CHAPTER 2

Economic Policy and Developments in 1975

DURING THE FIRST PART OF 1975 the economy moved rapidly through the final stages of the most severe recession of the postwar period. Real gross national product (GNP) fell at an annual rate of 9.2 percent in the first quarter and then began to increase (Table 6). In addition, the rate of inflation fell rapidly in the first half of the year from the high rates of 1974.

Economic policy shifted early in the year to counter the decline in output. The President proposed a $16-billion tax reduction in the State of the Union message in January and the Congress enacted a $21-billion net reduction in March. Because of these tax cuts, and associated one-time social security payments, real disposable personal income rose sharply in the second quarter. At the same time, the monetary aggregates expanded rapidly as the Federal Reserve accommodated the temporary buildup in the public's holdings of currency and bank deposits caused by the tax cuts and social security payments.

GNP rose sharply in the second half of the year; and by the end of the year the initial phase of a recovery was clearly evident, although both unemployment and inflation remained distressingly high.

Measured by the declines from peak to trough in real GNP and real disposable personal income (DPI), the 1974–75 recession was the most severe of the postwar period. Real GNP fell 6.6 percent from its peak in the fourth quarter of 1973 to its trough in the first quarter of 1975. Real DPI, cushioned by increased transfer payments and other built-in stabilizers, fell 4.4 percent during the same period. The recession became more severe in the last quarter of 1974 (Table 6). Real final sales decreased at an 8.6 percent annual rate in the fourth quarter, as both personal consumption expenditures and fixed investment expenditures dropped sharply. Real GNP declined at an annual rate of 7.5 percent in the fourth quarter after a 2.3 percent annual rate of decline in the third quarter.

Changes in the level of economic activity during 1975 were dominated by an exceptionally sharp inventory cycle. The large reduction in real final sales in late 1974 produced a large and unexpected accumulation of inventories which were then liquidated in 1975. Real final sales, which had declined since the end of 1973, stabilized in early 1975 and then rose steadily

TABLE 6.—*Changes in gross national product in constant (1972) dollars, 1973–75*

[Percent change; seasonally adjusted annual rates]

Component	1973	1974	1975[1]	1974		1975			
				III	IV	I	II	III	IV[1]
Percent change in 1972 dollars:									
Total GNP	5.3	−1.8	−2.0	−2.3	−7.5	−9.2	3.3	11.9	5.4
Personal consumption expenditures	4.5	−.8	.9	2.1	−9.2	1.8	6.4	3.9	3.5
Durable goods	8.7	−6.9	−2.8	4.6	−39.8	4.3	10.0	23.6	8.1
Nondurable goods	3.4	−2.1	1.3	1.2	−7.4	2.6	8.4	1.4	5.0
Services	4.2	2.6	1.7	2.1	1.7	.3	3.9	.5	.8
Business fixed investment	12.4	−2.9	−11.8	−14.3	−12.8	−17.3	−14.4	−.7	9.0
Residential investment	−3.1	−25.6	−18.1	−23.1	−41.9	−42.0	4.8	56.0	31.6
Government purchases	−.2	.7	1.2	−.5	−1.7	2.4	−.3	6.1	3.8
Federal purchases	−5.9	−1.1	−.8	4.3	−4.1	−4.2	−5.4	11.3	4.3
State and local purchases	3.5	2.0	2.4	−3.0	−.3	6.4	2.8	3.2	3.5
Addenda:									
Final sales	4.8	−1.2	−.5	−1.4	−8.6	−.6	3.8	4.7	5.0
Domestic final sales	3.9	−2.0	−1.1	−1.4	−9.4	−2.0	2.7	5.3	4.8
Change in billions of 1972 dollars:									
Inventory accumulation	6.6	−8.3	−17.8	−2.6	3.4	−26.6	−1.7	19.9	1.0
Net exports of goods and services	10.5	9.4	6.9	−.2	2.3	4.1	3.4	−1.4	.8

[1] Preliminary.

Source: Department of Commerce, Bureau of Economic Analysis.

during the balance of the year. Accelerating inventory liquidation kept industrial production declining until April, when the Federal Reserve's index bottomed out 12.5 percent below its level in September 1974. While nonfarm inventory decumulation continued through the year, the rate of liquidation slowed dramatically by the third quarter. As a result, production rebounded sharply and in December the index of industrial production was 7.8 percent above its April low. The unemployment rate increased from 5.6 percent in the third quarter of 1974 to a peak of 8.7 percent in the second quarter of 1975. By the fourth quarter it had fallen to 8.5 percent.

The rate of inflation was lower in 1975 than in 1974. As measured by the consumer price index (CPI), inflation dropped from a 12.1 percent annual rate during 1974 to a 7.3 percent rate during 1975. Two principal factors accounted for this improvement. First, the weakened state of demand and the reduction of inventories put downward pressure on prices at the same time that more moderate wage increases and gains in productivity were limiting the rise in unit labor costs. Second, the waning influence of the explosion of food and fuel prices in 1973 and 1974 also contributed to the moderation of inflation. Although energy prices continued to rise in 1975, the increase was much more moderate than it was following the 1973–74 Organization of Petroleum Exporting Countries (OPEC) oil price increases. The upward pressure on food prices, which stemmed from heavy world demand and the sharp reduction in the 1974 U.S. grain crop, also eased during 1975.

National Income and Product Accounts (NIPA) Revision

The Bureau of Economic Analysis of the Department of Commerce has just completed revisions of the national income and product data for all years after 1945. These revised data, which are described in the January 1976 issue of the *Survey of Current Business,* are used throughout this *Report.* The new data are the result of a major benchmark revision of the statistical data and the introduction of about 20 definitional changes which improve the conceptual framework of the accounts. In addition, the base period for constant dollar GNP estimates has been advanced from 1958 to 1972. The most significant of the definitional changes are a new treatment of depreciation, and the shift of mobile home purchases and purchases of consumer durables by landlords from consumption to residential investment.

While it will be some time before many of the implications of these revisions are known, there are noticeable changes in some series. Nominal GNP has been revised upward by amounts generally less than 1 percent. For 1974, nominal GNP was revised to $1,406.9 billion, a revision of 0.7 percent. However, the revisions generally show more weakness in the economy in the second and third quarters of 1974. Because of the new treatment of depreciation, capital consumption allowances have been significantly revised. For example, the new estimate for 1974 is $134.0 billion compared to $119.5 billion on the old basis. Employee compensation and gross output in the corporate sector have been revised upward progressively since 1958 to reflect an upward reappraisal of the importance of corporate activity in several sectors. Thus, for 1974, employee compensation in the corporate sector is now estimated to be $582.4 billion compared to $524.1 billion on the old basis, and gross corporate product is now $854.6 billion in 1974 compared to $770.1 billion on the old basis. Related to these revisions are decreases in corporate profits, and in noncorporate sector employee compensation and gross output. Because the increases in corporate employee compensation exceed the declines in the noncorporate sector, total employee compensation has been revised significantly upward.

FISCAL POLICY

Fiscal policy was expansionary in 1975 compared to what it had been in 1973–74. (Unless otherwise stated, reference is made to calendar, rather than fiscal, years throughout.) The growth in Federal expenditures, which had accelerated in 1974, remained high through mid-1975. The 1975 tax cuts added to the stimulus, with the result that the sharp rise in the full-employment surplus from the end of 1972 to the third quarter of 1974 was entirely reversed in 1975.

After passage of the Tax Reduction Act of 1975 in late March, an $8-billion rebate of 1974 taxes was paid. At an annual rate this represented a $32-billion tax reduction in the second quarter of 1975. From May 1, the amount of individual income taxes withheld was $12 billion lower at an annual rate. This came about because tax liabilities were reduced through a

$30 credit for each taxpayer and each dependent claimed on tax returns, and through increased standard deductions and low-income allowances. The tax credit for purchasing a new principal residence and the earned income credit will reduce Federal receipts by approximately $1 billion and raise transfer payments by $1 billion in the first half of 1976, when these credits are claimed on 1975 tax returns. An estimated 80 percent of the earned income credit, which is given to certain workers who earned less than $8,000 in 1975, will be in excess of any tax liability otherwise owed and will thus be a transfer payment rather than a tax refund.

The 1975 Tax Reduction Act cut corporate tax liabilities by a gross amount of $4¼ billion. The net reduction was only $2½ billion, however, because percentage depletion for oil and gas was curtailed and because foreign tax credits and deferral of taxes on incomes earned abroad by certain U.S. corporations were limited. The largest of the corporate tax reductions, amounting to $2¾ billion in 1975, resulted from liberalization of the investment tax credit. The rate of this tax credit was increased from 4 to 10 percent for utilities, and from 7 to 10 percent for all other businesses, on equipment acquired after January 21, 1975, and placed in service before January 1, 1977. The doubling of the surtax exemption from $25,000 to $50,000 and the lowering of the regular corporate income tax rate on the first $25,000 of taxable profits from 22 percent to 20 percent decreased 1975 liabilities by $1½ billion.

In all, the Tax Reduction Act of 1975 lowered receipts by around $42 billion at an annual rate in the second quarter of 1975, but most of this drop was temporary. The tax cuts that remained in effect during the last half of 1975 amounted to around $15 billion (annual rate) or 5 percent of the total Federal receipts otherwise obtained. By comparison, the 1964 tax cut that went into effect in 1964 and 1965 lowered Federal taxes by over 10 percent.

On a unified budget basis, the deficit in fiscal 1975 was $44 billion, $9 billion larger than estimated in February 1975. Outlays in fiscal 1975 were $325 billion, $11 billion above the February estimate. Only a fourth of the increase in outlays is attributable to departures from the legislative program assumed in the February budget. Receipts were $281 billion, $2 billion higher than projected, even though the Tax Reduction Act of 1975 reduced receipts in fiscal 1975 by $4 billion more than the budget proposed. Most of the $6-billion difference is explained by higher individual income tax receipts, since refunds of the 1974 tax liabilities were $1 billion less and final settlements $3 billion more than had been anticipated.

FEDERAL EXPENDITURES

On a national income accounts (NIA) basis, Federal expenditures increased from $300 billion in 1974 to $357 billion in 1975, a rise of 19 percent compared to the 13 percent increase the year before. Because the recently released revisions of NIA data have altered the measured level and composition of Federal expenditures, precise comparisons of actual expenditures with

the expenditures projected in the 1976 budget are difficult. Nevertheless, if the budget numbers are roughly adjusted to the new benchmark basis, a comparison can be made. Table 7 shows that Federal expenditures rose $10 billion more than was projected in February 1975, with defense purchases $3 billion, grants $4 billion, and transfer payments to persons over $6 billion higher than projected.

Production and deliveries on defense orders outstanding accelerated, as they have done repeatedly during previous recessions, because of the slack in the suppliers' other business. As a result NIA expenditures rose more rapidly than anticipated. In addition, defense purchases were raised by unexpectedly large cost increases, attributable in part to the high inflation of recent years. Nevertheless the share of defense purchases in total Federal expenditures declined. Federal employee compensation, both civilian and military, was not much higher than projected, since the proposal in the President's budget to place a 5 percent cap on the October 1975 pay raise of Federal employees was sustained by the Congress. Federal purchases other than compensation were about $1½ billion above the February estimates, even though energy-related spending was $1½ billion lower because domestic crude oil prices were not decontrolled as expected.

Grants were $4 billion higher than estimated last February, even though State and local governments did not receive the President's proposed $1½-billion offset for increased energy costs. Higher public assistance payments,

TABLE 7.—*Federal Government receipts and expenditures, national income accounts basis, calendar years 1974–75*

[Billions of dollars]

Receipt or expenditure category	1974	1975	
		February 1975 budget projections [1]	Actual [2]
Federal Government receipts	288.4	280.3	283.5
Personal tax and nontax receipts	131.4	103.7	125.6
Corporate profits tax accruals	45.9	31.7	40.2
Indirect business tax and nontax accruals	21.7	48.7	24.2
Contributions for social insurance	89.4	96.2	93.5
Federal Government expenditures	300.1	346.7	356.9
Purchases of goods and services	111.7	121.5	123.1
National defense	77.4	80.6	84.0
Nondefense	34.3	41.0	39.2
Transfer payments to persons	114.5	139.7	146.1
Transfer payments to foreigners	3.2	5.3	3.0
Grants-in-aid to State and local governments	43.9	50.0	54.2
Net interest paid	21.0	23.2	23.5
Subsidies less current surplus of government enterprises	5.2	7.0	6.8
Less: Wage accruals less disbursements	−.5	.0	.0
Surplus or deficit (−)	−11.7	−66.4	−73.4

[1] Data on a basis comparable to the new benchmark revisions have been estimated by adding to the budget data of last February the changes in actual receipts and expenditures that resulted in 1974 and 1975 from the recent conceptual revisions, calculating percentage changes for the conceptually revised components, and applying these percentage changes to the revised 1974 actual data.

[2] 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.

education grants which were drawn down in 1975 rather than in 1974, and congressional inaction on Presidential reform proposals for medicaid accounted for most of the increases in grants.

Over half of the $6-billion underestimation of transfer payments to persons is traceable to differences between expected and actual legislation, with the remaining underestimate distributed among a number of programs. Congress failed to enact the proposed 5 percent caps on automatic cost-of-living increases for transfer programs linked to the consumer price index or linked to an index of food costs alone. Social security recipients, for example, received an 8 percent increase in benefits on July 1, 1975, equal to the rise in the consumer price index from the second quarter of 1974 to the first quarter of 1975, according to the automatic cost-of-living formula adopted in 1972. The extra spending for this and other indexed programs, such as supplemental security income, Federal employee retirement and disability, military retired pay, railroad retirement, and food stamps, amounted to $1½ billion. In addition, $1¾ billion was paid to certain social insurance beneficiaries in the second quarter of 1975 as a result of the $50 bonus provided for each recipient by the Tax Reduction Act of 1975.

Over the past decade Federal transfer payments to persons have grown at an increasing pace. Between 1965 and 1973, both years of high resource utilization, the fraction of Federal expenditures accounted for by transfers to persons rose from 24 percent to 35 percent. Since then this share has grown to 41 percent. Only part of the recent rise has been due to higher rates of inflation, the direct Federal funding of certain welfare programs previously financed through grants, and the low levels of economic activity in the past 2 years.

One-third of the $31½–billion growth in transfer payments to persons from 1974 to 1975 cannot be explained by such factors. In 1975 unemployment benefits increased by $11 billion over 1974, with $8½ billion of this rise attributable to higher covered unemployment, $½ billion to higher average weekly benefits in response to wage inflation, and the remaining $2 billion to new legislation extending the scope of unemployment insurance. Since the consumer price index rose 9 percent from 1974 to 1975, additional expenditures of $10 billion were required to hold the real value of Federal transfer payments unchanged. Most of the remaining $10½ billion resulted from noncyclical growth in real transfer payments.

FEDERAL RECEIPTS

Federal receipts (NIA) declined in 1975 as a result of the tax cuts that went into effect at the low point of the business cycle and produced an $18½-billion reduction in receipts (excluding secondary effects). While nominal GNP rose by 6½ percent in spite of the recession, receipts fell by 2 percent, dropping from $288 billion in 1974 to $283 billion in 1975 (Table 7).

The overall decline in receipts closely matched that estimated in February 1975, since larger tax cuts were offset by upward reestimates of

receipts, even though the underlying economic developments were not significantly different from those assumed in last year's budget. The composition of receipts was quite different, however, since the President's energy program was not passed and since his program to provide economic stimulus was changed.

The President's energy program included decontrol of all domestic crude oil prices by April 1, 1975, coupled with higher import fees, excise taxes on domestic oil and natural gas, and a windfall profits tax on domestic producers of oil. In 1975 these additional indirect business taxes were estimated at $26½ billion, $19 billion of which was to be returned to individuals and $6 billion to corporations, through income tax reductions. Unlike the energy program, the President's program to stimulate the economy involved a reduction rather than a rearrangement of taxes. It provided for $12 billion in tax rebates to individuals and a 1-year increase in the investment tax credit for businesses (mostly nonfinancial corporations) costing approximately $3 billion. Hence the President's entire program would have lowered personal tax and nontax receipts by $31 billion and corporate profits tax receipts by $9 billion, compared to the receipts estimated if the 1974 tax laws were applied unchanged to the income levels projected for 1975. The actions actually taken, however, lowered taxes by $16 billion for individuals and $2½ billion for corporations in 1975. Differences in legislation alone would thus have caused individual income tax receipts to be $15 billion higher, corporate income taxes $6½ billion higher, and indirect business taxes (including the $2½-billion import fees on crude oil and products) $24 billion lower than in the February estimates. These program changes accounted for most of the differences among the receipt components shown in Table 7.

BALANCES OF THE FEDERAL SECTOR

The Federal sector deficit (NIA) rose from $12 billion in 1974 to an estimated $73 billion in 1975. Less than half of the $61-billion increase was due to the loss of receipts and the increase in expenditures directly caused by the cyclical downturn, since the decline in the full-employment balance equaled more than half the increase in the deficit (Table 8).

Full-employment surpluses or deficits are the differences between what receipts and expenditures are estimated to be if the economy were operating at the potential output level consistent with 4 percent unemployment.* The

*Until a formal reappraisal of potential output growth over the past decades can be completed in the light of the benchmark revisions and other factors, the following provisional procedure is used to estimate potential GNP in 1972 dollars: The percentage output gap is assumed to be −0.89 percent in the fourth quarter of 1968, the same as it was on the old basis; and potential output is projected to grow subsequently at a 4 percent annual rate, the same rate used before. On the new basis the gap in the third quarter of 1975 is estimated to be 12.63 percent, the same as on the old basis, but differences of more than 1 percentage point are observed in some earlier quarters.

TABLE 8.—*Actual and full-employment Federal and State and local government receipts and expenditures, national income accounts basis, calendar years 1969–75*

[Billions of dollars; seasonally adjusted annual rates]

Calendar year	Federal Government			State and local government			Combined surplus or deficit (−)
	Receipts	Expenditures	Surplus or deficit (−)	Receipts	Expenditures	Surplus or deficit (−)	
Actual:							
1969	197.0	188.4	8.5	119.7	117.6	2.1	10.7
1970	192.1	204.2	−12.1	134.9	132.2	2.8	−9.4
1971	198.6	220.6	−22.0	152.6	148.9	3.7	−18.3
1972	227.5	244.7	−17.3	177.4	163.7	13.7	−3.5
1973	257.9	264.8	−6.9	193.8	180.9	12.9	6.0
1974	288.4	300.1	−11.7	209.4	201.3	8.1	−3.6
1975 [1]	283.5	356.9	−73.4	232.4	222.4	10.0	−63.5
1974: I	275.7	281.1	−5.3	201.9	192.6	9.4	4.0
II	285.6	293.5	−7.9	207.3	199.1	8.2	.3
III	299.2	307.2	−8.0	213.5	204.5	9.1	1.0
IV	293.1	318.6	−25.5	214.9	209.0	5.9	−19.6
1975: I	283.6	337.4	−53.7	221.2	215.5	5.7	−48.0
II	250.1	352.3	−102.2	228.2	219.4	8.8	−93.4
III	293.3	363.8	−70.5	237.7	224.8	12.9	−57.6
Full-employment:							
1969	199.7	188.8	10.9	120.1	117.6	2.6	13.5
1970	208.9	202.9	5.9	140.6	132.2	8.4	14.3
1971	218.6	218.2	.4	160.4	148.9	11.5	11.9
1972 [2]	234.4	242.7	−8.4	183.9	163.7	20.2	11.8
1973	271.2	263.7	7.5	198.7	180.9	17.8	25.3
1974	323.2	297.8	25.4	224.5	201.3	23.2	48.6
1975 [1]	340.8	348.3	−7.5	259.8	222.4	37.4	29.9
1974: I	297.3	279.5	17.8	211.2	192.6	18.6	36.4
II	315.6	291.9	23.7	220.2	199.1	21.1	44.8
III	337.0	305.0	32.0	229.8	204.5	25.3	57.3
IV	342.7	314.7	28.0	236.7	209.0	27.7	55.7
1975: I	344.8	329.8	15.1	249.6	215.5	34.1	49.2
II	309.8	343.0	−33.3	257.3	219.4	37.9	4.6
III	348.6	355.3	−6.7	263.9	224.8	39.1	32.4

[1] Preliminary.
[2] The $9.1 billion estimated increase in overwithholding of personal income taxes is not included in 1972 full-employment receipts.

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.

measurement of these balances has been complicated by several factors in recent years. If they are computed on a consistent basis, however, changes in the full-employment balance can be used to indicate changes in the thrust of fiscal policy. Unlike the levels of these balances, the changes from year to year are not sensitive to the choice of the unemployment rate used to adjust actual receipts and expenditures for cyclical effects. If the calculations are based upon a 4 percent rate, Federal expenditures must be reduced by the difference between actual unemployment benefits and the unemployment benefits that would be paid at 4 percent unemployment under continuing programs. (An analogous adjustment is made to bring unemployment insurance taxes down to a level consistent with 4 percent unemployment.)

In computing the full-employment balance, the introduction of new unemployment benefit programs during the comparison period is handled by treat-

ing all expenditures under these programs as if they were included in full-employment expenditures. By this procedure the change in fiscal stimulus which stems from the adoption of new policy measures can be gauged correctly, even though the additional spending from these programs would not have occurred if unemployment had not risen. Thus full-employment expenditures for 1975 include the Federal supplemental benefits resulting from the increase in the maximum duration of unemployment benefits in December 1974 and March 1975. They also include expenditures under the special unemployment assistance program, which was enacted on a temporary basis in December 1974 to cover some unemployed wage and salary workers who are ineligible for the regular Federal or State programs solely because part or all of their employment was not in the covered sector.

The $33-billion decline in the full-employment balance from 1974 to 1975, a reduction which approached 2 percent of potential GNP, was the largest since the Council's series began in 1955. Full-employment expenditures, which rose 4 percentage points faster than potential GNP in current dollars, and the statutory tax cuts contributed about equally to this result. The swing between individual quarters was even greater. For instance, at an annual rate the actual deficit was $94 billion higher and the full-employment balance $65 billion lower in the second quarter of 1975 than in the third quarter of 1974, when the full-employment budget surplus was at a peak. For both measures, however, $39 billion of the swing was due to the one-time individual income tax rebates and to the special payments to certain social insurance recipients that were made in the second quarter of 1975. The stimulus to the economy resulting from the temporary tax measures was probably far less than that resulting from the reduction in withholding rates. Although the dollar amounts of temporary and permanent individual income tax cuts were roughly equal in 1975, a one-time increase in consumer income is generally expected to raise spending by less than would result from an equal increase in current income which is expected to be maintained.

The fiscal stimulus that remained in place during the second half of 1975 shows that the increases in the full-employment budget surplus which occurred from 1972 to 1974 have been completely offset. Between 1972 and 1974, increasing rates of inflation raised full-employment receipts proportionately more than full-employment expenditures. The decline in the rate of inflation in 1975 may have reversed the operation of this process, since the higher past rates of inflation still contribute to the current growth of full-employment expenditures while they have little effect on the current growth in full-employment receipts.

The effect of declining inflation on actual and full-employment corporate tax receipts has been particularly striking. Inventory profits decreased from $39 billion, or 29 percent of the book profits of corporations in 1974, to $12 billion, or 10 percent of book profits in 1975. Because of this decline, the share of profits in GNP used to estimate corporate profits tax accruals at full employment fell from 11¼ percent to 9½ percent.

Personal tax and nontax payments also respond disproportionately to changes in the rate of inflation. At full employment, the base of the personal income tax (which is approximated by personal income plus personal contributions for social insurance and minus transfer payments and other labor income) is estimated to be 72 percent of potential GNP. The average tax rate applied to this base rises over time as a result of inflation and growth. When the rate of inflation is about 6 percent, as it was from the fourth quarter of 1974 to the fourth quarter of 1975, and the full-employment tax base is growing by 4 percent per annum in real terms, the overall elasticity of personal taxes is between 1.40 and 1.45 with respect to the personal income tax base. If the nonrebate features of the Tax Reduction Act of 1975 or the provisions of the subsequent Revenue Adjustment Act were extended without change beyond the middle of this year, the average tax rate on the base, which was 13.0 percent in 1974 and 12.3 in the fourth quarter of 1975, would again reach 13.0 percent by the middle of 1977, assuming 4 percent potential growth and 6 percent inflation per year. Under these assumptions it would thus take only about 1½ years to reverse completely the reduction in the average tax rate resulting from the 1975 legislation. Provided that the growth in full-employment expenditures does not exceed that of potential GNP—as it did in 1975—a gradual rise in the full-employment surplus is built into the tax system.

STATE AND LOCAL AND COMBINED BALANCES

The full-employment surplus of State and local governments rose by $14 billion from the third quarter of 1974 to the corresponding quarter of 1975, offsetting over a third of the downswing in the Federal full-employment balance during this period. State and local governments shifted to greater restraint in their fiscal operations to prevent operating deficits from increasing as much as would automatically result from the recession.

State and local governments incurred operating deficits for 5 successive quarters, starting in the second quarter of 1974. The operating deficits are not shown in Table 8, but they can be obtained from the NIA surplus or deficit by subtracting the surplus of the social insurance funds of State and local governments. From the start of 1974 to the middle of 1975 this surplus grew from $9 billion to $11 billion. The operating deficit reached a peak of $5 billion (annual rate) in the first quarter of 1975, in spite of progressive increases in the full-employment surplus during 1974–75. By the third quarter, however, the operating deficit was eliminated after the economic recovery had begun. Toward the end of 1975, State and local governments had a small operating surplus, the first such surplus since late 1973 when the unemployment rate was less than 5 percent.

The swing in the fiscal position of State and local governments has been much more pronounced and procyclical in the last recession than in earlier ones. Though aided by an unusually large increase in Federal grants of $10 billion from 1974 to 1975, many State and local governments were unprepared for the depth and duration of the last recession and hence were

forced to adjust to new economic and financial realities. They did so by keeping the rate of growth of expenditures well below the rate of growth of potential GNP and by enacting tax increases of over $1 billion.

MONEY AND CREDIT

The monetary trends established in the second half of 1974 continued during the first quarter of 1975 as the economic decline intensified. Short-term interest rates fell sharply, continuing the steep decline that had begun in August 1974. During the same period, the growth in monetary aggregates slowed, with the narrowly defined money stock (M_1) actually declining slightly.

In the second and third quarters short-term rates of interest and the monetary aggregates exhibited behavior that is typical around a business cycle trough. Thus the monetary aggregates accelerated sharply just before the turnaround in production that started in April, and they continued to grow rapidly throughout the second quarter. Short-term interest rates reached a trough in June, shortly after the recovery had begun, and then rebounded fairly sharply in the third quarter.

However, neither of these patterns was sustained. Short-term interest rates peaked in September and by December had fallen back to their May levels. The growth in the monetary aggregates, which had fallen off sharply in the third quarter, remained sluggish through the end of the year. In spite of this return to patterns reminiscent of the first quarter of the year, however, GNP continued to grow rapidly from the third to the fourth quarter of the year.

MONETARY AGGREGATES

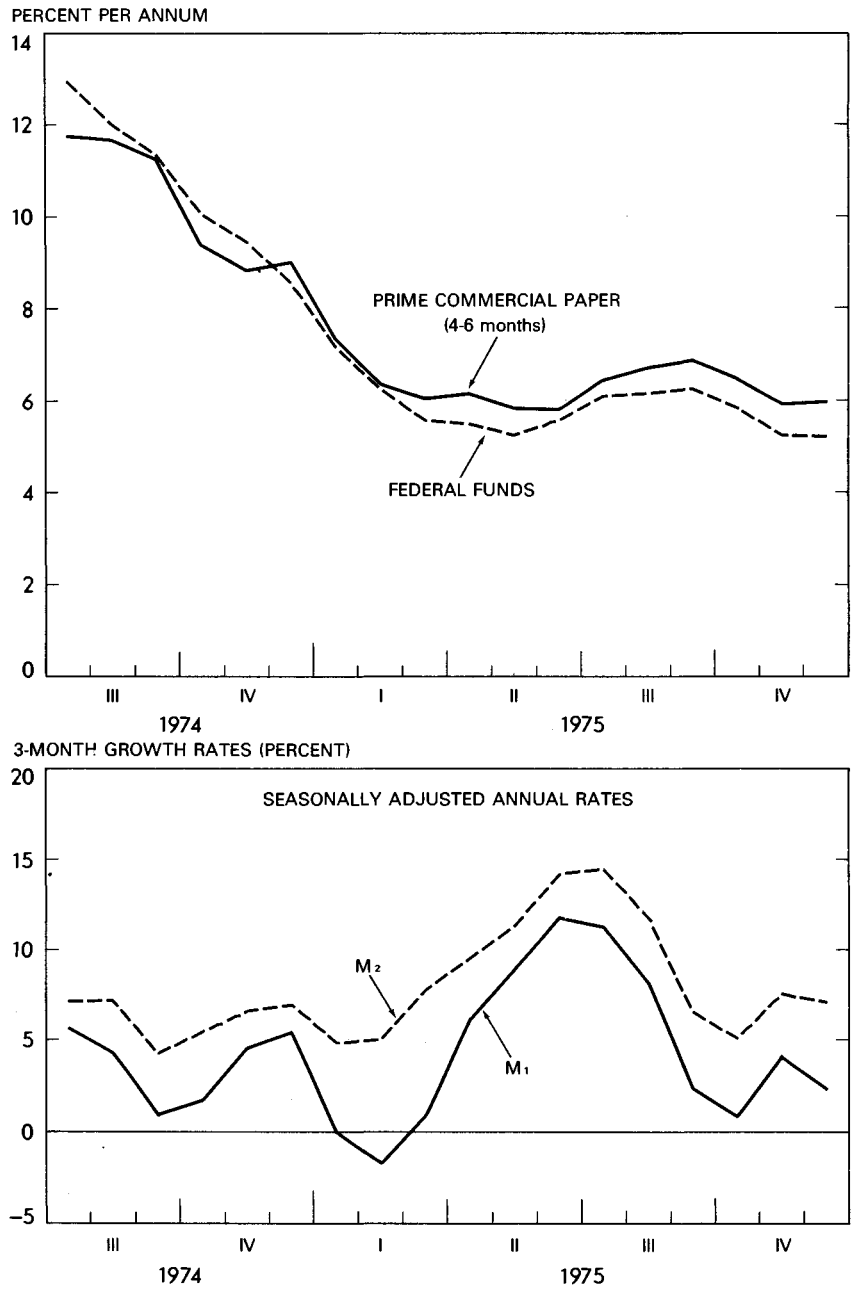
The steep decline in output in the first quarter of 1975 contributed to a significant slowdown in the rate of growth in the monetary aggregates. The decelerations show up even in 3-month growth rates (Chart 1). The rate for M_1 turns negative in February, while that for M_2 drops by over 2 percentage points from December 1974 to January 1975.

In the second quarter of 1975 this pattern was reversed. The money stock increased strikingly as the Treasury paid out nearly $10 billion in special tax rebates and special payments to certain social insurance recipients. The Federal Reserve did not move to offset the large increase in the money stock, and the aggregates expanded at substantial and accelerating rates. From the end of the first quarter to the end of the second, M_1 grew by 11.7 percent per annum, while M_2 advanced at a 14.1 percent annual rate.

During the third and fourth quarters of 1975 nominal GNP increased at a rapid rate as the recovery progressed. However, the fast growth in the monetary aggregates typical of the early stages of previous recoveries was not sustained this time. In fact monetary growth decelerated sharply in the second half of the year, exactly at the time that income was accelerating. Growth in velocity hence accounted for a larger share of the increase in nominal GNP than has been the case at comparable stages of the

Chart 1

Interest Rates and Monetary Growth



SOURCE: BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

last four postwar recessions. Moreover the large increase in velocity in the fourth quarter occurred when short-term rates of interest were actually falling.

Over the third quarter M_1 grew at a 2.3 percent annual rate, M_2 by 6.5 percent. These represent significant drops from the corresponding rates for the 3 months before: a decline of 9.4 percentage points in the M_1 growth rate, 7.6 points in the M_2 growth rate. These decelerations were large enough that the growth rates of the two aggregates for the 6-month period from March to September fell within the Federal Reserve's prescribed ranges, despite the fact that in May and June the aggregates had grown well above the prescribed ranges.

The growth in the aggregates did not recover significantly in the fourth quarter of 1975, however. From September to December, M_1 grew at a 2.3 percent annual rate, M_2 by 7.0 percent. Because of this persistence of sluggish monetary growth in the fourth quarter, growth in the aggregates for all of 1975 remained moderate. From the fourth quarter of 1974 to the fourth quarter of 1975, M_1 grew by 4.5 percent, M_2 by 8.7 percent. Despite the fact that 1975 was partly a recovery year, the growth in M_1 was somewhat lower than the 5.2 percent rate recorded in the recession year 1974, while the growth in the broader definition of money, M_2, was only a percentage point higher than in 1974.

THE MONEY AND BOND MARKETS

In early 1975, short-term interest rates continued the sharp decline of the last half of 1974, reflecting weak short-term credit demands and reduced inflationary expectations. Yields on new issues of 3-month Treasury bills declined 2 full percentage points from December 1974, reaching a low point of 5.2 percent in June 1975. Over this same period, yields on 4- to 6-month prime commercial paper fell from 9 percent to 5.8 percent.

During the summer short-term rates rose significantly and monetary growth decelerated. Bill rates were near 6½ percent in August and September; commercial paper rates peaked at 6.9 percent in September. This rise in interest rates following a turnaround in business activity was completely in keeping with the behavior of interest rates at comparable stages of previous recoveries. In that sense it was not unexpected, but in another sense it was. In previous recoveries the rise in short-term rates of interest has been associated with a rising private demand for credit. In the third quarter of 1975, however, private demand for credit remained relatively weak despite the rise in output, in part because inventories continued to be liquidated. It is therefore hard to argue that interest rates rose in the third quarter because of the quickening pace of economic activity.

A second explanation is the sharp decline in monetary growth in the third quarter. But if that is the reason, why did the decline in interest rates moderate in the second quarter when the monetary aggregates accelerated sharply? Moreover, the slow growth in the aggregates during the summer

may have represented the winding-down of a temporary buildup in cash balances due to the rebates, and if so, it should not have put upward pressure on interest rates. Finally, if slow money growth explains the rise in interest rates in the third quarter, how are slow money growth and falling interest rates in the fourth quarter to be reconciled?

A third explanation is that the sharp increase in the CPI in June and July caused inflationary expectations to be revised upward, which in turn led investors to demand higher nominal rates of interest. This reasoning can also explain the reversal of rates in the fourth quarter: the slow rate of price rise in August and a return to the more moderate rates of inflation of the first half of the year led inflationary expectations to be revised back down again.

Rates of interest on long-term securities were much more stable than short-term rates, as is typically the case. Moody's Aaa corporate bond yield, which stood at 9.27 percent in October 1974, declined only to 8.62 percent in February 1975 and fluctuated slightly below 9 percent for most of the rest of the year. A large volume of new issues of long-term corporate debt in the first half of 1975 helped to hold up long-term yields. Because the drop in long rates from their 1974 highs was much less than the fall in short rates, the large premium of short over long rates that had developed in the summer of 1974 was reversed. In July 1974, the 4- to 6-month commercial paper rate was 300 basis points above Moody's Aaa corporate bond yield. In October of last year it was nearly 240 basis points below.

Yields on municipal bonds also displayed a noticeable upward trend for most of the year, although they too fell at year-end. Events in the municipal bond markets were dominated by the financial difficulties of New York City. The uneasiness created by the New York situation raised a general question about the solvency of State and local governments and agencies in the minds of many investors. As a consequence the yields on prime municipal bonds rose moderately relative to both U.S. Government issues and high-grade corporate bonds from June to November, as investors demanded increased risk premiums to buy municipals. Much greater yield increases developed for less highly rated municipals.

Municipal bond markets became more orderly after the November 26 announcement of the President's program of conditional loans to New York City. The spread between interest rates on prime municipal bonds and high-grade corporate bonds promptly returned to approximately what it had been during the summer. However, the yield spread between prime and medium-grade municipal bonds remained at the high levels reached during the New York crisis (roughly 85 basis points), reflecting continued concern by investors about the credit worthiness of some issuers.

OTHER DEVELOPMENTS IN FINANCIAL MARKETS

Continued economic uncertainty, coupled with declines in market rates of interest, contributed to strong inflows of funds into time and savings accounts at commercial banks and into nonbank thrift institutions in 1975.

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This trend was accentuated in early summer by the deposit of tax rebate checks and one-time social security payments. From December 1974 to July 1975 commercial bank time and savings accounts grew at an annual rate of 15 percent, while deposits in thrift institutions increased at nearly an 18 percent rate (Table 9). In the last 5 months of 1975 these flows abated somewhat, especially in the early fall when short-term rates reached their peaks for the year. The inflows stepped up again, however, as rates receded in the autumn. Growth for the last 5 months of the year was at an 8.6 percent annual rate for time and savings deposits in commercial banks and 12.9 percent for deposits in nonbank thrift institutions.

Commercial and industrial loans at commercial banks declined by $7.8 billion from January to June as business inventories were liquidated at unprecedented rates, market yields fell more sharply than bank lending rates, and firms attempted to reduce short-term debt and improve liquidity positions. The decline in total loans was even larger, $11.4 billion. The figures show modest growth in loans after June. However, this may be somewhat misleading because part of the increase represented bankers' acceptances, which are more like short-term money market instruments than loans.

Paralleling the large decline in loans was the sharp runoff of large negotiable certificates of deposit (CDs). From January to August large CDs fell by $14.7 billion, a 26 percent decline at an annual rate. With loan demand weak and deposit inflows strong, commercial banks increased their investments, principally in Treasury securities, by $33.8 billion from January to December. The shift toward investments and away from loans, and the substitution of other time and savings deposits for large CDs have produced

TABLE 9.—*Selected components of commercial bank credit and time and savings deposits, 1974–75*

[Billions of dollars; seasonally adjusted]

Month	Commercial bank credit[1]		Bank time and savings deposits[2]		Deposits at nonbank thrift institutions[2]
	Commercial and industrial loans[3]	Holdings of U.S. Government securities	Large CDs	Other	
1974: July	178.0	55.9	83.6	319.2	360.0
December	182.6	48.8	90.3	329.1	368.2
1975: January	184.1	48.7	92.7	333.2	371.5
February	182.5	53.2	92.1	336.7	375.3
March	180.9	58.5	89.8	340.1	380.8
April	180.5	64.0	88.4	343.1	386.8
May	179.1	68.2	85.5	347.4	392.4
June	176.3	72.4	84.1	353.1	399.2
July	177.6	73.4	82.1	357.0	405.4
August	177.5	75.6	78.0	359.4	410.5
September	176.4	77.1	79.1	361.7	414.8
October	177.9	75.1	81.3	364.6	419.0
November	178.9	76.3	81.4	368.6	423.1
December[4]	177.7	77.9	83.3	371.2	426.4

[1] End of month data.
[2] Averages of daily figures.
[3] Excludes loans sold.
[4] Preliminary.

Source: Board of Governors of the Federal Reserve System.

a significant restructuring of bank balance sheets. Banks were clearly far more liquid by the end of 1975 than they were at the outset.

The stock market registered a sizable gain during 1975, but still remained substantially below the high levels achieved in the winter of 1972–73. Standard and Poor's index of 500 common stocks rose 38 percent from December 1974 to July 1975, fell about 8½ percent from July to September, but recovered about half of this loss by December.

RANGES FOR MONETARY GROWTH RATES

In May 1975 the Federal Reserve announced ranges of tolerance for the growth rates of M_1, M_2, M_3, and the bank credit proxy for the coming year. This step is potentially quite significant for promoting greater economic stability.

In the first place, explicit ranges of tolerance for monetary growth rates may reduce uncertainty about one important aspect of monetary policy: the growth in the money supply, however defined. By announcing ranges of tolerance, the Federal Reserve has indicated that it does not intend to permit growth rates of the aggregates to deviate too far or too long from a longer-range path.

The new policy may also affect inflationary expectations. By choosing ranges which encompass moderate rates of growth for the aggregates, the Federal Reserve signaled its intention to contain the rate of inflation. Indeed, the Federal Reserve has indicated on several occasions that even the present ranges of tolerance for monetary growth cannot be continued indefinitely if further progress is to be made against inflation.

The base for measuring the rate of growth of each aggregate was initially its March average. Because month-to-month movements in the aggregates have a large random component, the base was subsequently changed to the second-quarter average. A further revision was made in November when the Federal Reserve updated the base to the third-quarter average. In every case, the period for which the ranges were to apply was a year. Hence the ranges currently apply through the third quarter of 1976.

The range for M_1 growth rates has been 5–7½ percent since the ranges were announced in May. For M_2, the range is currently 7½–10½ percent, that for M_3, 9–12 percent. The range for the credit proxy is currently 6–9 percent.

As has been pointed out by the Federal Reserve, the revisions in the base have had the effect of raising the ranges of tolerance, measured from the original March base, for all the aggregates except the credit proxy. The reason is that all of the aggregates except the credit proxy grew near the upper end of the ranges between each of the revisions. Since the third-quarter base was established, however, all of the aggregates have grown below the announced ranges.

CONSUMER INCOME AND SAVING

Real disposable personal income increased 3.7 percent during 1975, after a decline of 3.1 percent during 1974 that was about three times more severe than the decline in any other postwar recession. After decreasing slightly in the first quarter, real disposable income grew at a 5.9 percent annual rate during the last 3 quarters of 1975. The increase was due to the real growth of GNP after the first quarter and the tax reductions stemming from enactment of the Tax Reduction Act of 1975. This act provided $8.1 billion in cash rebates and lowered withholding by $7.8 billion for the year as a whole, although reduced withholding did not begin until May 1. The act also included $1.8 billion in one-time $50 payments to social security and certain other pension recipients.

The composition of personal income growth shifted as the economy moved from recession into recovery in 1975 (Table 10). Transfer payments rose rapidly in the first half of the year, while income gains in the second half were largely due to increases in wages and salaries. At an annual rate, transfer payments rose $12.3 billion in the first quarter of 1975, $11.8 billion in the second quarter, and $3.1 billion in the third. About half of the second-quarter increase was due to the one-time $50 social security payments, whose later absence was largely offset by a $6.7-billion cost-of-living increase for social security recipients in the third quarter. At an annual rate, wages and salaries increased by only $4.0 billion in the first half of 1975 and then increased by $42.9 billion in the last half of the year as the recovery progressed. Proprietors' income was affected most by changes in farm income, which fell sharply in the first half and rebounded in the second half.

For the year as a whole, personal saving averaged 8¼ percent of disposable income, higher than the 7 percent average from 1969 to 1973 and the 6 percent average from 1960 to 1969. The saving rate rose sharply to 9.9 percent in the second quarter, largely because of the tax rebates and one-time transfer payments. Many consumers apparently made their spending decisions on the basis of longer-run expected income, and so a large portion of this temporary increase in income was saved. If the 7 percent saving rate which was the norm over the preceding cycle had applied in the second quarter of 1975, consumer expenditures would have been about $32 billion higher than they actually were. This suggests that roughly 80 percent of the one-time Federal payments, including both the rebates and the social security bonuses, was saved during the quarter. In the last half of 1975 the saving rate averaged 8.0 percent.

While data limitations make empirical analysis difficult, a number of hypotheses have been advanced to explain the generally higher saving rates of the 1970s relative to those of the 1960s. One set of explanations has focused on the effects of real household net wealth on personal saving rates. If consumer spending depends positively on wealth, a fall in wealth relative to

TABLE 10.—*Changes in personal income measures, 1974–75*

[Percent change; seasonally adjusted annual rates]

Income measure	1974	1975[1]	1975			
			I	II	III	IV[1]
Personal income[2]	9.5	7.9	3.0	6.9	12.9	10.9
Labor income	9.3	5.5	−.6	3.8	10.5	12.0
Proprietors' income[3]	−7.2	−2.1	−17.8	−4.9	57.1	−4.5
Property income[4]	15.3	10.1	5.6	4.3	12.0	17.7
Transfer payments	18.4	24.6	36.6	31.5	7.2	6.6
Disposable personal income:						
Total, current dollars	8.9	9.5	3.2	24.5	2.0	10.4
Total, 1972 dollars	−1.5	1.6	−2.8	19.7	−5.2	4.8
Per capita, 1972 dollars	−2.1	.8	−3.7	18.8	−6.3	4.0

[1] Preliminary.
[2] Includes personal contributions for social insurance, not shown separately.
[3] With inventory valuation and capital consumption adjustments.
[4] Rental income (with capital consumption adjustment), dividends, and personal interest income.

Source: Department of Commerce, Bureau of Economic Analysis.

income will reduce the average propensity to consume and hence raise the saving rate. One important difference between the 1960s and the 1970s has been the much higher inflation rate in the later period. If the higher inflation rate produced a decline in real household net wealth, saving rates may have been raised. Corporate equities are one important component of household financial assets, and it is revealing to examine their behavior during the 1970s.

In 1969, Standard and Poor's composite price index for 500 common stocks averaged 97.8. The index peaked in early 1973 at 120.2 and declined more or less continuously through the end of 1974. Despite a rise during 1975 the index stood at 90.2 at year-end, 8 percent below its level in 1969. By contrast, the price level rose continuously throughout the period: the consumer price index rose 47 percent between 1969 and the end of 1975. Taken together, these data imply that the real value of equities declined 37 percent from 1969 to the end of 1975.

Another explanation of the higher saving rates during the 1970s is that high and variable inflation and unemployment rates have created an unusual degree of uncertainty for consumers. This uncertainty may have reduced expected real income and hence raised saving rates.

CONSUMER EXPENDITURES

Real consumption declined to a trough in the fourth quarter of 1974, 2.8 percent below its previous peak. In the fourth quarter real outlays for nearly all categories of consumer goods fell sharply. This was a major reason for the involuntary buildup of inventories that depressed production in early 1975. Although the severity in the total decline of consumption during the recession was tied to the extraordinary decline in real disposable income from late 1973, the decline in demand at the end of 1974 was unexpectedly large. Judging from monthly retail sales data, the pace of con-

sumption began to increase early in the first quarter of last year and remained strong through midyear. During the last half of the year the growth of consumption slowed somewhat. From the fourth quarter of 1974 to the fourth quarter of 1975 real consumption rose 3.9 percent, while the 1975 average was 0.9 percent above the 1974 average. Not surprisingly, during this cycle purchases of durable goods declined most severely and showed the sharpest recovery, while nondurables fell off less and most services were fairly stable.

Durables fell 17 percent from their prerecession peak and then rose 11 percent during last year. This decline was much greater than in any previous recession, while the magnitude of recovery was representative of past cycles. Automobile sales dominated both the sharp decline in durables in late 1974 and their recovery during 1975. New car purchases collapsed in the fourth quarter of 1974, declining by 30 percent. Some of the sharpness of the drop in late 1974 reflected a concentration of auto sales in the third quarter of 1974, when consumers increased purchases of 1974 models to avoid the large price increases announced for the 1975 models. The impact of the price increases was accentuated by several factors. The list price increases were exceptionally large because of several factors, including newly required safety and air pollution control equipment. In addition, the price increases were concentrated on smaller and medium-sized models, which have the greatest price sensitivity. Furthermore the increases followed a series of extraordinary rises in the course of the 1974 model year.

The auto manufacturers introduced sizable rebates as well as other discounts in mid-January of last year. These remained in effect, for the most part, through March. Sales of domestic new cars improved from a seasonally adjusted annual rate of 5¾ million cars in December 1974 to a 7¼-million rate in February 1975. After the end of the rebate period in late March, sales fell back to about 6 million. Both the first-quarter surge and the second-quarter slowdown in sales were dominated by movements in the sales rate of small domestic cars, which were the principal beneficiaries of the rebate discounts of the first quarter. Sales followed a moderately upward trend during the balance of the year, reaching an annual rate of about 8 million by the fourth quarter.

Real outlays for nondurable goods increased by more than 4 percent during 1975, after a reduction of nearly 3 percent during 1974. Previous postwar declines exceeded 1 percent only once, during the 1958 recession. Reduced real outlays for clothing, food, house furnishings, and miscellaneous items dominated the fall-off, while increases in food and clothing led the recovery in nondurables. About 11 percent of the total decline in real consumption of nondurables from the third quarter of 1973 to the last quarter of 1974 was a result of smaller energy purchases.

Personal consumption expenditures for energy, in constant dollars, rose 4.0 percent last year over 1974, but were still 1.3 percent lower than in 1973. By the end of 1975 real consumer outlays for gas and electric utility

services were slightly higher than their peak in the third quarter of 1973, while real outlays for gasoline and motor oil declined by about 2½ percent over the same period. On the other hand, real outlays for fuel oil and coal declined over 30 percent from their peak in the last quarter of 1972 to the end of 1975, partly because of warmer than average weather.

BUSINESS FIXED INVESTMENT

Business fixed investment was almost unchanged in 1975 in current dollars but was down 12 percent in real terms. This drop in real investment outlays reflected the combination of recession and inflation in 1974, which lowered capacity utilization and operating profits and raised the replacement cost of plant and equipment. In addition, the declines in common stock and bond prices through most of 1974 depressed the market values of corporate stocks and bonds to a level below the replacement cost of the underlying assets, thereby discouraging investment expenditures.

Real investment outlays fell rapidly through the second quarter of 1975. In the third quarter a sharp rise in car and truck purchases largely offset declines in other producers' goods, while nonresidential construction was unchanged. By the fourth quarter there were widespread increases in purchases of producers' durable equipment.

At the start of 1975 several industries, notably materials producers, planned year-to-year increases in real investment. There were real increases in investment by the steel, petroleum refining, and mining industries, while investment by the paper and chemical industries was about unchanged. These are all industries in which capacity constraints existed in 1973. This investment strength is significant because all of the manufacturing industries in the group, except petroleum refining, were experiencing lower rates of capacity utilization early in 1975 than the average for manufacturing as a whole. Nonelectrical machinery, another industry in which some shortages were apparent in 1973, slowed its rate of real investment somewhat in 1975. This industry had increased real investment substantially in 1974, however. Other industries reduced their investment as utilization of capacity dropped last year. Among these were electrical machinery, autos and trucks, textiles, and rubber manufacturing.

Improving profits and sales after the first quarter of 1975 were reflected in new orders for nondefense capital goods. From their trough in the first quarter, new orders rose 6 percent to the third quarter and then grew more slowly in the fourth. However, indicators of planned commercial and industrial construction showed slow growth from their early 1975 lows.

RESIDENTIAL INVESTMENT

The annual rate of total private housing starts increased to 1.4 million units by the fourth quarter of last year from a 1.0-million rate in the fourth quarter of 1974. While both single and multifamily starts increased over 40 percent during 1975, the share of multifamily starts in the total remained

below the average of the early 1970s. Real residential investment, which lags housing starts by 1 or 2 quarters, bottomed out in the first half of 1975 and then began to rise appreciably, from $34 billion in the second quarter to $41 billion in the fourth. Nevertheless for 1975 as a whole real outlays were 18 percent below their 1974 level. A discussion of the factors affecting residential investment appears in Chapter 1.

INVENTORY INVESTMENT

During the first 3 quarters of 1974, firms increased their inventories in response to earlier shortages and expectations of future price and sales increases. The ratio of nonfarm inventories to final sales rose to 0.261 in the third quarter of 1974 from a level of 0.244 a year earlier. In the fourth quarter the decline in real nonfarm business final sales at an annual rate of 11.4 percent produced a further, largely involuntary, inventory accumulation. The nonfarm inventory-sales ratio increased to 0.271 in the fourth quarter, the highest level of the postwar period. Of the $9.0-billion annual rate increase in real nonfarm inventories in the fourth quarter, $2.6 billion was due to increased automobile inventories.

In response to the large accumulation of inventories, purchases from manufacturers were reduced. As a result real retail and wholesale trade inventories declined at an annual rate of $13.8 billion in the first quarter of 1975, including a $5.5 billion annual rate decline in new car stocks. Manufacturing inventories were not reduced rapidly until the second quarter. This pattern, in which changes in trade inventories lead changes in manufacturing inventories, is a typical cyclical one (Table 11).

The real nonfarm inventory decumulation slowed to a $3.3-billion annual rate in the third quarter. Inventory reductions continued in the fabricated metals and machinery sectors and began in the primary metals sector, where

TABLE 11.—*Changes in business inventories, 1974–75*

[Billions of 1972 dollars; seasonally adjusted annual rates]

Type	1974 IV	1975			
		I	II	III	IV [1]
Total business inventories	7.6	−19.0	−20.7	−0.8	0.2
Farm	−1.5	−1.2	−.1	2.5	3.7
Nonfarm	9.0	−17.9	−20.6	−3.3	−3.5
Manufacturing	7.0	−3.0	−9.2	−5.4	−.8
Durable goods	4.3	.2	−4.5	−6.5	−3.6
Nondurable goods	2.7	−3.2	−4.7	1.0	2.8
Wholesale trade	1.5	−3.5	−5.6	−.8	−2.8
Durable goods	2.2	−.4	−2.4	−1.6	−1.2
Nondurable goods	−.7	−3.1	−3.2	.8	−1.6
Retail trade	.2	−10.3	−4.5	3.6	−.1
Durable goods	4.5	−10.3	−3.0	3.7	−.8
Nondurable goods	−4.3	−.0	−1.5	−.1	.7
All other	.3	−1.1	−1.2	−.6	.2

[1] Preliminary.

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

Source: Department of Commerce, Bureau of Economic Analysis.

inventory accumulation had continued through the second quarter. In most other industries the inventory correction was largely ended as rising sales and the preceding inventory decumulation brought inventories closer to desired levels. The ratio of nonfarm inventories to final sales fell to 0.254 in the third quarter of 1975, the lowest level since the first quarter of 1974. The ratio declined further in the fourth quarter, largely as a result of accelerating final sales.

NET EXPORTS

On an NIA basis nominal net exports rose by $14.2 billion during 1975. Real net exports increased $6.9 billion, the result of a 2.4 percent decline in real exports and an 11.7 percent decline in imports. Both real imports and real exports began to increase in the second half of the year. Most of the increase in real net exports reflected shifts in merchandise trade flows, which were dominated by cyclical developments here and abroad.

On a balance of payments basis the volume of merchandise imports fell at an annual rate of 13.8 percent between the fourth quarter of 1974 and the third quarter of 1975. This fall largely mirrored the inventory decumulation which characterized most of 1975. For example, imports of industrial supplies other than petroleum, which are particularly sensitive to inventory shifts, fell at an annual rate of almost 40 percent during the first 3 quarters of 1975. Imports of finished goods also reflected inventory shifts, especially in the case of automobiles, and the weakness of final demand. Toward the end of the year, as the inventory adjustment tapered off, the volume of imports, particularly of consumer goods, began to increase.

Export volume remained stable during the year despite the recession in most industrial countries. This stability resulted mainly from a rise in agricultural exports, which partly offset a decline in other merchandise exports. Exports of capital goods stabilized at a rather high level, partly because delivery of these goods tends to lag behind the cycle and partly because shipments to oil-producing countries increased. In addition, the relative improvement in price competitiveness resulting from the exchange rate changes that occurred in earlier years helped to keep export and import flows above their cyclically expected level. This fact was particularly noticeable in the exports of consumer goods, which had been increasing steadily from 1972 through 1974 and which remained fairly stable in the first 3 quarters of 1975 despite depressed consumption demand abroad.

In the services category of the balance of payments accounts, services other than investment income showed a 5.9 percent annual rate of growth from the fourth quarter of 1974 to the third quarter of 1975. Receipts of investment income from other than direct investments abroad declined slightly during the same period. On the other hand, income from direct investments abroad dropped sharply: the average for the first 3 quarters of 1975 was roughly one-half the average of 1974. This drop is tied to what may be a structural shift in favor of self-financing by overseas entities of U.S. firms.

GOVERNMENT PURCHASES

Real Federal purchases of goods and services declined 2.4 percent during the year ending in the second quarter of 1975. In part, this resulted from a rate of inflation that was higher than expected, and thus meant that budgeted levels of nominal spending were translated into lower real purchases. As inflation slowed, real Federal purchases rose in the second half of last year.

Real State and local government purchases increased 2.4 percent last year, a somewhat slower rate than the average of the early 1970s, and a much slower rate than the average of the postwar period. The slowing of the rate of growth in the early 1970s below its postwar average was primarily the result of longer-run factors which are described in Chapter 1. In the last 2 years, the depressing effects of the recession on receipts and the difficulties in borrowing encountered by some jurisdictions further reduced the rate of growth of real outlays.

The growth of State and local purchases was sustained in 1975 by a large rise in Federal grants-in-aid. The increase in grants contributed nearly half the increase in total receipts—$10.3 billion in a total increase of $23.0 billion—even though grants account for less than one-quarter of total receipts.

PRICES, WAGES, AND PROFITS

PRICES

Inflation moderated in 1975 from the near-record rates of 1974 but remained very high by any other historical standard (Table 12). The slowing of inflation in early 1975 was due both to the sharp reduction in aggregate demand and to smaller increases in energy and food prices. From the fourth quarter of 1974 to the fourth quarter of 1975 the implicit price deflator for GNP rose 6.4 percent. This rate was 1.1 percentage point less than the rate during 1973 and only slightly more than one-half the rate during 1974. The easing of inflation in 1975 was about the same when measured by the deflator for nonfarm business gross product, which increased 7.0 percent during 1975 compared to 12.6 percent during 1974. The deflator for farm output declined 3.1 percent during 1975, largely as a result of the sharp downturn of farm product prices in the first quarter.

The behavior of some final demand deflators in 1975 is particularly noteworthy. After increasing approximately 27 percent in 1974, the deflator for exports rose only 10 percent in 1975. This deceleration reflected the sharply reduced world prices of food grains, feed grains, and oilseeds in 1975. Although the price deflator for the fixed investment component of GNP rose at a 16 percent annual rate in the first quarter, it slowed to less than 6 percent during the last half of the year. The persistence of high inflation rates in investment goods during the first quarter reflected sharp increases in prices of producer finished goods, particularly machinery and transportation equipment, at the end of 1974 and early in 1975, as well as rising residential construction costs.

TABLE 12.—*Changes in selected price measures, 1973–75*

[Percent change; seasonally adjusted annual rates]

Price measure	1973 IV to 1974 IV	1974 IV to 1975 IV [1]	1975			
			I	II	III	IV [1]
GNP implicit price deflator:						
Total GNP	11.4	6.4	7.8	4.3	7.1	6.5
Business	11.6	6.7	9.2	4.3	7.2	6.1
Nonfarm	12.6	7.0	12.2	3.3	5.9	6.8
Farm	−7.5	−3.1	−45.9	29.4	36.2	−7.5
Consumer price index:						
All items	12.1	7.3	8.0	6.0	8.5	6.7
Food	12.0	7.1	6.1	2.8	12.4	7.4
Directly purchased energy [2]	25.5	11.7	6.2	12.2	21.7	7.5
All other items	10.9	6.9	9.8	6.2	5.6	6.3
Wholesale price index:						
All commodities	22.4	4.3	−4.4	4.4	8.2	9.6
Farm products	−.1	4.3	−34.2	24.5	30.7	10.2
Processed foods and feeds	21.8	−2.0	−17.0	−.7	11.1	.4
Industrial commodities	27.1	5.9	5.5	2.2	5.8	10.5
Energy [3]	57.4	12.7	3.9	9.1	22.9	15.5

[1] Changes in GNP deflators are preliminary.
[2] Gas and electricity, fuel oil and coal, and gasoline and motor oil.
[3] Fuels and related products and power.

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

Consumer Prices

The quarterly movements of the CPI roughly paralleled those of the GNP deflator in 1975. During the first 6 months consumer prices increased at approximately half the 12 percent annual rate during the last 6 months of 1974. In the third quarter of 1975 the rise in the CPI accelerated to 8.5 percent, largely because of increases in food and energy prices, but then moderated somewhat in the fourth quarter. Prices increased in the second half of 1975 at an annual rate of about 7 percent, considerably less than the rate experienced in 1974.

Energy prices in the CPI accelerated rapidly in the first 3 quarters of 1975 before slowing in the fourth quarter. The rise in energy prices reflected the effects of the imposition of import fees on crude oil, a 60-cent import fee on refined petroleum products, and the pass-through of higher costs of energy materials by utilities. Nevertheless the 12 percent rise in the energy price component of the CPI for the year as a whole was much less than the 29 percent advance in 1974. Petroleum products remained under price controls in 1975, although authority for economy-wide controls had expired in 1974. Separate authority for petroleum price controls was extended temporarily in September and November 1975 and then for 5 years in December.

Among CPI components, food prices showed the most significant deceleration in the first half of 1975, slowing from an annual rate of increase of 17.3

percent in the fourth quarter of 1974 to a 2.8 percent annual rate by the second quarter of 1975. This behavior reflected sharply reduced prices at the wholesale level. As a result of increases in the price of meats, especially pork, and of fresh vegetables, the CPI food component accelerated in the third quarter. In the fourth quarter, increases in food prices were smaller than in the third, but were still above the average increase in the first half of the year. Although the rate of increase in food prices slowed in 1975 from the double-digit rates of the previous 2 years, it was more than twice as high as the average yearly increase since 1947.

Wholesale Prices

Average prices of industrial commodities increased 5.9 percent from the fourth quarter of 1974 to the fourth quarter of 1975, less than one-fourth the 27 percent rate during 1974. The price deceleration was evident in the commodity groups comprising 95 percent of the industrial commodity index. Wholesale energy prices rose 57 percent during 1974, but only 13 percent during 1975. Price movements of industrial commodities during 1975 generally coincided with the dominant economic pattern of recession in the first half and recovery in the second half. Seven of the 13 major commodity groups showed seasonally adjusted price declines in the first or second quarter; prices in the metals and textile groups fell in both quarters. The industrial commodity price index registered its lowest rate of increase in the second quarter. The rate then more than doubled in the third quarter and increased further in the fourth quarter to a 10.5 percent annual rate. Such wide fluctuations in the rate of increase of wholesale industrial commodities are not unusual, particularly near a cyclical turning point.

After increasing about 12 percent during 1974, the index of farm products and processed foods and feeds rose only 0.3 percent during 1975. Following a decline in the first quarter, this index rose in the second and third quarters because of reduced supplies of some livestock products and unexpectedly high foreign demand for grains. In the fourth quarter, however, a record U.S. grain crop put downward pressure on wholesale food prices.

Nonfood crude materials prices increased 1 percent during 1975 after a 31 percent rise during 1974 and a 15 percent average annual increase for the past 5 years. These prices, however, fluctuated from month to month during the year.

WAGES

The rate of increase in nominal wages slowed from 1974 to 1975. The average hourly earnings index of all production workers in the private nonfarm economy, adjusted to exclude the effects of interindustry shifts in employment and overtime in manufacturing, decreased from an annual rate of 9.3 percent during 1974 to 8.1 percent during 1975. Real wages, which had been declining since the third quarter of 1973, began to rise in

the first quarter of 1975. For the last 3 quarters of 1975 real wages rose at a 2 percent annual rate. The large decrease in real wages in 1974 was partly the result of a much greater rate of inflation than was expected. The sharp rise in unemployment from late 1974 to mid-1975, however, probably had a depressing effect on nominal wage rates in 1975.

Wage increases for the 11 percent of the labor force who are covered by major collective bargaining agreements (covering 1,000 or more workers) exhibited a similar pattern (Table 13). In the second and third quarters of 1975 the effective change in wages was slightly less than that of a year earlier. The decline in the effective wage rate change relative to 1974 was not due to slower increases in first-year wage changes for new contracts, but to a substantial decrease in the proportion of workers under major contracts expiring in 1975. Wage increases due to escalator provisions were larger in 1975 than in 1974.

A broader measure of labor costs, compensation per employee hour in the private nonfarm sector, covers all employees and includes supplements to wages and salaries. The pattern of compensation per hour during the last 2 years has also been similar to that of the adjusted hourly earnings index.

TABLE 13.—*Changes in major collective bargaining settlements, 1973–75*

[Percent]

Type of change and industry group	1973	1974	1975[1]	1974				1975[1]			
				I	II	III	IV	I	II	III	IV
Wage settlements:											
First-year wage change (annual rate)	5.8	9.8	10.2	7.1	9.2	11.2	10.3	12.5	9.8	10.0	11.5
Percent of workers covered by current quarter settlements[2]	52	50	28	7	18	19	6	5	6	8	2
Effective wage rate change:[3]											
Total effective changes	7.0	9.4	8.6	1.3	3.0	3.4	1.6	1.7	2.1	3.3	1.5
Adjustment resulting from:											
Current settlement	3.0	4.8	2.7	.3	1.6	2.0	.8	.6	.7	.7	.5
Prior settlement	2.7	2.6	3.7	.6	.9	.9	.3	.6	1.1	1.5	.5
Escalator provision	1.3	1.9	2.2	.3	.5	.5	.5	.4	.3	1.0	.4
Manufacturing	7.3	10.3	8.4	1.4	3.5	3.0	2.0	1.8	2.1	2.8	1.6
Nonmanufacturing, excluding contract construction	7.0	8.3	9.1	1.3	1.7	3.9	1.4	1.9	1.2	4.2	1.7
Construction	4.8	9.1	8.1	.6	4.3	3.2	.8	.8	4.5	2.1	.6
Transportation and public utilities	7.4	7.6	9.5	1.3	1.0	4.7	.6	1.7	.8	5.2	1.7
Wholesale and retail trade	6.3	10.3	9.1	1.4	3.7	3.1	1.9	2.4	2.1	3.0	1.5
Services	6.4	7.0	6.3	1.0	1.9	2.5	1.6	2.0	.7	2.1	1.4

[1] Preliminary.
[2] Percent of estimated number of workers under major collective bargaining settlements. Individual quarterly data for 1975 are based on preliminary estimates that do not add to the current total for the year.
[3] 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.

PRODUCTIVITY

Labor productivity in the private nonfarm sector increased 4.3 percent during 1975 after dropping 3.0 percent during the previous year. Productivity declined at a 0.5 percent annual rate in the first quarter of 1975 and then increased at an annual rate of 6.0 percent in the following 3 quarters (Table 14). This pattern is typical of business cycles (Table 15), in that labor productivity grows at a low rate or declines in a recession, increases sharply as the recovery begins, and then increases at a slower rate as recovery continues. The data in Table 15 suggest that the magnitude and the duration of the decline in labor productivity in the recent downturn were greater than in other postwar recessions, including the most severe previous recession of 1957–58.

During a downturn in economic activity, firms reduce current production at a rate faster than they reduce hours worked. The reason is that there are costs associated with hiring (or rehiring) and training workers, and some workers on layoff may move to another area, or take a job with another firm in the same area, and not be available when the layoff is over. In addition, a decline in hours of work need not result in a proportionate decline in labor costs, because some employer-paid fringe benefits like health insurance may continue for several months after the start of a layoff. There is, therefore, reluctance on the part of firms to adjust the work force fully during the initial stages of a recession when they are uncertain about the extent and duration of the downturn. This "retained" labor is not necessarily idle but may rather be working at a slower rate or engaging in maintenance work that may increase future output. In the most recent recession the cyclical adjustment of employment may have been slower than is typical because of the great uncertainty during 1974 about the future course of output.

As recovery begins, the currently employed workers return more intensively to production tasks. There is a less than proportionate increase in employment so that output per hour worked increases sharply. As it be-

TABLE 14.—*Changes in costs and productivity in the private nonfarm economy, 1974–75*

[Percent change; seasonally adjusted annual rate]

Quarter	Adjusted average hourly earnings[1]	Compensation per hour	Output per hour	Unit labor costs
1974: I	6.8	8.7	−3.8	13.0
II	10.1	11.6	−1.8	13.7
III	10.7	11.4	−2.9	14.7
IV	9.6	10.9	−3.4	14.8
1975: I	8.6	9.3	−.5	9.9
II	7.5	6.5	8.3	−1.6
III	8.6	8.5	8.7	−.2
IV	7.7	6.7	1.1	5.6

[1] Adjusted for overtime (in manufacturing only) and interindustry shifts.

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.

TABLE 15.—*Quarterly changes in labor productivity in postwar recessions, private nonfarm economy*

[Seasonally adjusted annual rates]

Recession year	Trough quarter [1]	Percent change from previous quarter [2]								
		T–4	T–3	T–2	T–1	Trough	T+1	T+2	T+3	T+4
1948–70 recession years average		1.9	1.3	2.1	3.9	4.0	8.3	3.1	2.2	1.1
1948–49	1949 IV	5.4	3.5	4.6	9.2	−.8	16.2	.0	.5	−.5
1954	1954 III	.0	1.7	2.8	2.0	7.5	2.9	6.2	.0	.7
1958	1958 II	2.0	4.3	2.4	−1.2	9.1	6.1	5.0	.9	2.4
1960–61	1961 I	4.3	−3.4	−1.6	2.1	6.0	8.7	1.0	5.6	4.7
1969–70	1970 IV	−2.0	.3	2.3	7.4	−1.9	7.7	3.1	4.0	−2.0
1974–75 recession	1975 II	−1.8	−2.9	−3.4	−.6	8.3	8.7	1.1	------	------

[1] The following quarters are those designated as cyclical troughs by the National Bureau of Economic Research (NBER): 1949 IV, 1954 III, 1958 II, and 1961 I. Trough quarters of real GNP were used for 1970 IV and 1975 II as NBER has not designated these quarters as cyclical troughs.

[2] Quarters before trough are minus and quarters after trough are plus.

Note.—Data relate to all employees.

Sources: Department of Labor (Bureau of Labor Statistics) and National Bureau of Economic Research.

comes clearer that the recovery is widespread and will be sustained, employers are more willing to incur the costs of expanding employment. Further increases in output are then accompanied by increased hours of work, and measured labor productivity changes converge to the long-term trend rate.

UNIT LABOR COSTS

The change in output per hour was the most important determinant of the change in the unit labor cost of output in 1975 (Table 14). Unit labor costs in the nonfarm economy rose at extraordinary rates during 1974 as productivity declined throughout the year. Severe employment cuts in the first half of 1975 and then sharply rising output in the third quarter raised productivity changes to well above trend. Unit labor costs actually declined in the second and third quarters. Unit labor costs rose 5.6 percent in the fourth quarter as the growth of productivity slowed. This rate of increase of unit labor costs appears to be near the longer-term trend given current rates of increase in wages.

PROFITS OF NONFINANCIAL CORPORATIONS

Although profits before tax declined, some significant measures of corporate profitability improved in 1975 (Table 16). Operating profits—corporate profits with inventory valuation and capital consumption adjustments—increased by 27.7 percent, from $63.2 billion in 1974 to $80.7 billion in 1975. Largely because of increasing prices and decreasing unit labor costs, the share of operating profits in the net product of nonfinancial

TABLE 16.—*Profits of domestic nonfinancial corporations, 1973–75*

[Billions of dollars; seasonally adjusted annual rates]

Item	1973	1974	1975	1975		
				I	II	III
Corporate profits with inventory valuation and capital consumption adjustments	75.9	63.2	80.7	55.3	75.7	92.7
Inventory valuation adjustment	−18.4	−38.5	−11.5	−13.7	−6.6	−9.9
Capital consumption adjustment	1.6	−2.1	−5.6	−4.1	−4.5	−5.9
Profits before tax	92.8	103.8	97.7	73.1	86.8	108.5
Addendum:						
Corporate profits with inventory valuation and capital consumption adjustments as percent of net domestic product	11.1	8.7	10.4	7.6	10.0	11.7

Source: Department of Commerce, Bureau of Economic Analysis.

corporations rose markedly, from 7.6 percent in the first quarter to 10.0 percent in the second, reaching a level higher than the 8.7 percent share for 1974 as a whole. This increase of the profit share accounted for $20.3 billion of the $20.4-billion annual rate increase in profits in the second quarter. In the third quarter, the share increased to 11.7 percent, accounting for $15.1 billion of the $17.0-billion annual rate rise in profits. Another measure of the share of income accruing to capital may be obtained by expressing net interest and operating profits less profits tax liability as a proportion of net domestic product. This share had declined almost continuously from 12½ percent in 1965 to 7 percent in 1974 before increasing rapidly to over 11½ percent by the third quarter of 1975.

Despite a decline in profits before tax of nonfinancial corporations, after-tax profits changed little from 1974 because of the provisions of the Tax Reduction Act of 1975. The act reduced general corporate taxes by $4¼ billion but raised $1¾ billion in new revenues by curtailing percentage depletion and restricting foreign tax credits. The revenue-raising features of the Tax Reduction Act chiefly affected the petroleum industry. The corporate tax reductions helped to reduce the effective total tax rate on domestic nonfinancial corporate profits from 41.1 percent in 1974 to 38.2 percent in 1975.

The recovery of operating profits and rapid disinvestment in inventories during the first half of the year allowed nonfinancial corporations to reduce their dependence upon external financing and to alter the structure of their liabilities. As Table 17 shows, corporations borrowed at an annual rate of $19.2 billion through the first 3 quarters of 1975, a rate far below those of the previous 2 years. In addition, corporations were able to lengthen the maturity of their debt by reducing bank loans at an annual rate of $20.1 billion in the first 3 quarters of the year, the largest decline in loan demand during the postwar period. Finally, some corpora-

TABLE 17.—*Net funds raised in financial markets by nonfinancial corporations, 1973–75*

[Billions of dollars; seasonally adjusted annual rates]

Item	1973	1974	1975		
			I	II	III
Total funds raised	67.2	77.1	27.2	29.3	29.8
Net new equity issues	7.4	4.1	7.7	12.9	8.1
Debt instruments	59.7	73.0	19.4	16.4	21.7
Tax-exempt bonds	1.8	1.6	1.7	3.2	2.4
Corporate bonds	9.2	19.7	40.1	30.5	21.2
Mortgages	16.1	10.9	2.5	6.3	7.9
Bank loans [1]	30.6	29.9	—26.4	—20.0	—13.8
Other [2]	2.0	11.0	1.5	—3.7	4.1

[1] Not elsewhere classified.
[2] Consists of commercial paper, acceptances, finance company loans, and U.S. Government loans.

Source: Board of Governors of the Federal Reserve System.

tions relied more heavily on equity financing in 1975 as new issues reached an annual rate of $9.6 billion in the first 3 quarters, the highest level since 1972.

EMPLOYMENT, UNEMPLOYMENT, AND INCOME MAINTENANCE

EMPLOYMENT

Total civilian employment estimated from household survey data averaged 84.8 million in 1975, 1.1 million below the level of the previous year (Table 18). From a peak of 86.2 million in the third quarter of 1974, employment fell to a low of 84.3 million in the first quarter of 1975 and then rose to 85.2 million by the fourth quarter.

The number of nonfarm payroll jobs estimated from establishment survey data averaged 77.0 million in 1975. This represents a 1.4-million drop from the 1974 level, a slightly greater decline than the drop in employment on the household basis. Nearly all of the change in payroll employment from its peak in the third quarter of 1974 to its trough in the second quarter of 1975 was in the goods-producing sector, where the number of jobs declined by 2.5 million (Table 19). The reduction in employment was substantial in all of the major goods-producing industries, except mining, where employment continued to increase. There was some recovery in employment in the goods-producing sector in the second half of the year, although by year-end the level remained substantially below its peak in the third quarter of 1974. Employment in the service-producing industries remained stable at about 54 million during the period when goods-producing employment declined. It then increased during the second half of 1975.

The decline and subsequent rise in payroll employment in manufacturing from the third quarter of 1974 to the end of 1975 are reflected in data on labor turnover (Table 20). The seasonally adjusted layoff rate, layoffs per 100 workers, doubled in the fourth quarter of 1974 compared to the pre-

597-578 O - 76 - 6

TABLE 18.—*Labor market indicators, 1957–58 and 1974–75*

[Seasonally adjusted]

Indicator	1957	1958	1974	1975	1974 IV	1975 I	1975 II	1975 III	1975 IV
	Millions of persons								
Civilian labor force	66.9	67.6	91.0	92.6	91.7	91.8	92.5	93.1	93.2
Employment	64.1	63.0	85.9	84.8	85.5	84.3	84.4	85.1	85.2
Unemployment	2.9	4.6	5.1	7.8	6.1	7.5	8.1	8.0	7.9
	Percent[1]								
Civilian labor force participation rate[2]	59.6	59.5	61.2	61.2	61.3	61.1	61.3	61.4	61.2
UNEMPLOYMENT RATES									
All civilian workers	4.3	6.8	5.6	8.5	6.7	8.1	8.7	8.6	8.5
Unemployed 15 weeks or longer[3]	.8	2.1	1.0	2.7	1.3	2.0	2.7	3.1	3.1
Demographic groups									
Men 20 years and over	3.6	6.2	3.8	6.7	4.9	6.2	7.0	7.0	7.0
Married men, spouse present	2.8	5.1	2.7	5.1	3.5	4.7	5.5	5.4	5.1
Women 20 years and over	4.1	6.1	5.5	8.0	6.5	8.0	8.4	7.9	7.9
Both sexes 16–19 years	11.6	15.9	16.0	19.9	17.6	19.8	20.2	20.2	19.5
Occupation									
White-collar workers	1.9	3.1	3.3	4.7	3.7	4.5	5.0	4.7	4.8
Blue-collar workers	6.2	10.2	6.7	11.7	8.6	11.1	12.6	12.1	11.2
Industry									
Nonagricultural private wage and salary workers[4]	4.9	7.9	5.7	9.2	7.0	8.7	9.7	9.3	9.1
Construction	10.9	15.3	10.6	18.1	13.6	16.6	20.1	19.6	17.4
Manufacturing	5.1	9.3	5.7	10.9	7.8	10.5	11.9	11.1	10.2
Durable goods	4.9	10.6	5.4	11.3	7.6	10.4	12.4	11.8	10.6
Nondurable goods	5.3	7.7	6.2	10.4	8.1	10.7	11.1	10.1	9.6
Transportation and public utilities	3.3	6.1	3.2	5.6	3.8	5.5	6.1	5.7	5.2
Wholesale and retail trade	4.5	6.8	6.4	8.7	7.4	8.3	8.7	8.7	9.3
Finance and service industries	3.6	4.9	4.6	6.6	5.2	6.3	6.7	6.4	7.0
Government workers	1.9	2.5	3.0	4.0	3.3	3.6	4.2	4.1	4.2
Agricultural wage and salary workers	6.9	10.3	7.3	10.3	7.9	10.1	10.3	10.1	11.1

[1] Unemployment as percent of civilian labor force in group specified, except as noted.
[2] Civilian labor force as percent of civilian noninstitutional population.
[3] Unemployment as percent of total civilian labor force.
[4] Includes mining, not shown separately.

Source: Department of Labor, Bureau of Labor Statistics.

vious 3 quarters and was substantially in excess of the average layoff rate of 1.4 from 1963 to 1973. The layoff rate remained at unprecedented levels until production began to rise rapidly in the third quarter of 1975. By the last quarter, however, layoffs had declined to more normal levels.

Much of the unemployment associated with job layoffs in a recession is followed by reemployment in the same firm. While the total accession rate declined in manufacturing during the recession, the rehire rate increased sharply: from an average of 1.0 in 1974 to 1.8 in the first and second quarters of 1975. From 1963 to 1973 rehires were 27 percent of accessions, but in 1975 they were 44 percent.

TABLE 19.—*Nonagricultural payroll employment, by industry, 1974–75*

[Millions of persons; seasonally adjusted]

Industry	1974		1975			
	III	IV	I	II	III	IV [1]
Total nonagricultural employment	78.7	78.3	76.9	76.4	77.0	77.6
Goods producing	24.8	24.1	22.8	22.3	22.4	22.7
Manufacturing	20.1	19.6	18.5	18.1	18.3	18.5
Durable goods	12.0	11.6	10.9	10.6	10.6	10.7
Nondurable goods	8.2	8.0	7.6	7.6	7.7	7.8
Contract construction	3.9	3.8	3.6	3.4	3.4	3.4
Mining	.7	.7	.7	.7	.7	.8
Service producing	54.0	54.2	54.1	54.1	54.6	55.0
Private [2]	39.8	39.8	39.5	39.4	39.8	40.0
Government	14.2	14.4	15.0	14.7	14.8	15.0
Federal	2.7	2.7	2.7	2.7	2.8	2.8
State and local	11.5	11.6	11.8	12.0	12.1	12.2

[1] Preliminary.
[2] Transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

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

Source: Department of Labor, Bureau of Labor Statistics.

TABLE 20.—*Labor turnover rates in manufacturing, 1963–75*

[Per 100 employees; seasonally adjusted]

Period	Accession rates		Separation rates		
	Total	New hires	Total	Quits	Layoffs
1963-73 average	4.4	3.2	4.4	2.2	1.4
1974 average	4.2	3.2	4.8	2.3	1.5
I	4.4	3.5	4.8	2.6	1.3
II	4.5	3.4	4.6	2.6	1.1
III	4.2	3.2	4.5	2.4	1.2
IV	3.3	2.2	5.5	1.8	2.4
1975 average [1]	3.6	2.0	4.3	1.3	2.2
I	3.3	1.5	5.3	1.2	2.9
II	3.6	1.8	4.2	1.3	2.4
III	4.0	2.4	3.7	1.4	1.6
IV [1]	3.6	2.3	3.9	1.6	1.7

[1] 11-month average for the year and 2-month average for fourth quarter.

Source: Department of Labor, Bureau of Labor Statistics.

UNEMPLOYMENT

The unemployment rate averaged 8.5 percent in 1975, sharply above the 5.6 percent rate in 1974 and the previous post-World War II high of 6.8 percent in 1958. The unemployment rate increased rapidly, from 5.6 percent in the third quarter of 1974 to 8.1 percent in the first quarter of 1975, and reached a peak of 8.7 percent in the second quarter. By the fourth quarter the rate had declined to 8.5 percent.

As in past recessions, the sharp rise in unemployment was widespread among major demographic groups (Table 18). The rate for married men, who typically have the lowest unemployment rate, increased from 2.7

percent in 1974 to 5.1 percent in 1975. Most other demographic groups experienced a similar or slightly larger percentage point increase in unemployment rates, but a substantially smaller relative increase.

The increase in the unemployment rate was largely a consequence of unemployment arising from the loss of a job, particularly among adult men and women (Table 21). The unemployment rate for job leavers (unemployed persons who quit their jobs, expressed as a percentage of the labor force) was essentially unchanged from 1974. Unemployed new entrants and reentrants increased as a percentage of the labor force in 1975. The increase in the unemployment rate among labor force entrants likely reflected a greater difficulty in finding a job, that is, a longer duration of unemployment rather than a greater influx of entrants, since the new-hire rate declined and the labor force participation rate did not change from 1974 to 1975.

There was a large increase in the number of persons unemployed 15 weeks or longer as a percentage of the labor force. The long-duration unemployment rate increased from 1.0 percent in 1974 to 2.7 percent in 1975, a much higher level than the previous postwar peak of 2.2 percent in 1961. This sharp increase compared to past recessions was due partly to the severity and duration of the most recent recession and partly to wider coverage and longer duration of unemployment compensation benefits than in the past.

Under legislation enacted in December 1974 and amended in March 1975, the maximum duration of unemployment compensation benefits for workers covered under the regular Federal and State programs was increased from 39 weeks to 65 weeks by adding a 26-week program called Federal supplemental benefits (FSB). This program expires at the end of March 1977. Another temporary program, special unemployment assistance (SUA), was also enacted in December 1974 to provide unemployment compensation coverage for an estimated 12 million wage and salary workers employed in industries not covered by the regular Federal and State programs. These

TABLE 21.—*Unemployment rates by reason for unemployment, age, and sex, 1973–75*

[Percent of civilian labor force]

Reason for unemployment	Men 20 years and over			Women 20 years and over			Both sexes 16 to 19 years		
	1973	1974	1975	1973	1974	1975	1973	1974	1975
Total unemployment rate	3.2	3.8	6.7	4.8	5.5	8.0	14.5	16.0	19.9
Job separation	2.4	3.0	5.6	2.5	3.1	5.1	4.1	5.0	6.8
Job losers	1.9	2.5	5.1	1.6	2.1	4.0	2.4	3.1	5.1
Job leavers	.5	.5	.6	.9	1.0	1.1	1.7	2.0	1.7
Previously out of labor force	.8	.8	1.1	2.3	2.4	2.9	10.3	10.9	13.1
Reentrants	.7	.7	1.0	2.0	2.1	2.6	4.3	4.9	6.0
New entrants	.1	.1	.1	.3	.3	.3	6.0	6.0	7.1

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

Source: Department of Labor, Bureau of Labor Statistics.

are largely State and local government workers, farm workers, domestics, and employees of small nonprofit organizations. In June the duration of benefits under SUA was extended from 26 to 39 weeks.

There is now considerable research suggesting that a longer maximum duration of unemployment benefits tends to lengthen the duration of actual unemployment by discouraging some from withdrawing from the labor force and some from accepting reemployment in a less attractive job. While the exact magnitude of any increase in measured unemployment is unclear, these studies suggest that interpretation of unemployment statistics has become more complex.

THE MITIGATING EFFECTS OF THE INCOME TRANSFER SYSTEM

Unemployment compensation and other income maintenance programs have had an important dual role as automatic stabilizers and as a means of providing income to those who have lost earnings because of the recession. Data on the major programs are given in Table 22.

Largely because of these programs, per capita real disposable income did not decline in 1975 despite a decline in real output per capita. Because the number and size of countercyclical programs have increased over time, the extent to which consumer income was maintained was greater in this recession than in past ones. In this recession, per capita real disposable income fell from peak to trough by one-half of 1 percent, compared to a drop of 4 percent in per capita real disposable income net of transfers. By contrast, in the 1958 recession per capita real disposable income fell by 2 percent from peak to trough, while per capita real disposable income net of transfers declined 3 percent.

The extent to which transfer payments replace family earnings lost as a result of unemployment varies with eligibility for the different programs as well as with past earnings. It has been estimated for 1975 that a family of four, headed by an insured unemployed worker who had previously worked at the minimum wage, could be entitled to about 90 percent of previous after-tax earnings through unemployment compensation, public assistance, and food stamps. For a head of family who had earned high wages, however, benefits replace a smaller percentage of after-tax earnings. For example, it has been estimated that an unemployed worker who earned $400 a week before taxes could receive benefits that replace about one-third of his after-tax earnings.

The most important countercyclical program is unemployment compensation, which in the first 10 months of 1975 paid an estimated average weekly benefit of about $70 per worker. As of January 1976, the maximum weekly benefit ranged from $60 in Indiana and Mississippi to $139 in Washington, D.C. As unemployment increased during the recession, the ratio of beneficiaries to persons unemployed rose sharply, from 33 percent in the fourth quarter of 1973 to 69 percent in the second quarter of 1975. This pattern is partly due to changes in the composition of unemployment that usually

TABLE 22.—*Income transfer programs, 1973–75*

Program	Unit	1973 IV	1974 I	1974 II	1974 III	1974 IV	1975 I	1975 II	1975 III	1975 IV
Unemployment:										
Total number of persons	Millions	4.0	5.0	4.6	5.1	5.6	8.3	8.0	7.8	7.2
Unemployment Compensation:										
Beneficiaries: Total	Millions [1]	1.3	2.3	2.1	1.9	2.3	5.1	5.5	5.2	------
Permanent programs	do	1.3	2.3	2.1	1.9	2.3	4.7	4.8	4.0	------
FSB and SUA [2]	do	------	------	------	------	------	.4	.7	1.2	------
Benefit payments: Total [3]	Billions of dollars [4]	4.1	7.5	6.8	6.1	7.8	17.3	19.0	18.4	------
Permanent programs	do	4.1	7.5	6.8	6.1	7.8	16.2	16.7	14.7	------
FSB and SUA	do	------	------	------	------	------	1.1	2.3	3.7	------
Food Stamp Program:										
Beneficiaries	Millions [5]	12.5	13.1	13.6	14.2	15.9	18.7	19.2	18.6	18.7
Benefit payments	Billions of dollars [4]	2.3	3.2	3.2	3.5	4.0	4.9	5.0	5.2	5.2
Aid to Families with Dependent Children:										
Beneficiaries: Total	Millions [5]	10.8	10.9	10.9	10.8	10.9	11.3	11.3	11.3	------
Unemployed fathers	do	.4	.4	.4	.4	.4	.5	.5	.5	------
Benefit payments [3]	Billions of dollars [4]	7.4	7.6	7.6	8.0	8.4	8.9	8.9	9.3	------
Old-age, Survivors, and Disability Insurance:										
Beneficiaries: Total [6]	Millions [5]	29.7	30.0	30.2	30.4	30.7	31.1	31.3	31.5	31.9
Retired workers	do	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.3
Disabled persons and beneficiaries	do	3.5	3.6	3.7	3.7	3.9	4.0	4.1	4.2	4.3
Benefit payments [7]	Billions of dollars [4]	50.8	53.0	56.6	58.7	56.8	60.6	63.0	67.1	68.5
Medicaid:										
Beneficiaries	Millions [5]	7.3	7.3	7.7	7.3	8.2	8.8	9.0	------	------
Benefit payments	Billions of dollars [4]	10.0	10.4	12.0	11.2	12.0	13.6	14.8	------	------
Medicare:										
Benefit payments	Billions of dollars [4]	10.1	11.2	12.2	12.5	13.7	14.9	15.4	15.5	17.2
Supplemental Security Income:										
Beneficiaries	Millions [5]	------	3.3	3.5	3.8	4.0	4.1	4.2	4.3	------
Benefit payments	Billions of dollars [4]	------	4.9	5.1	5.5	5.6	5.7	5.8	6.1	------

[1] Weekly average.
[2] Federal supplemental benefits (FSB) and special unemployment assistance (SUA).
[3] Includes State as well as Federal payments.
[4] Annual rate.
[5] Monthly average.
[6] Total also includes survivors and special beneficiaries 72 years and older.
[7] In current payment status.

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

occur during a downturn and partly to legislated program extensions (FSB and SUA). Largely because of these new programs a larger proportion of the unemployed received benefits in 1975 than in any prior recession. The new programs have therefore more than offset the secular decline in the proportion of the unemployed receiving benefits (estimated to be 40 percent in 1956 and 34 percent in 1973), a decline which is attributable to the disproportionate increase in the share of unemployment caused by entry into the labor force. The proportion of the unemployed receiving benefits was estimated to be 59 percent in 1958 and 66 percent in the first 3 quarters of 1975.

In the second quarter of 1975 there were about 19.2 million food stamp recipients, 54 percent more than in the fourth quarter of 1973. Approximately half the increase is attributable to the recession and half to the extension of the program to areas which had not previously offered food stamps (including Puerto Rico, which added 1.5 million new recipients) and to increases in participation among formerly eligible households. A survey taken by the Bureau of the Census in April 1975 showed that 18 percent of the families in which the head of the household was unemployed were receiving food stamps. Among families with an unemployed head of household and income under $5,000, 35 percent received stamps. The average monthly food stamp bonus (the Federal subsidy), which is not taxed as income, was $84 for families with an unemployed head of household. A further discussion of income maintenance programs is contained in Chapter 3.

ENERGY DEVELOPMENTS

The economy continued to adjust to higher world oil prices during 1975, though at a rate constrained by Government action. Price controls were maintained on some domestically produced crude oil and natural gas liquids, but a special fee (later removed) imposed on imported crude oil and petroleum products raised the prices received for uncontrolled oil. The net effect of these actions was to hold average oil prices in the United States below world levels, reduce the total revenues of domestic petroleum producers, slow the rate of increase in petroleum product prices to consumers, increase petroleum imports, and retard structural adjustment to higher world oil prices.

The relative price of energy continued to increase, but not at the rate which brought the adjustment problems of 1973 and 1974. The consumption of energy remained below its 1973 peak and well below its previous long-term growth path. Long-term adjustments in the capital stock toward lower use of petroleum were in evidence. Output of oil and natural gas continued to decline, bituminous coal production reached an all-time high, and nuclear power production again rose substantially. The Energy Policy and Conservation Act, discussed in Chapter 1, was enacted late in the year.

PRICES

The price of domestically produced petroleum products was affected by price ceilings on some of the crude oil entering refineries and by margin controls at all processing and marketing stages. Approximately 60 percent of the domestically produced crude entering refineries was controlled at a wellhead price of about $5.25 per barrel, bringing the blended price of domestic crude some $5 to $6 per barrel below the price of imported crude oil. Movements in the price of petroleum products were largely determined by changes in the composite cost of all crude, imported and domestic (Table 23). That cost rose about 19 percent in the 12 months ending October 1975, largely because of the special import fee.

TABLE 23.—*Refiner acquisition cost of crude petroleum, 1973–75*

Month	Cost (per barrel)		
	Composite	Imported	Domestic
1973: September		$4.54	
October		4.91	
November	$5.44	6.49	$5.00
December	6.54	8.22	5.95
1974: January	7.46	9.59	6.72
February	8.57	12.45	7.08
March	8.68	12.73	7.05
April	9.13	12.72	7.21
May	9.44	13.02	7.26
June	9.45	13.06	7.20
July	9.30	12.75	7.19
August	9.17	12.68	7.20
September	9.13	12.53	7.18
October	9.22	12.44	7.26
November	9.41	12.53	7.46
December	9.28	12.82	7.39
1975: January	9.48	12.77	7.78
February	10.09	13.05	8.29
March	9.91	13.28	8.38
April	9.83	13.26	8.23
May	9.79	13.27	8.33
June	10.33	14.15	8.33
July	10.57	14.03	8.37
August	10.81	14.25	8.48
September	10.79	14.04	8.49
October[1]	10.95	14.66	8.59

[1] Preliminary.

Source: Federal Energy Administration.

The average price of coal sold under long-term contract continued to increase during 1975, but the price of coal sold in spot markets (WPI for coal) declined substantially from the peaks reached during the coal strike of late 1974. Movements in the average price of all coal are reflected in the prices paid for coal by steam electric plants. Those prices reached a peak of 90 cents per million B.t.u. in November 1974. The average price was only 81 cents per million B.t.u. in the first 8 months of 1975, lower than the previous peak but still higher than the 71 cents per million B.t.u. average for 1974. Coal used for electricity generation still commands a price less than half that of its major substitute, residual fuel oil, when they are compared on an energy-equivalent price basis. Legal, technical, and utility capacity constraints on the use of coal have prevented further displacement of oil in the utility market.

Natural gas prices in 1975 continued to be dominated by regulatory institutions and by the long-term contracts characteristic of gas sales. Regulated gas prices rose pursuant to actions of the Federal Power Commission which increased the base ceiling rate for 1975 to 51 cents per thousand cubic feet of natural gas that had begun to flow in interstate commerce after December 31, 1972. The rate was 43 cents from June 1974 until early December of that year, when the rates were revised. Additionally, special provisions designed to induce movement of more gas into interstate regulated markets to meet emergency conditions brought some increase in average regulated

prices. The prices remained well below the market clearing level, however, leading to continuation of the natural gas shortage in the interstate price-controlled market. The average price paid by interstate pipelines for gas produced in the United States rose from 27 cents per thousand cubic feet in September 1974 to 37 cents in September 1975. The average price of imported gas entering the regulated interstate pipeline system, about 5 percent of consumption, rose from 59 cents to $1.41 per thousand cubic feet over the same period. The unregulated natural gas market—primarily gas consumed within its State of origin—also experienced price increases. The major increases in the price of unregulated new gas contracts occurred in 1974, but the average price of gas sold in unregulated markets continued to rise because a larger proportion of it was sold at the higher prices, as old agreements expired or were renegotiated and as depletion occurred in reserves sold under lower-priced contracts.

Continued advances in the wholesale price of energy (Table 24) carried through to consumers, but the increases to consumers were smaller than in 1974. The price of gasoline to consumers rose 6 cents per gallon, or about 11 percent, in the 12 months ending in December 1975, while fuel oil went up 9 percent. The price of residential electrical service rose 9 percent and that of residential gas service 20 percent during the same period (Table 25).

TABLE 24.—*Changes in wholesale prices of all commodities and selected fuels and power, 1966–75*

[Percent change; seasonally unadjusted annual rates]

Period	All commodities	Selected fuels and power			
		Coal	Natural gas	Refined petroleum products	Electric power
Average annual change:					
1966 to 1969	2.2	5.6	1.6	0.7	0.7
1969 to 1972	3.8	19.8	5.8	3.0	6.2
1972 to 1973	13.1	12.5	9.6	21.8	7.0
Change from preceding quarter:					
1973: I	20.9	14.6	5.9	25.4	12.2
II	20.6	16.0	13.5	35.4	5.5
III	17.6	4.9	13.4	14.2	7.0
IV	3.5	36.6	21.6	80.6	15.9
1974: I	29.4	37.0	18.6	213.4	42.7
II	15.0	125.5	11.8	69.6	50.0
III	31.3	75.2	35.6	21.8	27.3
IV	14.8	67.3	48.4	−6.4	16.8
1975: I	.0	2.1	63.5	4.2	23.0
II	4.3	−19.4	39.3	17.9	2.8
III	8.8	−9.6	8.3	34.1	11.7
IV	4.4	−9.0			

Note.—The fuel and electric power price changes shown in this table have been calculated from the wholesale price index adjusted for the lags embodied in some fuel price series. Natural gas prices are lagged 2 months, and electric power and refined petroleum products 1 month, the latter lagging beginning in March 1973 for the major products of the series. For example, the first-quarter prices as used in the above table are the reported indexes for March through May for natural gas, and February through April for refined petroleum products and electric power.

Source: Department of Labor, Bureau of Labor Statistics.

TABLE 25.—*Changes in consumer prices of all items and energy items, 1965–75*

[Percent change; seasonally unadjusted annual rates]

Period	All items	All items less energy	Energy				
			Total [1]	Electricity	Fuel oil [2]	Gasoline [3]	Gas
Average annual change:							
1966 to 1969	4.1	4.3	2.1	1.2	2.8	2.6	0.9
1969 to 1972	4.5	4.6	3.1	5.0	3.4	.9	6.0
1972 to 1973	6.2	6.1	8.0	5.0	15.4	9.8	4.6
Change from preceding quarter:							
1973: I	5.8	5.8	8.2	9.3	22.6	4.4	8.7
II	9.0	8.9	10.5	5.0	17.3	16.8	1.3
III	9.1	9.4	6.1	2.9	12.1	9.3	—.3
IV	9.9	8.5	27.8	8.6	93.3	31.1	15.0
1974: I	11.5	8.4	68.7	34.4	171.8	90.8	17.8
II	11.8	10.3	33.6	27.1	23.0	49.3	11.9
III	13.0	13.1	10.3	14.4	18.3	4.7	14.4
IV	12.0	12.9	—.2	12.5	8.7	—15.4	20.7
1975: I	7.5	7.5	9.6	19.6	.4	2.3	27.3
II	6.5	6.0	12.4	4.8	1.3	15.2	24.4
III	8.8	8.1	20.3	13.0	13.5	33.3	7.7
IV	6.5	6.6	5.2	3.8	19.6	—2.9	20.2

[1] Also includes coal and motor oil, not shown separately.
[2] Fuel oil No. 2.
[3] Regular and premium gasoline.

Source: Department of Labor, Bureau of Labor Statistics.

CONSUMPTION

The combination of increasing relative prices of energy (for the third consecutive year), a low level of economic activity, mild winter weather, and conservation measures left energy consumption in 1975 lower than in 1974. In 1974 energy consumption fell for the first time since 1958; there is no previous record of energy consumption's remaining below previous peak levels for 2 consecutive years.

The total effect of higher relative energy prices on energy consumption has not yet been felt because adjustments in energy use patterns and in capital stock are not yet complete. For example, 1974 model automobiles averaged an estimated rated 13.9 miles per gallon, while 1975 model automobiles are estimated to have averaged a rated 15.6 miles per gallon. The 1976 models will probably be even more fuel efficient, averaging a rated 17.6 miles per gallon according to estimates. Motor vehicle fuel consumption, however, responds to the average composition of the total vehicle fleet, which is still dominated by automobiles produced before energy prices rose.

The low level of economic activity in 1975 reinforced price effects in restraining energy use. Conversely, the expected recovery of 1976 is likely to lead to growth in energy consumption despite the continued restraining influence of past increases in its price.

The consumption of electric power rose only about 2 percent in 1975 and 0.4 percent in 1974, much below the 7 percent annual increase for the previous 10 years. This slowdown in demand growth has contributed to the decision of some firms to delay completion of additional generating capacity and

has brought about a reassessment of future industry capacity requirements. How greatly electricity consumption will be affected by the higher relative price of electricity is not yet known. Also unknown is the extent to which the movement will continue toward peak-load pricing of electric service, and how much this movement will affect generating capacity requirements and the optimal mix of generating equipment. It is expected, however, that the results of the change will be toward reducing the quantity of fossil fuel consumed per unit of electricity generated and shifting the mix of energy sources toward coal and nuclear power.

Petroleum consumption did not increase despite some substitution of petroleum for natural gas. The increased price of petroleum, lagged effects of earlier price increases, the low level of economic activity, and a milder winter explain this consumption pattern (Table 26).

The only unlocalized fuel shortage during 1975 was of natural gas. The shortage was greater in 1975 than before, despite relatively warm weather and the recession. The quantity of gas that would have been consumed at then existing prices, if that gas had been available, is unknown because potential consumers have been denied access to supplies. However, the quantity which was not delivered by interstate pipelines despite contractual requirements to do so is reported to the Federal Power Commission (FPC). Curtailments of firm (guaranteed) supplies amounted to 17 percent of requirements by the reporting pipelines in the 12 months ending August 1975, compared to 10 percent during the 12 months ending August 1974. The FPC expects these curtailments to reach 22 percent in the 12 months ending August 1976. When curtailments of interruptible (nonguaranteed) supplies are considered, the proportion of requirements curtailed rose from 38 percent in the earlier period to 52 percent in the 12 months ending in

TABLE 26.—*Gross consumption of energy by major source, 1965–75*

Year	Total energy consumption		Percent of total energy consumption					
	Amount (quadrillion Btu's)	Percent change [1]	Total	Petroleum	Natural gas	Coal	Hydropower	Nuclear
1965	53.3	4.1	100.0	43.6	30.2	22.3	3.9	0.1
1966	56.4	5.8	100.0	43.2	30.9	22.1	3.7	.1
1967	58.3	3.3	100.0	43.5	31.3	21.0	4.0	.1
1968	61.8	6.0	100.0	43.8	31.7	20.5	3.8	.2
1969	65.0	5.2	100.0	43.8	32.3	19.6	4.1	.2
1970	67.1	3.3	100.0	44.0	32.8	18.9	4.0	.3
1971	68.7	2.3	100.0	44.5	33.2	17.6	4.1	.6
1972	71.9	4.7	100.0	45.8	32.0	17.3	4.1	.8
1973	74.8	3.9	100.0	46.6	30.4	17.8	4.0	1.2
1974 [2]	73.2	−2.1	100.0	45.7	30.1	18.1	4.5	1.6
1975 [3]	72.0	−1.6	100.0	46.0	28.5	18.5	4.5	2.5

[1] Based on unrounded data.
[2] Preliminary.
[3] Preliminary estimate by the Council of Economic Advisers.

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

Source: Department of the Interior, Bureau of Mines (except as noted).

August 1975. Lower gas use for space heating and greater than expected success in filling storage will probably reduce the actual firm curtailments from those projected for the 12 months ending August 1976.

Petroleum inventories were adequate to meet normal emergencies throughout 1975. Inventories of natural gas liquids, especially propane, were at record highs toward the end of 1975, and no shortages were anticipated. Coal stocks were satisfactory after the buildup period following the 1974 strike. Interstate pipelines reported that working natural gas storage balances at the start of the 1975–76 winter heating season were nearly 10 percent higher than at the outset of the previous heating season.

Unfortunately the adequate petroleum inventory position which existed in 1975 is fragile. Petroleum inventories may be drawn down rather quickly in response to a change in price expectations or to a change in conditions in the world oil market. There is little incentive for commercial firms to maintain inventories solely for use during an embargo because the emergency allocation and pricing authorities granted by the Energy Policy and Conservation Act of 1975 take away much of the potential profit from doing so.

PRODUCTION

Investment in the domestic energy industry continued to grow in response to the higher relative prices of energy over the past 3 years. The uncertainty about prospective rates of return that resulted from the lack of a settled and supportive Government policy undoubtedly kept investment flows below the limits set by available manpower and equipment. In contrast to late 1973 and 1974, there were no reports of widespread shortages of essential equipment and supplies, and the few spot shortages were minor.

Crude oil production in 1975 totaled just over 3 billion barrels, nearly 5 percent less than in 1974 and 13 percent less than the peak production of 1970. Marketed production of natural gas in 1975 is estimated to be 11 percent lower than its 1973 peak. Preliminary estimates show a 5 percent decline in the production of natural gas liquids in 1975 from the 1974 figure. The level of exploration and development drilling continued to rise, but wells drilled increased at only roughly half the 19 percent increase of 1974 over 1973, and wells drilled during 1975 amounted to only 60 percent of those drilled during 1956, the record drilling year. Output responds only slowly to changes in drilling rates, however, and the recent increase has not been large enough to prevent the continued decline in the production of crude oil and natural gas. Domestic petroleum output may stabilize or even rise in 1977 or 1978 when North Slope Alaskan reserves begin to produce, but no turnaround can be expected before then. North Slope Alaskan natural gas resources will not be produced before the 1980s, when access to pipelines may be available. Domestic natural gas production will probably decline at least until then. Oil and gas production rates at the end of this decade, however, will be strongly influenced by Government policy and by price behavior during 1976 and 1977.

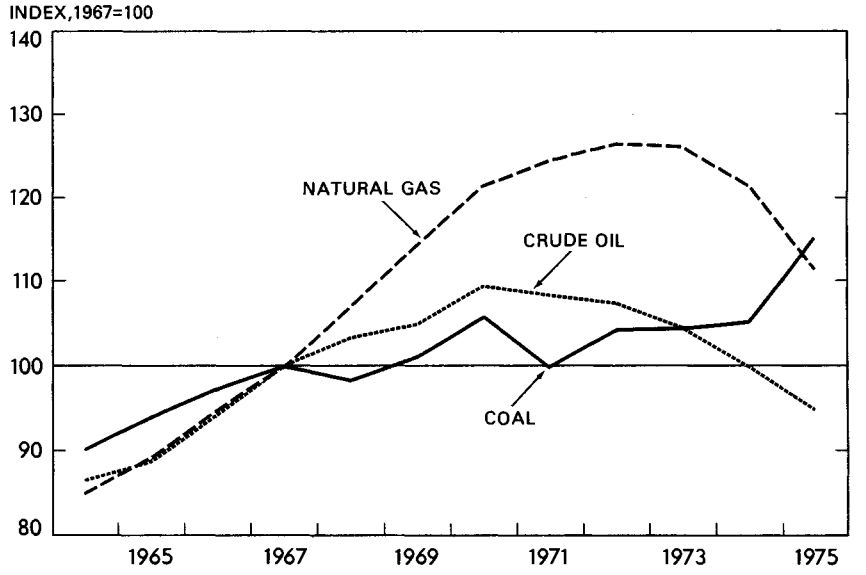
Consequently, pricing decisions under the recently enacted Energy Policy and Conservation Act will have an important effect on oil supplies, just as action to decontrol the price of natural gas will bring forth increasing quantities of this fuel—especially to the interstate market. The pattern of fuel production since 1963 is shown in Chart 2.

Bituminous and lignite coal production reached an all-time high of 640 million tons during 1975, surpassing the 631 million tons of 1947. Output of the bituminous coal industry rose 6 percent over 1974. The labor contract of late 1974 did not eliminate strikes—unauthorized walkouts idled some mines for several weeks. Output per hour worked continued to decline. Nevertheless record production was achieved, a consequence of high levels of output from established mines and continued production during much of the year from high-cost mines that were opened or reopened in response to the coal price increases of 1973 and 1974. Progress toward full exploitation of Western low-sulfur coal reserves fell below expectations, partly because of legal actions that slowed development and partly because of the moratorium on leasing of Federal coal lands.

Output of the other major sources of energy—nuclear power plants and hydroelectric generating facilities—was constrained by capacity limitations and operating problems. Hydropower and nuclear power represent about 25 percent of the electric power produced in the United States. The nuclear component of the total is growing rapidly, and its output approached 9 percent of U.S. production during 1975.

Chart 2

Domestic Fuel Production



SOURCE: BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM.

IMPORTS AND EXPORTS

The United States, a net importer of petroleum and natural gas and an exporter of coal, has been a net importer of energy for two decades. Gross imports of petroleum and petroleum products rose from about 21 percent of consumption in 1965 to about 37 percent in both 1974 and 1975. In absolute terms gross imports in 1975 were approximately 6 million barrels per day. There has been a decline in refined petroleum products as a proportion of total petroleum imports. They averaged 56 percent of the total for the 5 years from 1968 to 1972 but then fell to 48 percent in 1973, 43 percent in 1974, and about 32 percent in 1975. This decline is due largely to price controls administered by the Federal Energy Administration, which provide a large measure of protection against most imports of refined petroleum products.

Coal exports amount to about 10 percent of total production. They rose 13 percent in 1974 and increased another 10 percent in 1975. Natural gas is imported mostly by pipeline, and Canada is the dominant source. Canadian gas imports have played an important role in the natural gas supply of some regions, but according to recent Canadian policy announcements, these imports (as well as imports of oil from that nation) will be restricted in the future.

AGRICULTURAL DEVELOPMENTS

The most notable development in agriculture in the first half of 1975 was the extent of reduced feeding of livestock in response to the poor feed grain harvest of 1974. Most noteworthy in the second half was the reentry of the Soviet Union as a large buyer of U.S. grain, and the resulting policy measures in the controversial areas of export controls and long-term grain sales agreements between governments.

ADJUSTMENTS TO REDUCED 1974 CROPS

The United States entered 1975 with the lowest supply of feed grains (corn, oats, barley, and grain sorghum) since 1956. Adverse weather caused 1974 production to be 19 percent below that of the previous year. The 1974 shortfall was especially serious because U.S. grain stocks were already much below customary levels.

An unexpectedly large response to high grain prices by livestock producers resulted in a larger decline in feed use in 1975 than had been anticipated in late 1974. Farmers economized on feed use by selling cows and calves, fattening fewer cattle and hogs on grain, adjusting livestock rations, and marketing cattle at lower weights. The resulting reduction in feed demand contributed to a decline in feed grain prices of approximately 20 percent between the fourth quarter of 1974 and the second quarter of 1975. At the same time, the liquidation of cattle inventories increased beef supplies. Declines in the first quarter of 1975 in both crop and livestock prices brought about a sharp decline in the net income of farm operators and reduced the rate of increase in retail food prices. These developments helped to bring about the ending, early in March, of a system under which exporters

reported planned large sales of grains and soybeans to the Department of Agriculture for approval prior to finalizing such sales. Monitoring of export sales, however, was continued.

In the second half of 1975 price consequences of reduced feed supplies were passed through to consumers as supplies of most livestock and livestock products declined. Decreased slaughter of hogs led to record hog and pork prices. Consumption of pork per capita fell to the lowest level since the 1930s. Prices of wholesale dairy products increased sharply following a small decline in milk production. While cattle slaughter remained high because of heavy marketing of cows and other cattle not fattened on grain, steer and beef prices rose well above first half and year-earlier averages because of strong demand. These events, together with increased grain prices as the Soviet Union entered world grain markets, generated higher retail food prices and improved farm incomes. Net farm income (including inventory change) rose from a $20.7-billion annual rate in the first quarter to an average $27.8-billion annual rate for the remaining 3 quarters. The resulting $26.0-billion net income for all of 1975 is less than 1 percent below that of 1974, and it is the third highest on record.

THE SOVIET GRAIN SHORTFALL

When the rumored decrease in grain harvests in the U.S.S.R. was confirmed by large Soviet purchases in early July, world prices of wheat, feed grains, and soybeans increased rapidly. During the month beginning July 7, prices of U.S. new crop futures increased 28 percent for wheat, 26 percent for corn, and 25 percent for soybeans. Grain sales from the United States to the Soviet Union in July totaled about 10 million metric tons, four times the quantity sold in the preceding fiscal year. The combination of the surge in Soviet demand, reduced crop prospects in both Eastern and Western Europe, low U.S. carryover stocks, and the difficulty of knowing how the U.S. corn and soybean harvest would be affected by the drought in the western Corn Belt created an extremely uncertain price situation. Because of questions regarding the size of further Soviet purchases, with their potentially disruptive consequences given the uncertain supply situation, a temporary suspension of further U.S. grain sales to the U.S.S.R. was announced by the Secretary of Agriculture on August 11, 1975.

Under unrestricted market conditions the suspension of U.S. sales to the U.S.S.R. should have had only transient, if any, effects on grain prices. The Soviets would simply have shifted their demands to other countries, and U.S. sales to the U.S.S.R. would have been replaced by sales to other importing countries at the same world and U.S. prices as if the suspension had not been imposed. Supply conditions and restrictions in other important grain-exporting countries, however, limited the extent to which Soviet demands could be shifted. Even so, a hold was placed on sales to Poland during September to help prevent Soviet demands on world markets from being transmitted to the United States indirectly.

As it turned out, U.S. grain prices peaked during August soon after the suspension of sales to the Soviets. In October, when it had become clear that there would be bumper U.S. crops of feed grains as well as wheat, additional sales to the U.S.S.R. from 1975 grain crops of up to 7 million metric tons through September 30, 1976, were permitted without further consultation with the U.S. Government. Through the end of the year 2.7 million more tons of corn, but no additional wheat, were sold to the Soviet Union. Despite the fact that estimates of the Soviet grain harvest in 1975 were further reduced in December (to 137 million metric tons, 36 percent below target production), purchases of grain by the U.S.S.R. have been less than they were generally expected to be in October. The smaller than expected sales may be attributable to constraints on grain imports caused by Soviet port and handling capacity. In any event, the absence of strong demand, together with excellent world rice and good Southern Hemisphere grain prospects, led to a substantial decline in grain prices. From their August peaks to the end of 1975, the March 1976 futures prices of wheat and corn declined 30 percent and 22 percent respectively.

At the time that sales to the U.S.S.R. were reopened, a 5-year agreement for the purchase of U.S. corn and wheat was announced. The intention of this agreement is to eliminate the erratic fluctuations that have characterized past Soviet purchases from the United States (Table 27). The agreement specifies that the Soviet Union will purchase at least 6 million metric tons of corn and wheat in each of the next 5 years. The United States reserves the right, however, to limit Soviet purchases to 8 million tons in any year and to reduce purchases below 6 million tons if estimated U.S. production plus carryover stocks of wheat and feed grains fall below 225 million tons in any given year, a level which would be 41 million tons less than the large 1975 supply and 1 million tons below the sharply reduced 1974 level. The agreement is unlikely to generate significant net additions to the demand for U.S. grain because the Soviets can resell or store any of the required 6 million metric tons not needed for domestic use. Soviet storage, however, would help achieve the objective of smoothing out demands on world grain markets.

TABLE 27.—*U.S. grain exports to the U.S.S.R., fiscal years 1971–76*

Fiscal year	U.S. grain exports to U.S.S.R.			U.S. grain exports to U.S.S.R. as percent of total U.S. grain exports
	Total grains	Wheat and rye	Feed grains	
	Millions of metric tons			
1971	0	0	0	0
1972	2.9	0	2.9	8
1973	13.7	9.7	4.0	20
1974	7.9	3.3	4.6	11
1975	2.3	1.0	1.3	4
1976 [1]	13.1	4.4	8.7	----

[1] Fiscal 1976 export commitments as of January 4, 1976.

Source: Department of Agriculture.