

CHAPTER 3

The Economy: Review and Prospects

THE U.S. ECONOMY IN 1980 felt the effects of the huge 1979 oil-price shock. The 5-year recovery and expansion that followed the 1974-75 downturn came to an end with a sharp but brief recession and the underlying rate of inflation moved up to the 9- to 10-percent range. The most striking feature of the year, however, was the volatility of economic developments. Real gross national product (GNP) declined at a record rate in the second quarter but advanced thereafter, producing the briefest recession on record. Interest rates surged to record heights, plunged downward, and then rose to new peaks and declined again, all within the space of 9 months. Overall, these developments made for a historically unprecedented year.

While the outlook is for only a modest pace of recovery in 1981, the persistence of unacceptably high inflation and the Nation's vulnerability to energy shocks call for continued restraint in both monetary and fiscal policy. A modest-sized tax cut combined with restraint in Federal spending, however, would be compatible with this prudence. And if, as the Administration has proposed, a substantial part of the tax cut is oriented toward business investment, we can help support the recovery in a way that comes to grips with the country's longer-run needs.

A REVIEW OF 1980

The resilience that had characterized the economy during 1979 ultimately gave way to pressures from sharply higher energy prices and policy measures undertaken in the fight to cool inflation. Over the 4 quarters of 1980 real GNP fell 0.3 percent, but the pattern during the year was quite uneven. The first quarter's 3.1 percent annual rate of growth in real GNP was followed by a record 9.9 percent rate of decline in the second. After midyear, much to the surprise of most economic forecasters, the economy rebounded; real GNP grew at a 3.1 percent rate during the second half of the year. (All national income and product account data for the fourth quarter of 1980 are based on highly preliminary estimates.)

The weakness of the economy during the first half of 1980 led to significant deterioration in labor markets. The unemployment rate

rose from 6.0 percent in December 1979 to 6.3 percent in March and then spurted to a peak of 7.6 percent in May. The rate remained between 7.4 and 7.6 percent for the rest of the year. During the first half of the year, employment declined by 1.0 percent, a decline of 1 million jobs. From June to December, employment grew 0.5 million, thus reversing a substantial portion of the first-half loss. The labor force grew 1.3 percent over the 4 quarters of the year.

The rate of inflation increased in 1980. The implicit price deflator for GNP rose 10.0 percent over the 4 quarters of 1980, a 1.9 percentage point increase over the 1979 rate. For the 12 months ending November 1980 the consumer price index (CPI) for all urban consumers rose 12.6 percent—the same rate of increase as in the 12 months ending in November 1979. Due to the special circumstances created by increases in the prices of food and energy, and the treatment of home purchase and finance in the CPI, this latter comparison understates the rise in inflation in 1980. Excluding these factors, the CPI rose 9.9 percent as compared with 7.2 percent in 1979.

Wage rates, which had shown moderation during 1979 despite the rise in inflation, accelerated in 1980. Average hourly earnings grew 9.3 percent, up 1 percentage point from the 1979 rate. For the year ending with the third quarter of 1980 productivity was virtually unchanged, although this was an improvement as compared with the 1-percent decline recorded in 1979.

The year saw continued improvement in the U.S. international position. After absorbing the huge 1979 increases in our foreign oil bill, the U.S. balance of payments moved sharply into surplus in the second half of the year. All other major oil-importing countries, by contrast, are experiencing substantial current-account deficits. The U.S. dollar remained strong in relationship to other currencies throughout much of the year. At year-end, on an average weighted basis, its value was 6 percent higher than at the beginning of the year. The United States reduced its total energy use in 1980. In addition, as compared with 1979, oil imports declined by 20 percent to about 6½ million barrels per day at year-end. In 1980 we imported less oil than in any year since 1975. While a portion of this reduction can be traced to weakness in economic activity, much was due to intensified conservation efforts that have followed the recent rapid increases in energy prices.

AN OVERVIEW OF THE YEAR

The slowing in the growth of the economy that occurred in 1980 was largely the consequence of events that began in 1979.

The first of these was the significant disruption in the world oil market triggered by lost Iranian oil production. Extensive efforts to

build up oil inventories and maintain adequate supplies boosted the price of imported oil purchased by U.S. refiners by 94 percent during 1979. This, together with the phased decontrol of the prices of domestically produced oil, resulted in the average refiners' acquisition price for all oil in the United States rising from \$13 per barrel in January 1979 to \$24 per barrel in December 1979. This huge increase added to inflationary pressures and reduced purchasing power. The Council of Economic Advisers has calculated that the drag on purchasing power due to these higher oil prices reached 2 percent of GNP during 1979.

A second restraining force evident at the end of 1979 was the stance of monetary and fiscal policy. A major goal of macroeconomic policy since early 1979 has been to minimize the inflationary consequences of the oil-price shock by avoiding the spillover of accelerating consumer prices into wage demands, then higher business costs, and eventually higher long-term inflation. The Federal high-employment budget surplus (discussed in more detail later in this chapter), which had increased by \$7½ billion in 1978, tightened an additional \$13½ billion in 1979. Efforts to restrain growth in money and credit resulted in rising short-term interest rates during 1979, especially in the second half. From July to December 1979 the 91-day Treasury bill rate rose from 9.3 to 12.1 percent, while the prime rate increased from 11.5 to 15.5 percent.

A third source of potential demand restraint, which became evident at year-end 1979, stemmed from imbalances in the spending behavior of households. In the last half of 1979 real disposable income rose 1 percent, while real consumption spending advanced 2 percent. As a consequence, the personal saving rate fell 0.9 percentage point during the last half of 1979 to a 28-year low of 4.7 percent in the fourth quarter. At the same time, consumer debt burdens remained high and delinquency rates on consumer loans continued to rise. It seemed clear that some significant retrenchment by the consumer was likely, even in the absence of further oil drag and continued policy restraint.

In light of these developments, it was expected that 1980 would be a year of declining economic activity. Indeed, 1 year ago this *Report* stated: "The expected recession is likely to be mild and brief. Declines in real gross national product (GNP) should not extend much past midyear, and economic growth will resume later this year, albeit slowly at first. Over the 4 quarters of 1980 real GNP is forecast to decline by 1 percent . . . the unemployment rate is likely to rise . . . to 7½ percent in the fourth quarter . . ." Despite the general accuracy of last year's forecast, views about the likely course of the economy went through several rapid changes as the year unfolded.

Early in 1980 there were few signs of recession. If anything, activity seemed to be picking up. The evidence available at the time hinted that households, far from retrenching, were on a buy-in-advance spending spree. Retail sales, which had risen at an annual rate of 13 percent from October 1979 to December 1979, accelerated to an annual rate of nearly 43 percent in January 1980. Auto sales, which had been running at an annual rate of 9.4 million units in October 1979, spurted to 10.3 million units in December 1979 and to 11.9 million units in January 1980.

International events contributed to the sense that demand could be stronger than anticipated. Continued Mideast instability, the unresolved issue of the American hostages in Iran, and the Soviet invasion of Afghanistan all raised the possibility of greatly expanded defense spending, perhaps enough to sustain economic growth despite a predicted slowing in private demand.

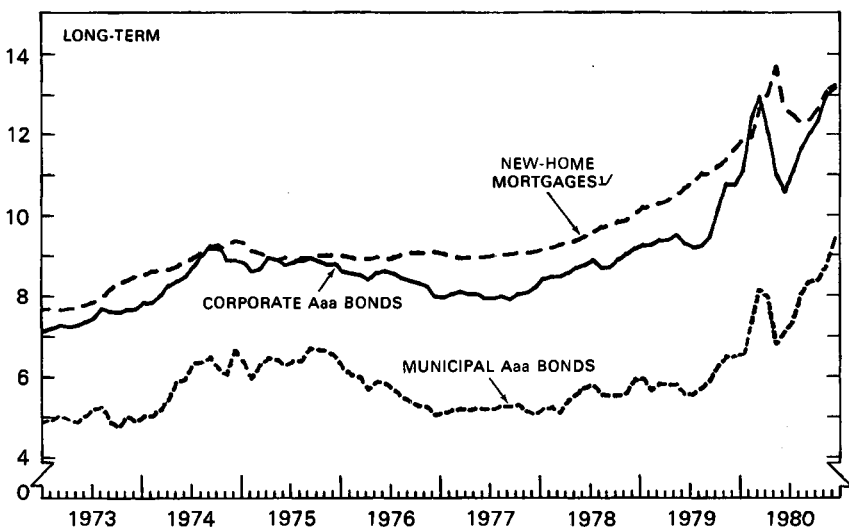
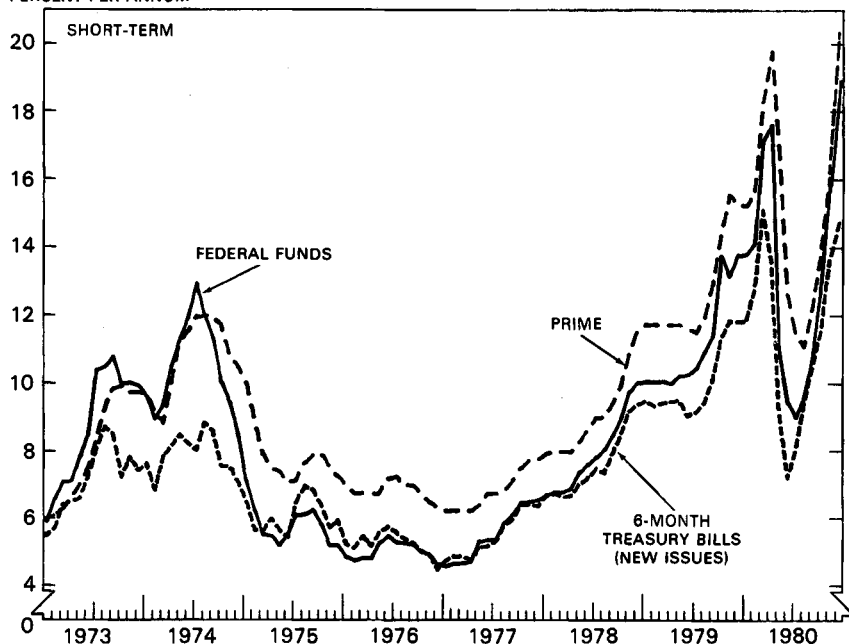
The inflation data also seemed to reflect an apparent acceleration in economic activity. The CPI, which had increased at an annual rate of between 13 and 14 percent during the last 3 months of 1979, rose at a rate of 18 percent in January and February. Although a large part of this speedup was due to higher oil prices, other prices also accelerated. For the 3 months ending in February, the CPI excluding energy prices rose at an annual rate of 12.9 percent, in contrast to the 12.2 percent rate during the 3 months ending in November 1979. The producer price index (PPI) for finished goods other than energy rose at an annual rate of 16½ percent in January 1980. More ominously, wage rate increases, which had remained moderate throughout most of the year, accelerated in late 1979 and early 1980.

Meanwhile, business demand for credit accelerated, with business loans growing at a rapid 24 percent annual rate from December 1979 to February 1980. Speculative activity in commodity and financial futures markets intensified, and interest rates continued their rapid climb (Chart 7). In early March the 91-day Treasury bill rate rose to 15.7 percent while the prime rate hit 17.75 percent. Several forces were apparently at work. Each new increase in short-term interest rates brought fears of higher rates, and thus further pressures to borrow immediately. In addition, hints of credit controls apparently motivated firms to borrow in advance of actual need.

Chart 7

Selected Interest Rates and Bond Yields

PERCENT PER ANNUM



✓ EFFECTIVE RATE ON CONVENTIONAL MORTGAGES IN THE PRIMARY MARKET.

SOURCES: DEPARTMENT OF THE TREASURY, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, FEDERAL HOME LOAN BANK BOARD, AND MOODY'S INVESTORS SERVICE.

By early March there was fear that inflationary pressures and inflationary expectations were mounting despite the restraining influences of fiscal and monetary policy, and that without some additional action these would validate and further accelerate wage demands and ultimately lead to an explosion of prices. This would have ended any chance of containing the 1979 oil-price shock. It was in this environment that the Administration and the Federal Reserve moved to suppress the speculative fever and return order to financial markets. On March 14 the President announced a series of budgetary and administrative actions designed to stabilize the situation. These included measures to reduce Federal expenditures, to strengthen wage and price monitoring, and to encourage energy conservation. In addition, the President authorized the Federal Reserve to institute a program of selective controls on credit.

The controls program—explained in more detail below—induced banks and other financial institutions to intensify actions to restrict the availability of virtually all types of credit. The growth of bank business loans and other lending covered by the program was curtailed sharply. The program also had the important psychological effect of curtailing household borrowing, as many forms of credit not explicitly covered by the program, such as home mortgages and auto loans, also fell sharply. A good part of these declines, however, probably stemmed from the rapid rise in interest rates.

Economic activity was apparently beginning to slow even before the imposition of the credit controls, but the subsequent decline in consumer demand was intensified by the controls. The economy reached its cyclical peak in January. Nevertheless, the first-quarter growth in real GNP was at an annual rate of 3.1 percent. During the second quarter real GNP dropped at an annual rate of 9.9 percent, exceeding the previous record of 8.2 percent set in the first quarter of 1975. Furthermore, the decline of 10.4 percent at an annual rate in real final sales was far and away the sharpest postwar drop in that category. Housing and automobile sales were the key sectors of weakness, accounting for about two-thirds of this drop in final demand. There was a modest amount of inventory accumulation but it was surprisingly small given such a large decline in final sales.

Interest rates, which had continued to rise for a brief time after the introduction of the credit controls program, fell sharply due to weakening loan demand and a declining economy. Rates peaked around the end of March and then fell further and more quickly than they

had risen just 2 months earlier. By late June the credit controls were no longer constraining the demand for credit, and by July the prime rate had fallen to 11 percent, down from its peak of 20 percent. In light of these developments, the controls were removed in early July.

After the second quarter's record drop in real GNP, most observers predicted that the economy would experience 2 more quarters of decline. There were fears that the downturn might approach the severity of the 1974-75 recession. Indeed, the unemployment rate, which had jumped to 7.6 percent in May, was forecast by many to be between 8½ and 9 percent by year-end.

In fact, private demand rebounded with surprising alacrity. The sharp decline in interest rates, combined with the absence of a significant stock of unwanted inventories, contributed to the brevity of the recession. The two sectors that had led the decline in the second quarter recovered quickly in the third. By September, housing starts had increased 70 percent above their May low—by far the quickest bounceback on record. Car sales also regained some of their lost ground. October sales ran at an annual rate of 9.2 million units, still lower than their year-earlier levels, but 28 percent above their May low rate of 7.2 million units. The third quarter rebound in real final sales was a strong 4.1 percent, but inventory liquidation held the growth in real GNP to a more modest 2.4 percent.

In the fourth quarter real growth picked up to a 3.7 percent annual pace, with continued strength evident in personal consumption and housing. With the turnabout in economic activity in the second half of the year, the labor market also improved.

At the same time that the recovery was taking place, tightening monetary conditions produced another upswing in the interest rate roller coaster (Chart 7). From July to December the prime rate advanced from 11 percent to a record level of 21½ percent, while the Treasury bill rate rose from 8 percent to 17 percent. Long-term interest rates also rose by about 2 to 3 percentage points over the same period. After mid-December interest rates dropped sharply for a time but nevertheless remained unusually high. These developments raise serious doubts about the future of the recovery and bring prospects of a leveling off or possibly a decline in output during the early part of 1981. Furthermore, the persistence of the Iran-Iraq war raises the possibility of sharply higher energy prices during 1981. At the end of 1980 the key features which had characterized the U.S. economy over most of the previous 18 months remain dominant: a surprising strength of demand straining against high interest rates, a stubborn inflation, and continued vulnerability to external oil shocks.

THE MAJOR SECTORS OF AGGREGATE DEMAND

The decline of the economy during 1980 as a whole was dominated by drops in expenditures on real consumer durable goods (down 7.7 percent over the 4 quarters), residential structures (down 18.0 percent), and real business fixed investment (down 6.0 percent) (Table 14). The sectors of real demand that grew during the year were personal consumption of services, Federal Government purchases, and net exports. Service consumption grew 2.8 percent over the 4 quarters of 1980. Federal Government purchases were up 4.7 percent. Real net exports grew from \$42.2 billion in the fourth quarter of 1979 to \$55.7 billion in the fourth quarter of 1980. A 6.7 percent reduction in imports combined with a 3.9 percent rise in exports to produce this result.

TABLE 14.—*Growth in major components of real gross national product, 1976–80*
[Change, fourth quarter to fourth quarter]

Component	1976	1977	1978	1979	1980 ¹
Percent change:					
Real gross national product.....	4.4	5.8	5.3	1.7	-0.3
Personal consumption expenditures.....	5.7	5.0	4.8	2.0	-3
Business fixed investment.....	7.8	13.5	9.0	2.9	-6.0
Residential fixed investment.....	19.8	12.5	-0	-6.1	-17.6
Government purchases of goods and services.....	-1.3	3.6	1.6	1.9	1.5
Federal.....	-8	5.0	-1.3	2.1	4.7
State and local.....	-1.7	2.7	3.3	1.7	-3
Real domestic final sales ²	4.9	5.9	4.4	1.7	-1.3
Change as a percent of GNP:					
Inventory accumulation.....	.4	.4	.2	-.8	.0
Net exports of goods and services.....	-.7	-.4	.9	.8	.9

¹ Preliminary.

² GNP excluding change in business inventories and net exports of goods and services.

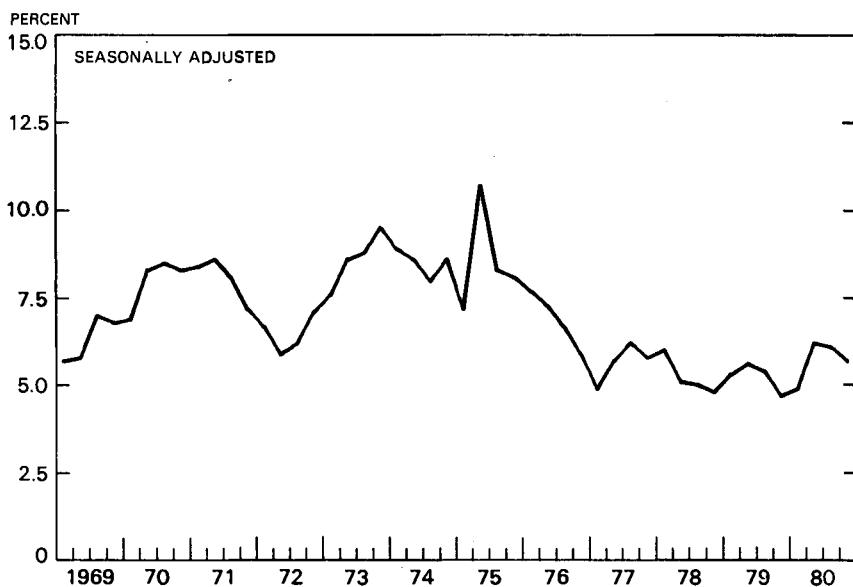
Source: Department of Commerce, Bureau of Economic Analysis.

Personal Consumption Expenditures

The year 1980 began with the personal saving rate at a 28-year low, with consumer debt burdens near record highs, and with attitude surveys showing consumer pessimism about the outlook. The modest strength in consumption that had been evident in 1979 despite the deceleration in real incomes had worsened the budget position of households. This, together with high interest rates and the imposition of credit controls, produced a retrenchment in consumer outlays. Real personal consumption expenditures fell in 1980 for the first time in 6 years. The 0.3 percent decline in consumption over the year, combined with the modest 0.5 percent increase in disposable income, helped to increase the saving rate from 4.7 percent in the fourth quarter of 1979 to 5.7 percent in the fourth quarter of 1980 (Chart 8).

Chart 8

Personal Saving Rate



SOURCE: DEPARTMENT OF COMMERCE.

The decline in consumption in 1980, which was largely the result of a decline in credit-sensitive purchases—particularly durable goods—was concentrated in the second quarter. In that quarter total real consumption fell at a record rate of 9.8 percent. The improvement in household debt positions that had begun in late 1979 was accelerated during the late spring and early summer by the credit controls program. Extensions of consumer credit in the second quarter fell at nearly a 60 percent annual rate. Outstanding consumer debt declined for 4 straight months from April to July, and for the second quarter as a whole it fell at a record 13.8 percent annual rate.

The rapid drop in interest rates helped to bring a quick reversal of the second quarter's consumption decline. In June real retail sales grew at a 17.8 percent annual rate; the gain in July was at an even greater 27.3 percent pace. For the third quarter as a whole real consumption advanced at an annual rate of 5.1 percent, regaining nearly one-half of the second quarter's drop. In the fourth quarter real consumption grew at a 3.3 percent annual rate.

Durable Goods. Real expenditures on consumer durables fell 7.7 percent during 1980, their second year of decline. The consumer durables cycle during 1979 and 1980 was much like that of the 1974-75 recession. During the first half of 1980 real consumer durable goods

expenditures continued the virtually unbroken decline that had begun after the fourth quarter of 1978. Over this period purchases of real consumer durables declined 16.3 percent, with the steepest drop concentrated in the second quarter of 1980. A long and gradual slide culminating in 1 quarter of very steep decline was also the pattern during 1974-75; the peak-to-trough decline then was also 16.3 percent. During the last half of 1980 real consumer durable expenditures regained nearly one-half of the second quarter's decline. Growth in the third quarter was at an annual rate of 21.9 percent. Growth in the fourth quarter was at a rate near 7 percent. Automotive purchases dominated quarter-to-quarter movements in consumer durables during the year, leading the first-half declines as well as the last-half gains. By year-end car sales were running at a 9-million unit rate, but sales were apparently being held back by a combination of the high interest rates on consumer loans and high car prices. Real automotive purchases fell 12.9 percent during 1980, as a whole. Similar weakness was evident in real consumer demand for other durable goods, which fell 4.0 percent over the 4 quarters of 1980.

Other Consumption. Real nondurable goods consumption fell 1.2 percent during 1980. Purchases of gasoline, oil, and other fuels fell 3.2 percent. In part this reflected the effects of the recession, but much of the decline in these energy demands was due to conservation efforts in response to sharply higher prices. By year-end the consumption of these goods was 11 percent below the peak levels set in 1978.

Real consumption of services grew at a sluggish 2.8 percent over the 4 quarters of 1980, down from the 1979 pace of 3.6 percent. Service consumption tends to be much more stable than goods consumption over the business cycle because many of these expenditures, such as housing and medical care, cannot be delayed or postponed. Nevertheless, important cyclically sensitive components of service consumption were quite weak during the year. Transportation services, for instance, fell at an annual rate of 11.9 percent in the second quarter and 2.0 percent over the entire year.

Residential Investment

The path of real investment in residential structures over the last 2 years was like that of consumer durables. It was marked by a slow and gradual slide throughout 1979, ending with a very sharp decline in the spring of 1980. Residential construction picked up rapidly thereafter, but at year-end housing starts had leveled off in response to higher mortgage interest rates. The pattern of housing activity in 1979 and 1980 reflected new developments in housing finance. As noted in Chapter 2, mortgage lenders now compete for loanable funds on a more even footing with other lenders. Consequently, the

chief cyclical determinant of housing activity has become interest rates rather than credit availability. As events have demonstrated, however, these institutional changes did not insulate housing from tighter monetary conditions.

The financial environment that determines the health of the housing sector had been weakened by the sharp rise in interest rates that began in 1979. By October of that year, most mortgage rates had risen to around 13 percent, a level that discouraged many potential home buyers. At the same time, increases in construction loan rates stretched the ability of homebuilders to finance new construction and carry inventories of unsold homes. This trend was accentuated in early 1980 by a further rise in interest rates on mortgage commitments to a record 16 percent in April. The increased interest rates pushed monthly mortgage payments higher than many could afford. In addition, even though mortgage finance was largely exempt from the provisions of the credit controls program, mortgage lenders were less willing to commit long-term funds in such an uncertain environment. During the year State and local government housing authorities continued to provide a substantial amount of mortgage support through purchase of residential mortgages at below-market interest rates financed by tax-exempt bonds. But Federal and related agencies provided only modest support to the mortgage market as compared with the last cyclical downturn. Home sales reached their nadir by late spring. Housing starts in May plummeted to a 906,000-unit annual rate, down 36 percent from their January level and down nearly 50 percent from their average 1979 level. During the second quarter single-family starts averaged 671,000 units at an annual rate, which was only slightly more than one-half 1979's total. Multifamily units fell to a rate of 382,000 units in the second quarter after averaging 551,000 units during 1979.

The midyear decline in mortgage interest rates lagged somewhat behind the drop in other long-term yields, but by August most mortgage rates had fallen to near 12 percent. Even with the high interest rates, however, sales of new homes had begun to increase in May, and construction activity followed quickly. Housing starts increased in June for the first time in 6 months. The surprisingly quick increase in starts probably stemmed from the relatively low level of new home inventories during the spring. With very few houses for sale, the increase in sales provided the needed stimulus for new building.

During the fall and early winter of 1980 mortgage rates again began to creep upward. Nonetheless, sales of new homes and total housing starts remained moderately strong through November. Although some weakening in sales was evident during the fourth quar-

ter, the low level of inventories encouraged a continuation of building activity.

The average price of a new home (adjusted for changes in quality) increased at an 11 percent annual rate in the first 3 quarters of 1980, which was about as fast as in the preceding year. Many of the homes built in 1980 were smaller and more austere than those constructed in preceding years, reflecting the recession weakness in incomes and the high cost of mortgage finance.

Business Fixed Investment

Real business fixed investment declined 6.0 percent over the 4 quarters of 1980. Business fixed investment averaged 10.7 percent of GNP, somewhat lower than the 11.0 percent level in 1979. Producers' durable equipment declined 4.8 percent during 1980. The volatile automotive portion of equipment purchases fell 16.2 percent during the year, its second year of very large declines. The remaining components declined 2.4 percent. Investment in nonresidential structures dropped 9.1 percent over the same period (Table 15).

TABLE 15.—*Changes in real business fixed investment, 1975–80*
(Percent change, fourth quarter to fourth quarter)

	1975	1976	1977	1978	1979	1980 ¹
Nonresidential fixed investment	-7.4	7.8	13.5	9.0	2.9	-6.0
Structures	-5.6	2.6	4.8	11.8	9.5	-9.1
Producers' durable equipment	-8.0	10.2	17.4	7.7	.4	-4.8
Autos, trucks, and buses	2.0	17.2	23.9	9.8	-22.9	-16.2
Other	-10.4	8.5	15.7	7.2	7.4	-2.4

¹ Preliminary.

Source: Department of Commerce, Bureau of Economic Analysis.

Several factors contributed to the decline in business fixed investment. First, the deceleration in final sales reduced the need for immediate additions to capacity. The Federal Reserve Board's index of capacity utilization rates in manufacturing dropped from 83.9 percent in January to a 5-year low of 74.9 percent following the spring decline. The sizable drop in this aggregate index, however, masked some important differences among certain industries. In the durable goods materials industries, for instance, capacity utilization rates fell below 70 percent. Thus key suppliers of hard goods found themselves with plenty of capacity to satisfy demand over the near term. In addition, forecasts of recession indicated that capacity needs would not be rising until early 1981. These forecasts, in conjunction with the high cost of funds during the early part of 1980—widely perceived as temporary—made the delay of capital investment plans more attractive.

Finally, shrinking sales and increasing debt service costs seriously reduced corporate cash flow. Internally generated funds for invest-

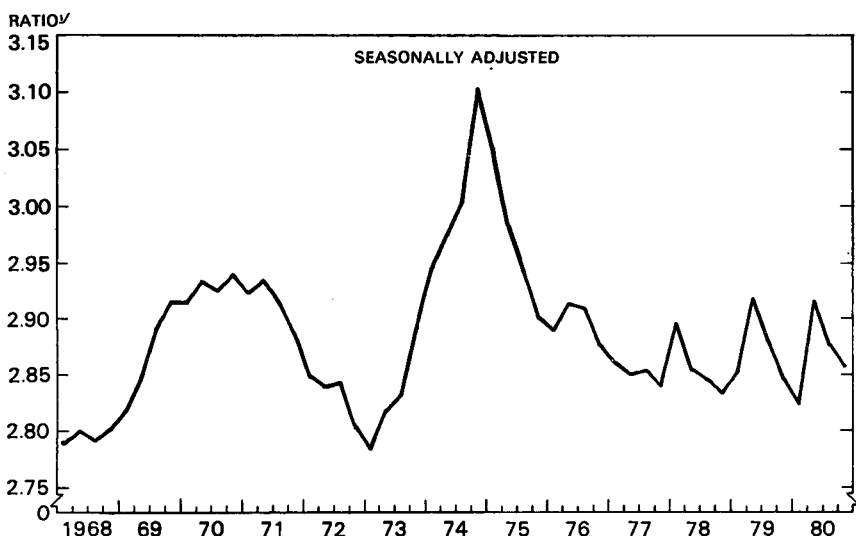
ment were sharply diminished by the 13.3 percent decline in profits during the second quarter of 1980. While aggregate measures of profitability and corporate cash flow reflected cyclical weakness, these measures understated the extent of the problem by masking important distributional imbalances. In particular, oil and coal industry profits represent a growing share of the aggregate. From the first quarter of 1979 to the third quarter of 1980 corporate profits in the petroleum and coal industries grew from \$15.0 billion, or 6.9 percent of total corporate profits, to \$22.2 billion, or 11.3 percent.

Inventory Accumulation

Cautious inventory policies continued throughout 1980. Real inventory accumulation in the fourth quarter was virtually unchanged from its level in the fourth quarter of 1979 and thus had almost no impact on the overall growth in real GNP over the 4 quarters of 1980.

Chart 9

Real Inventory—Final Sales Ratio, Nonfarm Business



1/ RATIO OF REAL INVENTORIES AT END OF QUARTER TO REAL FINAL SALES AT MONTHLY RATES.

SOURCE: DEPARTMENT OF COMMERCE.

As compared with the 1970s, inventory-to-sales ratios remained relatively low during 1980 (Chart 9). What was more interesting was the rapid response of production to the changes in final sales. As

Table 16 shows, the pattern of output, sales, and inventories in the nonfarm business sector in 1980 was quite different from the pattern of the 1974-75 recession. A sharp drop in final sales in the fourth quarter of 1974 was accompanied by a smaller percentage reduction in output. This resulted in an unintended accumulation of inventories, with real inventory investment of \$13.3 billion at an annual rate. The inventory-to-sales ratio rose markedly. This set off a sharp adjustment in subsequent quarters, and over the first half of 1975 inventories were decumulated at a \$13.9 billion annual rate.

TABLE 16.—*Real output, sales, and inventories, nonfarm business sector, 1974-75 and 1980*
(Seasonally adjusted annual rates)

Item	1974		1975		1980			
	III	IV	I	II	I	II	III	IV ¹
	Percent change							
Output.....	-2.8	-5.9	-10.6	6.1	1.7	-10.8	3.1	4.9
Contribution of: ²								
Final sales ³	-9	-8.0	-5	4.6	1.2	-11.4	4.3	3.3
Inventory accumulation	-1.9	2.2	-11.1	1.4	.4	.7	-1.2	1.6
	Billions of 1972 dollars							
Inventory accumulation	7.8	13.3	-15.6	-12.2	-1.4	.6	-3.1	1.6

¹ Preliminary.

² Change as percent of output.

³ Includes a small amount of final sales by farms.

Source: Department of Commerce, Bureau of Economic Analysis.

This sharp inventory cycle was not in evidence in 1980. Final sales fell at an annual rate of 10.8 percent in the second quarter, the most rapid decline ever recorded. But the output response was nearly as rapid and inventories increased at an annual rate of only \$0.6 billion. While inventories did decline in the third quarter of 1980, indicating efforts to trim unwanted inventories, the swing was distinctly more modest than in 1974-75.

Several factors account for the improved management of inventories. Inventory control and information systems continue to improve the ability of production managers to maintain the proper balance between raw material stocks and market demand. Also, unlike the earlier period, there were no serious doubts about the availability of raw materials and supplies this time around. Thus, precautionary overstocking of inventories to ensure adequate supplies of inputs for production was not apparent in 1979-80. In addition, high and volatile interest rates have increased both the cost and risk of holding large inventory stocks.

The External Sector

Following 2 years of rapid expansion, the growth in the volume of U.S. merchandise exports fell in 1980 as world economic activity slowed. At the same time, however, the volume of U.S. imports

dropped even faster, in large part because of the recession here. As a result, net exports measured in constant 1972 dollars showed a very large \$13.5-billion increase during the year.

In value terms, shifts in the U.S. trade balance were importantly affected by payments for oil. From the third quarter of 1979 to the first quarter of 1980 the oil import bill increased by about \$20 billion at an annual rate because of much higher oil prices. Other trade flows only partially offset this increase, and the merchandise trade deficit widened by \$15 billion to an annual rate of \$43 billion in the first quarter. After the first quarter, however, the volume of oil imports declined sharply. Thus, despite some further increases in oil prices, the oil bill fell, contributing to the marked narrowing of the trade deficit. The merchandise trade deficit for the whole of 1980 was an estimated \$26 billion, \$3.5 billion smaller than in 1979. Invisibles transactions, which reached a record surplus of \$33 billion at an annual rate in the first quarter, more than offset the deficit on merchandise trade during 1980.

For 1979 the U.S. current-account deficit was a small \$788 million. It was in deficit by about \$10 billion at an annual rate in the first half of 1980, moved sharply into surplus in the third quarter, and is likely to show a surplus of \$3-\$6 billion for 1980 as a whole.

The most noteworthy feature of recent U.S. trade performance has been its strength. From 1977 to the second quarter of 1980 the volume of U.S. exports grew by 40 percent. More significantly, the share of U.S. exports as a percentage of the total exports of the industrial countries over this period increased by about 1½ percentage points, reversing a declining trend visible since the 1950s. At the same time, the volume of U.S. imports showed almost no growth, even though real GNP rose by about 7 percent. This was a major break in longer-term trends, which have shown U.S. imports growing at rates well above the growth of real GNP.

These aggregate indicators of recent trade performance are all the more striking in view of the widespread popular notion that the United States is losing its ability to compete in both foreign and domestic markets. It may be that these views stem from unwarranted generalizations from particular sectors—such as automobiles, where foreign pressure clearly has increased—to aggregate trade. In addition, it may be that losses in relative terms vis-a-vis certain trading partners—most notably Japan and a certain number of newly industrializing developing countries—are viewed as more significant. Each of these concerns is certainly legitimate to some extent, but they should not obscure the overall success of the United States in foreign trade. Encouragement can be drawn from our recent aggregate performance, which most analysts ascribe to the increased competitive-

ness of U.S. producers in the wake of the depreciation of the dollar in 1977 and 1978.

Government Purchases of Goods and Services

Real government purchases of goods and services grew 1.5 percent during 1980, as gains in Federal purchases more than offset the decline in State and local purchases. Over the 4 quarters of 1980 State and local purchases fell 0.3 percent. Reduced purchases of durable goods (down 1.6 percent) and structures (down 6.5 percent) were the key factors. Real compensation of employees grew 0.7 percent in 1980, a significant deceleration from the 2.4 percent average rate in the previous 3 years. There had been widespread expectations that reductions in Federal grant-in-aid support, particularly for public service employment payrolls, combined with the recession squeeze on tax receipts and political pressures for reduced growth, would force an even sharper cutback in the growth of State and local payrolls. Instead, State and local governments have attempted to insulate payrolls from the worst of the budget pressures while cutting expenditures elsewhere. The decline in structures investment over the year was heavily concentrated in those areas dependent on the housing cycle: sewer system construction and highway and street construction and renovation.

Real Federal purchases of goods and services grew 4.7 percent during 1980. Real defense spending grew 5.7 percent during 1980, with the pace of spending picking up in the last half of the year. Real nondefense purchases grew at a slower 3.2 percent for the year as a whole.

LABOR MARKET DEVELOPMENTS

The volatility in demand for goods and services during 1980 produced similar swings in the demand for labor (Table 17). Civilian employment peaked at 97.8 million in February 1980. Then during the next 4 months employment fell sharply (1.1 percent) to 96.8 million in June. Over this same period unemployment rose from 6.5 million to 7.8 million. Automobile and construction employment were especially hard hit. Although these two industries constituted only about 6 percent of total payroll employment, they accounted for nearly two-fifths of the decline in employment from February to June.

Employment growth resumed at midyear. The magnitude of the subsequent recovery differs, depending on which of the two standard measures of employment is utilized. Judged by the household survey, employment growth after midyear was relatively modest so that by year-end total employment was still 500,000 lower than in December 1979. When measured by data from business payrolls, however, em-

ployment grew more vigorously after midyear and by December 1980 stood some 450,000 higher than a year earlier. Statistical discrepancies of this sort are not unusual for changes over short periods of time. Even with this difference, both measures clearly indicate that the decline in overall employment during 1980 ended quickly.

TABLE 17.—*Labor market developments, 1976–80*

Component	1976 IV	1977 IV	1978 IV	1979 IV	1980 IV
	Percent change from year earlier ¹				
Increase in civilian employment, total.....	3.4	4.4	3.6	2.1	–0.3
Males 20 years and over.....	2.6	3.3	2.5	1.3	–.7
Females 20 years and over.....	4.6	5.2	5.4	3.9	1.5
Both sexes 16–19 years.....	3.0	8.0	2.6	–.9	–6.7
White.....	3.3	4.3	3.2	2.0	–.2
Black and other.....	4.2	4.7	7.0	2.9	–.9
	Percent ²				
Unemployment rate, total ³	7.8	6.6	5.9	5.9	7.5
Males 20 years and over.....	6.0	4.8	4.1	4.4	6.3
Females 20 years and over.....	7.4	6.7	5.7	5.7	6.7
Both sexes 16–19 years.....	19.1	16.6	16.3	16.2	18.3
White.....	7.0	5.7	5.1	5.2	6.6
Black and other.....	13.3	13.3	11.5	11.3	14.1
Participation rate, total ⁴	61.8	62.6	63.5	63.8	63.7
Males 20 years and over.....	79.9	79.9	79.8	79.6	79.2
Females 20 years and over.....	47.4	48.6	50.1	51.0	51.4
Both sexes 16–19 years.....	54.4	56.8	58.4	58.1	56.4
White.....	62.1	62.9	63.7	64.1	64.1
Black and other.....	59.6	60.6	61.8	61.7	61.2

¹ Changes for 1978 IV 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.

² Seasonally adjusted.

³ Unemployment as percent of civilian labor force.

⁴ Civilian labor force as percent of civilian noninstitutional population.

Source: Department of Labor, Bureau of Labor Statistics.

The impact of the year's labor-market weakness was spread unevenly across demographic groups. The unemployment rate for adult men rose by a much greater percentage than did the unemployment rates for women and teenagers. The total unemployment rate rose from 5.9 percent in the fourth quarter of 1979 to 7.5 percent in the fourth quarter of 1980. The unemployment rate for men 20 years and over rose from 4.4 percent to 6.3 percent during this period. By contrast, the unemployment rate for women 20 years and over only increased from 5.7 to 6.7 percent. In the third quarter of 1980 the adult male unemployment rate exceeded the adult female rate. While this is highly unusual, adult male unemployment rates typically rise more than adult female rates during recession. This is because output declines tend to be concentrated in construction and durable goods manufacturing, sectors with a much higher proportion of adult male workers than, say, the relatively stable service sector. In the fourth quarter employment recalls in such industries as autos, steel,

and construction helped to reduce the adult male unemployment rate below that of adult females.

Unemployment duration lengthened significantly in 1980. In the last quarter of 1979, before the recession began, 48 percent of the unemployed had been looking for work for less than 5 weeks, and only 8.5 percent, or 524,000 people, had been without jobs for 27 weeks or more. By the last quarter of 1980 about 1.1 million people, or 14 percent of the unemployed, had been looking for work for 27 weeks or more. Many of these workers were eligible for up to 39 weeks of unemployment compensation, with additional benefits if their job loss was due to foreign competition or if their firms or unions provided supplemental unemployment benefits.

During the 4 years of economic expansion from 1976 to 1979 the civilian labor force grew at an average annual rate of 2.8 percent. The rise in unemployment during 1980 dampened this growth to 1.3 percent. After increasing by about 1 percentage point per year during the last half of the 1970s, the female labor force participation rate grew by about one-half, rising to 51.6 percent in 1980. The male labor force participation rate of 77.4 percent was down slightly over the year.

PRICE DEVELOPMENTS

Inflation dominated the economic news in 1980 as it did in 1979. The implicit price deflator for GNP rose 10.0 percent over the 4 quarters of 1980, substantially faster than the 8.1 percent rate of increase in the deflator during 1979 (Table 18). The producer price index for finished goods increased 11.7 percent from December 1979 to December 1980, following a 12.6 percent rise during the preceding 12 months. For the 12 months ending in November 1980, the CPI increased 12.6 percent, the same as over the corresponding period in 1979. These measures all reflected energy price surges early in the year and farm price increases late in the year. The most disappointing news, however, was the acceleration in various price measures which exclude the direct effects of such special factors as energy and food. As explained in Chapter 1, such measures are often used as a proxy for the "underlying" rate of inflation. After remaining surprisingly stable during most of 1979 in the face of very large oil-price increases, these measures showed significant increases in 1980.

The spring decline in aggregate demand brought rapid changes in the prices of certain sensitive industrial commodities. Sharp decreases were registered by producer prices of nonferrous metals as well as lumber and wood products. These price reductions had an important—if temporary—moderating influence on producer price measures. Excluding food and energy, producer prices of crude ma-

terials fell for a full third of the year. One other measure, the Bureau of Labor Statistics measure of spot market prices, fell 11.5 percent from February 1980 to June 1980. The turnaround in activity in the second half-year once again tightened industrial markets by enough to erase the early-year declines. Producer prices for crude materials excluding food and energy rose 10.6 percent in the 12 months ending in December 1980.

TABLE 18.—*Measures of price change, 1976–80*

[Percent change, fourth quarter to fourth quarter]

Item	1976	1977	1978	1979	1980 ¹
Implicit price deflators²					
Gross national product	4.7	6.1	8.5	8.1	10.0
Personal consumption expenditures	5.0	5.9	7.8	9.5	10.4
Private nonfarm business output	4.9	5.7	8.3	8.3	10.3
Consumer prices, total	5.0	6.6	9.0	12.7	^a 12.6
Farm value of food	-12.9	6.4	17.5	7.4	^a 14.5
Energy ⁴	6.2	8.2	7.5	36.5	^a 18.9
Home purchase and finance ⁵	3.8	8.9	13.4	19.8	^a 17.7
All other	6.3	6.1	7.3	7.9	^a 9.8
Producer prices of finished goods, total	2.7	6.9	8.7	12.6	12.0
Food	-4.4	7.4	11.6	7.8	7.4
Energy	5.0	9.2	6.4	62.0	28.4
All other	5.6	6.4	7.9	9.3	11.1

¹ Preliminary.

² Seasonally adjusted data.

³ November 1979 to November 1980.

⁴ Includes only prices for direct consumer purchases of energy for the home and for motor vehicles.

⁵ In both the table and the text, "home purchase and finance" consists of home purchase and financing, taxes, and insurance on owner-occupied homes.

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

Consumer Prices

As in 1979, the behavior of energy and food prices, together with the effects of mortgage interest rates on the CPI, attracted attention throughout the year. These are discussed in more detail below. Less marked by the public, but of more concern for the longer-run outlook, was the increase in the underlying rate of inflation as evidenced in the behavior of consumer prices after these special factors are excluded.

The underlying rate, as approximated by the CPI excluding food, energy, and home purchase and finance, jumped from 7.2 percent in the 12 months ending November 1979 to over 11 percent in December, and it stayed in the neighborhood of 12 percent during the first quarter of 1980. From April to November the measure grew at an average annual rate of 9.0 percent, a slowdown from the pace in the first quarter, but noticeably above the 1979 performance.

A second measure of the underlying inflation rate is the fixed-weight price index for personal consumption expenditures excluding energy and food. This measure, shown in Table 19 along with the

previously discussed CPI measures, reflects a similar acceleration over the year as a whole. Over the 4 quarters of 1980 the index rose 9.6 percent, up from the 7.2 percent increase over the 4 quarters of 1979.

TABLE 19.—*Alternative measures of consumer price changes, 1980*

(Percent change; seasonally adjusted annual rates)

Item	1979	1980				
	IV	I	II	III	IV ¹	
Consumer prices, total	13.7	16.9	13.6	7.2	12.1	
Food.....	10.2	5.9	6.5	13.3	15.3	
Energy ²	25.6	53.3	22.5	3.8	1.0	
Home purchase and finance ³	26.7	25.9	27.4	.1	20.5	
Other.....	7.6	11.3	9.3	8.7	9.9	
Personal consumption expenditures deflators:						
Implicit deflator, total.....	10.7	12.0	9.8	8.8	10.9	
Fixed-weight price index, total.....	11.3	12.8	9.8	9.6	11.0	
Food.....	9.9	3.4	5.7	16.9	16.2	
Energy ⁴	31.2	53.4	20.5	2.1	6.5	
Other.....	9.0	10.3	9.3	8.7	10.1	

¹ Preliminary; changes for consumer prices based on data through November.

² Includes only prices for direct consumer purchases of energy for the home and for motor vehicles.

³ In both the table and the text, "home purchase and finance" consists of home purchase and financing, taxes, and insurance on owner-occupied homes.

⁴ Gasoline and oil, fuel oil and coal, and electricity and gas.

Note.—Fixed-weight price indexes are preliminary and subject to revision.

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

It is difficult to ascribe the acceleration of these measures at the beginning of 1980 to any single factor. It is likely that the most important cause was the pass-through of oil-price increases into other commodities. About half of all oil is used in the production and distribution of other goods and services. Oil-price increases therefore must eventually be reflected in final product prices. Similarly, as described below, the rapid advance in unit labor costs during 1979 and 1980 exerted further upward pressures on prices. Finally, the latter part of 1979 and the early months of 1980 saw an upsurge in expectations about inflation and an upsurge in consumer buying. In such an atmosphere business may well have raised prices ahead of increases in costs. The relative improvement in the underlying rate following the spring's decline in demand offers some support for this view.

Prices of Energy, Food, and Housing

The measures of the underlying rate of inflation omit the primary sources of month-to-month variability in consumer prices. In particular, half of the CPI is accounted for by energy, food, and home purchase and finance. And 1980 saw very volatile movements in these prices.

Energy. Energy prices as measured by the CPI, which had climbed at a 55 percent rate in the 6 months between March and September

1979, slowed to a 19 percent annual rate in the last months of that year. During the fall of 1979 the Organization of Petroleum Exporting Countries (OPEC) announced an increase in the price of Saudi Arabian light crude oil of \$6.00 per barrel. That was followed by a series of \$2.00 per barrel increases in January, April, and August. These price increases were accompanied by the phased decontrol of domestic crude oil prices, which had begun in June 1979. The effect of these actions was a burst of price increases for oil products during the first 3 months of 1980, averaging an annual rate of almost 100 percent. Gasoline, for instance, which was priced at \$1.04 per gallon in December, moved up to \$1.23 per gallon in March. Similar increases were registered in other oil-related energy components of the CPI, in particular home heating oil.

By the second quarter the burst of OPEC-related energy price increases began to play itself out. In the 5 months between May and October 1980 the energy component of the CPI grew at an average annual rate of just 1.7 percent. This was in quite marked contrast to the 40.4 percent average annual rate of increase experienced over the prior 5 months. By November gasoline was actually 0.8 cents per gallon lower than it had been in March, and heating oil was up only 1.9 cents during the same period. Thus, although the energy sector spent the year in the limelight, it was a major *direct* source of inflation only in the first quarter of the year.

Food. Food prices in the CPI increased 10.6 percent in the 12 months ending November 1980, as compared with a 9.8 percent rise over the previous 12 months. The farm value of food increased nearly 15 percent over the period. Marketing costs increased about 9 percent.

Over the course of 1980 the food price situation was quite volatile. During the first half, food prices increased less than 5 percent at an annual rate. During the second half, however, the rate of increase more than doubled. Recession-induced weakness in demand during the spring, followed by drought during the summer growing season, contributed to the acceleration in monthly food price movements. Prices of retail meat, which accounts for nearly 30 percent of all food spending at home, actually fell at an annual rate of 11.8 percent during the first half, and rose at a rate of 35 percent from June to November.

The extended period of very hot and dry weather damaged crops in the Southwest (cotton, soybeans, sorghum, and peanuts) during the early summer. The adverse weather conditions persisted and moved north and east affecting the corn crop and meat production in July and August. As the summer progressed the full extent of the

crop damage became evident. Prices received for the major crops increased 20 to 30 percent during the second half of 1980.

Housing. The home purchase, finance, insurance, and taxes component of the CPI is a matter of controversy. Ideally, a cost-of-living index should reflect the cost of shelter services provided by owner-occupied houses. For rented houses, this is precisely what is captured by market rents. Under current practice, however, the home purchase and finance component of the CPI in effect treats the purchase of a house as it would any ordinary good. But houses do not only provide shelter; they are also assets which yield a return. As a consequence, the movement of house prices reflects not only the cost of shelter but also the value of the investment. Since the CPI also assumes that part of the mortgage used to finance a house is "purchased," the confounding of consumption and investment considerations is exacerbated by the treatment of mortgage interest costs. The Bureau of Labor Statistics (BLS) has been concerned for some time with the adequacy of the homeownership component of the CPI. BLS, in fact, currently publishes several experimental indexes based on alternative treatments of homeownership.

For the present, at least, the CPI tends to overstate the importance of home purchase and finance and, given the volatility of mortgage rates, to produce startling monthly variations in the CPI. During the first 6 months of 1980 the home purchase and finance component of the CPI increased at a 27.6 percent rate, adding about 3 percentage points to the annual rate of inflation over the period. In July and August the fall in mortgage rates dominated the index. The home purchase and finance component fell at an annual rate of over 25 percent in July, and this decline was large enough to offset the increase in the other components of the index, resulting in an unchanged CPI from June to July. While this zero change in prices was widely regarded as a statistical anomaly, it was no more or less anomalous than the inflationary influence that the home purchase and finance component had imparted to the CPI throughout the first half of the year. This influence began to be felt again during the late fall and early winter as mortgage rates climbed to near their spring peaks. The home purchase and finance component promises to have a heavy impact on the CPI in the early months of 1981.

WAGES, PRODUCTIVITY, AND INCOME SHARES

As discussed in Chapter 1, the primary goal of anti-inflation policy during 1980 was to prevent the increase in oil prices from becoming a stimulus to higher wage settlements. The policy was motivated by the facts that the long-term behavior of prices of goods and services closely reflects the behavior of business costs and that wages, salaries, and fringe benefits account for roughly two-thirds of the total

costs of production. The evidence suggests that while the policy was partially successful, it was not able to prevent an acceleration of wages. As shown in Table 20, all measures of labor compensation accelerated between 1979 and 1980 to a level of about 9 or 10 percent. The largest wage gains were in manufacturing, where average hourly earnings grew 10.8 percent over the 12 months ending in December 1980. The smallest gains were in the construction industry (7.2 percent over the same period).

TABLE 20.—*Measures of compensation and employment costs, 1977–80*

[Percent change, third quarter to third quarter]

Measure	1977	1978	1979	1980
Average hourly earnings index.....	7.4	8.3	8.0	9.2
Compensation per hour ¹	7.5	8.6	9.6	10.0
Employment cost index ²	7.2	8.0	7.7	9.4
Union.....	7.7	7.9	8.4	10.9
Nonunion.....	6.9	8.0	7.3	8.6
Union wage changes (total effective adjustment).....	8.6	7.9	8.7	9.1
Adjustment resulting from:				
Current settlement.....	3.5	2.1	2.8	3.4
Prior settlement.....	3.3	3.5	3.1	3.2
Escalator provision.....	1.7	2.2	2.8	2.5

¹ Data are for private nonfarm business sector, all persons.

² Changes are from September to September.

Source: Department of Labor, Bureau of Labor Statistics.

Although acceleration in wages, salaries, and fringe benefits seems to have taken place in both union and nonunion sectors, union wage gains continued to exceed nonunion wage gains. Uncertainty exists as to whether or not these results reflect the relative bargaining strength of union over nonunion workers, as well as the extent to which they mirror conditions specific to individual industries. These differentials may also result from the more prevalent use of cost-of-living adjustments (COLAs) in union contracts. To the extent that inflation is unanticipated, workers under contracts with COLAs will tend to receive larger wage settlements than those without COLAs. For this reason, sudden increases in inflation rates may tend to widen union-nonunion wage differentials. Finally, the 1980 wage differentials may result from the fact that a number of important unions were able to maintain wage gains even though aggregate labor markets were slack. Major contracts were settled in 1980 in the aerospace, steel, telephone, and clothing and apparel industries.

Despite the step-up in nominal wage increases, real wages continued to fall throughout 1980. However, as was pointed out in last year's *Report*, customary calculations of the real wage which use the CPI can be deceptive. Table 21 sets forth several calculations of real wage change utilizing alternative price indexes.

The additional cost of imported energy was a major factor in real wage declines in 1980, as it was in 1979. Increases in the price of

imported energy eventually will reduce real incomes in the United States. This reduction must be achieved by some combination of price inflation, wage moderation, or shrinking profit shares. Wage bargaining aimed at preventing this can only transform the adjustment into a more inflationary one.

TABLE 21.—*Alternative measures of changes in real earnings per hour, 1978–80*
[Percent change, fourth quarter to fourth quarter]

Item	1978	1979	1980 ¹
Average hourly earnings index			
Deflated by:			
Consumer price index (CPI)	–0.5	–4.3	–2.6
CPI with rent substituted for home-ownership .....	.6	–2.3	–1.1
CPI with rent substitution and excluding energy .....	.6	.1	–.2
Fixed-weight price index for personal consumption expenditures (PCE) .....	.2	–1.9	–1.1
Fixed-weight price index for PCE excluding energy .....	.2	.4	–.2
Compensation per hour ²			
Deflated by:			
Consumer price index (CPI) .....	.1	–2.7	–2.5
CPI with rent substituted for home-ownership	1.2	–.9	–.8
CPI with rent substitution and excluding energy	1.2	1.6	.9
Fixed-weight price index for PCE .....	.8	–.5	–.8
Fixed-weight price index for PCE excluding energy .....	.8	1.9	.8

¹ Preliminary; CPI for fourth quarter 1980 based on data through November.

² Data are for the private nonfarm business sector, all persons. Changes for 1980 are third quarter to third quarter.

Note.—CPI for all urban consumers used.

Fixed-weight price indexes are preliminary and subject to revision.

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

Incomes policies can help to moderate the inflationary response to an oil-price increase, but only if business and labor cooperate to achieve the necessary adjustment. Such a willingness supported the Council on Wage and Price Stability (CWPS) standards program through its first year, 1979. In that year, as was noted in the last *Report*, evidence suggested that the standards had helped to restrain wage inflation by 1 to 1½ percentage points. Since there was no evidence of widening profit margins, it appears that the CWPS program contributed to smoothing the adjustment to higher oil prices. While there is evidence that cooperation with the standards was also high in its second year, a combination of several program features seems to have reduced but not eliminated its impact. A widening of the allowable range of wage increase and an undervaluation of cost-of-living adjustments in multiyear contracts were important factors.

Productivity

Productivity growth continued weak in 1980, advancing a tiny 0.1 percent over the year ending with the third quarter. In 1979 private nonfarm business productivity had declined 1.1 percent.

During the course of 1980 productivity growth fluctuated sharply. In the first quarter productivity was essentially unchanged. With the

sharp decline in output in the second quarter, productivity declined at a rapid 3 percent annual rate. This marked the seventh consecutive quarterly drop. With the resumption of modest economic growth in the third quarter, productivity rebounded sharply, rising at a 4 percent rate.

The faltering productivity during the first half of 1980, combined with a more rapid rise in wages, resulted in an acceleration in unit labor costs. However, with the improvement in productivity in the third quarter, the increase in unit labor costs moderated substantially. For the year ending with the third quarter, unit labor costs rose 10 percent, a modest improvement from the increase recorded during 1979.

Distribution of National Income

The recession's impact was evident in the shifting distribution of national income during 1980 (Table 22). Compensation of employees, which had averaged 74.6 percent of national income over the years 1976-79, rose to 75.3 percent in 1980. This increase in the share of national income going to wage earners is the normal pattern in a recession. Employer contributions for social insurance continued to account for a growing share of the compensation total. Corporate profits and proprietors' income as a share of national income fell sharply to 14.8 percent in 1980, down from the 17.1 percent average share during 1976-79. The corporate profits share fell to 8.6 percent. The unusually high level of interest rates was responsible for boosting the net interest share of national income to 8.5 percent, its highest level in the postwar period. Net farm income fell in 1980 from its relatively high level in 1979. After adjusting for changes in inventory, net income from farming was about \$24 billion for the

TABLE 22.—*Shares of national income, 1976-80*

[Percent of total]

Item	1976	1977	1978	1979	1980 ¹	Third quarter	
						1979	1980
Compensation of employees	75.1	74.5	74.5	74.4	75.3	74.3	75.3
Wages, salaries, fringe benefits, and other	70.0	69.4	69.2	69.0	69.8	68.9	69.8
Employer contributions for social insurance	5.1	5.1	5.3	5.4	5.5	5.4	5.5
Proprietors' income ²	6.8	6.7	6.7	6.7	6.2	6.7	6.1
Nonfarm ²	5.4	5.5	5.2	5.1	5.1	5.2	5.1
Farm ²	1.4	1.2	1.5	1.6	1.1	1.5	1.0
Rental income ³	1.7	1.6	1.6	1.6	1.5	1.5	1.5
Corporate profits ²	10.0	10.7	10.6	10.0	8.6	10.0	8.4
Net interest	6.3	6.5	6.6	7.3	8.5	7.4	8.7

¹ Preliminary.

² With inventory valuation and capital consumption adjustments.

³ Rental income of persons, with capital consumption adjustment.

Note.—Quarterly figures based on seasonally adjusted data.

Detail may not add to 100 percent because of rounding.

Source: Department of Commerce, Bureau of Economic Analysis.

year, 23 percent lower than in 1979. Net cash income, the cash available to farmers for capital expenditures and operator income, was less affected and fell about 6 percent. The deceleration in cash receipts for livestock and continued inflation in farm production expenses were the principal factors in the decline.

ECONOMIC POLICY

As in 1979, economic policy in 1980 aimed at stemming an acceleration in prices and wages. Both fiscal and monetary policy sought to restrain aggregate demand. As noted above, these policies were supplemented by a program of voluntary standards for wage and price behavior.

Fiscal Policy

Changes in the high-employment surplus (HES) are a useful measure of discretionary fiscal policy. The actual Federal budget deficit is affected not only by changes in discretionary policy, such as changes in tax rates or more rapid spending on defense programs, but also by the state of the economy. In particular, cyclical swings in incomes and employment affect tax receipts. Outlays for such programs as unemployment compensation and food stamps are similarly affected. These changes in receipts and outlays alter the budget deficit without any action by the Congress or the President. Thus, the actual surplus or deficit is a poor measure of discretionary fiscal policy. The HES measures what the surplus would be if the economy were at high employment. By evaluating the budget at a standard level of GNP, the measure abstracts from those changes in budget receipts and outlays that result from cyclical changes in GNP.

The High-Employment Budget. When judged by this measure, discretionary fiscal policy remained tight in 1979. The high-employment surplus increased \$13.5 billion in 1979 (Table 23). The chief factors in the tightening were the sluggish pace of outlay growth during 1979 (particularly for grants-in-aid), the inflation-induced increases in personal income taxes, and legislated increases in social insurance taxes. Over the 4 quarters of 1980, however, the HES fell by \$6.8 billion. Two unusual factors were responsible for the apparent move toward expansion during 1980. First, the delayed effect on individual tax refunds and final settlements from the Revenue Act of 1978 lowered the HES by roughly \$8 billion, starting in the first quarter of 1980. Second, due to large increases in interest outlays caused by

record high interest rates during the year, *discretionary* outlay changes appear larger than they actually were. By convention, interest payments are unadjusted in the calculation of high-employment outlays. In other words, high-employment interest payments are defined to be equal to actual interest payments. Thus, the high-employment surplus tends to understate the degree of discretionary fiscal restraint when interest rates increase, and vice-versa. Excluding these two factors, the high-employment budget surplus actually tightened by roughly \$10 billion over the 4 quarters of 1980.

TABLE 23.—*Actual and high-employment Federal receipts and expenditures, national income and product accounts, calendar years 1973–80*

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

Calendar year or quarter	Actual				High-employment ¹			
	Receipts	Expenditures	Surplus or deficit (—)		Receipts	Expenditures	Surplus or deficit (—)	
			Amount	Percent of GNP			Amount	Percent of GNP ²
1973.....	258.6	264.2	—5.6	—0.4	252.7	264.0	—11.3	—0.9
1974.....	287.8	299.3	—11.5	—0.8	296.9	297.6	—0.7	—0.1
1975.....	287.3	356.6	—69.3	—4.5	315.8	344.9	—29.1	—2.2
1976.....	331.8	384.8	—53.1	—3.1	354.7	374.8	—20.1	—1.5
1977.....	375.1	421.5	—46.4	—2.4	390.7	413.8	—23.1	—1.6
1978.....	431.5	460.7	—29.2	—1.4	441.1	456.8	—15.7	—1.1
1979.....	494.4	509.2	—14.8	—0.6	504.2	506.5	—2.2	—0.1
1980 ³	538.9	601.2	—62.3	—2.4	573.2	591.6	—18.3	—1.2
1979:								
I.....	477.0	488.4	—11.5	—0.5	481.0	485.9	—4.8	—0.3
II.....	485.9	494.0	—8.1	—0.3	496.8	491.4	5.3	0.4
III.....	500.6	515.8	—15.2	—0.6	510.9	513.0	—2.1	—0.1
IV.....	514.0	538.6	—24.5	—1.0	528.3	535.5	—7.2	—0.5
1980:								
I.....	528.4	564.7	—36.3	—1.4	543.2	560.6	—17.4	—1.1
II.....	520.9	587.3	—66.5	—2.6	556.6	577.9	—21.3	—1.4
III.....	540.8	615.0	—74.2	—2.8	581.8	602.5	—20.7	—1.3
IV ⁴	565.4	637.9	—72.5	—2.6	611.2	625.3	—14.0	—0.9

¹ These totals differ from those published in the November 1980 *Survey of Current Business* because of revisions to both actual and potential GNP. For more information on these revisions, see the supplement to this chapter.

² High-employment surplus or deficit as percent of high-employment gross national product.

³ Preliminary.

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

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

Budget Outlays and Receipts. Federal budget outlays for fiscal 1980 were \$579 billion, an increase of \$85 billion, or 17 percent over the fiscal 1979 level. This marked acceleration in budget outlays was due largely to the combined impact of higher interest rates, growing unemployment, and increases in the cost of entitlement programs due to cost-of-living increases. Interest outlays jumped 23 percent in fiscal 1980, while outlays for income security and health, which include social security, unemployment insurance, and other major Federal entitlement programs, grew 19 percent. Together these three areas—health, income security, and interest—accounted for 61 percent of the change. In addition, defense outlays grew 17 percent in

fiscal 1980, up sharply from the 10 percent growth of the prior fiscal year.

Federal budget receipts rose by 12 percent compared to 16 percent during fiscal 1979. The recession-induced weakness in incomes and the delayed impact of the Revenue Act of 1978 on individual tax refunds and final settlements combined to produce this result. Individual tax receipts grew 12 percent in fiscal 1980, down sharply from the 20 percent fiscal 1979 gain. Corporate tax receipts fell 2 percent in fiscal 1980. The Federal budget deficit increased from \$28 billion in fiscal 1979 to \$59 billion in fiscal 1980.

Monetary Policy and Financial Markets

As discussed in Chapter 1, the Federal Reserve adopted a new procedure in October 1979 to guide its daily open market operations. Under the new procedure, designed to exert better control over the growth of the monetary aggregates, the Federal funds rate is allowed to vary over a much wider range. In a report submitted to the Congress in February 1980, the Federal Reserve set forth its objectives regarding increases in the money and credit aggregates during 1980 (Table 24). These ranges called for a deceleration in monetary expansion in 1980 from the preceding year.

TABLE 24.—*Growth in monetary and bank credit aggregates, 1979-81*

[Percent change]

Item	Actual		Federal Reserve longer-run ranges		
	1978 IV to 1979 IV	1979 IV to 1980 IV ¹	1979 IV to 1980 IV	1980 IV to 1981 IV	
				Unadjusted for nationwide NOWs	Adjusted for nationwide NOWs
M-1A.....	5.0	5.1	3½ to 6	3 to 5½	0 to 2½
M-1B.....	7.6	7.1	4 to 6½	3½ to 6	5 to 7½
M-2.....	8.9	9.6	6 to 9	5½ to 8½	5½ to 8½
M-3.....	9.8	9.7	6½ to 9½	6½ to 9½	6½ to 9½
Bank credit.....	11.5	≈7.8	6 to 9	6 to 9	6 to 9

¹ Preliminary.

* Estimate for fourth quarter 1980 based on November data.

Note.—M-1A is currency plus private demand deposits, net of deposits due to foreign commercial banks and official institutions.

M-1B is M-1A plus other checkable deposits (negotiable order of withdrawal accounts, accounts subject to automatic transfer service, credit union share draft balances, and demand deposits at mutual savings banks).

M-2 is M-1B plus overnight repurchase agreements (RPs) issued by commercial banks, overnight Eurodollar deposits held by U.S. nonbank residents at Caribbean branches of U.S. banks, money market mutual fund shares, and savings and small time deposits at all depository institutions.

M-3 is M-2 plus large time deposits at all depository institutions and term RPs issued by commercial banks and savings and loan associations.

Bank credit is total loans and investments plus loans sold at all commercial banks.

Source: Board of Governors of the Federal Reserve System.

Except for M-1B, the rates of growth of the various monetary aggregates during the year roughly matched or exceeded their 1979 pace. Some of the relative movements in the various monetary aggregates in 1980 were the result of special factors. At the beginning of the year the Federal Reserve had anticipated that funds attracted to

automatic transfer services (ATS) nationwide and negotiable order of withdrawal (NOW) accounts in the Northeast would cause M-1A to grow about one-half percentage point slower than M-1B. In fact, more funds flowed into these accounts from both regular savings accounts and demand deposits than was originally forecast. These developments boosted M-1B growth and lowered M-1A growth, each by about three-quarters of a percent relative to what they otherwise would have been.

For the year as a whole M-1B, M-2, and M-3 exceeded their target ranges while M-1A did fall within its range. However, if one adjusts the target ranges for M-1A and M-1B in light of the actual experience with NOW and ATS accounts, then both of these measures fall roughly at the upper end of the adjusted range.

Within the year, money growth, credit flows, and interest rates experienced unusually wide variations. The year began with money and credit demands apparently accelerating despite the sharp increase in interest rates in the fourth quarter of 1979. In February the growth of money and credit surged, boosting demand for reserves above the level consistent with the Federal Reserve's monetary growth ranges. The resulting pressures in money markets, combined with deteriorating inflationary expectations, forced both short- and long-term rates up sharply.

Data available in early March suggested that credit growth had not been deterred by the general monetary tightening and the sharp increases in interest rates. Moreover, the increasing speculative activity in financial and commodities markets raised concern among many in the financial community about the threat of a financial panic. Extraordinary measures were called for to dampen excessive credit demands, reduce the spiraling inflationary expectations, and ease the strains in financial markets.

On March 14 the President announced an extensive anti-inflation plan that included authorizing the Federal Reserve Board to implement certain types of credit controls under the provisions of the Credit Control Act of 1969. Operating under its own authority, the Federal Reserve also introduced a voluntary credit restraint program and tightened some already existing regulations, as detailed below. Taken together, the credit restraints were intended to reinforce traditional monetary policy measures that control overall money and credit growth while limiting the burden on certain sectors hard hit by high interest rates. Those sectors included small businesses, farmers, home buyers and builders, and auto dealers and purchasers.

The measures were designed to restrain the growth of certain types of consumer credit as well as those liabilities of large banks that had been used to support a rapid buildup in business loans. These

actions included: (1) a requirement that all types of lenders maintain on deposit at a Federal Reserve Bank a certain percentage of increases in credit card lending and other categories of unsecured consumer credit; (2) an increase in the marginal reserve requirement on managed liabilities—including large time deposits (\$100,000 or larger) with maturities of less than a year, Eurodollar borrowings, and security repurchase agreements—of large member banks and U.S. branches and agencies of large foreign banks; (3) an extension of special deposit requirements to increases in managed liabilities of large nonmember banks and to increases in total assets of money-market mutual funds; and (4) a surcharge of 3 percentage points on frequent borrowing by large member banks from Federal Reserve Banks. In addition, the Board announced a voluntary program under which commercial banks and finance companies would limit the growth in total loans to U.S. customers to 6 to 9 percent for the period from the fourth quarter of 1979 to the fourth quarter of 1980.

Expansion of credit and money slowed abruptly after these measures were announced. The reaction of financial institutions, households, and businesses was sharper than anticipated. Banks and other financial institutions responded by accelerating and intensifying measures to restrict credit availability already in train; consumers and business sharply altered their credit behavior. Credit card sales and applications dropped off abruptly in March. Consumer installment credit outstanding declined in April for the first time in 5 years. Commercial bank lending to businesses moderated in March and then declined for the next 3 months. Over this same period the pace of monetary expansion slowed. During April all the monetary aggregates actually fell below their target ranges. The narrower aggregates declined for the second quarter as a whole.

As evidence mounted that credit growth had been arrested, the Federal Reserve began to relax various provisions of the program. In early July the Board ended the program entirely, and the President revoked the Board's authority under the Credit Control Act.

In retrospect, it appears that another factor contributing to the abrupt decline in credit growth was that interest rates finally had reached levels in late February and early March which were sufficient to discourage borrowing. However, data available at the time did not show this development. For example, business loans at large banks had increased rapidly from December to mid-February, in part due to borrowing in anticipation of the rumored adoption of credit controls, but in late February and early March business borrowing from these large banks stagnated—a pattern that could not be discerned until late March. Similarly, new home sales fell slightly in February and

plunged in March, although the only information available in early March had shown that sales advanced in January.

The mid-March announcement of credit controls did not immediately break the upward spiral in interest rates. In late March and early April the Federal funds rate came within a few basis points of 20 percent, and rates on most short-term and long-term market instruments rose to record highs before falling sharply over the course of the second quarter. The Federal funds rate fell faster than other short-term market rates from April to mid-June, but the funds rate then stabilized for the next 2 months at around 9 percent. During this period there were occasions when the Federal Reserve kept the Federal funds rate from falling below the $8\frac{1}{2}$ percent lower bound set in May by the Federal Open Market Committee. Longer-term rates also declined as the spiral of inflationary expectations apparently was reversed in light of the growing slack in the economy and the weakness in the monetary aggregates. Downward adjustments in administered rates, like the prime rate and home mortgage rates, lagged the declines in market yields.

The downswing in most interest rates ended in June and July as monetary aggregates accelerated and credit demands again surged. The Federal Reserve did not accommodate the strong demand for bank reserves associated with acceleration of the monetary aggregates through the summer and fall, and the rate of expansion of adjusted nonborrowed reserves slowed from 31 percent at an annual rate in the second quarter to 4 percent in the third. Meanwhile, between late August and early December the discount rate was raised in three steps to 13 percent, and the Federal Reserve reimposed an additional surcharge on frequent borrowings by large banks. The Federal funds rate increased to over 20 percent in December. Other short-term market rates followed this upward climb. The prime rate adjusted more rapidly on the upswing than it had when rates had come down earlier in the year. Long-term rates, responding once again to continued inflationary pressures, reached rates at the end of the year near or above their March-April peaks. In mid-December short-term interest rates reached new peaks and began to fall rapidly once again. By early January the commercial paper rate, for instance, had fallen $3\frac{1}{2}$ percentage points from its mid-December peak. Long-term interest rates fell about $1\frac{1}{4}$ percentage points over the same period.

The volatile movements of the narrow monetary aggregates over the course of the year reflected in part the pattern of economic activity. But the atypical behavior of the demand for money during 1980 also contributed to this volatility. As noted in Chapter 1, the demand for money—which is used by economists to characterize the relation-

ship among money, interest rates, and economic activity—has shown a tendency toward abrupt shifts in recent years. In particular, such shifts in 1975 and in 1976 led to monetary growth in the narrower aggregates, M-1A and M-1B, that was well below that expected on the basis of the historical relationship between money, income, and interest rates. While not fully understood, such shifts have followed rapid increases in interest rates to record levels, which appear to induce firms and households to adopt cash-economizing financial innovations. (These were discussed in detail in the 1978 *Report*.)

In the second quarter of 1980 another shift in money demand apparently took place. Declines in M-1A and M-1B were greater than would have been expected even in the face of the sharp fall-off in economic activity and high interest rates. But the current episode appears to differ somewhat from the previous shifts in that this time the shift was largely offset in the subsequent 2 quarters. This offset suggests that some special factors may have been at work. One hypothesis is that the imposition of credit controls may have temporarily led holders of currency and demand deposits to draw down these balances in the second quarter. With the end of the controls program in July this temporary depressant disappeared, and households were able to rebuild their cash balances. Whether this explanation is correct or not, it seems likely that a temporary money-demand shift contributed to the pattern of a decline in the money supply in the second quarter followed by an unusually rapid money growth in the second half of the year.

Thrift Institutions. In the first quarter of 1980, deposit flows to thrift institutions—mutual savings banks and savings and loan associations—slowed to the lowest rate since the fall of 1974. But after market interest rates peaked in late March and early April thrift deposits once more began to expand at the healthier pace registered in the preceding year. From December through April the decline in thrift deposit flows was softened by an inflow of funds attracted to the variable rate instruments offered to savers—the 6-month money market certificates (MMCs) and the new 2½-year small saver certificates (SSCs). For the next 5 months, however, there were net withdrawals of MMCs as depositors shifted funds into the higher yielding SSCs. From April to July funds were also shifted into money market mutual funds, where the technical method for calculating return gave these funds a temporary yield advantage over MMCs. By October MMCs had resumed healthy expansion, and for the first 11 months of the year MMCs and SSCs at thrift institutions together grew by \$115 billion.

The other major sources of funds for thrifts also had interest costs tied to market rates. Members of the Federal Home Loan Bank

(FHLB) System increased their borrowing from the FHLB by over \$7 billion to a level of about \$47 billion. Many large institutions also augmented their small-account deposit flows by issuing "jumbo" (\$100,000 or larger) certificates of deposit. Small denomination accounts with interest rates fixed by regulation experienced net withdrawals throughout the year. By the end of 1980 these fixed-ceiling deposits accounted for just over half of total thrift deposits, compared to roughly two-thirds at the end of 1979.

While the new deposit instruments and FHLB borrowings helped the thrifts sustain asset growth by allowing them to compete for funds at market interest rates, this new-found competitive status was achieved at considerable peril to the short-run profitability of these institutions. For much of last year the interest cost on such funds was well above the return on the longer-term asset portfolios, thereby depressing thrift industry profits.

In an environment of growing uncertainty regarding the direction of interest rates and their ability to sustain deposit flows, thrifts apparently became somewhat more cautious in their asset management in early 1980. When high interest rates curtailed deposit inflows in earlier cycles, thrifts generally sustained their mortgage lending activity by selling off their liquid asset portfolios. From March to May 1980, however, savings and loans (S&Ls) reduced their home mortgage commitments at a record rate but continued to acquire liquid assets. The percentage of assets held by insured S&Ls in liquid instruments actually increased over most of 1980—an unprecedented development in a period of weak deposit flows.

Home mortgage commitments rebounded sharply from June through September following the declines in interest rates and the resumption of deposit flows. In the fourth quarter commitments fell off slightly as rising mortgage interest rates once again led to a reduction in housing sales.

Credit Flows. Credit extended to the nonfinancial sectors of the economy during the first 3 quarters of 1980 was well below the pace of the preceding year, even though Federal borrowing doubled. Funds raised by private nonfinancial borrowers (including State and local governments) plummeted in the second quarter in the face of high costs, restricted credit availability, and the recession-induced reduction in demand. While private credit flows rebounded somewhat in the third quarter, they continued to lag behind the 1979 pace.

The household sector experienced the sharpest reduction in borrowing during 1980. In late 1979 the ratio of consumer installment and mortgage credit repayments to disposable personal income—a common measure of the burden of household debt—reached its historical peak. Thereafter, the rate of increase of these household debt

categories gradually abated through the first quarter of 1980. As reported earlier, the credit controls program induced consumers to reduce their installment debt sharply in the second quarter, and their rate of mortgage borrowing nearly halved. Even with some recovery of borrowing in the third quarter, required household debt repayments as a percent of disposable personal income continued to fall throughout 1980. At year-end this measure of household debt burdens was well below the mid-1979 peak. Moreover, real financial net worth per capita rose over the year. Taken together, these trends suggest that the household debt burden may not be as serious a constraint on consumer spending in 1981 as it was in late 1979 and 1980.

Borrowing by nonfinancial businesses followed a pattern similar to that of the household sector, though not as severe. Second quarter borrowing fell much more sharply than the decline in the financing gap (the excess of capital expenditures, including inventory accumulation, over internally generated funds), as businesses liquidated some of the short-term assets built up over the previous 3 quarters. In the third quarter businesses once again began to increase their liquid asset portfolios, and corporate borrowing increased despite a further reduction in the financing gap. Corporations took advantage of the precipitous drop in long-term rates in May and June by issuing a record volume of long-term bonds, but when long-term rates moved upward later in the summer they returned to short-term credit expansion to meet their financing needs.

The liquidity positions of nonfinancial corporations have deteriorated significantly since 1976, when the ratios of liquid assets and long-term debt to short-term debt reached their cyclical highs. By the end of the second quarter of 1980 the corporate liquidity ratio (liquid assets relative to short-term debt) had reached an all-time low, and long-term debt as a percent of total debt was considerably lower than the previous low reached in early 1975. Historically, businesses have tended to restore their liquidity and move to a healthier balance in their liability structures near the end of recessions, when reduced credit needs and lower long-term rates allow them to liquidate their short-term borrowing and extend the maturity of their liability structure. This time, however, the sharper-than-usual increases in interest rates have attenuated this normal restructuring process and threaten to induce further deterioration of the financial health of corporations in 1981.

THE PROSPECTS FOR 1981 AND 1982

In 1981 the economy should continue its modest recovery from the 1980 recession. Real growth is projected to be about $1\frac{3}{4}$ percent over the 4 quarters of the year, with virtually all of it coming in the last 2 quarters. Although both employment and the labor force are expected to rise about $1\frac{1}{2}$ million during the year, the labor force gain is likely to be a shade larger. In consequence, the unemployment at year-end 1981 is anticipated to be slightly above its current level. The overall rate of inflation is forecast to be little changed from its 1980 pace. Given public concern with inflation, both fiscal and monetary policy are expected to be a restraining influence on economic activity in 1981 and beyond. However, there is both need and room for a prudently designed tax cut which would be phased in gradually over the next 2 years.

Over the 4 quarters of 1982 real growth is expected to be $3\frac{1}{2}$ percent, with the proposed tax cuts providing significant stimulus. The somewhat faster pace of economic activity should yield employment gains of roughly 2 million during the year. The unemployment rate is expected to decline gradually throughout 1982. The continued moderation in economic activity is projected to produce a slowing in the overall rate of inflation of about $1\frac{1}{2}$ percentage points during 1982.

FISCAL POLICY

The forecast presented below is based on the economic policy measures described in the 1982 budget. In fiscal 1981 Federal outlays are projected to be \$662.7 billion. This amounts to a 14 percent increase, a slowdown from the 17 percent growth in fiscal 1980. A further slowdown is projected in fiscal 1982, with outlays rising 12 percent to \$739.3 billion. Most of the increase in Federal outlays over the 2 years stems from the effects of inflation. Adjusted for inflation, total outlays will increase about 2 percent, with sizable real gains in defense spending partially offset by declines in nondefense spending.

In fiscal 1981 receipts are projected to be \$607.5 billion, rising to \$711.8 billion in fiscal 1982. Both these receipts, and to a lesser extent expenditures, reflect the President's proposed Economic Revitalization Program (ERP), designed to moderate the rise of tax burdens and provide incentives for business capital investment. The budget cost of the program is \$3.3 billion in fiscal 1981, rising to \$22.5 billion in fiscal 1982. The fiscal 1982 budget also includes a proposal to increase the Federal tax on motor fuels by 10 cents per gallon on June 1, 1981. Thereafter, the tax per gallon would increase with inflation. The proposed increase in the motor fuels tax is expected

to yield approximately \$13 billion in fiscal 1982 and larger amounts thereafter.

The tax reductions embodied in the ERP will not totally offset increases in other taxes. Social security taxes, the windfall profits tax on oil company revenues, and inflation-induced increases in personal taxes will combine with the proposed motor fuels tax and withholding of tax on interest and dividends to produce a rising tax burden in 1981 and 1982 despite the ERP. In addition, even with the budgeted acceleration in defense spending and continued increases in interest outlays, overall growth in Federal spending will be relatively modest in real terms. Thus, the high-employment surplus is expected to increase substantially in both 1981 and 1982, helping to moderate demand and lower inflation.

The Economic Revitalization Program

The major focus of the ERP is on increasing investment and encouraging innovation. Depreciation rules would be both liberalized and simplified under the plan. This would increase the rate of return on new investment and the cash flow of firms making investments. The program would also make the current investment tax credit (ITC) partially refundable. The ITC and accelerated depreciation proposals would be retroactive to January 1, 1981. These two proposals are explained in detail in Chapter 1.

To shift additional national resources into investment, a larger-than-usual share of the funds available for tax reduction will have to be devoted to investment incentives. But some other forms of tax relief are both feasible and desirable. The President's program proposes three principal areas of such relief. First, individuals and employers would receive an income tax credit sufficient to offset the rise in social security taxes which took place at the start of the year. This type of tax cut was chosen because it not only would reduce tax burdens but also lower business costs and thus help modestly with our inflation problem. Second, for workers who face a growing social security tax burden but earn too little to pay income taxes, the program would expand the earned income tax credit. This would more than offset the increase in social security taxes for our lowest-paid workers. Third, the program proposes a phased reduction in the tax burden on two-earner families by reducing the so-called "marriage penalty" that taxes married couples with roughly equal incomes at rates higher than unmarried couples with the same incomes.

These reductions in individual income taxes would not become effective until January 1, 1982. The program, as originally proposed in August 1980, had provided for implementation of these tax cuts immediately upon passage. The delay in the effective date is dictated by budgetary prudence and the desire to avoid rekindling inflationary

expectations. Of course, if the economy should weaken seriously during 1981, the Congress would have reason to advance the effective date of these tax cuts.

MONETARY POLICY

In July 1980 the Federal Reserve tentatively set its monetary aggregate growth target ranges for the period from the fourth quarter of 1980 to the fourth quarter of 1981 generally one-half percentage point below the previous year's targets (Table 24). As discussed in Chapter 1, this reduction is intended to provide sustained monetary restraint consistent with an eventual return to price stability. There is little doubt that these target ranges will restrain the economy in 1981, but the amount of that restraint is less certain.

A rough method of assessing the restrictiveness of monetary policy in the period ahead is the increase in velocity implied by keeping monetary growth within the target ranges while still supporting expansion of nominal GNP sufficient to permit a modest recovery from the 1980 recession. Given the likelihood that inflation will sustain considerable momentum over the year, the implied increases in the velocities of the key monetary aggregates are well above the long-term historical averages. Historically, such large increases in velocity have been associated with a substantial rise in interest rates, a rise that could threaten the prospects for a moderate economic recovery in 1981.

Several potential developments during 1981 could alter the degree of monetary restraint implied by the money growth targets. First, as discussed earlier, in 1975 and 1976 there were sizable shifts in the demand for money in a direction that tended to increase velocity and thus accommodate more nominal GNP growth for a given monetary growth. One factor thought by many to be associated with the earlier shifts—a rapid runup in interest rates piercing previous peak levels—occurred in late 1980. While a money-demand shift cannot be predicted with any confidence for 1981, the possibility that another shift may materialize raises the difficulty of interpreting the degree of restrictiveness of the money growth ranges.

In addition, the introduction of NOW accounts on a nationwide basis in January will alter to some degree the relationships among the various aggregates and their relationship to economic activity. Shifts out of demand deposits into NOWs will depress the rate of growth of M-1A. On the other hand, NOW accounts probably will attract some savings deposits and other interest-bearing deposits, thereby boosting M-1B. The degree of the shift into NOW accounts will depend on the aggressiveness with which depository institutions price these new instruments and promote them, as well as on the public response. Partly on the basis of NOW account growth in New

England, the Federal Reserve has adjusted the midpoints of the target ranges for these narrow aggregates in an attempt to account for these structural changes (Table 24). But whether the adjusted targets will in fact yield the same degree of monetary restrictiveness in 1981 as the announced unadjusted targets would have yielded in the absence of nationwide NOWs is unknown.

Shifts into NOWs from demand and most interest-bearing deposit categories at banks and thrifts will have no impact on the rates of expansion of M-2 and M-3. However, other financial developments could influence their growth patterns. In particular, there is considerable uncertainty about whether money-market mutual funds and the variable rate SSCs—both of which are included in M-2 and M-3—will continue their unusually rapid growth in 1981. There is also uncertainty as to whether these instruments will draw funds from deposit categories in M-2 and M-3 or from sources not included in these broader aggregates.

Finally, several technical problems associated with the Monetary Control Act of 1980 will confront the Federal Reserve in 1981, further complicating the implementation of monetary policy. As discussed in Chapter 2, the act requires a sweeping restructuring of reserve requirements and extends both reserve requirements and access to the discount window to nonmember banks and thrift institutions. It will take some time for these institutions to develop a stable pattern of reserve management and borrowing behavior. During this transition period the Federal Reserve will find it more difficult than usual to predict borrowings, excess reserves, and other reserve measures. Thus, the relationship between reserves and money, which is the key to controlling money growth, will probably be less certain during 1981 and perhaps over a longer period.

In the face of all these technical difficulties and uncertainties, the danger in rigidly keeping the growth of M-1A, M-1B, or any single monetary aggregate within a narrow preset range regardless of other developments is obvious. With the long-run monetary growth ranges for 1981 already implying considerable tightness, there is a great risk that developments unrelated to the basic course of economic activity could artificially boost the growth rates of some of the aggregates and induce excessive monetary stringency. The Federal Reserve has attempted to account for the structural changes by adjusting the ranges for the narrow aggregates. Another option could be to place more emphasis on the broader aggregates like M-2, which are unlikely to be so greatly affected by the structural changes. An additional adjustment that would reflect the greater uncertainty of financial relationships in 1981 would be to widen the limits of the longer-run ranges.

The uncertainty of developments in 1981 calls for flexible response on the part of monetary policy. Since the Federal Reserve began announcing its longer-run targets in 1975, it has been understood that "The longer-run ranges will be reconsidered as conditions warrant." In 1981, this statement assumes even greater importance than usual.

WORLD AND DOMESTIC OIL MARKETS

As has been the case in the recent past, developments in world oil markets will continue to influence U.S. inflation and growth. World oil demand is likely to remain weak during 1981 due to the sluggish pace of economic activity in the industrialized nations and the continued adjustment to 1979's rapid increase in oil prices. In addition, oil inventories, which prior to the outbreak of the war between Iran and Iraq were very high by historical standards, may still insulate the consuming nations from limited supply disruptions. Nevertheless, even with these elements tending to limit price pressures, the price of imported oil is expected to increase somewhat faster than inflation in 1981 and 1982.

Decontrol of U.S. oil prices will bring still sharper increases in domestic oil prices during 1981. In November 1980 the average price of domestic oil was about \$28 per barrel. That price will rise to the world market level by October 1981, at which time the price is expected to be in the neighborhood of \$40 per barrel.

The total burden to U.S. consumers of the relative price increases in oil during 1981 is expected to reach about \$30 billion by the end of the year. The bulk of this will go to the Federal Government in the form of higher receipts from the windfall profits tax and increased revenues from corporate taxes on the profits of oil companies. This increase in Federal revenues is one source of the estimated increase in the high-employment surplus during 1981. Of the remaining total, roughly \$3 billion will accrue to foreign producers and about \$8 billion to domestic producers. Some small fraction of these amounts will be respent in the United States in 1981, but the economic drag caused by the increase in oil prices during 1981 will still amount to roughly \$10 billion.

THE ECONOMIC FORECAST

The economy has now experienced 2 quarters of moderate real growth following the sharp decline in the second quarter of 1980. At the same time there was a rapid runup in interest rates through mid-December. While significant declines in interest rates were recorded thereafter, the effects of taut financial conditions during 1980 are likely to weaken the pace of recovery during the first half of 1981. These weak conditions should be particularly evident in housing and in spending for consumer durables. Overall, it is likely that real GNP

will be essentially flat in the first half of the year, with a distinct possibility of 1 quarter of actual decline.

After midyear the pace of activity should pick up, although by historical standards growth will remain modest for a period of recovery (Table 25). The restrictive stance of monetary and fiscal policy will contribute to this result. In addition, consumers' real incomes will be restrained by rising oil prices. Over the 4 quarters of 1981 the combination of fiscal and oil-price imposed restraint is estimated to rise by about \$60 billion, or 2 percent of GNP.

TABLE 25.—*Economic outlook for 1981*

Item	1980 ¹	Forecast range 1981
Growth, fourth quarter to fourth quarter (percent):		
Real gross national product.....	-0.3	1½ to 2
Personal consumption expenditures.....	-3	1 to 1½
Nonresidential fixed investment.....	-6.0	1 to 1½
Residential investment.....	-17.6	6 to 7
Federal purchases.....	4.7	3 to 3½
State and local purchases.....	-3	-½ to 0
GNP implicit price deflator.....	10.0	10 to 10½
Compensation per hour ²	10.2	10½ to 11
Output per hour ².....	.2	½ to 1
Level, fourth quarter: ³		
Unemployment rate (percent).....	7.5	7½ to 7¾
Housing starts (millions of units) ⁴	1.56	1½ to 1¾

¹ Preliminary.

² Private nonfarm business, all persons. Changes for 1980 are fourth quarter 1979 to third quarter 1980 at annual rates.

³ Seasonally adjusted.

⁴ Annual rates. October-November average used for fourth quarter 1980.

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

As the economy moves into 1982 it should maintain the momentum of the last half of 1981. Business fixed investment is expected to be a particular source of strength because of the proposed tax incentives for capital spending.

Consumer Expenditures

Consumer spending in 1981 will be constrained by sluggish growth in after-tax income due in part to inflation-induced increases in effective personal tax rates and the step-up in social security taxes. Overall, real after-tax incomes will show only a very small gain. Rising energy prices will also continue to put pressure on consumer purchasing power. As a consequence, consumer spending is projected to grow less rapidly than real GNP during 1981.

Last year the personal saving rate rose somewhat, ending the year at 5¼ percent. Over the last 4 years the saving rate has averaged a shade under 5½ percent, roughly 2 percentage points below the average of the preceding 10 years. Nevertheless, the attempt to maintain living standards in the face of sluggish income growth is likely to

produce a slight decline in the saving rate during 1981. Despite this, real consumer purchases of goods and services are only projected to rise by slightly more than 1 percent over the 4 quarters of 1981.

Consumer spending is expected to be particularly sluggish in the first half of the year. Purchases of autos and other credit-sensitive goods are likely to be the most affected, leading to a decline in durables spending during 1981. In contrast, expenditures by consumers on both nondurable goods and services are projected to rise during the year. A somewhat healthier growth in real consumer spending should be evident in 1982 partly due to the gains in disposable incomes that will follow the personal tax cuts proposed for the start of that year.

Business Fixed Investment

Surveys of capital spending plans by business for 1981 are currently showing surprising strength. One private survey indicates that for 1981 as a whole real spending on plant and equipment will increase 2 percent. The most recent Department of Commerce survey is slightly less optimistic, suggesting that business plans to increase real investment outlays by about 1 percent. The year-over-year increase indicated by these surveys would involve vigorous gains in investment during 1981.

These surveys need to be interpreted with caution. Business spending plans tend to be revised downward when the economy weakens, as it is projected to do in the first half of 1981. Thus despite the surveys, some continued weakness is expected during the first half of 1981. However, business capital spending should begin accelerating in the second half of 1981. An important source of this growth will be the proposed liberalization of both depreciation allowances and the investment tax credit. These are assumed to go into effect in mid-1981, retroactive to the start of the year. But given the lags in the investment process, these tax incentives should have their major impact in 1982 and beyond. Indeed, real business capital spending during 1982 is expected to increase substantially faster than real GNP. One further reason for the strength in this sector is the marked increase in capital spending anticipated in the energy industry.

Housing

During the last several months of 1980 the short-term prospects for the housing market worsened somewhat. After the swift rebound during the summer, housing starts leveled off at roughly a 1.55-million unit annual rate for September through November. Many observers were surprised that housing starts were maintained at that level, especially in November, in light of very high and rising interest rates. Part of the explanation appears to be that multifamily starts—

which increased from September to November—were bolstered somewhat by Federal subsidy programs. Single-family starts declined during this period partly due to a reduction in the rate of new home sales in September and October, but sales unexpectedly turned up slightly in November despite a rise in mortgage rates to 14 percent and above.

The high mortgage rates that are likely to prevail during much of 1981 will delay any further rebound in homebuilding activity. At current interest rates, many potential home buyers—especially those looking for their first home—cannot afford the required monthly mortgage payments. Nevertheless, with the continued high rate of household formation by the postwar baby-boom generation and the tax advantages of homeownership, potential housing demand is quite strong. Moreover, new financing arrangements may help reduce the problems of affordability. Thrift institutions are now offering several versions of the graduated-payment mortgage and have begun to offer shared-appreciation mortgages in which the lender receives an equity interest in the house in exchange for lower mortgage rates. In addition, there have been reports of homebuilders offering to meet part of the buyer's monthly mortgage payments in exchange for a higher sales price.

These factors suggest that housing starts may fall somewhat during the first half of 1981 in response to high mortgage rates. But thereafter, growing housing demand and the further development of innovative financing arrangements should lead to some rebound in homebuilding even if interest rates remain high. By the end of 1981 housing starts are expected to be in the range of 1.5 to 1.7 million units, with further gains probable during 1982.

Inventories

As observed above, recent inventory behavior has been noteworthy for its relatively quick adjustment to changes in final sales. As a consequence, unlike previous periods of recession and recovery, there has been no major inventory cycle this time around. Over the coming months the sluggish pace of economic activity will create continued pressure for moderation in inventory accumulation. In addition, the current high level of interest rates provides an additional incentive to hold down inventories. This suggests that inventory investment will be quite modest in the first half of 1981 and should gradually gain thereafter, roughly in line with sales, as economic growth quickens.

The Foreign Sector

The pattern of economic growth projected for the other industrial countries is quite similar to the one projected for the United States: very slow growth in the first half of this year, followed by somewhat

more rapid growth thereafter. During this year and next, growth abroad is likely to average between 2 and 3 percent—roughly comparable to average growth in this country. As a result of this similarity in growth patterns, net exports are not expected to show major swings over the coming 2 years. From the fourth quarter of 1980 to the end of 1982 a modest decline in net exports—about \$2 billion in constant dollars—is projected. This decline will result primarily from a somewhat more rapid rise in import volumes than in export volumes, although neither of these is projected to grow very strongly. Some loss in U.S. competitiveness is implicit in these projections. American goods are likely to become somewhat more expensive in relation to foreign goods, both because of somewhat higher inflation in the United States and because of the strength of the dollar in foreign exchange markets. The strength of the dollar is likely to persist so long as interest rates in the United States remain high relative to interest rates abroad and if, as predicted, the U.S. current account remains in surplus. While the surplus is projected to diminish somewhat during the course of 1981 from the very high level reached in the second half of 1980, it should remain large through 1982 in the absence of any future oil-price shock.

Government Purchases

Real Federal purchases are projected to increase by about $3\frac{1}{4}$ percent during the course of 1981, and by a smaller amount in 1982. During both years real defense purchases are anticipated to increase substantially, offsetting projected declines in real nondefense purchases.

State and local government spending in real terms fell in 1980 and is forecast to decline again during 1981. The economy's sluggish growth, continued taxpayer resistance to new spending programs, and budget tightness will serve to hold down spending. With the resumption of healthier economic growth in 1982, State and local government purchases are expected to increase in real terms, although substantially more slowly than GNP.

Employment and Unemployment

Employment is likely to increase by slightly less than $1\frac{1}{2}$ percent during 1981 and, with the pickup in economic activity in the following year, to advance by a shade more than 2 percent during 1982.

Growth in the labor force is projected to average about $1\frac{3}{4}$ percent over the next 2 years, advancing at a somewhat slower rate in 1981 and speeding up in 1982. This pace is in line with average annual growth over the last 30 years, although it does represent a distinct slowdown from the $2\frac{1}{2}$ percent annual gain recorded in the 1970s.

These projections for employment and the labor force imply that the unemployment rate at year-end 1981 will be between 7½ and 7¾ percent, although it is likely to be above this range in the early part of 1981. During 1982 the unemployment rate is projected to decline steadily, ending the year in the range of 7¼ to 7½ percent.

Wage and Price Developments

Wages and prices should decelerate over the next several years. Several factors will be at work. With both fiscal and monetary policy aimed at continued restraint in aggregate demand, the prospects are for modest economic growth through 1982. These developments should limit demand relative to supply in both labor and product markets, gradually reduce inflationary expectations, and ultimately yield a better wage and price performance. At the same time, expanded tax incentives will spur investment and thus improve productivity growth. This too should contribute to moderating wage and price increases.

As discussed in Chapter 1, however, reducing inflation via demand restraint and increased productivity does not yield quick results. Furthermore, a number of factors will serve to keep inflation relatively high in the near future. These will include higher food price inflation, the recent increases in social security taxes and the minimum wage, and the continued rise in energy prices resulting from further oil-price increases and the decontrol of domestic energy prices. These factors suggest that wage and price increases during 1981 may nearly match those recorded in 1980.

Wages and Unit Labor Costs. After showing moderation through most of 1979, wage rates accelerated last year. While the relatively slack labor market will limit further wage acceleration this year, there is unlikely to be any noticeable slowdown. Both oil and food prices will rise sharply in 1981, maintaining the pressure for sizable wage gains. But by 1982, with continued restraint in aggregate demand and lower food- and oil-price rises (decontrol will be completed), the rate of pay increase should diminish, returning to the vicinity of wage gains seen in 1979.

Private wages and fringe benefits are projected to increase 10 to 10½ percent during 1981. In addition, the jump in payroll taxes which occurred on January 1, 1981 added slightly over one-half percent to the level of compensation. As a result, increases in total hourly compensation should average about 10½ to 11 percent over the 4 quarters of 1981, with a large bulge in the first quarter. With only a modest boost in payroll taxes scheduled for 1982, the rate of increase in total hourly payroll costs should slow noticeably.

In the face of sluggish economic activity in the first half of 1981, productivity could well record a slight decline. Thereafter, with the

reemergence of modest but sustained economic growth, productivity is projected to increase slightly faster than its underlying trend rate of 1 to 1½ percent. This productivity performance, in conjunction with the slowdown in the increase in hourly compensation projected for late 1981 and into 1982, should substantially moderate increases in unit labor costs.

Product Prices. The large share of wage and salary payments in total business costs makes the advance of unit labor costs a fundamental determinant of the trend increase in product prices. Thus, the prospects for product prices basically mirror those for unit labor costs, with the overall rate of price inflation as measured by the GNP deflator expected to be noticeably improved by 1982. Over the 4 quarters of 1982 the overall inflation rate is expected to drop to about 8¾ percent. During 1981, however, the rise in the deflator should roughly match the 1980 increase of 10 percent. Adoption of the motor fuels tax could add another one-fourth to one-half percentage point to growth in the deflator. The near-term projection for inflation reflects developments in energy discussed above and agricultural markets, which deserve special attention.

Food Prices. Significantly higher prices for food are anticipated for 1981, with a rise of about 12 percent likely. The production adjustments already underway by meat producers, together with the effects of the summer-long drought, will exert upward pressure on commodity prices. Continued increases in energy costs and labor wage rates imply that food marketing costs will increase at about the rate of general inflation.

Meat price increases will probably be most visible to the average consumer. After 5 years of steady increase, pork production is expected to fall 6 to 8 percent. Beef production is likely to be only slightly higher than its low level in 1980. Live animal prices are forecast to be much higher than in 1980. High prices (and limited supplies) of feedgrains will limit increases in poultry production. Meat supplies will also be tight on a world scale. While the seasonal pattern of the 1981 meat price increase is still in doubt, it appears that retail meat prices will rise most notably from April through August before stabilizing (and perhaps declining) late in the year. Crop conditions in the United States and worldwide will determine this pattern. Generally poor crop conditions early in the year could push grain prices much higher. Under these conditions, retail meat prices would be lower in the first half (as herds are liquidated) but higher in the second half than is now expected.

Agricultural conditions also point to higher prices for most other food items during 1981. Commodity price increases resulting from

the drought in 1980 will be reflected in food prices during most of 1981.

The Consumer Price Index. The CPI merits special attention because of its high visibility and its key role in the indexing of both wage contracts and benefit levels under Federal entitlement programs. The CPI is expected to increase by 12½ percent over the 4 quarters of 1981, with roughly one-half percentage point of this increase accounted for by the proposed increase in the motor fuels tax. This increase, which is roughly the same as was registered during 1980, is about 2 percentage points higher than the increase forecast for the GNP deflator. Among other reasons for this difference, the CPI is more sensitive to increases in oil and food prices. Further, mortgage interest rates have no direct effect on the deflator. Although the increase in the CPI in 1981 is likely to match the 1980 increase, the first quarter of the year is likely to see a surge of inflation in the CPI due to already recorded mortgage interest rate increases. After this effect has passed the outlook is for improvement during the remainder of the year and continuing through 1982. During 1982 CPI inflation is expected to decline to about 9½ percent.

Uncertainties in the Outlook

Among the various uncertainties in the outlook, two deserve particular attention: the possibility of a serious collision between the demand for funds and the monetary targets of the Federal Reserve, and the possibility of sharply higher oil prices should the continued loss of Iraqi and Iranian oil, or some other shock, tighten oil markets.

Interest rates now appear to have peaked in mid-December of last year. Most short-term rates have already fallen sharply, some by as much as 3½ percentage points. While long-term interest rates have fallen by much smaller amounts, the peaks in these rates also seem to have passed. But additional dramatic declines—like those of last spring—are not likely this year. There remains considerable uncertainty as to what the Federal Reserve's operating targets imply for the path of interest rates between now and the end of 1982. Furthermore, interest rates are still unusually high for the early stages of a recovery. Should rates surge upward again, it is likely that housing and other interest-sensitive sectors would suffer serious setbacks. In this event, weakness in economic activity could continue past mid-year, and the rise in the unemployment rate might continue throughout the year.

A second risk is the possibility of a major hike in oil prices. Such a shock would contribute significantly to inflationary pressures at the same time that it would depress real economic activity and drive up the unemployment rate. The precise quantitative effects of such a

hike would depend on many factors, including the response of the Federal Reserve. Under plausible assumptions, if in early 1981 the world market price of oil were to rise \$10 per barrel above that already assumed, then by year-end this would add about 2 percentage points to the inflation rate and reduce the growth of real GNP from what it otherwise would have been by 2 percentage points. Some further effects would be felt in 1982, and by year-end the unemployment rate would be about 1 percentage point higher than it would have been without this increase in oil prices.

While the two major uncertainties in the outlook raise the possibility that the recovery will be weaker than forecast, a stronger recovery is entirely possible. Any improvement in the outlook must have at its core a reduction in the rate of inflation. A better inflation performance could result from several causes, the chief among them being improved productivity, more moderate wage gains, or favorable crop developments. If, for example, that part of the slowdown in productivity which had remained a bit of mystery were to reverse itself, the outlook for business costs and prices could be greatly improved. Reductions in inflationary expectations would follow, reinforcing the direct effects of the productivity improvement. Presuming the Federal Reserve maintained its monetary targets, the improved inflation outlook would tend to reduce interest rates and generally ease conditions in financial markets. As a consequence, real economic activity could advance more rapidly than forecast.

THE GOALS OF ECONOMIC POLICY

The Humphrey-Hawkins Full Employment and Balanced Growth Act sets forth both general and highly specific objectives for two of the most important indicators of the country's economic health, the unemployment rate and inflation, and establishes the target of reducing Federal outlays to 20 percent of GNP. The act establishes specific milestones for the achievement of these objectives. An interim goal of Federal outlays equal to 21 percent of GNP is set for 1981; interim goals of 4 percent for the overall unemployment rate (3 percent for adults) and 3 percent inflation are both set for 1983.

According to the act, beginning with the 1980 *Economic Report* the President may, if he deems it necessary, modify the timetable for achievement of the interim and final goals for unemployment, inflation, and Federal outlays as a share of GNP. Last year's *Economic Report* discussed in some detail the degree of progress toward these goals and the reasons why their achievement by 1983 was not possible. The chief reason was the 1979 rise in oil prices. Federal policies

in 1979 and 1980 were of necessity aimed at limiting the negative impact of these oil-price increases.

Economic policy now faces a stiff challenge: to reduce a stubborn inflation, improve the growth of productivity, and expand output and employment. The policies required to meet this challenge are discussed in Chapters 1 and 2 of this *Report*, and they will lead to substantial progress toward the goals of reduced inflation and lower unemployment over the next 5 years. Longer-term projections are shown in Table 26. But even with this progress, it will not be simultaneously possible to achieve 4 percent unemployment and 3 percent inflation in the time envisioned in the Humphrey-Hawkins Act or in last year's *Report*. Attempts to reach either goal on the act's timetable would frustrate progress toward the other goal and could substantially impair the prospects for improved economic performance. In the long run such attempts would prove self-defeating and result in very harmful economic and social consequences. The more gradual path shown in the table will allow us to make progress toward our goals and to maintain them once achieved. Over the years ahead Federal spending as a share of GNP will decline, but the level of spending required to meet national needs and priorities, especially in the defense area, will not permit a reduction to the numerical target set forth in the act.

TABLE 26.—*Economic projections, 1981–86*

Item	1981	1982	1983	1984	1985	1986
Unemployment rate (percent), fourth quarter ¹	7.7	7.4	7.0	6.6	6.2	5.9
	Percent change, fourth quarter to fourth quarter					
Consumer price index.....	12.6	9.6	8.2	7.5	6.7	6.0
Real GNP.....	1.7	3.5	3.7	3.7	3.7	3.7

¹ Seasonally adjusted.

Source: Council of Economic Advisers.

SUPPLEMENT

National Income and Product Account Revisions

The national income and product accounts (NIPA), which provide data on aggregate output and income, were substantially revised in 1980 by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce. The revisions included a refining of accounting concepts and estimation procedures, and introduced new and more recent sources of data. The last

major revision of the NIPA occurred 5 years ago and was reported in the January 1976 *Survey of Current Business* published by the Commerce Department. The current revision will be described in an article in the December 1980 *Survey*. All of the NIPA data discussed in this *Report* are the revised data, except as noted.

The major features of the revision are these:

- The data from three major new sources are now incorporated in the NIPA. These are BEA's 1972 input-output tables, the 1977 censuses, and the 1973 and 1976 Compliance Measurement Program of the Internal Revenue Service (IRS).
- Normal data sources which would have been used in the postponed July 1980 annual revisions of the NIPA (e.g., IRS tax return information, annual surveys of manufacturers, housing, and retail trade) were also utilized in these revisions.
- The major conceptual change in the NIPA involves the treatment of certain international transactions. The *reinvested* earnings of incorporated foreign affiliates of U.S. companies are now included in exports of services. The *repatriated* earnings of these affiliates were previously included in exports of services. The reinvested earnings of incorporated foreign-owned affiliates in the United States receive similar treatment thus adding to imports of services. Because the U.S. earnings abroad are larger than the foreign earnings here, the net result is higher net exports and gross national product especially since the late 1960s. Gross domestic product is, of course, unaffected by the change. This change makes the handling of foreign earnings in the NIPA consistent with that used in the balance of payments accounts since 1978.
- The treatment of international transactions has also been changed by using a new procedure for estimating the prices of service exports and imports.
- More detailed analysis of Federal purchases has allowed separate constant dollar estimates for both nondefense and defense purchases beginning in 1972.
- The level of detail at which output is deflated has been increased.
- Estimating procedures now allow a more complete differentiation between dividend and interest income than was previously reported.

The revisions have raised estimates of real GNP by about 3½ percent for 1979, by about 2½ percent for 1974, and by lesser amounts for earlier years. About one-third of the upward revision for the years 1977-79 was due to the conceptual change in the handling of foreign earnings. In addition, the revision in the deflators has, on balance, reduced estimates of prices, thus raising real output. Finally, estimates of real nonresidential fixed investment have been substantially increased, especially since 1973. The ratio of real

nonresidential fixed investment to real GNP, which had previously averaged 9.9 percent between 1974 and 1979, now averages 10.4 percent.

Past business cycle patterns have been little changed by the revisions. The GNP-measured turning points are all as previously reported. However, the peak-to-trough declines have been reduced by one-half percent and 1 percent for the 1970 and 1974-75 contractions, respectively. The NIPA now show the 1974-75 contraction being interrupted by 1 quarter of slight expansion in the second quarter of 1974, immediately following the period of the Arab oil embargo.

Total compensation remained roughly the same as before revision, but its composition changed. Wages and salaries in the most recent years are now higher and supplements lower than had been previously reported. Business net interest was revised upward by significant amounts especially in recent years. These revisions rise to \$13.7 billion for 1979. Corporate profits were raised significantly, but chiefly because of the conceptual change in reinvested foreign earnings. Lowered estimates of corporate taxes contributed to higher corporate retained earnings and saving estimates for the most recent years. Personal saving estimates were also raised. This is because estimates of personal consumption were barely changed, while personal income was revised upward considerably. The personal saving rate in the 1970s was revised upward from an average 6.4 percent under the old estimates to 7.1 percent under the new estimates.

Potential GNP

Until a formal reappraisal of the historical growth in real potential output can be completed in the light of the 1980 benchmark revisions to the NIPA, a provisional procedure has been used to estimate real potential GNP. The provisional procedure includes two major changes. First, revised data on business output indicate a somewhat more rapid gain in worker productivity since 1973. As a result, the trend rate of growth in potential GNP has been increased by one-fourth of a percentage point from 1973 on. Thus the one-half percentage point deceleration in the old potential series that occurred in 1973, principally due to reduced productivity growth, has been changed to a one-fourth point deceleration. The further one-half point deceleration in potential that had been assumed starting in the first quarter of 1979 is still maintained. The second major change in the series was to add directly to potential the dollar estimate of the conceptual change to rest of world output that occurred from the revisions in the handling of reinvested foreign earnings. In this manner, the gap between actual and potential GNP is unaffected by conceptual changes to the NIPA. The dollar amount of these conceptual revisions has been growing very rapidly recently. As a result, these changes actually increase the estimated growth of potential in recent years by nearly 0.2 percentage point. The newly-constructed series grows somewhat less than 3 percent since the first quarter of 1979. This growth rate is expected to continue through 1981. Thereafter the series is projected to grow at 3 percent

per year. This modest acceleration is due to the combined effect of a small assumed increase in the growth rate of worker productivity offset by an expected decline in the contribution to growth of the conceptual changes to the NIPA. On balance, these changes to actual and potential GNP result in smaller output gaps over the recent past (Table 27).

TABLE 27.—*Revised potential GNP, 1973–80*

Year	Potential GNP. (billions of 1972 dollars)	GNP gap (percent) ¹	
		Revised	Pre-revision
1973.....	1,234.9	—1.6	—0.7
1974.....	1,277.5	2.3	3.7
1975.....	1,320.6	6.6	7.7
1976.....	1,365.1	4.7	5.1
1977.....	1,411.4	2.8	3.0
1978.....	1,459.3	1.5	1.7
1979.....	1,504.6	1.4	2.0
1980 ²	1,548.5	4.4	(³)

¹ Potential minus actual as a percent of potential.

² Preliminary.

³ Not available.

Sources: Department of Commerce (Bureau of Economic Analysis) and Council of Economic Advisers.