

SURVEY OF CURRENT BUSINESS



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the BUSINESS SITUATION

THE President's annual economic message, and the budget submitted to Congress early this month, were cast in terms of a weakening economy with inflation continuing at a high rate at least in the early part of the year, and acknowledged a great deal of uncertainty about the outlook for the later months of the year. Fiscal policy in 1974 is intended to be flexible, and its course will depend on the path of the economy. The administration has indicated that discretionary fiscal measures, in addition to those already in the budget, may be adopted if economic conditions warrant. (For a detailed review of the budget, see the "Federal Fiscal Program" article beginning on page 14 of this issue of the SURVEY.)

In early February, the administration announced that it would not seek to renew the present program of mandatory wage and price controls after their expiration on April 30. The decision reflected a judgment that the problems generated by retention of a full program of mandatory controls would outweigh any contribution the controls could make to price stability. The administration proposed keeping the Cost of Living Council as a monitoring agency but without authority to order wage or price changes, recommended that control be maintained in the health-care and petroleum industries, and indicated that standby authority would be requested for intervention in one or two other industries.

The evidence now available for January indicates that the general weakening of economic activity, which has been apparent for several months, has intensified. Employment was slack and the unemployment rate increased; personal income and industrial production declined; and while retail sales rose

rather sharply, the advance followed a sharp drop in December and put sales no higher than the October-November level. Shortages of petroleum products were having further adverse effects on employment and production in January, although it is very difficult to quantify these effects. The short supplies and rising costs of fuels were central issues in an early-February strike by independent truckers that caused a temporary disruption of the Nation's distribution channels.

Industrial production

Industrial production declined again in January, and somewhat more steeply than in December. The Federal Reserve Board's index for January was down 0.8 percent from December and 1.4 percent from the November peak. Declines were spread through all major market groups but were most pronounced in consumer durables, where production dropped 3.5 percent in January following a 3.1 percent decline

Positions in the Bureau of Economic Analysis

The position of Editor of the SURVEY OF CURRENT BUSINESS will soon be open. The editorship has in the past been combined with other responsibilities, but a separate position is now to be established. Depending on the qualifications of the candidate, the new position can be rated up to GS-14 (\$24,247-\$31,519).

The Editor will report to the Director of BEA, and will be a member of an editorial group of BEA staff that will determine what material is to be published in the SURVEY and review the material for substance. It is highly desirable that candidates have experience in editing for publication material in the areas of BEA's work which include domestic economic developments, international and regional economics, economic accounting, and econometrics. Professional training in economics would be useful but is not a requisite if the candidate has appropriate other qualifications. The job may include other tasks connected with the operation of the SURVEY.

* * * * *

The position of Chief Economist of BEA will soon become vacant. The position is rated at GS-16 (\$32,806-\$36,000; the 1975 Federal Budget recommends three annual increases of 7½ percent each in the ceiling).

The Chief Economist, who reports to the Director of BEA, helps to carry out that part of the BEA program which is concerned with the interpretation of economic

developments. The work focuses on the national economy but extends also to regional and industrial developments within the U.S. economy and to U.S. international economic relations. Some of the work is for the use of Government agencies and some is for outside professional journals or audiences, but most of it is intended for publication in the SURVEY. Accordingly, the Chief Economist has a special interest in the SURVEY. The job content can be adjusted in line with the incumbent's qualifications and interests. In particular, there is latitude in the degree of involvement with the SURVEY, and in the mix between research work carried out directly by the Chief Economist and work over which the Chief Economist exercises general oversight.

Candidates must have a thorough command of macroeconomic theory, and the ability and inclination to apply it to the real world and to express the results in clear language. Other requisites are thorough familiarity with the national accounts and other economic data, both financial and nonfinancial, and experience in using them in research, and familiarity with forecasting, including econometric forecasting.

* * * * *

Persons interested in either position should write to George Jaszi, Director, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, D.C. 20230.

in December. Auto production fell about 15 percent in both December and January, and accounted for most of the drop in consumer durables output; production of other consumer durables was unchanged in December and down 0.8 percent in January. Consumer non-durables production has also dropped in the past 2 months, as has production of intermediate products and materials. Production of business equipment was about unchanged in January after declining slightly in December.

Employment and income

Total employment was essentially unchanged from October through January, while the civilian labor force continued to rise sharply. The result was a marked upturn in the unemployment rate from 4.6 percent in October to 4.8 percent in December and 5.2 percent in January, the highest in more than a year. The increases in November and December were entirely among women and teenagers, partly because of layoffs in sales and services industries, which were the first to feel the effects of fuel shortages. The unemployment rate for adult men was unchanged until January, when it rose sharply, largely reflecting heavy cutbacks in durable goods manufacturing. The rates for women and teenagers rose further in January.

The number of workers on nonfarm payrolls had been in a steep uptrend through November, but leveled off in December and declined 260,000 in January. The decline was moderate in the trade and service industries and sharp in manufacturing. About half of the decline in manufacturing occurred in the transportation equipment industry, while much of the remainder was in primary metals and electrical and nonelectrical machinery.

The factory workweek declined in January even more abruptly than employment. The workweek had held at a relatively high level through December but fell 0.4 hour in January, to 36.6 hours. The decline in the workweek was heavily concentrated in manufacturing where it fell from 40.7 hours in December to 39.9 hours in January. Cuts in hours were espe-

cially large in transportation equipment, primary metals, and building materials, but occurred in 16 of the 21 major manufacturing industries.

After about 2 years of large gains, personal income dropped \$4.1 billion in January, to an annual rate of \$1,084.9 billion. Almost \$2.5 billion of that decline was attributable to an increase in the wage base subject to social security taxes, which caused a large one-time jump in the level of contributions for social security. These contributions are deducted in the calculation of personal income.

The rest of the income decline, \$1.6 billion, was due mainly to reduced employment and a shorter workweek in the commodity producing industries, and a drop in Government subsidy payments to farmers. Payrolls in the commodity-producing industries decreased \$4.4 billion, while payrolls in other major industry groups rose about \$1.7 billion. Mainly because of lower subsidy payments, farm proprietors' income decreased \$2.8 billion. Sizable increases in personal interest income and transfer payments, \$1.1 billion and \$2.7 billion, respectively, provided the main offsets to these declines.

Revision of GNP

On the basis of more complete source data, BEA has revised the estimate of fourth quarter GNP. The estimate is now \$1,337.5 billion (seasonally adjusted annual rate), \$3.5 billion higher than the preliminary figure released a month ago. Personal consumption expenditures were revised down \$3.8 billion, in good part because the estimate of December retail sales was revised down substantially from the preliminary figure. However, net exports and inventory accumulation, the two major GNP components for which source data were available for only 2 months of the quarter when the preliminary estimate was made, were both revised upward—net exports by \$4.8 billion and inventory investment by \$2.1 billion. The revision of net exports reflects an increase in the estimated fourth quarter inflow of income from U.S. investments abroad, and a fourth quarter merchandise trade sur-

plus that is larger than the preliminary estimate.

The implicit price deflator for GNP is now estimated to have increased at an annual rate of 8.8 percent in the fourth quarter, compared with the preliminary figure of 7.9 percent. The increase in real output (GNP adjusted to exclude price changes) is now estimated at an annual rate of 1.6 percent, compared with a preliminary figure of 1.3 percent.

Consumer Spending

Personal income expansion last year was smallest in the first quarter and biggest in the fourth—seasonally adjusted annual rates of \$20.5 billion and \$31.8 billion, respectively—while the increase in consumer spending was strongest in the first quarter and weakest in the fourth—seasonally adjusted annual rates of \$26.8 billion and \$9.2 billion, respectively. The saving rate (personal saving as a percentage of disposable income) increased in the fourth quarter by 1½ percentage points to 7¼ percent, its highest level in 2 years.

The behavior of aggregate consumer spending last year mainly reflected the behavior of outlays for durable goods, which rose \$9.3 billion in the first quarter—a very large advance—were level in the second and third quarters, and declined \$7.2 billion in the fourth. The rise in outlays for both nondurable goods and services was strong all year (table 1). Large and widespread price increases accounted for three-fourths of the overall rise in consumer outlays last year. In real terms, the behavior of consumption spending for durable goods and for services was quite similar to the behavior in current dollar terms, although the changes in real terms were of course weaker; the path of nondurables consumption, where prices were up very steeply, was weak and erratic when measured in real terms. However, the deflated quarterly data on consumption spending are subject to erratic behavior due to the fact that the timing of price data used for deflation is not always well matched to the timing of spending data.

Spending for automobiles is the most volatile component of durable goods consumption; last year, spending for autos rose \$3.9 billion in the first quarter, declined slightly in the second and third, and plunged \$7.1 billion in the fourth. Following 2 years of very strong expansion, new car sales peaked in the first quarter at an exceptionally high annual rate of 12.5 million units (including foreign models). The sales rate eased to 12.2 million units in the spring and 11.7 million in the summer, and dropped to 9.8 million units in the fourth quarter. That drop partly reflected the feeling of many people that the mandatory anti-pollution and safety equipment on the 1974 models would make them more expensive and less convenient; the drop also reflected demand cutbacks, especially for cars in the higher price ranges, which are typically large users of gasoline.

Expenditures for furniture and household equipment rose steadily last year, but by far the largest increase occurred in the first quarter. Furniture and appliance producers encountered capacity problems early in 1973, and shortages and delivery delays apparently cut into sales growth; however, after the first quarter, the steep con-

traction of homebuilding was the major factor slowing sales. Spending for other durables also rose sharply in the opening quarter of last year, but showed virtually no net change during the rest of the year.

Measured in current dollars, nondurables consumption increased strongly all year, and faster than spending for durables or services. In real terms, however, nondurables outlays rose only moderately in the first and third quarters and declined in the second and fourth. For the year as a whole, spending for nondurables rose \$2.5 billion in constant dollars as compared to a rise of \$8.9 billion for services and a decline of \$0.5 billion for durables.

Food expenditures rose sharply all year but the increases were entirely due to higher prices; in constant dollars spending for food was unchanged in the first quarter and declined steadily after that. Spending for clothing and shoes rose sharply early in the year and continued to rise thereafter; in constant dollars, however, outlays grew only in the first quarter and were unchanged during the rest of the year. Spending for other nondurables increased at a fairly rapid pace throughout last year, but demand in constant dollars grew

Personal Consumption Expenditures As a Percent of Disposable Personal Income

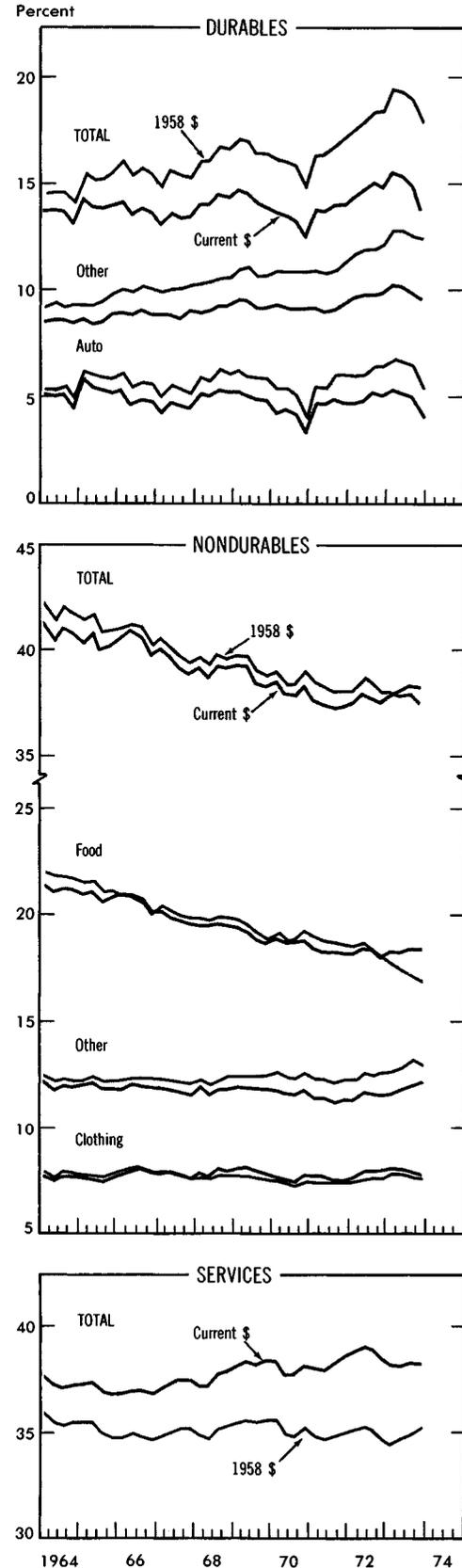


Table 1.—Quarterly Change in Personal Consumption Expenditures

[Billions of dollars, seasonally adjusted annual rate]

	1972				1973			
	I	II	III	IV	I	II	III	IV
	Current Dollars							
Personal consumption expenditures.....	16.8	19.0	14.9	18.5	26.8	16.2	20.4	9.2
Total goods.....	10.1	12.7	9.5	11.1	20.8	8.7	11.3	.8
Durable goods.....	4.8	3.6	5.1	2.7	9.3	-6	0	-7.2
Autos.....	.5	1.5	3.7	-6	3.9	-5	-1	-7.1
Furniture.....	3.0	.7	1.3	1.4	3.7	.7	.6	0
Other.....	1.3	1.4	.1	1.9	1.7	.4	-5	-1
Nondurable goods.....	5.3	9.1	4.4	8.4	11.5	8.1	11.3	8.0
Food.....	2.6	3.7	1.8	2.6	5.6	3.4	6.2	4.0
Clothing.....	1.3	2.3	1.2	2.2	3.2	1.0	1.0	.5
Other.....	1.2	3.3	1.4	3.6	2.6	3.8	3.9	3.5
Services.....	6.8	6.2	5.4	7.4	6.0	7.6	9.0	8.4
	Constant (1958) Dollars							
Personal consumption expenditures.....	8.3	11.0	7.5	9.5	12.4	0.5	4.8	-6.8
Total goods.....	5.4	8.4	5.4	7.0	10.8	-1.6	1.4	-8.6
Durable goods.....	3.4	2.7	3.9	3.4	7.8	-8	-8	-6.7
Autos.....	-3	1.2	2.7	.6	3.1	-8	-5	-5.9
Furniture.....	2.8	.4	1.0	1.2	3.1	.2	.3	-5
Other.....	.9	1.1	.2	1.6	1.6	-2	-6	-3
Nondurable goods.....	2.0	5.7	1.5	3.6	3.0	-8	2.2	-1.9
Food.....	.4	2.2	0	.2	0	-1.8	-4	-1.0
Clothing.....	.6	1.4	.8	.9	1.8	-2	.2	-4
Other.....	.9	2.2	.7	2.4	1.3	1.2	2.4	-5
Services.....	2.9	2.6	2.1	2.5	1.6	2.1	3.4	1.8

U.S. Department of Commerce, Bureau of Economic Analysis

74-2-1

only through the third quarter and declined a little in the fourth.

Spending and income

Chart 1 shows the relationship of the major components of personal consumption to disposable personal income, measured in current and in constant (1958) dollars. When both income and consumption are measured in constant dollars, the share of income spent on any particular consumption component is generally different from the current dollar share. This is because the change in the component's price from the 1958 base period to the period under review is generally different from the change in the implicit price deflator for total personal consumption spending (the PCE deflator); the price index for the component is used to deflate the component, while the PCE deflator is used to deflate disposable income. Such differences between the levels of the current and constant dollar shares of income spent on a particular consumption component are of rather limited interest. Of greater interest are differences between their movements over a specified span of time; such differences reflect differences over that time span between the behavior of the spending component's price index and the behavior of the overall PCE deflator.

As can be seen on chart 1, spending for durables is the most cyclically sensitive component of consumption and the one whose share of income has been increasing over the past decade, especially during the 1970-73 upswing in economic activity. Measured in current dollars, the share of durables spending in disposable income reached a peak in the first quarter of last year, above the previous cyclical highs in the first quarter of 1969 and the first quarter of 1966. After the first quarter of last year, however, the share spent on durables fell sharply, and by the fourth quarter was at its lowest level since early 1971. The constant dollar share of income spent on durable goods increased faster than the current dollar share, particularly since 1971. The reason for this is that the deflator for durable goods has been increasing

less rapidly than the deflator for total personal consumption spending.

Aside from cyclical fluctuations, the share of income spent on autos has not changed much in current dollars and increased only slightly in constant dollars over the past decade. The shares of income allocated both to furniture and household equipment and to the "other" group of durables (which are combined in chart 1) have been on a steady secular uptrend. Measured in constant dollars, the share of income spent on furniture and household equipment moved up from about 6¼ percent in 1964 and 1965 to about 8 percent in 1973, while that for the "other durables" group (which includes many luxury type goods) moved up from about 3 percent in 1964 and 1965 to 4½ percent in 1973.

There is relatively little cyclical sensitivity in the shares of income spent on nondurable goods and on services. There is a secular downtrend in the share spent on nondurables, in both current and constant dollars, which reflects the secularly declining share of income spent on food. On the other hand, outlays for services hold steady in relation to income when measured in constant dollars, and drift upward somewhat when measured in current dollars, reflecting the rapid rise in services prices.

Sharp price increases last year interrupted the secular downtrend in the share of current dollar income spent for nondurables, although the share in constant dollars continued to decline. The divergence between the behavior of current and constant dollar measures last year was striking in the case of food: from the fourth quarter of 1972 to the fourth quarter of 1973, current dollar outlays for food increased from 18 percent to 18.3 percent of disposable income, but the share in constant dollars declined from 17.9 percent to 16.8 percent of income.

The services deflator has been rising faster than the overall deflator for consumption spending since 1966, which accounts for the uptrend in the share of money income spent on services. Within the services group, the most rapidly increasing deflators are in the "other" category which includes trans-

portation, medical care, admission to amusements, etc. Current dollar outlays for this category rose from 18¼ percent of income in 1964 to nearly 20 percent in 1973, while in constant dollars the share drifted slightly lower, from 16¾ percent in 1964 to 15¼ percent in 1973. On the other hand, price increases for housing and household operations have been similar to the increases in the aggregate PCE deflator over the past decade. In both current and constant dollars, housing outlays have held in a fairly narrow range between 13 and 13½ percent of disposable income, and outlays for household operation services (electricity, gas, water, etc.) between 5¼ and 5½ percent of income.

Durable Goods Manufacturing

The expansion of goods output weakened sharply in the closing quarter of last year. In real terms, final sales of goods declined and inventory accumulation increased. The weakness was in the cyclically-sensitive durable goods industries and largely in consumer goods, particularly automobiles; capital goods output continued to expand moderately.

The growth of new orders for durable goods began to slacken around mid-1973, following a very steep rise in 1972 and the first half of 1973 (chart 2). After mid-1973, weakening in new orders for transportation equipment, electrical machinery, and steel more than offset continued expansion in orders for nonferrous metals and non-electrical machinery. In the case of steel, orders declined after mid-1973. Initially the decline mainly reflected controls on new orders imposed by the producers; with the industry operating essentially at capacity, the aim of orders control was to keep production lead times from becoming excessive. However, late in the year the decline accelerated and evidently reflected slackening in steel demand. The weakening in new orders in the transportation equipment industry was pronounced both in autos and in other types of equipment. (In these data, new orders for autos are treated as identical to shipments, and the industry

is considered to have no unfilled orders backlog.)

The slowdown in new orders for durables in the fourth quarter was concentrated in December, when orders fell 6½ percent, or \$2.9 billion, according to preliminary data—one of the sharpest monthly declines on record. Nearly \$2½ billion of the drop was in orders for transportation equipment, of which about half was in motor vehicles. Orders for aircraft also declined in December, and that decline may have reflected an impact of the fuel shortage, which has caused airlines to cut schedules and take a number of aircraft out of service. Orders for steel also declined fairly sharply in December, in good part because of cutbacks in orders by the automobile industry.

Shipments by durable goods manufacturers have shown a smoother trend in the past year than new orders. After a 4 percent rise in the first quarter, their growth slowed to 3 percent in each of the next three quarters. In December, however, shipments fell markedly, with the drop centered in motor vehicles, other transportation equipment, and steel; shipments of machinery and nonferrous metals continued to increase.

Unfilled orders held by durables goods manufacturers rose 11 percent in the second quarter of last year—the peak rate of increase in the post-1970 cyclical expansion—7¼ percent in the third quarter, and 6 percent in the fourth. Much of this slowing occurred in steel backlogs; these rose more than 50 percent in the second quarter, 15 percent in the third, and declined 5½ percent in the fourth. The rise in backlogs in household durables and aircraft also slowed in the second half, but, reflecting the ongoing strength in capital goods expansion, unfilled orders for nonelectrical machinery continued a strong and steady rise.

Inventories

Inventories in durable goods manufacturing rose 3¼ percent from September to December, continuing the slow acceleration of accumulation that has been going on for more than 2 years. The Census Bureau's monthly data on inventory accumulation by industry and by stage of processing are in book value terms, and thus can show an increase solely because of inventory turnover when prices are rising. This must be borne in mind when the data are reviewed.

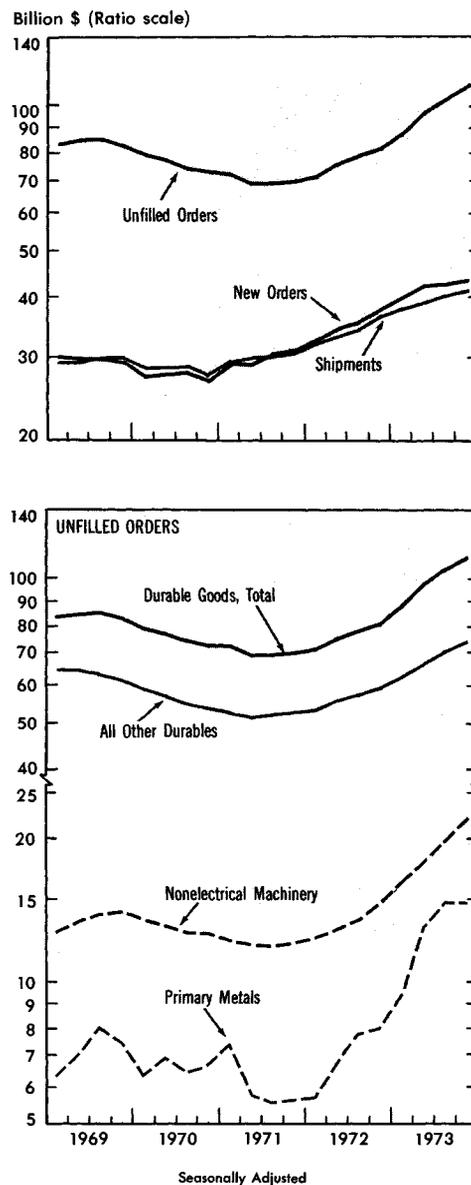
Most of the acceleration in the rise of durable goods inventories has occurred in industries related to the capital goods expansion, particularly machinery, electrical equipment, and instruments. Within these industries, increases have been mainly in materials and supplies; goods in process inventories have risen moderately and those of finished goods very little. In the transportation equipment industry, however, accumulation slackened appreciably in the fourth quarter after sharp acceleration earlier in the year. Nearly all of that slowdown reflected a decline in materials and supplies inventories in the motor vehicle industry resulting from the sudden sharp drop in demand which forced production cutbacks late in the year. (It is industry practice that stocks of finished cars are held not by the manufacturers but by retailers.)

In the metals group, inventory accumulation by fabricated metals producers accelerated in fourth quarter as it had during most of last year; inventories of primary metals producers were unchanged in fourth quarter after declining earlier in the year. The decline in inventories of primary metals manufacturers last year was mainly in finished goods, reflecting efforts of producers to meet urgent demands.

The ratio of inventories to sales in durables manufacturing increased moderately in the fourth quarter, to 1.89,

after holding unchanged earlier in 1973. All of the increase came in December, when shipments declined and inventory accumulation accelerated.

CHART 2
Orders and Shipments in Durable Goods Manufacturing



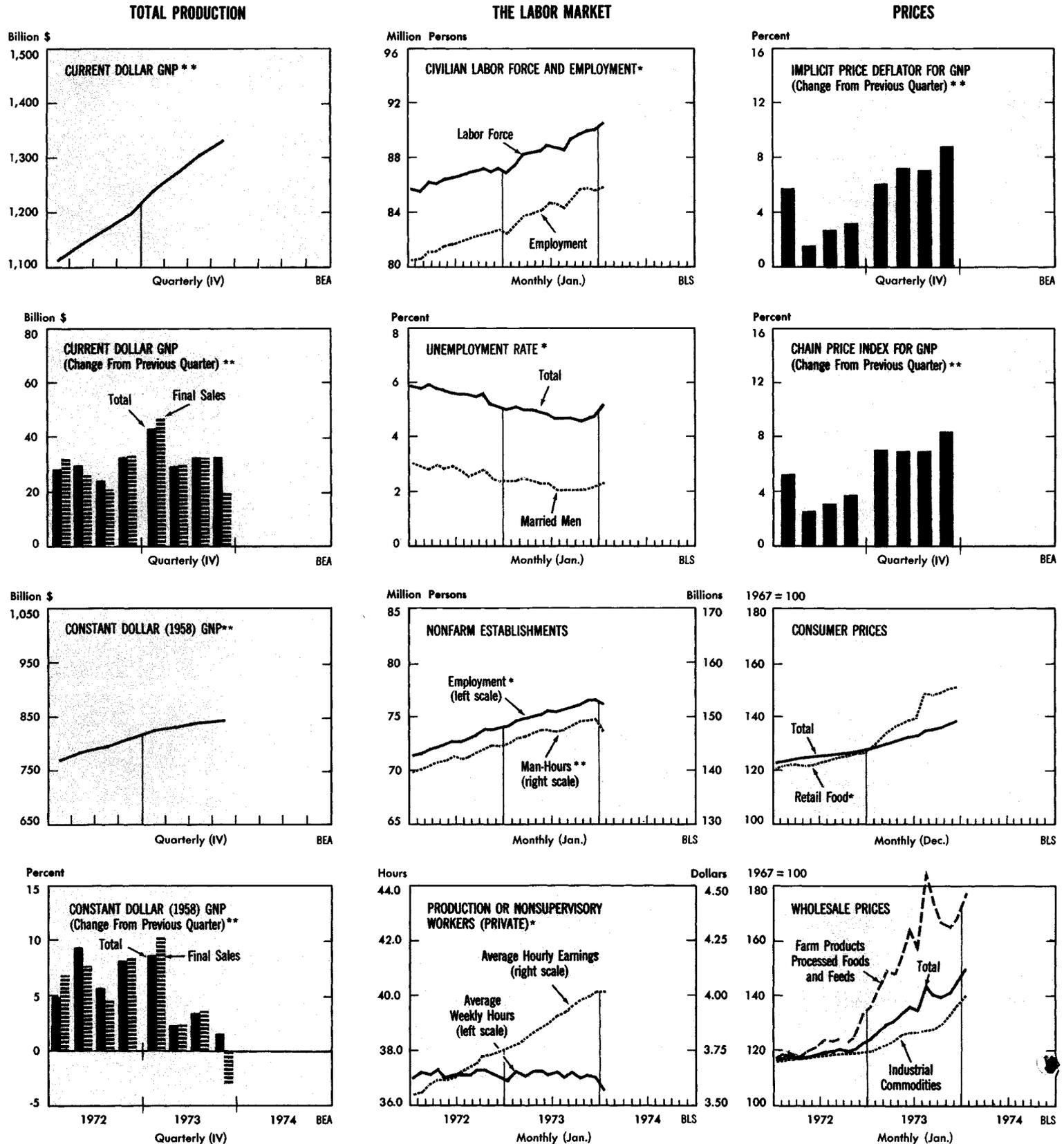
NOTE.—Sales and new orders are plotted as quarterly averages of monthly figures; unfilled orders are as of end of quarter.

Data: Census

U.S. Department of Commerce, Bureau of Economic Analysis

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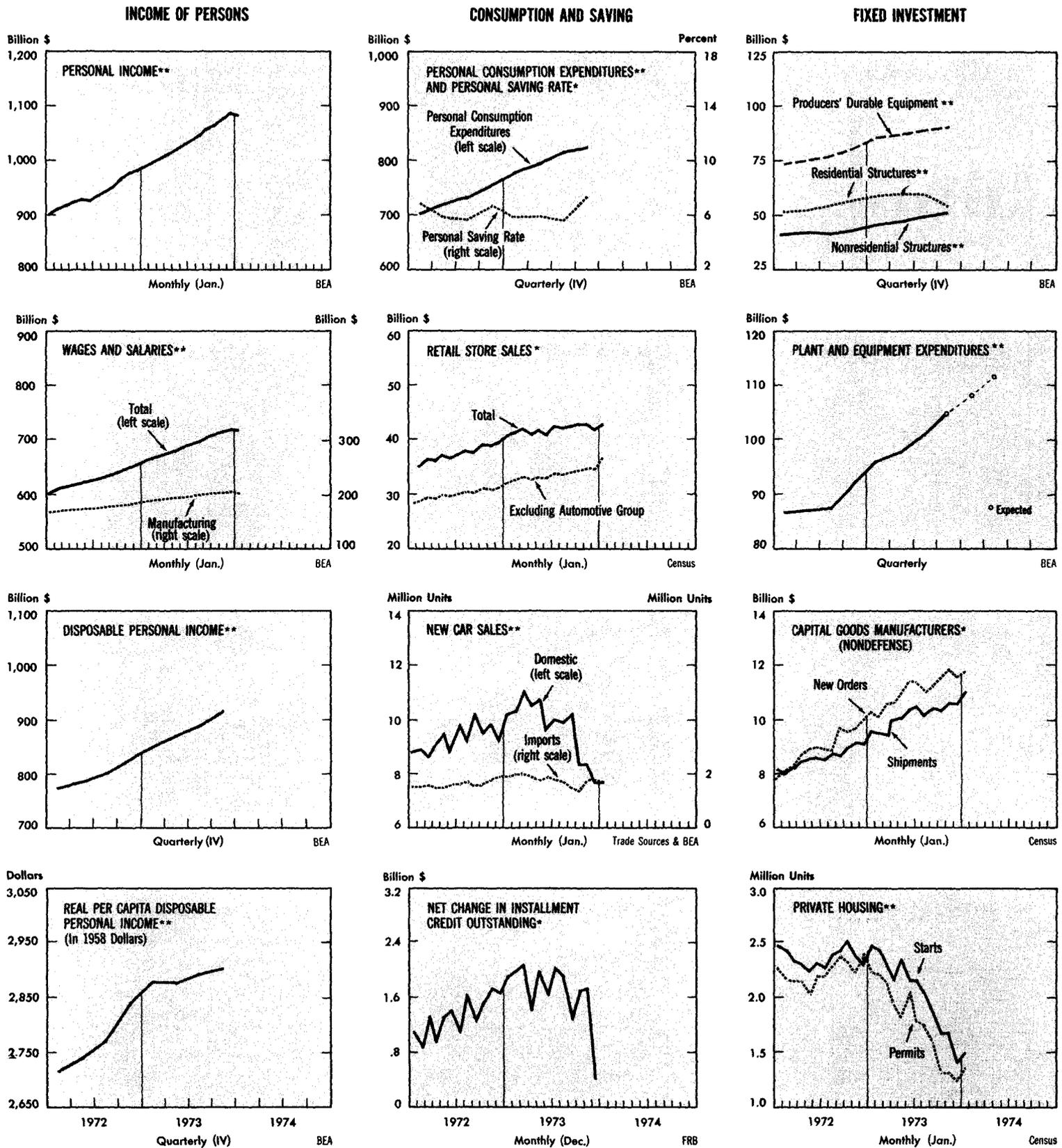
- Revised data show fourth quarter GNP up \$33 billion; real GNP grew 1½ percent at an annual rate
- In January: The jobless rate increased to 5.2 percent; nonfarm payroll employment dropped 260,000
- The wholesale price index increased 3½ percent



* Seasonally Adjusted ** Seasonally Adjusted at Annual Rates

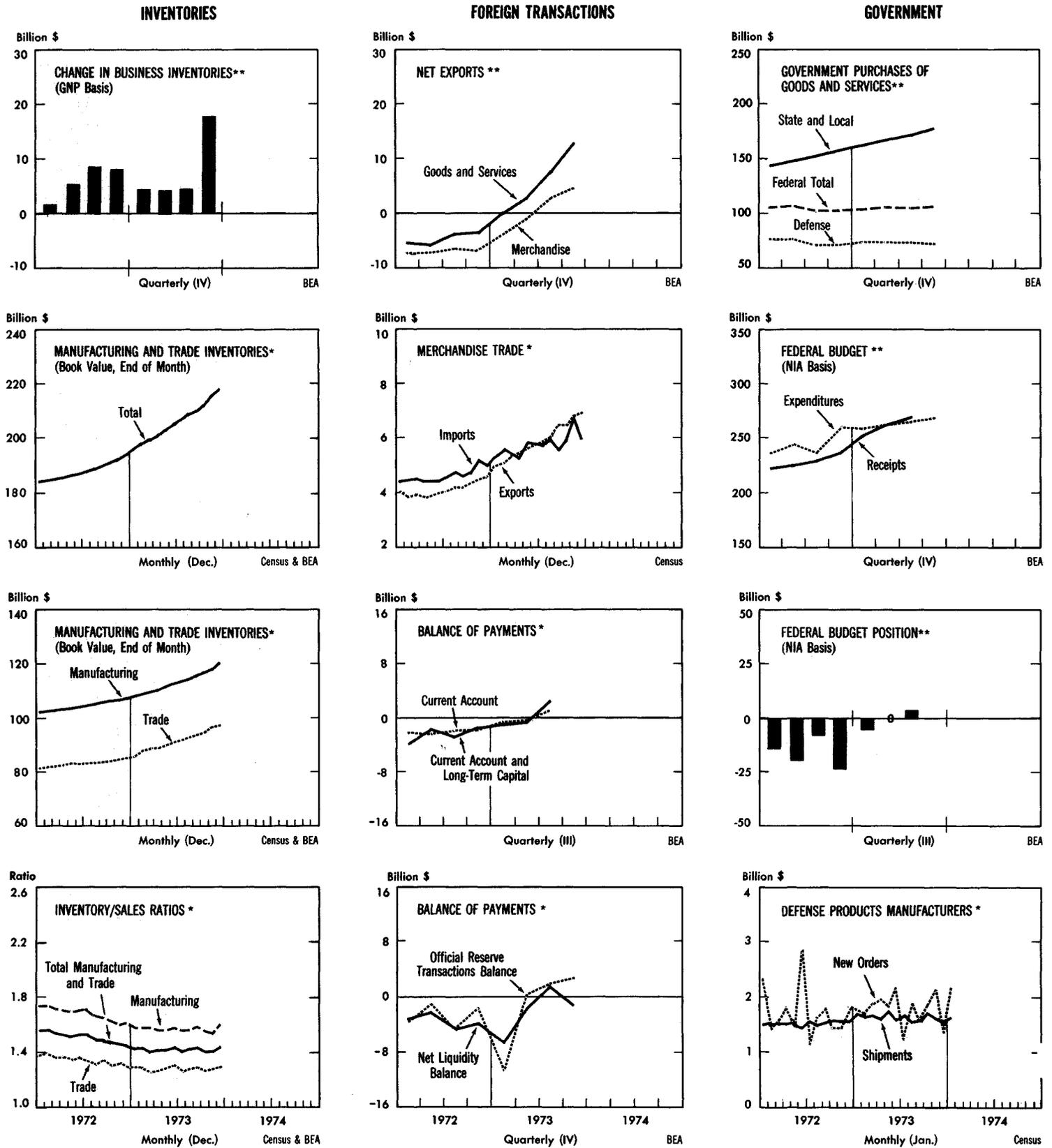
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- In January: Personal income declined \$4 billion; most of the decline was in manufacturing pay and farm income
- Retail sales advanced \$1 billion; domestic-model car sales remained at a rate of 7¾ million units
- Housing starts and building permits increased



* Seasonally Adjusted ** Seasonally Adjusted at Annual Rates

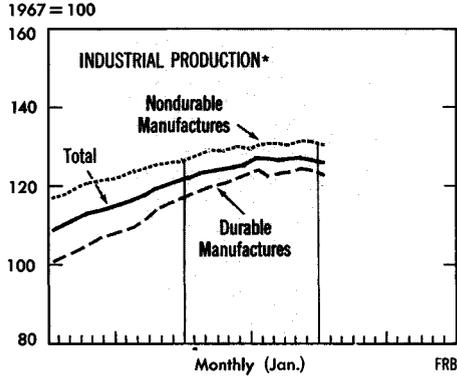
- In December: Manufacturing and trade firms added \$2¾ billion to inventories
- U. S. merchandise trade showed a surplus of almost \$1 billion
- Fourth quarter balance of payments in surplus on official reserve basis, in deficit on liquidity basis



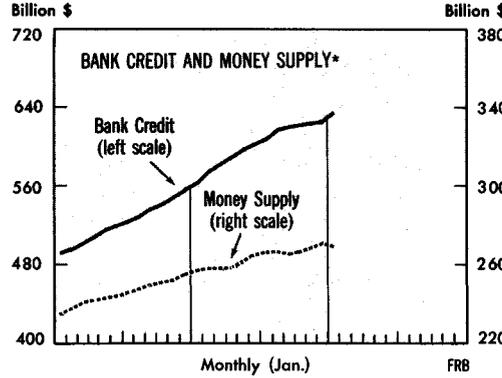
*Seasonally Adjusted **Seasonally Adjusted at Annual Rates

- In January: Industrial production declined by nearly 1 percent
- Bank credit increased sharply; money supply declined slightly
- Interest rates and bond yields moved higher

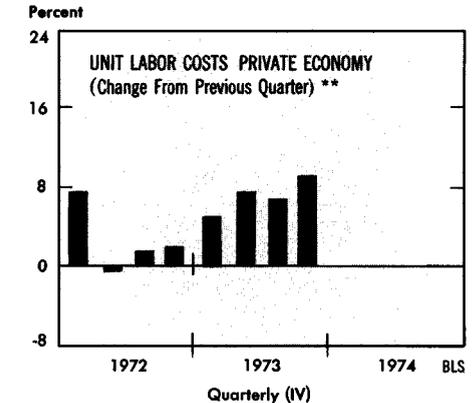
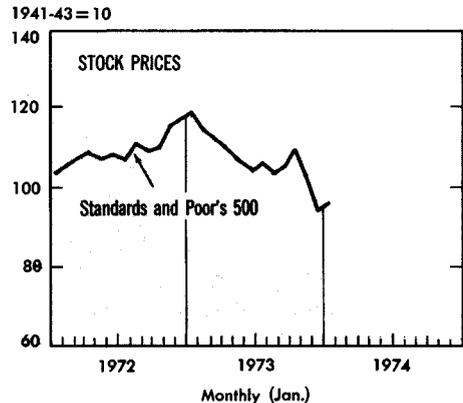
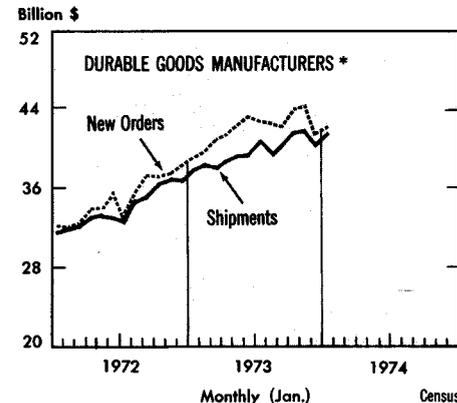
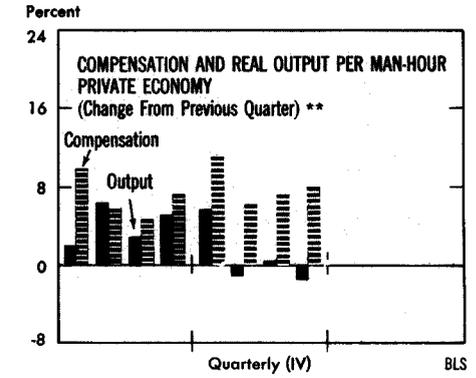
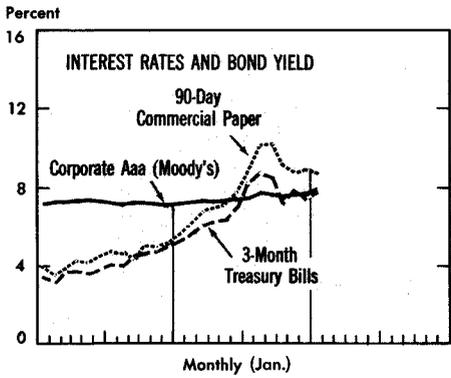
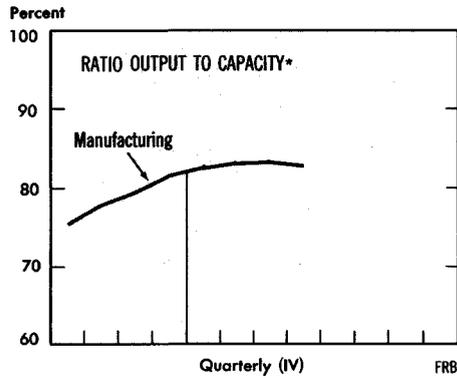
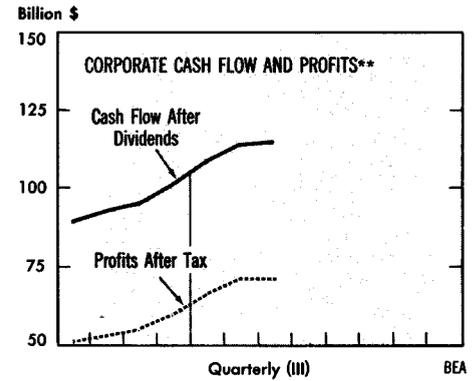
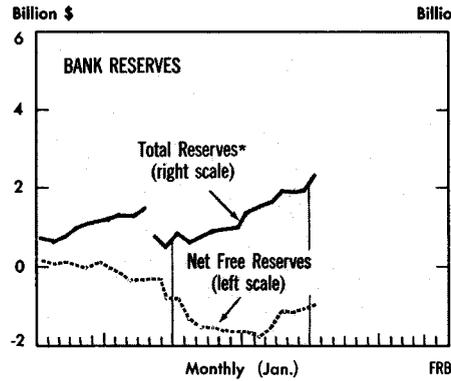
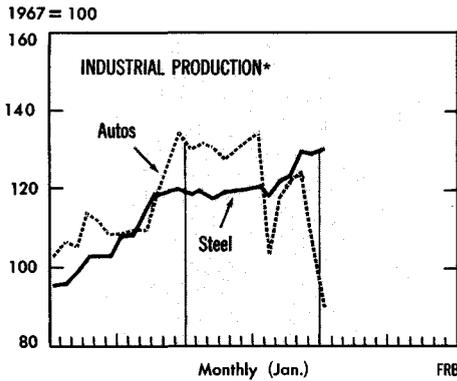
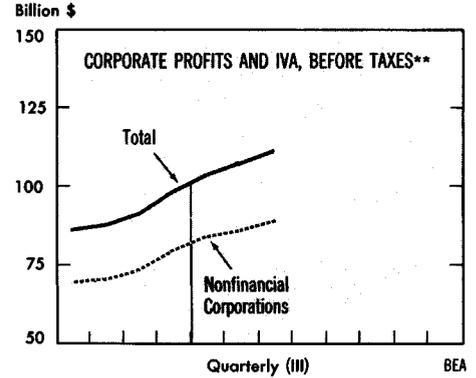
INDUSTRIAL PRODUCTION



MONEY, CREDIT, AND SECURITIES MARKETS



PROFITS AND COSTS



* Seasonally Adjusted ** Seasonally Adjusted at Annual Rates

NATIONAL INCOME AND PRODUCT TABLES

	1972	1973	1972				1973				1972	1973	1972				1973														
			III	IV	I	II	III	IV	III	IV			I	II	III	IV	III	IV													
			Seasonally adjusted at annual rates										Seasonally adjusted at annual rates																		
Billions of current dollars																Billions of 1958 dollars															

Table 1.—Gross National Product in Current and Constant Dollars (1.1, 1.2)

Gross national product	1,155.2	1,289.1	1,166.5	1,199.2	1,242.5	1,272.0	1,304.5	1,337.5	790.7	837.4	796.7	812.3	829.3	834.3	841.3	844.6
Personal consumption expenditures	726.5	804.0	734.1	752.6	779.4	795.6	816.0	825.2	526.8	553.9	531.0	540.5	552.7	553.3	558.1	551.3
Durable goods.....	117.4	130.8	120.2	122.9	132.2	132.8	132.8	125.6	104.0	114.3	105.8	109.2	117.0	116.2	115.4	108.7
Nondurable goods.....	299.9	335.9	302.3	310.7	322.2	330.3	341.6	349.6	220.9	228.8	222.2	225.8	228.8	228.0	230.2	228.3
Services.....	309.2	337.3	311.6	319.0	325.0	332.6	341.6	350.0	201.8	210.7	202.9	205.4	207.0	209.1	212.5	214.3
Gross private domestic investment	178.3	202.1	181.5	189.4	194.5	198.2	202.0	213.9	122.9	132.2	124.8	129.1	130.2	130.2	130.8	137.6
Fixed investment.....	172.3	194.2	172.9	181.2	189.9	193.7	197.3	195.9	118.3	126.6	118.2	122.8	126.9	126.9	127.7	125.0
Nonresidential.....	118.2	136.2	118.3	124.3	130.9	134.1	138.0	141.8	83.7	92.6	83.4	87.5	91.2	91.5	93.2	94.5
Structures.....	41.7	48.4	41.3	43.0	45.3	47.2	49.5	51.7	23.0	24.9	22.7	23.1	23.8	24.4	25.2	26.2
Producers' durable equipment.....	76.5	87.8	77.0	81.2	85.5	86.9	88.6	90.1	60.8	67.7	60.7	64.3	67.4	67.2	68.0	68.3
Residential structures.....	54.0	58.0	54.5	56.9	59.0	59.6	59.2	54.0	34.6	34.0	34.7	35.3	35.6	35.3	34.5	30.5
Nonfarm.....	53.5	57.4	53.9	56.4	58.4	59.1	58.6	53.4	34.2	33.6	34.3	35.0	35.3	35.0	34.2	30.1
Farm.....	.6	.6	.6	.5	.6	.5	.6	.7	.4	.4	.4	.3	.4	.3	.4	.4
Change in business inventories.....	6.0	8.0	8.7	8.2	4.6	4.5	4.7	18.0	4.6	5.6	6.6	6.3	3.3	3.4	3.0	12.5
Nonfarm.....	5.6	7.3	8.4	7.9	4.4	4.4	3.2	17.3	4.5	5.2	6.6	6.2	3.2	3.3	2.3	12.1
Farm.....	.4	.6	.3	.3	.2	.1	1.5	.7	.1	.3	.0	.1	.1	.1	.7	.4
Net exports of goods and services	-4.6	5.8	-3.8	-3.5	.0	2.8	7.6	12.8	-2.0	6.7	-9	-8	2.0	5.6	7.4	11.6
Exports.....	73.5	102.0	74.0	79.7	89.7	97.2	104.5	116.4	56.4	67.6	56.6	59.6	65.3	66.6	67.4	71.0
Imports.....	78.1	96.2	77.7	83.2	89.7	94.4	97.0	103.6	58.4	60.9	57.5	60.3	63.3	61.1	60.0	59.4
Government purchases of goods and services	255.0	277.1	254.7	260.7	268.6	275.3	279.0	285.6	143.0	144.7	141.8	143.5	144.4	145.2	145.0	144.1
Federal.....	104.4	106.6	102.3	102.7	105.5	107.3	106.8	106.8	60.8	57.1	58.8	58.6	58.2	58.2	57.2	54.9
National defense.....	74.4	73.9	71.9	72.4	74.3	74.2	74.2	73.0	.....	.....	.....	.....	.....	.....	.....	.....
Other.....	30.1	32.7	30.4	30.3	31.2	33.1	32.7	33.8	.....	.....	.....	.....	.....	.....	.....	.....
State and local.....	150.5	170.5	152.4	158.0	163.0	168.0	172.2	178.8	82.2	87.6	83.0	85.0	86.2	87.0	87.8	89.2

Table 2.—Gross National Product by Major Type of Product in Current and Constant Dollars (1.3, 1.5)

Gross national product	1,155.2	1,289.1	1,166.5	1,199.2	1,242.5	1,272.0	1,304.5	1,337.5	790.7	837.4	796.7	812.3	829.3	834.3	841.3	844.6
Final sales.....	1,149.1	1,281.1	1,157.8	1,191.0	1,237.8	1,267.5	1,299.8	1,319.4	786.1	831.8	790.0	806.0	826.0	831.0	838.3	832.1
Change in business inventories.....	6.0	8.0	8.7	8.2	4.6	4.5	4.7	18.0	4.6	5.6	6.6	6.3	3.3	3.4	3.0	12.5
Goods output	541.4	614.7	548.6	563.6	589.6	604.2	622.3	642.6	423.9	455.9	428.4	438.4	452.1	453.9	456.8	460.9
Final sales.....	535.4	606.7	539.9	555.4	585.0	599.6	617.6	624.6	419.3	450.3	421.7	432.1	448.7	450.5	453.7	448.4
Change in business inventories.....	6.0	8.0	8.7	8.2	4.6	4.5	4.7	18.0	4.6	5.6	6.6	6.3	3.3	3.4	3.0	12.5
Durable goods.....	219.1	250.1	222.6	233.2	242.5	249.7	254.3	254.2	184.1	206.2	186.2	196.3	203.4	207.1	208.1	206.0
Final sales.....	214.1	242.1	216.8	222.8	238.1	242.4	246.2	241.7	180.2	200.4	181.8	188.0	200.3	201.8	202.4	197.2
Change in business inventories.....	4.9	8.0	5.8	10.4	4.4	7.3	8.0	12.4	3.9	5.8	4.4	8.2	3.2	5.4	5.7	8.9
Nondurable goods.....	322.3	364.5	326.0	330.3	347.2	354.5	368.0	388.4	239.8	249.7	242.2	242.1	248.7	246.7	248.7	254.9
Final sales.....	321.2	364.6	323.1	332.5	346.9	357.3	371.4	382.8	239.1	250.0	240.0	244.1	248.5	248.7	251.3	251.3
Change in business inventories.....	1.1	-1	2.9	-2.2	.3	-2.8	-3.4	5.6	.7	-2	2.2	-1.9	.2	-2.0	-2.6	3.6
Services.....	487.3	534.5	491.8	503.9	514.8	527.7	540.8	554.7	292.6	306.0	294.5	298.8	300.6	304.1	308.6	310.5
Structures.....	126.5	139.9	126.2	131.7	138.1	140.1	141.4	140.2	74.2	75.5	73.8	75.1	76.7	76.3	76.0	73.1

Table 3.—Gross National Product by Sector in Current and Constant Dollars (1.7, 1.8)

Gross national product	1,155.2	1,289.1	1,166.5	1,199.2	1,242.5	1,272.0	1,304.5	1,337.5	790.7	837.4	796.7	812.3	829.3	834.3	841.3	844.6
Private	1,019.7	1,141.6	1,030.0	1,060.0	1,098.9	1,126.2	1,156.3	1,184.9	729.5	774.9	735.3	750.3	767.1	772.0	778.8	781.7
Business.....	975.4	1,090.9	984.9	1,013.6	1,050.5	1,076.8	1,105.2	1,131.1	706.6	750.8	712.3	726.8	742.9	748.3	754.7	757.4
Nonfarm.....	941.0	1,043.2	951.0	976.9	1,008.9	1,033.5	1,056.2	1,074.4	682.0	727.7	688.7	702.5	718.1	725.9	733.6	733.2
Farm.....	34.4	47.7	33.9	36.7	41.6	43.3	49.0	56.7	24.6	23.2	23.6	24.2	24.8	22.4	21.2	24.2
Households and institutions.....	36.8	41.1	37.5	37.8	39.3	40.5	41.8	42.9	17.4	18.3	17.5	17.4	18.0	18.2	18.5	18.5
Rest of the world.....	7.5	9.6	7.6	8.7	9.1	8.9	9.3	10.9	5.5	5.8	5.5	6.2	6.3	5.5	5.4	5.9
General government	135.4	147.5	136.5	139.2	143.5	145.8	148.2	152.5	61.1	62.5	61.3	62.0	62.2	62.4	62.5	62.9
Federal.....	50.3	52.8	50.2	50.5	52.5	52.2	52.3	54.1	21.8	21.3	21.7	21.7	21.6	21.4	21.2	21.2
State and local.....	85.1	94.8	86.4	88.7	91.1	93.6	96.0	98.4	39.3	41.1	39.7	40.3	40.6	41.0	41.3	41.7

HISTORICAL STATISTICS

THE national income and product data for 1929-63 are in *The National Income and Product Accounts of the United States, 1929-1965, Statistical Tables* (available at \$1 from Commerce Department District Offices or the Superintendent of Documents; see addresses inside front cover). Each July SURVEY contains preliminary data for the latest 2 years and fully revised data for the preceding 2. The July 1973 issue has data for 1969-72. Prior July issues have fully revised data as follows: 1968-69, July 1972; 1967-68, July 1971; 1966-67, July 1970; 1965-66, July 1969; 1964-65, July 1968. BEA will provide on request a reprint of the fully revised data for the years 1964-69.

	1972	1973 *	1972		1973			
			III	IV	I	II	III	IV
			Seasonally adjusted at annual rates					
Billions of dollars								

Table 4.—Relation of Gross National Product, National Income, and Personal Income (1.9)

Gross national product	1,155.2	1,289.1	1,166.5	1,199.2	1,242.5	1,272.0	1,304.5	1,337.5
Less: Capital consumption allowances.....	102.4	109.6	102.3	105.1	106.9	109.0	110.5	112.1
Equals: Net national product	1,052.8	1,179.5	1,064.2	1,094.1	1,135.5	1,163.0	1,194.0	1,225.4
Less: Indirect business tax and nontax liability... Business transfer payments... Statistical discrepancy...	109.5 4.6 -1.5	117.8 4.9 2.9	110.5 4.7 1.6	112.8 4.7 .2	115.6 4.8 1.1	117.2 4.9 3.2	118.5 5.0 3.7	119.9 5.1 -----
Plus: Subsidies less current surplus government enterprises.....	1.7	.4	1.8	2.2	.9	.4	.6	-.2
Equals: National income	941.8	1,054.3	949.2	978.6	1,015.0	1,038.2	1,067.4	-----
Less: Corporate profits and inventory valuation adjustment... Contributions for social insurance... Wage accruals less disbursements.....	91.1 73.7 -.5	109.4 92.1 -1	91.5 74.5 -2	98.8 75.8 .0	104.3 89.3 .0	107.9 90.9 -.3	112.0 93.0 .0	----- 95.0 -----
Plus: Government transfer payments to persons... Interest paid by government (net) and by consumers... Dividends... Business transfer payments.....	98.3 32.7 26.0 4.6	112.6 37.1 27.8 4.9	96.4 32.9 26.2 4.7	107.3 33.7 26.4 4.7	108.8 34.7 26.9 4.8	110.8 36.1 27.3 4.9	113.7 38.0 28.1 5.0	116.9 39.7 29.0 5.1
Equals: Personal income	939.2	1,035.4	943.7	976.1	996.6	1,019.0	1,047.1	1,078.9

Table 5.—Gross Auto Product in Current and Constant Dollars (1.15, 1.16)

	Billions of current dollars							
	1972	1973	1974	1975	1976	1977	1978	1979
Gross auto product ¹	43.6	49.7	46.5	45.6	51.5	51.2	49.6	46.5
Personal consumption expenditures.....	39.4	42.9	41.8	41.2	45.1	44.6	44.5	37.4
Producers' durable equipment.....	7.0	7.6	7.4	7.3	8.0	7.9	7.8	6.6
Change in dealers' auto inventories.....	-.5	1.5	-.8	-.4	.9	1.2	-.5	4.3
Net exports.....	-2.7	-2.7	-2.3	-2.9	-2.8	-2.9	-2.7	-2.4
Exports.....	3.0	3.8	3.2	3.3	3.6	3.6	3.8	4.2
Imports.....	5.7	6.5	5.4	6.2	6.4	6.5	6.5	6.6
Addenda:								
New cars, domestic ²	37.9	43.1	40.3	39.5	44.0	44.8	43.5	40.3
New cars, foreign.....	8.6	9.9	8.8	9.4	10.6	9.8	9.5	9.9
Billions of 1958 dollars								
Gross auto product ¹	39.0	44.2	41.0	41.4	46.4	45.5	43.6	41.3
Personal consumption expenditures.....	35.2	38.1	36.7	37.3	40.4	39.6	39.1	33.2
Producers' durable equipment.....	6.3	6.8	6.5	6.7	7.2	7.0	7.0	5.9
Change in dealers' auto inventories.....	-.4	1.3	-.7	-.3	.8	1.0	-.4	3.9
Net exports.....	-2.4	-2.4	-1.9	-2.6	-2.4	-2.5	-2.4	-2.1
Exports.....	2.6	3.4	2.7	3.0	3.2	3.1	3.3	3.8
Imports.....	5.0	5.7	4.7	5.5	5.6	5.6	5.7	5.9
Addenda:								
New cars, domestic ²	34.6	39.3	36.2	36.7	40.6	40.7	39.3	36.7
New cars, foreign.....	7.9	9.2	8.0	8.8	9.9	9.0	8.7	9.1

1. The gross auto product total includes government purchases.
 2. Differs from the gross auto product total by the markup on both used cars and foreign cars.
 *Corporate profits (and related components and totals) for 1973 total are preliminary and subject to revision next month.

	1972	1973 *	1972		1973			
			III	IV	I	II	III	IV
			Seasonally adjusted at annual rates					
Billions of dollars								

Table 6.—National Income by Type of Income (1.10)

National income	941.8	1054.3	949.2	978.6	1015.0	1038.2	1067.4	-----
Compensation of employees	707.1	785.2	713.1	731.2	757.4	774.9	794.0	814.7
Wages and salaries.....	627.3	691.4	632.5	648.7	666.7	682.3	699.3	717.2
Private.....	493.3	546.0	497.5	510.9	525.1	538.7	553.2	566.9
Military.....	20.3	20.8	20.0	20.1	20.9	20.5	20.4	21.3
Government civilian.....	113.8	124.6	115.1	117.7	120.7	123.1	125.7	129.1
Supplements to wages and salaries... Employer contributions for social insurance.....	79.7 39.0	93.9 49.0	80.5 39.3	82.5 40.2	90.8 47.4	92.6 48.3	94.7 49.4	97.5 50.8
Other labor income.....	40.7	44.9	41.3	42.3	43.3	44.2	45.3	46.7
Proprietors' income	74.2	84.2	74.1	77.1	80.6	81.5	85.0	89.8
Business and professional.....	54.0	57.5	54.3	55.3	56.3	57.1	57.9	58.5
Farm.....	20.2	26.8	19.8	21.8	24.3	24.4	27.1	31.3
Rental income of persons	24.1	25.1	24.9	24.9	24.7	24.6	25.3	25.7
Corporate profits and inventory valuation adjustment	91.1	109.4	91.5	98.8	104.3	107.9	112.0	-----
Profits before tax.....	98.0	126.6	98.4	106.1	119.6	128.9	129.0	-----
Profits tax liability.....	42.7	56.1	42.9	45.9	52.7	57.4	57.6	-----
Profits after tax.....	55.4	70.5	55.6	60.3	66.9	71.6	71.5	-----
Dividends.....	26.0	27.8	26.2	26.4	26.9	27.3	28.1	29.0
Undistributed profits.....	29.3	42.7	29.4	33.9	40.0	44.2	43.4	-----
Inventory valuation adjustment.....	-6.9	-17.3	-6.9	-7.3	-15.4	-21.1	-17.0	-15.5
Net interest	45.2	50.4	45.7	46.6	47.9	49.4	51.1	53.0

Table 7.—National Income by Industry Division (1.11)

All industries, total	941.8	1054.3	949.2	978.6	1015.0	1038.2	1067.4	-----
Agriculture, forestry, and fisheries.....	30.4	37.8	29.9	32.2	34.7	35.1	38.2	-----
Mining and construction.....	59.9	67.2	60.4	61.8	64.0	65.5	68.8	-----
Manufacturing.....	252.6	291.9	253.9	266.5	280.8	290.4	295.0	-----
Non-durable goods.....	99.9	111.5	100.8	104.6	107.3	109.9	112.6	-----
Durable goods.....	152.7	180.4	153.1	161.9	173.5	180.5	182.4	-----
Transportation.....	36.0	39.3	36.2	37.3	38.2	38.5	39.7	-----
Communication.....	20.0	21.7	20.4	20.8	20.9	21.0	22.5	-----
Electric, gas, and sanitary services.....	18.2	19.8	18.5	18.6	19.1	19.4	20.6	-----
Wholesale and retail trade.....	139.7	151.5	140.5	143.2	146.9	149.7	153.4	-----
Finance, insurance, and real estate.....	107.9	118.9	109.2	111.6	114.2	117.3	120.8	-----
Services.....	120.1	133.6	121.8	123.9	128.4	131.4	135.4	-----
Government and government enterprises.....	149.5	162.9	150.7	153.9	158.6	160.9	163.7	-----
Rest of the world.....	7.5	9.6	7.6	8.7	9.1	8.9	9.3	-----

Table 8.—Corporate Profits (Before Tax) and Inventory Valuation Adjustment by Broad Industry Groups (6.12)

All industries, total	91.1	109.4	91.5	98.8	104.3	107.9	112.0	-----
Financial institutions	17.5	21.6	17.6	18.6	19.8	21.4	22.3	-----
Federal Reserve banks.....	3.4	4.5	3.4	3.4	3.9	4.4	4.8	-----
Other financial institutions.....	14.1	17.1	14.2	15.2	16.0	17.0	17.5	-----
Nonfinancial corporations	73.6	87.8	73.9	80.2	84.5	86.5	89.7	-----
Manufacturing.....	40.1	51.5	39.9	44.7	49.7	52.4	51.9	-----
Non-durable goods.....	20.0	24.7	20.4	22.4	22.8	23.9	25.3	-----
Durable goods.....	20.2	26.8	19.5	22.3	26.9	28.5	26.6	-----
Transportation, communication, and public utilities.....	9.3	9.3	9.8	9.9	9.2	8.5	10.3	-----
All other industries.....	24.2	27.0	24.1	25.7	25.6	25.6	27.5	-----

Federal Fiscal Program

THE budget transmitted to Congress last month plots a flexible fiscal course in the environment of a weakening, inflation-plagued economy. The administration acknowledges a high degree of uncertainty about the economic outlook, and reserves the option of shifting the budget toward greater stimulus if conditions warrant.

Fiscal policy is intended to restrain an economic decline in calendar 1974, but not to provide the stimulus that would push the economy above its normal growth path. At least initially, fiscal policy will rely for its anti-recession thrust on stabilizers that occur "automatically" as the economy weakens, such as higher unemployment benefits and lower levels of receipts. Apart from the impact of the automatic stabilizers, the budget posture is essentially neutral. The full-employment surplus for calendar 1974 as a whole shows little change from the previous year although the budget implies some stimulus in the first half. However, administration officials have indicated that discretionary fiscal measures in addition to those already in the budget may be adopted if the economy clearly departs from the path outlined in the President's *Economic Report*.

Unified budget outlays and receipts

The unified budget projects an increase in outlays of \$29.7 billion in fiscal 1975, somewhat more than the \$28.2 billion estimated for the current year (table 1). Civilian programs account for about three-fourths—\$22.6 billion—of the 1975 increase. National defense outlays, mainly by the Department of Defense, are to rise \$7.1 billion, the largest increase since 1968. In terms of budget authority, civilian programs increase only \$4.4 billion in fiscal 1975,

and national defense programs \$6.8 billion. The much smaller increase in 1975 civilian budget authority, relative to the increase in civilian outlays, largely results from congressional action that concentrated multiyear authority in fiscal 1974 for programs such as highways, mass transit, and environmental protection; actual spending of these appropriations will be spread over several years.

Among civilian programs, substantial outlay gains are projected for income

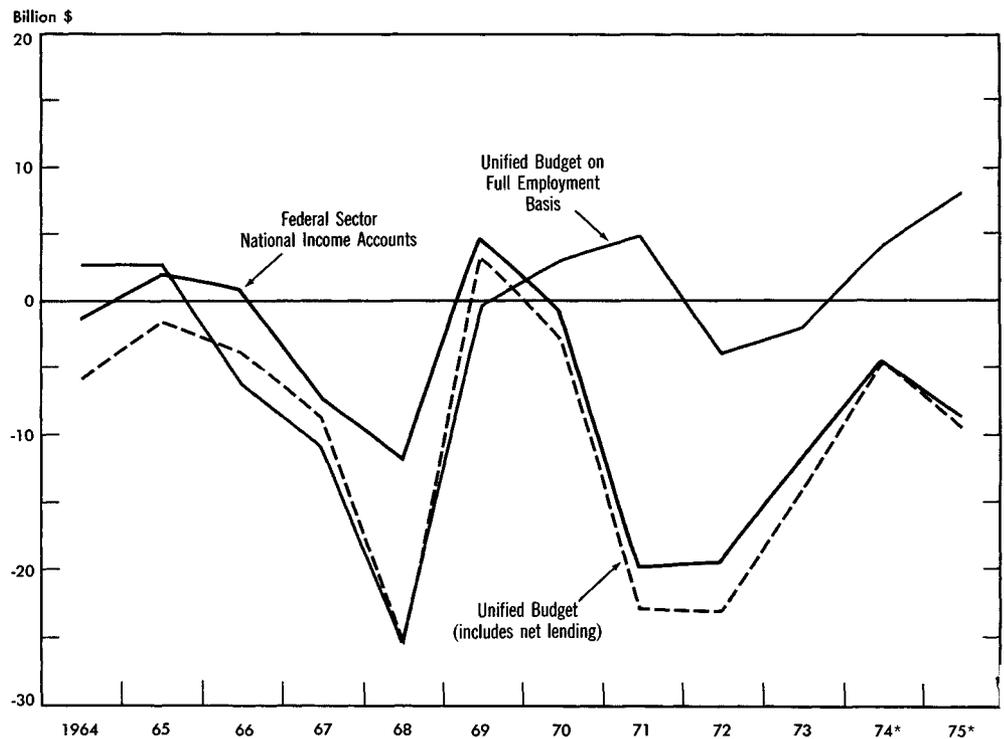
security (\$15.1 billion), health (\$3.0 billion), natural resources and environment (\$2.5 billion), and interest (\$1.3 billion). Allowances for energy research, civilian agency pay raises, and contingencies add another \$1.3 billion. A decrease of \$1.3 billion is slated for agriculture and rural development. Outlays for other civilian functions are to increase \$0.7 billion.

Receipts are estimated to rise \$25 billion in fiscal 1975, well below the \$37.8 billion advance projected for

CHART 7

Federal Fiscal Position

Unified budget and NIA Federal sector show increased deficits in fiscal year 1975



*Estimates from "The Budget of the United States Government, 1975."

Table 1.—Federal Government Receipts and Expenditures, Fiscal Years 1973-75

[Billions of dollars]

	1973 actual	Estimates	
		1974	1975
Unified budget			
Receipts.....	232.2	270.0	295.0
Outlays.....	246.5	274.7	304.4
Surplus or deficit (-).....	-14.3	-4.7	-9.4
Full-employment surplus or deficit (-).....	-2.0	4.0	8.0
National income accounts			
Receipts.....	243.3	280.5	304.8
Expenditures.....	255.1	285.2	313.4
Surplus or deficit (-).....	-11.8	-4.7	-8.6

Sources: "The Budget of the United States Government, Fiscal Year 1975" and BEA.

1974. The slowdown is primarily attributable to a lower rate of economic expansion; in addition, enacted and proposed tax changes contribute less to the 1975 increase in receipts than to the 1974 increase. The receipt estimates for 1974 and 1975—\$270 billion and \$295 billion, respectively—are given in the budget in round numbers to emphasize the difficulties of making accurate receipt forecasts. Administration officials caution that the estimates should be considered in terms of a range extending at least 1 percent on either side of the stated receipt figure.

The receipt estimates are based on an increase in GNP from \$1,288 billion in calendar 1973 to \$1,390 billion in calendar 1974, a rise of 7.9 percent, compared to 11.5 percent in calendar 1973. Personal income is projected at \$1,135 billion, up \$100 billion, or 9.6 percent. Corporate profits before taxes are expected to decline \$2 billion in 1974 after increasing \$28.6 billion last year.

The deficit in the unified budget is to double from \$4.7 billion in fiscal 1974 to \$9.4 billion in 1975 (chart 7). This is the first time since the fiscal 1964 budget that an increase has been projected in the deficit. The entire increase in the deficit results from the projected economic slowdown; under the so-called "full-employment" concept, the unified budget would show a surplus of \$4 billion in 1974 and \$8 billion in 1975. Much of the estimated increase in the full-employment surplus is the result of inflation which, in the short run,

increases receipts more than it increases outlays. The budget document takes the view that the full-employment surpluses should help to restrain inflation and should not serve as a rationale for spending increases that would make inflation worse.

NIA deficit increases

Under the concepts used in the Federal sector of the national income accounts (NIA), the increase in the deficit in fiscal 1975 is \$3.9 billion (table 2), only slightly less than in the unified budget. Expenditures on the NIA basis increase \$28.2 billion—\$1.5 billion less than unified budget outlays—and NIA receipts increase \$24.3 billion—\$0.7 billion less than unified budget receipts.

The smaller 1975 increase in NIA expenditures than in unified budget outlays results mainly from a one-time transfer of \$2.1 billion worth of rupees to India in February 1974. This transaction is included in the foreign transfer component of NIA Federal expenditures, where it causes a one-time bulge in 1974, but is excluded from the unified budget. (The rupees were accumulated by the U.S. Government over a number of years mainly in payment for agricultural commodities; in the NIA, these sales were netted against

purchases.) Two developments working in the opposite direction, i.e., to make the rise in unified budget outlays less than that in NIA expenditures, are: (1) a decline of \$0.4 billion in financial transactions, which are included in the unified budget but excluded from the NIA; (2) an increase in NIA spending by the Postal Service that is \$0.3 billion larger than the unified budget postal payment. Beginning in fiscal 1974, the unified budget totals exclude Postal Service outlays and show only the Federal payment to the Postal Service. The NIA continues to record capital spending by the Postal Service as part of Federal nondefense purchases, and the postal operating deficit as part of subsidies less the current surplus of government enterprises.

On the basis of the budget document, the Bureau of Economic Analysis (BEA) estimates that the NIA deficit in calendar 1974 will be over \$6½ billion, compared with a preliminary figure of about a \$1 billion surplus for calendar 1973. Expenditures will rise nearly \$40 billion, about half in transfers to persons, and receipts only \$32 billion. The net effect of tax changes in calendar 1973 and 1974 is to raise calendar 1974 receipts about \$6½ billion; excluding the effect of tax

Table 2.—Federal Government Receipts and Expenditures, NIA Basis

[Billions of dollars]

	Fiscal year			Calendar 1973			
	1973 actual	1974	1975	I	II	III	IV
		Estimates			Seasonally adjusted at annual rates		
Federal Government receipts.....	243.3	280.5	304.8	253.6	262.4	269.5	.....
Personal tax and nontax receipts.....	107.2	123.7	135.3	108.5	111.4	116.9	121.0
Corporate profits tax accruals.....	43.8	50.3	50.2	46.6	50.8	51.0	.....
Indirect business tax and nontax accruals.....	20.9	23.3	27.5	20.7	21.2	20.8	21.5
Contributions for social insurance.....	71.4	83.2	91.8	77.8	79.1	80.8	82.5
Federal Government expenditures.....	255.1	285.2	313.4	258.6	262.4	265.6	269.6
Purchases of goods and services.....	104.5	111.5	121.6	105.5	107.3	106.8	106.8
National defense.....	73.9	75.3	82.0	74.3	74.2	74.2	73.0
Other.....	30.6	36.2	39.6	31.2	33.1	32.7	33.8
Transfer payments.....	89.4	107.2	123.5	91.8	93.8	96.6	99.6
To persons.....	86.8	102.5	120.7	89.7	91.5	94.2	96.9
To foreigners (net).....	2.6	4.7	2.8	2.1	2.3	2.5	2.7
Grants-in-aid to State and local governments.....	40.4	44.1	46.6	41.1	40.5	40.5	41.6
Net interest paid.....	14.4	18.2	19.6	14.7	15.6	16.2	17.0
Subsidies less current surplus of government enterprises.....	6.4	4.2	2.1	5.5	5.1	5.3	4.6
Less: Wage accruals less disbursements.....	0	0	0	0	-1	0	0
Surplus or deficit (-), national income and product accounts.....	-11.8	-4.7	-8.6	-5.0	0	4.0	.....

Sources: "The Budget of the United States Government, Fiscal Year 1975" and BEA.

changes, revenue growth in calendar 1974 is \$25½ billion, mainly in personal income taxes.

Budget path on the NIA basis

If budget projections are realized, the Federal fiscal position on the NIA basis shifts from the surplus of \$4¼ billion recorded in the second half of 1973 to a deficit of \$8¼ billion in the first half of calendar 1974 (quarterly and half-year figures in this article are expressed at seasonally adjusted annual rates),¹ and then drops to a deficit of \$5¼ billion in the second half. However, if the Indian rupee transaction is excluded, the deficit increases from the first to the second half of calendar 1974.

Expenditures increase \$33 billion from the second half of calendar 1973 to the first half of 1974 (chart 8). Transfer payments rise about \$18 billion, of which about \$14 billion is in personal transfers, reflecting a 7 percent social security (OASDHI) increase payable in April, the Federal takeover of adult welfare programs in January, increased spending for food stamps, and increases in programs providing benefits for veterans, government retirees, and the unemployed. Foreign transfers increase \$4 billion (annual rate), entirely due to the transfer of rupees to India. Purchases also increase sharply in the first half of 1974—about \$9 billion, of which about two-thirds is for civilian programs. Other projected half-year increases are \$3 billion for grants-in-aid,

despite the elimination of adult welfare grants, and \$3 billion for interest. Subsidies decline \$3 billion, largely because of a steep decline in agriculture subsidies and a large March postal rate increase.

Receipts increase almost \$20 billion in the first half of calendar 1974, despite a decline of about \$½ billion in corporate tax liabilities. Personal taxes rise over \$9 billion, all in withholdings. Contributions for social insurance advance \$6½ billion; roughly \$4 billion is due to the increase in the maximum earnings subject to the social security payroll tax from \$10,800 to \$13,200, effective January 1. The proposed new "emergency windfall profits tax," assumed to be effective April 1, accounts for \$3 billion of the \$4 billion half-year gain in indirect business taxes.

Expenditures increase only \$8 billion in the second half of calendar 1974. Personal transfers rise \$9 billion, reflecting the full impact of the April OASDHI increase and another 4 percent OASDHI boost payable in July. The rate of increase in many other transfer programs slows. Foreign transfers return

to normal levels after their unusual first half bulge. Defense purchases continue to advance; nondefense purchases slow noticeably, despite an October pay raise for Federal workers. Grants, interest, and subsidies remain essentially unchanged. Receipts move up more than \$11 billion in the second half, almost entirely because of a projected increase in the pace of economic activity.

The rise in expenditures continues at about the same rate in the first half of 1975. Purchases, mainly for defense, continue their uptrend, boosted by the full impact of the October 1974 pay raise. The rise in personal transfers slows markedly, grants are flat and interest declines, but subsidies pick up, because of postal pay raises and a moderate increase in farm subsidies. Receipts increase somewhat more than expenditures. The growth in personal taxes moderates despite a large increase in withholdings, as final settlements slump, partly because of proposed legislation. Corporate taxes increase briskly, but indirect taxes fall as the revenue effect of the proposed windfall profits tax gradually declines. (Proposed tax changes are discussed in the receipts section of this article.) Contributions for OASDHI continue to advance, including over \$1 billion resulting from another increase in the wage base, to \$14,100, effective January 1, 1975.

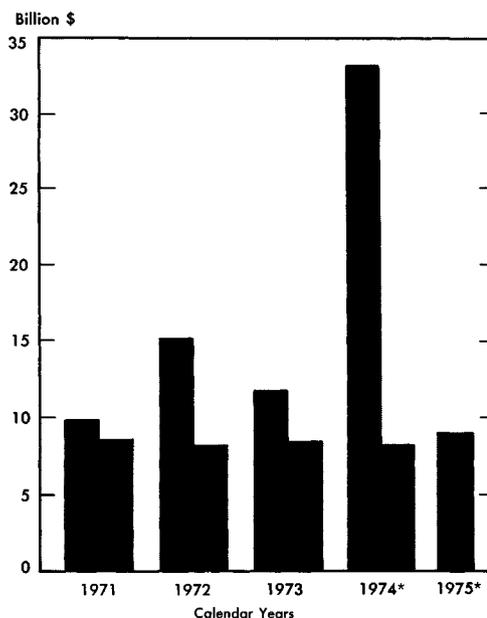
Little change in calendar 1974 full-employment surplus

As measured by changes in the full-employment surplus (NIA basis), fiscal policy was clearly restrictive in calendar 1973 but will be neutral in calendar 1974 if the budget scenario is realized. According to the Council of Economic Advisers (CEA), the full-employment surplus increased \$13.5 billion in 1973, but will be essentially unchanged in 1974 (table 3).

The CEA believes that the current slowdown will probably not extend beyond mid-year, and will be followed by a fairly strong expansion. Several reasons are cited for the projected pickup, in addition to the operation of the budget's automatic stabilizers cited

CHART 8

Federal Expenditures (NIA Basis) Large increases expected in first half of 1974



Change From Previous Half Year, Seasonally Adjusted
Estimate by BEA

U.S. Department of Commerce, Bureau of Economic Analysis

74-2-8

1. In the Federal sector, as in the rest of the NIA, seasonally adjusted and unadjusted data are exactly equal only on a calendar year basis. On a fiscal year basis, there can be differences, but they are generally small.

The differences are larger than usual in fiscal 1974 and 1975. In fiscal 1974, the four quarters of NIA receipts at seasonally adjusted annual rates will average to a figure over \$1½ billion larger than the unadjusted total; in fiscal 1975, they could average about \$3½ billion larger than the unadjusted total. These large differences are due to two factors. First, the January 1974 increase in the social security tax base will increase seasonally adjusted contributions in fiscal 1974 by \$2 billion, but increase unadjusted contributions only \$0.4 billion; the January 1975 base increase will increase seasonally adjusted contributions in fiscal 1975 by \$0.7 billion, but increase unadjusted contributions only \$0.1 billion. Second, the large reduction in net final settlements projected in the budget for fiscal 1975 (partly the result of proposed legislation) will be seasonally adjusted by smoothing it over all four quarters of calendar 1975, rather than concentrating it in the first half; this will result in seasonally adjusted personal taxes in fiscal 1975 exceeding the unadjusted totals by about \$3 billion.

A somewhat similar case exists on the expenditure side with subsidies in fiscal 1974. On a seasonally adjusted basis, agriculture subsidies will average to a figure \$1.4 billion below the unadjusted total. This is due to the huge—\$2 billion—decline in agriculture subsidies from calendar 1973 to calendar 1974; on an unadjusted basis, these subsidies are largely paid in the third quarter, and thus the budget decline occurs from fiscal 1974 to fiscal 1975—since the third quarter of calendar 1974 is in fiscal 1975. However, the NIA data maintain consistency with seasonally adjusted data provided by the Department of Agriculture, which will show a sharp decline in farm subsidies (and related farm income) beginning in the first quarter of 1974.

Table 3.—Changes in Full-Employment Surplus, NIA Basis

[Billions of dollars, half-years at seasonally adjusted annual rates]

Calendar year	Change from previous half-year ¹
1973:	
First half.....	11.4
Second half.....	5.9
1974:	
First half.....	-3.8
Second half.....	2.0
	Change from previous year
1973.....	13.5
1974.....	.2

1. Excludes the transfer of \$2.1 billion worth of rupees (\$4.2 billion at annual rate) in the first half of 1974 which will be included in actual NIA expenditures for that period, but is believed to have no economic impact in the United States.

Note.—Data exclude the impact of overwithholding and associated refunds.

Source: Council of Economic Advisers.

earlier: (1) some recovery of auto sales as producers raise capacity to produce small cars, and consumers are better assured of ability to purchase gasoline; (2) rising housing starts, partly due to greater availability of mortgage money and lower interest rates; (3) an increase in consumer spending for other products as the increase in prices of energy-related products halts; (4) continuation of a rate of money expansion conducive to accelerating real growth in the second half of 1974; (5) a steady rise in business investment; and (6) avoidance of a worldwide recession through cooperation among developed countries.

However, the administration believes that a neutral fiscal policy will not be appropriate if the economy departs significantly from the projected growth path. The administration is building a list of reserve measures, focusing primarily on budget expenditures which could be accelerated. The Secretary of the Treasury has mentioned a number of possible stimulative actions such as increased unemployment benefits, stepped-up public works programs in high unemployment areas, expansion of housing and defense programs, and revisions in income tax withholding tables to reduce overwithholding.

Fiscal 1975 Receipts

Federal receipts in fiscal 1975 total about \$305 billion on the NIA basis, an advance of over \$24 billion from the

estimate for fiscal 1974. This compares with increases of \$37 billion in fiscal 1974 and \$30 billion in 1973. The 1975 increase amounts to 8.7 percent, the smallest percentage gain since 1971, when economic slowdown and reductions in tax rates resulted in an actual decline.

NIA receipts, which are recorded mainly on an accrual basis, increase somewhat less than cash collections in both 1974 and 1975. Accruals exceed collections by \$6.1 billion in 1973, \$5.4 billion in 1974 and \$4.3 billion in 1975. The narrowing of the gap in fiscal 1975 is unusual, since the gap generally widens as economic activity accelerates. It can be traced in good part to the fact that the 1974 excess of accruals over collections is inflated by the impact of the proposed windfall profits tax.

The net effect of tax changes is to increase 1975 receipts \$4.3 billion, while income growth accounts for a gain of \$20.0 billion (table 4). For 1974,

Table 4.—Breakdown of Changes in Federal Receipts, NIA Basis

[Billions of dollars]

	Change from previous fiscal year		
	1973	1974	1975
Total receipts, NIA basis.....	29.6	37.2	24.3
Amount due to higher incomes.....	30.9	28.8	20.0
Amount due to tax changes.....	-1.3	8.4	4.3
Personal tax and nontax payments...	7.1	16.5	11.6
Amount due to higher incomes.....	15.2	16.2	13.5
Amount due to tax changes.....	-8.1	.3	-1.9
Corporate profits tax accruals.....	9.1	6.5	-1.1
Amount due to higher incomes.....	9.6	7.1	1.3
Amount due to tax changes.....	-5	-6	-1.4
Indirect business tax and nontax accruals.....	1.0	2.4	4.2
Amount due to higher incomes.....	.6	2.0	1.0
Amount due to tax changes.....	.4	.4	3.2
Contributions for social insurance....	12.4	11.8	8.6
Amount due to higher incomes.....	5.5	3.5	4.2
Amount due to tax changes.....	6.9	8.3	4.4

1. Includes overwithholding and associated refunds. Source: Estimates by BEA.

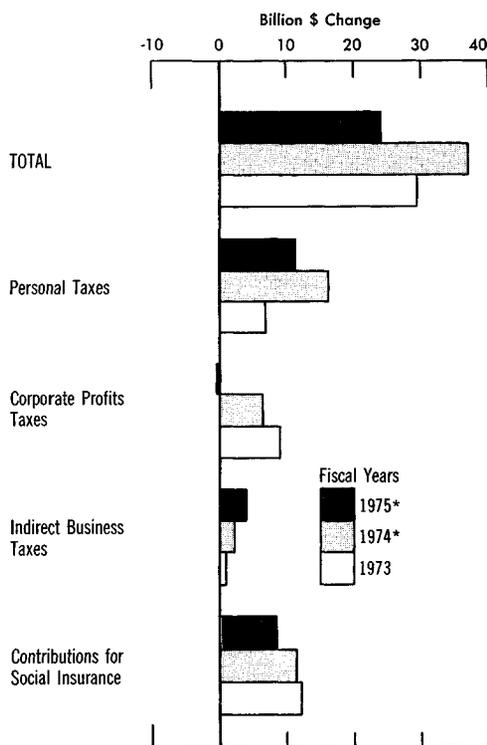
\$28.8 billion of receipts growth is attributable to higher incomes and \$8.4 billion to tax changes, mainly increases in social security taxes. The 1975 rise in receipts resulting from tax changes is due principally to social security tax increases and the windfall profits tax. Partly offsetting these tax increases are proposals to lower personal taxes.

Personal taxes up \$11.6 billion

Personal taxes in fiscal 1975 are estimated at \$135.3 billion, an increase of \$11.6 billion from 1974. This is the net result of a \$13½ billion rise attributable to higher incomes and a \$1.9 billion drop because of tax changes. The budget assumes congressional approval of tax reform and simplification proposals submitted by the administration in 1973, and of legislation calling for liberalized deductions for individual contributions to pension plans. The reform and simplification proposals include (1975 revenue effect in parentheses) a property tax credit for the elderly (-\$0.6 billion), a private school tuition credit (-\$0.3 billion), a limitation on artificial accounting losses (\$0.3 billion), and a proposal to simplify the tax structure (-\$0.4 billion). The liberalized deductions for pension contributions would reduce receipts \$0.9 billion.

CHART 9

Changes in Federal Government Receipts (NIA Basis)



* Estimate by BEA
U.S. Department of Commerce, Bureau of Economic Analysis

74-2-9

Withheld taxes advance nearly \$16 billion in 1975, about the same absolute increase as in 1974; overwithholding is assumed to continue at about the same rate. Quarterly declarations rise \$1.2 billion, about in line with recent trends. Offsetting these gains is a \$6 billion decline in net final settlements (final payments less refunds) on calendar 1974 liabilities, due in part to the proposed tax changes. Estate and gift taxes advance about \$½ billion.

Windfall profits tax assumed

Indirect business tax and nontax accruals are estimated to increase \$4.2 billion in fiscal 1975, following an advance of \$2.4 billion expected in 1974 and \$1.0 billion in 1973. The 1974 and 1975 advances are heavily dependent on assumed congressional approval of the proposed windfall profits tax, effective April 1, 1974, which adds \$1.5 billion in 1974 and an additional \$3.4 billion in 1975. The telephone excise tax

declines from 8 percent to 7 percent on January 1, 1975, after having been reduced by one percentage point in each of the 2 preceding years. The interest equalization tax (IET) was moved to zero by executive order in January 1974, as part of the termination of controls over the outflow of capital from the U.S. The IET had been applied since July 1963, at various rates, and was most recently reduced from 11.25 percent to 3.75 percent January 1, 1974.

The windfall profits tax will be levied on the sale of a barrel of crude petroleum. The tax will be calculated on the excess of the selling price over the producer's base price. The base price will be the ceiling price on December 1, 1973, as set by the Cost of Living Council; in the case of petroleum from new sources, the base price will be determined by the ceiling price on the date the new production begins. The tax will be imposed on the producer of crude petroleum; the producer will be permitted to deduct the new tax along with his other expenses in calculating his taxable profits. In most cases, it will be collected by refiners who will remit to the Government in the month following the month of liability.

The tax rates will range from 10 percent to 85 percent (table 5). However, Treasury regulations are to provide for a successive broadening of the lowest tax bracket in order to make the 10 percent rate applicable after 36 months only to taxable amounts in excess of \$7 per barrel, which is the expected longrun supply price. This broadening of the lowest bracket implies a gradual phase-out of the tax. According to BEA calculations based on the budget, the tax would add \$6 billion (annual rate) to NIA receipts in the second quarter of 1974, but only \$4.2 billion one year later.

Corporate tax liabilities are projected to edge down \$0.1 billion in 1975, to \$50.2 billion. Changes in statutory tax rates are not a factor in the year-to-year change, but the windfall profits tax raises corporate expenses, thus lowering profits and related tax liabilities. On the NIA basis, corporate taxes are reduced \$0.6 billion in 1974 and \$2.0 billion in 1975 because of this factor. The "energy crisis" also affects cor-

porate taxes in another way. A projected shift in the calendar 1974 profit "mix" toward a relatively larger share for oil industry profits reduces the overall tax rate somewhat, for oil industry profits are taxed at a lower effective rate than profits of other industries taken together.

Table 5.—Proposed Emergency Windfall Profits Tax Per Barrel of Crude Petroleum

Total amount taxable, i.e., difference between selling price and base price (dollars)	Tax bracket	Bracket tax rate (percent)	Maximum bracket tax (cents)	Cumulative total tax (cents)
Up to \$0.50	1st 50 cents	0	0	0
Up to \$0.75	Next 25 cents	10	2½	2½
Up to \$1.10	Next 35 cents	20	7	9½
Up to \$1.70	Next 60 cents	30	18	27½
Up to \$2.50	Next 80 cents	50	40	67½
\$2.51 and above	Any amount above \$2.50	85		

Source: Department of the Treasury.

Growth in social insurance contributions moderates

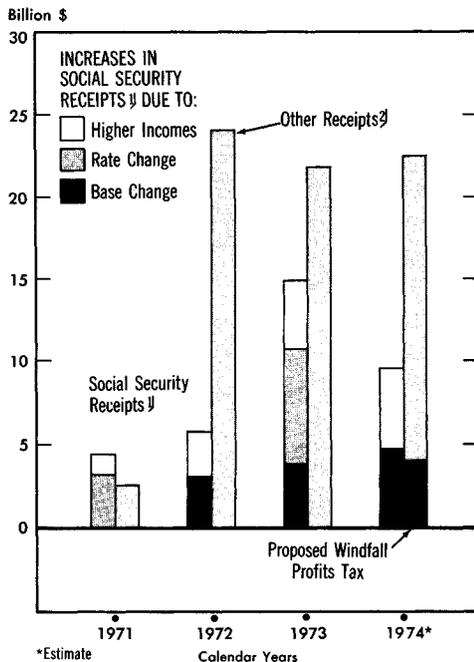
Social insurance contributions are projected to rise \$8.6 billion in fiscal 1975 to \$91.8 billion. This amounts to a 10.3 percent rise, a relatively small increase compared with the increases of 21 percent in 1973 and 16.5 percent in 1974. The slowdown is due largely to a reduction in the impact of changes in tax rates and in the maximum earnings subject to tax, which account for only \$4.4 billion of the 1975 increase as compared to \$8.3 billion in 1974 and \$6.9 billion in 1973.

The maximum amount of earnings subject to the OASDHI tax was raised from \$10,800 to \$13,200 January 1, 1974, and will be raised to \$14,100 January 1, 1975. The maximum taxable wage base for the railroad retirement program was also raised on January 1, 1974, and the budget proposes additional changes in the system in fiscal 1975. Other, much smaller, tax changes occurring during this period include a July 1, 1974, increase in the supplementary medical insurance premium from \$6.30 to \$6.70 per month, and a January 1974 decrease in the Federal unemployment tax rate.

The 1974 and 1975 increases in the OASDHI tax base have their most

CHART 10

Increases in Social Security Tax Rates and Base are Important in Growth of Federal Receipts



*Estimate
 1. Includes payments by self-employed persons as well as payroll taxes for the OASDHI program.
 2. Includes personal tax and nontax receipts, corporate profits tax accruals, indirect business tax and nontax accruals, and other contributions for social insurance.
 U.S. Department of Commerce, Bureau of Economic Analysis

pronounced effect on actual receipts in the second half of the calendar year in which they occur—and thus in the following fiscal year—because persons reach the earnings maximum later in the year than they would with a lower base. Thus, the relatively large base increase in January 1974 has its principal impact on fiscal 1975 contributions, and the increase estimated for January 1975 affects mainly fiscal 1976 contributions. However, in the seasonally adjusted NIA figures, the base increase is annualized when it occurs. (In effect, BEA is revising seasonal adjustment factors in anticipation of the new seasonal pattern of OASDHI contributions resulting from the base base change.) Thus, the January 1974 increase raises contributions as calculated in the NIA about \$4 billion (annual rate) beginning in the first quarter of calendar 1974, and the January 1975 increase raises contributions about \$1.3 billion beginning in the first quarter of calendar 1975.

Fiscal 1975 Expenditures

Federal expenditures on the NIA basis increase \$28.2 billion in fiscal 1975, compared with \$30.1 billion in the current fiscal year (table 2). Among the NIA expenditure categories, personal transfers account for about 65 percent of the 1975 rise (\$18.2 billion), followed by defense purchases (\$6.7 billion), nondefense purchases (\$3.4 billion), grants (\$2.5 billion), and net interest (\$1.4 billion). Declines are projected for subsidies (\$2.1 billion) and foreign transfers (\$1.9 billion).

Table 6 highlights the major factors which contribute to the year-to-year change in Federal expenditures. Increases in social security benefits and in pay account for \$9.7 billion of the 1975 advance. The Indian rupee transfer adds \$2.1 billion to the 1974 expenditure rise but has a negative impact of the same amount on the changes in spending in 1975. Government subsidy payments to farmers decline \$2.3 billion in 1975. The sale of military hardware to Israel reduces expenditures by \$1 billion in 1974 and has the opposite effect on the change in spending from

1974 to 1975. Of the remaining \$21.9 billion of spending rise in 1975, non-defense expenditures show a \$17.3 billion gain, substantially lower than the 1974 increase of \$23.7 billion; defense expenditures show a \$4.6 billion increase, more than double the 1974 advance.

The major new initiative included in the budget is the administration's proposal for a comprehensive national health insurance plan. In addition, Congress is asked to bring about a major reform of the welfare system. Neither of these proposals, however, is expected to be enacted and established in time to affect 1975 budget totals significantly.

If enacted, the new health insurance plan is estimated to cost an additional \$6 billion in the first full year of operation, probably fiscal 1977. Most of these funds would subsidize benefits for the unemployed, the poor, and people with high health risks; employers

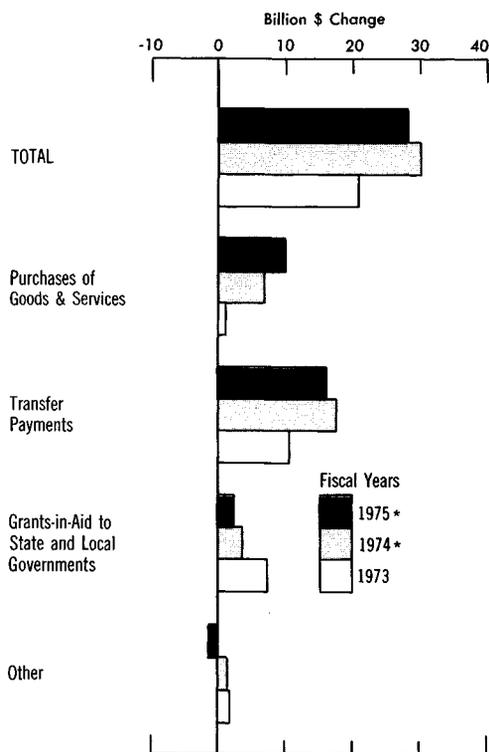
and employees would pay for the rest of the program. The plan would pay for 75 percent of most medical costs over \$150, up to \$1,500, and the entire amount of remaining costs, and would incorporate existing medicare and medicaid programs with benefits broadened slightly. Details were not provided on new proposals to reform the welfare system.

Table 6.—Breakdown of Changes in Federal Expenditures, NIA Basis
(Billions of dollars)

	Change from previous fiscal year	
	1974	1975
Total expenditures	30.1	28.2
OASDHI and welfare.....	2.9	7.0
Pay raises.....	1.6	2.7
Indian rupee transfer.....	2.1	-2.1
Government payments to farmers.....	-1.3	-2.3
Military sale to Israel.....	-1.0	1.0
Other.....	25.8	21.9
Defense ¹	2.1	4.6
Nondefense ¹	23.7	17.3

1. Includes purchases, transfers, grants, and interest.
Source: Estimates by BEA.

CHART 11
Changes in Federal Government Expenditures (NIA Basis)



*Estimate by BEA
U.S. Department of Commerce, Bureau of Economic Analysis

The budget also reflects an energy policy to provide additional funds for energy research and development. It is anticipated that this program will require \$10 billion in Federal funds during its first 5 years. For 1975, the budget includes \$1.5 billion for direct energy research and development, compared with about \$900 million in the current fiscal year.

Significant advance in defense purchases

National defense purchases, which amounted to \$73.9 billion in fiscal years 1972 and 1973, increase to \$75.3 billion in the current year and \$82 billion in 1975. The 1975 advance of \$6.7 billion is the largest since the \$8.2 billion gain in fiscal 1968.

Increases in the average compensation of military and civilian personnel have been a major factor in maintaining high levels of national defense purchases for many years (chart 13); this trend continues in 1974 and 1975. These increases in average compensation have

more than offset the decline in military and civilian personnel, resulting in higher total compensation. In fiscal 1975, total compensation will make up 50.2 percent of defense purchases; in 1965, compensation accounted for 43.6 percent of purchases. Pay raises going into effect since January 1973 added \$0.8 billion to defense purchases in 1973 and are expected to add \$2.7 billion in 1974 and \$4.5 billion in 1975; excluding these amounts, defense purchases would decline \$1.3 billion in 1974 and increase \$2.2 billion in 1975.

Armed forces personnel have declined substantially in the post-Vietnam war period. The number of military personnel at June 30, 1975 is estimated at slightly less than 2.2 million, the lowest level since before the Korean war and 1.4 million below the Vietnam war peak in mid-1968.

Operation and maintenance outlays increase \$1.6 billion in 1975, following a \$2.2 billion gain in the current year. Among other things, these gains result from: (1) increased civilian pay; (2) higher prices for fuel oil; (3) overhauling

of ships; and (4) purchase of spare parts for the C5A and C141 transports.

Procurement of major military hard goods as recorded on a delivery basis in the NIA increases over \$1 billion in 1975, compared with a decline of nearly \$3 billion in fiscal 1974. Part of the 1975 increase reflects a rebuilding of defense inventories reduced during the Mideast conflict. Spending also goes up for the Trident system, Navy ships, combat aircraft, and for the purchase of ammunition and sophisticated missiles. Other increases in defense purchases occur in Department of Defense research and development (\$0.5 billion), military construction (\$0.2 billion), and for atomic energy programs (\$0.2 billion). Table 7 shows the functional detail of unified budget defense outlays and a reconciliation with defense purchases on the NIA basis.

Increase in nondefense purchases

Nondefense purchases are estimated to advance \$3.4 billion in fiscal 1975, compared with \$5.6 billion in 1974. The purchase of agricultural products by

Table 7.—Breakdown of National Defense Outlays in the Unified Budget, and their Relationship to National Defense Purchases on the NIA Basis, Fiscal Years 1973–75

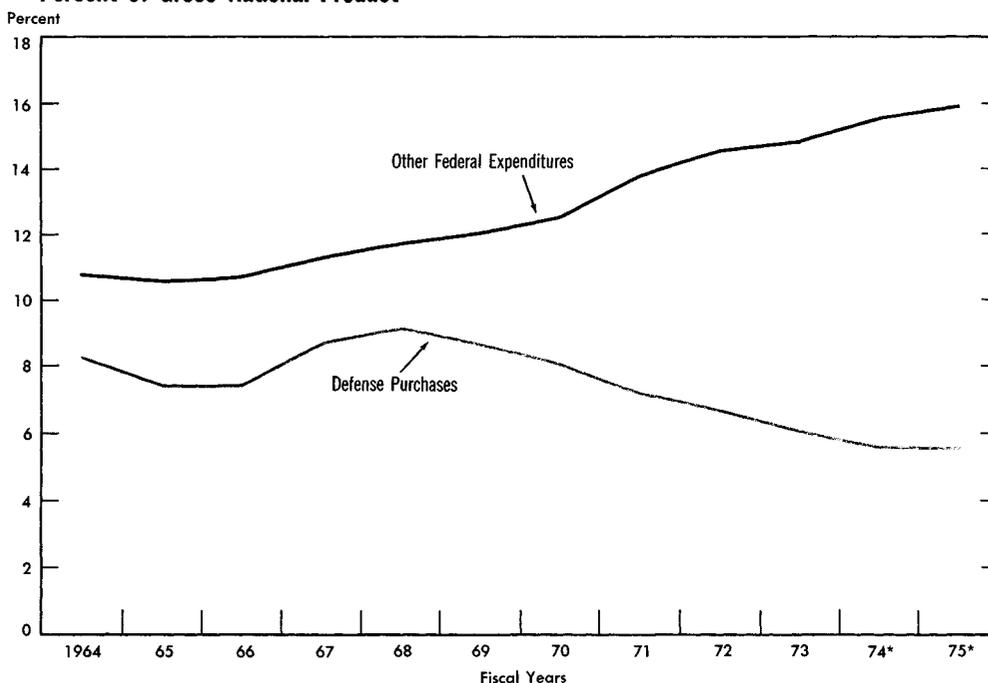
	1973 actual	1974 1975	
		Estimates	
Department of Defense, military	73.3	78.4	84.6
Military personnel.....	23.2	24.1	24.4
Retired military personnel.....	4.4	5.1	5.7
Operation and maintenance.....	21.1	23.3	24.9
Procurement.....	15.7	15.1	16.4
Aircraft.....	5.1	n.a.	n.a.
Missiles.....	3.0	n.a.	n.a.
Ships.....	2.0	n.a.	n.a.
Vehicles and ordnance.....	2.9	n.a.	n.a.
Electronics and communications.....	.7	n.a.	n.a.
Other.....	2.0	n.a.	n.a.
Research, development, test, and evaluation.....	8.2	8.4	8.9
Other.....	.8	2.2	2.1
Civilian and military pay increases ¹			1.7
All-volunteer force.....		.1	.2
Military retirement cost-of-living increases and system reform.....			.3
Military assistance.....	.5	1.1	1.2
Atomic energy and other defense-related activities	2.2	1.1	1.9
Total unified budget outlays for national defense	76.0	80.6	87.7
Less: Transfers, grants, interest.....	4.6	5.4	6.2
Timing differences and other adjustments.....	-2.3	-1	-1.5
Equals: National defense purchases, NIA	73.9	75.3	82.0

¹ Includes pay raise effective October 1974.

Sources: "The Budget of the United States Government, 1975," Department of Defense, and BEA.

CHART 12

Defense Purchases and Other Federal Expenditures as a Percent of Gross National Product



* Estimate

U.S. Department of Commerce, Bureau of Economic Analysis

74-2-12

the Commodity Credit Corporation (CCC) accounts for \$1½ billion of the advance, pay raises for over \$¾ billion, with the remaining increases—about \$1½ billion—distributed over a wide range of other programs. The advance in CCC purchases reflects a substantial increase in activity in 1975 following declines in 1973 and 1974 resulting from higher market prices and expanded exports. (CCC operations affect several categories of Federal expenditures on the NIA basis, not just purchases; see table 8.)

Transfer payments continue to advance

Expenditures other than for purchases of goods and services increase by over \$18 billion in 1975, following a rise of over \$23 billion in 1974. This continues a trend which has accelerated in recent years; in fiscal 1965, these expenditures accounted for 46 percent

Table 8.—Breakdown of Commodity Credit Corporation Expenditures on the NIA Basis, and Their Relationship to Outlays in the Unified Budget, Fiscal Years 1973-75

(Billions of dollars)

	1973	1974	1975
Commodity Credit Corporation, unified budget outlays.....	4.4	1.9	1.5
Less: Financial transactions.....	1.1	.3	.5
Netting and grossing.....	-.4	-.2	-.2
Timing differences.....	.6	-.2	-.2
Other.....	.1	.2	.2
Equals: Commodity Credit Corporation, NIA expenditures.....	3.0	1.5	.9
Purchases.....	-1.4	-.7	.6
Foreign transfers.....	.4	.4	.4
Net interest paid.....	-.2	-.2	-.2
Subsidies.....	4.0	2.4	.1
Current surplus.....	.2	-.4	.....

Sources: Department of Agriculture and BEA.

of the total, they had increased to 50 percent by 1970, and are expected to account for over 60 percent of total expenditures by 1975. The 1975 absolute advance is entirely in personal transfer payments; other expenditures combined—foreign transfer payments, grants to State and local governments, net interest paid, and subsidies (less the current surplus of government enterprises)—are unchanged.

Personal transfer payments advance \$18.2 billion, from \$102.5 billion in 1974 to \$120.7 billion in 1975. Since 1965, transfer payments have risen more than \$92 billion, for an average annual rate of increase of over 15½ percent. This growth of transfers has resulted from increases in average benefits and in the number of beneficiaries, as well as the introduction of new programs such as medicare, food stamps, special benefits for disabled coal miners, and supplemental security income.

Social security benefits (excluding medicare) account for \$8½ billion of the 1975 advance in personal transfers, with about \$5¼ billion resulting from the 7 percent benefit increase effective in April 1974 (adding about \$1 billion to benefits in 1974 and \$4 billion in 1975, respectively) and the 4 percent increase effective in July 1974 (adding about \$2½ billion in fiscal 1975). As shown in table 9, social security recipients have received a number of across-the-board benefit increases in recent years. Hospital and medical payments under the medicare program are expected to advance \$2.0 billion in 1975 to a level of

nearly \$13½ billion. Included in these payments is about \$1½ billion for the extension of benefits (effective July 1973) to disabled persons under 65 years of age.

Under legislation approved in 1972 and amended last year, future adjustments in social security benefits and the associated taxes will be tied directly to increases in the cost of living and in average wages. After calendar 1974, benefit increases will be automatically effective in June (payable in July) if the consumer price index for the first quarter is at least 3 percent higher than at the time the previous increase was triggered; the benefit increase will be exactly equal to the percentage change in the CPI. If benefits are raised, the maximum taxable wage base also rises automatically in the following January. The wage base will increase by the same percentage as the advance in average taxable wages from the first quarter of the year of the previous benefit change to the year of the benefit change which triggered the base increase.

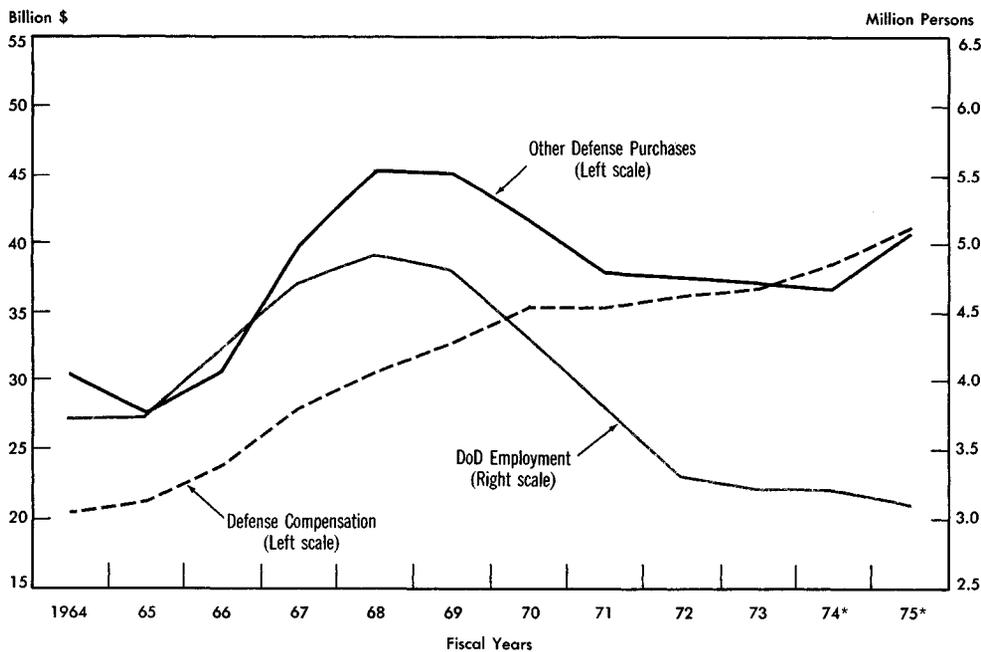
The Federal program of supplemental security income (SSI), initiated January 1, 1974, replaced federally aided State programs of assistance to the aged, blind, and disabled. States will continue to administer the large program of aid to families with dependent children (AFDC). Federal transfer payments under the SSI program are estimated to be \$1¼ billion in fiscal 1974 and \$4¼ billion in 1975. The basic SSI benefit is scheduled to rise July 1, 1974, to \$146 a month from \$140 for a single person and to \$219 from \$210 for a couple. Legislation is being developed to adjust SSI benefits for cost-of-living advances.

Rise in unemployment benefits

Unemployment benefits rise from \$4¼ billion in fiscal 1974 to \$6¼ billion in 1975. These estimates are consistent with the expectation, stated in the Annual Report of the Council of Economic Advisers, that the unemployment rate will average a little above 5½ percent for calendar 1974, as compared with 4.9 percent in 1973. The administration has renewed an earlier proposal to raise the maximum weekly benefits to at least two-thirds of the average wage in the State and to extend cover-

CHART 13

National Defense Purchases and Defense Department Employment
Compensation continues to rise as employment drops



*Estimate by BEA

U.S. Department of Commerce, Bureau of Economic Analysis

74-2-13

Table 9.—Major Social Security Benefit Increases, 1965-74

Year	Month paid	Percent increase	Billions of dollars
			Annual rate
1965	September.....	7	1.3
1968	March.....	13	3.5
1970	April.....	15	4.4
1971	June.....	10	3.6
1972	October.....	20	8.4
1974	April.....	7	3.9
1974	July.....	4	2.4

Source: Department of Health, Education, and Welfare.

age to farm workers. Largely because of inherent delays in obtaining State approval for increasing the maximum benefit, the budget does not include any increase in outlays for this proposal in fiscal 1975.

Other transfer payments advance \$3¼ billion in 1975 as compared to \$4¼ billion in the current fiscal year; cost-of-living increases contribute to the gain in many of these programs. The 1975 gain is the net result of growth in civilian and military retirement benefits

(up \$1¼ billion and \$¾ billion, respectively), the food stamp program (about \$1 billion), and increases over a wide range of other programs (over \$1 billion). Declines are expected in veterans readjustment benefits (down almost \$½ billion) and for special benefits for coal miners.

Foreign transfers, mainly economic assistance to foreign governments and retirement payments to individuals living abroad, decline \$1.9 billion in 1974. This decline reflects a return to a normal level of foreign transfers following the one-time transfer of \$2.1 billion of rupees to India in fiscal 1974.

Grants continue to advance

Grants-in-aid continue to grow in 1975, although the \$2.5 billion increase is the smallest since fiscal 1969; this compares with advances of \$3.7 billion in 1974 and \$7.5 billion in 1973. Grants under older programs, such as highways, public assistance, education, and urban renewal, are essentially un-

Table 10.—Reported Use of General Revenue Sharing by State and Local Governments Through June 30, 1973¹

Category ²	[Millions of dollars]			
	State governments		Local governments	
	Operation and maintenance	Capital	Operation and maintenance	Capital
Education.....	643.0	21.3	-----	22.9
Environment.....	1.3	6.1	91.2	89.3
General government.....	18.5	5.9	-----	177.8
Health.....	30.0	2.7	71.4	63.9
Public safety.....	15.1	5.0	481.4	153.9
Recreation.....	1.4	2.3	34.4	78.9
Social services.....	57.5	3.7	30.6	9.2
Transportation.....	45.5	10.1	138.4	222.9
Other.....	78.6	6.4	69.9	58.9
Total.....	890.9	63.5	917.3	877.7

¹ As provided by recipient governments. For a further evaluation of actual use expenditures, see the forthcoming publication of the Office of Revenue Sharing, "General Revenue Sharing—The First Actual Use Reports."

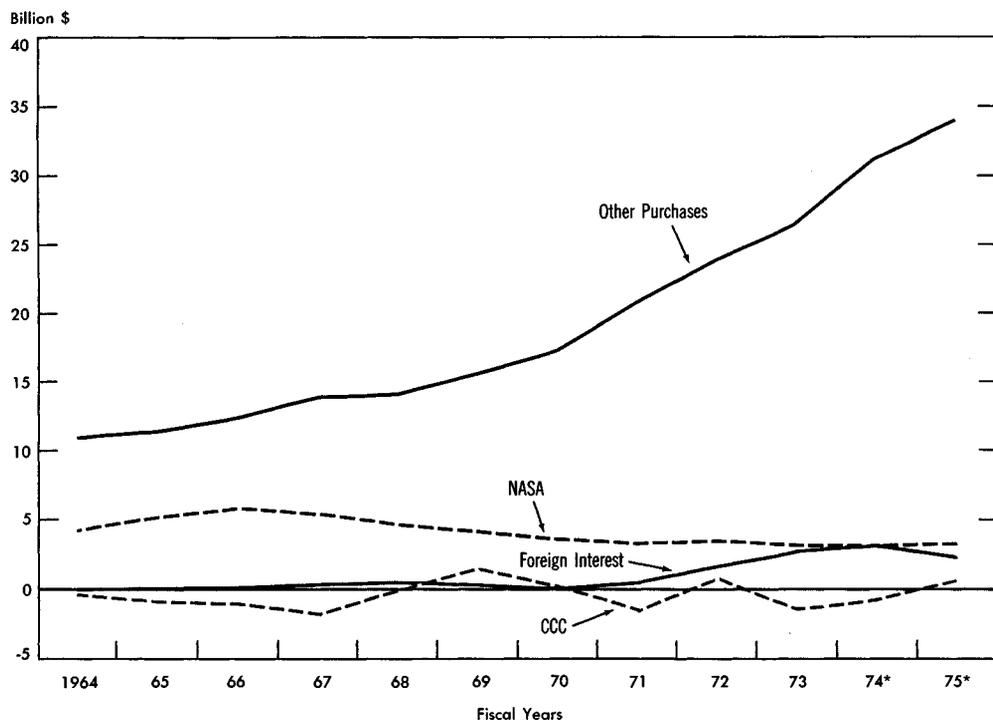
² State operation and maintenance categories are not strictly comparable to similar local categories.

Source: "The Budget of the United States Government, Fiscal Year 1975."

changed from fiscal 1974, while increases are projected for sewage plant construction (up \$1¼ billion), urban mass transportation facilities (\$½ billion), health resources and services (\$¼ billion), and community development (\$¼ billion). Of particular interest is a 55 percent increase in grants for school lunch, breakfast, and milk programs. In 1973, the administration attempted to cut back these programs, but Congress expanded them.

General revenue sharing, now in its second year, will provide slightly more than \$6 billion of funds to states and localities in fiscal 1974 and in 1975. Through January 7, 1974, \$11.2 billion of general revenue-sharing funds had been distributed. Table 10 shows how funds for the first three entitlement periods—January 1, 1972 through June 30, 1973—have been reported as spent in the "actual use reports" filed by State and local governments as required by law. Recipient governments reported spending \$2.7 billion, or 41 percent, of the \$6.7 billion they had received by June 30, 1973. Other sources indicated that much of the remaining funds were invested in financial assets and served to forestall additional tax increases. State and local governments have 2 years from receipt of funds in which to use them.

Nondefense Purchases



*Estimate by BEA

U.S. Department of Commerce, Bureau of Economic Analysis

74-2-14

Expenditures for the largest grant program, public assistance, decline about \$¼ billion in fiscal 1975. This decline is the result of the complete elimination of grants for welfare assistance to the aged, blind, and disabled—replaced by direct Federal transfer payments—which is partly offset by increases in medicaid and social services grants. Grants for aid to families with dependent children are unchanged.

Proposed new programs, similar in concept to the earlier special revenue-sharing proposals, replace existing categorical grants with broad-based formula grants. Among these programs are: (1) Education Grants Consolidation and Reform which would merge certain existing programs into a consolidated education grant of \$1.9 billion in 1975; and (2) the Better Communities Act which would replace several urban development grants and amount to more than \$½ billion in fiscal 1975. Similar programs are proposed for rural development and transportation.

Net interest paid increases \$1.4 billion in fiscal 1975 to \$19.6 billion. This increase is primarily the result of budget deficits in 1974 and 1975. The considerably larger gain of \$3.8 billion in 1974 is due primarily to the acceleration of

interest rates in 1973. Debt held by the public (including the Federal Reserve System) increases \$3½ billion in the current fiscal year and \$12½ billion in 1975. Government interest payments to foreigners, which have risen rapidly in recent years, are not counted in this NIA expenditure category; they are treated in the NIA as a Federal purchase (but also as an import, and thus do not affect total GNP).

Large decline in farm subsidies

Subsidies (less the current surplus of government enterprises) decrease \$2.1 billion in 1975 and \$2.2 billion in 1974. Major declines include: (1) farm subsidy payments (down \$2½ billion), as high market prices continue for wheat, feed grains, and cotton, essentially eliminating subsidy payments for these crops; and (2) the Postal Service deficit (down \$¼ billion), reflecting the rate increase effective in March 1974 which adds about \$1¼ billion to postal revenues in 1975 (and more than offsets the effect of postal pay hikes during this period). Partly offsetting these declines is a shift of about \$½ billion in the operating budget of the CCC from a surplus to a balance and an increase (\$¼ billion) in housing subsidies.

Table 11.—Unified Budget Outlays and Federal Expenditures on the NIA Basis, Fiscal Years 1975 and 1976

[Billions of dollars]		
	1975	1976
Unified budget outlays	304	329
Reconciliation items.....	9	8
Federal expenditures, NIA bases	313	337
Purchases of goods and services.....	122	131
Defense.....	82	88
Other.....	40	43
Transfer payments.....	124	133
Personal.....	121	130
Foreign.....	3	3
Grants-in-aid.....	47	51
Net interest paid.....	20	20
Subsidies less current surplus.....	2	2

Sources: "The Budget of the United States Government, Fiscal Year 1975" and 1976 estimates by BEA.

Fiscal 1976 Expenditures

This year's budget again presents a preview of outlays and receipts on a full-employment basis beyond the budget year. It projects full-employment outlays of \$329 billion and full-employment receipts of \$339 billion in fiscal 1976. (The budget assumes that actual and full-employment outlays are identical in 1976.) Outlays are presented in agency and functional detail; no detail is shown for receipts. Fiscal 1976 expenditures on the NIA basis shown in table 11 are estimates by BEA. Table 12 shows a summary reconciliation of Federal re-

ceipts and outlays as recorded in the unified budget and in the NIA.

Federal expenditures on the NIA basis increase \$24 billion from 1975 to 1976. Transfer payments account for about \$9 billion of this advance, followed by defense purchases (\$6 billion), grants (\$4 billion), and nondefense purchases (\$3 billion). Net interest paid and subsidies (less the current surplus of government enterprises) show smaller increases.

Automatic increases in social security benefits are a major factor in the advance of transfer payments as are higher Federal retirement benefits and SSI payments. Pay increases and higher prices account for a significant part of the advance in defense and other purchases. Higher grants under the proposed consolidated education grant program and the Better Communities Act account for a large part of the rise in grants-in-aid. As noted earlier, the proposed National Health Insurance Plan will not have a major impact until 1977.

Table 12.—Relationship of Federal Government Receipts and Expenditures in the National Income Accounts to the Unified Budget, Fiscal Years 1973-75

[Billions of dollars]			
	1973	1974	1975
Receipts			
Unified budget receipts	232.2	270.0	295.0
Plus: Coverage differences.....	-.4	-.5	-.6
Netting and grossing.....	5.4	5.9	6.1
Timing differences.....	6.1	5.4	4.3
Miscellaneous.....	.....	-.3	.....
Equals: Federal receipts, NIA basis	243.3	280.5	304.8
Expenditures			
Unified budget outlays	246.5	274.7	304.4
Plus: Coverage differences.....	.2	-.4	-.2
Outer continental shelf deposit funds.....	1.1	.....	.....
Postal Service.....	.....	.6	.9
Other.....	-.9	-1.0	-1.1
Financial transactions.....	-1.6	-2.4	-2.0
Net purchases of land.....	2.2	5.3	4.4
Netting and grossing.....	5.4	5.9	6.1
Timing differences.....	2.3	-.4	-.2
Miscellaneous.....	.1	2.5	.7
Indian rupee settlement.....	.....	2.1	.....
Other.....	.1	.4	.7
Equals: Federal expenditures, NIA basis	255.1	285.2	313.4

Sources: Estimates by the office of Management and Budget and BEA.

The Input-Output Structure of the U.S. Economy: 1967

THE results of BEA's study of input-output (I-O) relationships in the United States economy for 1967 are presented in this article. With the publication of these results, the number of comparable benchmark I-O tables is increased to four, and the timespan covered by these studies is extended to 20 years, covering the period 1947-1967.¹

The 1967 results presented in this article depict the interrelationships among the industries of the economy in terms of the 85-industry categories used for the 1947, 1958, and 1963 I-O studies. The 1967 information, like that for 1963, will be available also in considerably greater industrial detail.² The I-O tables presented in this article show more detail on value added and on government purchases than those in earlier SURVEY articles. Value added for each industry is divided into three components—employee compensation, indirect business taxes, and property-type income.³ Government purchases of goods and services are subdivided into four broad functional groups: Federal Government defense and non-defense purchases, and State and local government purchases for education and for all other functions.

1. Previous benchmark input-output tables were developed for the years 1947, 1958, and 1963. In addition, the 1958 table was updated to 1961 and the 1963 table was updated to 1966. Although U.S. input-output tables for 1929 and 1939 were developed by Wassily Leontief (see *The Structure of American Economy 1919-1939*, New York: Oxford University Press, 1951), these tables were not integrated into the national income and product accounts and are not conceptually and statistically consistent with the later series of tables prepared by the U.S. Government.

The 1947 table, which represents a reworking of the 1947 table originally prepared by the Bureau of Labor Statistics, was published by BEA in mimeographed form in March 1970. The 1958 and 1963 tables were published in the November 1964 and November 1969 issues of the SURVEY, respectively. A complete list of BEA publications relating to input-output is presented in Appendix A.

2. The industry categories used for the 367-industry 1967 input-output study and the relationship to the 1967 Standard Industrial Classification are shown in Appendix B. When the more detailed I-O tables are ready, their availability will be announced in the SURVEY.

3. For reference to a special report on value added in the 1963 study, see item 12 in Appendix A.

Input-output and the national income and product account

The input-output tables are an integral part of the national economic accounts. The charts on page 25 show how the input-output account is related to the basic national income and product account.

The national income and product account (chart 15) measures the output of the Nation both in terms of final product flows and in terms of the income types generated in its production. The final product flows consist of sales to consumers (personal consumption expenditures), sales to business on

capital account and change in business inventories (gross private domestic investment), sales to government (government purchases of goods and services), and net sales to foreigners (net exports). The sum of these final product flows equals the gross national product (GNP). This same total can also be derived by summing the incomes generated in its production (referred to in this article as value added). These consist of employee compensation, proprietors' income, rental income, corporate profits, net interest, business transfer payments, indirect business taxes, current surplus of government

Acknowledgments

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Manufacturing and Mining: Leo C. Maley, Jr., Anthony P. Andrews, Stephen P. Baldwin, Marjorie S. Crenshaw, Douglas C. McIntosh, Marjorie K. Pavilscak, Mary J. Price.

Construction: Claiborne M. Ball.

Finance, Insurance, Real Estate: Janet B. Riddle, Elizabeth T. Spaulding.

Services and Communications: Carolyn B. Knapp, Elizabeth G. Rhodes.

Transportation: E. Lawrence Salkin, William A. Allen.

Trade: D. Anne Fisher, Robert T. Mangan.

Utilities and Final Demand: Nancy W. Simon.

Government: Irving Stern, Roy A. Seaton II, John R. Welty, Lucy J. Wayne.

Value Added: William Gullickson, Vesta C. Jones, Mark R. Meiners.

Special Studies: Paula C. Young, Howard L. Schreier, James E. Huyghebaert.

Systems Analysis and Computation: Norman E. Bakka, Joanne S. Thompson.

Secretarial: Brenda R. Stanley, E. Louise Adams, Karen D. Redman.

The data for the agricultural industries were prepared by Gerald Schluter and staff, U.S.D.A., Economic Research Service.

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CHART 15

CHART 16

THE GROSS NATIONAL PRODUCT
National Income and Product Account

THE GROSS NATIONAL PRODUCT
In Input-Output Format

1. Compensation of employees	10. Personal consumption expenditures
2. Proprietors' income	11. Gross private domestic investment
3. Rental income of persons	12. Net export of goods and services
4. Corporate profits and inventory valuation adjustment	13. Government purchases of goods and services
5. Net interest	
6. Business transfer payments	
7. Indirect business tax and nontax liability	
8. Less: Subsidies less current surplus of government enterprises	
9. Capital consumption allowances	
GROSS NATIONAL PRODUCT	GROSS NATIONAL PRODUCT

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	PRODUCERS	PERSONS	INVESTORS	FOREIGNERS	GOVERNMENT	
PRODUCERS		Personal consumption expenditures item 10	Gross private domestic investment item 11	Net exports of goods and services item 12	Government purchases of goods and services item 13	Gross national product
EMPLOYEES	Employee compensation item 1					
OWNERS OF BUSINESS AND CAPITAL	Profit-type income and capital consumption allowances items 2,3,4,5,6,8,9					
GOVERNMENT	Indirect business taxes item 7					
	Gross national product					

U.S. Department of Commerce, Bureau of Economic Analysis 74-2-16

CHART 17

INPUT-OUTPUT FLOW TABLE

		PRODUCERS								FINAL MARKETS						
		Agriculture	Mining	Construction	Manufacturing	Trade	Transportation	Services	Other	Persons	Investors	Foreigners	Government			
PRODUCERS	Agriculture															
	Mining															
	Construction															
	Manufacturing									Personal consumption expenditures	Gross private domestic investment	Net exports of goods and services	Government purchases of goods and services			
	Trade															
	Transportation															
	Services															
	Other															
Employees	Employee compensation								GROSS NATIONAL PRODUCT							
Owners of Business and Capital	Profit-type income and capital consumption allowances															
Government	Indirect business taxes															

U.S. Department of Commerce, Bureau of Economic Analysis

enterprises less subsidies, and capital consumption allowances.

Chart 16 shows the components of GNP rearranged in an input-output format—a matrix or a table containing data arranged in rows and columns. The row labeled “producers” shows the sales of these producers to final markets. The column headed “producers” shows the income types which make up the gross national product—grouped as payments to employees, to owners of business and capital, and to government. The sum of this column, like the sum of the row, is equal to the GNP.

The black box, which represents producer-to-producer sales of the goods and services used in production, is blank in chart 16. These sales are already included in the value of the final products that add up to the total GNP. Accordingly, they are omitted to avoid duplication in the measurement of national output.

For input-output analysis, however, these sales by producers to producers must be measured because this analysis focuses on the way industries interact in producing the GNP. Chart 17, which is an extension of chart 16, shows the sales by producers to final markets as well as income payments by producers; however, the empty black box has been expanded into a large shaded area with many boxes to display separately the industries producing and consuming raw materials, semi-finished products, and intermediate services.

These industry-to-industry flows depict the input-output structure of the economy. For example, the manufacturing row shows the sales by manufacturing industries to each of their industrial customers as well as to the final markets; the column for manufacturing shows the industrial sources of the goods and services purchased by manufacturers for use in production, and also the value added by manufacturers.

Because the interindustry account is conceptually and statistically integrated with the national income and product account, the value of total GNP as well as of the flows to each of the final markets (personal consumption, gross private domestic investment, government purchases, and net exports) is the

same in the two sets of accounts.⁴ However, the breakdown of the flows differs in the two accounts. In the interindustry account, the final demand columns are classified by industry. For the national income account, other types of breakdowns are shown.

Value added is shown in greater component detail in the national income and product account than in the input-output table presented in this article, but in less industrial detail. Although the all-industry sum of total value added is the same in the two accounts, the industrial distributions differ due to differences in definition and coverage of the industries and in the statistical sources used for the industry data in the two accounts.⁵

Uses of input-output

Input-output analysis has a variety of applications including such diverse uses as evaluating the sales potential of an individual firm and probing the implications of broad economic programs.

The major contribution of input-output analysis is that it permits measurement of the industrial repercussions of changes in demand. This can be illustrated by an example showing the effects of an increase in consumer demand for passenger cars. This increase in demand will lead in the first instance to an increase in the output of the automobile industry. However, there will be further impacts. The increase in the output of the automobile industry will result in more steel production, which in turn will require more chemicals, more iron ore, more limestone, and more coal. The automobile industry will also demand more upholstery fabrics, and the increased production of these fabrics will require more natural fibers, more synthetic fibers, and more plastics. There will be even further

reactions; for instance, the production of synthetic fibers and other chemicals will lead to the production of more electricity and containers.

These are only a few of the industrial repercussions resulting from the initial change in consumer demand for automobiles. Input-output analysis traces this intricate chain reaction throughout the entire industrial structure and measures the effects of all the demands, both direct and indirect, on the output of each of the industries.

The industry outputs derived in this way can be used for estimating related requirements. For example, with supplementary data, the estimated output of each industry can be translated into requirements for employment, inventories,⁶ or fixed capital.

Supplemented by information on the geographic distribution of industries, input-output analysis can also shed light on the regional implications of changes in the Nation's GNP.

Input-output is also useful in cost/price analysis. The input-output relationships shown in the table provide information on the cost/price structure of each industry and permit the measurement of the direct and indirect impact on each industry of price changes occurring in any given industry.

Input-output techniques have been used widely in recent months to help in evaluation of the economic impact of energy shortages. BEA plans to prepare more product and industry detail for the important energy-producing and energy-consuming industries to enhance the capability for energy impact analysis.

The use of statistical information in economic analysis generally requires reliance on quantitative relationships among variables. In the case of input-output, the most important of these relationships is the proportionality between total output of an industry and its input requirements. The use of proportional relationships is explained on pages 27 and 28 in connection with the discussion of tables 2 and 3.

Many users of input-output make the simplifying assumption that the pro-

4. The 1967 GNP as now published in the national income and product account differs from the GNP as shown in the 1967 input-output table because it has not yet been revised to conform to the input-output calculations. The forthcoming benchmark revisions of the national income and product account, which will incorporate these calculations, may in turn require some modifications of the input-output information presented in this article. One of the important benchmark revisions will be that reflecting the new treatment of mobile homes as residential investment rather than as personal consumption of durable goods. This revision has been included in the I-O tables in this article. (See footnote 1 to table B on p. 32.)

5. An explanation of these differences and their reconciliation for 1963 for major industry divisions appears in an earlier SURVEY article (see item 12 in Appendix A).

6. An input-output study of inventory requirements is listed as item 13, Appendix A.

portions developed in the most recent table are applicable to other years and over a considerable range of output levels. While there are practical limitations to the applicability of this assumption, it has generally yielded satisfactory results. However, where significant changes in the proportions do occur, they should be introduced.⁷

Description of the tables

The results of the 1967 input-output study are presented in three basic tables—the transactions or flow table, the direct requirements table, and the total requirements table. The following discussion describes these tables and highlights some of the important interindustry relationships for 1967. The user of these tables should keep in mind the definitions and conventions adopted for the 1967 input-output study. The most important of these are described briefly in the final section of this article, beginning on page 33.

The transactions (or flow) table (table 1). Table 1 shows the dollar value of the transactions among industries. Each row shows the distribution to each industry and to final users of the output of goods and services of a given industry. The columns show the value of each industry's consumption (input) of raw materials, semi-finished products, and services, and its value added.

One interesting aspect of the sales pattern that is shown by table 1 is the wide variation in the proportion of output sold directly to the final markets by the various industries. Some industries, such as footwear and other leather goods (34) and household furniture (22), sold over four-fifths of their total output to final markets and are, therefore, directly affected to a substantial degree by changes in these markets. Other industries, such as wooden containers (21) and iron and ferro-alloy ores mining (5), sold virtually all of their output to intermediate consumers. For such industries the connection between production and final markets is remote and can be traced only through the sales of their

customers. Of the 78 regular producing industries (excluding special and dummy industries), 45 sold more than half of their output to intermediate users, and 36 sold more than three-fourths of their output to such users.

Table 1 also shows the diversity of intermediate distribution patterns. For example, the primary iron and steel industry (37) and the metal container industry (39) both sold over 95 percent of their output to other industries. Industry 37 sold its output to 63 industries, none accounting for more than 19 percent of its output. In contrast, industry 39 sold its output to 29 industries, one of which, food and kindred products (14), absorbed 59 percent of container output.

It is important to bear in mind that the output distributions shown in table 1 refer to 1967 and, therefore, reflect the demands, prices, and product mixture for that year. As these change over time, the output distribution pattern will also change.

Direct requirements table (table 2). Table 2 relates each of the inputs of an industry to its total output. Each column shows the inputs that the industry named at the top of that column required from the industry named at the beginning of each row to produce a dollar of its output. For example, to produce a dollar of output, the chemicals manufacturing industry (27) required 19 cents of its own production, 8 cents of output from the petroleum refining industry (31), 3 cents of output from the chemical mining industry (10), etc.

Table 2 shows more directly the heavy interdependence among industries which is a feature of the U.S. economy. Seventy-six of the 78 industries required inputs from at least 30 others, and 56 industries required inputs from over 50 industries. The chemicals industry (27), for example, required inputs from 68 industries, only eight of which are producers of basic raw materials.

The data in table 2 permit the tracing of the interconnections among the various industries and final demand in a systematic way. For example, assume that the household furniture industry (22) produces \$1 million of furniture

for sale to consumers. Column 22 shows that the household furniture industry would require slightly over \$15,000 ($\$1,000,000 \times 0.01529$) from itself. Thus, industry 22 would have to produce a minimum of \$1,015,000. Continuing the calculation, this output would require more than \$50,000 ($\$1,015,000 \times 0.04967$) of fabrics from industry 16, a little over \$139,000 ($\$1,015,000 \times 0.13708$) of wood products from industry 20, and so on down the column.

The next calculation is that of the output required by each of the supplying industries to meet the requirement placed on it. For example, industry 22 has so far required \$50,000 of fabrics from industry 16. To meet this requirement, industry 16 requires an output of more than \$16,000 ($\$50,000 \times 0.32380$) from itself, and the total \$66,000 ($\$50,000 + \$16,000$) of output of industry 16 requires more than \$6,000 ($\$66,000 \times 0.09546$) from industry 28.

This chain of calculations of output requirements which spread through the economy can be continued, and the total output required from each industry to produce \$1 million of household furniture for consumers can thus be derived. However, the total output required from each industry can be calculated more easily using table 3, in which the relationships shown in table 2 have been completely traced and summarized.

Total requirements table (table 3). Each column of table 3 shows the output required both directly and indirectly from the industry named at the beginning of each row per dollar of delivery to final demand by the industry named at the head of the column.⁸ The data in the table make it possible to calculate the impact on the various industries of the economy which result from stipulated changes in the final demand.

Although table 3 is more convenient for calculating total requirements, table 2 will sometimes be preferred, because it permits flexibility in the computation and modification of the relationships which are used. Also, table 2 is needed

8. The mathematical procedures for converting direct requirements to total requirements are described in well-known texts, such as *Interindustry Economics*, Hollis B. Chenery and Paul G. Clark, John Wiley & Sons, 1959 and *Input-Output and National Accounts*, Richard Stone, The Organization for European Economic Cooperation, 1961.

7. Information on the changes that have occurred—as shown by the input-output tables for 1947, 1958, and 1961—was presented in the paper listed as item 23 in Appendix A.

to split the total requirements, as given in table 3, into their direct and indirect components.

Returning to the household furniture example, it is possible to calculate the impacts quite simply. Thus, the column for industry 22 shows that to provide final demand with \$1 million of household furniture, about \$1,016,000 ($\$1,000,000 \times 1.01626$) is required in total

from industry 22, over \$90,000 ($\$1,000,000 \times 0.09034$) from industry 16, almost \$196,000 ($\$1,000,000 \times 0.19575$) from industry 20, and so on.

Supplementary data requirements

Before table 3 (or table 2) can be used to measure the impact on each industry of changes in the level and composition of GNP, a bill of goods

must be formulated. A bill of goods is a set of final demands (personal consumption expenditures, gross private domestic investment, etc.) classified according to the industry categories of the table, expressed in 1967 prices, and valued at producers' prices. The trade margin on each item of the bill of goods is separately specified as a requirement from the trade industry; simi-

Table A.—Sales of Specified Industries to Each Category of Final

(Millions)

Line	Producing industry	Personal consumption expenditures				Gross private fixed capital formation				New inventory change			
		Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices	Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices	Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices
1	Livestock and livestock products.....	1,811	122	585	2,518	0	0	0	0	129	-5	-1	123
2	Other agricultural products.....	3,756	578	3,106	7,440	0	0	0	0	1,031	41	35	1,107
3	Forestry and fishery products.....	449	84	496	1,029	0	0	0	0	2	(*)	(*)	3
5	Iron and ferroalloy ores mining.....	0	0	0	0	0	0	0	0	25	1	0	27
6	Nonferrous metal ores mining.....	0	0	0	0	0	0	0	0	12	1	0	13
7	Coal mining.....	121	72	81	273	0	0	0	0	125	49	2	176
8	Crude petroleum and natural gas.....	0	0	0	0	0	0	0	0	257	3	0	260
9	Stone and clay mining and quarrying.....	4	1	0	5	0	0	0	0	12	-2	(*)	10
10	Chemicals and fertilizer mineral mining.....	2	1	0	3	0	0	0	0	8	1	0	8
13	Ordinance and accessories.....	322	3	208	532	25	0	0	25	147	0	1	148
14	Food and kindred products.....	60,974	1,440	33,193	95,607	0	0	0	0	899	17	60	976
15	Tobacco manufactures.....	5,270	33	3,599	8,902	0	0	0	0	189	1	6	196
16	Broad and narrow fabrics, yarn and thread mills.....	592	7	750	1,349	0	0	0	0	114	1	5	120
17	Miscellaneous textile goods and floor coverings.....	1,406	47	1,163	2,616	89	3	10	102	107	1	4	113
18	Apparel.....	16,247	125	11,279	27,650	0	0	0	0	281	2	14	296
19	Miscellaneous fabricated textile products.....	1,983	20	1,994	3,997	0	0	0	0	49	(*)	3	53
20	Lumber and wood products, except containers.....	259	14	138	410	7	(*)	1	8	121	10	14	146
21	Wooden containers.....	0	0	0	0	0	0	0	0	3	(*)	(*)	3
22	Household furniture.....	3,861	137	2,931	6,990	165	7	10	182	49	1	2	52
23	Other furniture and fixtures.....	174	4	180	357	1,632	59	415	2,106	41	(*)	2	43
24	Paper and allied products, except containers.....	1,502	62	1,069	2,632	0	0	0	0	228	7	18	254
25	Paperboard containers and boxes.....	73	1	56	130	0	0	0	0	39	1	1	41
26	Printing and publishing.....	4,119	125	2,012	6,256	0	0	0	0	297	7	20	324
27	Chemicals and selected chemical products.....	504	34	246	784	0	0	0	0	305	12	10	327
28	Plastics and synthetic materials.....	18	1	11	29	0	0	0	0	26	2	1	29
29	Drugs, cleaning and toilet preparations.....	7,294	161	5,089	12,544	0	0	0	0	221	3	15	239
30	Paints and allied products.....	52	2	59	112	0	0	0	0	54	2	6	62
31	Petroleum refining and related industries.....	10,194	774	10,589	21,558	0	0	0	0	541	30	82	652
32	Rubber and miscellaneous plastics products.....	2,269	65	1,806	4,140	30	1	11	41	142	4	14	160
33	Leather tanning and industrial leather products.....	0	0	0	0	0	0	0	0	-6	0	0	-6
34	Footwear and other leather products.....	3,659	35	2,667	6,361	0	0	0	0	21	(*)	2	23
35	Glass and glass products.....	317	11	301	629	0	0	0	0	39	2	1	41
36	Stone and clay products.....	244	11	291	546	0	0	0	0	127	10	13	150
37	Primary iron and steel manufacturing.....	4	(*)	3	6	0	0	0	0	514	7	7	528
38	Primary nonferrous metal manufacturing.....	15	(*)	12	27	34	1	1	36	336	4	4	344
39	Metal containers.....	0	0	0	0	11	1	1	12	61	1	1	62
40	Heating, plumbing and structural metal products.....	66	2	52	119	933	22	40	996	128	4	13	145
41	Stampings, screw machine products and bolts.....	374	7	325	706	0	0	0	0	86	1	2	88
42	Other fabricated metal products.....	774	13	605	1,392	337	8	52	397	198	2	10	210
43	Engines and turbines.....	144	2	71	217	735	6	19	760	55	(*)	1	56
44	Farm machinery and equipment.....	38	1	13	52	2,942	76	1,051	4,069	409	9	44	463
45	Construction, mining and oil field machinery.....	0	0	0	0	2,428	39	314	2,781	58	(*)	3	61
46	Materials handling machinery and equipment.....	0	0	0	0	1,108	25	59	1,191	36	(*)	1	37
47	Metalworking machinery and equipment.....	88	1	63	151	3,461	35	158	3,654	167	(*)	2	169
48	Special industry machinery and equipment.....	22	(*)	18	40	3,205	31	181	3,416	90	(*)	1	92
49	General industrial machinery and equipment.....	0	0	0	0	1,888	38	171	2,097	125	1	3	129
50	Machine shop products.....	4	0	3	7	5	0	(*)	6	32	(*)	1	33
51	Office, computing and accounting machines.....	112	1	117	230	3,352	17	335	3,704	156	(*)	5	161
52	Service industry machines.....	404	9	220	632	1,729	37	282	2,048	126	1	6	133
53	Electric industrial equipment and apparatus.....	28	(*)	21	49	2,886	42	170	3,098	132	(*)	3	135
54	Household appliances.....	3,538	123	1,681	5,342	127	2	19	148	103	2	11	116
55	Electric lighting and wiring equipment.....	557	12	468	1,038	67	1	7	75	58	1	5	63
56	Radio, television and communication equipment.....	3,646	62	2,242	5,950	2,937	16	86	3,038	600	2	13	615
57	Electronic components and accessories.....	171	(*)	114	285	18	0	1	19	139	1	3	143
58	Miscellaneous electrical machinery, equipment and supplies.....	626	15	394	1,034	210	4	68	281	35	1	4	39
59	Motor vehicles and equipment.....	15,822	402	2,813	19,037	9,054	264	1,372	10,690	-310	-10	-5	-325
60	Aircraft and parts.....	50	0	3	53	2,367	(*)	125	2,492	1,918	1	1	1,920
61	Other transportation equipment.....	1,078	16	629	1,722	3,430	35	367	3,832	196	1	7	204
62	Scientific and controlling instruments.....	601	4	637	1,241	1,132	10	214	1,355	109	(*)	3	112
63	Optical, ophthalmic and photographic equipment.....	1,030	5	1,203	2,238	920	4	302	1,226	78	(*)	8	86
64	Miscellaneous manufacturing.....	4,417	90	4,060	8,567	533	13	81	626	147	2	14	163
80A	Directly allocated imports.....	9,870	448	5,968	16,323	658	34	157	1,854	-100	-1	7	-95
82	Office supplies.....	0	0	0	0	0	0	0	0	0	0	0	0
83	Scrap, used and secondhand goods.....	1,287	0	3,198	4,484	-2,921	0	467	-2,454	-121	0	0	-121

*Less than \$500,000.

1. Includes insurance charges of \$37 million on personal consumption expenditures; \$4

million on gross private fixed capital formation; -\$1 million on net inventory change and \$1 million on Federal Government purchases, defense.

Table B.—Industrial Composition of Personal Consumption Expenditures, by PCE Category, in Producers' and Purchasers' Prices, 1967

[Millions of dollars]

Producing industry number	Allocations to PCE				
	Producers' prices	Transportation (industry 65)	Trade (industry 69)	Insurance (industry 70)	Purchasers' prices
VIII-2a. Street and electric railway and local bus (s.)					
Total.....	1,399	0	0	0	1,399
65.....	1,399	0	0	0	1,399
VIII-2b. Taxicabs (s.)					
Total.....	692	0	0	0	692
65.....	692	0	0	0	692
VIII-2c. Railway (commutation) (s.)					
Total.....	145	0	0	0	145
65.....	145	0	0	0	145
VIII-3a. Railway (excluding commutation) and sleeping and parlor car (s.)					
Total.....	270	0	0	0	270
65.....	270	0	0	0	270
VIII-3b. Intercity bus (s.)					
Total.....	466	0	0	0	466
65.....	466	0	0	0	466
VIII-3c. Airline (s.)					
Total.....	1,582	0	0	0	1,582
65.....	1,582	0	0	0	1,582
VIII-3d. Other intercity transportation (s.)					
Total.....	107	0	0	0	107
65.....	107	0	0	0	107
IX-1. Books and maps (d.c.)					
Total.....	1,230	26	591	1	1,847
26.....	1,160	21	535	0	1,716
80.....	70	5	56	1	131
IX-2. Magazines, newspapers, and sheet music (n.d.c.)					
Total.....	2,213	78	915	0	3,206
26.....	2,236	77	910	0	3,223
80.....	7	1	5	0	13
83.....	-30	0	0	0	-30
IX-3. Nondurable toys and sport supplies (n.d.c.)					
Total.....	2,225	66	1,980	(*)	4,272
03.....	49	6	45	0	100
13.....	125	(*)	81	0	209
17.....	6	(*)	5	0	11
24.....	13	(*)	10	0	23
26.....	75	4	64	0	143
27.....	1	0	(*)	0	1
32.....	10	(*)	5	0	15
53.....	2	0	2	0	4
55.....	114	3	103	0	219
58.....	41	1	17	0	59
63.....	403	2	246	0	652
64.....	1,309	39	1,288	0	2,636
80.....	78	9	116	(*)	202
IX-4. Wheel goods, durable toys, sport equipment, boats, and pleasure aircraft (d.c.)					
Total.....	2,448	46	1,590	1	4,085
13.....	197	1	126	0	324
19.....	78	(*)	65	0	143
32.....	25	1	19	0	44
34.....	37	1	28	0	65
42.....	45	1	33	0	78
43.....	144	2	71	0	217
60.....	50	0	3	0	53
61.....	782	14	512	0	1,308
63.....	296	3	194	0	493
64.....	500	10	386	0	896
72.....	7	0	0	0	7
73.....	153	0	0	0	153
80.....	135	15	142	1	292
83.....	0	0	13	0	13
IX-5. Radio and TV receivers, records, and musical instruments (d.c.)					
Total.....	4,192	72	2,724	0	6,988
34.....	(*)	0	(*)	0	(*)
56.....	3,619	61	2,225	0	5,905
57.....	168	(*)	113	0	282
58.....	163	3	82	0	248
64.....	236	7	256	0	499
80.....	6	1	6	0	13
83.....	0	0	42	0	42
IX-6. Radio and TV repair (s.)					
Total.....	999	0	0	0	999
72.....	999	0	0	0	999
IX-7. Flowers, seeds, and potted plants (n.d.c.)					
Total.....	686	39	755	0	1,480
02.....	580	39	755	0	1,374
04.....	106	0	0	0	106
IX-8a. Admissions to motion picture theaters (s.)					
Total.....	1,128	0	0	0	1,128
76.....	1,128	0	0	0	1,128
IX-8b. Admissions to legitimate theaters and opera and entertainments of nonprofit institutions (except athletics) (s.)					
Total.....	475	0	0	0	475
76.....	475	0	0	0	475
IX-8c. Admissions to spectator sports (s.)					
Total.....	429	0	0	0	429
76.....	429	0	0	0	429
IX-9. Clubs and fraternal organizations except insurance (s.)					
Total.....	959	0	0	0	959
77.....	959	0	0	0	959
IX-10. Commercial participant amusements (s.)					
Total.....	1,900	0	0	0	1,900
65.....	205	0	0	0	205
76.....	1,695	0	0	0	1,695
IX-11. Pari-mutual net receipts (s.)					
Total.....	881	0	0	0	881
76.....	881	0	0	0	881
IX-12. Other recreation (s.)					
Total.....	2,909	13	43	0	2,965
1.....	143	13	40	0	196
4.....	30	0	0	0	30
66.....	139	0	0	0	139
72.....	687	0	0	0	687
73.....	534	0	0	0	534
76.....	963	0	0	0	963
77.....	406	0	0	0	406
80.....	7	(*)	3	0	10
X-1. Private higher education (s.)					
Total.....	2,988	0	0	0	2,988
77.....	2,988	0	0	0	2,988
X-2. Private elementary and secondary schools (s.)					
Total.....	2,268	0	0	0	2,268
77.....	2,268	0	0	0	2,268
X-3. Other private education and research (s.)					
Total.....	1,702	0	0	0	1,702
77.....	1,702	0	0	0	1,702
XI. Religious and welfare activities (s.)					
Total.....	6,822	0	0	0	6,822
77.....	6,822	0	0	0	6,822
XII-1. Foreign travel by U.S. residents (s.)					
Total.....	4,249	0	0	0	4,249
65.....	670	0	0	0	670
80.....	3,579	0	0	0	3,579
XII-2. Expenditures abroad by U.S. Government personnel (military and civilian) (n.d.c.)					
Total.....	1,328	0	281	0	1,609
80.....	1,328	0	281	0	1,609
XII-3. Expenditures in the United States by foreigners (s.)					
Total.....	-1,868	0	0	0	-1,868
85.....	-1,868	0	0	0	-1,868
XII-4. Personal remittances in kind to foreigners (n.d.c.)					
Total.....	-179	0	0	0	-179
85.....	-179	0	0	0	-179
Total personal consumption expenditures					
Total.....	376,618	5,180	108,826	37	490,660
Durable commodities (d.c.)					
Total.....	43,719	1,165	25,312	20	70,215
Nondurable commodities (n.d.c.)					
Total.....	125,380	3,997	83,391	17	212,784
Services (s.)					
Total.....	207,519	18	124	0	207,661

(d.c.) Durable commodities.
 (n.d.c.) Nondurable commodities.
 (s.) Services.
 *Less than \$500,000.

1. In accordance with the new treatment of mobile homes as housing rather than as recreational vehicles, as discussed in the July 1972 issue of the *Survey of Current Business*, mobile homes are no longer in category VIII-1a of personal consumption expenditures but

are included in the structures component of GNP. Estimates of the space rental value of owner-occupied mobile homes are included in category IV-1; rents paid on tenant-occupied mobile homes are included in category IV-2. Payments of trailer park fees have been eliminated from category IV-4.

NOTE.—Detail may not add to total due to rounding.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

expenditures in each of the 83 functional categories into which PCE is classified.⁹ For each category, the table shows the breakdown of expenditures by input-output industry in producers' prices, plus each element of margin which is added to arrive at the PCE category value, which is in purchasers' prices.

The identifying numbers for the PCE categories are the ones used in table 2.5 in the annual income and product accounts published each July. The input-output industry code numbers, used to identify producing industries, are shown in appendix B with the associated industry titles and codes in terms of the 1967 Standard Industrial Classification.¹⁰

As an example, "shoes and other footwear" (PCE category II-1) has a value in table B of \$3,464 million in producers' prices. The industrial composition of this value can be seen by

reading down the first column: \$401 million of rubber footwear from industry 32, \$2,801 million of leather footwear from industry 34, \$261 million of imported footwear, etc. The total transportation margin of \$51 million for the entire category, shown in the second column, is the sum of the in-

9. The input-output data in the table are for summary (85-industry) categories. Announcement will be made in a later issue of the SURVEY of the availability of a comparable table with the full 367-industry detail.

10. A discussion of the definitions and conventions of the 1967 input-output study appears in the final section of this article, beginning on page 56. Some additional points helpful in understanding table B are summarized here.

Consumer purchases of scrap, used, or secondhand goods (industry 83) in producers' prices are shown net, i.e., as purchases by the personal sector from the other final demand sectors less personal sales to other final demand sectors. (Sales within the personal sector do not affect the first column of table 1 because they cancel.) However, the trade margin has been measured on all sales of used goods—both within the personal sector and between persons and other sectors—to the extent that such sales pass through trade channels. This margin is usually the largest part of the value of used goods in purchasers' prices. Thus, purchases in 1967 of used other durable house furnishings (part of category V-4) from industry 83 amounted to \$138 million, of which \$79 million was margin. The value of \$59 million in producers' prices represents the net purchase by persons of used furniture from other final demand sectors.

The margin shown in table B for the insurance industry covers only the cost of insuring imported commodities as they move from the foreign port to the domestic port. Insurance on domestic products while in transit is included in the transportation margin.

dividual transportation costs associated with the output of each producing industry; e.g., \$10 million was the cost of transporting the products of industry 32 to consumers, \$19 million was the cost of transporting the products of industry 34 to consumers, and so on. The costs of wholesale and retail distribution are in the third column. It shows, for example, that \$334 million was the cost of distributing the products of industry 32. Purchases of insurance (from industry 70), shown in the next to last column, are shown separately only to the extent that they apply to imported goods.

The sum of the transportation, trade, and insurance margins, added to the \$3,464 million producers' value, equals the purchasers' value of \$6,177 million for the PCE category "shoes and other footwear." The industrial composition of this total is shown in the last column.

(Continued on page 56)

Appendix A.—Bibliography of Reports and Materials on Input-Output Issued by the Bureau of Economic Analysis

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2. "The Transactions Table of the 1958 Input-Output Study and Revised Direct and Total Requirement Data," September 1965.*
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4. Nancy W. Simon, "Personal Consumption Expenditures in the 1958 Input-Output Study," October 1965.
5. "Additional Industry Detail for the 1958 Input-Output Study," April 1966.
6. "Industrial Impact of the 1966 Housing and Commercial Building Decline," November 1966.
7. "The Input-Output Structure of the U.S. Economy: 1963," November 1969. Reprint available from Superintendent of Documents, Government Printing Office, Washington, D.C. 20402; price 40 cents.
8. Allan H. Young and Claiborne M. Ball, "Industrial Impact of Residential Construction and Mobile Homes," October 1970.*
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11. Allan H. Young, Leo C. Maley, Jr., Sally R. Reed and Roy A. Seaton II, "Interindustry Transactions in New Structures and Equipment," August 1971.*
12. Albert J. Walderhaug, "The Composition of Value Added in the 1963 Input-Output Study," April 1973.
13. Philip M. Ritz and Eugene P. Roberts, "Industry Inventory Requirements: An Input-Output Analysis," November 1973.

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14. *Input-Output Structure of the U.S. Economy: 1963*; Volume 1, "Transactions Data for Detailed Industries;" Volume 2, "Direct Requirements for Detailed Industries;" Volume 3, "Total Requirements for Detailed Industries." U.S. Department of Commerce, 1969.

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16. "Input-Output Transactions: 1966," Staff Paper in Economics and Statistics, No. 19. Bureau of Economic Analysis, U.S. Department of Commerce, February 1972. Available from National Technical Information Service, Springfield, Va., 22151. \$3.00 per copy (\$1.45 Microfiche); Accession no. 72-10299.
17. "Input-Output Analysis as a Predictive Tool," Arlene K. Shapiro. Bureau of Economic Analysis Staff Paper No. 20, December 1972. Available from National Technical Information Service, Springfield, Va., 22151. \$3.00 per copy (\$1.45 Microfiche); Accession no. 73-10146.

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18. U.S. Department of Commerce, Office of Business Economics (now Bureau of Economic Analysis), "The Input-Output Structure of the United States Economy: 1947," March 1970.*
19. "Definitions and Conventions of the 1963 Input-Output Study," Bureau of Economic Analysis April 1972.*
20. "Industrial Composition of Personal Consumption Expenditures by PCE Category in Producers' and Purchasers' Prices, 1963." Table showing producing industry detail at 367 industry level of classification.*
21. "Interindustry Transactions in New Structures and Equipment, 1963." Table showing producing industry detail at 367 industry level of classification.*
22. "Notes on Methods and Sources Used in Preparing the 1963 Capital Flow Table," U.S. Department of Commerce, Office of Business Economics (now Bureau of Economic Analysis), November 1971.*
23. Beatrice N. Vaccara, "Changes Over Time in U.S. Input-Output Relationships." Paper presented at Seminar on Input-Output Analysis sponsored by the YMCA Center for International Management Studies and the State Planning Committee of Romania. July 1969.*

*Indicates that a limited supply of the paper or reprint of the article is available. Requests for copies should be addressed to the Bureau of Economic Analysis (BE-51), U.S. Department of Commerce, Washington, D.C. 20230.

APPENDIX B.—Industry Classification of the 1967 Input-Output Tables

The titles in bold face represent the groupings of industries used for the summary version of the 1967 tables and were also used in the 1958 and 1963 input-output tables prepared by the Bureau of Economic Analysis.

Industry number and title	Related Census-SIC codes (1967 edition)	Industry number and title	Related Census-SIC codes (1967 edition)
AGRICULTURE, FORESTRY, AND FISHERIES		12. 02	Maintenance and repair construction, all other. pt. 15, pt. 16, pt. 17, pt. 138.
1 Livestock and livestock products		MANUFACTURING	
1. 01	Dairy farm products----- 0132, pt. 014.	13 Ordnance and accessories	
1. 02	Poultry and eggs----- 0133, 0134, pt. 014.	13. 01	Complete guided missiles----- 1925.
1. 03	Meat animals and miscellaneous livestock products. 0135, 0136, 0139, pt. 014, 0193, pt. 0729.	13. 02	Ammunition, except for small arms, n.e.c. 1929.
2 Other agricultural products		13. 03	Tanks and tank components----- 1931.
2. 01	Cotton----- 0112, pt. 014.	13. 04	Sighting and fire control equipment.. 1941.
2. 02	Food feed grains and grass seeds.... 0113, pt. 0119, pt. 014.	13. 05	Small arms----- 1951.
2. 03	Tobacco----- pt. 0114, pt. 014.	13. 06	Small arms ammunition----- 1961.
2. 04	Fruits and tree nuts----- 0122, pt. 014.	13. 07	Other ordnance and accessories.... 1911, 1999.
2. 05	Vegetables, sugar, and miscellaneous crops. 0123, pt. 0119, pt. 014.	14 Food and kindred products	
2. 06	Oil bearing crops----- pt. 0113, pt. 0119, pt. 014.	14. 01	Meat products----- 201.
2. 07	Forest, greenhouse, and nursery products. 0192, pt. 014.	14. 02	Creamery butter----- 2021.
3 Forestry and fishery products		14. 03	Cheese, natural and processed----- 2022.
3. 00	Forestry and fishery products----- 074, 081, 082, 084, 086, 091.	14. 04	Condensed and evaporated milk.... 2023.
4 Agricultural, forestry, and fishery services		14. 05	Ice cream and frozen desserts----- 2024.
4. 00	Agricultural, forestry, and fishery services. 071, 0723, 073, pt. 0729, 085, 098.	14. 06	Fluid milk----- 2026.
MINING		14. 07	Canned and cured sea foods----- 2031.
5 Iron and ferroalloy ores mining		14. 08	Canned specialties----- 2032.
5. 00	Iron and ferroalloy ores mining----- 1011, 106.	14. 09	Canned fruits and vegetables----- 2033.
6 Nonferrous metal ores mining		14. 10	Dehydrated food products----- 2034.
6. 01	Copper ore mining----- 102.	14. 11	Pickles, sauces, and salad dressings.. 2035.
6. 02	Nonferrous metal ores mining, except copper. 103, 104, 105, 108, 109.	14. 12	Fresh or frozen packaged fish----- 2036.
7 Coal mining		14. 13	Frozen fruits and vegetables----- 2037.
7. 00	Coal mining----- 11, 12.	14. 14	Flour and cereal preparations----- 2041, 2043, 2045.
8 Crude petroleum and natural gas		14. 15	Prepared feeds for animals and fowls. 2042.
8. 00	Crude petroleum and natural gas... 1311, 1321.	14. 16	Rice milling----- 2044.
9 Stone and clay mining and quarrying		14. 17	Wet corn milling----- 2046.
9. 00	Stone and clay mining and quarrying. 141, 142, 144, 145, 148, 149.	14. 18	Bakery products----- 205.
10 Chemicals and fertilizer mineral mining		14. 19	Sugar----- 206.
10. 00	Chemical and fertilizer mineral mining. 147.	14. 20	Confectionery and related products.. 207.
CONSTRUCTION		14. 21	Alcoholic beverages----- 2082-5.
11 New construction		14. 22	Bottled and canned soft drinks----- 2086.
11. 01	New construction, residential buildings (nonfarm). pt. 15, pt. 16, pt. 17, pt. 6561.	14. 23	Flavoring extracts and sirups, n.e.c.. 2087.
11. 02	New construction, nonresidential buildings. pt. 15, pt. 17.	14. 24	Cottonseed oil mills----- 2091.
11. 03	New construction, public utilities... pt. 15, pt. 16, pt. 17.	14. 25	Soybean oil mills----- 2092.
11. 04	New construction, highways----- pt. 16, pt. 17.	14. 26	Vegetable oil mills, n.e.c.----- 2093.
11. 05	New construction, all other----- pt. 15, pt. 16, pt. 17, pt. 138.	14. 27	Animal and marine fats and oils----- 2094.
12 Maintenance and repair construction		14. 28	Roasted coffee----- 2095.
12. 01	Maintenance and repair construction, residential buildings (nonfarm). pt. 15, pt. 17.	14. 29	Shortening and cooking oils----- 2096.
		14. 30	Manufactured ice----- 2097.
		14. 31	Macaroni and spaghetti----- 2098.
		14. 32	Food preparations, n.e.c.----- 2099.
		15 Tobacco manufactures	
		15. 01	Cigarettes, cigars, etc.----- 2111, 2121, 2131.
		15. 02	Tobacco stemming and redrying.... 2141.
		16 Broad and narrow fabrics, yarn and thread mills	
		16. 01	Broadwoven fabric mills and fabric finishing plants. 2211, 2221, 2231, 2261, 2262.
		16. 02	Narrow fabric mills----- 2241.
		16. 03	Yarn mills and finishing of textiles, n.e.c. 2269, 2281-3.
		16. 04	Thread mills----- 2284.
		17 Miscellaneous textile goods and floor coverings	
		17. 01	Floor coverings----- 227.
		17. 02	Felt goods, n.e.c.----- 2291.
		17. 03	Lace goods----- 2292.
		17. 04	Paddings and upholstery fillings.... 2293.
		17. 05	Processed textile waste----- 2294.
		17. 06	Coated fabrics, not rubberized----- 2295.
		17. 07	Tire cord and fabric----- 2296.
		17. 08	Scouring and combing plants----- 2297.
		17. 09	Cordage and twine----- 2298.
		17. 10	Textile goods, n.e.c.----- 2299.
		18 Apparel	
		18. 01	Hosiery----- 2251, 2252.
		18. 02	Knit apparel mills----- 2253, 2254, 2259.
		18. 03	Knit fabric mills----- 2256.
		18. 04	Apparel made from purchased materials. 23 (excl. 239), 39996.
		19 Miscellaneous fabricated textile products.	
		19. 01	Curtains and draperies----- 2391.

APPENDIX B.—Industry Classification of the 1967 Input-Output Tables—Continued

Industry number and title	Related Census-SIC codes (1967 edition)	Industry number and title	Related Census-SIC codes (1967 edition)
19. 02 Housefurnishings, n.e.c.-----	2392.	31 Petroleum refining and related industries	2911, 299.
19. 03 Fabricated textile products, n.e.c.---	2393-9.		
20 Lumber and wood products, except containers		31. 01 Petroleum refining and related products.	
20. 01 Logging camps and logging contractors.	2411.	31. 02 Paving mixtures and blocks.-----	2951.
20. 02 Sawmills and planing mills, general.	2421.	31. 03 Asphalt felts and coatings.-----	2952.
20. 03 Hardwood dimensions and flooring.	2426.	32 Rubber and miscellaneous plastics products	
20. 04 Special product sawmills, n.e.c.-----	2429.	32. 01 Tires and inner tubes.-----	3011.
20. 05 Millwork.-----	2431.	32. 02 Rubber footwear.-----	3021.
20. 06 Veneer and plywood.-----	2432.	32. 03 Reclaimed rubber and miscellaneous rubber products, n.e.c.-----	3031, 3069.
20. 07 Prefabricated wood structures.-----	2433.	32. 04 Miscellaneous plastics products.-----	3079.
20. 08 Wood preserving.-----	2491.	33 Leather tanning and industrial leather products	
20. 09 Wood products, n.e.c.-----	2499.	33. 00 Leather tanning and industrial leather products.	3111, 3121.
21 Wooden containers		34 Footwear and other leather products	
21. 00 Wooden containers.-----	244.	34. 01 Footwear cut stock.-----	3131.
22 Household furniture		34. 02 Footwear except rubber.-----	314.
22. 01 Wood household furniture.-----	2511, 2519.	34. 03 Other leather products.-----	3151, 3161, 317, 3199.
22. 02 Upholstered household furniture.---	2512.	35 Glass and glass products	
22. 03 Metal household furniture.-----	2514.	35. 01 Glass and glass products except containers.	3211, 3229, 3231.
22. 04 Mattresses and bedsprings.-----	2515.	35. 02 Glass containers.-----	3221.
23 Other furniture and fixtures		36 Stone and clay products	
23. 01 Wood office furniture.-----	2521.	36. 01 Cement, hydraulic.-----	3241.
23. 02 Metal office furniture.-----	2522.	36. 02 Brick and structural clay tile.-----	3251.
23. 03 Public building furniture.-----	2531.	36. 03 Ceramic wall and floor tile.-----	3253.
23. 04 Wood partitions and fixtures.-----	2541.	36. 04 Clay refractories.-----	3255.
23. 05 Metal partitions and fixtures.-----	2542.	36. 05 Structural clay products, n.e.c.-----	3259.
23. 06 Venetian blinds and shades.-----	2591.	36. 06 Vitreous plumbing fixtures.-----	3261.
23. 07 Furniture and fixtures, n.e.c.-----	2599.	36. 07 Food utensils, pottery.-----	3262, 3263.
24 Paper and allied products except containers and boxes		36. 08 Porcelain electrical supplies.-----	3264.
24. 01 Pulp mills.-----	2611.	36. 09 Pottery products, n.e.c.-----	3269.
24. 02 Paper mills, except building paper.---	2621.	36. 10 Concrete block and brick.-----	3271.
24. 03 Paperboard mills.-----	2631.	36. 11 Concrete products, n.e.c.-----	3272.
24. 04 Envelopes.-----	2642.	36. 12 Ready-mixed concrete.-----	3273.
24. 05 Sanitary paper products.-----	2647.	36. 13 Lime.-----	3274.
24. 06 Wallpaper and building paper and board mills.	2644, 2661.	36. 14 Gypsum products.-----	3275.
24. 07 Converted paper, products, n.e.c., except containers and boxes.	2641, 2643, 2645, 2646, 2649.	36. 15 Cut stone and stone products.-----	3281.
25 Paperboard containers and boxes		36. 16 Abrasive products.-----	3291.
25. 00 Paperboard containers and boxes.---	265.	36. 17 Asbestos products.-----	3292.
26 Printing and publishing		36. 18 Gaskets and insulations.-----	3293.
26. 01 Newspapers.-----	2711.	36. 19 Minerals, ground or treated.-----	3295.
26. 02 Periodicals.-----	2721.	36. 20 Mineral wool.-----	3296.
26. 03 Book printing and publishing.-----	273.	36. 21 Nonclay refractories.-----	3297.
26. 04 Miscellaneous publishing.-----	2741.	36. 22 Nonmetallic mineral products, n.e.c.---	3299.
26. 05 Commercial printing.-----	2751, 2752.	37 Primary iron and steel manufacturing	
26. 06 Manifold business forms, blank-books, and binders.	2761, 2782.	37. 01 Blast furnaces and basic steel products.	331.
26. 07 Greeting card publishing.-----	2771.	37. 02 Iron and steel foundries.-----	332.
26. 08 Miscellaneous printing services.-----	2753, 2789, 279.	37. 03 Iron and steel forgings.-----	3391.
27 Chemicals and selected chemical products		37. 04 Primary metal products, n.e.c.-----	3399.
27. 01 Industrial inorganic and organic chemicals.	281 (excl. 28195.)	38 Primary nonferrous metals manufacturing	
27. 02 Fertilizers.-----	2871, 2872.	38. 01 Primary copper.-----	3331.
27. 03 Agricultural chemicals, n.e.c.-----	2879.	38. 02 Primary lead.-----	3332.
27. 04 Miscellaneous chemical products.---	2861, 289.	38. 03 Primary zinc.-----	3333.
28 Plastics and synthetic materials		38. 04 Primary aluminum.-----	3334, 28195.
28. 01 Plastics materials and resins.-----	2821.	38. 05 Primary nonferrous metals, n.e.c.---	3339.
28. 02 Synthetic rubber.-----	2822.	38. 06 Secondary nonferrous metals.-----	3341.
28. 03 Cellulosic man-made fibers.-----	2823.	38. 07 Copper rolling and drawing.-----	3351.
28. 04 Organic fibers, noncellulosic.-----	2824.	38. 08 Aluminum rolling and drawing.-----	3352.
29 Drugs, cleaning and toilet preparations		38. 09 Nonferrous rolling and drawing, n.e.c.-----	3356.
29. 01 Drugs.-----	283.	38. 10 Nonferrous wire drawing and insulating.	3357.
29. 02 Cleaning preparations.-----	284 (excl. 2844.)	38. 11 Aluminum castings.-----	3361.
29. 03 Toilet preparations.-----	2844.	38. 12 Brass, bronze, and copper castings.---	3362.
30 Paints and allied products		38. 13 Nonferrous castings, n.e.c.-----	3369.
30. 00 Paints and allied products.-----	2851.	38. 14 Nonferrous forgings.-----	3392.
		39 Metal containers	
		39. 01 Metal cans.-----	3411.
		39. 02 Metal barrels, drums, and pails.---	3491.
		40 Heating, plumbing, and fabricated structural metal products	
		40. 01 Metal sanitary ware.-----	3431.
		40. 02 Plumbing fittings and brass goods.---	3432.

APPENDIX B.—Industry Classification of the 1967 Input-Output Tables—Continued

Industry number and title	Related Census-SIC codes (1967 edition)	Industry number and title	Related Census-SIC codes (1967 edition)		
40.03	Heating equipment, except electric...	3433.	51.02	Typewriters.....	3572.
40.04	Fabricated structural steel.....	3441.	51.03	Scales and balances.....	3576.
40.05	Metal doors sash and trim.....	3442.	51.04	Office machines, n.e.c.....	3579.
40.06	Fabricated plate work (boiler shops).....	3443.			
40.07	Sheet metal work.....	3444.	52 Service industry machines		
40.08	Architectural metal work.....	3446.	52.01	Automatic merchandising machines.....	3581.
40.09	Miscellaneous metal work.....	3449.	52.02	Commercial laundry equipment.....	3582.
41 Screw machine products, bolts, nuts, etc. and metal stampings			52.03	Refrigeration machinery.....	3585.
41.01	Screw machine products and bolts, nuts, rivets, and washers.....	345.	52.04	Measuring and dispensing pumps.....	3586.
41.02	Metal stampings.....	3461.	52.05	Service industry machines, n.e.c.....	3589.
42 Other fabricated metal products			53 Electric transmission and distribution equipment and electrical industrial apparatus		
42.01	Cutlery.....	3421.	53.01	Electric measuring instruments.....	3611.
42.02	Hand and edge tools including saws.....	3423, 3425.	53.02	Transformers.....	3612.
42.03	Hardware, n.e.c.....	3429.	53.03	Switchgear and switchboard apparatus.....	3613.
42.04	Coating, engraving, and allied services.....	3471, 3479.	53.04	Motors and generators.....	3621.
42.05	Miscellaneous fabricated wire products.....	3481.	53.05	Industrial controls.....	3622.
42.06	Safes and vaults.....	3492.	53.06	Welding apparatus.....	3623.
42.07	Steel springs.....	3493.	53.07	Carbon and graphite products.....	3624.
42.08	Pipe, valves, and pipe fittings.....	3494, 3498.	53.08	Electrical industrial apparatus, n.e.c.....	3629.
42.09	Collapsible tubes.....	3496.			
42.10	Metal foil and leaf.....	3497.	54 Household appliances		
42.11	Fabricated metal products, n.e.c.....	3499.	54.01	Household cooking equipment.....	3631.
43 Engines and turbines			54.02	Household refrigerators and freezers.....	3632.
43.01	Steam engines and turbines.....	3511.	54.03	Household laundry equipment.....	3633.
43.02	Internal combustion engines, n.e.c.....	3519.	54.04	Electric housewares and fans.....	3634.
44 Farm machinery			54.05	Household vacuum cleaners.....	3635.
44.00	Farm machinery.....	3522.	54.06	Sewing machines.....	3636.
45 Construction, mining, oil field machinery equipment			54.07	Household appliances, n.e.c.....	3639.
45.01	Construction machinery.....	3531.	55 Electric lighting and wiring equipment		
45.02	Mining machinery.....	3532.	55.01	Electric lamps.....	3641.
45.03	Oil field machinery.....	3533.	55.02	Lighting fixtures.....	3642.
46 Materials handling machinery and equipment			55.03	Wiring devices.....	3643, 3644.
46.01	Elevators and moving stairways.....	3534.	56 Radio, television and communication equipment		
46.02	Conveyors and conveying equipment.....	3535.	56.01	Radio and television receiving sets.....	3651.
46.03	Hoists, cranes, and monorails.....	3536.	56.02	Phonograph records.....	3652.
46.04	Industrial trucks and tractors.....	3537.	56.03	Telephone and telegraph apparatus.....	3661.
47 Metalworking machinery and equipment			56.04	Radio and television communication equipment.....	3662.
47.01	Machine tools, metal cutting types.....	3541.	57 Electronic components and accessories		
47.02	Machine tools, metal forming types.....	3542.	57.01	Electron tubes.....	3671, 3672, 3673.
47.03	Special dies and tools and machine tool accessories.....	3544, 3545.	57.02	Semiconductors.....	3674.
47.04	Metalworking machinery, n.e.c.....	3548.	57.03	Electronic components, n.e.c.....	3679.
48 Special industry machinery and equipment			58 Miscellaneous electrical machinery, equipment and supplies		
48.01	Food products machinery.....	3551.	58.01	Storage batteries.....	3691.
48.02	Textile machinery.....	3552.	58.02	Primary batteries, wet and dry.....	3692.
48.03	Woodworking machinery.....	3553.	58.03	X-ray apparatus and tubes.....	3693.
48.04	Paper industries machinery.....	3554.	58.04	Engine electrical equipment.....	3694.
48.05	Printing trades machinery.....	3555.	58.05	Electrical equipment, n.e.c.....	3699.
48.06	Special industry machinery, n.e.c.....	3559.	59 Motor vehicles and equipment		
49 General industrial machinery and equipment			59.01	Truck and bus bodies.....	3713.
49.01	Pumps and compressors.....	3561.	59.02	Truck trailers.....	3715.
49.02	Ball and roller bearings.....	3562.	59.03	Motor vehicles and parts.....	3711, 3714.
49.03	Blowers and fans.....	3564.	60 Aircraft and parts		
49.04	Industrial patterns.....	3565.	60.01	Aircraft.....	3721.
49.05	Power transmission equipment.....	3566.	60.02	Aircraft engines and parts.....	3722.
49.06	Industrial furnaces and ovens.....	3567.	60.03	Aircraft propellers and parts.....	37295.
49.07	General industrial machinery, n.e.c.....	3569.	60.04	Aircraft equipment, n.e.c.....	3729 (excl. 37295).
50 Machine shop products			61 Other transportation equipment		
50.00	Machine shop products.....	359.	61.01	Shipbuilding and repairing.....	3731.
51 Office, computing, and accounting machines			61.02	Boatbuilding and repairing.....	3732.
51.01	Computing and related machines.....	3573, 3574.	61.03	Locomotives and parts.....	3741.
			61.04	Railroad and street cars.....	3742.
			61.05	Motorcycles, bicycles and parts.....	3751.
			61.06	Trailer coaches.....	3791.
			61.07	Transportation equipment, n.e.c.....	3799.
			62 Professional, scientific and controlling instruments, and supplies		
			62.01	Engineering and scientific instruments.....	3811.

APPENDIX B.—Industry Classification of the 1967 Input-Output Tables—Continued

Industry number and title	Related Census-SIC codes (1967 edition)	Industry number and title	Related Census-SIC codes (1967 edition)
62. 02	Mechanical measuring devices.....	3821.	
62. 03	Automatic temperature controls.....	3822.	
62. 04	Surgical and medical instruments.....	3841.	
62. 05	Surgical appliances and supplies.....	3842.	
62. 06	Dental equipment and supplies.....	3843.	
62. 07	Watches, clocks and parts.....	387.	
63	Optical, ophthalmic and photographic equipment and supplies		
63. 01	Optical instruments and lenses.....	3831.	
63. 02	Ophthalmic goods.....	3851.	
63. 03	Photographic equipment and supplies.	3861.	
64	Miscellaneous manufacturing		
64. 01	Jewelry, including costume, and silverware.	391, 3961.	
64. 02	Musical instruments and parts.....	3931.	
64. 03	Games, toys, etc.....	3941, 3942, 3943.	
64. 04	Sporting and athletic goods, n.e.c.....	3949.	
64. 05	Pens, pencils, etc.....	395.	
64. 06	Artificial flowers.....	3962.	
64. 07	Buttons, needles, pins and fasteners.....	3963, 3964.	
64. 08	Brooms and brushes.....	3991.	
64. 09	Hard surface floor covering.....	3996.	
64. 10	Morticians goods.....	3994.	
64. 11	Signs and advertising displays.....	3993.	
64. 12	Miscellaneous manufactures, n.e.c.....	3999 (excl. 39996).	
TRANSPORTATION, COMMUNICATION, ELECTRIC, GAS, AND SANITARY SERVICES			
65	Transportation and warehousing		
65. 01	Railroads and related services.....	40, 474.	
65. 02	Local, suburban and interurban highway passenger transportation.	41.	
65. 03	Motor freight transportation and warehousing.	42, 473.	
65. 04	Water transportation.....	44.	
65. 05	Air transportation.....	45.	
65. 06	Pipe line transportation.....	46.	
65. 07	Transportation services.....	47, (excl. 473, 474.).	
66	Communications, except radio and television broadcasting		
66. 00	Communications, except radio and television.	48, (excl. 483).	
67	Radio and television broadcasting		
67. 00	Radio and television broadcasting...	483.	
68	Electric, gas, water and sanitary services		
68. 01	Electric utilities.....	491, pt. 493.	
68. 02	Gas utilities.....	492, pt. 493.	
68. 03	Water and sanitary services.....	494, 495, 496, 497, pt. 493.	
WHOLESALE AND RETAIL TRADE			
69	Wholesale and retail trade		
69. 01	Wholesale trade.....	50 (excl. manufacturers' sales offices).	
69. 02	Retail trade.....	52, 53, 54, 55, 56, 57, 58, 59, 7396, pt. 8099.	
FINANCE, INSURANCE AND REAL ESTATE			
70	Finance and insurance		
70. 01	Banking.....	60.	
70. 02	Credit agencies.....	61, 67.	
70. 03	Security and commodity brokers.....	62.	
70. 04	Insurance carriers.....	63.	
70. 05	Insurance agents and brokers.....	64.	
71	Real estate and rental		
71. 01	Owner-occupied dwellings.....		
71. 02	Real estate.....	65 (excl. pt. 6561), 66.	
		SERVICES	
		72	Hotels and lodging places, personal and repair services, except automobile repair
72. 01	Hotels and lodging places.....	70.	
72. 02	Personal and repair services except auto repair and barber and beauty shops.	72 (excl. 723, 724) 76 (excl. 7692, 7694, and pt. 7699). 723, 724.	
72. 03	Barber and beauty shops.....		
		73	Business services
73. 01	Miscellaneous business services.....	73 (excl. 731, 7396), 7692, 7694, pt. 7699. 731.	
73. 02	Advertising.....		
73. 03	Miscellaneous professional services.....	81, 89 (excl. 8921).	
		74	Research and development
		Eliminated as a separate industry in the 1963 study. Research and development performed for sale is distributed to the purchaser by each of the industries performing the research and development.	
		75	Automobile repair and services
75. 00	Automobile repair and services.....	75.	
		76	Amusements
76. 01	Motion pictures.....	78.	
76. 02	Amusement and services.....	79.	
		77	Medical, educational services, and nonprofit organizations
77. 01	Doctors and dentists.....	801, 802, 803, 804.	
77. 02	Hospitals.....	8061.	
77. 03	Other medical and health services.....	0722, 807, 809. (excl. pt. 8099)	
77. 04	Educational services.....	82.	
77. 05	Nonprofit organizations.....	84, 86, 8921.	
		GOVERNMENT ENTERPRISES	
		78	Federal Government enterprises
78. 01	Post Office.....		
78. 02	Federal electric utilities.....		
78. 03	Commodity Credit Corporation.....		
78. 04	Other Federal Government enterprises.		
		79	State and local government enterprises
79. 01	Local government passenger transit.		
79. 02	State and local electric utilities.....		
79. 03	Other state and local government enterprises.		
		IMPORTS	
		80	Gross imports of goods and services
80. 01	Directly allocated imports.....		
80. 02	Transferred imports.....		
		DUMMY INDUSTRIES	
		81	Business travel, entertainment and gifts
81. 00	Business travel, entertainment and gifts.		
		82	Office supplies
82. 00	Office supplies.....		
		83	Scrap, used and secondhand goods
83. 00	Scrap, used and secondhand goods...		
		SPECIAL INDUSTRIES	
		84	Government industry
84. 00	Government industry.....		
		85	Rest of the world industry
85. 00	Rest of the world industry.....		
		86	Household industry
86. 00	Household industry.....		

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

of Gross Output, 1967—Continued

prices]

Table with 17 columns (66-83) representing different economic sectors and 88 rows of data points. The sectors include Communications, Radio and TV broadcasting, Electric, gas, water and sanitary services, Wholesale and retail trade, Finance and insurance, Real estate and rental, Hotels, personal and repair services except auto, Business services, Automobile repair and services, Amusements, Medical, educational services and non-profit organizations, Federal Government enterprises, State and local government enterprises, Gross imports of goods and services, Business travel, entertainment and gifts, Office supplies, Scrap, used and secondhand goods. The table contains numerical values for each sector across 88 rows.

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V.A.
E.C.
I.T.B.
P.T.I.
T.

Definitions and Conventions of the 1967 Input-Output Tables¹¹

Trade. The input-output tables do not trace actual flows to and from the trade industry. If trade were shown as buying and reselling, the detailed connections would be between the producing industries and trade, and the consuming industries and final users would make most of their purchases from a single source—trade. To show the links between producing industries and consuming industries or final markets, commodities are shown as if moving directly from producer to user, bypassing trade. The output of trade is measured in terms of total margins, that is, operating expense plus profit.

Valuation of transactions. The valuation underlying the tables in this report is based on producers' prices.¹² Such prices exclude distribution costs, which constitute the difference between producers' and purchasers' prices. Under this valuation system, the individual inputs to an industry are valued at producers' prices while the trade margin and transportation costs associated with the aggregate of these inputs appear as inputs to the consuming industry from the trade and transportation industries, respectively.

Classification of industries. For this article, all productive activities of the U.S. economy are grouped into 85 industries. Most of these are combinations of industries as defined in the Standard Industrial Classification (SIC) Manual, 1967 edition. Three are "dummy" industries established to simplify the estimating procedures. The list of industrial categories and their composition in terms of the SIC is given in Appendix B.

Secondary products or activities. In

most cases, secondary output is treated as if sold by the producing industry to the industry to which it is primary, and it is added to the output of the primary industry for distribution to users.¹³ In some cases, where secondary output is considerably different from an industry's primary output, particularly when it is a large proportion of total output, the industry is redefined to exclude the secondary output. In these instances, the secondary output and associated inputs are subtracted from the producing industry and added to the primary industry.

Imports. Imports used for production (i.e., intermediate goods and services) which are substitutable for domestically produced goods and services¹⁴ are treated like secondary products; they are shown as if purchased by the industry producing the substitutable item and added to that industry's output.

Imports used in production which have no domestic counterparts, and imports purchased by final users in substantially the same form in which they were imported, are shown as purchased directly by the consuming industry or final market.

Gross output and gross input. Gross output of an industry represents the sum of the values of the following elements: (a) the total production by the industry, including both primary and secondary products or services; (b) the producers' value of the secondary products or services of other industries which are primary to the given industry; and (c) the domestic port value of substitutable imports, which are distributed as part of the output of the given industry.

Gross input of an industry is equal to the sum of the values of the follow-

ing elements: (a) total consumption of goods and services required for the industry's total production; (b) value added by the industry; (c) the producers' value of the secondary products or services of other industries which are primary to the given industry; and (d) the domestic port value of substitutable imports.¹⁵

Gross output, the row total, equals gross input, the column total.

Inventories. The inventory change shown for each industry represents the change in inventories of the industry's primary products regardless of which industry actually owns or holds the inventories. (This is different from the customary industry inventory figures which represent inventories held by each industry.) Inventories are so classified in the input-output table in order to make the row total equal to the outputs of each industry. Setting aside the inventory item, the entries in a row add up to the total consumption (industrial and final use) of its products or services. The difference between this and the total output of the industry is the change in the inventories of its products wherever held. It is, therefore, this magnitude that must be entered as the inventory item.

11. This subject is discussed much more fully in a document available upon request; see item 19 in Appendix A.

12. Producers' prices have been defined to include Federal and State and local excise taxes collected and paid by the producer.

13. The basic unit of classification in the SIC is the establishment. An establishment is classified in an industry on the basis of its principal activity. However, once an establishment is classified in an industry, its entire output, subsidiary as well as principal, is counted as part of the output of that industry. Its principal output, that which determines its industry classification, is called primary output; its other (subsidiary) output is called secondary.

14. Substitutability was determined on a judgmental basis using the following guide: the imports should be interchangeable with a domestically produced item without any changes in the technology of the consuming industry or the resultant product.

15. Thus, secondary products and substitutable imports are added to both the inputs and outputs.

Footnotes to Tables on pages 38-55

TABLE 1

*Less than \$500,000.

1. Entry in each column represents the sum of the value of transferred imports at domestic port value and the value of the secondary output of other industries which has been transferred to the industry named at the head of the column. See text for further discussion.

2. The detailed entries reflect gross exports of goods and services from each producing industry. Imports in total are shown as negative entries in this column on rows 80A and 80B. Therefore, the sum of the column equals the GNP component "net exports of goods and services."

3. Entry in each row represents the value of output of the industry named at the beginning of the row which has been transferred to other industries for distribution. These entries include secondary products which have been transferred to primary producing industries and primary outputs which have been transferred to "dummy" industries. See text for further discussion.

NOTE.—Detail may not add due to rounding.

TABLE 2

*Less than 0.000005.

1. To remove a source of instability in the measurement of direct requirements per dollar of output and total requirements per dollar of delivery to final demand, the Commodity Credit Corporation has been excluded from this industry. The excluded inputs to the CCC from the specified industries are: Industry 2, \$389 million; Industry 14, \$121 million; Industry 65, \$318 million; Industry 69, \$56 million; total value added, —\$863 million; indirect business taxes, \$67 million; and property-type income, —\$980 million.

NOTE.—Detail may not add due to rounding.

TABLE 3

NOTE.—To prevent requirements for scrap and by-products from generating production, scrap and by-products have been treated as inputs to the producing industry rather than to the consuming industry.

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Table header for General Business Indicators - Quarterly Series. Columns: 1970, 1971, 1972, 1971 (I-IV), 1972 (I-IV), 1973 (I-IV), 1974 (I).

GENERAL BUSINESS INDICATORS—Quarterly Series—Continued

Table with rows for 'U.S. BALANCE OF INTERNATIONAL PAYMENTS—Con.' and 'Quarterly Data Are Seasonally Adjusted'. Includes categories like 'Unilateral transactions', 'Balance on current account', and 'Gross liquidity balance'.

Table header for General Business Indicators - Monthly Series. Columns: 1971, 1972, 1972 (Dec.), 1973 (Jan-Dec), 1974 (Jan.).

GENERAL BUSINESS INDICATORS—Monthly Series

Main table for monthly series with sections: PERSONAL INCOME, BY SOURCE; FARM INCOME AND MARKETINGS; INDUSTRIAL PRODUCTION. Includes sub-sections like 'Wage and salary disbursements', 'Cash receipts from farming', and 'Final products'.

* Revised. † Preliminary. ‡ See corresponding note on p. S-1. § Series revised beginning 1969; monthly data prior to May 1972 appear in the Farm Income Situation, July 1973, available from the U.S. Dept. of Agriculture, Economic Research Service. ¶ Includes data for items not shown separately.

⊝ Series revised back to 1970 to reflect new seasonal adjustment factors and production levels. Monthly revisions are available upon request.

Table with columns for years 1971, 1972, 1972 (Dec), 1973 (Jan, Feb, Mar, Apr, May, June, July, Aug, Sept, Oct, Nov, Dec), and 1974 (Jan). Includes a note: 'Unless otherwise stated in footnotes below, data through 1970 and descriptive notes are as shown in the 1971 edition of BUSINESS STATISTICS'.

GENERAL BUSINESS INDICATORS—Continued

Main data table with columns for various indicators and years. Rows include Industrial Production (Federal Reserve Index), Seasonally adjusted total index, and various product categories like Consumer goods, Equipment, Materials, Machinery, etc.

* Revised. † Preliminary. ‡ Includes data for items not shown separately. § Revised data for 1966-72 for the indicated series appear on pp. 24-25 of the Oct. 1972 and p. 7 of the July 1973 issue of the SURVEY. See also notes marked "†" on pp. S-11 and S-12. ¶ See note marked "⊘" on p. S-3.

Table with columns for years 1971, 1972, 1973, and 1974, and sub-columns for months (Jan., Feb., Mar., Apr., May, June, July, Aug., Sept., Oct., Nov., Dec.) and Annual. Includes a note about data revisions.

GENERAL BUSINESS INDICATORS-Continued

Main data table containing 'MANUFACTURERS' SALES, INVENTORIES, AND ORDERS' and 'BUSINESS INCORPORATIONS'. It includes various sub-categories like 'New orders, net' and 'Unfilled orders' with numerical values for each year and month.

COMMODITY PRICES

Table titled 'PRICES RECEIVED AND PAID BY FARMERS' showing commodity prices for crops, livestock, and dairy products. It includes columns for prices received and paid, and parity ratios for various items like wheat, corn, and hogs.

Revised. Preliminary. Advance estimate; total mfrs. unfilled orders for Dec. 1973 do not reflect revisions for selected components. Based on unadjusted data. Revised back to 1966 to reflect benchmarking to Annual Surveys of Manufactures (1966-71) and calculation of new seasonal factors. Revisions and further details available from the Census Bureau as follows: 1966-Mrs. Shipments, Inventories, and Orders: 1966-72, M3-1.4, Revised; 1967-Mar. 1973-Mrs. Shipments, Inventories, and Orders: 1967-73, M3-1.5. See note marked 'S' on p. 8-6.

Includes textile mill products, leather and products, paper and allied products, and printing and publishing industries, unfilled orders for other nondurable goods are zero. Includes data for items not shown separately. Compiled by Dun & Bradstreet, Inc. (failures data for 48 States and Dist. of Col.). Revisions for Jan.-Dec. 1970 (unadj.) and Mar. 1970-Dec. 1971 (seas. adj.) will be shown later. Ratio of prices received to prices paid (parity index).

Table with columns for years 1971, 1972, 1973, and 1974. Sub-columns for 1972 (Annual, Dec.) and 1973 (Jan., Feb., Mar., Apr., May, June, July, Aug., Sept., Oct., Nov., Dec.).

LABOR FORCE, EMPLOYMENT, AND EARNINGS—Continued

MAN-HOURS—Continued
Indexes of man-hours, private nonagric. payrolls, goods-producing indus., seas. adjusted—Con.
Manufacturing... 1967=100
Durable goods...
Nondurable goods...
Service-producing...
Transportation, comm., elec., gas*...
Wholesale and retail trade*...
Wholesale trade*...
Retail trade*...
Finance, insurance, and real estate*...
Services*...

HOURLY AND WEEKLY EARNINGS
Average hourly earnings per worker:††
Not seasonally adjusted:
Private nonagric. payrolls... dollars
Mining...
Contract construction...
Manufacturing...
Excluding overtime...
Durable goods...
Excluding overtime...
Ordinance and accessories...
Lumber and wood products...
Furniture and fixtures...
Stone, clay, and glass products...
Primary metal industries...
Fabricated metal products...
Machinery, except electrical...
Electrical equipment and supplies...
Transportation equipment...
Instruments and related products...
Miscellaneous manufacturing ind...
Nondurable goods...
Excluding overtime...
Food and kindred products...
Tobacco manufactures...
Textile mill products...
Apparel and other textile prod...
Paper and allied products...
Printing and publishing...
Chemicals and allied products...
Petroleum and coal products...
Rubber and plastics products, nec...
Leather and leather products...
Transportation, comm., elec., gas...
Wholesale and retail trade...
Wholesale trade...
Retail trade...
Finance, insurance, and real estate...
Services...

Seasonally adjusted:*
Private nonagricultural payrolls...
Mining...
Contract construction...
Manufacturing...
Transportation, comm., elec., gas...
Wholesale and retail trade...
Finance, insurance, and real estate...
Services...

Indexes of avg. hourly earnings, seas. adj.: ©¶
Private nonfarm economy:
Current dollars... 1967=100
1967 dollarsΔ...
Mining...
Contract construction...
Manufacturing...
Transportation, comm., elec., gas...
Wholesale and retail trade...
Finance, insurance, and real estate...
Services...

Hourly wages, not seasonally adjusted:
Construction wages, 20 cities (E NR): ♂
Common labor... \$ per hr.
Skilled labor...
Farm, without board or rm., 1st of mo...
Railroad wages (average, class I)...

Avg. weekly earnings per worker, †private nonfarm:
Current dollars, seasonally adjusted*
1967 dollars, seasonally adjusted*Δ
Spendable earnings (worker with 3 dependents):
Current dollars, seasonally adjusted
1967 dollars, seasonally adjustedΔ

Current dollars, not seasonally adjusted:†
Private nonfarm, total... dollars
Mining...
Contract construction...
Manufacturing...
Durable goods...
Nondurable goods...
Transportation, comm., elec., gas...
Wholesale and retail trade...
Wholesale trade...
Retail trade...
Finance, insurance, and real estate...
Services...

* Revised. † Preliminary. ‡ Includes adjustments not distributed by months. § See corresponding note, p. S-13. ¶ Production and non-supervisory workers. *New series. † Line-haul roads; omits wages in switching and terminal companies. ‡ Corrected. ©Source: USDL, Bureau of Labor Statistics; the indexes exclude effects of changes in the proportion of workers in high-wage and low-wage industries, and the total and manufacturing indexes also exclude, for the manufacturing sector only, effects of fluctuations in overtime premiums. See also note "†," p. S-13. ♂Wages as of Feb. 1, 1974: Common, \$7.29; skilled, \$9.89. ΔEarnings expressed in 1967 dollars are adjusted for changes in purchasing power since the base period, 1967, by dividing by the Consumer Price Index for the respective period.

Table with columns for years: 1971, 1972, 1972, 1973 (Jan-Dec), 1974 (Jan). Includes a note: 'Unless otherwise stated in footnotes below, data through 1970 and descriptive notes are as shown in the 1971 edition of BUSINESS STATISTICS'

ELECTRIC POWER AND GAS—Continued

Table containing two sections: 'ELECTRIC POWER—Continued' and 'GAS†'. Rows include Sales to ultimate customers, Revenue from sales, Total utility gas, Customers, Sales to customers, and Revenue from sales to customers.

FOOD AND KINDRED PRODUCTS; TOBACCO

Table containing two sections: 'ALCOHOLIC BEVERAGES' and 'DAIRY PRODUCTS'. Rows include Beer, Distilled spirits, Whisky, Rectified spirits and wines, Butter, creamery, and Cheese.

† Revised. † Reported annual total; revisions are not distributed to the monthly data. ‡ Includes Hawaii; no monthly data available for Hawaii. § Data are not wholly comparable on a year to year basis because of changes from one classification to another.

†Data restated to represent the total gas utility industry, 99 percent of which is natural gas; also, sales are expressed in B.t.u. instead of therms. ‡Revised data for months prior to May 1971 will be shown later.

Table with columns for years 1971-1974 and a note: 'Unless otherwise stated in footnotes below, data through 1970 and descriptive notes are as shown in the 1971 edition of BUSINESS STATISTICS'

PETROLEUM, COAL, AND PRODUCTS—Continued

Main table for Petroleum, Coal, and Products. Rows include categories like Refined petroleum products, Residual fuel oil, Jet fuel, Lubricants, Asphalt, and Liquefied gases. Columns represent monthly data from Jan 1971 to Jan 1974.

PULP, PAPER, AND PAPER PRODUCTS

Main table for Pulp, Paper, and Paper Products. Rows include categories like Pulpwood and Waste Paper, WOODPULP Production, Stocks, Exports, Imports, and PAPER AND PAPER PRODUCTS. Columns represent monthly data from Jan 1971 to Jan 1974.

* Revised. ^ Corrected.
† Reported annual total; revisions not allocated to the months.

‡ Less than 50 thousand barrels.
§ Monthly data no longer furnished. ¶ Average for May and June.

