

## CHAPTER 2

# Economic Review of 1976

THE ECONOMIC EXPANSION continued last year. Real gross national product (GNP) rose 6.2 percent, as projected in the last *Report*. The growth of output was unexpectedly strong in the first quarter, but fell below expectations during the rest of the year (Table 7). The rise in real GNP has been slightly greater since the trough in the first quarter of 1975 than the average rise over similar periods in the last four expansions, partly because of the exceptional depth of the last recession. The depth of the recession also accounted for the substantial excess capacity that remained at year-end, when the gap between actual and potential output was 8 percent and the unemployment rate was just under 8 percent. For the year as a whole the unemployment rate averaged 7.7 percent, 0.8 percentage point lower than in 1975, and employment increased by 2.7 million persons.

Excess capacity helped moderate last year's rate of inflation. The GNP deflator slowed to 5 percent last year from 7 percent during 1975 in spite of the large year-to-year rise of output. The slackening of inflation is a reflection of slower rates of increase in both labor compensation per hour and profits per unit of output. Smaller rises in food prices and a legislated rollback of oil prices helped in the slowing of inflation.

At year-end there were signs of some reacceleration of the economy, though real GNP rose at a 3 percent annual rate for the last quarter as a whole. A rapid growth of retail sales took place within the quarter, starting from a depressed September level, and auto sales rose rapidly from low levels early in the quarter when supplies were limited. Housing starts and residential investment grew very rapidly from third-quarter averages. Business fixed investment, which had been recovering for a year, was little changed from the third quarter, largely because of a sharp drop in car and truck purchases that also reflected limited supplies.

## DEMAND AND OUTPUT

The rise of real GNP initially accelerated to a 9 percent annual rate, but then decelerated to a 3¾ percent annual rate over the last 3 quarters of last year. The unevenness of GNP growth was largely due to change in the rate of inventory accumulation. Early in 1976 GNP was increased by a large change

TABLE 7.—*Changes in gross national product in constant (1972) dollars, 1975–76*

[Percent change; quarterly changes at seasonally adjusted annual rates]

Component	1975	1976 <sup>1</sup>	1976			
			I	II	III	IV <sup>1</sup>
<u>Percent change in 1972 dollars:</u>						
Total GNP-----	-1.8	6.2	9.2	4.5	3.9	3.0
Personal consumption expenditures-----	1.5	5.5	8.8	4.0	3.6	5.4
Durable goods-----	-4	12.3	23.2	3.0	3.2	2.3
Nondurable goods-----	.9	4.3	6.8	3.8	1.7	8.5
Services-----	2.6	4.5	6.2	4.6	5.3	3.9
Business fixed investment-----	-13.3	3.8	7.8	8.3	9.6	.8
Residential investment-----	-14.7	22.7	22.3	15.1	16.1	37.0
Government purchases-----	1.8	1.3	-4.9	2.6	2.9	.4
Federal purchases-----	.4	1.0	-7.2	2.5	5.7	3.5
State and local purchases-----	2.6	1.4	-3.5	2.7	1.4	-1.3
Addenda:						
Final sales-----	-1	4.3	3.7	4.2	4.3	4.8
Domestic final sales-----	-7	5.0	6.0	4.5	4.5	5.0
<u>Change in billions of 1972 dollars:</u>						
Inventory accumulation-----	-20.5	21.1	15.9	.7	-.9	-5.5
Net exports of goods and services-----	6.1	-6.7	-6.5	-.6	-.3	-.4

<sup>1</sup> Preliminary.

Source: Department of Commerce, Bureau of Economic Analysis.

in inventory investment, while the pace of inventory accumulation slowed considerably at year-end, pushing GNP growth to its lowest rate of the year. The growth rate of final sales was much steadier, averaging  $4\frac{1}{4}$  percent during the year. Consumption expenditures slowed after a rapid growth in the first quarter, but then accelerated at year-end. Consumption at midyear was restrained by a slow growth of personal income. The buildup of inventories in the first quarter led to cautious production and employment policies by business. Wage rates and government transfers also rose less than was expected and farm income declined. There was unexpected slowness in growth of government purchases early in the year, when public spending in many categories was below expectations. Investment, however, was weak in the final quarter of the year.

## PERSONAL CONSUMPTION

Real personal consumption expenditures rose 5.5 percent in 1976. After increasing 6.1 percent in the year ending in the first quarter of 1976, real expenditures grew more slowly during the rest of the year.

Real disposable income is the most important determinant of long-run real consumption. Individuals tend to retain their consumption patterns for some time after a given change in income. In the short run the effects of income changes tend to be divided between savings and the purchases of durable items. During 1975 and 1976 the rate of growth in real consumption roughly followed the rate of growth in real disposable income (Table 8). After a period of relatively fast growth from the first quarter of 1975 through the

TABLE 8.—*Growth of real consumption expenditures and real disposable personal income, 1975–76*

[Seasonally adjusted annual rates]

Period	Real personal consumption expenditures	Real disposable personal income
Percent change:		
1975 I to 1975 III.....	5.6	7.2
From preceding quarter:		
1975: IV.....	4.5	4.9
1976: I.....	8.8	6.1
II.....	4.0	4.7
III.....	3.6	.7
IV <sup>1</sup> .....	5.4	3.7

<sup>1</sup> Preliminary.

Source: Department of Commerce, Bureau of Economic Analysis.

first quarter of 1976, the rise in real disposable income slowed, especially in the third quarter. Because the slowdown in income growth may have been viewed initially as temporary and because a cushion was provided by the high savings of 1975, the slowdown in consumption was less pronounced and more steady. The personal saving rate fell from 7.0 percent in the first half of 1976 to 6.2 percent in the last half.

Real expenditures for consumer durables have been the largest contributor to the recovery in final sales in the current expansion, growing by 23 percent from the very depressed last quarter of 1974 through the fourth quarter of 1976. After a 23 percent annual rate increase in the first quarter of 1976, however, the growth of real expenditures on durable goods slowed to a 3 percent annual rate on average over the last 3 quarters. These movements in durables were dominated by purchases of motor vehicles and parts, which grew 45 percent from the last quarter of 1974 through the first quarter of 1976. Growth slowed to 3.0 and 1.5 percent respectively in the second and third quarters, and then declined by 9.0 percent at an annual rate in the strike-affected fourth quarter.

The significant slowdown in growth of real consumer durables sales in the second quarter, particularly sales of new domestic automobiles, was influenced by factors other than real disposable income. Shortages existed in some intermediate and large car lines. Changes in the relative price of automobiles may also have had an effect. The deflator for new domestic autos grew at a 9.4 percent annual rate from the third quarter of 1975 through the first quarter of 1976 as rebates and other discounts offered in 1975 were phased out and list prices on the 1976 domestic models increased. Some effects of this inflation in new automobile prices apparently continued beyond the first quarter. As individuals attempted to substitute used for new cars, the implicit deflator for used cars rose by an extraordinary 12.2 percent from the first quarter to the second and continued to rise strongly in the third quarter. The increase in domestic auto prices would appear to have been a factor in the rise in foreign car sales after the first quarter.

Relative price movements were apparently important in the real consumption of some nondurable items too. In particular, food prices were virtually constant throughout 1976 and helped the real value of food consumption to rise 5.2 percent for the year even though real incomes grew only 4.1 percent. Energy consumption was also significantly affected by relative price movements, as noted elsewhere in this chapter.

## BUSINESS FIXED INVESTMENT

Real business fixed investment increased 4 percent last year, about the amount forecast in last year's *Report*. From lows reached in the second half of 1975 real business fixed investment grew at an 8½ percent average annual rate over the first 3 quarters. Largely because of the Ford Motor Company strike, growth slowed to a 1 percent annual rate in the fourth quarter. Real investment, apart from motor vehicles, rose at substantially better than a 10 percent annual rate in that quarter.

Probably most important in starting the recovery of investment were the optimistic sales expectations stimulated by the rapid increase in consumption expenditures through 1975 and early 1976. An additional thrust came from a much improved cash flow and somewhat lower interest rates, particularly for firms with lower credit ratings. Rapidly rising labor and energy costs relative to fixed investment costs have also provided an incentive to invest in plant and equipment. The increases in the investment tax credit in 1975 further enhanced the after-tax profitability of equipment investment.

Plant and equipment expenditures by nondurable goods manufacturers increased more rapidly in 1976 than the expenditures by durables manufacturers. Industries showing strong growth include motor vehicles, textiles, food, paper, and electric utilities (Table 9).

TABLE 9.—*Changes in plant and equipment expenditures, 1974–76*

(Percent change)

Industry	1974 actual	1975 actual	1976 expected <sup>1</sup>
All industries.....	12.7	0.3	7.5
Manufacturing.....	21.0	4.2	10.5
Durable goods <sup>2</sup> .....	17.5	-3.4	8.0
Machinery, except electrical.....	29.2	2.0	11.6
Motor vehicles.....	18.0	-23.4	20.3
Nondurable goods <sup>2</sup> .....	24.7	11.6	12.5
Food including beverages.....	4.6	.2	19.8
Textiles.....	9.9	-21.0	26.5
Paper.....	38.8	14.3	17.8
Nonmanufacturing <sup>2</sup> .....	7.6	-2.4	5.3
Mining.....	16.2	19.4	4.7
Electric utilities.....	10.6	-3.6	11.4

<sup>1</sup> Based on actual expenditures in 1975 and expected expenditures in 1976 (actuals for first 3 quarters and expected for fourth quarter).

<sup>2</sup> Includes some industries not shown separately.

Source: Department of Commerce, Bureau of Economic Analysis.

Last year's *Report* noted that investment held up quite well during the recession in those industries which faced capacity constraints in 1973. In the past year capacity growth in the paper, chemicals, and petroleum refining industries has been above 3 percent, reflecting substantial investment in these industries over the past 2 years. In paper, however, the operating rate is perhaps high enough that constraints on capacity for the most refined kinds of paper could occur in the next year. In iron and steel, another industry of shortages in 1973, capacity has recently been growing at about 2 percent annually, close to the long-term trend growth rate of steel usage. There was a slowing of investment last year by steelmakers, however, following the very sizable acceleration in 1975. Other industries are operating considerably below capacity levels and shortages in 1977 are unlikely.

### INVENTORY INVESTMENT

Real inventory investment in the national income and product accounts (NIPA) reflects the difference between aggregate production and deliveries. With real consumption expenditures growing strongly in the last half of 1975 and the first quarter of 1976, and with completion of the massive inventory adjustment of 1975, production increased very sharply in the first quarter of 1976 as firms moved to keep output in line with the anticipated growth of final sales. With an only modest rise in total final sales, inventory investment in the first quarter was \$10.4 billion, compared with a decline of \$5.5 billion in the fourth quarter of 1975. The \$15.9-billion swing in the first quarter of 1976 accounted for more than half of the 9.2 percent annual rate increase in gross national product in that quarter. Inventory investment did not accelerate later in the year, since slower growth of retail sales gave rise to conservative orders and production policies in many businesses.

The NIPA nonfarm business inventory-to-sales ratio stayed in the neighborhood of 0.272 throughout last year. This was below the peak levels of about 0.300 at the trough of the recession but was still significantly above the approximately 0.250 levels of the 1972-73 period, a fact suggesting that inventory accumulation will not accelerate sharply in the immediate future. The book value of manufacturers' work-in-process inventories, which was not rising at the beginning of the year, rose in the second half, reflecting the moderately strong growth in producers' durable equipment.

### HOUSING AND RESIDENTIAL INVESTMENT

The 1976 recovery in residential investment reflected the recovery in housing starts which began in 1975. Real residential investment grew at an 18 percent annual rate in the first 3 quarters of 1976 and accelerated to a 37 percent annual growth rate in the fourth quarter. Housing demand became one of the most favorable developments during a period of general weakness in the economy. A strong 11 percent increase in total housing starts in

August was followed by a 20 percent increase in September, bringing the seasonally adjusted annual rate to 1.84 million units. Total starts then remained strong in the last months of the year.

Starts of multifamily dwelling units were important in the acceleration of starts in 1976. Rental vacancy rates fell from above 6 percent late in 1975 and remained about 5½ percent during most of 1976. A strong rise in multifamily rental absorption rates was also indicative of stronger demand for rental housing.

Federal assistance programs also encouraged housing construction. In January, \$3 billion in Government National Mortgage Association 7½ percent commitment funds was released, with an additional \$2 billion in September, and by the second half of the year the subsidized leasing program authorized by section 8 of the Housing and Urban Development Act began to affect the building of new multifamily units. By the end of the year it was estimated that approximately 40,000 apartment units had been started under the section 8 program, though the incremental impact on housing construction is smaller in that some of these units would have been constructed without the program.

Financial developments were favorable to housing in 1976, especially in the second half of the year. Interest rates in the short-term money markets did not increase in the way that many had anticipated and in fact they declined in the latter part of the year. By the end of the year market interest rates were below rates on time deposits of similar maturities at financial intermediaries. This situation encouraged continued savings flows into thrift institutions and made funds for home mortgages readily available. In addition, the continued fall in all long-term interest rates in the second half of the year reduced mortgage interest rates. The Federal Housing Administration series on new-home mortgages in the secondary market fell from 9.41 percent in December 1975 to 8.45 percent last December but had a negligible impact on mortgage rates in the primary market in 1976.

## GOVERNMENT PURCHASES

Total government purchases in real terms rose by 1.3 percent in 1976, less than in 1975 and below the rate forecast at the beginning of last year. Real Federal purchases grew by 1.0 percent for the year. (A detailed discussion of Federal spending is presented elsewhere in this chapter.) Real purchases of goods and services by State and local governments rose by only 1.4 percent in 1976, the lowest real growth since 1951.

There has been a downward trend in rates of growth of real State and local government purchases since the late 1960s, partly because the steady slowing of population growth has reduced the demand for additional services. The deceleration of spending appears to have been sharpened in 1976 by a delayed reaction to the 1974–75 recession and ensuing financial difficulties experienced by some States and local units. The widely publicized

budgetary crisis of New York City emphasized the dangers of an excessive expansion of current services financed by borrowing. The unusually slow growth of State and local spending in 1976 was thus in part a cyclical correction to bring expenditures in line with receipts and eliminate operating deficits. By the fourth quarter of 1976, State and local operating balances in the aggregate moved back into surplus for the first time since late 1973.

The slowdown in State and local spending was most pronounced in new construction, which fell about 8 percent in nominal terms in 1976. The bulk of the decline occurred early in the year and was concentrated in new school building and highway construction. In addition, State and local employment grew by 2.7 percent in 1976, compared with 5.0 percent a year earlier and with an average rate of growth of 4.8 percent between 1955 and 1975. Moreover, most of the increase in employment came early in 1976. To some extent the slower growth in 1976 in employment can be attributed to the expansion of federally funded public service employment jobs in 1975.

## NET EXPORTS

On an NIPA basis, nominal net exports of goods and services declined by \$15.8 billion from the fourth quarter of 1975 to the fourth quarter of 1976. In real terms the decline amounted to \$7.8 billion. The decrease largely reflects a return to more normal trade balances from the cyclically high export surplus recorded in 1975. Real exports increased 2.0 percent during 1976 and real imports increased 13.7 percent. Export prices rose 5.6 percent over the same period, while the increase for import prices was 6.5 percent.

Most of the shift in real net exports was accounted for by changes in merchandise trade. Shipments from abroad in late 1976 were 18 percent above their level at the end of 1975. Most of this increase in volume was accounted for by a 26 percent rise in imports of fuels. The volume of merchandise exports changed negligibly as a rise in agricultural sales abroad offset a small decline in other sales. The real surplus on service transactions, including investment income, rose from \$6.4 billion in 1975 to about \$8 billion in 1976. This increase reflects in part a trend growth in the surplus on investment incomes.

## PRICES, WAGES, AND PROFITS

The rates of growth in both prices and wages were smaller last year than in any of the preceding 3 years. Real wages increased after 2 years of decline. Corporate profits also rose with the economic recovery.

## PRICES

The rate of inflation slowed significantly during 1976 to about 5 percent for both the GNP deflator and the consumer price index (CPI). Increases from the fourth quarter of 1975 to the fourth quarter of 1976 in many of the

main price indexes were significantly lower than during 1975 and at least 7 percentage points below the 1974 figures (Table 10).

The overall declines in the measured rates of inflation during 1976 probably exaggerate the decline in the underlying rate of inflation during the year. Declines in the prices of food and energy-related products in the first part of the year, which are not likely to recur in the near future, helped bring the overall inflation rate below a currently sustainable level. Although any decomposition of inflation changes into temporary and longer-run factors is subject to considerable error, more restrained wage increases in most sectors indicate that some of last year's decline in inflation may be more lasting. The absence of significant demand pressures on capacity and the damping of inflationary expectations have been important forces in this more permanent decline.

The rates of price increase for all major components of the CPI were well below the peak rates of 1974. Compared to 1975 rates, the rates of price increase declined for durables and nondurables and did not change for services. Consumer price increases for energy continued toward convergence with the overall inflation rate, rising at a much slower rate than during 1974 and 1975. In the first quarter the CPI for energy fell,

TABLE 10.—*Changes in selected price measures, 1973–76*

[Percent change; quarterly changes at seasonally adjusted annual rates]

Price measure	1973 IV to 1974 IV	1974 IV to 1975 IV	1975 IV to 1976 IV <sup>1</sup>	1976			
				I	II	III	IV <sup>1</sup>
<b>GNP implicit price deflators:</b>							
Total GNP.....	11.5	7.1	4.7	3.2	5.2	4.4	6.2
Business.....	11.7	7.2	4.2	2.3	5.2	4.0	5.5
Nonfarm.....	12.7	6.6	5.1	4.4	3.7	5.9	6.5
Farm.....	-12.4	10.3	-15.4	-38.4	52.2	-32.6	-18.9
Personal consumption expenditures.....	11.9	6.0	4.7	3.9	4.1	5.5	5.4
Durable goods.....	11.0	5.6	5.7	5.4	6.7	3.6	6.9
Nondurable goods <sup>2</sup> .....	14.7	5.1	2.7	.5	1.6	4.8	4.1
Food.....	13.5	5.3	.6	-1.7	1.1	1.4	1.7
Gasoline and oil.....	26.3	11.3	2.6	-13.4	-5.1	19.1	13.2
Fuel oil and coal.....	44.7	8.5	5.1	-8.8	2.8	17.5	10.6
Services.....	9.6	7.2	6.3	7.1	5.6	6.8	5.8
<b>Consumer price index:</b>							
All items.....	12.1	7.3	5.0	4.6	4.6	6.0	4.7
Food.....	12.0	7.1	.9	-2.4	1.6	3.1	1.3
Directly purchased energy <sup>3</sup> .....	25.5	11.7	6.1	-6.1	2.2	17.0	13.1
All other items.....	10.9	6.9	6.4	8.3	6.1	6.5	4.4
<b>Wholesale price index:</b>							
All commodities.....	22.4	4.3	4.1	-7	4.9	3.9	7.9
Farm products.....	-1	4.3	-3.6	-17.0	13.3	-7.8	-4
Processed foods and feeds.....	21.8	-2.0	-3.9	-15.5	10.6	-7.5	-1.3
Industrial commodities.....	27.1	5.9	6.6	4.9	3.2	7.5	10.5
Energy <sup>4</sup> .....	57.4	12.7	8.6	-8.0	-3.1	19.9	30.0

<sup>1</sup> Changes in GNP deflators are preliminary, changes in consumer price index are preliminary estimates by the Council of Economic Advisers.

<sup>2</sup> Includes some groups not shown separately.

<sup>3</sup> Gas and electricity, fuel oil and coal, and gasoline and motor oil.

<sup>4</sup> Fuels and related products and power.

Sources: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Bureau of Labor Statistics), except as noted.



primarily because of the removal of the tariff on oil and the initial price roll-back features of the Energy Policy and Conservation Act. Despite moderate second-quarter increases and large increases during the summer months, the overall 6.1 percent rate from the fourth quarter of 1975 to the fourth quarter of 1976 was substantially less than the 11.7 percent rate during 1975. The rise in food prices decelerated to 1 percent, the smallest increase occurring within a year since 1967, the principal reason being abundant supplies of meats and cereals.

Wholesale prices for all commodities rose about 4 percent from the last quarter of 1975 to that of 1976 (see Table 10). Following the second quarter, prices rose more rapidly for most of the major industrial categories, although some transaction prices may have gone up less than the reported list prices because of more discounting by sellers. Increases in list prices accompanied by larger discounts may reflect hedging against the possible return of price controls.

## WAGES

The rate of increase in wages, although high by historical standards, was lower in 1976 than in 1975 (Table 11). Real wages, when measured by the adjusted average hourly earnings index deflated by the CPI, increased by 2 percent in 1976 after declines of 2.5 percent and 0.3 percent in 1974 and 1975 respectively. The continued high rate of increase in nominal wages last year was in part due to the lagged adjustment of wages to the very high rate of inflation in 1974 and 1975. It may have also reflected continued expectations of relatively high inflation.

TABLE 11.—*Changes in labor costs and productivity in the private nonfarm business sector, 1974–76*

[Percent change; quarterly changes at seasonally adjusted annual rates]

Period	Adjusted average hourly earnings <sup>1</sup>	Compensation per hour	Output per hour	Unit labor costs
1974 .....	8.2	9.3	-3.5	13.2
1975 .....	8.9	9.7	2.2	7.4
1976 <sup>2</sup> .....	6.9	8.0	4.0	3.8
1975: I .....	9.0	12.1	1.9	10.0
II .....	7.3	7.6	13.1	-4.9
III .....	8.4	6.6	8.4	-1.7
IV .....	8.0	7.2	-7	8.0
1976: I .....	6.9	9.3	4.9	4.2
II .....	6.5	8.4	4.0	4.3
III .....	7.1	6.7	2.5	4.1
IV <sup>2</sup> .....	6.2	9.2	.3	8.9

<sup>1</sup> Adjusted for overtime (in manufacturing only) and interindustry shifts.

<sup>2</sup> Preliminary.

Note.—Data for adjusted hourly earnings relate to production or nonsupervisory workers; all other data relate to all employees.

Source: Department of Labor, Bureau of Labor Statistics.

A broader measure of labor costs, compensation per hour of work in the private nonfarm business economy, covers all employees and includes supplements to wages and salaries. It represents the sum of labor costs to employers. Compensation per hour increased faster than average hourly earnings in the first quarter of 1976, partly because of the January increase in the base earnings subject to social security taxes. The rate of increase in compensation per hour was lower in the following quarters, and it was lower in 1976 than in 1975.

While only 11 percent of the employed are covered by major collective bargaining settlements (those which cover 1,000 or more workers), these settlements may have a disproportionate impact on wage settlements throughout the economy as the result of a demonstration effect. The rate of wage increases negotiated in such contracts declined in 1976 (Table 12). The first-year annual wage increases averaged 10.2 percent for contracts negotiated in 1975, covering 3 million workers, and 8.9 percent during the first 3 quarters of 1976, covering 2.7 million workers. (Approximately 4½ million workers were under major contracts scheduled to expire during the full year). The effective wage rate change under collective bargaining agreements is the actual wage change going into effect in a quarter because of settlements negotiated in that year, deferred increases agreed to in the past, and escalator or cost-of-living adjustments (COLA). The effective

TABLE 12.—*Changes in major collective bargaining settlements, 1974–76*

[Percent]									
Type of change and industry group	1974	1975	1975				1976 <sup>1</sup>		
			I	II	III	IV	I	II	III
Wage settlements:									
First-year wage change (annual rate) -----	9.8	10.2	12.1	9.0	9.7	11.0	8.8	8.2	10.1
Percent of workers covered in current quarter settlements <sup>2</sup> -----	50	29	7	10	9	3	3	13	7
Effective wage rate change: <sup>3</sup>									
Total effective changes -----	9.4	8.7	1.7	2.1	3.3	1.5	1.2	2.6	2.0
Adjustment resulting from:									
Current settlement -----	4.8	2.8	.6	.7	.8	.6	.3	1.2	.6
Prior settlement -----	2.6	3.7	.6	1.1	1.5	.5	.6	1.2	1.0
Escalator provision -----	1.9	2.2	.4	.3	1.0	.4	.4	.2	.3
Manufacturing -----	10.3	8.5	1.8	2.1	2.8	1.6	1.4	2.1	2.2
Nonmanufacturing, excluding contract construction -----	8.3	9.3	1.9	1.2	4.3	1.8	1.3	2.6	1.9
Construction -----	9.1	8.1	.8	4.5	2.2	.6	.7	4.0	1.5
Transportation and public utilities -----	7.6	9.7	1.7	.8	5.3	1.8	.9	2.7	1.9
Wholesale and retail trade -----	10.3	9.2	2.5	2.1	3.0	1.5	1.8	2.8	2.5
Services -----	7.0	6.4	2.0	.8	2.2	1.4	2.2	1.6	.5

<sup>1</sup> Preliminary.

<sup>2</sup> Percent of estimated number of workers under major collective bargaining settlements. Individual quarterly data for 1976 are based on preliminary estimates that do not add to the current total for the year.

<sup>3</sup> Effective wage rate changes are wage rate changes actually going into effect per worker under major contracts in the respective quarters resulting from major collective bargaining settlements made that calendar year, plus deferred increases in accordance with prior-year contracts plus escalator adjustments.

Note.—Data relate to settlements covering 1,000 or more workers in private nonfarm industries. Effective wage rate adjustment for the year is the total of the four quarterly changes, except as noted.

Detail may not add to totals because of rounding.

Source: Department of Labor, Bureau of Labor Statistics.

wage rate change during the first 3 quarters of 1976 was 7.9 percent at an annual rate, and was smaller than the increase in 1975 both because of lower first-year settlements and because the lower rate of inflation resulted in smaller cost-of-living adjustments.

## PRODUCTIVITY AND UNIT LABOR COSTS

Labor productivity, or output per hour of work, increased by 4 percent in 1976 reflecting the cyclical improvement in the economy (See Table 11). Labor productivity rises sharply in the trough quarter of most recessions or in the following quarter and remains substantially above the trend growth rate for the first 2 or 3 quarters of recovery. Perhaps because of the severity of the 1974-75 recession, labor productivity growth was above the trend rate for 1976 as a whole.

Both the slowdown in compensation per hour and the rise in productivity contributed to a sharp deceleration in the rate of increase in unit labor costs last year (see Table 11). The rate of increase in unit labor costs in 1976 is consistent with further declines in the rate of inflation. However, as the economic recovery continues and the rate of growth in productivity settles to its long-run trend, unit labor costs will rise more rapidly unless the growth rate of nominal compensation per hour continues to fall.

## CORPORATE PROFITABILITY

Pretax corporate profits were up 30 percent last year to about \$149 billion. Inflation-based adjustments for inventory appreciation and for depreciation based on replacement cost increased moderately from 1975, and hence the rise in NIPA profits was also 30 percent. Inventory appreciation rose about \$3 billion. The excess of the depreciation based on replacement costs used in the NIPA over the book depreciation that is still based on historical costs grew by \$4 billion, about half of the 1975 increase. The slower rise of the excess of NIPA depreciation over book depreciation was due to the substantial deceleration of the rise in prices of investment goods last year.

Last year's sharp growth in profits was a typical cyclical increase reflecting the marked rise in output and productivity characteristic of the early part of a business cycle recovery. Although productivity in the corporate sector, as in the economy as a whole, rose about 4 percent in 1976, the rate of increase had tapered off to under a 3 percent annual rate in the second half. This moderation, in combination with current rates of increase in compensation per hour of labor of 7½ to 8 percent, means that the normal cyclical increase of the share of profits in gross product has now tapered off.

The share of after-tax operating profits in the net domestic product of nonfinancial corporate business exceeded 5 percent in the second half of 1976 after reaching a cyclical low of 1 percent in the third quarter of 1974 (Table 13). Because of the large increase in debt financing in the past 15 years, it is more revealing to examine the share of corporate income accruing to holders of both equity and liabilities. This share is measured by net interest

TABLE 13.—*Output, profits, net interest, and profit measures of nonfinancial corporate business, 1960–76*

Year	Net domestic product	Corporate profits after tax with IVA and CCA <sup>1</sup>	Net interest	Percent of net domestic product	
				Corporate profits after tax with IVA and CCA <sup>1</sup>	Corporate profits after tax with IVA and CCA <sup>1</sup> plus net interest
Billions of dollars					
1960.....	250.3	18.3	3.5	7.3	8.7
1961.....	256.7	18.0	3.9	7.0	8.5
1962.....	282.3	24.2	4.5	8.6	10.2
1963.....	301.1	27.2	4.8	9.0	10.6
1964.....	326.6	32.8	5.3	10.0	11.7
1965.....	359.3	38.9	6.1	10.8	12.5
1966.....	394.9	41.7	7.4	10.6	12.4
1967.....	413.6	39.6	8.7	9.6	11.7
1968.....	455.4	38.5	10.1	8.5	10.7
1969.....	494.0	33.1	13.1	6.7	9.4
1970.....	507.5	24.3	17.0	4.8	8.1
1971.....	544.2	28.8	17.9	5.3	8.6
1972.....	608.4	38.5	19.1	6.3	9.5
1973.....	683.3	36.3	23.1	5.3	8.7
1974.....	729.3	17.0	29.0	2.3	6.3
1975.....	773.8	32.8	30.8	4.2	8.2
1976 <sup>2</sup> .....	874.8	44.9	35.8	5.1	9.2
Seasonally adjusted annual rates					
1975: I.....	731.5	19.4	30.0	2.7	6.8
II.....	756.1	32.5	30.2	4.3	8.3
III.....	793.3	40.8	30.8	5.1	9.0
IV.....	814.2	38.5	32.0	4.7	8.7
1976: I.....	844.8	42.1	33.9	5.0	9.0
II.....	866.1	42.3	35.2	4.9	8.9
III.....	885.0	46.0	36.5	5.2	9.3

<sup>1</sup> Corporate profits after tax with inventory valuation and capital consumption adjustments.

<sup>2</sup> Preliminary.

Note.—All data relate to nonfinancial corporate business.

Source: Department of Commerce, Bureau of Economic Analysis.

plus after-tax operating profits as a percentage of net domestic product of nonfinancial corporations. It rose to 9 percent in the third quarter of 1976. While this figure is well above the cyclical low of 5 percent reached in the third quarter of 1974, it is well below the peak of 12½ percent in 1965. Low profitability may therefore still be exerting a damping effect on investment expenditures.

## GOVERNMENT BUDGETS AND FISCAL POLICY

The objective of fiscal policy in 1976 was to maintain the degree of stimulus provided during 1975 in order to keep the economy on a course of moderate, sustained expansion. The full-employment surplus, which had declined sharply in 1975, was expected to remain relatively unchanged in 1976. However, fiscal policy unintentionally became less expansionary in

the first half of 1976, when expenditures were lower than anticipated while receipts remained close to target. Had Federal expenditures followed the projected pattern, the level of GNP would have been higher and the economic slowdown following the spring of 1976 would have been less severe.

The overestimate or shortfall in Federal spending in 1976 was small relative to the size of the budget and was typical of recent years (Table 14). These errors in estimating spending suggest that the ability to forecast Government expenditures precisely is limited, and that the textbook notion of a truly deterministic level of Government spending is too simple. To the extent that a regular pattern exists in the difference between actual and predicted levels of Federal spending, appropriate adjustments can be made when predicted expenditures are incorporated into economic forecasts. The shortfall last year is an important reminder of the difficulties in attempting to fine tune the economy with fiscal policy. This experience suggests that it is hard to measure the precise magnitude of the policy instruments as well as to assess their economic effects.

TABLE 14.—*Comparison of projected and actual Federal expenditures, national income and product accounts, fiscal years 1970–76*

[Billions of dollars, except as noted]

Fiscal year	Projection <sup>1</sup>	Actual	Actual less projection	
			Amount	Percent of actual
1970.....	196.0	195.6	—0.4	—0.2
1971.....	212.4	212.7	.3	.1
1972.....	238.2	232.9	—5.3	—2.3
1973.....	259.7	256.2	—3.5	—1.4
1974.....	286.4	278.9	—7.5	—2.7
1975.....	324.4	329.5	5.1	1.5
1976.....	378.7	373.0	—5.7	—1.5

<sup>1</sup> Projections made in the Budget of the United States Government published in January of the current fiscal year and, except for fiscal year 1976, adjusted for revisions by applying projected percent changes to revised data.

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

## FEDERAL EXPENDITURES AND THE SHORTFALL

The 8.7 percent increase in total Federal expenditures in 1976\* was a return to a more typical rate of growth after the exceptionally large increases in 1974 and 1975 caused by the high rates of unemployment and inflation in those years (Table 15). The deceleration in 1976 was due mainly to much smaller increases in transfer payments to individuals and grants-in-aid to State and local governments.

\*Unless otherwise noted, reference is to calendar years and to the Federal sector in the national income and product accounts (NIPA). The Congressional Budget and Impoundment Control Act of 1974 changed the fiscal year from July 1–June 30 to October 1–September 30, beginning with fiscal 1977. The change necessitated a 3-month “transition-quarter” from July 1, 1976 to September 30, 1976.

TABLE 15.—*Federal Government receipts and expenditures, national income and product accounts, calendar years 1975–76*

[Billions of dollars]

Receipt or expenditure category	1975	1976	
		January 1976 budget projection <sup>1</sup>	Actual <sup>2</sup>
Federal Government receipts.....	286.5	330.0	330.6
Personal tax and nontax receipts.....	125.7	143.6	145.3
Corporate tax accruals.....	42.6	55.2	55.9
Indirect business tax and nontax accruals.....	23.9	22.8	23.5
Contributions for social insurance.....	94.3	108.4	105.8
Federal Government expenditures.....	357.8	391.6	388.9
Purchases of goods and services.....	124.4	135.4	133.4
National defense.....	84.3	88.7	88.2
Nondefense.....	40.1	46.7	45.2
Transfer payments.....	148.9	163.0	162.2
To persons.....	145.8	159.2	159.0
To foreigners.....	3.1	3.8	3.2
Grants-in-aid to State and local governments.....	54.4	59.5	60.2
Net interest paid.....	23.5	28.6	27.5
Subsidies less current surplus of government enterprises.....	6.5	5.1	5.6
Surplus or deficit (—).....	—71.2	—61.6	—58.3

<sup>1</sup> January 1976 projected percent changes applied to revised 1975 data.

<sup>2</sup> Preliminary.

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

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

The composition of Federal expenditures in 1976 continued the shift away from defense and toward domestic programs that has been under way since 1967. Defense purchases as a share of total spending were 23 percent in 1976, down from 48 percent in 1960. Conversely, transfer payments—now the largest single component of Federal spending—and grants-in-aid to State and local governments have grown markedly in recent years as a result of wider coverage, higher benefit payments, and new programs. These two categories accounted for 57 percent of Federal expenditures in 1976, compared with 32 percent in 1960.

There was much discussion about the unexpected shortfall in Federal expenditures in 1976, its relation to the slowing of real growth during the year, and its implications for spending in 1977. Actual spending should be compared with the January projections presented in the 1977 Federal Budget because the latter incorporated the Administration's plans and expectations early last year. Moreover a complete translation from the unified budget to NIPA concepts is readily available only for this set of estimates. On an NIPA basis the shortfall from the January projection for fiscal 1976 was 1.5 percent of actual expenditures, a difference within the range of recent experience (see Table 14). Despite the fact that the underspending for the year as a whole was neither exceptionally large nor unprecedented, it was concentrated in a short period and produced a rather sharp rise in the full-employment surplus in the second quarter (see Table 18).

A shortfall in Federal spending of about \$3 billion, distributed over a year as shown in Table 16, could be expected to produce a decline in the annual growth rate of real GNP of roughly 0.2 to 0.3 percentage point. Because the shortfall was not sustained throughout the year and because a major portion was in transfers, which have a low GNP multiplier relative to purchases, the expected impact of such a change would be smaller. But it does help explain the weakness in the economy after the spring of 1976.

The Federal expenditure shortfall was concentrated in the second quarter (Table 16). By the third quarter the underspending was much reduced, and in the fourth quarter total spending was substantially above projected levels.

TABLE 16.—*Federal expenditure shortfall, national income and product accounts, calendar year 1976*

[Billions of dollars; quarterly data at seasonally adjusted annual rates<sup>1</sup>]

Category	1976				
	Year <sup>2</sup>	I	II	III	IV <sup>3</sup>
Total expenditures.....	-2.8	-5.5	-13.8	-1.8	10.0
Purchases of goods and services.....	-2.0	-3.5	-4.6	-.4	.5
National defense.....	-.5	-1.4	-.7	.0	.1
Nondefense.....	-1.5	-2.2	-4.0	-.3	.4
Transfer payments.....	-.9	-2.8	-4.7	.0	3.7
To persons.....	-.2	-2.2	-3.8	.6	4.4
To foreigners.....	-.7	-.6	-1.0	-.5	-.7
Grants-in-aid to State and local governments.....	.7	.4	-3.0	-.9	6.3
Net interest paid.....	-1.1	-.3	-.9	-1.3	-1.6
Subsidies less current surplus of government enterprises.....	.5	.8	-.5	.6	1.1

<sup>1</sup> Actual expenditures less adjusted January 1976 projections. See note below.

<sup>2</sup> Preliminary.

Note.—January 1976 quarterly projections have been adjusted to revised 1976 data by multiplying the adjusted annual projection (see Table 15) by the ratio of the original quarterly projections to the original annual projections. 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.

The shortfall can be attributed to a combination of lower-than-expected rates of inflation, unemployment, and interest, as well as to delays in making new obligations and outlays and to an apparent bias toward overestimation of expenditures in the budget. The obligation and payment lags primarily affected purchases, particularly for defense, where unused obligational authority unexpectedly rose about \$10 to \$12 billion in the 15-month period between July 1, 1975 and September 30, 1976. Obligation delays were also responsible for the slowdown in the Federal highway aid program, which affects the grant component of total expenditures. The spending overrun in the last quarter of 1976 was almost entirely in transfers and grants and was due to legislation which differed from that assumed in January. This increase does not appear to have been the result of spending delayed from earlier in the year.

In the unified budget the total shortfall from the January estimate for fiscal 1976 and the transition quarter was \$11.4 billion. This figure was significantly larger than in the NIPA Federal sector (Table 17) and was the

TABLE 17.—*Reconciliation of estimates of Federal expenditure shortfall, unified budget and national income and product accounts, fiscal year 1976 and transition quarter*

[Billions of dollars]

Category	Expenditure shortfall <sup>1</sup>		
	Total	Fiscal year 1976	Transition quarter <sup>2</sup>
Federal budget outlays <sup>3</sup> .....	-11.4	-7.9	-3.5
Less: Financial transactions and other asset transfers.....	-3.9	-1.5	-2.4
Plus: Defense timing adjustment.....	4.4	2.1	2.3
Foreign military sales.....	3.6	3.0	.6
Other purchases.....	.8	-.9	1.7
Coverage, netting and other timing differences.....	-3.1	-1.4	-1.7
Equals: Federal expenditures in national income and product accounts..	-6.2	-5.7	-.5

<sup>1</sup> Actual expenditures less January 1976 projections.

<sup>2</sup> July-September 1976.

<sup>3</sup> Excludes outlays of the Export-Import Bank.

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

basis for most of the public discussion about the shortfall. Differences between expenditures on the two bases result from financial transactions and other asset transfers included in the unified budget but not in the NIPA, certain differences in coverage and netting, and timing discrepancies between foreign military deliveries and payments, and between cash payments recorded in the unified budget and actual deliveries recorded in the NIPA. Most of the difference between the unified and NIPA spending shortfalls in 1976 represents unforeseen changes in financial transactions and other asset transfers and advance payments for military sales abroad. In addition, the shortfall in defense outlays in the unified budget was not completely reflected in NIPA defense purchases. The slowdown in these outlays was a consequence of delays in making new obligations, largely because of the delay in passage of the 1976 defense appropriations bill and a lag in adjusting to substantial increases in budget authority.

While the unified budget presents a fairly comprehensive record of all receipts and outlays of the Federal Government, the Federal sector of the NIPA is generally considered a better measure of the Government's impact on current economic activity. If unified spending deviates from targeted levels because of unexpected asset transfers or advance payments, the Federal sector in the NIPA is unaffected, since such transactions are likely to have little direct impact on economic activity. On the other hand, because the economic effects resulting from defense spending for major procurement items may occur well before there is a change in NIPA defense purchases,



the latter may not immediately reflect the impact of a significant change in defense activity. Such a phenomenon happened in 1965-66 and may have occurred in 1976. The shortfall in new obligations and defense spending on a unified basis could explain the softness in defense orders in mid-1976.

In 1977 the residual economic impact resulting from the shortfall will stem from a combination of delayed multiplier effects and possible revisions of spending levels where a catchup or continuing shortfall is expected. In the 1978 budget the fiscal 1977 outlay projections have been revised to incorporate the delayed effects of the shortfall. Outlays for some programs are expected to be higher than estimated in last year's budget. In other cases outlays will continue to lag somewhat in 1977. But on balance no significant net increase or decrease in Federal spending is anticipated in 1977 as a result of last year's shortfall.

#### TAX LEGISLATION AND FEDERAL RECEIPTS

The antirecession tax cuts enacted in 1975 were continued throughout 1976. The Revenue Adjustment Act of 1975 extended the personal and corporate tax cuts in the Tax Reduction Act of 1975 for the first 6 months of calendar 1976. For corporations this legislation included a doubling of the surtax exemption from \$25,000 to \$50,000 and a lowering of the regular corporate income tax rate on the first \$25,000 of taxable profits from 22 percent to 20 percent. In addition, the maximum investment tax credit on qualified equipment was increased from 4 to 10 percent for utilities and from 7 to 10 percent for all other businesses. Altogether these provisions yielded a net reduction of about \$2.5 billion in corporate tax accruals in 1976 from what they would have been under 1974 law.

For individuals the Revenue Adjustment Act provided somewhat larger tax reductions than the earlier legislation in order to maintain the lower withholding rates in effect during the last 8 months of 1975. The major provisions were:

1. A \$35 tax credit per dependent, or a credit equal to 2 percent of taxable income up to \$9,000, whichever is larger.
2. An increase in the low-income allowance (minimum standard deduction) from \$1,300 per return to \$2,100 for a joint return and \$1,700 for a single person.
3. An increase in the percentage standard deduction, from 15 percent of adjusted gross income (with a maximum of \$2,000) to 16 percent of adjusted gross income (with a maximum of \$2,800 for a joint return, or \$2,400 for a single return).
4. An extension of the refundable 10 percent earned income credit for families with dependent children and incomes below \$8,000.

The tax credit on purchases of new homes was not extended beyond 1975.

The permanent changes in the Tax Reduction Act together with extension of the temporary provisions in the Revenue Adjustment Act yielded a reduction of about \$13.5 billion in personal taxes in 1976 from what they would have been under 1974 law.

Although the Administration had proposed that the personal and corporate tax reductions due to expire in mid-1976 be enlarged and made permanent, the Tax Reform Act of 1976 merely extended the provisions of the Revenue Adjustment Act. In particular, the higher low-income allowance and percentage standard deductions were made permanent; the personal tax credits, the reduction in the tax rate on the first \$25,000 of corporate income, and the increase in the corporate surtax exemption were extended through calendar 1977; and the 10 percent investment tax credit was extended through 1980. Thus the Tax Reform Act of 1976 did not produce any general tax cuts beyond those enacted at the end of 1975. Nor did it contain any of the special tax incentives proposed by the Administration to encourage specific types of economic activity. The total of the tax reductions was about \$16 billion in 1976, compared with \$18½ billion in 1975.

The Tax Reform Act of 1976 also made the first extensive changes in the tax code since 1969. These changes increased receipts by \$0.6 billion in 1976 and are expected to yield a \$1.6-billion gain in 1977. Among the more important measures enacted in the new law were unification of estate and gift taxes, a narrowing of allowable deductions for tax sheltered losses, tighter rules on personal deductions and exclusions, an increase in the minimum tax, and an expansion of loss-carryover provisions. Numerous other revisions were made in the tax law which modified existing tax preferences and added new ones. Despite these changes the Tax Reform Act of 1976 did not achieve fundamental reform or simplification of the tax code.

The other tax legislation passed in 1976 was a temporary increase in the Federal unemployment insurance tax rate from 0.5 percent to 0.7 percent to become effective January 1, 1977. The amount of wages subject to this tax was also raised permanently from \$4,200 per worker to \$6,000 per worker, effective January 1, 1978. These measures are designed to replenish State unemployment insurance trust funds. The legislation also extended coverage under the regular State unemployment compensation tax and benefit system to about 9 million additional employees in State and local government and farm and domestic workers, effective January 1, 1978. The Congress did not enact the Administration's proposed increase in the social security tax rate to 12.3 percent. Under current law, however, the rate will rise from 11.7 percent to 12.1 percent on January 1, 1978, and the taxable wage base will rise \$1,200 in both 1977 and 1978.

Federal receipts increased by \$44 billion to \$331 billion in 1976, yielding a Federal tax share of nominal GNP of 19.5 percent. The strong economy, continued inflation, and the absence of the 1975 tax rebate were responsible for the large growth in receipts.

## THE FISCAL BALANCES

The Federal deficit fell to \$58.3 billion in 1976, \$3.3 billion less than the deficit projected in January. The full-employment surplus rose by \$2.2 billion for the year (Table 18). The full-employment surplus measures the difference between total receipts and expenditures under the assumption that the economy is operating along its potential GNP path. Because the full-employment surplus is calculated at a constant operating rate for the economy, changes in receipts and expenditures that occur automatically in response to the cyclical behavior of output and employment are eliminated. Since full-employment expenditures are intended to measure discretionary shifts in fiscal policy, they include temporary expansions of unemployment compensation programs designed to counteract cyclical variations in the economy. For example, full-employment expenditures for 1975 and 1976 include benefits under the Federal supplemental benefits (FSB) program and the supplemental unemployment assistance (SUA) program created in December 1974. The full-employment budget numbers presented in Table 18 are based on the Council of Economic Advisers' new estimates of poten-

TABLE 18.—*Actual and full-employment Federal and State and local government receipts and expenditures, national income and product accounts basis, calendar years 1970–76*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Calendar year	Federal Government				State and local government			
	Receipts	Expenditures	Surplus or deficit (—)		Receipts	Expenditures	Surplus or deficit (—)	Operating surplus or deficit (—) <sup>1</sup>
			Amount	Change				
<b>Actual:</b>								
1970.....	192.1	204.2	—12.1	—20.6	134.9	132.2	2.8	—4.0
1971.....	198.6	220.6	—22.0	—9.9	152.6	148.9	3.7	—3.8
1972.....	227.5	244.7	—17.3	4.7	177.4	163.7	13.7	5.6
1973.....	258.3	285.0	—6.7	10.6	193.5	180.5	13.0	4.1
1974.....	288.2	299.7	—11.5	—4.8	210.2	203.0	7.3	—2.8
1975.....	286.5	357.8	—71.2	—59.7	234.3	227.5	6.9	—5.1
1976 <sup>2</sup> .....	330.6	388.9	—58.3	12.9	260.5	246.6	13.9	.8
1976: I.....	316.5	380.3	—63.8	5.6	251.6	239.5	12.2	—6
II.....	324.6	378.7	—54.1	9.7	254.3	245.0	9.2	—3.8
III.....	333.8	391.1	—57.4	—3.3	262.0	249.3	12.7	—6
<b>Full-employment:</b>								
1970.....	201.0	203.6	—2.6	—6.3	138.1	132.2	6.0	-----
1971.....	210.0	219.1	—9.2	—6.6	157.3	148.9	8.3	-----
1972.....	222.1	243.6	—21.5	—12.3	179.4	163.7	15.7	-----
1973.....	257.5	265.4	—7.9	13.6	192.9	180.5	12.4	-----
1974.....	311.8	297.7	14.1	22.0	219.3	203.0	16.4	-----
1975.....	337.6	350.1	—12.5	—26.5	255.6	227.5	28.1	-----
1976 <sup>2</sup> .....	371.6	381.9	—10.3	2.2	277.7	246.6	31.2	-----
1976: I.....	358.5	372.6	—14.1	6	269.2	239.5	29.7	-----
II.....	365.3	371.9	—6.7	7.4	271.7	245.0	26.7	-----
III.....	376.1	384.3	—8.2	—1.5	279.7	249.3	30.4	-----

<sup>1</sup> Surplus or deficit excluding social insurance funds.

<sup>2</sup> 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.

tial output and the full-employment unemployment rate, which are discussed in Chapter 1. Thus the levels of the surplus are different from those reported in previous years. The new benchmarks, however, have little effect on the period-to-period change in the full-employment surplus, which is the appropriate measure of the thrust of fiscal policy.

The difference between movements in the actual deficit and full-employment surplus is an indicator of the normal cyclical changes in receipts and expenditures. Over four-fifths of the drop in the actual Federal deficit in 1976 was due to an improving economy which automatically raised tax collections and reduced unemployment insurance payments. The remainder was largely the result of the unintended shortfall in spending.

The State and local surplus rose to \$13.9 billion in 1976. Of the total increase, slightly more than one-half was the result of higher tax receipts produced by the cyclical economic upturn and a significant increase in Federal grants. The rest—as shown by the \$3.1-billion increase in the State and local full-employment surplus—was due to trend economic growth and discretionary reductions in the growth of expenditures relative to receipts. The most significant aspect of State and local finances in 1976 was the restoration of a surplus in their operating accounts (exclusive of social insurance trust funds) in the last quarter of the year. This was made possible by the unusually small increase in State and local expenditures in 1976, together with the rapid growth in revenues. This fiscal conservatism at the State and local level reinforced the unexpected restraint coming from the Federal sector.

## THE NEW CONGRESSIONAL BUDGET PROCESS

In 1976 Congress fully implemented its new budget procedures for the first time. The Congressional Budget and Impoundment Control Act of 1974 established a process whereby the Congress is forced to consider overall receipts and outlays and commit itself under a binding resolution to these totals. The First Concurrent Resolution on the budget, which must be passed before May 15 of each year, sets targets for total receipts and outlays and for the division of outlays among the major functional categories to guide congressional committees in considering new legislation. These targets are revised in the light of the normal authorization and appropriations process, and the changes are incorporated in the Second Concurrent Resolution, which sets a binding floor on receipts and a ceiling on outlays for the coming fiscal year. The second resolution must be passed before the new fiscal year begins on October 1. After the Second Concurrent Resolution has been approved, legislation that raises outlays above the ceiling or reduces receipts below the established floor cannot be considered unless both Houses of Congress first pass a revised concurrent resolution.

The most obvious benefit of the new procedures is that Congress now considers the budget as a whole and its impact on the desired course of fiscal policy and resource allocation. In earlier years, legislation was enacted in a piecemeal fashion, with little attention to the overall macroeconomic and al-

locative implications of the resulting tax and spending totals. By setting an overall ceiling on outlays and a floor on receipts, the Congress is now forced to consider the tradeoffs among alternative programs. It must also weigh higher spending against lower taxes for stabilization purposes in making the long-term choice between a larger or smaller Federal sector. The new budget process also requires current and future cost estimates for all new programs, thereby making more explicit the effects of current legislation on future budgets. The new budget process has thus institutionalized a more rational procedure for legislative deliberations on the budget and should make the Congress more aware of the costs and consequences of the programs it enacts.

## MONETARY POLICY AND FINANCIAL MARKETS

Monetary policy in 1976 must be interpreted in the light of financial and economic developments affecting monetary growth and interest rates during the year. Less extensive use of demand deposits for transactions purposes has apparently continued to shift the demand for money downward, reducing the growth of  $M_1$  which would otherwise be needed to sustain the economic expansion. An unusually low rate of growth of  $M_1$  relative to GNP growth is hence not necessarily evidence of a restrictive monetary policy. But neither is the decline in interest rates during 1976 evidence of an expansive monetary policy. Both a slowing of economic growth in mid-1976 and falling inflationary expectations as inflation rates declined during the year have contributed to lower interest rates than had been expected. Appraisal of monetary developments in 1976 therefore requires a careful examination of monetary growth and the behavior of interest rates during the year.

### GROWTH OF THE MONETARY AGGREGATES

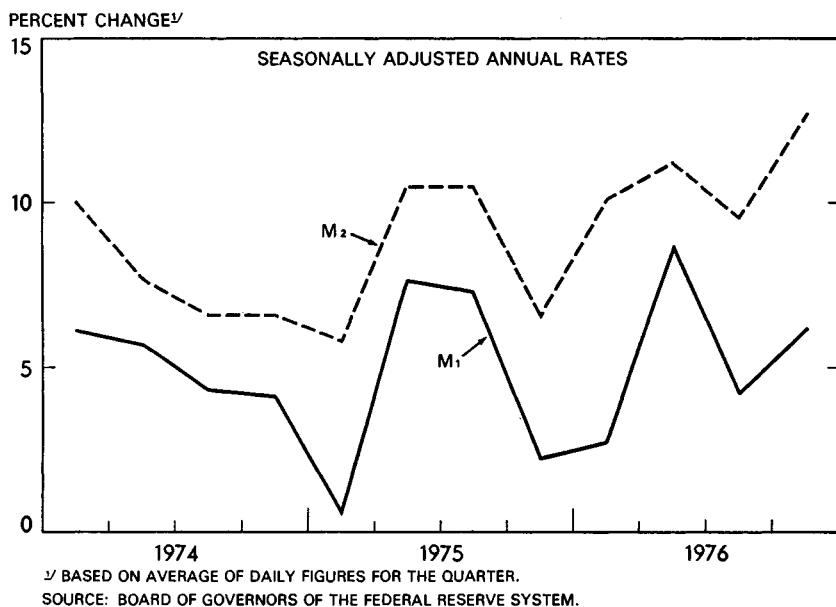
Over the 4 quarters of 1976 the monetary aggregates  $M_1$  and  $M_2$  grew by 5.0 and 9.8 percent respectively. The very slow growth in  $M_1$  which began in the latter half of 1975 continued in the first quarter of 1976, when  $M_1$  increased by only 2.7 percent at an annual rate. In the second quarter  $M_1$  expanded rapidly, spurred on by a significant drawdown of U.S. Treasury deposits, which transferred funds to private demand deposit accounts in April. After another slowdown in the third quarter, the growth rate of  $M_1$  reaccelerated in the fourth quarter (Chart 5).

The growth of  $M_2$  did not vary as much as the growth of  $M_1$  during 1976. In the first quarter the growth rate of time and savings deposits at commercial banks increased sharply because some market interest rates fell below the rates paid at banks. Thus  $M_2$  increased at a 10.1 percent rate in the first quarter while  $M_1$  increased at only a 2.7 percent rate. By the last 2 months of the second quarter, however, the increase in market interest rates had caused some slowdown in the inflow to time and savings deposits.

For this reason, although the rate of growth of  $M_1$  increased by 5.9 percentage points in the second quarter, the rate of growth of  $M_2$  increased by only 1.1 percentage points. As interest rates on marketable securities began to decline in the second half of the year, the growth of time and savings deposits picked up again and resulted in a substantial increase in  $M_2$ .

Chart 5

## Growth in Money Stock



The velocity of  $M_1$ —the ratio of nominal GNP to  $M_1$ —grew by about a 3 percent annual rate during the last 3 quarters of 1976, much more slowly than in the previous 3 quarters. Both a faster rate of  $M_1$  growth and a slower rate of nominal GNP growth contributed to this slowdown. The important question thus raised is whether velocity will again accelerate in 1977 when nominal GNP growth is expected to increase. Some of the slower velocity growth in the last 3 quarters can be explained by the usual lag in the adjustment of money balances to changes in nominal GNP growth. This same lag could provide some stimulus to velocity growth in 1977 if GNP growth accelerates.

Over the recovery as a whole  $M_1$  velocity growth has been somewhat higher than in previous recovery periods—averaging more than 6 percent at an annual rate over the last 6 quarters—despite the moderate decline in interest rates. Regulatory changes and financial innovations, partly induced by the high interest rates which peaked in 1974, have apparently been a factor in this higher velocity growth, as was noted in Chapter 1. Estimates of how these changes affect  $M_1$  demand are necessarily imprecise, however,

and should be used with caution in interpreting monetary developments and projecting actual monetary growth rates.

Another possible reason for the slow growth in demand for  $M_1$  is the unusually weak behavior of business loans at commercial banks during this recovery. Many banks require compensating balances for their loans in the form of demand deposits, and businesses sometimes build up deposits at commercial banks to establish lines of credit in anticipation of loan needs. If loan demand is unusually weak, as has been the case in this recovery,  $M_1$  growth thus tends to be unusually small. It is therefore possible that a recovery of loan demand in 1977 could cause an acceleration of the growth in the demand for  $M_1$ .

Econometric estimates of the demand for  $M_1$  as a function of GNP, a money market interest rate, and the average rate on savings deposits provide evidence that some factors, perhaps the ones mentioned above, have shifted the demand for money downward. Such an estimated money demand function incorporating lagged adjustments, which has explained the data well during most of the postwar period, began to shift in early 1974. This shift has continued during 1976, though at a moderately diminished rate.

#### FEDERAL RESERVE TOLERANCE RANGES FOR MONETARY GROWTH

In May 1975 the Federal Reserve began to report prospective ranges for annual growth rates in the monetary aggregates. This practice has continued with quarterly reports of projected growth rate ranges for the three main aggregates  $M_1$ ,  $M_2$ , and  $M_3$ . These ranges represent Federal Reserve projections of monetary growth rates using the available information about economic conditions and policy intentions at the time projections are made. The ranges have been at least 2 percentage points wide in each case, the width of the ranges giving some flexibility to the projection procedure while preserving the information about the longer-run intentions of the Federal Reserve. The quarterly updating of the base period adds flexibility, but when actual growth deviates significantly from the projected range some adjustment in the range may be necessary to prevent further deviations. Moreover the ranges themselves are not inflexible and are modified when emerging economic developments require a change.

Experience with this practice of announcing monetary growth rates indicates that it can become a constructive addition to the economic policy-making process, helping to stabilize inflationary expectations. The ranges have also provided information which permits a more enlightened discussion of monetary policy. Their forward-looking perspective has helped to promote general understanding of the tradeoffs between short-run and long-run economic goals and to clarify policy makers' intentions.

With the exception of the first projection for the period from March 1975 to March 1976, each range has referred to growth from an average taken for the most recently completed quarter to an average for the same

quarter a year later. The actual growth rates for the 1-year intervals ending in 1976 have not significantly deviated from the projected ranges (Table 19), though this alone is not an indication that monetary policy has been successful in achieving ultimate stabilization goals. The growth rate of  $M_2$  has been inside the projected range for all but one of the four periods, with more frequent deviations of  $M_3$  above the upper boundary and of  $M_1$  below the lower. The largest deviation for  $M_1$  was from the third quarter of 1975 to the third quarter of 1976, when  $M_1$  grew by only 4.4 percent. Some of this shortfall, however, may have been due to the unusually high base for this period, a result of the 1975 tax rebates' effect on the money stock. Thus a moderate smoothing of the path of  $M_1$  from May through September 1975, to adjust for the impact of these special payments, would bring the growth of  $M_1$  above the lower boundary of 5 percent.

TABLE 19.—*Projected and actual growth rates of monetary aggregates, 1975–76*

Period	$M_1$	$M_2$	$M_3$
Percent change from a year earlier:			
March 1976:			
Projected range <sup>1</sup> .....	5–7½	8½–10½	10–12
Actual.....	4.9	9.6	12.2
1976 II:			
Projected range <sup>1</sup> .....	5–7½	8½–10½	10–12
Actual.....	5.2	9.6	12.0
1976 III:			
Projected range <sup>1</sup> .....	5–7½	7½–10½	9–12
Actual.....	4.4	9.3	11.5
1976 IV:			
Projected range <sup>1</sup> .....	4½–7½	7½–10½	9–12
Actual.....	5.4	10.9	12.8

<sup>1</sup> Range of percent changes in  $M_1$ ,  $M_2$ , and  $M_3$  forecast by Federal Reserve for the period and actual percent changes between periods indicated. Actual quarterly changes are based on quarterly averages.

Source: Board of Governors of the Federal Reserve System.

## INTEREST RATES

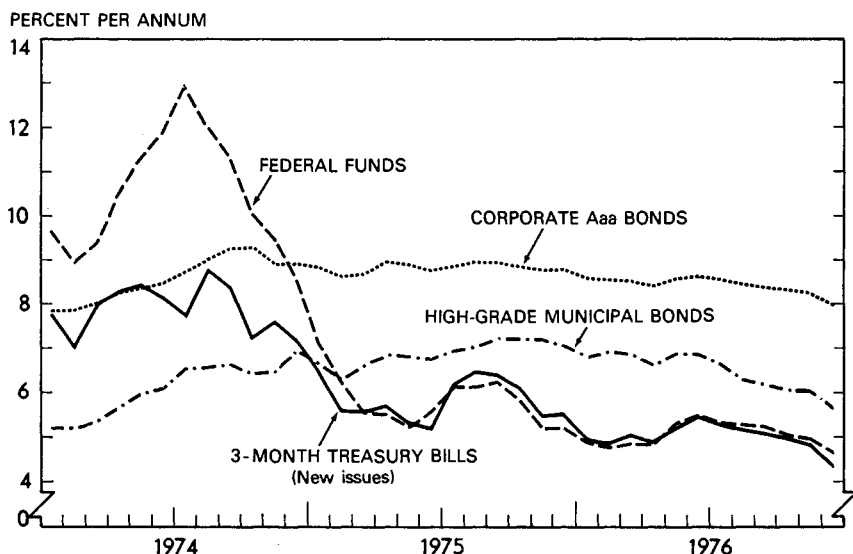
Short-term interest rates generally fell during 1976 and by December were at their lowest levels since 1972 (Chart 6). Only one marked fluctuation occurred during the year. In the last 2 weeks of April the Federal Reserve took actions to slow the accelerating growth in the aggregates; and the Federal funds rate began to rise, reaching 5½ percent in late May. Accompanying the rise in the key money market interest rate, the Treasury bill rate and the commercial paper rate also increased; but by June the short-term interest rates again began to decline.

Long-term interest rates also fell during 1976. Moody's Aaa corporate bond yield fell to 8.0 percent by early December from an average of 8.8 percent in December 1975. Interest rates on less highly rated corporate bonds fell more sharply, as indicated by the 144 basis point decline in Moody's Baa corporate bond yield. Mortgage interest rates in the secondary market also fell during 1976 but by the end of the year had only a negligible impact on home mortgage rates in the primary market.



Chart 6

## Interest Rates



SOURCES: DEPARTMENT OF THE TREASURY, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM, MOODY'S INVESTORS SERVICE, AND STANDARD & POOR'S CORPORATION.

At the end of 1976 both short-term and long-term interest rates were well below the levels reached at the start of the recovery in early 1975. Declines in interest rates are not typical of an economic expansion. The 1976 experience results in part from a decline in the expected rate of inflation, which has apparently accompanied the decline in actual inflation rates. The decline in longer-term interest rates, however, may have been smaller than the decline in the expected long-term rate of inflation. If so, the real rate of interest—one measure of the impact of monetary policy on the economy—has not decreased.

### OTHER FINANCIAL DEVELOPMENTS

Nonfinancial corporations have lengthened the average maturity of their debt during the recovery. With severe liquidity problems at the start of 1975, brought on by unusually large short-term borrowing in previous years, most businesses aimed at restructuring their balance sheets by increasing their long-term borrowing relative to short-term borrowing and by holding more liquid assets such as Treasury bills. The U.S. Treasury's borrowing strategy has shifted in a similar direction in 1976, with 89 percent of the increase in marketable interest-bearing public debt in the form of longer-maturity coupon issues, compared to 53 percent in 1975.

Partly as a result of the desire of business firms for increased liquidity, commercial and industrial loans at commercial banks declined throughout the first half of the year, as they have generally done during the recovery, but a marked upturn in business loans began in October 1976. As was true of the temporary turnaround in late 1975, a large proportion of this increase was in the form of bankers' acceptances—short-term money market instruments counted as bank loans—an indication that the turnaround again might be temporary.

In 1976 internal financing covered about 90 percent of total capital outlays for nonfinancial corporate business compared with more than 100 percent in 1975 when inventories were being liquidated. The fraction, however, remains well above any seen since the mid-1960s, and business use of external funds remains relatively weak. As the growth of investment continues in 1977, the internal financing fraction should continue to decline and the dependence on external finance should increase.

Proportionately more of the increase in long-term funds raised from external sources by business corporations in early 1976 was in the form of equities (Table 20), but this trend was interrupted in the third quarter. Stock market prices were higher in 1976 than in 1975, although they remained relatively steady during the year.

Increased borrowing in the household sector absorbed most of the declining share of U.S. Government borrowing in 1976. Home mortgage borrowing increased sharply in the third quarter and accounted for most of the net change in total mortgages during this period. Flows into thrift institutions, especially into savings and loan associations, were stimulated by declining market interest rates relative to deposit rates, and they provided the major share of funds to support this demand for mortgages.

TABLE 20.—*Funds raised in credit markets by nonfinancial sectors, 1971–76*

[Billions of dollars; quarterly data at seasonally adjusted annual rates]

Sector and credit market instrument	1971–74 average	1975				1976		
		I	II	III	IV	I	II	III
Total funds raised.....	178.6	156.9	211.6	222.0	250.9	233.6	250.3	258.8
U.S. Government.....	15.1	59.6	102.0	94.0	85.2	73.4	74.2	78.9
State and local government.....	16.6	11.7	16.0	16.3	15.4	12.0	21.4	18.9
Nonfinancial business <sup>1</sup> .....	82.9	43.3	40.9	43.8	62.6	60.5	65.5	56.0
Corporate debt instruments.....	56.7	27.3	19.2	24.3	37.9	32.8	34.1	31.9
Corporate equities.....	8.6	7.7	12.9	6.9	12.2	12.6	14.0	6.1
Households <sup>2</sup> .....	56.4	33.9	44.0	54.2	66.6	71.1	74.6	87.0
Home mortgages.....	37.7	28.5	38.5	42.2	48.2	51.5	53.2	60.6
Consumer credit.....	15.4	.9	1.3	14.3	17.7	18.1	20.6	19.2
Foreign.....	7.7	8.3	8.8	13.8	21.1	16.6	14.7	18.0

<sup>1</sup> Also includes farm and nonfarm noncorporate not shown separately.

<sup>2</sup> Also includes mortgages other than home, bank loans n.e.c., and other loans.

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

Source: Board of Governors of the Federal Reserve System.

# EMPLOYMENT, UNEMPLOYMENT, AND INCOME TRANSFER PROGRAMS

The improvement in the economy last year was reflected in the labor market: employment increased, unemployment declined, and benefits from income transfer programs were lower in comparison with 1975. The improvement in employment was stronger in the first half of 1976. While the unemployment rate fell during the first half, it increased during the second half.

## EMPLOYMENT

Total civilian employment estimated from household survey data increased 3.2 percent last year over the 1975 average (Table 21). The increase was

TABLE 21.—Labor market indicators, 1974-76

[Quarterly data seasonally adjusted]

Indicator	1974	1975	1976	1975 IV	1976			
					I	II	III	IV
EMPLOYMENT STATUS	Millions of persons							
Civilian labor force.....	91.0	92.6	94.8	93.1	93.6	94.5	95.3	95.7
Employment.....	85.9	84.8	87.5	85.2	86.5	87.5	87.8	88.1
Unemployment.....	5.1	7.8	7.3	7.9	7.1	7.0	7.5	7.6
	Percent <sup>1</sup>							
Civilian labor force participation rate <sup>2</sup> ...	61.2	61.2	61.6	61.1	61.2	61.6	61.8	61.8
UNEMPLOYMENT RATES								
All civilian workers.....	5.6	8.5	7.7	8.4	7.6	7.4	7.8	7.9
Unemployed 15 weeks or longer <sup>3</sup> .....	1.0	2.7	2.5	3.1	2.7	2.2	2.4	2.6
Demographic groups								
Men 20 years and over.....	3.8	6.7	5.9	6.9	5.8	5.7	6.0	6.2
Women 20 years and over.....	5.5	8.0	7.4	7.9	7.4	7.1	7.7	7.6
Both sexes 16-19 years.....	16.0	19.9	19.0	19.6	19.2	18.8	18.8	19.1
Married men, spouse present.....	2.7	5.1	4.2	5.1	4.1	4.1	4.4	4.4
Occupation								
White-collar workers.....	3.3	4.7	4.6	4.8	4.6	4.6	4.7	4.6
Blue-collar workers.....	6.7	11.7	9.4	11.2	9.3	9.0	9.8	9.7
Industry								
Nonagricultural private wage and salary workers <sup>4</sup> .....	5.7	9.2	7.9	9.0	7.9	7.6	8.1	8.1
Construction.....	10.6	18.1	15.6	17.5	15.8	15.3	16.4	14.9
Manufacturing.....	5.7	10.9	7.9	10.1	7.8	7.5	8.0	8.2
Durable goods.....	5.4	11.3	7.7	10.5	7.9	7.4	7.6	7.9
Nondurable goods.....	6.2	10.4	8.1	9.6	7.7	7.7	8.7	8.7
Transportation and public utilities.....	3.2	5.6	5.0	5.2	4.7	4.7	5.1	5.5
Wholesale and retail trade.....	6.4	8.7	8.6	9.1	8.6	8.3	8.8	8.7
Finance and service industries.....	4.6	6.6	6.5	6.9	6.5	6.3	6.5	6.8
Government workers.....	3.0	4.0	4.4	4.2	4.4	4.5	4.3	4.4
Agricultural wage and salary workers.....	7.3	10.3	11.7	11.0	11.0	11.6	11.1	12.9

<sup>1</sup> Unemployment as percent of civilian labor force in group specified, except as noted.

<sup>2</sup> Civilian labor force as percent of civilian noninstitutional population.

<sup>3</sup> Unemployment as percent of total civilian labor force.

<sup>4</sup> Includes mining, not shown separately.

Source: Department of Labor, Bureau of Labor Statistics.

widespread among demographic groups. Since the first quarter of 1975, when the trough in employment was reached, civilian employment has increased by 4.4 percent, compared to 3.9 percent in the 7 quarters following the trough of the 1957–58 recession.

Payroll employment increased 2.8 percent in 1976 over the 1975 level and 2.7 percent from the fourth quarter of 1975 to the fourth quarter of 1976. The rate of increase in jobs from the last quarter of 1975 to the last quarter of 1976 varied substantially among the sectors of the economy. Employment rose by 4.2 percent in durable goods manufacturing and in the private service-producing sectors by 2.8 percent. In other sectors, however, there was little or no change. Perhaps most notable is that State and local government payroll employment, after growing by 4.8 percent from the fourth quarter of 1974 to the fourth quarter of 1975, increased by only 1.8 percent from the fourth quarter of 1975 to the fourth quarter of 1976. The 3.7 percent increase in payroll employment since the first quarter of 1975 was little more than half the increase recorded during the 7 quarters following the 1957–58 recession trough.

## UNEMPLOYMENT

Although the unemployment rate declined in 1976 it remained substantially above the 1974 level (Table 21). The official seasonally adjusted unemployment rate decreased from the fourth quarter of 1975 to the second quarter of 1976 and increased in the last 2 quarters. The unemployment rate in the last quarter exceeded that of the first quarter.

The quarterly movements in the seasonally adjusted unemployment rate are sensitive to the seasonal adjustment procedure that is adopted, particularly when there are large swings in unemployment because of a severe recession or sudden changes in seasonality. The Bureau of Labor Statistics (BLS) recognizes that analytically there is no unique or unambiguously superior seasonal adjustment procedure and provides data adjusted under several alternative procedures. The procedure used to compute the official unemployment rate gives a heavier weight to the more recent experience than the procedure applied to other statistics. Because large changes in unemployment occurred during the course of 1974 and 1975, the official seasonal adjustment procedure may have exaggerated the movements in the unemployment rate last year.

One of the alternative seasonal adjustment procedures used by BLS is to assume that there has been no change over time in the seasonality in employment and in unemployment within age-sex groups for the years 1967 to 1973 and to exclude the experience of the recent recession. Unemployment rates adjusted according to the stable seasonality procedure suggest more gradual changes throughout the year than the official statistics and about the same unemployment rate during the last quarter as during the first quarter of 1976. Under this procedure the unemployment rate was 8.3 percent in the fourth quarter of 1975, 7.8 percent in the first quarter of 1976, 7.5 percent in

the second quarter, 7.7 percent in the third quarter, and 7.8 percent in the fourth quarter. This approach, however, does not allow for possible changes over time in the seasonality of age-sex specific unemployment rates that may have accompanied the dramatic changes in the composition of the labor force. Of course differences in seasonal adjustment procedures have no effect on the unemployment rate for the year as a whole.

Last year's decline in unemployment rates was widespread among demographic groups, though the rate fell more sharply for men than for women. One reason is the greater concentration of male workers in cyclically sensitive blue-collar jobs. Another was the rapid increase in the participation of females in the labor force, an increase which retarded the decline in their unemployment rate in spite of the rise in female employment.

The decrease in unemployment rates by occupation and industry in 1976 mirrored the cyclical increase in 1974-75. By occupation, the unemployment rate of white-collar workers was essentially the same in 1975 and 1976, but blue-collar workers' unemployment rate fell by over 2 percentage points. In 1976 the unemployment rates in construction, manufacturing, and transportation and public utilities were lower than in 1975, but in the other private service-producing industries the unemployment rates in 1976 about equaled the 1975 levels. Unemployment rates in 1976 were substantially higher than in 1975 and 1974 for government workers and agricultural wage and salary workers.

The persistence of relatively high unemployment rates in 1976 for government and agricultural wage and salary workers may in part reflect the slow growth in government employment and a continued adjustment to SUA, which came into effect in the first quarter of 1975. SUA provided unemployment compensation coverage for the first time for the 12 million wage and salary workers not covered by a regular Federal or State program, most of these being State and local government or agricultural wage and salary workers. The availability of these benefits may have encouraged some persons who became unemployed for seasonal or other reasons to extend their period of unemployment and job search rather than take a less desirable job or drop out of the labor force. (The effects of the unemployment compensation system on the unemployment rate are discussed in greater detail in Chapter 4.)

## LABOR FORCE PARTICIPATION

The civilian labor force participation rate increased sharply last year compared to 1974 and 1975 (Table 21). The increase was largely concentrated among women. For women aged 20 and over the participation rate rose from 46.0 percent in 1975 to 47.0 in 1976, more than offsetting a 0.4 percentage point decline in the participation rate among adult men which continued a long-term trend. The teenage labor force participation rate increased somewhat, by 0.5 percentage point to 54.6 percent in 1976.

The increase in female labor force participation is in part a continuation

of longer-term trends. Over the past 2 decades, for example, the labor force participation rate of women aged 20 and over has risen 11 percentage points from 36 percent in 1956. This change reflects a combination of related factors: increased potential earnings in the labor market; later marriages; a decline in birth rates; more efficient production in the home because of such time-saving consumer durables as freezers and dishwashers, and such non-durables as frozen foods and wash-and-wear clothing; and a change in attitudes concerning the roles of men and women. The expanded employment opportunities in 1976 compared to the previous year may also have encouraged greater labor force participation by women.

The increase in labor force participation by adult females last summer appears to be larger than one would have predicted on the basis of the secular and cyclical factors. The rise in the participation rate from 46.6 percent in the first 5 months to 47.3 percent in July and August, and the decline to 47.2 percent in the following 3 months may be traceable in part to the effect of SUA, which provided a new incentive for women in the educational services industry, and perhaps in other sectors, to remain in the labor force rather than withdrawing during the summer.

In summary, the substantial increase in employment (2.7 million persons) last year was accompanied by a very strong growth in the civilian labor force (2.2 million persons). The labor force growth resulted mainly from the increase in the population aged 16 and over, the secular increase in overall labor force participation rates, and the economic recovery to the extent that it encouraged persons to enter or remain in the labor force. The result of these factors was that only a moderate decline occurred in the number of unemployed persons (0.5 million).

## INCOME TRANSFER PROGRAMS

A major concern of public policy in a recession is to mitigate the loss of family income among those who become unemployed. Cushioning this loss helps to maintain consumer purchases and thereby facilitates economic recovery. It also provides for a broader sharing of the economic burden created by a recession. With the improvement in the economy in 1976, benefits under income transfer programs declined (Table 22).

Unemployment compensation is the most important countercyclical income transfer program. As unemployment increases because of layoffs, the number of recipients increases; with the recall of workers the number of recipients declines. This pattern appeared in the last 2 years during the decline in economic activity and in the subsequent recovery (Table 22).

The ability of the unemployment compensation system to respond to the economic downturn was strengthened by two temporary programs. Under FSB the duration of entitlement for persons covered by a regular program was extended in two 13-week installments to a maximum of 65 weeks. Benefit durations under FSB were reduced in 1976 in States with lower insured unemployment rates, and FSB is scheduled to terminate this March.

TABLE 22.—Income transfer programs, 1974–76

Program	Unit	1974 IV	1975				1976			
			I	II	III	IV	I	II	III	IV
<b>Unemployment:</b>										
Total number of persons.....	Millions.....	5.6	8.3	8.0	7.8	7.2	7.9	7.0	7.3	7.0
<b>Unemployment Compensation:</b>										
Beneficiaries: Total.....	Millions <sup>1</sup> .....	2.3	5.1	5.5	5.3	4.8	5.2	4.3	4.2	-----
Permanent programs.....	do.....	2.3	4.7	4.8	4.0	3.5	4.1	3.2	3.1	-----
FSB and SUA <sup>2</sup> .....	do.....	-----	.4	.7	1.3	1.3	1.1	1.1	1.1	-----
Benefit payments: Total <sup>3</sup> .....	Billions of dollars <sup>4</sup> .....	7.8	17.3	19.0	18.6	17.6	20.5	16.0	13.1	-----
Permanent programs.....	do.....	7.8	16.2	16.7	14.7	13.2	15.5	12.2	10.9	-----
FSB and SUA.....	do.....	-----	1.1	2.3	3.9	4.4	5.0	3.8	2.2	-----
<b>Food Stamp Program:</b>										
Beneficiaries.....	Millions <sup>5</sup> .....	15.9	18.6	19.2	18.6	18.5	18.8	18.2	17.3	-----
Benefit payments.....	Billions of dollars <sup>4</sup> .....	4.0	4.9	5.0	5.2	5.1	5.6	5.4	5.1	-----
<b>Aid to Families with Depend-</b>										
<b>ent Children:</b>										
Beneficiaries: Total.....	Millions <sup>5</sup> .....	10.9	11.3	11.3	11.3	11.4	11.5	11.3	11.2	-----
Unemployed fathers.....	do.....	.4	.5	.5	.5	.6	.7	.7	.6	-----
Benefit payments <sup>3</sup> .....	Billions of dollars <sup>4</sup> .....	8.4	8.9	8.9	9.3	9.8	10.1	9.9	10.0	-----
<b>Old-age, Survivors, and Disa-</b>										
<b>bility Insurance:</b>										
Beneficiaries: Total <sup>6</sup> .....	Millions <sup>5</sup> .....	30.7	31.1	31.1	31.5	31.9	32.3	32.4	32.6	32.9
Retired workers and de-	do.....	19.6	19.8	19.9	20.1	20.3	20.5	20.5	20.6	20.9
pendents.....	do.....	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.5	4.6
Disabled persons and de-	do.....	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.5	4.6
pendents.....	do.....	3.9	4.0	4.1	4.2	4.3	4.4	4.5	4.5	4.6
Benefit payments <sup>7</sup> .....	Billions of dollars <sup>4</sup> .....	56.8	60.6	63.0	67.1	68.3	69.4	71.4	75.3	76.8
<b>Medicaid:</b>										
Beneficiaries.....	Millions <sup>5</sup> .....	8.2	8.8	9.0	8.7	9.0	9.4	9.3	9.1	-----
Benefit payments.....	Billions of dollars <sup>4</sup> .....	11.9	13.4	14.3	13.7	14.6	15.3	15.3	15.8	-----
<b>Medicare:</b>										
Benefit payments.....	Billions of dollars <sup>4</sup> .....	13.7	14.9	15.4	15.5	16.5	17.3	18.3	18.6	-----
<b>Supplemental Security In-</b>										
<b>come:</b>										
Beneficiaries.....	Millions <sup>5</sup> .....	4.0	4.1	4.2	4.3	4.3	4.3	4.3	4.3	4.3
Benefit payments <sup>3</sup> .....	Billions of dollars <sup>4</sup> .....	5.5	5.6	5.6	5.9	6.0	6.0	6.0	6.2	6.2

<sup>1</sup> Weekly average.<sup>2</sup> Federal supplemental benefits (FSB) and special unemployment assistance (SUA).<sup>3</sup> Includes State as well as Federal payments.<sup>4</sup> Annual rate.<sup>5</sup> Monthly average.<sup>6</sup> Total also includes survivors.<sup>7</sup> In current payment status.

Sources: Department of Agriculture, Department of Labor, and Department of Health, Education, and Welfare.

SUA provided temporary coverage and a maximum duration of benefits of 39 weeks for the 12 million wage and salary workers not previously covered by a regular Federal or State program. Under the Unemployment Compensation Amendments Act of 1976 about 9 million of the 12 million persons covered by SUA are to be brought under the regular State programs by January 1978, and SUA will not take any new claims from that date.

The other cash transfer programs are less cyclically sensitive. Aid to Families with Dependent Children (AFDC), social security, and the supplemental security income program (SSI) provide benefits largely to low-income fatherless families, the aged, and the disabled—groups whose employ-

ment and earnings show little cyclical sensitivity (Table 22). These programs are nevertheless major sources of income redistribution. In 1976 total benefits were \$10 billion under AFDC, \$73 billion under social security, and \$6 billion under SSI.

The AFDC program for unemployed fathers (AFDC-UF), now available in 28 States, grew significantly in 1976, though it is still a small program. AFDC-UF benefits had been available only to families with low income and few assets and with an unemployed father not eligible for unemployment compensation. In June 1975, however, the Supreme Court ruled that a State with the program could not deny AFDC-UF benefits simply because the father was eligible for unemployment compensation, thus permitting such fathers to choose between the programs. For low-income families with several dependents, benefits under AFDC-UF may exceed those available under unemployment compensation. The average monthly cash benefit among AFDC-UF families was \$325 in the first half of 1976, about the same as the average monthly unemployment compensation benefit. Because they tend to have low earnings when they work, the average AFDC-UF claimant would have a lower than average unemployment compensation benefit. In addition, participation in AFDC-UF includes categorical eligibility for food stamps and medicaid. As more low-income families became aware of these greater benefits and as more workers exhausted their FSB entitlement, AFDC-UF participation increased. From June 1974 to June 1975, when the unemployment rate increased from 5.3 percent to 8.7 percent, AFDC-UF participation rose from 86,000 families to 112,000 families. By June 1976 the unemployment rate had fallen to 7.6 percent, but participation had increased to 146,000 families.

There are three major in-kind income transfer programs: medicaid, medicare, and food stamps. Medicaid subsidized medical care for persons on AFDC, and for other low-income persons who are medically indigent, at a cost of \$15 billion in 1976. Medicare provided medical insurance at a cost of \$18 billion for the aged and disabled receiving social security benefits and for persons with end-stage renal (kidney) disease. These programs exhibit some cyclical sensitivity. The food stamp program, which provides subsidized food vouchers for low-income families, is the most cyclically sensitive in-kind income transfer program. With the improvement in the economy the average monthly participation in the food stamp program decreased, although at an annual rate the program costs were about the same as in 1975 (Table 22).

One measure of the adverse impact of a recession is its effect on the poverty rate, the proportion of the population represented by families or unrelated individuals with money incomes below the poverty level. The poverty threshold in 1975 for a nonfarm family of four was officially defined as \$5,500 in money income as measured in the March 1976 supplement to the *Current Population Survey*. Because of the growth over time in real family money income, the poverty rate declined from 22.4 percent in 1959



(the earliest data available) to 11.1 percent in 1973. In the recessions occurring during this period poverty either declined more slowly or actually increased, while during periods of rapid economic expansion the poverty rate fell sharply.

The most recent period is no exception. The poverty rate increased by 0.5 percentage point (1.3 million persons) from 1973 to 1974 and by 1.1 percentage points (2.5 million persons) from 1974 to 1975. Given the severity of the downturn, as measured by the unemployment rate and real disposable personal income, the increase in poverty is somewhat smaller than would have been expected. Past experience suggests that the increase would have been 0.7 percentage point from 1973 to 1974 and 1.3 percentage points from 1974 to 1975. Moreover the extent of the increase in poverty would have been smaller if the value of in-kind income transfer benefits, such as the food stamp subsidy and the insurance premium value of medicaid were counted as income.

## ENERGY DEVELOPMENTS

Since late 1973 world petroleum prices have risen by over 350 percent as the posted price of crude oil produced in the Persian Gulf increased from \$2.59 per barrel to about \$12 per barrel. The economic recovery in 1976 promoted an increase in energy consumption, though higher prices held consumption below the previous peak. Adjusting the quantity and mix of sources of energy consumed in the United States has been slowed because such adjustment requires extensive changes in the capital stock of the country and because the prices of domestic petroleum and natural gas are held below world price levels by controls. The United States has apparently adjusted less rapidly than other developed countries. This has contributed to increased U.S. dependence upon imports, exposing the economy to greater risk of externally imposed damage.

## CONSUMPTION

Energy consumption increased in 1976 after 2 consecutive years of decline. The economic recovery was sufficiently strong to increase energy consumption by about  $3\frac{1}{2}$  percent in spite of higher prices, an abnormally warm winter, and a cooler than usual summer. Energy consumption has been lowered compared with the level that would have existed if it had not been for the price increases of 1973–75. In the household-commercial sector, changes in energy usage followed movements in real disposable income for the first 2 years after the late 1973 price increase (Table 23). In the most recent 4 quarters, however, changes in energy consumption have been far smaller than the growth in real disposable income, suggesting a gradually growing response to price increases. In the manufacturing and transportation sectors as well, energy consumption has increased less rapidly than would have been predicted on the basis of the growth in manufacturing

production or real GNP, and this also implies a continuing response to the price rise.

The amount of substitution of alternative energy inputs for petroleum to date has not been great. While coal is being substituted for petroleum, increased amounts of petroleum are being used to make up for shortages of natural gas. Petroleum as a percentage of total energy inputs in manufacturing increased from 27 percent in 1973 to 30 percent in 1976. Usage of petroleum by utilities dropped 1 percent. The share of coal in total energy used in manufacturing remained constant between 1973 and 1976, while utilities increased their consumption of coal from 56 to 62 percent of all fossil fuel inputs.

TABLE 23.—*Changes in energy consumption and relevant economic indicators by final consumption sector, 1950–76*

[Percent]						
Period	Energy consumption in household and commercial sector	Real disposable personal income	Energy consumption in industrial sector	Manufacturing production	Energy consumption for transportation	Real GNP
Annual average change:						
1950 to 1955 .....	2.9	3.3	3.5	5.3	2.6	4.2
1955 to 1960 .....	4.1	2.7	1.3	2.4	1.9	2.4
1960 to 1965 .....	4.6	4.7	3.4	6.5	3.3	4.7
1965 to 1970 .....	5.5	3.9	4.2	3.5	5.1	3.0
1970 to 1973 .....	3.5	4.8	1.8	6.9	4.7	4.7
Change from preceding year:						
1974 .....	-1.8	-1.6	-2.9	-.3	-3.4	-1.7
1975 .....	1.9	1.7	-8.3	-10.1	.6	-1.8
Change from a year earlier to:						
1974: I .....	-4.8	.2	-1.1	2.3	-7.3	.0
II .....	-.6	-1.4	-5.0	1.6	-2.6	-.8
III .....	-1.4	-1.9	-.7	1.1	-2.6	-1.9
IV .....	.6	-3.3	-4.8	-5.8	-1.0	-4.1
1975: I .....	3.7	-2.2	-5.1	-14.5	3.9	-5.6
II .....	3.2	3.5	-13.1	-14.4	1.3	-3.6
III .....	1.5	1.8	-11.0	-9.6	-.6	-.3
IV .....	-1.0	4.0	-4.7	-1.3	-1.9	2.3
1976: I .....	2.7	6.3	.4	13.9	3.7	7.3
II .....	-1.6	2.4	11.4	15.1	3.5	7.0
III .....	1.6	4.1	5.9	9.8	4.6	5.2

Note.—Energy consumption includes distribution generation losses.

Sources: Department of Commerce (Bureau of Economic Analysis), Department of the Interior (Bureau of Mines) Federal Energy Administration, and Board of Governors of the Federal Reserve System.

## PRODUCTION

Imports of oil increased while domestic production of crude oil and natural gas declined again in 1976; however, production of bituminous coal continued to grow.

The decline in the production of crude oil which began in 1970 continued in 1976, although the rate of decline slowed to 2.6 percent from a 4.7 percent decline in 1975. The decrease in petroleum production has to some extent been caused by price controls on all or part of the output of

domestic wells since 1971. From May 1973 to February 1976 roughly two-thirds of U.S. oil production was under price controls. From February 1976 to September 1976 all U.S. output was controlled. In September 1976 controls were lifted from stripper wells, which produce less than 10 barrels a day and account for 14 percent of total U.S. output. The number of oil and gas wells drilled and the total footage of such wells increased in 1976 to the level last recorded in the early 1960s, although many drilling rigs were idle through part of the year. Production from the Elk Hills Naval Petroleum Reserve was begun, and a number of problems which had prevented production of crude oil from offshore leases in California were surmounted. After numerous delays progress on the Alaskan pipeline set the stage for delivery of the first production from the North Slope in late 1977.

Production of bituminous coal increased by 2½ percent in 1976 and reached a postwar record level. From 1973 to 1976 the production of coal increased 12 percent, as coal production capacity has expanded in response to higher coal prices.

Total marketed production of natural gas, which had been declining since 1973, appears to have stabilized in 1976. The stabilization of production masks a continuing trend to withhold new production from interstate markets in favor of intrastate markets, where a higher price is offered. The interstate market for natural gas has apparently been bearing the full brunt of the declines in total marketed production since 1973. Thus Federal price controls are not only causing reductions in U.S. production but also distorting the distribution of available supplies.

There were only small increases in production from other energy sources, primarily nuclear power and hydropower. Hydropower production is limited by the physical capacity of hydropower plants as well as by the amount of rainfall. Production from nuclear power plants was constrained by licensing and operating problems. Although the maximum dependable capacity of nuclear power plants increased by 10.3 percent from the end of 1975 to July 1976, production increased by only 6.0 percent; operating rates declined to 52.0 percent of capacity from the average 55.0 percent recorded in 1975.

## IMPORTS

The increase in demand for petroleum and the decline in domestic production implied increased imports of petroleum during 1976. In some measure the increase in petroleum imports represents the natural response to the greater demand created by the economic recovery. Much of the increase, however, is the result of a policy which sets consumer prices by averaging higher-priced imports and lower-priced domestic output. Imports, the marginal supply of petroleum in the United States, are being subsidized by the price controls, which discourage conservation and expansion of domestic production. Petroleum imports averaged 7.2 million barrels a day, up 14

percent from 1973. The cost of petroleum imports has risen from \$7.5 billion in 1973 to \$32 billion in 1976. Imports currently represent 41 percent of U.S. oil consumption, compared with 29 percent in 1972. Although countries of the Western Hemisphere, primarily Venezuela and Canada, supplied about two-thirds of U.S. imports of petroleum in 1973, less than half came from the Western Hemisphere in 1976.

The 1976 increase in imports was concentrated in crude oil rather than refined products. Since 1973 total petroleum imports have increased from 6.3 million barrels a day to approximately 7.2 million; but imports of petroleum products have declined from 3 million barrels a day to less than 2 million. This substitution is a result of expansion in refining capacity and implementation of the Federal Energy Administration's (FEA) entitlement programs, which provide substantial price protection to U.S. refineries.

## PRICES

The increase in energy prices, which had exceeded 10 percent per year during 1974 and 1975, slowed significantly during 1976. Contributing to this moderation was the Energy Policy and Conservation Act, which was passed by the Congress in December 1975 and became effective in February 1976. This act caused an initial reduction of 8.8 percent in the price of crude oil produced within the United States and prescribed that the rate of increase of crude oil prices would equal the rate of inflation as measured by the GNP deflator plus up to 3 percent, as a production incentive until the act expired in 1979. In its attempts to comply with the provisions of the act, FEA froze the price of crude oil at the June 1976 level as of July. Consequently, U.S. crude oil prices have fallen even farther below the price of imports.

Prices charged to consumers did not reflect the decline in domestic crude oil prices last year (Table 24). The average price of crude oil entering refineries, including imported crude oil, increased during the last year, although the price of domestic crude production fell 7 percent. The prices of fuel oil and gasoline had surpassed the December 1975 levels by mid-1976.

During 1976 price controls were removed from distillate fuel oils, residual fuel oils, and miscellaneous products. Gasoline, commercial jet fuels, propane, and certain other products remained under controls. Consumer prices of products that were no longer under price controls rose no faster than prices of those products still under control.

The average price of natural gas continued to increase during 1976; but at about 54 cents per thousand cubic feet (mcf) it remained well below the price of the nearest substitute, oil, owing to the effects of the continued regulation by the Federal Power Commission (FPC) of gas sold for resale in interstate markets. Prices of domestic gas entering the regulated interstate pipelines rose from 30 cents per mcf for the 12 months ending June 1975 to 39 cents for the 12 months ending June 1976. In mid-1976, prices for im-

TABLE 24.—*Changes in consumer prices of energy items, 1966–76*

[Percent]

Period	Total energy items <sup>1</sup>	Electricity	Fuel oil <sup>2</sup>	Gasoline <sup>3</sup>	Gas
Average annual change:					
1966 to 1969 .....	2.1	1.2	2.8	2.6	0.9
1969 to 1972 .....	3.1	5.0	3.4	.9	6.0
Change from a year earlier:					
1973 .....	8.0	5.0	15.4	9.8	4.6
1974 .....	29.3	18.1	58.8	35.4	12.5
1975 .....	10.6	13.2	8.3	6.8	19.9
1976 .....	7.1				

<sup>1</sup> Also includes coal and motor oil, not shown separately.<sup>2</sup> Fuel oil No. 2.<sup>3</sup> Regular and premium gasoline.

Source: Department of Labor, Bureau of Labor Statistics.

ported and some newly contracted intrastate gas ranged between \$1.67 and \$1.71 per mcf.

During 1976 the FPC lifted the ceiling price to 93 cents per mcf for gas first dedicated for sale in interstate commerce in 1973 and 1974. The price allowed for gas first sold in interstate commerce in 1975 and 1976 was set at \$1.42 per mcf. The FPC also raised the minimum price for what is termed old gas.

The extent to which these price changes will affect demand is limited by the practice of basing consumer charges on the average cost of gas, including the gas purchased under the previously lower regulated price. Consequently these price actions will not eliminate the shortage of natural gas for interstate trade though they will help to reduce it.

The average price of coal sold under long-term contracts continued to increase during 1976 at a rate approximately parallel to the rate of inflation in the economy at large. The price of bituminous coal in spot markets, however, continued to decline during 1976 from peaks reached during the coal strike of 1974.

Electricity prices rose at a 7.2 percent annual rate through the first 9 months of 1976 with rate increases awarded by regulatory authorities to offset the past decline in revenues from electricity consumption. As growth in the demand for electricity resumed in mid-1976, requests for these revenue-sustaining increases began to diminish.

## AGRICULTURAL DEVELOPMENTS

Increased crop and livestock production last year resulted in the smallest food price increases since 1971, the food CPI averaging 3 percent above 1975. At the same time, farm income remained close to the 1975 level. Last year's relatively stable situation provides a vantage point from which to assess the adjustments of the agricultural sector to the relative price changes of the preceding 3½ years.

## COMMODITY MARKETS AND FOOD PRICES

World grain (including rice) production in the 1976-77 marketing year is estimated to be 8 percent greater than the preceding year, a record harvest and sufficient to add over 40 million metric tons to world stocks. This would be the first substantial addition to world stocks in 5 years.

While much attention has been given to weather uncertainties in recent years, world production of all grains has been relatively stable. Because short-falls in individual countries have to some extent been offsetting, world production has not fallen as much as 3 percent below trend levels in any year since 1960. However, relatively small variations in production can cause large price fluctuations because of the inelasticity of world supply and demand, especially with the much-reduced level of world carryover stocks of grain in recent years. Price fluctuations in the United States during 1972-75 were further increased in size by policies in other countries, which attempted to insulate their prices from world supply and demand conditions. The result was to leave a disproportionate amount of consumption and production adjustment to countries which follow relatively free-trade, market-oriented policies. Chief among these is the United States.

In response to the high crop prices of 1972-75, and accommodating farm policies, U.S. farmers in 1976 harvested record crops of wheat and corn for the second consecutive year. The large crops allowed substantial rebuilding of stocks, especially of wheat. U.S. carryover stocks from 1976 food grain supplies are expected to be around 28 million metric tons for wheat and 2 million tons for rice, roughly half a year's total utilization for each. At the end of 1976 farm prices were substantially lower than a year earlier for wheat and rice, and slightly lower for corn. For soybeans, however, prices were much higher as strong domestic and foreign demand, coupled with a reduced U.S. crop, indicated that carryover stocks might be drawn down near minimum levels in 1977.

The lower food grain prices were reflected in an estimated 1 percent decline between the fourth quarter of 1975 and the fourth quarter of 1976 in the cereal and bakery product component of the CPI. But grain prices influence the food sector primarily through livestock markets. Favorable ratios of livestock to feed prices in 1975 resulted in large increases in meat production in 1976. Compared to production figures a year earlier, pork production was up 8 percent, beef up 8½ percent, and broilers up 12 percent. Milk production increased 4 percent, the largest annual rise since 1953. Beef production was high not only because of increased marketing of grain-fed cattle, but also because cattlemen continued to cut back their breeding herds, which had been overbuilt in the early 1970s. The resulting addition to last year's meat supplies helped depress prices, but the reduction in cattle numbers set the stage for higher beef prices in the future.

Consumption of red meats and poultry last year rose an estimated 7 percent from 1975. The relative price of meats as measured by the red meats

and poultry CPI deflated by the overall CPI fell an estimated 6½ percent below the 1975 average. Taking into account changes in income and population, the increased quantities consumed implied a larger response of consumption to the price decline or the income increase than is found in most econometric studies of demand for meats.

Consumer prices for other food categories, including fruits and vegetables and dairy products, increased faster than the overall CPI during 1976. There were especially sharp increases for coffee, eggs, and fish. But cereals and meats declined sufficiently during the year to make the increase in the food CPI only an estimated 1 percent from the fourth quarter of 1975 to the fourth quarter of 1976 and 3 percent from year-average 1975 to 1976.

## FARM INCOME

Preliminary estimates indicate that last year's real income from farm and other sources per farm household was high by historical standards for the fifth straight year, even though it was substantially below the 1973 peak. U.S. Department of Agriculture data on disposable income per capita for the farm and nonfarm populations give some basis for comparing farm and nonfarm economic well-being (Table 25). Comparison is difficult, however, because of differences in the cost of living and in the number of persons per household, as well as nonpecuniary differences between farm and nonfarm work and greater capital gains arising from farm real estate. Commercial farmers with annual gross sales of \$20,000 or more per year earned higher average incomes than the nonfarm population throughout the 1970s. This group accounted for 89 percent of the farm products sold in 1975. In 1975 they earned a mean income per household of \$24,980, after tax but including income in kind, but the aggregate conceals wide variations in returns. In particular, many cattle feeders and sugar beet and cane producers experienced losses last year, although in some recent years they earned large profits.

The changes in product and factor prices that lay behind the farm income changes of the 1970s show the influence of sharply rising export demand for grains and oilseeds. In fiscal 1976 farm exports attained a seventh consecutive yearly record of \$22.1 billion, of which \$13.7 billion was accounted for by wheat, feed grains, and soybeans. In addition, domestic demand for food has continued to increase. Total domestic utilization of farm food commodities increased 6 percent between 1970 and 1976, while the CPI for food consumed at home increased 8 percent relative to the overall CPI. Between 1970 and 1976 the prices farmers received for crops rose 35 percent relative to the GNP deflator and the relative prices received for livestock rose 2 percent.

The associated increases in factor prices reflect not only a greater derived demand but also the effects of energy price increases on production costs. The prices of all important groups of farm inputs increased in compari-

TABLE 25.—*Real income per farm and per capita disposable personal farm income as percent of nonfarm income, 1961–75*

Period	Total income per farm (1967 dollars) <sup>1</sup>	Percent of farm operators' income from farming	Per capita disposable personal income, farm as percent of nonfarm
1961–65 average .....	\$6,797	51.2	61.7
1966–70 average .....	8,893	45.9	72.0
1971 .....	9,327	41.3	74.7
1972 .....	10,865	46.4	83.4
1973 .....	14,183	55.8	109.3
1974 .....	12,685	51.3	92.7
1975 .....	10,969	44.4	89.6

<sup>1</sup> Net farm income excluding inventory change plus off-farm income of farm households divided by the index of prices paid by farmers for family living items, 1967=100.

Source: Department of Agriculture.

son with the general price level. The indexes for farm prices paid, deflated by the GNP deflator, were up 44 percent for fertilizers, 28 percent for tractors and self-propelled machinery, 23 percent for fuels and energy, and 21 percent for agricultural chemicals between 1970 and 1976. The index of farm real estate prices relative to the GNP deflator rose 42 percent, and the hourly real wage rate of hired farm workers rose 12 percent during this same period.

## FARM AND FOOD POLICY

Through the Rice Production Act of 1975 a rice program that restricted output was replaced last year by the market-oriented approach already existing for wheat, feed grains, and upland cotton. That approach, introduced in the Agriculture and Consumer Protection Act of 1973, provides income support by means of deficiency payments based on the difference between a legislated target price and the market price or support price received. The market price is supported at a lower level by way of the "loan rate," the price per bushel which is provided as a loan to qualifying farmers who put grain in storage and may then pay off the loan by turning grain over to the Commodity Credit Corporation. The higher target price has little effect on acreage because deficiency payments are made only on an allotment base which a farmer cannot increase by expanding acreage. Unlike that for wheat and feed grains the target for rice established for the 1976 crop is above market prices. Consequently deficiency payments on the 1976 crop of an estimated \$140 million will be made to rice growers.

The loan rate on wheat was increased by 75 cents to \$2.25 per bushel in October 1976, with smaller increases for feed grains. This increase put the wheat support price near enough to market prices so that any further significant increase in the support price would threaten to reduce export and feed use of wheat.



Following a recent emphasis on international approaches to commodity policy, the United States proposed in the International Wheat Council a system of nationally held food grain reserves. The reserves, to consist of 30 million metric tons of wheat and rice, would be used to add to supplies during years of exceptionally low production rather than to defend any particular price band. They would be acquired and released with reference to quantitative triggers, when world supplies exceeded or fell short of trend by a fixed percentage. No progress was made toward implementation of this plan. By year-end, however, prospective private carryover stocks of wheat and rice above working stocks in the United States amounted to perhaps 20 million tons of the proposed 30-million world total.

There were significant policy developments in several other areas in 1976. The Administration attempted unsuccessfully to move toward a market-oriented program for peanuts to replace the current reliance on acreage controls and high support prices. Dairy price supports were reviewed at quarterly intervals and were raised in April and October to keep the price of milk used in manufacturing at 80 percent of parity. By the end of the year substantial Government purchases of butter, cheese, and powdered milk were being made at the support prices. The President vetoed a bill which would have raised dairy supports to 85 percent of parity and under which the accumulation of dairy products would have been still larger and the year-end prices still higher.

Other international policy developments concerned imported coffee, sugar, and meat, which in fiscal 1976 accounted for \$5.0 billion of the \$10.1 billion U.S. agricultural imports. The Senate ratified U.S. participation in a new International Coffee Agreement, which contains provisions intended to stabilize prices within a band agreed upon by producers and consumers. As with most such arrangements, there is a danger that the agreement will be more effective in holding prices above the price floor than in holding prices below the price ceiling when a short crop occurs. The devastating Brazilian frost of July 1975 is likely to keep prices well above the highest possible support price for at least 2 more years. In regard to sugar and meat, measures were taken to protect domestic producers from imports. The tariff on sugar was increased 1.25 cents per pound, and quantitative restrictions were imposed on imports of beef.

Government regulation of agriculture continued to grow last year. The Environmental Protection Agency suspended most uses of the pesticides heptachlor and chlordane. The Grain Standards Act of 1976 will greatly increase Federal supervision of the weighing and grading of grain for export. The Farmer-to-Consumer Direct Marketing Bill was enacted to encourage the purchase of food in places other than grocery stores. Other regulatory developments included increasing health and safety regulation, the ban by the Food and Drug Administration of several food additives, and the decisions, first to permit and then to deny the use of mechanically deboned red meat for human consumption.

While circumstances have enabled a movement away from restrictive programs for grains and upland cotton, most of last year's policy developments were not in the direction of less regulated markets. With farmers pressing for intervention to forestall lower grain prices, and with increased interest in achieving grain price stability through grain reserves, the potential exists for a further turn from the market orientation that has been brought about in the last decade. The costs of such a turn are discussed in Chapter 4.