as well as the excess of contributions over benefit payments. Continued growth in this surplus is likely as States and localities move to provide actuarially sound funding of these trusts.

LABOR MARKET DEVELOPMENTS

Demand for labor continued to be unusually strong in 1978. Despite another sharp increase in the labor force participation rate, the creation of new jobs exceeded the growth of the labor force by a substantial margin, and the rate of unemployment declined further. The proportion of the working-age population employed continued to climb in 1978, reaching 59.0 percent in the fourth quarter.

The civilian labor force rose by $2\frac{3}{4}$ million over the 4 quarters of 1978. This is a 2.8 percent annual growth rate, well above the long-term trend rate of $2\frac{1}{4}$ percent per year, which results from population growth and a long-term upward drift in labor force participation rates.

Women, teenagers, and blacks contributed most to the growth of the labor force; their participation rates rose to new highs. The participation rate for adult women increased 1.5 percentage points to 50.1 percent, passing the 50 percent mark for the first time. The teenage participation rate jumped 1.6 percentage points to 58.5 percent, and that for blacks and other racial minorities increased 1.2 percentage points to 62.0 percent.

Employment increased by 3.3 million from the fourth quarter of 1977 to the fourth quarter of 1978, a smaller gain than in 1977 but still large by historical standards. The growth in employment was surprisingly large in relation to the rise in real GNP, reflecting the year's poor productivity performance. The employment gain was broadly based across industries, with service-oriented and typically cyclical industries showing the largest gains.

Among manufacturing establishments, most nondurable goods industries showed little or no growth in employment. Employment was reduced in such industries as apparel, textiles, leather products, and tobacco manufactures. Some of the durable goods industries—particularly those related to construction and transportation—showed sizable gains. Among these were nonferrous primary metals, fabricated metal products, nonelectrical machinery (particularly construction and related equipment and computers) and aircraft.

Employment also increased in other major sectors during the year. Of these, construction employment grew at the fastest pace, with gain of 11.6 percent. Other large gains in employment were registered by finance, insurance, and real estate (5.3 percent); retail trade (4.1 percent); and services (4.4 percent).

Employment gains were greatest among women, blacks, and teenagers, the groups that led the labor force expansion. The employment increase among adult women (aged 20 and over) accounted for more than half of the total; the percentage increase in their employment was more than double that of their male counterparts. Blacks and members of other racial minorities filled about one-third of the new jobs. Employment in these groups grew more than twice as fast as that of whites.

Overall, unemployment declined from 6.6 percent of the labor force in the final quarter of 1977 to 5.8 percent in the fourth quarter of 1978. Most of the decline occurred early in the year. The unemployment rate for adult white women fell to 5.0 percent, but the white teenage unemployment rate showed little change, since in that age bracket the growth in the labor force was as rapid as the rise in employment (Table 4).

Earlier in the recovery the unemployment rate for blacks had declined more slowly than that for whites, widening the gap between the two. In

TABLE 4.—*Unemployment rate and growth in employment and labor force, by demographic group, 1978*

Group	Unemployment rate (percent) ¹ 1978 IV	Employment	Civilian labor force
		Percent change from 1977 IV to 1978 IV ²	
Total.....	5.8	3.6	2.8
White.....	5.1	3.2	2.5
Both sexes 16-19 years.....	14.0	1.8	2.0
Males 20 years and over.....	3.5	2.1	1.4
Females 20 years and over.....	5.0	5.2	4.4
Black and other.....	11.5	7.0	5.2
Both sexes 16-19 years.....	35.3	12.1	6.0
Males 20 years and over.....	8.3	6.1	4.7
Females 20 years and over.....	10.2	7.3	5.5

¹ Percent of civilian labor force in group specified; seasonally adjusted.

² Adjusted for the increase of about 250,000 in employment and labor force in January 1978 resulting from changes in the sample and estimation procedures introduced into the household survey.

Source: Department of Labor, Bureau of Labor Statistics.

1978 some progress was made in reversing that pattern. The unemployment rate for blacks declined by 1.7 percentage points to 11.5 percent, compared to the 0.5 percentage point decline for whites to 5.1 percent.

Since mid-1975 there has been a fairly steady reduction in the percentage of unemployed persons who report job loss as the reason for their unemployment. The percentage of unemployed who are reentrants to the labor force has been increasing fairly rapidly, while the percentage who are new entrants and the percentage who quit their last job have both increased moderately. These typical cyclical patterns continued in 1978.

PRICES AND WAGES IN 1978

Price developments last year were a major source of disappointment and concern. The consumer price index rose by 9.0 percent from November 1977 through last November; producer prices of finished goods rose by 9.1 percent from December 1977 to December 1978, and the GNP deflator rose by 8.3 percent during the 4 quarters of the year. In all cases the increases were considerably greater than in each of the preceding 2 years.

As shown in Table 5, the acceleration of prices was widespread. Energy prices, which had been a major factor contributing to high inflation rates in the 1973-75 period, did not play a large role last year. Food prices, however, were once again an important influence. Even if one eliminates food and energy prices from the price indexes—thus removing the effects of external shocks to supply—the remaining prices show an acceleration in 1978.

The upward movement in these other prices was a response to a wide variety of forces—including the pass-through of higher import prices associated with depreciation of the dollar, the effects on home prices of in-

TABLE 5.—*Alternative measures of inflation, 1976–78*

[Percent change, December to December, except as noted]

Measure	1976	1977	1978 ¹
Consumer price index: ²			
All items.....	4.8	6.8	9.0
Food.....	.6	8.0	11.3
Energy ³	6.9	7.2	7.0
All items less food and energy.....	6.1	6.4	8.6
Producer price index for finished goods:			
All finished goods.....	3.3	6.6	9.1
Consumer goods.....	2.1	6.4	9.5
Foods.....	-2.5	6.6	11.9
All other.....	4.9	6.1	8.3
Capital equipment.....	6.4	7.2	8.0
Implicit price deflator for gross national product ⁴	4.7	6.1	8.3
Food consumption.....	.7	5.7	11.7
Other goods and services.....	5.3	6.2	7.9

¹ Consumer price changes are from November 1977 to November 1978. Changes for price deflators are preliminary.² Data beginning January 1978 relate to all urban consumers; earlier data relate to urban wage earners and clerical workers.³ Gas (piped) and electricity; fuel oil, coal, and bottled gas; and gasoline, motor oil, coolant, etc.⁴ Changes are from fourth quarter to fourth quarter.

Sources: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics).

centives to invest in land and houses as an inflation hedge, and some supply bottlenecks in construction materials. A particularly troublesome phenomenon, however, was the slow growth in productivity. This added directly to costs of production and may indirectly have affected wage rates by increasing the demand for labor.

Table 6 shows the acceleration in hourly earnings and in total compensation per hour, the slower growth in productivity for the nonfarm private business sector, and the effects of both of these forces on unit labor

TABLE 6.—*Measures of wage rates and costs, 1973–78*

[Percent change, fourth quarter to fourth quarter, except as noted]

Item	1973	1974	1975	1976	1977	1978 ¹
Adjusted hourly earnings index ²	6.4	9.1	7.5	7.4	7.5	8.2
Union wage changes (total effective adjustment) ³	7.0	9.4	8.7	8.1	8.0	7.5
Private nonfarm business sector, all persons:						
Compensation per hour.....	8.2	10.9	8.6	8.5	7.6	9.8
Contribution of:						
Wages and salaries and private fringes.....	(⁴)	10.0	8.0	7.7	6.9	8.7
Employer payments to social insurance.....	(⁴)	.9	.6	.8	.7	1.1
Productivity.....	-.7	-3.4	4.4	2.6	1.3	.8
Unit labor costs.....	9.0	14.9	4.0	5.8	6.3	8.9

¹ Preliminary.² Adjusted for overtime in manufacturing and for interindustry employment shifts.³ Agreements covering 1,000 workers or more. Changes are for the four quarters ending in December through 1977 and ending in September for 1978.⁴ Not available.

Source: Department of Labor, Bureau of Labor Statistics.

costs last year. Table 7 indicates that the rise in prices in the nonfinancial corporate sector was less than the increase in unit labor costs. Nevertheless profits per unit of output still continued to increase, although much less rapidly than in 1977.

TABLE 7.—*Changes in price, costs, and profits, per unit of output, private nonfinancial corporate sector, 1973–78*

[Percent change, fourth quarter to fourth quarter, except as noted]

Item	1973	1974	1975	1976	1977	1978 ¹
Labor costs.....	8.6	16.3	2.1	7.3	5.6	8.7
Nonlabor payments.....	2.2	8.6	18.7	1.5	6.1	3.3
Corporate profits.....	-6.3	-26.0	66.9	.5	16.4	1.2
Other nonlabor costs ²	6.3	23.1	6.5	1.9	2.1	4.2
Implicit price deflator.....	6.4	13.8	7.3	5.3	5.8	6.8

¹ Changes are measured from third quarter 1977 to third quarter 1978.

² Interest, rent, depreciation, and indirect business taxes.

Source: Department of Labor, Bureau of Labor Statistics.

Chapter 2 develops in considerably more detail the relation between wages, productivity, and prices. The following sections describe some of the special factors adding to inflation last year.

FOOD PRICES IN 1978

Retail food prices for the 12 months ending in November 1978 rose 11.3 percent—well above the 8.4 percent increase for all items excluding food. Most of the increase in food prices occurred during the first half of the year and was very broadly based. Prices for meats, poultry, fish, and eggs rose 18.9 percent (Table 8), and the index for fruits and vegetables was up 11.5 percent. The index for all food consumed at home was 12.0 percent higher. Prices of imported food rose less than in 1977, however, because coffee prices declined from the record highs of 1977.

TABLE 8.—*Changes in retail food prices, 1977–78*

[Percent change, seasonally adjusted annual rate]

Consumer price index component	1978				Nov. 1977 to Nov. 1978 ²
	I	II	III	IV ¹	
All food.....	12.4	20.0	7.0	6.8	11.3
Food away from home.....	10.7	10.9	10.8	7.9	10.0
Food at home ³	13.7	24.2	5.2	6.3	12.0
Meats, poultry, fish, and eggs.....	28.4	46.8	-4.9	11.2	18.9
Dairy products.....	2.5	15.8	12.3	7.4	9.5
Fruits and vegetables.....	12.2	22.6	14.3	6.7	11.5
Sugar and sweets.....	14.0	22.4	11.7	-1.8	11.6

¹ Based on October–November data.

² Based on unadjusted data.

³ Includes items not shown separately.

Note.—Data beginning 1978 relate to all urban consumers; earlier data relate to urban wage earners and clerical workers.

Source: Department of Labor, Bureau of Labor Statistics.

Increases of this magnitude in food prices were not anticipated as the year began, and price forecasts for food had to be revised repeatedly in the following months. There were a number of reasons for the unfavorable developments: hog production failed to expand despite favorable grain prices; cattle marketings continued to decline; adverse weather curtailed some crops here and abroad; government farm programs and price support levels were changed; prices of major grains rebounded from abnormally low levels in 1977; costs of food processing and marketing went up; and the increase in the minimum wage raised labor costs both for food marketing and for restaurant meals.

The cattle cycle has always been a major determinant of U.S. meat prices. When ranchers become optimistic about future beef prices, they hold back cows and heifers for breeding purposes. Over a period of years, cattle numbers rise until overexpansion of the herd occurs and the large supplies lead to a fall in beef prices. The cycle then enters its liquidation phase until the herd is reduced enough to make the longer-term price outlook more promising. At that point the cycle begins again.

The past 4 years have witnessed a prolonged liquidation phase. The number of cattle and calves on farms in the United States declined from 132 million head in January 1975 to about 111 million head at the end of last year. This represents a 16 percent drop, the sharpest ever recorded. With fewer cattle available in 1978, slaughter was down by 5 percent, and per capita beef consumption declined by more than 4 percent to 120 pounds.

It was expected that lower beef production in 1978 would be largely offset by a higher output of pork and poultry. Analysis of the intentions of hog producers in late 1977 indicated a probable 10 percent increase in pork production in the following year, but the severe winter weather radically changed the outlook. Conception rates fell, abortions increased, and the average number of pigs per litter dropped 6 percent below normal. Disease, rising feed costs, uncertainty over government regulation of feed additives and use of nitrites in processing, and structural changes in the industry also kept hog production from reaching expected levels. When it became evident that pork production was not expanding, meat prices began to rise very rapidly, with strong consumer demand adding further pressure.

Adverse weather in 1978 also affected other food prices. Heavy rains in California delayed spring plantings last year and fresh vegetable prices rose dramatically. Most fruit crops were also reduced by bad weather, apples being the only major exception. In December 1978, freezing temperatures in southern California and Arizona once again hurt citrus and fresh vegetable crops.

In contrast, weather conditions during the growing season for grain were very favorable in the major producing areas. The corn crop reached a record of 7.1 billion bushels, and the national average corn yield exceeded 100 bushels per acre for the first time in history. Other major grain harvests were also fairly ample.

Changes in government farm programs and increased price support levels for agricultural products also led to retail price increases for some food products in 1978. In January, import fees on foreign sugar were raised in order to guarantee the effectiveness of the domestic price support program. In March, land diversion programs were expanded to improve grain prices. The grain reserve programs, which were instituted last year to provide some insurance against the price-raising consequences of a crop failure, led to higher wheat and flour prices while the reserves were being built up. Dairy price support levels rose automatically in April and October, as required by statute, but lower production and strong demand kept prices of milk and dairy products above those higher support levels.

Increasing costs and prices in the rest of the economy also affected food prices. The value of farm commodities, together with the cost of imported foods such as coffee and cocoa, accounts for 43 percent of retail food expenditures. The other 57 percent represents the cost of transporting, processing, and marketing the commodities. Thus, when the costs of labor, transportation, packaging, and other inputs increased last year, the food sector was affected as were other sectors. Approximately one-half of the food price increase in 1978 was attributable to higher prices for these marketing services.

The 15.2 percent increase in the (nonfarm) minimum wage at the beginning of 1978 may have had a particularly large effect on restaurant and institutional food prices and on food marketing costs. Since many workers in these industries are paid the minimum wage, an increase in that wage would quickly translate into higher costs. For food consumed away from home, which represents about one-fourth of total food consumption, prices rose 10 percent during the year.

DEPRECIATION OF THE DOLLAR

Another source of inflationary pressure in the U.S. economy during 1978 was the decline in the value of the dollar relative to other currencies. An index of the value of the dollar relative to the currencies of 10 other industrial countries—computed by using the percentage of world trade of each country as its weight (multilateral basis)—shows a 13.8 percent decline in the dollar from September 1977 to September 1978. Weighted by each country's share of U.S. trade (bilateral basis), the decline was 8.9 percent. The difference between the two indexes is largely caused by the high share of Canadian trade in the latter index and by the 8.0 percent decline of the Canadian dollar relative to the U.S. dollar.

Changes in the relative value of the dollar affect the price of imported goods and thus the cost of living. Over the 4 quarters of 1978, prices of non-fuel imports rose 15½ percent. This was substantially less than the 24.3 percent rise in foreign prices in dollar terms in the 10 largest countries of the Organization for Economic Cooperation and Development (OECD). The difference between these two price movements indicates that foreign producers absorbed a substantial amount of the fall in the dollar by reducing

their profit margins on exports. Such behavior is consistent with historical experience.

The rise in the prices of imported goods has a further effect on domestic prices by raising wage demands and by allowing price increases for goods that compete with imports. The econometric evidence suggests that over a 2-year period these indirect effects might amount to about twice the direct effects on prices of final products. A 10 percent depreciation will generally result in a roughly 1½ percent increase in prices by the end of a 2- to 3-year period, with approximately half of the effect coming in the first year.

The impact of the decline of the dollar on domestic prices is limited by the denomination of oil prices in dollars. As a result, the price of imported fuel does not rise as the dollar falls. In addition, the Organization of Petroleum Exporting Countries (OPEC) did not raise its prices in 1978. The large increase in OPEC prices announced on December 17 for 1979 means that this moderating influence will not be repeated this year.

Inflation affects the depreciation of the dollar as well as being affected by it. Countries with low inflation rates tend to have strong currencies, and the appreciation of their currencies helps to hold down the rise of their domestic price levels (Table 9). Relative inflation rates are by no means the only factors that influence the relative value of currencies. Indeed, in the short run, factors such as relative interest rates, differences in real growth, the size of the current account balance, and expectations of traders in foreign exchange markets are likely to be dominant influences.

TABLE 9.—*Changes in currency values and consumer prices, by country, third quarter 1977 to third quarter 1978*

[Percent change]

Country	Dollar exchange rate	Consumer price index
Canada.....	-6.4	9.3
France.....	11.6	9.3
Germany.....	15.0	2.4
Italy.....	5.4	11.9
Japan.....	38.1	4.0
United Kingdom.....	11.3	7.8

Sources: Board of Governors of the Federal Reserve System and Organization for Economic Cooperation and Development.

HOUSING COSTS

Housing is the largest single component of the consumer price index, comprising over one-third of the expenditures covered by this measure. This component encompasses many items, such as rent, utilities, and home purchase costs. Most of these costs have been rising very rapidly.

Housing is one sector in which a classical demand-pull inflation seems to have been occurring in 1978. The strong demand for houses has raised the price of both land and materials. The average price of a new single-

family house rose by 13½ percent in the 12 months ending in October. Demands for construction materials have strained the capacity of some supplying industries, and prices of building materials have risen strongly. Lumber prices, for example, have risen 33 percent in the last 2 years, and shortages of gypsum products have been common. The increase in energy prices since 1974 has also affected prices of building materials, particularly the prices of insulation and asphalt products such as shingles.

If housing starts taper off this year as expected, some of these problems should become less severe. Energy conservation tax credits enacted late in 1978, however, may keep pressure on prices of insulation.

Some have questioned whether the widely used consumer price index appropriately measures the real burden of rising housing costs in periods of rapid inflation. Capturing the magnitude of rising housing costs in the index is indeed difficult. Rental costs in multifamily dwellings are, in principle, fairly easy to measure. Owner occupancy poses different problems, however, because of the distinction between the costs of owning a house and the costs of using its services.

During the most recent revision of the consumer price index, the Bureau of Labor Statistics reviewed the conceptual basis for the home purchase portion of the index. In principle, there are two ways to measure the cost of owner-occupied housing. The first is to measure the home prices, mortgage interest rates, and other cost elements faced by those buying a home during the period in question. This is the method that has been used historically in the CPI. A second approach would be to price the flow of services from housing, using rents on equivalent units as a measure of the true cost of living in a house. This method is used in the national income and product accounts and in the implicit deflators for GNP and its components.

When home prices move up, rents on comparable units will tend to rise. Unless vacancy rates are very low, however, rents will adjust upward only gradually to a level that fully reflects the new and higher price of homes. Rent controls in some areas may contribute to the slowness of the process of adjustment. Consequently in a period when housing prices are rising rapidly the measurement technique now used in the CPI will show a faster increase in the cost of home-ownership than the alternative index based on equivalent rents. Conversely, when the increase in home prices slows, rents may keep rising for some time in order to close the gap, and the current CPI technique will show a slower price increase than the alternative.

Under either method of measurement, however, a period of rapid rise in housing prices would increase the housing cost index faster than the rise in out-of-pocket costs paid by homeowners who had earlier purchased their homes at lower prices and contracted for mortgages at lower interest rates. An important part of the total rise in the CPI last year stemmed from the homeownership component. New home prices rose by 11 percent and mort-

gage interest rates by 9 percent. Only about 10 percent of homeowners—those who actually bought a house last year—were directly affected by the resulting increases in the cost of homeownership.

MEDICAL CARE

Medical care costs have added significantly to inflation for most of the past decade. Except for the period of mandatory wage-price controls from 1971 through early 1974, medical care costs have risen much more rapidly than other prices. From 1973 through 1977 the cost of medical care rose at an average annual rate of 10.2 percent, compared to 7.7 percent for the total consumer price index. During 1978 the increase in medical care prices slowed to 8.8 percent, about the same rate as the total CPI.

The reason for this moderation is not completely clear. Prospects for mandatory cost containment legislation may have been partly responsible; the success of some of the State cost containment programs may also have been influential. It should be noted, however, that total hospital expenditures continued to increase as a share of GNP since the deceleration early in 1978 in the prices of many hospital services was partially offset by greater use of these services. A significant reacceleration of hospital costs also occurred late in 1978. These developments point out the need for some more permanent means of containing the rise of hospital costs. The Administration will resubmit legislation with this aim in 1979.

AGGREGATE DEMAND MANAGEMENT IN 1978

The focus of aggregate demand policy changed during the past year, as inflation accelerated and unemployment fell faster than had been expected. The acceleration of inflation in the context of continued large employment gains prompted a lowering of the target for output growth. Fiscal and monetary policies shifted toward restraint.

In the fourth quarter of 1977, during the budget planning period, the unemployment rate stood at 6.6 percent. With normal increases in productivity a 1978 economic growth rate well above the long-run trend would have been needed to achieve a further significant reduction in unemployment. Fiscal policy was designed to meet that objective by continuing, though gradually reducing, the stimulative effects of the Federal budget.

The stimulus measures adopted in 1977 were expected to have a dwindling effect in the course of 1978. A reduction in income taxes, to take effect in the final quarter of the year, was proposed to offset the dampening effect on real growth of increases in social security taxes and of the higher effective tax rates resulting from inflation. Some normal cyclical rise in interest rates was anticipated, but it was expected that monetary policy would be generally accommodative.

During the early months of the year, however, it became apparent that the slow growth in productivity, and the associated sharp increases in the

demand for labor, were contributing to a serious acceleration of inflation. For this reason, it became appropriate to slow the growth of the economy to preclude the emergence of excess demand. This slowing would provide an environment in which structural anti-inflation measures and the dollar support program could be effective.

FISCAL POLICY

Shifts in the high-employment budget offer a useful way to summarize changes in fiscal policy. The adjustments made to obtain the high-employment budget remove from actual receipts and expenditures the effects of fluctuations in the economy. Consequently, this budget shows the surplus or deficit as it would be if the economy were moving smoothly along its potential growth path. Changes in the high-employment surplus or deficit reflect the effects on receipts attributable to inflation and to growth in potential real GNP as well as to discretionary changes in Federal expenditures and tax rates. Short-run changes in the high-employment surplus or deficit are relatively insensitive to assumptions regarding the level of potential GNP.

Table 10 shows that fiscal policy shifted toward restraint in 1978. For the calendar year as a whole, the high-employment deficit was reduced by almost one-half from 1977 and declined continuously through 1978. The tax cut at the beginning of 1979 will temporarily increase the high-employment deficit, but the high-employment budget will be about in balance by mid-1980.

The 1978 reduction in the high-employment deficit occurred for four reasons. First, the effects of the 1977-78 stimulus package gradually dissipated: public service employment peaked slightly above 725,000 jobs in the spring,

TABLE 10.—*Actual and high-employment Federal receipts and expenditures, national income and product accounts, calendar years 1973-78*

[Amounts in billions of dollars; quarterly data at seasonally adjusted annual rates]

Calendar year or quarter	Actual				High-employment			
	Receipts	Expenditures	Surplus or deficit (—)		Receipts	Expenditures	Surplus or deficit (—)	
			Amount	Percent of GNP			Amount	Percent of GNP ¹
1973-----	258.3	265.0	-6.7	-0.5	256.8	265.1	-8.4	-0.6
1974-----	288.6	299.3	-10.7	-1.8	301.1	298.6	2.6	.2
1975-----	286.2	356.8	-70.6	-4.6	320.5	350.1	-29.6	-1.8
1976-----	331.4	385.2	-53.8	-3.2	356.9	380.3	-23.4	-1.3
1977-----	374.5	422.6	-48.1	-2.5	394.5	419.0	-24.6	-1.3
1978 ² -----	431.6	461.0	-29.4	-1.4	446.6	459.6	-12.9	-.6
1977: III-----	374.3	430.7	-56.4	-2.9	392.2	427.4	-35.3	-1.8
IV-----	385.5	444.1	-58.6	-3.0	403.4	441.4	-38.0	-1.9
1978: I-----	396.2	448.8	-52.6	-2.6	417.5	447.0	-29.5	-1.4
II-----	424.7	448.3	-23.6	-1.1	438.1	447.1	-9.0	-.4
III-----	441.7	464.5	-22.8	-1.1	455.2	463.0	-7.9	-.4
IV-----					475.8	481.2	-5.4	-.2

¹ High-employment surplus or deficit as percent of high-employment gross national product.

² Preliminary.

Note.—Detail may not add to totals because of rounding.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of the Treasury, Office of Management and Budget, and Council of Economic Advisers.

and antirecession fiscal assistance to State and local governments ceased at the end of the third quarter. Second, inflation and real growth moved individuals into higher tax brackets during the year.

Third, Federal spending rose less rapidly than had been anticipated. The increase in total expenditures as measured in the national income and product accounts was \$38.2 billion from the end of 1977 to the end of 1978. This increase amounts to only 8.6 percent in nominal terms in a period when the GNP deflator rose 8.3 percent. The substantial shortfall in fiscal 1978 from the rate of spending anticipated in the January budget came to \$12½ billion on a unified budget basis, or 2.8 percent of total outlays. The prospect of a shortfall became apparent fairly early last year, but no attempts were made to offset it, since additional fiscal restraint was a desirable outcome in view of unfolding economic circumstances.

For fiscal 1979, which began last October, budget projections were similarly scaled down; on a unified basis, fiscal 1979 Federal spending is now expected to be \$493.4 billion or \$7.6 billion below the original estimates made last January (adjusted to include earned-income tax credits in excess of taxpayers' liabilities, which are now treated as outlays).

The fourth element in the shift toward fiscal restraint was the President's decision to revise his tax reduction proposal. Originally the Administration had requested a \$25-billion tax reduction effective on October 1, 1978. In May the President asked that the net reduction be scaled back to \$20 billion and its effective date postponed to January 1, 1979. Reduction was still needed to offset the fiscal drag stemming from the changes in effective tax rates occasioned by inflation and real growth, from increases in social security taxes previously enacted, and from the \$6.6-billion increase in social security taxes legislated in 1977 to take effect in 1979. Nevertheless, a smaller and later reduction appeared appropriate in view of the need for greater fiscal restraint. The Congress ultimately enacted a \$20.6-billion reduction of personal and business taxes plus a \$0.7 billion increase in outlays for the earned income tax credit. This package yields a net revenue loss of \$18.9 billion when allowance is made for the expiration of \$2.5 billion in employment tax credits. These tax measures are discussed in Chapter 3.

These adjustments to fiscal policy moved the budget more quickly toward two previously stated objectives of the Administration: reducing Federal outlays to 21 percent of GNP and achieving a balanced budget in the context of reasonable economic growth (Table 11). Fulfillment of these objectives is a major challenge because it will require offsetting the upward pressure on Federal outlays from rising prices and from automatic increases in entitlement programs under current law.

MONETARY POLICY

Two major developments dominated monetary and financial conditions during 1978. The first was a substantial rise in interest rates. The second was the introduction of new financial instruments through which thrift

TABLE 11.—*Federal unified budget outlays as percent of gross national product, and budget surplus or deficit, fiscal years 1955–80*
[Current dollars]

Fiscal years	Budget outlays as percent of GNP			Budget surplus or deficit (—) (billions of dollars)
	Total ¹	Income security	National defense	
1955–59 average.....	18.3	3.0	10.0	–2.3
1960–64 average.....	19.2	4.1	8.8	–4.2
1965–69 average.....	19.9	4.0	8.5	–7.2
1970–74 average.....	20.3	5.6	6.7	–13.8
1975.....	22.4	7.5	5.9	–45.2
1976 ²	22.5	7.8	5.4	–63.5
1977.....	22.0	7.5	5.3	–45.0
1978.....	22.1	7.2	5.1	–48.8
1979 (estimate).....	21.6	6.9	5.0	–37.4
1980 (estimate).....	21.2	7.1	5.0	–29.0

¹ Includes other outlays not shown separately.

² Transition quarter averaged with fiscal year 1976.

Sources: Department of Commerce, Department of the Treasury, Office of Management and Budget, and Council of Economic Advisers.

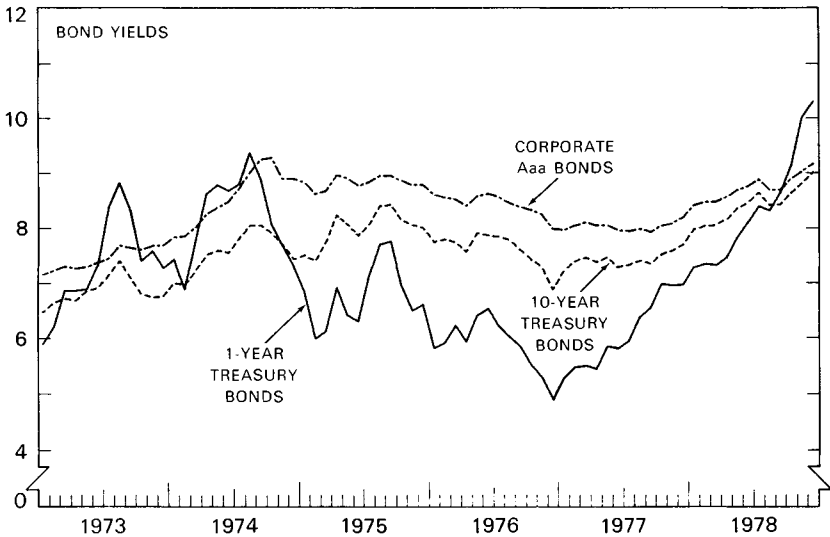
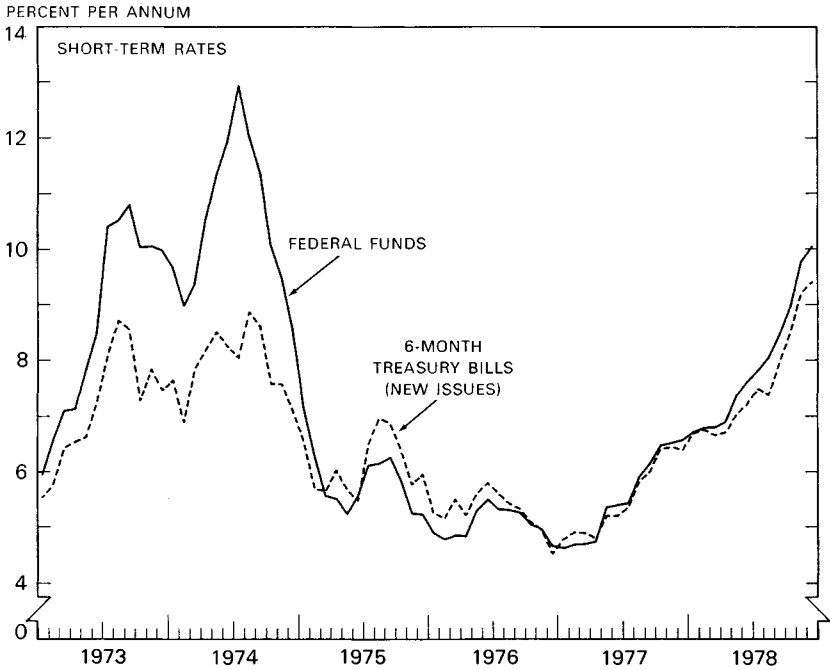
institutions could continue to attract funds, an innovation that moderated significantly the degree to which high short-term interest rates depressed housing construction.

Chart 1 shows the rise in both short- and long-term interest rates. These increases came in several phases. A small upward movement in short-term rates occurred early in the year after the Federal Reserve raised the discount rate in January in response to international developments. This was followed by a period of relative stability through mid-April as the slow pace of economic activity in the first quarter led to quite moderate growth in the monetary aggregates. Very rapid growth in the aggregates began in the second quarter and persisted into the summer. The efforts of the monetary authorities to moderate the growth of the aggregates resulted in substantial increases in short-term interest rates. The Federal funds rate rose by 2 percentage points between March and the middle of October. Most other short-term rates rose in an approximately parallel fashion. Measures to defend the dollar, announced at the beginning of November, prompted a further dramatic increase in rates. The discount rate was raised by a full percentage point, from $8\frac{1}{2}$ to $9\frac{1}{2}$ percent, on November 1; between then and the end of the year the Federal funds rate rose by another three-fourths of a percentage point to about 10 percent.

The movement of long-term interest rates was determined by current developments in short-term rates, by anticipations of future interest rate and price developments, and by supply and demand considerations in capital markets. Long-term rates drifted up somewhat during the first quarter, when demands for business credit remained strong, but leveled out subsequently as expectations developed that rates might be nearing cyclical peaks. With short-term rates continuing to increase, the yield curve by October had become inverted; that is, long-term rates were below short-term rates.

Chart 1

Selected Interest Rates and Bond Yields



NOTE: TREASURY BONDS ARE CONSTANT MATURITIES.
SOURCES: DEPARTMENT OF THE TREASURY, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, AND MOODY'S INVESTORS SERVICE.

Behavior of the Major Monetary Aggregates

During the first half of the year the behavior of the monetary aggregates paralleled fluctuations in the real economy. Growth of M_1 (demand deposits and currency) and M_2 (including, in addition to M_1 , time and savings deposits other than negotiable certificates at large commercial banks) was quite slow in the first quarter and much faster in the second quarter. Growth of these two monetary aggregates continued to be relatively strong in the third quarter, despite rising interest rates and slowing growth of real GNP.

Between the final quarter of 1977 and the third quarter of last year, M_1 grew at an 8.2 percent annual rate, well above the upper end of the Federal Reserve's long-term target growth range of 4 to 6½ percent. Studies that relate the real value of M_1 to real GNP and to short-term interest rates indicate that the usual historical relationship held up fairly well through this period. The continuation of rapid growth of the monetary aggregates through the third quarter appears to have been largely attributable to the rapid increases in nominal GNP which raised transactions demands. There was virtually no growth in M_1 during the fourth quarter when interest rates were rising sharply.

In the latter half of the year, two major innovations in financial markets tended to change the usual relation between the monetary aggregates on the one side and economic activity and interest rates on the other. The first innovation was the new regulation permitting commercial banks and nonbank thrift institutions on June 1 to begin issuing money market certificates (MMCs) of 6-month maturity in minimum denominations of \$10,000. Commercial banks were permitted to pay a maximum yield on these certificates equal to the discount rate on 6-month Treasury bills, but interest could be compounded if the bank chose to do so. The maximum rate for nonbank thrift institutions is one-fourth of a percentage point above the rate payable by commercial banks.

The second innovation, introduced on November 1, was a regulation permitting commercial banks to offer individual customers an automatic transfer service whereby funds are automatically transferred from a customer's savings account to cover needs for funds in the customer's checking account. By the end of the year it is estimated that there were \$3.2 billion in 420,000 accounts covered by this service. Use of these services can be expected to grow over the future.

The introduction of MMCs influenced the growth of M_2 by enabling banks to retain time and savings deposits that they would otherwise have lost. Growth in M_2 remained very strong in the third quarter, at a 10.8 percent annual rate, but slowed significantly in the fourth quarter to 4.5 percent.

The introduction of the automatic transfer service began to have a significant effect on the growth of M_1 in the last 2 months of 1978. During November and December, M_1 declined \$0.6 billion. In the absence of the new deposit services, M_1 probably would have risen by about \$1 billion.

In response to this effect on the behavior of the conventional aggregates, the Federal Reserve defined a new aggregate, M_1+ . It includes, in addition to M_1 , all passbook savings accounts at commercial banks and all checkable deposits at nonbank thrift institutions (negotiable order of withdrawal accounts, demand deposits at mutual savings banks, and share draft accounts at credit unions). This aggregate thus includes all transactions accounts plus those accounts from which transfers to the automatic transfer service accounts are most likely to occur. The annual rate of growth of this aggregate dropped from 6.1 percent in the first half of 1978 to 2.4 percent in the second half.

Role of MMCs in Monetary Restraint

The new money market certificates played a critical role in the way the economy responded to monetary restraint in 1978. Experience would have led one to expect that the large rise in interest rates would sharply curtail the availability of mortgage credit during 1978, with strongly adverse effects on home building. The growth of mortgage credit did taper off somewhat during the year and residential construction activity did flatten out. The magnitude of these responses was very small, however, compared with past periods of tight financial markets.

In previous periods of sharply rising market interest rates, individuals began at some point to divert funds from deposits in thrift institutions to market securities because of the low ceiling rates on deposit instruments. The growth of thrift deposits usually slowed to a 4–6 percent range in such periods, and net new inflows (excluding crediting of interest) fell to around zero. This necessarily slowed the acquisition of mortgages by these institutions, and consequently housing credit dried up.

During late 1977 and early 1978 this same pattern began to emerge. After the introduction of MMCs in the middle of the year, however, the pattern was dramatically reversed. As a result, mortgage acquisitions declined much less than in previous periods of rapidly rising market interest rates.

The introduction of these instruments does not wholly resolve the disintermediation problem or entirely buffer the housing market from credit restraint. Home buyers are affected by the higher *cost* of credit, although they are affected much less than before by the reduced *availability* of credit. Furthermore, since mortgage rates do not rise commensurately with short-term rates, the thrift institutions are confronted with reduced cash flow for two reasons. First, the spread between the cost of new deposits and the return from new mortgages narrows. Second, the composition of deposits becomes more heavily weighted by the higher-interest certificates. Since this is occurring faster than the mortgage portfolio is rolled over, the average cost of deposits is rising relative to the average yield on mortgages. In early 1978, however, the spread between the return on the mortgage portfolio and the cost of deposits had become quite large and the narrowing that occurred

in the second half of the year was relatively small. Therefore—barring a prolonged period of very narrow spreads between mortgage rates and short-term rates—savers, the thrift institutions, and the housing market will all benefit from the new instrument.

The reduced sensitivity of mortgage credit availability to rising market interest rates smooths the adjustment of the economy to credit restraint. It also implies, however, that interest rates must move through somewhat larger cyclical swings to achieve the effect on aggregate demand that would formerly have resulted from variations in both credit availability and interest rates. Such a change also means that the distribution and timing of the response of the economy to monetary restraint will be different. The period ahead will require adroit reading of the signals to judge the degree of restraint that is occurring and is appropriate.

CREDIT FLOWS IN 1978

Credit flows had been very strong at the end of 1977 and remained so through the first part of last year. The ratio of total funds raised in credit markets (exclusive of corporate equities) to GNP reached a record peak in the third quarter of 1977 and moved only slightly lower in the following 2 quarters. Some decline developed in the second and third quarters of last year. The ratio of total private funds raised to private GNP remained on a record high plateau from the third quarter of 1977 through the first quarter of last year but then began to decline.

The composition of credit flows shifted during the year. Mortgage credit flows peaked late in 1977 and then moderated somewhat. With the dollar value of residential construction continuing to rise, the ratio of net home mortgage extensions to household investment in residential construction turned downward last year from a very high peak. The large volume of mortgage credit that was being used in late 1977 and early 1978 relative to residential construction suggested that homeowners were realizing capital gains on houses when ownership changed hands and were using the funds to finance other types of expenditures.

Consumer credit continued to grow strongly through the first half of the year, reflecting the strength of new car sales and sales of other durables. The rate of installment credit extensions leveled out, however, in the second half of the year on a plateau slightly below the June peak.

Federal Government borrowing also declined relative to the total of funds raised in credit markets. The moderation in Federal borrowing from domestic sources resulted from the shift in fiscal policy previously discussed and also from an increase in official foreign purchases of U.S. securities with dollars obtained through intervention in foreign exchange markets.

The nonfarm, nonfinancial corporate business sector borrowed heavily in the fourth quarter of 1977 and the first quarter of last year. Indeed, credit market funds raised in the first quarter were more than a third greater than

a year earlier. The amount of funds raised leveled out subsequently at an annual rate below this peak but exceeded all previous years except 1974. Business borrowing from commercial banks, in particular, was exceptionally heavy in the first half but slowed in the second half of the year. The strength of capital spending relative to internal funds is the primary reason for the rapid growth in business credit demands. The ratio of external funds raised to capital expenditures rose to slightly under one-half in 1978, which is a high though not unprecedented figure.

Efficiency of Financial Markets

Both of the innovations in financial markets described above work to provide individuals with a competitive return on their savings. The automatic transfer services perform another valuable function: they reduce the loss of efficiency associated with substantial shifts of funds from one type of deposit to another in response to interest rate differentials. Furthermore, to preserve the competitive position of nonbank thrift institutions, the Federal Home Loan Bank Board is considering giving nonbank thrift institutions authority to receive deposits from which third-party payments may be made. Such a move might further stabilize their deposit flows.

These changes, however, entail cumbersome bookkeeping and transactions procedures. A further consolidation of the institutional changes initiated this year would be to move toward a uniform structure for commercial banks and nonbank thrift institutions under which all of these institutions would have authority to accept household checking deposits and to pay interest on them. The bill proposed by the Administration in the last Congress to authorize negotiable order of withdrawal accounts for all U.S. banks and thrift institutions was one approach to this reform.