

SURVEY OF CURRENT BUSINESS



UNITED STATES DEPARTMENT OF COMMERCE / BUREAU OF ECONOMIC ANALYSIS

SURVEY OF CURRENT BUSINESS



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the BUSINESS SITUATION

REAL GNP increased at an annual rate of 4 percent in the fourth quarter of 1977, compared with 5 percent in the third (table 1).¹ A much larger increase of final sales than in the third quarter—7 percent compared with 4½ percent—was more than offset by a swing in the rate of real inventory accumulation. After a \$2½ billion (annual rate) step-up, inventory accumulation fell \$8 billion, from \$15½ billion in the third quarter to \$7½ billion in the fourth (chart 1).

1. These preliminary (15-day) estimates are based on the following major data sources: For *personal consumption expenditures* (PCE), retail sales, and unit auto and truck sales through December; for *nonresidential fixed investment*, the same information for autos and trucks, manufacturers' shipments of equipment for October and November, construction put in place for October and November, and investment plans for the quarter; for *residential investment*, construction put in place for October and November, and housing starts for October and November; for *change in business inventories*, October and November book values for manufacturing and trade, and unit auto inventories through December; for *net exports of goods and services*, merchandise trade for October and November, and fragmentary information on investment income for the quarter; for *government purchases of goods and services*, Federal unified budget outlays for October and November, State and local construction put in place for October and November, and State and local employment through December; and for *GNP prices*, the Consumer Price Index for October and November, and the Wholesale Price Index through December. Some of these source data are subject to revision.

Real personal consumption expenditures (PCE) and fixed investment increased substantially more than in the third quarter—7½ percent and 11 percent at annual rates. Government purchases increased 4 percent, somewhat less than in the third quarter, and net exports declined. If net exports are excluded from final sales to derive a measure of domestic sales, the increase of 7½ percent—and also the acceleration, from 3½ percent in the third quarter—was larger than in total final sales.

Prices.—The rate of increase in GNP prices accelerated in the fourth quarter as shown by each of the three commonly used measures—the implicit price deflator, the chain price index, and the fixed-weighted price index. The fixed-weighted price index increased 6 percent (annual rate) compared with 5 percent in the third quarter (table 2). Most of the step-up was traceable to domestic nonbusiness production—that is, gross product originating in households and institutions and in government. Compensation of employees is used to measure the prices of these two types of nonbusiness pro-

duction. A pay raise for Federal Government employees contributed about 0.8 percentage points to the acceleration of GNP prices, and an unusually large increase in the average earnings of the employees of households and institutions contributed the remainder. Prices of gross business product increased about 5 percent in both quarters. An acceleration in prices of capital goods purchased by private investors and government was offset by a deceleration in prices of PCE.

The deceleration in prices of PCE was largely due to prices of services; gas and electricity prices increased substantially less in the fourth quarter than in the third. Prices of nondurable goods increased a little less than in the third quarter—3 percent (annual rate) compared with 3½ percent. A major factor in the deceleration was food prices, which increased 1½ percent compared with 2½ percent in the third quarter. A sharp acceleration in gasoline prices was a partial offset. Prices of durable goods accelerated, from 2 percent to 4½ percent, mainly due to the prices of new cars. The

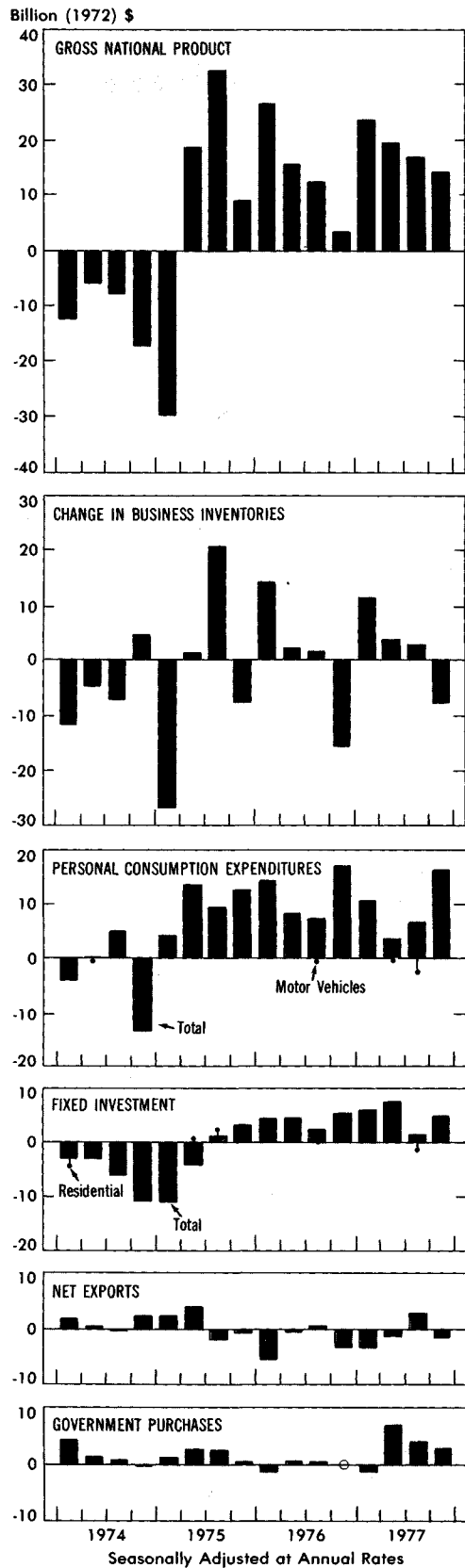
Table 1.—Gross National Product in Current and Constant Dollars, 1977

[Quarters at seasonally adjusted annual rates]

	Current dollars					Constant (1972) dollars									
	Billions of dollars										Percent change from preceding period				
	Year	I	II	III	IV	Year	I	II	III	IV	Year	I	II	III	IV
Gross national product	1,890.4	1,810.8	1,869.9	1,915.9	1,965.1	1,337.6	1,311.0	1,330.7	1,347.4	1,361.4	4.9	7.5	6.2	5.1	4.2
Final sales.....	1,872.7	1,797.0	1,848.2	1,892.2	1,953.2	1,326.1	1,301.2	1,317.5	1,331.8	1,353.8	4.7	3.8	5.1	4.4	6.8
Change in business inventories.....	17.8	13.8	21.7	23.6	11.9	11.6	9.7	13.2	15.7	7.7	-----	-----	-----	-----	-----
Less: Rest-of-the-world product.....	17.5	17.6	18.4	17.7	16.3	7.4	7.7	7.9	7.4	6.6	10.4	96.7	10.9	-25.3	-35.3
Equals: Gross domestic product	1,872.9	1,793.2	1,851.4	1,898.2	1,948.8	1,330.2	1,303.3	1,322.8	1,340.1	1,354.8	4.9	7.2	6.1	5.3	4.5

CHART 1

Real Product: Change From Preceding Quarter



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

78-1-1

acceleration of new car prices reflected smaller dealer discounts in the fourth quarter. The effect of the smaller discounts was partly offset by the fact that the 1978 model cars, which carry higher prices than the 1977 model cars, accounted for a smaller share of fourth-quarter sales than was typical of earlier years.

Employment and unemployment.—As measured by the household survey, employment increased 1.2 million in the fourth quarter, twice as much as in the third (table 3). The civilian labor force also increased much more than in the third quarter, as the labor force participation rate increased sharply—0.5 percentage points—after having shown no change in the third quarter. Unemployment and the unemployment rate declined, the latter from 6.9 to 6.6 percent. These figures incorporate the annual revisions made by the Bureau of Labor Statistics to update seasonal adjustment factors. The revised figures show that the official measure of the unemployment rate declined steadily in the quarters of 1977. Two measures of the unemployment rate that are based on alternative seasonal adjustment procedures—the all-additive and the stable 1967-73 procedures—showed similar declines.

Increases in employment as measured by the establishment survey were

smoother than those in the household survey—0.6 million in the fourth quarter and 0.7 million in the third. (The short-term changes in employment shown by the establishment survey are generally regarded to be more reliable.) The increase in goods-producing industries was about the same in both quarters. Fourth-quarter employment was held down by strikes in mining and in aircraft production; other manufacturing industries as a whole picked up. In service-producing industries, a deceleration was traceable to trade, services, and government. State and local public service jobs continued to account for most of the increase in government employment. Average weekly hours were up 0.1, to 36.1, after having dropped 0.2 in the third quarter.

Productivity and costs.—In contrast to GNP, real gross product in nonfarm business other than housing increased only a little less than in the third quarter (table 4). The difference in the deceleration of the two output measures is partly due to components that are included in GNP but not in this output measure—nonbusiness production, farming, and housing—and partly due to measurement errors in the three independent estimates of GNP—the sums of final product, of incomes, and of industry products—that are used in estimating output for this table.

Table 2.—Fixed-Weighted Price Indexes, 1977

[Quarters are seasonally adjusted]

	Index numbers (1972=100)					Percent change from preceding period (quarters at annual rate)				
	Year	I	II	III	IV	Year	I	II	III	IV
Gross national product.....	143.2	139.9	142.3	144.0	146.1	6.1	7.1	7.0	4.8	6.1
Less: Change in business inventories.....										
Equals: Final sales.....	143.1	139.8	142.2	143.9	146.0	6.1	7.1	7.0	4.9	6.1
Less: Exports.....	181.8	177.8	182.6	182.6	182.7	5.5	3.9	11.2	-1.1	.3
Plus: Imports.....	199.2	194.5	198.7	202.7	205.2	7.6	8.3	8.8	8.3	5.0
Equals: Final sales less exports plus imports.....	144.3	141.0	143.3	145.3	147.6	6.3	7.4	6.9	5.6	6.5
Personal consumption expenditures.....	141.7	138.6	140.9	142.8	144.4	5.7	7.0	6.8	5.4	4.7
Food.....	147.1	144.0	147.3	148.2	148.8	4.0	7.0	9.5	2.4	1.6
Energy ¹	181.4	176.2	180.2	183.3	186.2	8.8	8.1	9.5	7.2	6.3
Other personal consumption expenditures.....	126.5	133.6	135.4	137.5	139.3	5.9	6.8	5.6	6.1	5.4
Other.....	148.8	144.9	147.4	149.5	152.9	7.2	8.2	7.0	5.9	9.5
Nonresidential structures.....	157.5	153.7	156.8	158.4	160.9	6.2	8.4	8.3	4.2	6.6
Producers' durable equipment.....	144.0	140.3	142.4	144.9	148.0	6.1	4.8	6.3	7.1	9.0
Residential.....	159.7	153.6	157.4	160.7	166.4	12.1	17.8	10.5	8.7	14.9
Government purchases.....	146.0	142.7	144.8	146.6	149.7	6.5	6.8	6.1	5.1	8.8

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

Table 3.—Selected Labor Market Series

[Seasonally adjusted]

	Levels					Change from preceding quarter			
	1976	1977				1977			
	IV	I	II	III	IV	I	II	III	IV
Household survey									
Civilian labor force (millions)	95.6	96.2	97.2	97.6	98.6	0.6	0.9	0.4	1.1
Employment.....	88.2	89.1	90.3	90.8	92.1	.9	1.2	.6	1.2
Unemployment.....	7.4	7.2	6.9	6.7	6.6	-.3	-.3	-.2	-.2
Unemployment rate (percent):									
Official.....	7.8	7.4	7.1	6.9	6.6	-.4	-.3	-.2	-.3
All additive ¹	7.8	7.5	7.0	7.0	6.7	-.3	-.5	0	-.3
Stable 1967-73 ¹	7.8	7.5	7.1	6.8	6.7	-.3	-.4	-.3	-.1
Civilian labor force participation rate (percent)	61.8	61.9	62.2	62.2	62.7	.1	.3	0	.5
Establishment survey									
Employment (millions)	80.1	80.9	81.9	82.5	83.2	.8	.9	.7	.6
Goods-producing.....	23.5	23.8	24.3	24.4	24.5	.3	.5	.1	.1
Service-producing.....	56.7	57.1	57.6	58.2	58.7	.5	.5	.6	.5
Average weekly hours: private nonfarm (hours)	36.2	36.1	36.2	36.0	36.1	-.1	.1	-.2	.1

1. Quarterly rates are averages of monthly rates.
Source: Bureau of Labor Statistics.

The quarterly changes in gross product, hours, and compensation, and also in their quotients, are especially difficult to interpret because of errors in timing and problems in seasonal adjustment. In particular, the gross product and hours series do not seem to be well synchronized. The increase in hours in the fourth quarter, which followed little change in the third, largely reflected the increase in employment. In conjunction with gross product, it resulted in a 2½ percent annual rate of increase in productivity in the fourth quarter, compared with 5 percent in the third. Compensation per hour is smoother,

because it is based largely on common data sources for hours. It increased 8 percent in the fourth quarter, compared with 8½ percent in the third. Unit labor cost increased 6 percent, substantially more than the unusually low rate of increase of 3½ percent registered in the third quarter. The movement of unit labor cost reflects the deficiencies of the productivity series.

Personal consumption and income

Real PCE in the fourth quarter increased at an annual rate of 7½ percent, compared with 3 percent shown by the 75-day estimate for the third

Table 4.—Real Gross Product, Hours, and Compensation in the Business Economy Other Than Farm and Housing, 1977

[Percent change from preceding period, quarters at seasonally adjusted annual rates]

	Year	I	II	III	IV
Real gross product.....	6.0	9.7	9.0	4.8	4.5
Hours.....	3.5	5.0	8.3	-1	2.1
Compensation.....	12.7	16.3	16.3	8.5	10.6
Real gross product per hour.....	2.4	4.4	.6	4.8	2.0
Compensation per hour.....	8.9	10.8	7.4	8.6	7.9
Unit labor cost.....	6.3	6.1	6.7	3.5	5.8

quarter (table 5). The 45-day estimate of the increase had been 2 percent. The 75-day estimate incorporated a non-routine revision in the Census Bureau retail sales series, which underlies much of the goods component of PCE; the revision in this series was discussed in last month's SURVEY OF CURRENT BUSINESS.

The step-up in the fourth quarter was in goods (chart 2). In contrast, the increase in services was smaller than in the third quarter; the deceleration was largely in electricity. In durable goods, motor vehicles and parts increased substantially. Purchases of trucks were the main factor; purchases of new automobiles were unchanged. In the third quarter, trucks and new automobiles had both declined—trucks a little, and new automobiles sharply. The other major categories of durables—furniture and equipment, and "other"—increased more in the fourth quarter than in the third.

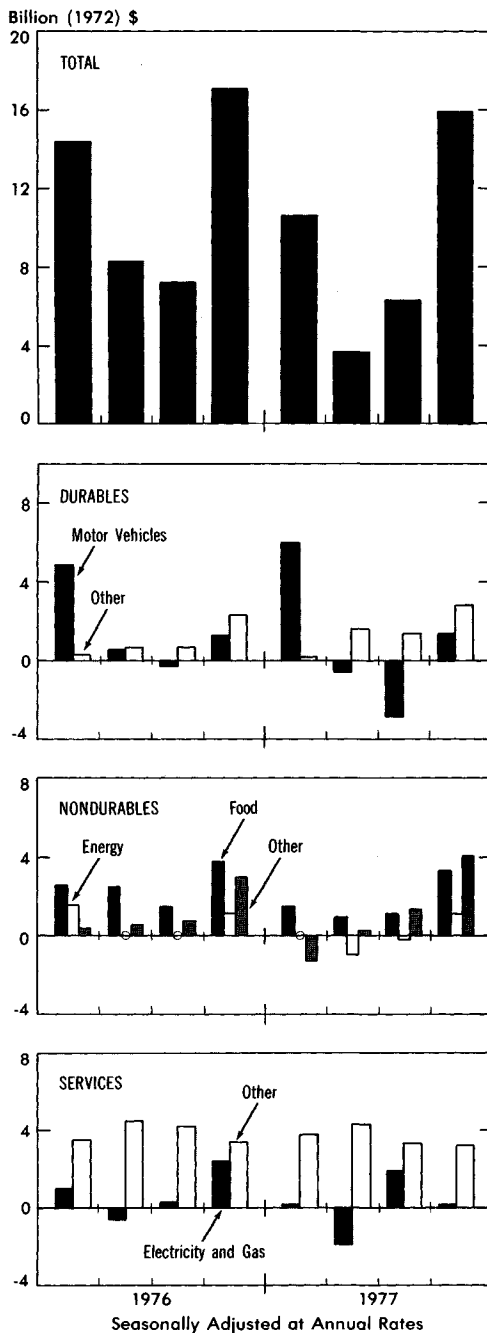
Table 5.—Personal Consumption Expenditures in Current and Constant Dollars, 1977

[Quarters at seasonally adjusted annual rates]

	Current dollars					Constant (1972) dollars									
	Billions of dollars										Percent change from preceding period				
	Year	I	II	III	IV	Year	I	II	III	IV	Year	I	II	III	IV
Personal consumption expenditures	1,210.1	1,172.4	1,194.0	1,218.9	1,255.3	860.3	850.4	854.1	860.4	876.4	4.8	5.1	1.8	3.8	7.6
Durables	179.4	177.0	178.6	177.6	184.6	138.0	136.9	137.9	136.5	140.8	8.3	20.2	3.0	-3.9	13.0
Motor vehicles and parts.....	83.8	85.3	84.5	81.2	84.1	61.2	62.7	62.1	59.3	60.3	9.9	49.4	-3.4	-16.8	10.0
Other durables.....	95.7	91.7	94.1	96.4	100.5	76.8	74.2	75.8	77.2	80.0	7.0	1.0	8.5	7.8	15.3
Nondurables	480.1	466.6	474.4	481.8	497.7	333.3	329.7	330.0	332.5	340.9	3.6	.3	.3	3.0	10.5
Food.....	246.3	237.9	244.8	248.3	254.2	167.6	165.4	166.4	167.6	170.9	4.9	3.6	2.4	3.1	8.0
Energy ¹	57.7	57.8	56.7	56.6	59.8	31.2	31.8	30.7	30.5	31.6	1.1	1.0	-12.7	-2.2	14.6
Other nondurables.....	176.1	170.9	173.0	177.0	183.7	134.5	132.6	132.9	134.3	138.4	2.6	-3.7	1.0	4.2	12.7
Services	550.6	528.8	541.1	559.5	572.9	389.0	383.8	386.3	391.4	394.7	4.5	4.4	2.7	5.4	3.4
Energy ²	39.4	38.7	36.1	41.0	41.7	23.2	23.6	21.7	23.6	23.8	7.3	3.9	-28.6	41.4	2.6
Other services.....	511.2	490.1	505.0	518.6	531.2	365.9	360.2	364.6	367.8	370.9	4.3	4.4	5.0	3.5	3.5

1. Gasoline and oil, and fuel oil and coal.
2. Electricity and gas.

CHART 2
Real Personal Consumption Expenditures: Change From Preceding Quarter



U.S. Department of Commerce, Bureau of Economic Analysis 78-1-2

Table 6.—Personal Income, 1977
[Change from preceding quarter; billions of dollars, seasonally adjusted at annual rates]

	I	II	III	IV
Personal income.....	44.6	40.4	32.6	50.7
Wage and salary disbursements.....	28.1	29.6	18.0	28.2
Manufacturing.....	10.3	10.5	4.1	7.5
Other commodity-producing.....	1.0	5.9	1.5	1.2
Distributive.....	8.1	6.0	3.9	6.3
Services.....	6.3	4.7	5.1	6.9
Government and government enterprises.....	2.3	2.4	3.4	6.3
Farm proprietors' income.....	4.1	-1.0	-4.2	6.6
Transfer payments.....	5.5	- .5	5.7	3.8
Other.....	6.9	12.3	13.1	12.1

In nondurable goods, the annual rate of real increase in the fourth quarter was 10½ percent, compared with 3 percent in the third. PCE on food increased 8 percent, on clothing and shoes 20 percent, and on energy 14½ percent; these increases seem unsustainable.

Personal income increased \$50½ billion (annual rate) in the fourth quarter—the largest increase in the current expansion and \$18 billion more than the third-quarter increase (table 6). Wage and salary disbursements and farm proprietors' income more than accounted for the acceleration. Transfer payments increased about \$2 billion less than in the third quarter, when there had been a \$5 billion cost-of-living adjustment to social security benefit payments.

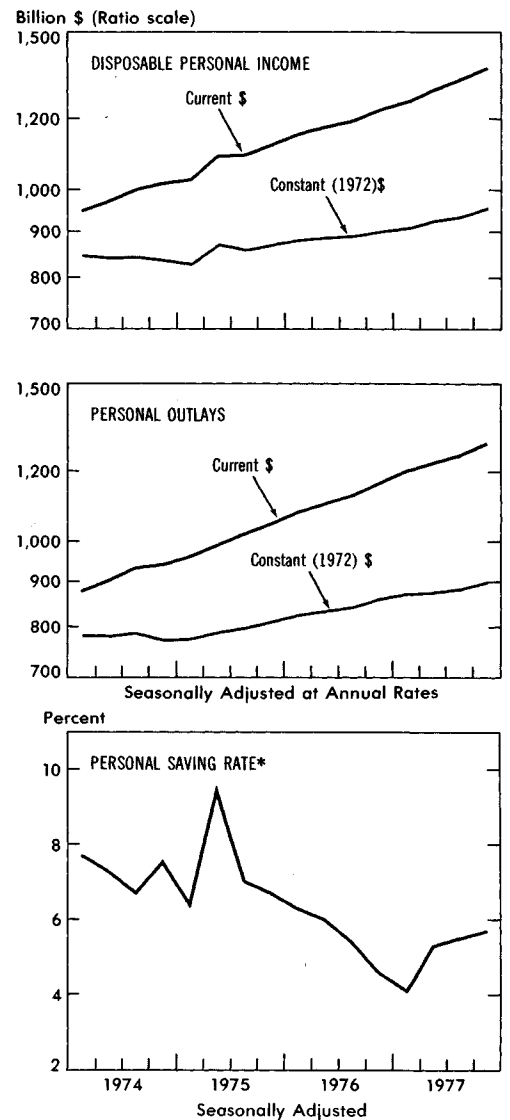
Wages and salaries increased \$10 billion more than in the third quarter. In manufacturing, most of the \$3½ billion acceleration was due to employment and a recovery in average hours. The ½ billion deceleration in other commodity-producing industries reflected the coal strike. A recovery in average hours also was a factor in the distributive industries, where there was a \$2½ billion acceleration in wages and salaries, and in the service industries, where there was a \$2 billion acceleration. The pay raise for Federal civilian and military personnel more than accounted for a \$3 billion acceleration in government and government enterprises.

Farm proprietors' income increased \$6½ billion, after a decline of \$4 billion in the third quarter. Deficiency payments on the target-price provisions of wheat under the Food and Agriculture

Act of 1977 accounted for \$2½ billion of the fourth-quarter increase. The remainder of the swing was traceable to changes in cash receipts that were only partly offset by changes in production expenses. Largely reflecting crop prices, receipts had declined sharply in the third quarter and made a partial recovery in the fourth.

The increase in personal taxes in the fourth quarter was much larger than in the third—\$8½ billion (annual rate) compared with \$1½ billion (table 7). Most of the step-up was in Federal individual income taxes, which increased \$7 billion, after no change in the third

CHART 3
Disposable Personal Income, Personal Outlays, and Personal Saving Rate



* Personal saving as a percentage of disposable personal income.
U.S. Department of Commerce, Bureau of Economic Analysis 78-1-3

Table 7.—Personal Tax and Nontax Payments, 1977

[Change from preceding quarter; billions of dollars, seasonally adjusted at annual rates]

	I	II	III	IV
Personal tax and nontax payments.....	14.9	0.4	1.3	8.5
Federal.....	12.9	-1.4	0	6.9
Impact of legislation.....	5.1	-8.0	-3.9	1.2
Estate and gift taxes.....	5.6	-6.9	0	0
Income taxes.....	-5	-2.0	-3.9	1.2
Other.....	7.8	6.6	3.9	5.7
State and local.....	1.9	1.8	1.3	1.6

quarter. The increase in third-quarter income taxes had been held down \$4 billion by legislated changes—mainly the full impact on withholdings of the increase in the standard deduction that became effective June 1, changes in sick pay provisions, and the job credit. The absence of the reduction due to the changes in sick pay provisions, which had involved a one-time refund in the third quarter, added \$1 billion to the increase in income taxes in the fourth quarter.

Disposable personal income—personal income less personal taxes—increased \$42 billion (13½ percent) compared with \$31½ billion (10 percent) in the third quarter. Reflecting the deceleration in prices of PCE, real disposable income increased much more relative to the third quarter—8½ percent compared with 4½ percent. PCE and other personal outlays increased a little less than disposable income, and the rate of personal saving edged up from 5.5 to 5.7 percent (chart 3).

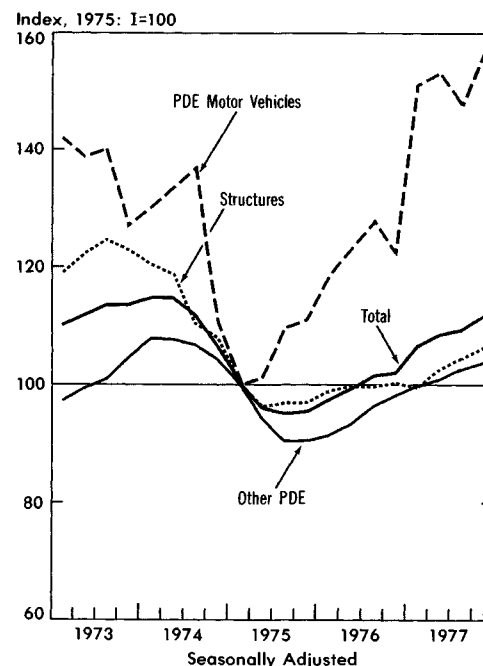
The fourth-quarter increase in real PCE was quite large in historical perspective. Among the major factors that

helps to explain its size were the large increases in wages and salaries, and in farm proprietors' income. Another is the deceleration of PCE prices, which added to real disposable income; the fourth-quarter increase in these prices was moderate compared with recent experience. None of these factors is likely to operate in the first quarter of 1978, and the increase in disposable income will be further limited by increases in contributions for social security. As a result, it is likely that real PCE will increase much less in the first quarter of 1978 than it did in the fourth quarter of 1977.

Investment

Fixed investment.—Real residential investment increased at an annual rate of 17 percent in the fourth quarter, after having been flat in the third (table 8). The increase was in construction of single-family units; construction of multifamily units showed little change. The housing recovery, carried by strength in single-family units, has exceeded general expectations. Single-family starts, which averaged 1.57 million units in the fourth quarter, were above their previous cyclical peak in late 1972. The recovery of multifamily units, which has not been complete, has fallen short of expectations.

Real nonresidential investment increased at an annual rate of 8½ percent, more than double that in the third quarter. Investment in structures increased 6½ percent—about the same as in the third quarter, and about equal the average of the first- and second-quarter changes when construction was

CHART 4
Real Nonresidential Fixed Investment

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

78-14

affected by cold weather. Producers' durable equipment increased much more than in the third quarter. The acceleration—from 2½ to 9 percent—was entirely due to purchases of motor vehicles (mainly trucks), which had declined in the third quarter and increased in the fourth. Purchases of other producers' durables showed a weak increase in the fourth quarter after a strong one in the third.

Chart 4 shows, for the period 1973–75, the components of real nonresidential fixed investment that are shown in table 8. The components are indexed to the first quarter of 1975, when GNP fell to its cyclical low. (This is also the

Table 8.—Fixed Investment in Current and Constant Dollars, 1977

[Quarters at seasonally adjusted annual rates]

	Current dollars					Constant (1972) dollars														
	Billions of dollars															Percent change from preceding period				
	Year	I	II	III	IV	Year	I	II	III	IV	Year	I	II	III	IV					
Fixed investment.....	276.6	258.0	273.2	280.0	295.1	184.0	177.0	184.0	185.1	190.0	11.9	14.7	16.8	2.5	11.0					
Nonresidential.....	185.6	177.0	182.4	187.5	195.5	127.1	124.3	126.4	127.6	130.2	8.9	19.0	7.0	3.9	8.4					
Structures.....	61.6	57.9	61.0	62.6	64.9	38.4	37.0	38.2	38.9	39.6	3.6	-3.5	14.7	7.3	6.7					
Producers' durable equipment.....	124.0	119.2	121.4	124.9	130.7	88.7	87.3	88.1	88.7	90.7	11.3	30.5	3.9	2.5	9.2					
Autos, trucks, and buses.....	30.3	29.2	29.9	29.3	32.8	23.6	23.4	23.7	22.9	24.3	23.6	128.4	6.0	-13.3	26.9					
Other.....	93.7	90.0	91.5	95.6	97.9	65.1	63.9	64.4	65.8	66.3	7.4	8.2	3.1	8.8	3.5					
Residential.....	90.9	81.0	90.8	92.5	99.5	56.9	52.7	57.6	57.5	59.8	19.1	5.4	42.6	-7	16.9					

Table 9.—Net Exports of Goods and Services in Current and Constant Dollars, 1977

[Quarters at seasonally adjusted annual rates]

	Current dollars					Constant (1972) dollars					Percent change from preceding period				
	Billions of dollars										Percent change from preceding period				
	Year	I	II	III	IV	Year	I	II	III	IV	Year	I	II	III	IV
Net exports of goods and services	-9.0	-8.2	-9.7	-7.5	-10.8	10.7	10.6	9.4	12.2	10.6					
Exports.....	175.6	170.4	178.1	179.9	174.3	98.0	96.9	98.5	99.8	96.8	2.3	0	7.0	5.5	-11.5
Merchandise.....	120.2	117.9	122.1	123.2	117.7	68.0	67.9	68.3	69.4	66.6	.5	-4.2	2.0	6.8	-15.4
Agricultural.....	24.0	24.5	26.7	24.0	20.9										
Nonagricultural.....	96.2	93.4	95.4	99.2	96.8										
Other.....	55.4	52.5	56.0	56.7	56.5	30.0	28.9	30.2	30.4	30.3	6.8	10.6	19.3	2.4	-2.1
Imports.....	184.7	178.6	187.7	187.4	185.1	87.3	86.3	89.1	87.6	86.2	9.4	16.5	13.9	-6.7	-6.0
Merchandise.....	150.5	145.8	153.3	153.4	149.5	67.6	66.9	69.2	68.2	66.1	11.1	22.8	14.4	-6.0	-11.6
Petroleum.....	45.2	44.8	47.0	45.6	43.6										
Nonpetroleum.....	105.2	101.0	106.3	107.8	105.9										
Other.....	34.2	32.8	34.5	34.0	35.6	19.7	19.3	19.9	19.4	20.2	4.0	-2.4	11.8	-9.2	15.9

quarter into which the National Bureau of Economic Research placed its cyclical reference trough.) The chart brings out that all three components of fixed investment—structures, motor vehicles, and other producers' durable equipment—fell sharply during the recession. The recovery in structures was weak through 1976, but subsequently, as mentioned above, proceeded at an annual rate of 7 percent. Structures remain far below their previous peak. Other producers' durable equipment also remains below its previous peak, despite increasing 7 percent at an annual rate since its low in the fourth quarter of 1975. In contrast, a prompt and sharp increase in motor vehicles resulted in their complete recovery by early 1977.

The outlook for plant and equipment expenditures is discussed later in this issue. The BEA plant and equipment survey for 1978 indicates a smaller increase in business investment plans than the 1977 increase in investment expenditures.

Inventories.—Real inventory investment was at an annual rate of \$7½ billion in the fourth quarter, compared with \$15½ billion in the third. The \$8 billion deceleration was traceable mainly to retail trade other than autos, and to nondurables manufacturing. In the latter, inventory investment had been stepped up in the second quarter and in the third quarter continued at the high second-quarter rate. In retail trade other than autos, inventory investment had been heavy in the third quarter. The deceleration in the fourth quarter may have reflected the strong increase in demand for consumer goods.

Retail auto inventories were the only major component of inventory investment that was higher in the fourth quarter than in the third. The fourth-quarter increase in accumulation was concentrated in the new downsized intermediate models, which had been in short supply at the beginning of the fourth quarter. Overall, the inventory-sales ratio for domestic cars rose to 2.4—far higher than the 2.0

that is considered normal. The high ratio primarily reflected excess stocks of models produced by the smaller manufacturers.

Net exports and government purchases

Net exports of goods and services in recent months were affected by the dock strike. Anticipation of the dock strike was a factor in the September increase in merchandise exports. In October and November, both exports and imports were distorted, but it is impossible at this time to disentangle the effects of the strike. When the source data for December become available, the picture will probably become clearer. The real net export estimate of \$10½ billion (annual rate) incorporated in table 9 is based on the assumption that both merchandise exports and imports will increase in December—exports much more sharply than imports—and that there will be a large temporary improvement in the merchandise trade balance. A drop of petroleum imports from their

Table 10.—Government Purchases of Goods and Services in Current and Constant Dollars, 1977

[Quarters at seasonally adjusted annual rates]

	Current dollars					Constant (1972) dollars					Percent change from preceding period				
	Billions of dollars										Percent change from preceding period				
	Year	I	II	III	IV	Year	I	II	III	IV	Year	I	II	III	IV
Government purchases of goods and services	395.0	374.9	390.6	400.9	413.6	271.1	263.3	270.0	274.0	276.8	2.5	-1.9	10.6	6.1	4.1
Federal.....	145.4	136.3	143.6	148.1	153.8	101.4	97.0	101.1	103.3	104.1	5.0	-3	18.2	8.9	2.9
National defense.....	94.3	89.7	93.4	95.6	98.6										
Nondefense.....	51.1	46.7	50.2	52.5	55.2										
State and local.....	249.5	238.5	247.0	252.9	259.8	169.7	166.4	168.9	170.7	172.8	1.1	-2.8	6.3	4.4	4.9

high November rate will contribute to that improvement.

Real government purchases increased 4 percent (annual rate) in the fourth quarter (table 10). The increase was somewhat less than in the third quarter. State and local government purchases were up slightly more, as construction strengthened. Federal purchases increased less than in the third quarter. Defense purchases were flat after a large increase in the third quarter. Commodity Credit Corporation (CCC) price support operations continued high; operations to support corn were up, and those involving wheat were reduced as market prices rose above support levels.

Reflecting in part the \$3½ billion (annual rate) pay raise of Federal employees, Federal purchases in current dollars increased \$5½ billion in the fourth quarter, compared with \$4½ billion in the third (table 11). Net interest paid and subsidies less current surplus of government enterprises also increased more than in the third quarter. The fourth-quarter increase in the latter was \$5 billion, and mainly

Table 11.—Federal Government Receipts and Expenditures, NIPA Basis

[Billions of dollars; seasonally adjusted at annual rates]

	1977				Change from preceding quarter			
					1977			
	I	II	III	IV	I	II	III	IV
Receipts	364.9	371.2	373.2	n.a.	20.4	6.3	2.0	n.a.
Personal tax and nontax receipts.....	170.0	168.6	168.6	175.5	12.9	-1.4	0	6.9
Corporate profits tax accruals.....	55.4	59.9	59.5	n.a.	.3	4.5	-4	n.a.
Indirect business tax and nontax accruals.....	24.2	24.6	25.4	25.2	.4	.4	.8	-2
Contributions for social insurance.....	115.4	118.1	119.7	122.4	7.0	2.7	1.6	2.7
Expenditures	403.7	411.5	432.1	446.7	3.3	7.8	20.6	14.6
Purchases of goods and services.....	136.3	143.6	148.1	153.8	2.1	7.3	4.5	5.7
National defense.....	89.7	93.4	95.6	98.6	1.3	3.7	2.2	3.0
Nondefense.....	46.7	50.2	52.5	55.2	.9	3.5	2.3	2.7
Transfer payments.....	170.7	169.3	174.8	177.6	4.4	-1.4	5.5	2.8
Grants-in-aid to State and local governments.....	62.0	63.6	72.7	72.2	-3.5	1.6	9.1	-5
Net interest paid.....	28.6	29.1	29.4	30.9	.1	.5	.3	1.5
Subsidies less current surplus of government enterprises.....	6.1	5.9	7.2	12.3	.1	-2	1.3	5.1
Surplus or deficit (-), national income and product accounts	-38.8	-40.3	-58.9	n.a.	17.1	-1.5	-18.6	n.a.

n.a. Not available.

reflected wheat deficiency payments and a higher CCC operating deficit. In contrast, grants-in-aid to State and local governments decreased slightly in the fourth quarter, after an extraordinary increase of \$9 billion in the third. As noted earlier, receipts of personal taxes increased \$7 billion, after having shown no change in the third quarter.

Estimates of corporate profits tax accruals for the fourth quarter are not yet available. However, if—as seems likely—corporate profits before tax increased, the Federal deficit on a national income and product accounts basis will not be very different from the \$59 billion deficit registered in the third quarter.

Senior Economist, Current Business Analysis Division

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Interested persons should write to Carol S. Carson, Chief, Current Business Analysis Division, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, D.C. 20230. Applications should include, if possible, a completed Standard Form 171—the Civil Service Commission's "Personal Qualifications Statement."

NATIONAL INCOME AND PRODUCT TABLES

	Billions of current dollars								Billions of 1972 dollars							
	1976	1977 ^p	1976		1977				1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p			III	IV	I	II	III	IV ^p
			Seasonally adjusted at annual rates								Seasonally adjusted at annual rates					

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

Gross national product	1,706.5	1,890.4	1,727.3	1,755.4	1,810.8	1,869.9	1,915.9	1,965.1	1,274.7	1,337.6	1,283.7	1,287.4	1,311.0	1,330.7	1,347.4	1,361.4
Personal consumption expenditures	1,094.0	1,210.1	1,102.2	1,139.0	1,172.4	1,194.0	1,218.9	1,255.3	821.3	860.3	822.7	839.8	850.4	854.1	860.4	876.4
Durable goods.....	158.9	179.4	159.3	166.3	177.0	178.6	177.6	184.6	127.5	138.0	127.1	130.7	136.9	137.9	136.5	140.8
Nondurable goods.....	442.7	480.1	444.7	458.8	466.6	474.4	481.8	497.7	321.6	333.3	321.5	329.4	329.7	330.0	332.4	340.9
Services.....	492.3	550.6	498.2	513.9	528.8	541.1	559.5	572.9	372.2	389.0	374.0	379.7	383.8	386.3	391.4	394.7
Gross private domestic investment	243.3	294.3	254.3	243.4	271.8	294.9	303.6	307.0	173.0	195.6	179.4	169.2	186.7	197.2	200.8	197.6
Fixed investment.....	230.0	276.6	232.8	244.3	258.0	273.2	280.0	295.1	164.5	184.0	165.6	171.0	177.0	184.0	185.1	190.0
Nonresidential.....	161.9	185.6	164.9	167.6	177.0	182.4	187.5	195.5	116.8	127.1	118.5	119.0	124.3	126.4	127.6	130.2
Structures.....	55.8	61.6	56.0	57.0	57.9	61.0	62.6	64.9	37.1	38.4	37.1	37.3	37.0	38.2	38.9	39.6
Producers' durable equipment.....	106.1	124.0	109.0	110.6	119.2	121.4	124.9	130.7	79.7	88.7	81.4	81.7	87.3	88.1	88.7	90.7
Residential.....	68.0	90.9	67.8	76.7	81.0	90.8	92.5	99.5	47.7	56.9	47.1	52.0	52.7	57.6	57.5	59.8
Nonfarm structures.....	65.7	88.4	65.7	74.3	78.5	88.2	89.9	97.0	46.0	55.1	45.4	50.2	50.9	55.7	55.7	58.0
Farm structures.....	1.0	1.1	.9	1.1	1.1	1.2	1.1	1.0	.7	.7	.6	.7	.7	.8	.7	.6
Producers' durable equipment.....	1.3	1.4	1.3	1.3	1.4	1.4	1.5	1.5	1.0	1.1	1.0	1.1	1.1	1.1	1.1	1.2
Change in business inventories.....	13.3	17.8	21.5	-9	13.8	21.7	23.6	11.9	8.5	11.6	13.8	-1.8	9.7	13.2	15.7	7.7
Nonfarm.....	14.9	17.5	22.0	1.4	14.1	22.4	23.1	10.4	10.1	11.4	14.4	.7	9.9	13.6	15.3	6.6
Farm.....	-1.6	.3	-5	-2.3	-3	-7	.5	1.5	-1.6	.2	-6	-2.5	-2	-5	.4	1.0
Net exports of goods and services	7.8	-9.0	7.9	3.0	-8.2	-9.7	-7.5	-10.8	16.0	10.7	17.0	13.8	10.6	9.4	12.2	10.6
Exports.....	162.9	175.6	168.4	168.5	170.4	178.1	179.9	174.3	95.8	98.0	97.9	96.9	96.9	98.5	99.8	96.8
Imports.....	155.1	184.7	160.6	165.6	178.6	187.7	187.4	185.1	79.8	87.3	80.9	83.1	86.3	89.1	87.6	86.2
Government purchases of goods and services	361.4	395.0	363.0	370.0	374.9	390.6	400.9	413.6	264.4	271.1	264.6	264.6	263.3	270.0	274.0	276.8
Federal.....	130.1	145.4	130.2	134.2	136.3	143.6	148.1	153.8	96.5	101.4	96.7	97.1	97.0	101.1	103.3	104.1
National defense.....	86.8	94.3	86.4	88.4	89.7	93.4	95.6	98.6								
Nondefense.....	43.3	61.1	43.8	45.8	46.7	50.2	52.5	55.2								
State and local.....	231.2	249.5	232.7	235.8	238.5	247.0	252.9	259.8	167.9	169.7	168.0	167.5	166.4	168.9	170.7	172.8

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

Gross national product	1,706.5	1,890.4	1,727.3	1,755.4	1,810.8	1,869.9	1,915.9	1,965.1	1,274.7	1,337.6	1,283.7	1,287.4	1,311.0	1,330.7	1,347.4	1,361.4
Final sales.....	1,693.1	1,872.7	1,705.8	1,756.3	1,797.0	1,848.2	1,892.2	1,953.2	1,266.2	1,326.1	1,269.8	1,289.2	1,301.2	1,317.5	1,331.8	1,353.8
Change in business inventories.....	13.3	17.8	21.5	-9	13.8	21.7	23.6	11.9	8.5	11.6	13.8	-1.8	9.7	13.2	15.7	7.7
Goods	764.2	834.5	776.0	774.7	805.9	827.1	843.5	861.5	580.1	612.9	586.9	581.9	602.4	608.5	617.0	623.7
Final sales.....	750.9	816.8	754.5	775.6	792.1	805.4	819.9	849.6	571.6	601.3	573.0	583.7	592.7	595.3	601.3	616.1
Change in business inventories.....	13.3	17.8	21.5	-9	13.8	21.7	23.6	11.9	8.5	11.6	13.8	-1.8	9.7	13.2	15.7	7.7
Durable goods.....	303.4	342.0	313.4	312.6	334.4	341.0	342.3	350.4	235.2	254.3	240.8	237.0	252.3	254.7	253.5	256.5
Final sales.....	299.3	333.2	302.7	312.0	326.6	329.5	332.1	344.9	232.4	248.4	233.5	237.0	246.7	247.4	246.8	252.7
Change in business inventories.....	4.1	8.8	10.7	.6	7.8	11.5	10.3	5.5	2.8	5.9	7.2	.1	5.6	7.3	6.7	3.8
Nondurable goods.....	460.9	492.5	462.6	462.1	471.5	486.1	501.2	511.1	344.9	358.7	346.1	344.8	350.1	353.8	363.5	367.2
Final sales.....	451.6	483.5	451.8	463.6	465.6	475.9	487.8	504.8	339.3	353.0	339.5	346.7	346.0	347.9	354.5	363.4
Change in business inventories.....	9.3	9.0	10.9	-1.6	6.0	10.2	13.4	6.4	5.7	5.7	6.6	-1.9	4.2	5.8	9.0	3.8
Services	782.0	868.4	791.8	813.8	833.7	855.3	881.6	903.1	584.7	606.7	587.9	593.6	597.1	602.9	611.1	615.6
Structures	160.2	187.5	159.6	166.9	171.2	187.5	190.7	200.4	109.9	118.0	108.8	111.9	111.5	119.3	119.4	122.1

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

Gross national product	1,706.5	1,890.4	1,727.3	1,755.4	1,810.8	1,869.9	1,915.9	1,965.1	1,274.7	1,337.6	1,283.7	1,287.4	1,311.0	1,330.7	1,347.4	1,361.4
Gross domestic product	1,692.1	1,872.9	1,712.0	1,740.9	1,793.2	1,851.4	1,898.2	1,948.8	1,268.0	1,330.2	1,276.7	1,280.9	1,303.3	1,322.8	1,340.1	1,354.8
Business.....	1,444.3	1,604.1	1,463.0	1,485.2	1,532.3	1,586.4	1,628.1	1,669.5	1,082.0	1,141.4	1,090.5	1,093.9	1,116.2	1,134.9	1,150.5	1,163.9
Nonfarm.....	1,390.9	1,552.8	1,409.4	1,433.4	1,478.0	1,536.7	1,580.0	1,624.8	1,043.8	1,103.8	1,051.2	1,054.8	1,077.8	1,099.8	1,112.7	1,125.0
Nonfarm less housing.....	1,258.7	1,406.7	1,275.4	1,296.8	1,337.4	1,392.7	1,431.9	1,474.9	934.9	991.1	941.6	944.7	966.7	987.8	999.3	1,010.5
Housing.....	132.3	146.1	134.0	136.5	140.6	144.1	148.0	151.8	108.8	109.6	110.2	111.1	111.1	112.1	113.4	114.5
Farm.....	47.9	50.3	45.6	46.4	51.0	50.8	47.2	52.0	33.0	35.9	32.2	34.1	35.1	34.9	36.2	37.4
Statistical discrepancy.....	5.5	1.0	8.0	5.3	3.3	-1.2	.9									
Residual ¹									5.2	1.7	7.0	4.9	3.4	.2	1.6	² 1.6
Households and institutions.....	56.2	63.0	56.4	58.3	60.4	62.0	63.6	66.0	40.2	41.4	40.0	40.6	40.6	41.2	41.7	42.1
Government.....	191.6	205.8	192.6	197.5	200.5	203.1	206.5	213.2	145.8	147.5	146.2	146.4	146.5	146.7	147.9	148.8
Federal.....	62.4	66.5	61.8	64.7	65.4	65.5	69.2	68.8	48.4	48.6	48.5	48.6	48.6	48.6	48.7	48.7
State and local.....	129.2	139.4	130.7	132.8	135.1	137.6	140.7	144.1	97.3	98.8	97.7	97.8	97.9	98.1	99.2	100.1
Rest of the world	14.4	17.5	15.3	14.4	17.6	18.4	17.7	16.3	6.7	7.4	7.0	6.5	7.7	7.9	7.4	6.6

¹Preliminary. See other footnotes on following page.

HISTORICAL STATISTICS

The national income and product data for 1929-72 are in *The National Income and Product Accounts of the United States, 1929-74: Statistical Tables* (available for \$4.95, SN 003-010-00052-9, from Commerce Department District Office or the Superintendent of

Documents; see addresses inside front cover). Data for 1973 and 1974-76 are in the July 1976 and July 1977 issues of the *SURVEY*, respectively (except for seasonally unadjusted quarterly estimates, which are in the September 1976 and August 1977 issues).

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted at annual rates					
Billions of current dollars								

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

Gross national product	1,706.5	1,890.4	1,727.3	1,755.4	1,810.8	1,869.9	1,915.9	1,965.1
Less: Capital consumption allowances with capital consumption adjustment.....	179.0	197.0	180.9	184.5	189.0	193.3	199.8	205.9
Capital consumption allowances without capital consumption adjustment.....	142.0	152.9	143.5	146.7	149.0	151.2	154.6	157.0
Less: Capital consumption adjustment.....	-37.1	-44.1	-37.4	-37.8	-40.0	-42.1	-45.2	-49.0
Equals: Net national product	1,527.4	1,693.4	1,546.5	1,570.9	1,621.8	1,676.6	1,716.0	1,759.1
Less: Indirect business tax and nontax liability.....	150.5	165.2	151.8	155.5	160.1	163.3	166.9	170.4
Business transfer payments.....	8.1	9.0	8.2	8.4	8.7	8.9	9.1	9.4
Statistical discrepancy.....	5.5	1.0	8.0	5.3	3.3	-1.2	.9	-----
Plus: Subsidies less current surplus of government enterprises.....	.8	2.1	1.1	.5	.5	.1	1.4	6.3
Equals: National income	1,364.1	1,520.3	1,379.6	1,402.1	1,450.2	1,505.7	1,540.5	-----
Less: Corporate profits with inventory valuation and capital consumption adjustments.....	128.1	140.3	133.5	123.1	125.4	140.2	149.0	-----
Net interest.....	88.4	100.9	90.1	92.0	95.3	98.9	103.1	106.4
Contributions for social insurance.....	123.8	139.0	124.7	127.5	135.0	138.0	139.9	143.1
Wage accruals less disbursements.....	0	0	0	0	0	0	0	0
Plus: Government transfer payments to persons.....	184.7	197.8	186.2	189.5	194.8	194.0	199.5	203.1
Personal interest income.....	130.3	147.9	132.3	136.4	140.3	145.4	150.3	155.6
Net interest.....	88.4	100.9	90.1	92.0	95.3	98.9	103.1	106.4
Interest paid by government and business.....	39.3	42.4	39.8	40.6	41.2	42.3	42.4	43.6
Less: Interest received by government.....	22.4	25.0	23.1	22.6	23.7	24.7	25.5	26.0
Interest paid by consumers to business.....	25.0	29.6	25.5	26.3	27.5	28.9	30.4	31.6
Dividends.....	35.8	41.2	36.0	38.4	38.5	40.3	42.3	43.6
Business transfer payments.....	8.1	9.0	8.2	8.4	8.7	8.9	9.1	9.4
Equals: Personal income	1,382.7	1,536.1	1,393.9	1,432.2	1,476.8	1,517.2	1,549.8	1,600.5

Table 5.—Relation of Gross National Product, Net National Product, and National Income in Constant Dollars (1.10)

[Billions of 1972 dollars]

Gross national product	1,274.7	1,337.6	1,283.7	1,287.4	1,311.0	1,330.7	1,347.4	1,361.4
Less: Capital consumption allowances with capital consumption adjustment.....	126.0	129.8	126.3	127.0	128.0	129.2	130.4	131.6
Equals: Net national product	1,148.7	1,207.8	1,157.4	1,160.4	1,182.9	1,201.5	1,217.0	1,229.8
Less: Indirect business tax and nontax liability plus business transfer payments less subsidies plus current surplus of government enterprises.....	126.1	132.6	126.9	129.2	131.1	131.9	132.9	134.4
Residual ¹	5.2	1.7	7.0	4.9	3.4	.2	1.6	-----
Equals: National income	1,017.4	1,073.6	1,023.5	1,026.3	1,048.4	1,069.4	1,082.6	-----

^pPreliminary.

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted at annual rates					
Billions of dollars								

Table 6.—Net National Product and National Income by Sector in Current and Constant Dollars (1.11, 1.12)

Net national product	1,527.4	1,693.4	1,546.5	1,570.9	1,621.8	1,676.6	1,716.0	1,759.1
Net domestic product	1,513.1	1,675.9	1,531.2	1,556.5	1,604.2	1,658.2	1,698.4	1,742.8
Business.....	1,265.3	1,407.1	1,282.2	1,300.7	1,343.3	1,393.1	1,428.2	1,463.6
Nonfarm.....	1,225.0	1,370.3	1,241.8	1,262.4	1,302.9	1,357.7	1,394.8	-----
Farm.....	34.8	35.8	32.4	32.9	37.1	36.6	32.5	36.8
Statistical discrepancy.....	5.5	1.0	8.0	5.3	3.3	-1.2	.9	-----
Households and institutions.....	56.2	63.0	56.4	58.3	60.4	62.0	63.6	66.0
Government.....	191.6	205.8	192.6	197.5	200.5	203.1	206.5	213.2
Rest of the world	14.4	17.5	15.3	14.4	17.6	18.4	17.7	16.3
National income	1,364.1	1,520.3	1,379.6	1,402.1	1,450.2	1,505.7	1,540.5	-----
Domestic income	1,349.8	1,502.8	1,364.3	1,387.6	1,432.6	1,487.3	1,522.9	-----
Business.....	1,102.0	1,234.0	1,115.3	1,131.8	1,171.7	1,222.2	1,252.7	-----
Nonfarm.....	1,069.2	1,198.7	1,084.8	1,100.5	1,135.8	1,187.2	1,221.6	-----
Farm.....	32.7	35.2	30.5	31.4	36.6	35.0	31.1	38.3
Households and institutions.....	56.2	63.0	56.4	58.3	60.4	62.0	63.6	66.0
Government.....	191.6	205.8	192.6	197.5	200.5	203.1	206.5	213.2
Rest of the world	14.4	17.5	15.3	14.4	17.6	18.4	17.7	16.3
Billions of 1972 dollars								
Net national product	1,148.7	1,207.8	1,157.4	1,160.4	1,182.9	1,201.5	1,217.0	1,229.8
Net domestic product	1,142.0	1,200.4	1,150.4	1,153.9	1,175.2	1,193.6	1,209.6	1,223.2
Business.....	956.0	1,011.6	964.2	966.9	988.2	1,005.7	1,020.0	1,032.3
Nonfarm.....	927.0	983.6	934.2	937.2	959.2	980.2	991.9	-----
Farm.....	28.8	28.0	23.0	24.8	25.6	25.4	26.6	27.6
Residual ¹	5.2	1.7	7.0	4.9	3.4	.2	1.6	-----
Households and institutions.....	40.2	41.4	40.0	40.6	40.6	41.2	41.7	42.1
Government.....	145.8	147.5	146.2	146.4	146.5	146.7	147.9	148.8
Rest of the world	6.7	7.4	7.0	6.5	7.7	7.9	7.4	6.6
National income	1,017.4	1,073.6	1,023.5	1,026.3	1,048.4	1,069.4	1,082.6	-----
Domestic income	1,010.7	1,066.2	1,016.5	1,019.8	1,040.7	1,061.5	1,075.2	-----
Business.....	824.7	877.3	830.3	832.8	853.7	873.6	885.6	-----
Nonfarm.....	799.2	849.4	805.8	806.3	826.4	846.7	857.4	-----
Farm.....	25.5	27.9	24.5	26.5	27.3	26.9	28.1	29.3
Households and institutions.....	40.2	41.4	40.0	40.6	40.6	41.2	41.7	42.1
Government.....	145.8	147.5	146.4	146.4	146.5	146.7	147.9	148.8
Rest of the world	6.7	7.4	7.0	6.5	7.7	7.9	7.4	6.6

1. Equals GNP in constant dollars measured as the sum of final products less GNP in constant dollars measured as the sum of gross product by industry. The quarterly estimates are obtained by interpolating the annual estimates with the statistical discrepancy deflated by the implicit price deflator for gross domestic business product.

NOTE.—Table 6: The industry classification within the business sector is on an establishment basis and is based on the 1972 Standard Industrial Classification.

Footnotes for tables 2 and 3.

1. Equals GNP in constant dollars measured as the sum of final products less GNP in constant dollars measured as the sum of gross product by industry. The quarterly estimates are obtained by interpolating the annual estimates with the statistical discrepancy deflated by the implicit price deflator for gross domestic business product.

2. Held constant at level of previous quarter.

NOTE.—Table 2: "Final sales" is classified as durable or nondurable by type of product. "Change in business inventories" is classified as follows: For manufacturing, by the type of product produced by the establishment holding the inventory; for trade, by the type of product sold by the establishment holding the inventory; for construction, durable; and for other industries, nondurable.

Table 3: The industry classification within the business sector is on an establishment basis and is based on the 1972 Standard Industrial Classification.

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted at annual rates					
Billions of dollars								

Table 7.—National Income by Type of Income (1.13)

National income	1,364.1	1,520.3	1,379.6	1,402.1	1,450.2	1,505.7	1,540.5	.....
Compensation of employees	1,036.3	1,155.8	1,046.5	1,074.2	1,109.9	1,144.7	1,167.4	1,201.3
Wages and salaries.....	891.8	989.5	900.2	923.2	951.3	980.9	998.9	1,027.1
Government and government enterprises.....	187.2	199.9	188.2	192.5	194.8	197.2	200.6	206.9
Other.....	704.6	789.6	712.0	730.7	756.4	783.6	798.3	820.2
Supplements to wages and salaries.....	144.5	166.3	146.3	150.9	158.6	163.8	168.5	174.2
Employer contributions for social insurance.....	68.6	77.7	69.1	70.9	75.4	77.1	78.2	80.2
Other labor income.....	75.9	88.6	77.3	80.0	83.2	86.7	90.3	94.0
Proprietors' income with inventory valuation and capital consumption adjustments	88.0	97.9	86.2	88.7	95.1	97.0	95.5	104.2
Farm.....	18.6	19.5	16.2	16.6	20.7	19.7	15.5	22.1
Proprietors' income with inventory valuation adjustment and without capital consumption adjustment.....	22.8	24.2	20.3	20.8	25.0	24.2	20.3	27.4
Capital consumption adjustment.....	-4.2	-4.7	-4.2	-4.2	-4.2	-4.5	-4.8	-5.2
Nonfarm.....	69.4	78.4	70.0	72.0	74.3	77.3	80.0	82.0
Proprietors' income without inventory valuation and capital consumption adjustments.....	70.4	79.9	70.7	73.2	76.1	78.9	80.8	83.9
Inventory valuation adjustment.....	-1.3	-1.4	-1.1	-1.7	-2.0	-1.7	-6	-1.4
Capital consumption adjustment.....	.3	-.1	.4	.5	.3	0	-.1	-.4
Rental income of persons with capital consumption adjustment	23.3	25.3	23.3	24.1	24.5	24.9	25.5	26.4
Rental income of persons.....	40.0	45.3	40.3	41.5	42.9	44.6	45.7	48.1
Capital consumption adjustment.....	-16.7	-20.0	-16.9	-17.3	-18.4	-19.7	-20.2	-21.7
Corporate profits with inventory valuation and capital consumption adjustments	128.1	140.3	133.5	123.1	125.4	140.2	149.0	.....
Corporate profits with inventory valuation adjustment and without capital consumption adjustment.....	142.7	157.5	148.2	137.9	141.0	156.2	166.9	.....
Profits before tax.....	156.9	172.1	159.9	154.8	161.7	174.0	172.8	.....
Profits tax liability.....	64.7	69.2	65.9	63.9	64.4	69.7	69.3	.....
Profits after tax.....	92.1	102.9	94.0	90.9	97.2	104.3	103.6	.....
Dividends.....	35.8	41.2	36.0	38.4	38.5	40.3	42.3	43.6
Undistributed profits.....	56.4	61.7	58.0	52.5	58.8	64.1	61.2	.....
Inventory valuation adjustment.....	-14.1	-14.5	-11.7	-16.9	-20.6	-17.8	-5.9	-13.8
Capital consumption adjustment.....	-14.7	-17.2	-14.7	-14.8	-15.6	-15.9	-17.9	-19.4
Net interest	88.4	100.9	90.1	92.0	95.3	98.9	103.1	106.4
Addenda:								
Corporate profits with inventory valuation and capital consumption adjustments.....	128.1	140.3	133.5	123.1	125.4	140.2	149.0	.....
Profits tax liability.....	64.7	69.2	65.9	63.9	64.4	69.7	69.3	.....
Profits after tax with inventory valuation and capital consumption adjustments.....	63.3	71.1	67.6	59.2	61.0	70.6	79.7	.....
Dividends.....	35.8	41.2	36.0	38.4	38.5	40.3	42.3	43.6
Undistributed profits with inventory valuation and capital consumption adjustments.....	27.6	29.9	31.6	20.8	22.5	30.3	37.4	.....

Table 8.—Gross Domestic Product of Corporate Business (1.15, 7.8)

Gross domestic product of corporate business	1,041.9	1,161.1	1,056.6	1,070.1	1,103.3	1,150.0	1,181.9	.....
Capital consumption allowances with capital consumption adjustment.....	111.8	121.9	112.9	115.2	117.6	119.4	123.7	127.0
Net domestic product	930.1	1,039.1	943.7	954.9	985.7	1,030.6	1,058.3	.....
Indirect business tax and nontax liability plus business transfer payments less subsidies.....	108.3	118.6	109.2	111.9	115.0	117.4	119.6	122.2
Domestic income	821.8	920.6	834.6	843.0	870.7	913.2	938.6	.....
Compensation of employees.....	690.4	776.9	698.0	715.9	743.1	770.9	786.0	807.6
Wages and salaries.....	585.9	656.1	592.1	606.9	628.4	651.8	663.3	681.0
Supplements to wages and salaries.....	104.5	120.8	105.9	109.0	114.8	119.1	122.6	126.6

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted at annual rates					
Billions of dollars								

Table 8.—Gross Domestic Product of Corporate Business—Con.

Corporate profits with inventory valuation and capital consumption adjustments.....	119.9	130.7	125.1	115.4	115.3	129.5	139.5	.....
Profits before tax.....	148.7	162.5	151.4	147.1	151.6	163.3	163.3	.....
Profits tax liability.....	64.7	69.2	65.9	63.9	64.4	69.7	69.3	.....
Profits after tax.....	84.0	93.3	85.5	83.2	87.2	93.6	94.0	.....
Dividends.....	31.8	37.5	32.4	35.5	34.5	36.5	38.7	40.2
Undistributed profits.....	52.2	55.8	53.1	47.7	52.7	57.1	55.3	.....
Inventory valuation adjustment.....	-14.1	-14.5	-11.7	-16.9	-20.6	-17.8	-5.9	-13.8
Capital consumption adjustment.....	-14.7	-17.2	-14.7	-14.8	-15.6	-15.9	-17.9	-19.4
Net interest	11.4	13.0	11.5	11.7	12.2	12.7	13.2	13.7
Gross domestic product of financial corporate business ¹	51.0	56.2	52.0	52.9	54.0	55.1	57.1	.....
Gross domestic product of non-financial corporate business	991.0	1,104.9	1,004.7	1,017.2	1,049.3	1,094.9	1,124.8	.....
Capital consumption allowances with capital consumption adjustment.....	107.0	116.6	108.0	110.2	112.5	114.2	118.2	121.4
Net domestic product	884.0	988.3	896.7	907.0	936.8	980.7	1,006.6	.....
Indirect business tax and nontax liability plus business transfer payments less subsidies.....	99.4	108.5	100.0	102.5	105.3	107.5	109.4	111.8
Domestic income	784.6	879.8	796.6	804.5	831.6	873.3	897.2	.....
Compensation of employees.....	650.3	732.7	657.3	674.4	700.6	727.4	741.2	761.6
Wages and salaries.....	552.6	619.5	558.2	572.3	593.1	615.7	626.3	643.0
Supplements to wages and salaries.....	97.7	113.2	99.1	102.0	107.5	111.7	114.9	118.7
Corporate profits with inventory valuation and capital consumption adjustments.....	101.9	110.4	106.8	97.1	96.3	109.8	118.5	.....
Profits before tax.....	130.6	141.9	133.0	128.7	132.4	143.4	142.0	.....
Profits tax liability.....	53.7	57.0	54.8	52.7	52.8	57.7	56.9	.....
Profits after tax.....	76.9	84.9	78.2	76.0	79.5	85.7	85.1	.....
Dividends.....	32.4	38.2	33.2	36.0	35.2	37.2	39.4	41.0
Undistributed profits.....	44.5	46.6	45.0	40.0	44.3	48.5	45.7	.....
Inventory valuation adjustment.....	-14.1	-14.5	-11.7	-16.9	-20.6	-17.8	-5.9	-13.8
Capital consumption adjustment.....	-14.5	-17.0	-14.5	-14.7	-15.5	-15.8	-17.6	-19.1
Net interest	32.4	36.7	32.6	33.0	34.6	36.1	37.5	38.7
Billions of 1972 dollars								
Gross domestic product of non-financial corporate business	731.0	774.1	736.6	736.5	753.3	771.7	781.2	.....
Capital consumption allowances with capital consumption adjustment.....	74.9	76.9	75.0	75.3	75.8	76.5	77.2	77.9
Net domestic product	656.1	697.2	661.6	661.3	677.5	695.2	704.0	.....
Indirect business tax and nontax liability plus business transfer payments less subsidies.....	82.9	86.7	83.1	84.7	86.0	86.2	86.7	88.0
Domestic income	573.2	610.5	578.5	576.6	591.5	609.0	617.3	.....
Dollars								
Current-dollar cost and profit per unit of constant-dollar gross domestic product ²	1.356	1.427	1.364	1.381	1.393	1.419	1.440	.....
Capital consumption allowances with capital consumption adjustment.....	.146	.151	.147	.150	.149	.148	.151	.....
Net domestic product	1.209	1.277	1.217	1.231	1.244	1.271	1.288	.....
Indirect business tax and nontax liability plus business transfer payments less subsidies.....	.136	.140	.136	.139	.140	.139	.140	.....
Domestic income	1.073	1.137	1.081	1.092	1.104	1.132	1.148	.....
Compensation of employees.....	.890	.947	.892	.916	.930	.943	.949	.....
Corporate profits with inventory valuation and capital consumption adjustments.....	.139	.143	.145	.132	.128	.142	.152	.....
Profits tax liability.....	.073	.074	.074	.072	.070	.075	.073	.....
Profits after tax with inventory valuation and capital consumption adjustments.....	.066	.069	.071	.060	.058	.068	.079	.....
Net interest.....	.044	.047	.044	.045	.046	.047	.048	.....

^p Preliminary.

1. Consists of the following industries: Banking; credit agencies other than banks; security and commodity brokers, dealers, and services; insurance carriers; regulated investment companies; small business investment companies; and real estate investment trusts.

2. Equals the deflator for gross domestic product of nonfinancial corporate business with the decimal point shifted two places to the left.

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted at annual rates					
Billions of dollars								

Table 9.—Auto Output in Current and Constant Dollars (1.16, 1.17)

	1976	1977 ^p	1976	1976	1976	1976	1976	1976
	1976	1977 ^p	1976	1976	1976	1976	1976	1976
Seasonally adjusted at annual rates								
Billions of dollars								
Auto output	62.9	72.8	60.9	66.1	74.1	73.2	70.8	73.2
Final sales	61.8	71.3	61.4	64.9	73.0	73.3	68.5	70.2
Personal consumption expenditures.....	55.0	63.8	54.8	58.1	65.0	65.1	62.3	62.8
New autos.....	39.2	46.0	37.8	40.8	45.8	47.3	44.9	45.9
Net purchases of used autos.....	15.8	17.8	16.9	17.3	19.2	17.8	17.4	16.9
Producers' durable equipment.....	8.8	10.3	8.4	8.7	9.8	10.3	10.1	11.1
New autos.....	15.7	19.1	15.5	16.6	18.8	19.5	18.8	19.5
Net purchases of used autos.....	-7.0	-8.8	-7.1	-7.9	-9.0	-9.2	-8.7	-8.4
Net exports.....	-2.6	-3.6	-2.4	-2.6	-2.5	-2.8	-4.6	-4.4
Exports.....	6.4	7.1	6.4	6.4	7.1	7.3	6.8	7.2
Imports.....	8.9	10.7	8.8	9.0	9.6	10.1	11.4	11.6
Government purchases of goods and services.....	.6	.7	.6	.6	.7	.7	.7	.8
Change in business inventories of new and used autos	1.0	1.6	-5	1.2	1.0	-1	2.4	2.9
New.....	1.0	1.4	0	1.0	1.3	-7	2.6	2.6
Used.....	0	.1	-6	.2	-3	.6	-2	.3
Addenda:								
Domestic output of new autos ¹	50.5	59.4	48.2	52.6	60.4	59.4	58.8	59.1
Sales of imported new autos ²	11.5	15.2	11.6	12.6	14.0	16.9	14.8	15.2
Billions of 1972 dollars								
Auto output	50.1	55.7	48.2	51.2	56.8	56.4	54.6	54.9
Final sales	49.4	54.4	48.6	50.3	55.8	56.1	52.7	53.0
Personal consumption expenditures.....	41.6	45.4	40.9	42.5	46.5	46.6	44.5	44.2
New autos.....	32.1	35.8	30.9	32.7	36.3	37.1	34.8	34.8
Net purchases of used autos.....	9.5	9.7	10.0	9.8	10.2	9.4	9.6	9.4
Producers' durable equipment.....	8.3	9.8	8.1	8.3	9.6	10.0	9.7	9.8
New autos.....	12.9	14.9	12.7	13.3	14.9	15.3	14.6	14.8
Net purchases of used autos.....	-4.6	-5.1	-4.6	-5.0	-5.3	-5.3	-4.9	-5.0
Net exports.....	-1.0	-1.4	-9	-1.0	-1.0	-1.1	-2.0	-1.6
Exports.....	5.2	5.5	5.3	5.1	5.6	5.7	5.2	5.5
Imports.....	6.2	6.9	6.2	6.1	6.6	6.8	7.2	7.1
Government purchases of goods and services.....	.5	.6	.5	.5	.6	.6	.6	.6
Change in business inventories of new and used autos.....	.7	1.3	-.4	.9	1.1	.3	1.9	1.9
New.....	.7	1.2	-.1	.8	1.2	-.1	2.0	1.7
Used.....	0	.1	-.4	.1	-.1	.3	-.1	.2
Addenda:								
Domestic output of new autos ¹	41.3	46.2	39.4	42.1	47.8	46.6	45.6	44.9
Sales of imported new autos ²	9.4	11.9	9.5	10.1	11.1	13.3	11.5	11.6

^p Preliminary.
 1. Consists of final sales and change in business inventories of new autos produced in the United States.
 2. Consists of personal consumption expenditures, producers' durable equipment, and government purchases.
 3. Consists of agriculture, forestry, and fisheries; mining; contract construction; and manufacturing.
 4. Consists of transportation; communication; electric, gas, and sanitary services; and trade.
 5. Consists of finance, insurance, and real estate; services; and rest of the world.

NOTE.—Table 10: The industry classification of wage and salary disbursements and proprietors' income is on an establishment basis and is based on the 1972 Standard Industrial Classification.

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted at annual rates					
Billions of dollars								

Table 10.—Personal Income and Its Disposition (2.1)

	1976	1977 ^p	1976	1976	1976	1976	1976	1976
	1976	1977 ^p	1976	1976	1976	1976	1976	1976
Seasonally adjusted at annual rates								
Billions of dollars								
Personal income	1,382.7	1,536.1	1,393.9	1,432.2	1,476.8	1,517.2	1,549.8	1,600.5
Wage and salary disbursements	891.8	989.5	900.2	923.2	951.3	980.9	998.9	1,027.1
Commodity-producing industries ¹	308.5	346.3	310.8	317.7	329.0	345.4	351.0	359.7
Manufacturing.....	238.2	267.2	240.2	245.1	255.4	265.9	270.0	277.5
Distributive industries ⁴	217.1	242.5	220.2	226.4	234.5	240.6	244.4	250.7
Service industries ⁴	179.0	200.8	180.9	186.7	193.0	197.7	202.8	209.7
Government and government enterprises.....	187.2	199.9	188.2	192.5	194.8	197.2	200.6	206.9
Other labor income	75.9	88.6	77.3	80.0	83.2	86.7	90.3	94.0
Proprietors' income with inventory valuation and capital consumption adjustments	88.0	97.9	86.2	88.7	95.1	97.0	95.5	104.2
Farm.....	18.6	19.5	16.2	16.6	20.7	19.7	15.5	22.1
Nonfarm.....	69.4	78.4	70.0	72.0	74.3	77.3	80.0	82.0
Rental income of persons with capital consumption adjustment	23.3	25.3	23.3	24.1	24.5	24.9	25.5	26.4
Dividends	35.8	41.2	36.0	38.4	38.5	40.3	42.3	43.6
Personal interest income	130.3	147.9	132.3	136.4	140.3	145.4	150.3	155.6
Transfer payments	192.8	206.9	194.3	198.0	203.5	203.0	208.7	212.5
Old-age, survivors, disability, and health insurance benefits.....	92.9	105.0	95.8	98.4	99.9	101.8	108.5	109.8
Government unemployment insurance benefits.....	15.7	12.7	15.1	15.0	15.1	12.3	11.6	11.8
Veterans benefits.....	14.4	13.8	13.6	13.9	14.3	13.7	13.3	13.8
Government employees retirement benefits.....	25.7	28.8	26.1	26.4	27.1	28.4	29.2	30.5
Aid to families with dependent children.....	.9	10.3	10.0	10.0	10.0	10.2	10.3	10.5
Other.....	34.3	36.3	33.8	34.3	37.0	36.6	35.6	36.0
Less: Personal contributions for social insurance	55.2	61.2	55.6	56.6	59.6	60.8	61.7	62.9
Less: Personal tax and nontax payments	196.9	227.5	200.6	209.5	224.4	224.8	226.1	234.6
Equals: Disposable personal income	1,185.8	1,308.6	1,193.3	1,222.6	1,252.4	1,292.5	1,323.8	1,365.9
Less: Personal outlays	1,119.9	1,240.9	1,128.5	1,166.3	1,201.0	1,223.9	1,250.5	1,288.1
Personal consumption expenditures.....	1,094.0	1,210.1	1,102.2	1,139.0	1,172.4	1,194.0	1,218.9	1,255.3
Interest paid by consumers to business.....	25.0	29.6	25.5	26.3	27.5	28.9	30.4	31.6
Personal transfer payments to foreigners (net).....	.9	1.2	.9	1.0	1.1	1.0	1.3	1.2
Equals: Personal saving	65.9	67.8	64.8	56.3	51.4	68.5	73.3	77.8
Addenda:								
Disposable personal income:								
Total, billions of 1972 dollars.....	890.3	930.3	890.7	901.5	908.4	924.5	934.4	953.6
Per capita:								
Current dollars.....	5,511	6,035	5,540	5,665	5,793	5,967	6,098	6,279
1972 dollars.....	4,137	4,290	4,135	4,177	4,202	4,268	4,305	4,383
Population (millions).....	215.2	216.9	215.4	215.8	216.2	216.6	217.1	217.5
Personal saving as percentage of disposable personal income.....	5.6	5.2	5.4	4.6	4.1	5.3	5.5	5.7

	1976								1977							
	1976	1977 ^p	1976		1977				1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p			III	IV	I	II	III	IV ^p
			Seasonally adjusted at annual rates								Seasonally adjusted at annual rates					
Billions of current dollars								Billions of 1972 dollars								

Table 11.—Personal Consumption Expenditures by Major Type of Product in Current and Constant Dollars (2.3, 2.4)

Personal consumption expenditures.....	1,093.9	1,210.1	1,102.2	1,139.0	1,172.4	1,194.0	1,218.9	1,255.3	821.3	860.3	822.7	839.8	850.4	854.1	860.4	876.4
Durable goods.....	158.9	179.4	159.3	166.3	177.0	178.6	177.6	184.6	127.5	138.0	127.1	130.7	136.9	137.9	136.5	140.8
Motor vehicles and parts.....	71.9	83.8	72.1	75.7	85.3	84.5	81.2	84.1	55.7	61.2	55.4	56.7	62.7	62.1	59.3	60.8
Furniture and household equipment.....	63.9	70.3	63.9	66.5	67.4	69.3	70.9	73.4	52.8	56.6	52.7	54.6	54.8	55.9	57.0	58.7
Other.....	23.1	25.4	23.3	24.1	24.2	24.8	25.5	27.1	19.0	20.2	19.0	19.5	19.4	19.8	20.2	21.3
Nondurable goods.....	442.7	480.1	444.7	458.8	466.6	474.4	481.8	497.7	321.6	333.3	321.5	329.4	329.7	330.0	332.4	340.9
Food.....	225.5	246.3	227.0	232.0	237.9	244.8	248.3	254.2	159.7	167.6	160.1	163.9	165.4	166.4	167.6	170.9
Clothing and shoes.....	76.3	82.6	76.9	79.9	79.3	80.4	83.3	87.5	64.7	67.4	64.7	66.8	65.5	66.0	67.5	70.6
Gasoline and oil.....	41.4	44.8	41.2	43.5	44.1	44.3	44.2	46.4	25.2	25.8	24.9	25.6	25.8	25.6	26.1	26.1
Fuel oil and coal.....	12.0	12.9	12.0	13.3	13.7	12.3	12.3	13.4	5.7	5.4	5.6	6.1	5.9	5.1	5.0	5.5
Other.....	87.6	93.5	87.7	90.0	91.6	92.5	93.7	96.2	66.4	67.1	66.2	67.1	67.1	66.9	66.8	67.7
Services.....	492.3	550.6	498.2	513.9	528.8	541.1	559.5	572.9	372.2	389.0	374.0	379.7	383.8	386.3	391.4	394.7
Housing.....	167.9	184.5	170.4	173.7	177.6	181.9	186.7	191.6	136.3	141.1	137.8	138.2	139.2	140.3	141.8	143.1
Household operation.....	73.0	83.1	73.1	78.8	80.7	79.2	85.2	87.2	52.7	56.3	52.5	55.1	55.8	54.6	57.0	57.8
Electricity and gas.....	33.3	39.4	32.8	37.6	38.7	36.1	41.0	41.7	21.6	23.2	21.0	23.4	23.6	21.7	23.6	23.8
Other.....	39.6	49.7	40.3	41.2	42.0	43.1	44.2	45.5	31.1	33.1	31.5	31.8	32.2	32.9	33.4	34.0
Transportation.....	36.8	41.4	37.6	38.7	39.5	40.5	42.3	43.1	28.9	29.5	29.0	29.1	29.2	29.3	29.7	29.9
Other.....	214.6	241.6	217.1	222.8	230.9	239.4	245.3	250.9	154.3	162.1	155.2	157.3	159.6	162.0	162.9	163.9

	1976		1977			
	1976	1977 ^p	1976		1977	
			III	IV	I	II
			Seasonally adjusted at annual rates			
Billions of dollars						

	1976		1977			
	1976	1977 ^p	1976		1977	
			III	IV	I	II
			Seasonally adjusted at annual rates			
Billions of dollars						

Table 12.—Federal Government Receipts and Expenditures (3.2)

Receipts.....	332.3	373.9	337.1	344.5	364.9	371.2	373.2
Personal tax and nontax receipts.....	147.3	170.7	150.3	157.1	170.0	168.6	168.6
Income taxes.....	141.6	163.4	144.5	150.7	157.9	163.2	162.8
Estate and gift taxes.....	5.6	7.2	5.7	6.3	11.9	5.3	5.7
Nontaxes.....	.1	.1	.1	.1	.1	.1	.1
Corporate profits tax accruals.....	55.9	59.5	56.9	55.1	55.4	59.9	59.5
Indirect business tax and nontax accruals.....	23.4	24.8	23.7	23.8	24.2	24.6	25.4
Excise taxes.....	16.9	17.4	17.0	17.3	17.2	17.2	17.5
Customs duties.....	4.6	5.3	4.8	4.5	5.0	5.4	5.8
Nontaxes.....	1.9	2.1	1.9	2.0	2.0	2.1	2.1
Contributions for social insurance.....	105.7	118.9	106.2	108.4	115.4	118.1	119.7
Expenditures.....	386.3	423.5	390.6	400.4	403.7	411.5	432.1
Purchases of goods and services.....	130.1	145.4	130.2	134.2	136.3	143.6	148.1
National defense.....	86.8	94.3	86.4	88.4	89.7	93.4	95.6
Compensation of employees.....	41.6	43.9	41.2	43.0	43.3	43.3	43.4
Military.....	24.1	25.1	23.8	24.8	24.7	24.8	26.3
Civilian.....	17.6	18.8	17.3	18.2	18.5	18.5	19.5
Other.....	45.2	50.4	45.2	45.4	46.4	50.2	52.1
Nondefense.....	43.3	51.1	43.8	45.8	46.7	50.2	55.2
Compensation of employees.....	20.8	22.5	20.7	21.7	22.1	22.2	23.4
Other.....	22.6	28.6	23.2	24.0	24.6	28.0	30.1
Transfer payments.....	162.0	173.1	163.9	166.3	170.7	169.3	174.8
To persons.....	158.8	169.8	160.0	163.1	167.8	166.4	171.2
To foreigners.....	3.2	3.2	3.9	3.2	2.9	2.9	3.6
Grants-in-aid to State and local governments.....	61.0	67.6	63.1	65.5	62.0	63.6	72.7
Net interest paid.....	27.2	29.5	27.3	28.5	28.6	29.1	29.4
Interest paid.....	32.2	35.5	32.7	33.4	34.1	35.1	35.6
To persons and business.....	27.7	29.9	28.1	28.7	29.2	29.9	29.8
To foreigners.....	4.5	5.6	4.6	4.7	4.9	5.2	5.9
Less: Interest received by Government.....	5.0	6.0	5.4	4.9	5.5	6.0	6.2
Subsidies less current surplus of Government enterprises.....	5.9	7.9	6.1	6.0	6.1	5.9	7.2
Subsidies.....	5.7	7.1	5.7	5.9	6.3	6.1	6.3
Less: Current surplus of Government enterprises.....	-.3	-.7	-.4	-.1	.2	.3	-.9
Less: Wage accruals less disbursements.....	0	0	0	0	0	0	0
Surplus or deficit (-), national income and product accounts.....	-54.0	-49.6	-53.5	-55.9	-38.8	-40.3	-58.9
Social insurance funds.....	-12.5	-10.2	-13.9	-15.0	-10.0	-7.9	-11.6
Other funds.....	-41.5	-39.4	-39.6	-40.9	-28.8	-32.4	-47.3

Table 13.—State and Local Government Receipts and Expenditures (3.4)

Receipts.....	264.7	294.5	269.0	277.5	281.0	288.1	301.6
Personal tax and nontax receipts.....	49.6	56.8	50.3	52.5	54.4	56.2	57.6
Income taxes.....	26.8	31.7	27.1	29.0	30.3	31.4	32.1
Nontaxes.....	16.0	17.5	16.3	16.3	16.8	17.2	17.7
Other.....	6.8	7.6	7.0	7.1	7.3	7.5	7.7
Corporate profits tax accruals.....	8.9	9.7	9.0	8.8	9.0	9.8	9.8
Indirect business tax and nontax accruals.....	127.1	140.3	128.1	131.7	135.9	138.6	141.5
Sales taxes.....	57.3	63.8	57.3	59.1	61.7	63.1	64.2
Property taxes.....	57.6	62.8	58.2	59.7	61.0	62.1	63.4
Other.....	12.3	13.7	12.5	12.9	13.2	13.5	13.9
Contributions for social insurance.....	18.1	20.1	18.5	19.1	19.5	19.9	20.2
Federal grants-in-aid.....	61.0	67.6	63.1	65.5	62.0	63.6	72.7
Expenditures.....	246.2	265.3	247.9	251.1	253.7	262.6	268.7
Purchases of goods and services.....	231.2	249.5	232.7	235.8	238.5	247.0	252.9
Compensation of employees.....	129.2	139.4	130.7	132.8	135.1	137.6	140.7
Other.....	102.0	110.2	102.0	103.1	103.4	109.4	112.2
Transfer payments to persons.....	25.9	28.0	26.2	26.5	27.0	27.7	28.3
Net interest paid.....	-5.7	-6.5	-6.0	-5.7	-6.2	-6.3	-6.7
Interest paid.....	11.6	12.5	11.7	12.0	12.1	12.4	12.6
Less: Interest received by Government.....	17.3	18.9	17.6	17.7	18.3	18.7	19.3
Subsidies less current surplus of government enterprises.....	-5.2	-5.8	-5.1	-5.5	-5.7	-5.7	-5.8
Subsidies.....	.2	.3	.2	.3	.3	.3	.4
Less: Current surplus of government enterprises.....	5.4	6.1	5.3	5.8	6.0	6.0	6.2
Less: Wage accruals less disbursements.....	0	0	0	0	0	0	0
Surplus or deficit (-), national income and product accounts.....	18.4	29.2	21.1	26.5	27.3	25.4	32.9
Social insurance funds.....	14.5	15.5	14.8	15.2	15.4	15.5	15.7
Other funds.....	3.9	13.7	6.2	11.3	11.9	10.0	17.4

^pPreliminary.
1. Includes fees for licenses to import petroleum and petroleum products.

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted at annual rates					
Billions of dollars								

Table 14.—Foreign Transactions in the National Income and Product Accounts (4.1)

	1976	1977 ^p	1976	1976	1976	1976	1976	1976
Receipts from foreigners..	162.9	175.6	168.4	168.5	170.4	178.1	179.9	174.3
Exports of goods and services..	162.9	175.6	168.4	168.5	170.4	178.1	179.9	174.3
Merchandise.....	114.7	120.2	118.4	118.9	117.9	122.1	123.2	117.7
Other.....	48.2	55.4	50.0	49.7	52.5	56.0	56.7	56.5
Capital grants received by the United States (net).....	0	0	0	0	0	0	0	0
Payments to foreigners..	162.9	175.6	168.4	168.5	170.4	178.1	179.9	174.3
Imports of goods and services..	155.1	184.7	160.6	165.6	178.6	187.7	187.4	185.1
Merchandise.....	123.9	150.5	129.5	133.2	145.8	153.3	153.4	149.5
Other.....	31.1	34.2	31.0	32.4	32.8	34.5	34.0	35.6
Transfer payments (net).....	4.2	4.4	4.8	4.2	4.0	3.9	4.9	4.8
From persons (net).....	.9	1.2	.9	1.0	1.1	1.0	1.3	1.2
From government (net).....	3.2	3.2	3.9	3.2	2.9	2.9	3.6	3.6
Interest paid by government to foreigners.....	4.5	5.6	4.6	4.7	4.9	5.2	5.9	6.6
Net foreign investment.....	-9.9	-19.1	-1.5	-5.9	-17.1	-18.8	-18.2	-22.1

Table 15.—Gross Saving and Investment (5.1)

	1976	1977 ^p	1976	1976	1976	1976	1976	1976
Gross saving.....	237.0	274.3	244.8	232.2	251.4	277.2	284.5	
Gross private saving.....	272.5	294.7	277.2	261.6	262.9	292.1	310.5	
Personal saving.....	65.9	67.8	64.8	56.3	51.4	68.5	73.3	77.8
Undistributed corporate profits with inventory valuation and capital consumption adjustments.....	27.6	29.9	31.6	20.8	22.5	30.3	37.4	
Undistributed profits.....	56.4	61.7	58.0	52.5	58.8	64.1	61.2	
Inventory valuation adjustment.....	-14.1	-14.5	-11.7	-16.9	-20.6	-17.8	-5.9	-13.8
Capital consumption adjustment.....	-14.7	-17.2	-14.7	-14.8	-15.6	-15.9	-17.9	-19.4
Corporate capital consumption allowances with capital consumption adjustment.....	111.8	121.9	112.9	115.2	117.6	119.4	123.7	127.0
Noncorporate capital consumption allowances with capital consumption adjustment.....	67.2	75.1	68.0	69.2	71.4	73.8	76.2	78.9
Wage accruals less disbursements.....	0	0	0	0	0	0	0	0
Government surplus or deficit(-), national income and product accounts.....	-35.6	-20.4	-32.4	-29.4	-11.5	-14.9	-26.0	
Federal.....	-54.0	-49.6	-53.5	-55.9	-38.8	-40.3	-58.9	
State and local.....	18.4	29.2	21.1	26.5	27.3	25.4	32.9	
Capital grants received by the United States (net).....	0	0	0	0	0	0	0	0
Gross investment.....	242.5	275.3	252.8	237.5	254.7	276.1	285.4	284.9
Gross private domestic investment.....	243.3	294.3	254.3	243.4	271.8	294.9	303.6	307.0
Net foreign investment.....	-9.9	-19.1	-1.5	-5.9	-17.1	-18.8	-18.2	-22.1
Statistical discrepancy.....	5.5	1.0	8.0	5.3	3.3	-1.2	.9	

^p Preliminary.

1. Inventories are as of the end of the quarter. The quarter-to-quarter change in inventories calculated from current-dollar inventories shown in this table is not the current-dollar change in business inventories (CBI) components of GNP. The former is the difference between two inventory stocks, each valued at end-of-quarter prices. The latter is the change in the physical volume of inventories valued at average prices of the quarter. In addition, changes calculated from this table are at quarterly rates, whereas CBI is stated at annual rates.

2. Quarterly totals at annual rates.

3. Equals ratio of nonfarm inventories to final sales of business. These sales include a small amount of final sales by farms.

NOTE.—Table 16: Inventories are classified as durable or nondurable as follows: For manufacturing, by the type of product produced by the establishment holding the inventory; for trade, by the type of product sold by the establishment holding the inventory; for construction, durable; and for other nonfarm industries, nondurable. The industry classification is based on the 1972 Standard Industrial Classification.

Table 17: The industry classification of compensation of employees, proprietors' income, and rental income is on an establishment basis; the industry classification of corporate profits and net interest is on a company basis. The industry classification of these items is based on the 1972 Standard Industrial Classification.

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted at annual rates					
Billions of dollars								

Table 16.—Inventories and Final Sales of Business in Current and Constant Dollars (5.9, 5.10)

	1976	1977 ^p	1976	1976	1976	1976	1976	1976
Inventories¹.....			455.5	461.5	478.6	482.5	492.0	504.7
Farm.....			61.3	59.8	62.8	60.0	57.6	60.5
Nonfarm.....			394.2	401.7	415.8	422.5	434.4	444.1
Durable goods.....			220.9	225.8	231.4	235.0	243.5	249.0
Nondurable goods.....			173.3	175.9	184.4	187.6	190.9	195.1
Manufacturing.....			201.7	206.1	210.8	213.7	219.3	223.7
Durable goods.....			127.5	130.8	133.1	134.4	138.9	141.9
Nondurable goods.....			74.2	75.3	77.8	79.3	80.4	81.8
Wholesale trade.....			74.3	75.2	78.8	79.5	80.8	82.6
Durable goods.....			45.6	46.0	47.5	48.8	50.6	51.2
Nondurable goods.....			28.7	29.2	31.2	30.7	30.2	31.4
Retail trade.....			80.4	81.2	86.0	88.5	91.9	94.5
Durable goods.....			35.8	36.5	38.2	39.0	40.6	42.1
Nondurable goods.....			44.5	44.7	47.8	49.5	51.4	52.4
Other.....			37.9	39.1	40.2	40.8	42.4	43.4
Final sales².....			1,441.5	1,486.1	1,518.5	1,564.7	1,604.4	1,657.6
Ratio of inventories to final sales.....			.316	.311	.315	.308	.307	.304
Nonfarm ³.....			.273	.270	.274	.270	.271	.268

Billions of 1972 dollars

	1976	1977 ^p	1976	1976	1976	1976	1976	1976
Inventories¹.....			300.8	300.4	302.8	306.1	310.0	312.0
Farm.....			42.0	41.4	41.3	41.2	41.3	41.6
Nonfarm.....			258.8	259.0	261.5	264.9	268.7	270.4
Durable goods.....			147.4	147.4	148.8	150.7	152.4	153.3
Nondurable goods.....			111.4	111.6	112.7	114.2	116.4	117.1
Manufacturing.....			127.7	128.1	128.7	130.3	131.4	131.8
Durable goods.....			82.4	82.7	83.0	83.8	84.2	84.4
Nondurable goods.....			45.3	45.4	45.7	46.4	47.3	47.4
Wholesale trade.....			49.8	49.7	50.5	51.1	51.7	51.9
Durable goods.....			31.5	31.2	31.8	32.4	32.9	32.9
Nondurable goods.....			18.3	18.5	18.7	18.6	18.8	19.0
Retail trade.....			58.0	57.7	58.8	60.0	62.0	62.9
Durable goods.....			25.7	25.6	26.1	26.4	27.3	27.8
Nondurable goods.....			32.3	32.0	32.7	33.6	34.7	35.0
Other.....			23.4	23.6	23.5	23.6	23.7	23.8
Final sales².....			1,076.6	1,095.7	1,106.5	1,121.7	1,134.8	1,156.3
Ratio of inventories to final sales.....			.279	.274	.274	.273	.273	.270
Nonfarm ³.....			.240	.236	.236	.236	.237	.234

Table 17.—National Income Without Capital Consumption Adjustment by Industry (6.4)

	1976	1977 ^p	1976	1976	1976	1976	1976	1976
National income without capital consumption adjustment.....	1,399.3	1,562.3	1,415.0	1,437.9	1,488.2	1,545.7	1,583.6	
Domestic income.....	1,384.9	1,544.8	1,399.7	1,423.4	1,470.6	1,527.3	1,565.9	
Agriculture, forestry, and fisheries.....	40.8	44.5	38.7	39.8	44.4	44.2	41.0	
Mining and construction.....	87.1	99.1	87.5	89.5	90.7	99.5	102.1	
Manufacturing.....	365.0	411.4	369.9	370.8	386.5	410.8	418.3	
Nondurable goods.....	146.9	160.7	148.2	148.3	152.4	159.4	166.4	
Durable goods.....	218.1	250.8	221.7	222.6	234.1	251.4	251.9	
Transportation.....	50.6	55.8	51.7	52.1	53.2	55.5	56.6	
Communication.....	30.9	35.4	31.4	32.5	33.3	34.5	36.0	
Electric, gas, and sanitary services.....	25.9	28.9	26.3	25.4	28.0	27.4	29.6	
Wholesale and retail trade.....	220.7	245.5	225.5	229.5	234.8	241.8	251.4	
Wholesale.....	91.1	99.7	93.7	92.7	94.6	97.7	102.9	
Retail.....	129.6	145.8	131.8	136.8	140.1	143.1	148.5	
Finance, insurance, and real estate.....	160.8	181.5	163.1	166.8	172.2	177.8	184.4	
Services.....	188.2	211.5	189.5	195.5	202.5	207.9	214.4	
Government and government enterprises.....	214.9	231.1	216.0	221.4	225.0	227.9	232.0	
Rest of the world.....	14.4	17.5	15.3	14.4	17.6	18.4	17.7	16.3

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted at annual rates					
Billions of current dollars								

Table 18.—Corporate Profits by Industry (6.18)

Corporate profits with inventory valuation and capital consumption adjustment.....	128.1	140.3	133.5	123.1	125.4	140.2	149.0
Domestic industries.....	119.9	130.8	125.1	115.4	115.3	129.5	139.5
Financial ¹	18.0	20.4	18.3	18.3	19.1	19.7	21.0
Nonfinancial.....	101.9	110.4	106.8	97.1	96.3	109.8	118.5
Rest of the world.....	8.1	9.6	8.4	7.7	10.1	10.7	9.6
Corporate profits with inventory valuation adjustment and without capital consumption adjustment.....	142.7	157.5	148.2	137.9	141.0	156.2	166.9
Domestic industries.....	134.6	147.9	139.8	130.2	131.0	145.5	157.4
Financial ¹	18.2	20.6	18.4	18.4	19.2	19.9	21.2
Federal Reserve banks.....	6.0	6.2	5.9	6.1	6.1	6.2	6.2
Other.....	12.2	14.4	12.5	12.3	13.1	13.7	15.1
Nonfinancial.....	116.4	127.3	121.3	111.8	111.8	125.5	136.1
Manufacturing.....	68.3	74.7	68.4	62.9	65.2	76.4	77.6
Nondurable goods.....	36.4	37.7	37.4	33.9	33.7	37.0	40.1
Food and kindred products.....	8.3		9.7	7.1	5.1	5.6	8.0
Chemicals and allied products.....	7.4		7.3	6.6	7.7	8.3	8.1
Petroleum and coal products.....	9.9		9.3	9.9	9.2	10.5	9.9
Other.....	10.8		11.2	10.3	11.7	12.6	14.2
Durable goods.....	29.9	37.0	31.0	29.0	31.5	39.4	37.5
Primary metal industries.....	2.4		2.2	1.1	1.0	2.7	3
Fabricated metal products.....	3.5		3.7	3.0	3.2	4.1	4.3
Machinery, except electrical.....	5.9		6.3	6.6	6.8	7.7	8.9
Electric and electronic equipment.....	3.7		3.9	4.0	4.6	5.3	5.0
Motor vehicles and equipment.....	7.2		7.3	6.9	8.0	9.8	8.5
Other.....	7.2		7.7	7.4	7.9	9.8	10.4
Wholesale and retail trade, transportation, communication, and electric, gas, and sanitary services.....	11.5		12.2	10.4	11.6	11.5	14.1
Other.....	11.5		11.6	11.1	11.0	12.2	13.2
Rest of the world.....	8.1	9.6	8.4	7.7	10.1	10.7	9.6
Corporate profits before deduction of capital consumption allowances with inventory valuation adjustment.....	239.9	262.2	246.4	238.3	243.0	259.7	272.7
Domestic industries.....	231.8	252.7	238.0	230.6	232.9	249.0	263.1
Financial ¹	22.9	25.7	23.2	23.3	24.2	25.0	26.4
Federal Reserve banks.....	6.0	6.2	5.9	6.1	6.1	6.3	6.2
Other.....	16.9	19.5	17.2	17.2	18.1	18.7	20.3
Nonfinancial.....	208.9	226.9	214.8	207.3	208.7	224.0	236.7
Manufacturing.....	106.3	117.6	108.8	104.2	107.2	119.0	120.8
Nondurable goods.....	55.2	58.1	56.5	53.3	53.5	57.2	60.7
Food and kindred products.....	11.7		13.2	10.6	8.7	9.3	11.8
Chemicals and allied products.....	11.9		11.9	11.2	12.5	13.2	13.2
Petroleum and coal products.....	15.3		14.7	15.5	14.8	16.1	15.5
Other.....	16.3		16.8	16.0	17.6	18.6	20.2
Durable goods.....	51.1	59.5	52.3	50.9	53.6	61.8	60.1
Primary metal industries.....	6.1		6.0	4.9	4.9	6.7	4.4
Fabricated metal products.....	5.2		5.4	4.7	4.9	5.8	6.1
Machinery, except electrical.....	9.6		10.0	10.3	10.5	11.5	12.7
Electric and electronic equipment.....	6.6		6.8	7.0	7.6	8.3	8.0
Motor vehicles and equipment.....	10.7		10.8	10.8	11.9	13.6	12.3
Other.....	12.8		13.3	13.3	13.9	15.9	16.5
Wholesale and retail trade, transportation, communication, and electric, gas, and sanitary services.....	37.4		39.6	38.1	34.8	36.4	42.6
Other.....	36.9		37.9	36.7	38.3	38.8	42.0
Other.....	28.3		28.5	28.4	28.5	29.9	31.4
Rest of the world.....	8.1	9.6	8.4	7.7	10.1	10.7	9.6

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted					
Index number, 1972=100								

Table 19.—Implicit Price Deflators for Gross National Product (7.1)

Gross national product.....	133.88	141.32	134.56	136.35	138.13	140.52	142.19	144.34
Personal consumption expenditures.....	133.2	140.7	134.0	135.6	137.9	139.8	141.7	143.2
Durable goods.....	124.7	130.0	125.3	127.2	129.3	129.5	130.0	131.2
Nondurable goods.....	137.7	144.1	138.3	139.3	141.5	143.8	144.9	146.0
Services.....	132.3	141.5	133.2	135.4	137.8	140.1	142.9	145.1
Gross private domestic investment.....								
Fixed investment.....	139.8	150.3	140.6	142.9	145.8	148.5	151.3	155.3
Nonresidential.....	138.7	146.0	139.2	140.9	142.5	144.4	146.9	150.2
Structures.....	150.7	160.3	150.9	152.8	156.6	159.7	160.9	164.0
Producers' durable equipment.....	133.1	139.8	133.9	135.4	136.5	137.7	140.8	144.1
Residential.....	142.5	159.9	144.1	147.5	153.7	157.6	160.9	166.5
Nonfarm structures.....	143.0	166.5	144.5	148.0	154.3	158.2	161.6	167.3
Farm structures.....	142.9	159.4	145.3	148.9	153.7	157.7	160.6	166.5
Producers' durable equipment.....	122.6	126.8	123.4	123.8	125.2	126.6	127.6	127.9
Change in business inventories.....								
Net exports of goods and services.....								
Exports.....	170.0	179.2	172.0	174.0	175.9	180.8	180.2	180.0
Imports.....	194.3	211.5	198.4	199.3	207.0	210.6	213.9	214.6
Government purchases of goods and services.....	136.7	145.7	137.2	139.8	142.3	144.6	146.3	149.4
Federal.....	134.8	143.5	134.7	138.2	140.6	142.0	143.3	147.8
State and local.....	137.7	147.1	138.6	140.7	143.4	146.2	148.1	150.4

Table 20.—Fixed-Weighted Price Indexes for Gross National Product, 1972 Weights (7.2)

Gross national product.....	134.9	143.2	135.5	137.5	139.9	142.3	144.0	146.1
Personal consumption expenditures.....	134.0	141.7	134.8	136.3	138.6	140.9	142.8	144.4
Durable goods.....	124.8	130.5	125.3	127.3	129.3	130.0	130.6	132.0
Nondurable goods.....	138.9	145.6	139.6	140.4	142.7	145.3	146.6	147.7
Services.....	132.6	142.0	133.7	135.6	138.1	140.6	143.4	145.6
Gross private domestic investment.....								
Fixed investment.....	141.1	152.7	142.0	144.5	148.1	151.1	153.6	157.5
Nonresidential.....	140.3	148.9	140.9	143.0	145.1	147.6	149.8	152.7
Structures.....	148.4	157.5	148.7	150.6	153.7	156.8	158.4	160.9
Producers' durable equipment.....	135.7	144.0	136.4	138.6	140.3	142.4	144.9	148.0
Residential.....	142.6	159.7	144.0	147.4	153.6	157.4	160.7	166.4
Change in business inventories.....								
Net exports of goods and services.....								
Exports.....	172.4	181.8	173.9	176.2	177.8	182.6	182.6	182.7
Imports.....	185.2	199.2	188.8	190.6	194.5	198.7	202.7	205.2
Government purchases of goods and services.....	137.1	146.0	137.5	140.4	142.7	144.8	146.6	149.7
Federal.....	136.4	145.2	136.3	140.4	142.3	143.6	145.2	149.4
State and local.....	137.6	146.6	138.3	140.3	142.9	145.7	147.6	150.0
Addenda:								
Final sales.....	134.8	143.1	135.4	137.4	139.8	142.2	143.9	146.0
Gross domestic product.....	134.4	142.6	135.1	137.1	139.4	141.8	143.4	145.6
Business.....	134.7	142.7	135.3	137.1	139.4	141.9	143.6	145.5
Nonfarm.....	134.5	142.9	134.9	137.1	139.0	141.6	143.7	

^p Preliminary.

1. Consists of the following industries: Banking; credit agencies other than banks; security and commodity brokers, dealers, and services; insurance carriers; regulated investment companies; small business investment companies; and real estate investment trusts.

NOTE.—Table 18: The industry classification is on a company basis and is based on the 1972 Standard Industrial Classification.

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted					
Index numbers, 1972=100								

Table 21.—Implicit Price Deflators for Gross National Product by Major Type of Product (7.3)

Gross national product.....	133.88	141.32	134.56	136.35	138.13	140.52	142.19	144.34
Final sales.....	133.7	141.2	134.3	136.2	138.1	140.3	142.1	144.3
Change in business inventories.....								
Goods.....	131.7	136.2	132.2	133.1	133.8	135.9	136.7	138.1
Final sales.....	131.4	135.8	131.7	132.9	133.7	135.3	136.4	137.9
Change in business inventories.....								
Durable goods.....	129.0	134.5	130.2	131.9	132.6	133.9	135.6	136.6
Final sales.....	128.8	134.2	129.6	131.7	132.4	133.2	134.6	136.5
Change in business inventories.....								
Nondurable goods.....	133.6	137.3	133.7	134.0	134.7	137.4	137.6	139.2
Final sales.....	133.1	137.0	133.1	133.7	134.6	136.8	137.7	138.9
Change in business inventories.....								
Services.....	133.8	143.1	134.7	137.1	139.6	141.9	144.3	146.7
Structures.....	145.8	158.8	146.6	149.1	153.6	157.1	159.8	164.2

Table 22.—Implicit Price Deflators for Gross National Product by Sector (7.5)

Gross national product.....	133.88	141.32	134.56	136.35	138.13	140.52	142.19	144.34
Gross domestic product.....	133.4	140.8	134.1	135.9	137.6	140.0	141.7	143.8
Business.....	133.5	140.5	134.2	135.8	137.3	139.8	141.5	143.4
Nonfarm.....	133.3	140.7	134.1	135.9	137.1	139.7	142.0	
Nonfarm less housing.....	134.6	141.9	135.4	137.3	138.4	141.0	143.3	
Housing.....	121.5	129.6	122.3	123.9	126.5	128.6	130.6	132.6
Farm.....	145.1	140.1	141.6	136.2	145.6	145.6	130.5	139.0
Residual.....								
Households and institutions.....	139.6	152.2	141.1	143.6	148.8	150.6	152.4	156.6
Government.....	131.5	139.6	131.7	134.9	136.9	138.4	139.7	143.3
Federal.....	128.8	136.6	127.6	133.2	134.6	134.9	135.1	142.0
State and local.....	132.8	141.0	133.8	135.7	138.0	140.2	141.9	144.0
Rest of the world.....								

Table 23.—Implicit Price Deflators for the Relation of Gross National Product, Net National Product, and National Income (7.6)

Gross national product.....	133.88	141.32	134.56	136.35	138.13	140.52	142.19	144.34
Less: Capital consumption allowances with capital consumption adjustment.....	142.1	151.8	143.2	145.3	147.6	149.3	153.2	156.5
Equals: Net national product.....	133.0	140.2	133.6	135.4	137.1	139.5	141.0	143.0
Less: Indirect business tax and nontax liability plus business transfer payments less subsidies plus current surplus of government enterprises.....	125.2	129.9	125.2	126.6	128.4	130.5	131.4	129.1
Residual.....								
Equals: National income.....	134.1	141.6	134.8	136.6	138.3	140.8	142.3	

^p Preliminary.

1. Consists of final sales and change in business inventories of new autos produced in the United States.

2. Consists of personal consumption expenditures, producers' durable equipment, and government purchases.

NOTE.—Table 21 "Final sales" is classified as durable or nondurable by type of product. "Change in business inventories" is classified as follows: For manufacturing, by the type of product produced by the establishment holding the inventory; for trade, by the type of product sold by the establishment holding the inventory; for construction, durable; and for other industries, nondurable.

Tables 22 and 24 The industry classification within the business sector is on an establishment basis and is based on the 1972 Standard Industrial Classification.

	1976	1977 ^p	1976		1977			
			III	IV	I	II	III	IV ^p
			Seasonally adjusted					
Index numbers, 1972=100								

Table 24.—Implicit Price Deflators for Net National Product and National Income by Sector (7.7)

Net national product.....	133.0	140.2	133.6	135.4	137.1	139.5	141.0	143.0
Net domestic product.....	132.5	139.6	133.1	134.9	136.5	138.9	140.4	142.5
Business.....	132.4	139.1	133.0	134.5	135.9	138.5	140.0	141.8
Nonfarm.....	132.1	139.3	132.9	134.7	135.8	138.5	140.6	
Farm.....	146.1	136.0	140.9	132.9	144.8	144.2	122.5	133.3
Residual.....								
Households and institutions.....	139.6	152.2	141.1	143.6	148.8	150.6	152.4	156.6
Government.....	131.5	139.6	131.7	134.9	136.9	138.4	139.7	143.3
Rest of the world.....								
National income.....	134.1	141.6	134.8	136.6	138.3	140.8	142.3	
Domestic income.....	133.5	141.0	134.2	136.1	137.7	140.1	141.6	
Business.....	133.6	140.7	134.3	135.9	137.3	139.9	141.5	
Nonfarm.....	133.8	141.1	134.6	136.5	137.4	140.2	142.5	
Farm.....	128.7	126.3	124.6	118.4	133.9	129.8	110.5	130.9
Households and institutions.....	139.6	152.2	141.1	143.6	148.8	150.6	152.4	156.6
Government.....	131.5	139.6	131.7	134.9	136.9	138.4	139.7	143.3
Rest of the world.....								

Table 25.—Implicit Price Deflators for Auto Output (7.9)

Auto output.....	125.5	130.7	126.3	129.1	130.3	129.7	129.8	133.2
Final sales.....	125.1	131.0	126.3	129.1	130.9	130.5	129.9	132.5
Personal consumption expenditures.....	132.1	140.4	133.8	136.9	139.9	139.7	140.1	142.0
New autos.....	122.3	128.6	122.5	124.9	126.3	127.4	128.9	131.8
Net purchases of used autos.....								
Producers' durable equipment.....	106.1	105.2	104.0	105.1	101.5	102.2	104.1	112.9
New autos.....	122.1	128.4	122.3	124.7	126.1	127.2	128.7	131.5
Net purchases of used autos.....								
Net exports.....	121.9	128.9	122.5	125.3	125.7	127.9	130.0	132.1
Exports.....	143.6	154.2	143.2	147.2	145.5	148.9	157.7	163.8
Imports.....								
Government purchases of goods and services.....	121.8	122.8	121.2	122.5	119.5	121.5	121.8	127.7
Change in business inventories of new and used autos.....								
Addenda:								
Domestic output of new autos ¹	122.2	128.5	122.4	124.9	126.2	127.4	129.0	131.7
Sales of imported new autos ²	122.3	128.6	122.5	124.9	126.3	127.4	128.9	131.8

Table 26.—Implicit Price Deflators for Personal Consumption Expenditures by Major Type of Product (7.11)

Personal consumption expenditures.....	133.2	140.7	134.0	135.6	137.9	139.8	141.7	143.2
Durable goods.....	124.7	130.0	125.3	127.2	129.3	129.5	130.0	131.2
Motor vehicles and parts.....	129.1	136.8	130.2	133.6	136.1	135.9	136.8	138.4
Furniture and household equipment.....	120.9	124.1	121.2	121.8	123.1	123.9	124.4	125.1
Other.....	122.1	125.9	122.5	123.9	124.8	125.1	126.1	127.3
Nondurable goods.....	137.7	144.1	138.3	139.3	141.5	143.8	144.9	146.0
Food.....	141.2	147.0	141.7	141.5	143.9	147.2	148.1	148.8
Clothing and shoes.....	117.9	122.6	118.8	119.6	121.1	121.9	123.4	123.8
Gasoline and oil.....	164.4	173.8	165.1	170.0	170.7	173.3	173.5	177.6
Fuel oil and coal.....	212.1	239.8	214.0	218.8	230.4	240.0	244.6	245.4
Other.....	131.9	139.3	132.5	134.3	136.6	138.3	140.3	142.1
Services.....	132.3	141.5	133.2	135.4	137.8	140.1	142.9	145.1
Housing.....	123.2	130.7	124.1	125.7	127.6	129.6	131.7	133.9
Household operation.....	138.4	147.5	139.2	142.9	144.6	145.2	149.3	150.8
Electricity and gas.....	154.3	169.8	156.2	161.0	164.1	166.4	173.2	175.2
Other.....	127.4	131.9	128.0	129.6	130.3	131.2	132.4	133.8
Transportation.....	127.5	140.2	130.0	132.9	135.6	138.3	142.6	144.3
Other.....	139.0	149.1	139.9	141.7	144.7	147.8	150.6	153.1

	1976	1977 ^a	1976		1977			
			III	IV	I	II	III	IV ^a
			Seasonally adjusted					
Percent		Percent at annual rate						

Table 27.—Percent Change From Preceding Period in Gross National Product in Current and Constant Dollars, Implicit Price Deflator, and Price Indexes (8.9)

Gross national product:								
Current dollars.....	11.6	10.8	8.6	6.7	13.2	13.7	10.2	10.7
1972 dollars.....	6.0	4.9	3.9	1.2	7.5	6.2	5.1	4.2
Implicit price deflator.....	5.3	5.6	4.6	5.4	5.3	7.1	4.8	6.2
Chain price index.....	5.6	6.0	4.6	5.9	6.9	7.0	4.3	6.0
Fixed-weighted price index.....	5.6	6.1	4.8	6.0	7.1	7.0	4.8	6.1
Personal consumption expenditures:								
Current dollars.....	11.6	10.6	9.1	14.1	12.2	7.6	8.6	12.5
1972 dollars.....	6.0	4.8	3.6	8.6	5.1	1.8	3.0	7.6
Implicit price deflator.....	5.3	5.6	5.3	5.0	6.8	5.7	5.5	4.5
Chain price index.....	5.3	5.7	5.2	4.6	7.0	6.6	5.4	4.6
Fixed-weighted price index.....	5.3	5.7	5.2	4.6	7.0	6.8	5.4	4.7
Durable goods:								
Current dollars.....	19.6	12.9	6.7	18.8	28.2	3.6	-2.2	16.9
1972 dollars.....	13.1	8.3	1.5	11.8	20.2	3.0	-3.9	13.0
Implicit price deflator.....	5.7	4.3	5.2	6.2	6.6	6.6	1.7	3.5
Chain price index.....	5.4	4.5	4.3	6.8	6.5	1.9	1.8	4.1
Fixed-weighted price index.....	5.6	4.6	4.2	6.7	6.3	2.2	2.0	4.4
Nondurable goods:								
Current dollars.....	8.2	8.4	7.1	13.3	7.0	6.8	6.4	13.9
1972 dollars.....	4.6	3.6	2.8	10.2	3.3	3.3	3.0	10.5
Implicit price deflator.....	3.4	4.7	4.1	2.8	6.7	6.5	3.2	3.1
Chain price index.....	3.4	4.8	4.1	2.4	6.6	7.4	3.6	3.0
Fixed-weighted price index.....	3.4	4.8	4.2	2.4	6.7	7.5	3.6	3.0
Services:								
Current dollars.....	12.4	11.8	11.7	13.3	12.0	9.6	14.3	9.9
1972 dollars.....	4.9	4.5	4.9	6.2	4.4	2.7	5.4	3.4
Implicit price deflator.....	7.1	7.0	6.4	6.7	7.3	6.8	8.5	6.3
Chain price index.....	7.1	7.0	6.4	5.9	7.4	7.5	8.1	6.3
Fixed-weighted price index.....	7.2	7.1	6.6	6.0	7.5	7.5	8.2	6.3
Gross private domestic investment:								
Current dollars.....	28.7	21.0	17.3	-16.1	55.5	38.6	12.4	4.5
1972 dollars.....	22.2	13.1	9.9	-20.9	48.4	24.3	7.5	-6.1
Implicit price deflator.....								
Chain price index.....								
Fixed-weighted price index.....								
Fixed investment:								
Current dollars.....	14.7	20.3	12.3	21.3	24.4	25.7	10.3	23.4
1972 dollars.....	8.6	11.9	6.2	13.8	14.7	16.8	2.5	11.0
Implicit price deflator.....	5.6	7.5	5.8	6.6	8.4	7.6	7.6	11.1
Chain price index.....	6.0	7.7	6.2	7.1	9.0	7.8	7.0	10.7
Fixed-weighted price index.....	6.0	8.2	6.5	7.3	10.2	8.3	6.9	10.5
Nonresidential:								
Current dollars.....	8.6	14.6	13.4	6.7	24.5	12.8	11.6	18.2
1972 dollars.....	3.6	8.9	9.0	1.8	19.0	7.0	3.9	8.4
Implicit price deflator.....	4.8	5.3	4.1	4.8	4.6	5.4	7.4	9.0
Chain price index.....	5.5	5.8	4.6	6.0	5.1	6.7	6.2	8.7
Fixed-weighted price index.....	5.4	6.1	4.6	6.0	6.2	7.1	6.0	8.1
Structures:								
Current dollars.....	5.6	10.3	1.3	7.5	6.3	24.0	10.8	15.0
1972 dollars.....	2.2	3.6	-1.1	2.2	-3.5	14.7	7.3	6.7
Implicit price deflator.....	3.3	6.4	1.4	5.2	10.2	8.1	3.3	7.8
Chain price index.....	3.1	6.2	2.5	5.1	8.1	8.6	4.8	6.8
Fixed-weighted price index.....	2.8	6.2	2.3	5.2	8.4	8.3	4.2	6.6
Producers' durable equipment:								
Current dollars.....	10.2	16.9	20.4	6.2	34.7	7.6	12.0	19.9
1972 dollars.....	4.2	11.3	13.4	1.6	30.5	3.9	2.5	9.2
Implicit price deflator.....	5.8	5.0	6.1	4.6	3.3	3.6	9.3	9.8
Chain price index.....	6.8	5.7	5.8	6.4	3.5	5.7	6.9	9.6
Fixed-weighted price index.....	7.1	6.1	6.1	6.5	4.8	6.3	7.1	9.0
Residential:								
Current dollars.....	32.2	33.6	9.7	63.3	24.2	57.9	7.7	34.3
1972 dollars.....	23.2	19.1	-4.4	48.8	5.4	42.6	-7.7	16.9
Implicit price deflator.....	7.3	12.2	10.1	9.7	17.9	10.8	8.5	14.8
Chain price index.....	7.3	12.1	10.2	9.7	17.9	10.5	8.7	15.0
Fixed-weighted price index.....	7.3	12.1	10.1	9.7	17.8	10.5	8.7	14.9

	1976	1977 ^a	1976		1977			
			III	IV	I	II	III	IV ^a
			Seasonally adjusted					
Percent		Percent at annual rate						

Table 27.—Percent Change From Preceding Period in Gross National Product in Current and Constant Dollars, Implicit Price Deflator, and Price Indexes—Con.

Exports:								
Current dollars.....	10.6	7.8	20.9	.3	4.4	19.3	4.1	-11.9
1972 dollars.....	6.5	2.3	11.7	-4.2	.0	7.0	5.5	-11.5
Implicit price deflator.....	3.8	5.4	8.3	4.7	4.4	11.5	-1.3	-.5
Chain price index.....	3.6	5.3	7.6	5.5	3.2	11.2	-3.3	.1
Fixed-weighted price index.....	3.1	5.5	7.4	5.4	3.9	11.2	-1.1	.3
Imports:								
Current dollars.....	22.2	19.1	29.9	13.0	35.4	22.1	-.7	-4.8
1972 dollars.....	18.4	9.4	10.8	11.0	16.5	13.9	-6.7	-6.0
Implicit price deflator.....	3.2	8.9	17.3	1.9	16.2	7.2	6.4	1.2
Chain price index.....	2.9	7.3	14.7	4.1	6.9	7.4	10.3	4.5
Fixed-weighted price index.....	2.5	7.6	13.0	4.0	8.3	8.8	8.3	5.0
Government purchases of goods and services:								
Current dollars.....	6.6	9.3	4.7	7.9	5.4	17.9	11.0	13.3
1972 dollars.....	.5	2.5	.3	.0	-1.9	10.6	6.1	4.1
Implicit price deflator.....	6.0	6.6	4.4	8.0	7.4	6.6	4.6	8.8
Chain price index.....	6.1	6.5	4.8	8.4	7.0	6.2	4.2	8.9
Fixed-weighted price index.....	5.8	6.5	4.5	8.6	6.8	6.1	5.1	8.8
Federal:								
Current dollars.....	5.5	11.8	5.6	12.6	6.6	23.3	12.9	16.4
1972 dollars.....	-2	5.0	2.5	1.6	-3	18.2	8.9	2.9
Implicit price deflator.....	5.7	6.4	3.0	10.8	6.9	4.3	3.6	13.0
Chain price index.....	5.9	6.2	3.8	12.3	5.5	3.3	2.5	13.7
Fixed-weighted price index.....	5.6	6.4	3.8	12.8	5.6	3.4	4.5	12.3
State and local:								
Current dollars.....	7.2	7.9	4.2	5.4	4.7	14.9	9.9	11.5
1972 dollars.....	1.0	1.1	-1.0	-1.0	-2.8	6.3	4.4	4.9
Implicit price deflator.....	6.2	6.8	5.2	6.4	7.7	8.1	5.3	6.3
Chain price index.....	6.1	6.7	5.4	6.3	7.9	7.9	5.2	6.2
Fixed-weighted price index.....	5.8	6.6	5.0	5.9	7.7	7.9	5.5	6.5
Addenda:								
Final sales:								
Current dollars.....	9.9	10.6	7.9	12.4	9.6	11.9	9.9	13.5
1972 dollars.....	4.5	4.7	3.4	6.3	3.8	5.1	4.4	6.8
Implicit price deflator.....	5.2	5.6	4.4	5.8	5.6	6.5	5.3	6.3
Chain price index.....	5.6	6.0	4.6	5.9	6.9	7.0	4.3	6.0
Fixed-weighted price index.....	5.6	6.1	4.8	6.0	7.1	7.0	4.9	6.1
Gross domestic product:								
Current dollars.....	11.4	10.7	8.2	6.9	12.6	13.6	10.5	11.1
1972 dollars.....	5.9	4.9	3.7	1.3	7.2	6.1	5.3	4.5
Implicit price deflator.....	5.2	5.5	4.4	5.5	5.0	7.1	4.9	6.3
Chain price index.....	5.6	5.9	4.5	6.0	6.7	7.0	4.3	6.0
Fixed-weighted price index.....	5.6	6.1	4.6	6.1	7.0	7.0	4.8	6.2
Business:								
Current dollars.....	12.0	11.1	8.6	6.2	13.3	14.9	10.9	10.6
1972 dollars.....	6.7	5.5	4.2	1.3	8.4	6.9	5.6	4.8
Implicit price deflator.....	4.9	5.3	4.2	4.9	4.5	7.5	5.1	5.6
Chain price index.....	5.4	5.8	4.3	5.4	6.5	7.5	4.3	5.2
Fixed-weighted price index.....	5.4	6.0	4.5	5.5	6.8	7.5	5.0	5.2
Nonfarm:								
Current dollars.....	12.7	11.6	9.4	7.0	13.1	16.9	11.7	-----
1972 dollars.....	7.1	5.8	3.4	1.4	9.0	8.4	4.8	4.5
Implicit price deflator.....	5.2	5.6	5.9	5.5	3.7	7.8	6.7	-----
Chain price index.....	5.5	6.1	5.6	6.5	5.5	7.5	5.6	-----
Fixed-weighted price index.....	5.6	6.3	5.9	6.7	5.8	7.5	6.2	-----
Disposable personal income:								
Current dollars.....	9.4	10.4	6.7	10.2	10.1	13.4	10.0	13.4
1972 dollars.....	3.8	4.5	1.3	4.9	3.1	7.3	4.3	8.4

^a Preliminary.

NOTE.—Table 27: The implicit price deflator for GNP is a weighted average of the detailed price indexes used in the deflation of GNP. In each period, the weights are based on the composition of constant-dollar output in that period. In other words, the price index for each item is weighted by the ratio of the quantity of the item valued in 1972 prices to the total output in 1972 prices. Changes in the implicit price deflator reflect both changes in prices and changes in the composition of output. The chain price index uses as weights the composition of output in the prior period, and, therefore, reflects only the change in prices between the two periods. However, comparisons of percent changes in the chain index also reflect changes in the composition of output. The fixed-weighted price index uses as weights the composition of output in 1972. Accordingly, comparisons over any timespan reflect only changes in prices.

Plant and Equipment Expenditures: Year 1978

NEW plant and equipment expenditures by business are expected to total \$150.9 billion in 1978, 10.1 percent more than in 1977, according to the survey conducted by BEA in late November and December (table 1). This survey is the first BEA survey that covers the year 1978. Estimated 1977 spending, based on the survey conducted a month earlier, is \$137.0 billion, 13.7 percent more than in 1976.¹

These figures are not adjusted for price change. BEA began collecting estimates of capital goods price changes from survey respondents in 1970. In the present survey, respondents estimated that prices of capital goods purchased by them increased 8 percent in 1977, and they expect a similar increase in 1978 (table 2).² The survey results have usually indicated larger actual price increases than the implicit price deflator for the fixed nonresidential investment

component of GNP. The deflator is considered to be a more reliable measure of actual price increases, because the survey may reflect the estimates of officials at companies' central offices who typically have little information on which to base such estimates. The deflator increased about 5½ percent in 1977, suggesting that real spending on plant and equipment increased 8 percent. If capital goods prices increase another 5½ percent in 1978, an increase in real spending of 4½ percent for 1978 is implied by the survey results.

Annual surveys taken in November-December have been reported for the past 8 years. Planned spending exceeded actual spending in 4 years and fell short of it in 4 (chart 5); the average deviation between planned and actual spending was 1.4 percent. The percentages by which planned spending exceeded actual spending were largest in the recession years 1970 and 1975. If the preliminary estimate of 1977 spending is realized, spending plans for 1977 would show a shortfall of 1½ percent—the largest on record.

Table 1.—Expenditures for New Plant and Equipment by U.S. Business¹

	1976	1977 ^a	1978 ²	1976-77	1977-78
	Billions of dollars			Percent change	
All industries	120.49	137.02	150.89	13.7	10.1
Manufacturing	52.48	61.03	67.35	16.3	10.4
Durable goods	23.68	28.26	31.57	19.3	11.7
Primary metals ³	5.97	5.89	6.16	-1.3	4.6
Blast furnaces, steel works.....	2.99	2.82	2.74	-5.9	-2.5
Nonferrous metals.....	2.16	2.25	2.50	3.7	11.4
Electrical machinery.....	2.62	3.30	3.72	26.0	12.7
Machinery, except electrical.....	5.03	5.86	6.77	16.6	15.6
Transportation equipment ³	3.62	5.27	5.96	45.6	13.0
Motor vehicles.....	2.45	4.02	4.48	63.9	11.5
Aircraft ⁴.....	.94	1.00	1.24	6.4	23.4
Stone, clay, and glass.....	1.72	2.04	2.33	18.8	14.3
Other durables ⁵	4.73	5.90	6.63	24.7	12.4
Nondurable goods	28.81	32.77	35.78	13.8	9.2
Food including beverage.....	3.75	4.15	4.59	10.8	10.5
Textiles.....	.81	.93	1.05	14.6	12.3
Paper.....	3.27	3.40	3.64	3.9	7.2
Chemicals.....	6.68	6.90	7.38	3.4	6.9
Petroleum.....	11.62	14.18	15.35	22.1	8.2
Rubber.....	1.10	1.44	1.62	31.4	12.3
Other nondurables ⁶	1.58	1.76	2.16	11.0	23.0
Nonmanufacturing	68.01	75.99	83.54	11.7	9.9
Mining.....	4.00	4.44	5.27	11.1	18.6
Railroad.....	2.52	2.90	3.34	15.2	15.2
Air transportation.....	1.30	1.68	2.17	29.3	28.9
Other transportation.....	3.63	2.41	1.88	-33.5	-21.9
Public utilities.....	22.28	26.14	29.27	17.3	12.0
Electric.....	18.80	21.74	24.25	15.6	11.5
Gas and other.....	3.47	4.40	5.02	26.5	14.1
Communication, commercial, and other ⁷	34.29	38.42	41.61	12.0	8.3

^a Preliminary.

1. Excludes agricultural business; real estate; medical, legal, educational, and cultural services; and nonprofit organizations.

2. Estimates are based on planned capital expenditures reported by business in late November and December 1977. The estimates of expected expenditures for 1978 have been corrected for biases.

3. Includes industries not shown separately.

4. Includes guided missiles and space vehicles.

5. Consists of fabricated metal, lumber, furniture, instruments, and miscellaneous.

6. Consists of apparel, tobacco, leather, and printing-publishing.

7. Includes trade, service, construction, finance, and insurance.

1. For estimates of prior years, see pages 25-40 of "Revised Estimates of New Plant and Equipment Expenditures, 1947-69: Part I" in the January 1970 SURVEY OF CURRENT BUSINESS and the March 1970, 1972, 1974, and 1976 SURVEY issues.

The estimate for 1977 is based on actual expenditures in the first three quarters plus plans for the fourth quarter. The plans were adjusted for systematic biases by procedures described on pages 36-39 of the February 1970 SURVEY.

The 1978 plans were adjusted for systematic biases. Before adjustment, plans were \$68.13 billion for manufacturing and \$83.80 billion for nonmanufacturing; the net effect of the adjustments was to lower manufacturing \$0.78 billion and to lower nonmanufacturing \$0.26 billion. The bias adjustments, which are computed separately for each major industry, were applied only when plans deviated from actual spending in the same direction for 5 of the last 7 years. In these cases, the adjustment used was the median deviation between actual and planned spending in the last 5 years.

2. Respondents were asked:

"What are your best estimates of average price changes from 1976 to 1977 and expected price changes from 1977 to 1978:

"a. Prices paid by your company for new construction, machinery, and equipment.

"b. Prices of goods and/or services sold by your company."

Similar information was obtained in the corresponding annual surveys conducted since 1970. The companies' responses on capital goods and sales price changes were weighted by their reported capital expenditures and sales, respectively.

Table 2.—Change in Prices of Capital Goods Purchased

[Percent change from preceding year]

	Reported in Nov.-Dec. 1976 survey		Reported in Nov.-Dec. 1977 survey	
	Actual 1976	Expected 1977	Actual 1977	Expected 1978
All Industries	8.3	7.9	7.8	7.9
Manufacturing	8.1	8.0	7.8	7.9
Durable goods.....	8.0	7.7	7.8	7.6
Nondurable goods.....	8.1	8.2	7.8	8.2
Nonmanufacturing	8.4	7.9	7.8	7.9
Mining.....	11.1	10.1	10.3	10.0
Transportation.....	8.8	8.2	8.3	8.2
Public utilities.....	8.7	7.9	7.5	7.7
Communication, commercial, and other.....	7.8	7.5	7.5	7.8

The 1978 spending plans show moderate increases for both manufacturing and nonmanufacturing. In manufacturing, durable goods industries generally plan larger increases than nondurables. In nonmanufacturing, all industry groups except "other transportation" plan sizable increases.

Spending plans for manufacturing are \$67.4 billion, 10½ percent more than spending in 1977; there was a

16.3-percent increase in 1977. The largest increases in 1978 spending are planned by aircraft (23½ percent), "other nondurables" (23 percent), and nonelectrical machinery (15½ percent). Increases between 10 and 14 percent are planned by stone-clay-glass, electrical machinery, rubber, textiles, "other durables," motor vehicles, nonferrous metals, and food-beverage. Other manufacturing industries plan smaller increases except iron and steel, which plans a small decrease.

The smaller increase in manufacturers' planned spending for 1978, compared with last year's actual spending increase, is more than accounted for by four major industries—motor vehicles, rubber, electrical machinery, and petroleum. This year, these four industries plan to increase their spending only \$2.2 billion compared with a \$5.1 billion increase last year.

Spending by nonmanufacturing industries as a whole is expected to increase 10 percent, to \$83.5 billion; last year, spending increased 11½ percent. Air transportation companies plan

Table 3.—Change in Business Sales

[Percent change from preceding year]

	1977		1978	
	Expected as reported in:		Actual	Expected as reported in:
	Dec. 1976	Feb. 1977			Dec. 1977
Manufacturing	10.9	10.3	12.8	10.2
Durable goods ¹	11.9	11.2	14.6	10.7
Primary metals.....	14.6	14.2	10.2	12.2
Electrical machinery.....	12.6	12.4	14.5	10.5
Machinery, except electrical.....	9.7	11.2	10.2	10.1
Transportation equipment.....	13.3	10.2	22.0	10.9
Stone, clay, and glass.....	8.8	9.3	15.1	10.5
Nondurable goods ¹	10.0	9.4	10.9	9.7
Food including beverage.....	8.4	7.0	5.8	8.1
Textiles.....	5.9	5.8	12.6	8.2
Paper.....	11.5	10.1	8.0	9.5
Chemicals.....	14.5	12.8	10.8	11.8
Petroleum.....	9.9	10.5	17.4	10.6
Rubber.....	19.6	16.1	14.2	11.1
Trade	8.9	9.1	10.1	10.4
Wholesale.....	8.4	8.1	10.3	10.2
Retail.....	9.2	9.7	10.0	10.7
Public utilities	15.3	14.4	18.8	11.0

1. Includes industries not shown separately. Sources: Manufacturing data from Bureau of the Census, Current Industrial Reports, Series M-3, for first 10 months of 1977, and BEA estimates for November and December 1977. Trade data are from Bureau of the Census, Current Business Reports, Monthly Wholesale Trade and Monthly Retail Trade, and BEA estimates for November and December 1977. Public utility figures are estimated by BEA on basis of data collected in the annual business investment surveys.

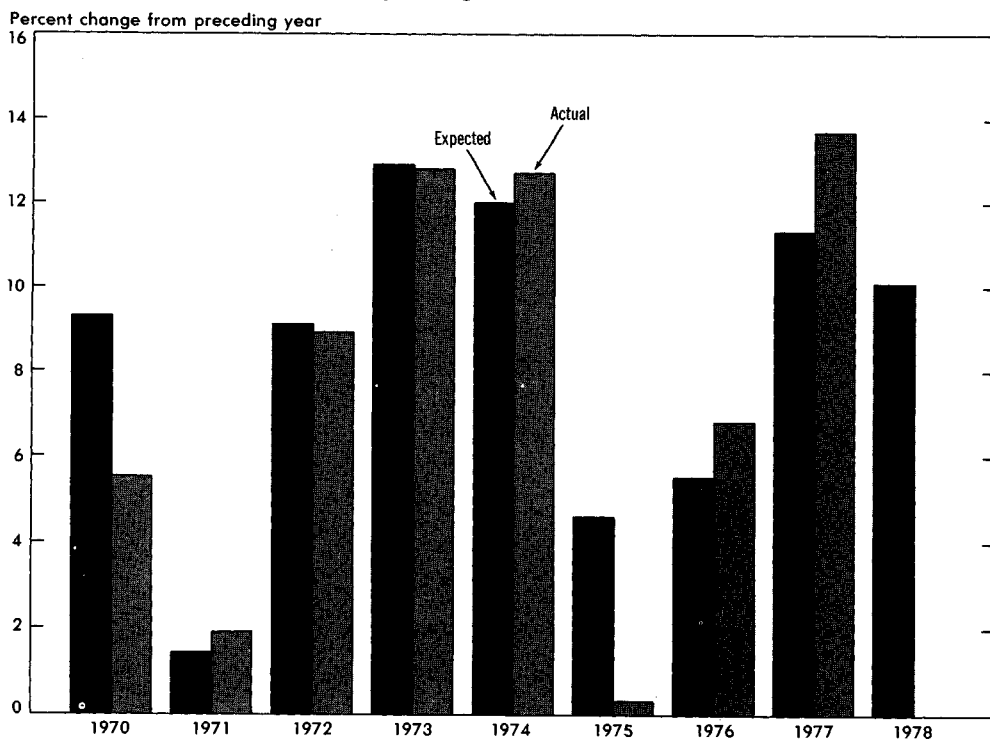
a 29-percent increase, the same as last year's actual increase. Mining companies plan an 18½-percent increase and railroads, 15 percent. Gas utilities plan a 14-percent increase after a 26½-percent increase last year. Electric utilities also plan a smaller increase than occurred last year—11½ percent compared with 15½ percent. Spending by the "other transportation" group is planned to decline 22 percent; spending in 1978 is about half that in 1976 when outlays for the Trans-Alaska pipeline were at a peak.

(Continued on page 44)

Table 4.—Change in Prices of Products and Services Sold by Manufacturing and Utility Companies

[Percent change from preceding year]

	Reported in Nov.-Dec. 1976 survey		Reported in Nov.-Dec. 1977 survey	
	Actual 1976	Expected 1977	Actual 1977	Expected 1978
Manufacturing	5.4	5.7	5.9	6.0
Durable goods.....	5.8	6.1	6.1	6.2
Nondurable goods.....	5.0	5.3	5.6	5.8
Public utilities	12.9	11.7	12.0	7.9

Expected and Actual Capital Spending

NOTE.—Expected spending estimates are from November-December surveys. Estimate of 1977 actual spending is preliminary. U.S. Department of Commerce, Bureau of Economic Analysis

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Regional Patterns of Change in Nonfarm Income in Recession and Expansion

FROM the fourth quarter of 1973 to the third quarter of 1977, nonfarm income increased faster than the national average in the southern and western BEA regions (Southwest, Rocky Mountain, Far West, Plains, and Southeast) and more slowly than the national average in the Northeast-Great Lakes BEA regions (Great Lakes, New Eng-

land, and Mideast). This period extends from the national cyclical peak to the most recent quarter for which regional income estimates are available, and may be divided into a recession phase, dating to the national cyclical trough in the first quarter of 1975, and an expansion phase, dating from that trough. In general, the regional pat-

tern of change that characterizes the whole period also characterizes both the recession and the expansion (chart 6). However, regional differences in the rates of increase in nonfarm income were wider in the recession than in the expansion: In the recession, the rates ranged from 19 percent above the national average for the southern and

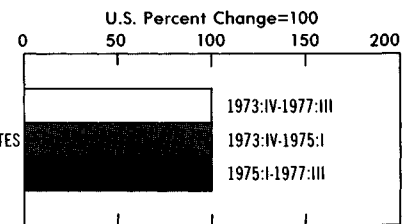
Table A.—Percent Change in Nonfarm Income and Selected Components

Ranked by gain in nonfarm income 1973:IV-1977:III	Nonfarm income	Wage and salary disbursements			
		Manufac- turing	Construc- tion	State and local govern- ment	Private service-type industries ¹
1973:IV-1977:III					
United States.....	43.4	31.6	17.7	41.7	43.1
Southern and western regions:					
Southwest.....	54.1	50.6	49.8	51.0	55.4
Rocky Mountain.....	51.8	42.3	22.3	52.9	54.9
Far West.....	49.7	35.1	38.0	47.7	52.4
Plains.....	45.9	38.3	36.4	43.2	47.1
Southeast.....	44.7	37.0	11.0	46.0	43.4
Average.....	49.2	40.7	31.5	48.2	50.6
Northeast-Great Lakes regions:					
Great Lakes.....	41.1	30.5	19.5	38.4	40.3
New England.....	37.3	28.0	-12.3	30.0	36.8
Mideast.....	36.7	21.2	-5.7	35.2	33.9
Average.....	38.4	26.6	.5	34.5	37.0
1973:IV-1975:I					
United States.....	11.9	1.9	-.3	12.7	11.7
Southern and western regions:					
Southwest.....	17.0	12.8	10.7	16.4	16.5
Rocky Mountain.....	14.3	11.4	-2.5	15.7	14.4
Far West.....	15.1	5.9	.9	14.6	14.3
Plains.....	13.2	7.4	7.1	11.0	12.9
Southeast.....	11.6	-1.2	-3.6	14.9	10.7
Average.....	14.2	7.3	2.5	14.5	13.8
Northeast-Great Lakes regions:					
Great Lakes.....	8.6	-2.7	-1.0	11.0	10.6
New England.....	9.8	3.7	-12.0	8.5	9.3
Mideast.....	10.9	3.0	-6.8	10.9	9.6
Average.....	9.8	1.3	-6.6	10.1	9.8
1975:I-1977:III					
United States.....	28.2	29.1	18.0	25.8	28.1
Southern and western regions:					
Southwest.....	31.6	33.6	35.3	29.6	33.4
Rocky Mountain.....	32.7	27.7	25.5	32.1	35.4
Far West.....	30.1	27.6	36.7	28.9	33.3
Plains.....	28.9	28.7	27.3	29.0	30.2
Southeast.....	29.7	38.7	15.1	27.0	29.6
Average.....	30.7	31.3	28.0	29.3	32.4
Northeast-Great Lakes regions:					
Great Lakes.....	29.9	34.0	20.7	24.7	26.9
New England.....	25.0	23.5	-.3	19.8	25.1
Mideast.....	23.2	17.7	1.2	21.9	22.2
Average.....	26.0	25.1	7.2	22.1	24.7

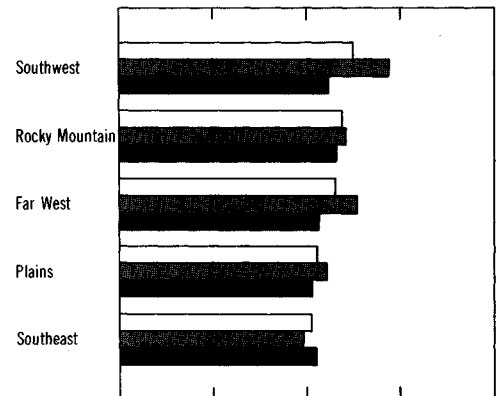
1. Consists of wholesale and retail trade, the finance-insurance-real estate group, the transportation-communication-public utilities group, and services.

CHART 6

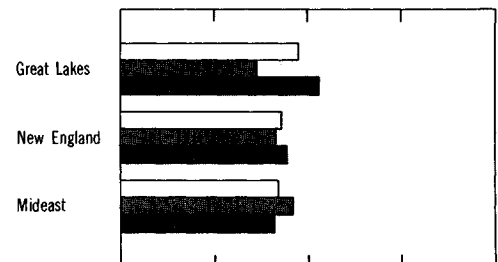
Changes in Nonfarm Income Since Late 1973



Most regions that grew at rates above national average did well in recession and in expansion



Most regions that grew at rates below national average did poorly in recession and in expansion



western group to 18 percent below the average for the Northeast-Great Lakes group; in the expansion, the respective rates ranged from only 9 percent above the average to 8 percent below.¹

In four of the five southern and western regions (the Southwest, Rocky Mountain, Far West, and Plains) the growth advantage—the percent by which the rate of increase in nonfarm income exceeded the national average—was larger in the recession than in the expansion. Nearly all major industrial components of nonfarm income (wage and salary disbursements in manufacturing, construction, State and local government, and private service-type industries) increased faster than the national average, and thus supported the growth advantage in the recession; all major components except manufacturing supported the advantage in the expansion (table A). The Southeast, in contrast, had a growth disadvantage (the percent by which the rate of increase in nonfarm income fell short of the national average) in the recession; it was slight and was mainly due to declines in manufacturing (especially textiles) and construction. With sharp improvement in manufacturing (both durables and nondurables), the Southeast showed a growth advantage in the expansion.

The patterns of change were less uniform among the three Northeast-Great Lakes regions. The Great Lakes had the largest growth disadvantage in the recession; the size of the disadvantage reflected severe weakness in manufacturing—especially in the automobile-manufacturing States of Michigan, Ohio, and Indiana—and in construction. In contrast, this region showed a growth advantage in the expansion. It was the only one of the three regions to do so, and the reversal reflected sharp turnarounds in automobile manufacturing and construction and increases nearer to the national average in State and local government and private service-type industries. In New England, the growth disadvantage was smaller in the expansion than in the

recession, as private service-type industries and State and local government increased at rates nearer to the national average. In the Mideast, the disadvantage was larger in the expansion, due to weakness in manu-

facturing and private service-type industries. Such weakness was especially evident in New York, which lost manufacturing plants in the face of high tax burdens and high labor and fuel costs.

Table 1.—Total Personal Income, States and Regions

(Millions of dollars, seasonally adjusted at annual rates)

State and region	1976				1977		
	I	II	III	IV	I	II	III
United States	1,340,368	1,368,559	1,392,927	1,427,974	1,470,257	1,510,902	1,543,524
New England	78,300	79,241	81,373	83,232	85,503	87,519	89,557
Connecticut.....	22,523	22,546	23,147	23,707	24,340	24,880	25,510
Maine.....	5,571	5,694	5,806	5,975	6,141	6,298	6,425
Massachusetts.....	37,134	37,698	38,679	39,492	40,548	41,486	42,383
New Hampshire.....	4,718	4,814	4,985	5,131	5,275	5,459	5,617
Rhode Island.....	5,825	5,916	6,119	6,224	6,427	6,526	6,690
Vermont.....	2,527	2,578	2,637	2,703	2,764	2,869	2,932
Mideast	289,681	294,281	300,842	306,782	313,510	321,228	328,167
Delaware.....	4,078	4,244	4,257	4,395	4,329	4,452	4,571
District of Columbia.....	5,861	5,982	6,107	6,326	6,367	6,481	6,600
Maryland.....	28,288	28,844	29,326	30,185	30,678	31,513	32,145
New Jersey.....	51,947	52,668	53,771	54,921	56,412	58,053	59,342
New York.....	125,258	126,682	129,804	131,846	135,057	137,467	140,270
Pennsylvania.....	74,250	75,860	77,577	79,110	80,667	83,262	85,289
Great Lakes	268,606	275,699	280,865	287,135	295,946	307,404	312,892
Illinois.....	81,124	82,665	84,275	85,774	88,288	91,470	93,070
Indiana.....	31,949	33,111	33,436	34,203	35,356	36,799	37,239
Michigan.....	60,716	63,240	64,271	66,483	68,477	71,147	72,599
Ohio.....	66,535	68,111	69,576	70,813	72,981	76,040	77,309
Wisconsin.....	28,282	28,572	29,307	29,862	30,844	31,979	32,676
Plains	99,670	103,102	103,739	105,577	109,372	112,176	114,115
Iowa.....	17,750	18,616	18,854	18,693	19,706	20,164	20,275
Kansas.....	14,656	15,003	14,967	15,386	15,998	16,372	16,668
Minnesota.....	23,458	24,325	24,625	25,166	25,977	26,685	27,147
Missouri.....	27,782	28,519	28,896	29,574	30,410	31,322	32,120
Nebraska.....	9,373	9,828	9,673	9,889	10,185	10,431	10,578
North Dakota.....	3,429	3,526	3,433	3,506	3,604	3,675	3,706
South Dakota.....	3,223	3,285	3,291	3,362	3,493	3,527	3,622
Southeast	259,376	264,744	268,573	275,548	285,390	293,617	299,356
Alabama.....	18,216	18,518	18,712	19,396	20,080	20,631	21,100
Arkansas.....	10,572	10,734	10,644	10,850	11,454	11,891	12,040
Florida.....	50,061	50,767	51,551	53,358	54,777	56,046	57,361
Georgia.....	26,862	27,508	27,790	28,602	29,458	30,224	30,818
Kentucky.....	17,976	18,436	18,832	19,109	20,003	20,761	21,022
Louisiana.....	20,128	20,816	20,546	21,266	22,227	22,868	23,111
Mississippi.....	10,470	10,824	10,724	11,064	11,611	11,918	12,157
North Carolina.....	28,553	29,309	30,169	30,295	31,900	32,650	33,545
South Carolina.....	14,136	14,380	14,782	15,099	15,530	15,978	16,302
Tennessee.....	22,243	22,703	23,048	23,582	24,413	25,095	25,660
Virginia.....	30,548	31,155	31,858	32,761	33,543	34,373	35,276
West Virginia.....	9,611	9,594	9,917	10,165	10,394	10,782	10,963
Southwest	109,299	111,817	113,380	117,112	120,129	123,178	126,472
Arizona.....	12,810	12,977	13,273	13,771	14,173	14,419	14,707
New Mexico.....	5,899	6,014	6,104	6,338	6,495	6,674	6,849
Oklahoma.....	15,194	15,411	15,690	16,303	16,717	17,234	17,746
Texas.....	75,396	77,415	78,313	80,701	82,744	84,851	87,171
Rocky Mountain	34,183	34,429	35,415	36,469	37,704	38,626	39,376
Colorado.....	16,299	16,635	16,868	17,387	17,886	18,347	18,682
Idaho.....	4,721	4,363	4,999	4,941	5,216	5,317	5,363
Montana.....	4,159	4,207	4,132	4,363	4,518	4,648	4,699
Utah.....	6,452	6,636	6,795	7,041	7,243	7,376	7,598
Wyoming.....	2,553	2,589	2,620	2,737	2,841	2,938	3,035
Far West	191,571	195,299	198,676	205,854	212,255	217,038	223,013
California.....	149,245	152,160	154,868	160,421	165,046	169,066	173,862
Nevada.....	4,295	4,388	4,518	4,699	4,909	5,027	5,192
Oregon.....	14,288	14,539	14,781	15,367	15,968	16,551	16,468
Washington.....	23,743	24,312	24,509	25,367	26,332	26,794	27,491
Alaska.....	3,661	3,928	3,965	3,999	3,994	3,939	3,888
Hawaii.....	6,021	6,019	6,099	6,265	6,454	6,576	6,685
	Census regions						
Addenda:							
New England.....	78,300	79,241	81,373	83,232	85,503	87,519	89,557
Middle Atlantic.....	251,454	255,210	261,152	265,876	272,137	278,783	284,851
East North Central.....	268,606	275,699	280,865	287,135	295,946	307,404	312,892
West North Central.....	99,670	103,102	103,739	105,577	109,372	112,176	114,115
South Atlantic.....	197,998	201,783	205,758	211,187	216,976	222,498	227,582
East South Central.....	68,905	70,482	71,315	73,151	76,107	78,406	79,939
West South Central.....	121,289	124,376	125,193	129,120	133,142	136,844	140,068
Mountain.....	57,188	57,808	59,310	61,277	63,281	64,747	66,123
Pacific.....	196,958	200,858	204,222	211,420	217,794	222,525	228,395

1. The range of the rate of increase in nonfarm income has been wider in recession than in expansion in the other post-war business cycles as well. See "Sensitivity of State and Regional Income to National Business Cycles," SURVEY OF CURRENT BUSINESS, April 1973.

NOTE.—The quarterly State income series have not yet been revised to reflect the benchmark revisions of the annual State series published in the August 1977 SURVEY. The revised quarterly series (1958-77) will be available in early summer. The quarterly estimates of State personal income were prepared by Robert L. Brown and Robert Lipovsky with the aid of Frances B. Actie and Q. Francis Dallavalle under the supervision of Kenneth P. Berkman.

Effects of Selected Changes in the Institutional and Human Environment Upon Output Per Unit of Input

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Summary

IN the last decade, the institutional and human environment within which business must operate has changed in several ways that adversely affect output per unit of input. This article examines the effects of three such changes: (1) New requirements to protect the physical environment against pollution; (2) increased requirements to protect the safety and health of employed persons; (3) a rise in dishonesty and crime. The common characteristic of these changes is that they have reduced the measured output that is produced by any given amount of input. By "measured" output, I mean national income or net national product as defined by the Bureau of Economic Analysis.

By 1975, the last year for which this article provides estimates, output per unit of input in the nonresidential business sector of the economy was 1.8 percent smaller than it would have been if business had operated under 1967 conditions. Of this amount, 1.0 percent is ascribable to pollution abatement and 0.4 percent each to employee safety and health programs and to the increase in dishonesty and crime. The reductions had been small in 1968-70 but were rising rapidly in the 1970's. The increase in their size cut the annual change in output per unit

(See footnotes at end of article)

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of input from 1972 to 1973 by 0.2 percentage points, the change from 1973 to 1974 by 0.4 percentage points, and the change from 1974 to 1975 by 0.5 percentage points.

A reduction of 0.5 percentage points in the annual growth rate, the reduction reached by 1975, is equal to a large fraction of the growth rates that have been achieved in the past. For example, it is equal to nearly one-fourth of the annual growth rate of output per unit of input from 1948 to 1969 (2.1 percent) and nearly one-fifth of the growth rate of output per person employed during that timespan (2.6 percent). The fractions are even larger if comparisons are made with more recent growth rates, which are lower for other reasons besides the impact of pollution abate-

ment, employee safety programs, and crime.

The purpose of this article is to aid analysis of growth and productivity; it is not to judge the wisdom of government programs, which have benefits as well as costs. It must also be stressed that, as the article explains, many of the costs occasioned by pollution abatement, employee safety and health programs, and dishonesty and crime do not reduce output per unit of input and therefore are not included in cost estimates cited. In particular, costs imposed directly upon governmental units and consumers do not have this effect. A major part of the estimating process was the division of costs between those that change output per unit of input and those that do not.

tion and of changes in a variety of miscellaneous determinants. In *Accounting*, I expressed a tentative judgment (which still seems correct) that in the period covered changes in miscellaneous determinants had only a small net effect on the residual index, so that its growth rate provided an approximation to the contribution that the incorporation of knowledge into production had made to the growth rate of output. But I continued as follows:

“Let me stress that this judgment does not necessarily extend to the period since 1969 or the years immediately ahead. Several changes that do or may affect measured productivity adversely (which is not a criterion by which to assess their desirability) are now taking place, simultaneously and over a brief timespan. Most prominent are major and far-reaching controls for environmental protection which require firms to use labor and capital for protection of the environment that could otherwise be used to provide measured output. The cost of the required measures is higher in the short run than it is likely to be in the long run because of the need to develop appropriate new technology and different sources of supply; because of immobility; and because delays in securing approval for new plants threaten to cause shortages of some products, especially fuels and power, that are used by other firms.

“Major new legislation to promote employee and consumer safety is a second source of increased costs. A third source has been a rise in the incidence of crime, particularly holdups of business establishments, thefts of their merchandise (including shoplifting), and embezzlement. Wage and price controls—introduced in 1971, relaxed in 1972, and subsequently reimposed and again liberalized—are a possible fourth source. If long continued they may raise overhead costs, distort resource allocation, and introduce uneconomic labor turnover.”³

To interpret the recent behavior of the residual, or indeed of any productivity measure, one needs estimates of the amount by which it has been affected by such changes. Estimates are

Part 1: Introduction

This article presents estimates of the effect upon output per unit of input in the nonresidential business sector of three changes in the institutional and human environment within which business operates. It is part of a comprehensive study of the sources of economic growth. That broader study will revise and update series developed in my previous publication, *Accounting for United States Economic Growth 1929-1969* (hereafter cited as *Accounting*).¹ I begin with a short explanation of how this article fits into the broader framework.

The size of any nation's output is governed by many determinants. They include the number, composition, and skills of persons engaged in production, and the capital and land that workers use—that is to say, all of the “inputs” used in production. They also include the existing state of knowledge as to how to produce at low cost, the size of markets served, the efficiency with which resources are allocated among uses, and many other conditions that may affect the amount of output that is obtained from a given amount of input.

In *Accounting*, the growth rate of output in nonresidential business was

divided between changes in input and changes in output per unit of input. Changes in output per unit of input were then allocated among seven determinants, or groups of determinants.² Examples are changes in the extent to which labor was overallocated to agriculture, and economies of scale made possible by the growth of markets. For each determinant, an index was computed that measured the course that output per unit of input would have taken if nothing had changed except that determinant. Six indexes were estimated directly; the seventh index, labeled “advances in knowledge and all other determinants,” was obtained by dividing the index of output per unit of input by the first six indexes. Consequently, the seventh index captures the effects of all output determinants that were not separately estimated; it may be described as the residual in the analysis of the sources of growth. It had a growth rate of 1.4 percent a year from 1948 to 1969 and rose at a fairly steady rate during this period.

This residual index was defined as a measure of the joint effects of the incorporation of knowledge into produc-

provided here for three that seemed especially likely to be important. One is the imposition of government controls to protect and improve the physical environment. The second is the controls to protect the safety and health of workers.⁴ The third is the increase in dishonesty and crime among employees, customers, and the public. The effects of other changes in the

environment within which business must operate are not examined here.⁵

The series reported for the effects of the three changes upon productivity rest on less adequate information than one would like, and are by no means precise. Nevertheless, they are believed sufficient to add appreciably to understanding of recent productivity experience.

Part 2: Costs Incurred To Protect the Physical Environment

Legislation relating to pollution passed prior to the mid-1960's—the Water Pollution Control Act of 1948, with amendments in 1956; the Air Pollution Control Act of 1955; and the Clean Air Act of 1963—expressed governmental concern about pollution but did not importantly affect business costs. Subsequent legislation did. At the Federal level, this legislation included the Water Quality Act of 1965 and the 1972 Water Pollution Act Amendments, the Motor Vehicle Air Pollution Control Act of 1965, the Air Quality Act of 1967, the Clean Air Amendments of 1970, numerous amendments to these basic air and water pollution laws, and provisions affecting other types of pollution. State and local governments have also introduced new laws and regulations and more vigorous enforcement of existing provisions. The effect of the new environmental controls was not immediate and their impact upon business costs and productivity can be ignored through 1967. I attempt annual estimates beginning with 1968; they are meant to cover controls imposed by all levels of government.

A General Explanation of the Estimating Procedure

Some of the expenditures made to protect the environment reduce measured output per unit of input. The reason is that the labor and capital whose services they purchase provide no measured output whereas they

would have done so if not diverted to environmental protection. Measured output refers to products that are counted as final products in the national income and product accounts (NIPA's). My objective is to calculate the effect of changes in environmental expenditures upon an index of output per unit of input. To do this for any period, one must know the percentages by which environmental expenditures reduced measured output per unit of input at both the beginning and end of the period, or at least the amount by which the percentage changed during the period. This section provides a general explanation of the estimating procedure. It is followed by a detailed description of sources and methods, and the actual estimates.

The proportion of inputs diverted from production of measured output

The estimates rely on the presumption, common in economic analysis, that if purchases of any commodity represent a certain percentage of the value of the Nation's output, then the percentage of the Nation's total factor input that is used to produce that commodity is about the same. Consequently, percentage distributions of output and input are similar. In this formulation total factor input refers to a combined measure of labor, capital, and land. To calculate total factor input, these three factors of production, and the various types of each factor, are combined by using their earnings as weights.

The percentage distribution of total factor input corresponds to the percentage distribution of output more closely if output is valued at factor cost—that is to say, as the sum of the earnings, including profit, of labor and property—than if it is valued at market prices, which also include indirect business taxes. When measured net of depreciation, the factor cost measure is called national income (NI) and the market price measure, net national product (NNP).

Measured output per unit of total factor input (henceforth, simply "input") is reduced if there is an increase in the proportion of input that is used in activities that do not contribute to the production of products counted as final products. This occurs when certain types of purchases for pollution abatement and control (PAC) increase relative to purchases of goods and services that are counted as final products.

Because only certain types of expenditures for PAC divert input from production of measured output, and thus reduce output per unit of input, environmental expenditures must be divided between those that have this effect and those that do not.

When the costs of environmental protection are borne by government or by consumers, diversion of expenditures and inputs to environmental protection does not reduce measured output per unit of input. This is so because purchases of goods and services for environmental protection by government and consumers, like all their other purchases, are counted as final products. Consequently, such purchases merely replace other final products that could have been produced by the inputs absorbed by environmental protection.

In contrast, costs of environmental protection that are incurred by business on current account, whether for purchases from other enterprises or for the direct hiring of labor, are not counted as purchases of final products. Because they absorb inputs that would otherwise be used to produce final products, the diversion of inputs to environmental protection lowers output per unit of input below what it would have been in the absence of the diversion. The

dollar cost of the environmental expenditures, when expressed as a percentage of measured output plus these expenditures themselves, measures both the percentage of input diverted to unmeasured production and the percentage reduction in measured output per unit of input that they cause.

Capital goods acquired by business for pollution abatement are counted as final products when they are purchased, so their production in place of other final products does not immediately reduce measured output per unit of input. What does reduce measured output per unit of input is the use of part of the stock of capital for pollution abatement, because the proportion of the stock of capital goods present at any date that business devotes to pollution abatement is not available to produce products that are counted as final. Given the total stock of capital, measured output is reduced by the value of the services that this capital would have provided if used to produce final products.

This value is measured as the sum of depreciation on pollution abatement capital and an imputed net return on this capital. It represents the opportunity cost of using capital for pollution abatement. Depreciation is calculated directly for pollution abatement capital, using a formula (the straight-line method), service lives, and procedures as consistent as practical with those used in the NIPA's. The imputed net return, which I call the net opportunity cost of using capital for pollution abatement, is calculated as the product of the net stock of pollution abatement capital and the ratio of earnings net of depreciation to the net capital stock that is observed for capital in general.

The business sector in the NIPA's can be divided between the services of dwellings and nonresidential business. This article is confined to nonresidential business so environmental expenditures associated with dwellings, chiefly for trash collection and sewage disposal, must be omitted from the aggregate used.

I now summarize the discussion to this point. PAC costs incurred by government and consumers, and PAC costs arising from the use of dwellings,

must be omitted in appraising the effect of programs for environmental protection on output per unit of input in nonresidential business; only PAC costs incurred by nonresidential business enterprises need to be considered. Viewed from the standpoint of a pollution-abating enterprise, PAC costs are the cost of the labor it hires directly for PAC, depreciation on the capital it uses for PAC and the net opportunity cost of this capital, and payments to other firms for materials and services that are purchased for PAC (which represent returns to the labor and capital used by such suppliers).⁶ Summed for all enterprises, these PAC costs provide an estimate of the amount by which the value of measured output is reduced by outlays for environmental protection.

Classification of costs between government and consumers, on the one hand, and business, on the other, usually is clearcut and can be based on who makes the expenditure in the first instance. But this is not necessarily so in exceptional cases when, as the result of the initial business expenditure, there is a recognizable change in a final product. Pollution abatement devices installed in motor vehicles (autos and trucks) are the outstanding example. Such devices add to the unit values of motor vehicles but they do not raise motor vehicle prices as measured by the Bureau of Labor Statistics (BLS) and the Bureau of Economic Analysis (BEA). This is so because these agencies consider that the difference in unit value between vehicles with and without these devices represents a difference in real product rather than in price. The outcome is the same as if purchasers bought the pollution abatement devices separately from vehicles. Consequently, the devices on vehicles bought by consumers and government must be classified in the category of PAC purchases by these groups (and omitted from expenditures that reduce output per unit of input) while devices on vehicles bought by business must be classified as capital outlay for pollution abatement equipment by business (and included in the stock of pollution abatement capital against which depreciation and net opportunity cost are charged).

Use of incremental costs

Business incurred costs for disposal of sewage and solid wastes and to limit air, water, and other forms of pollution before 1967 and would have continued to do so in the absence of new environmental controls. Consequently, the total cost of pollution abatement must be distinguished from the incremental cost.

Total cost, as I shall use the term, refers to the concept that BEA uses when it provides estimates of national expenditures for PAC. It is, in brief, the difference between costs with techniques actually used and costs that would be incurred with the minimum cost method that business would choose if it were indifferent to pollution.⁷

By incremental cost, I mean the excess of total cost over a baseline cost that may be defined either as (1) the cost that would have been incurred in the absence of an increase in the stringency of environmental requirements since 1967, or (2) the cost that would have been incurred if the 1967 level of abatement costs had continued unchanged after allowance for growth and price level changes. These two alternative definitions, it may be noted, are not precisely synonymous, but data are not sufficiently refined to permit any distinction between them to be drawn in practice.

To obtain the effect of increased pollution controls upon an index of output per unit of input, one must know incremental costs. In this article, these are sometimes calculated by measuring directly the incremental costs that were occasioned by changes in requirements and sometimes by estimating both total costs and baseline costs and subtracting to obtain incremental costs.

Numerical illustration of effects on output per unit of input

Use of the incremental cost estimates will now be illustrated with some hypothetical numbers. As a preliminary, I note that—as in the broader study of which this is a part—output is measured by NI, which is the same as net national product valued at factor cost. Use of NI rather than some other output measure, such as gross or net national product at market price, in-

fluences my procedures to a minor degree.

Suppose now that incremental costs incurred for environmental protection of types that must be counted, which were zero by definition in 1967, reached \$3 billion in 1972 and \$10 billion in 1975. Suppose also that measured NI originating in nonresidential business was \$597 billion in 1972 and \$990 billion in 1975. In the absence of a diversion of resources to environmental protection, the sector's measured NI would have been the sum of these amounts, \$600 billion in 1972 and \$1,000 billion in 1975. Therefore, the change in environmental protection conditions after 1967 reduced output per unit of input in nonresidential business 0.5 percent in 1972 and 1.0 percent in 1975. The same statement can be made about total output in the sector only if the change in provision for environmental protection did not change the amount of total input.⁸ But such a qualification is not needed when the percentages are used, as I do use them, to measure effects on output per unit of input, because an induced change in total input would change total output rather than output per unit of input.⁹

Since output is valued at factor cost, costs of environmental protection must also be valued at factor cost if the percentages are to be correct. If, instead, environmental costs are valued at market price, which is normally higher, the percentages will be too high unless NNP is substituted for NI when the percentages are computed.

The percentages should be based on data in current (as distinguished from constant) prices, as is usually the case in resource-allocation calculations. The reason is that relative prices of products each year should reflect the relative quantities of inputs required for their production in the same year, not in some earlier or later year.

Subtraction of the illustrative percentages from 100 percent provides an index that is similar in form and meaning to those I derived for components of output per unit of input in *Accounting*. With 1967=100, its value is 99.5 in 1972 and 99.0 in 1975. Its meaning is that measured output per unit of input

would have been equal to these percentages of its 1967 amount if nothing had changed except provision for environmental protection. The growth rate of the index—minus 0.13 percent in 1967–75—provides the amount in percentage points by which provision for environmental protection reduced the growth rate of output per unit of input.

The index for effects of environmental costs on output per unit of input would be approximately the same whether output is measured by NI or NNP. However, if gross national product were used, the decline in the index would be reduced—in practice by about one-tenth. The appropriate dollar figure for the incremental cost of environmental protection is the same whether it is related to net or gross product. But the value of gross product is larger, by an average of 11 percent in nonresidential business in the 1972–75 period. If this were also true in the illustrative example, gross product would have been \$663 billion in 1972 and \$1,099 billion in 1975. The percentage reductions would have been 0.45 ($3/663+3$) in 1972 and 0.9 ($10/1,099+10$) in 1975.

Derivation of Cost Estimates

My series for the incremental cost of pollution abatement to nonresidential business is the sum of 10 component series, less the value of materials and fuel reclaimed as a result of the incremental outlays for pollution abatement. Table 1 shows these components and total incremental cost, which rose from zero in 1967 to \$9,549 million in 1975. The estimates for each year are expressed in current prices of that year. The series had to be pieced together from various sources. Some guessing was also required. A general review of sources will be followed by a line-by-line description of the series.

The most important source of information is the Abatement and Control Expenditures Branch (ACEB) of the Environmental and Nonmarket Economics Division, BEA. Two articles in the *SURVEY OF CURRENT BUSINESS* report 1973, 1974, and 1975 plant and equipment expenditures by U.S. business for the abatement of air, water,

and (except for 1973) solid waste pollution abatement; a third provides detailed estimates of national expenditures for PAC in 1972, 1973, and 1974.¹⁰ These figures refer to total rather than incremental expenditures. ACEB also provided unpublished detail and, very importantly, annual series for the net stock of pollution abatement structures and equipment that it prepared for this study by use of the perpetual inventory method. Depreciation estimates consistent with these capital stock estimates were also prepared and made available, and I have used them in preference to lower estimates, published in the February 1977 *SURVEY*, that were secured by adjusting estimates valued at historical cost so as to reflect current prices. ACEB furnished additional estimates, which are described below, and advice on the use of its information.

Annual reports of the Council on Environmental Quality (CEQ) contain estimates of total and incremental pollution control expenditures; however, each report contains estimates for only a single year. Because procedures are constantly changed and underlying data revised, estimates for most components are not comparable from year to year and time series cannot be obtained. Nevertheless, estimates for 1974 and 1975 were used as checks on estimates for some components of business costs and, occasionally, other use was made of the data.

BLS reports annually the value of changes in automobiles that result from environmental regulations (as well as from safety regulations and other causes).

The Bureau of the Census, U.S. Department of Commerce, has collected and published a variety of data for the pollution abatement costs and expenditures of manufacturing establishments in 1973, 1974, and 1975.¹¹

I now turn to the line-by-line description of the estimates in table 1. The reader will follow the description more readily if he appreciates that, both in table 1 and in the BEA estimates of national expenditures for PAC, costs are classified from the standpoint of the enterprise whose pollution is being abated.

1. Current costs: motor vehicle emission abatement

The cost of additional maintenance and gasoline consumption that was incurred on business-owned motor vehicles as a result of environmental requirements in 1972-74 is taken directly from the SURVEY, February 1977, p. 15, table 2. Incremental cost and total cost, as the latter is defined and measured by BEA, are synonymous for this component. Nearly all of the cost was incurred on automobiles, as distinguished from trucks.

The 1972 estimate was extrapolated back to 1968, and the 1974 estimate forward to 1975, by a preliminary series that was constructed in the following way. (a) Annual pollution abatement costs in the form of additional gasoline (the "fuel penalty") and additional maintenance, valued in 1974 dollars, in 1968-74 were obtained for all automobiles from CEQ's 6th Annual Report, December 1975, figure 8, p. 525.¹² The percentage increase from 1974 to 1975 was calculated from the series for projected costs attributable to light-duty vehicle emission controls (total costs less equipment costs) shown in Environmental Protection Agency (EPA), *The Cost of Clean Air*, April 1974, table III-10, p. III-22. (b) To secure business expenditures in constant prices, each year's estimate for all automo-

Table 2.—Incremental Pollution Abatement Capital of Nonresidential Business, Average for Year

[Billions of dollars]

	1967	1968	1969	1970	1971	1972	1973	1974	1975
Motor vehicle emission abatement ¹		0.0	0.1	0.1	0.2	0.3	0.4	0.7	1.0
Air and water pollution abatement except motor vehicle emissions.....		.5	1.3	3.1	5.4	8.1	11.9	18.2	26.0
Solid waste disposal.....		.0	.0	.1	.1	.2	.3	.5	.6
Total incremental net stock.....		.5	1.4	3.2	5.7	8.6	12.6	19.4	27.6
Addendum: Total net stock, air and water pollution abatement except motor vehicle emissions.....	5.0	6.0	7.2	9.2	11.9	15.3	19.8	26.6	35.0

1. Business vehicles only.

biles, obtained in (a), was multiplied by the ratio of the new automobile component of producers' durable equipment to the sum of this series and the new automobile components of personal consumption expenditures and government purchases. Data are from NIPA table 1.17. Each year's allocation was based on the value, in 1972 prices, of car purchases during the preceding 5 years, excluding years before 1967. (c) A price index with 1972=100 was constructed by combining the implicit price deflators (1972=100) for personal consumption expenditures for gasoline and oil (weighted 5) and for user-operated transportation services (weighted 3) from NIPA table 7.12. The weights were based on relative expenditures for the fuel penalty and for additional maintenance in 1972, as

shown in the CEQ figure 8 cited in (a). (d) The constant-price series was multiplied by this price index to secure the series for business costs in current prices that was used to extrapolate the 1972-74 BEA data.

2. Current costs: air and water pollution abatement except motor vehicle emissions

Total nonresidential business expenditures on current account for air and water pollution abatement, other than motor vehicle emission abatement, in 1972-74 were obtained from the SURVEY, February 1977, p. 15, table 2, by combining eight series: expenditures for air pollution abatement by private manufacturing establishments, privately owned electric utility establishments, other private nonmanufacturing establishments, and publicly owned electric utilities, and expenditures for water pollution abatement by the same four groups. This is the series that is conceptually desired except that it is for total rather than incremental expenditures.¹³

In the absence of similar data for other years, 1972 current expenditures were extrapolated back to 1967, and the 1974 figure forward to 1975, by a series for the stock of capital for air and water pollution abatement; it seemed reasonable to suppose that the two series would rise in a fairly similar pattern, and they actually did so from 1972 to 1974.¹⁴ The capital stock series has the same industrial coverage as the series for current expenditures except that, for lack of data, it excludes outlays by publicly owned electric utilities. (Such utilities account for only 2 percent of current expenditures.) The

Table 1.—Incremental Pollution Abatement Costs That Reduce National Income Per Unit of Input in Nonresidential Business

[Millions of dollars]

	1967	1968	1969	1970	1971	1972	1973	1974	1975
Current costs:									
1. Motor vehicle emission abatement ¹	0	86	180	257	396	558	867	1,409	1,831
2. Air and water pollution abatement except motor vehicle emissions.....	0	71	180	431	742	1,115	1,521	2,221	3,217
a) Direct labor cost.....	0	24	61	147	252	379	517	686	933
b) Equipment leasing, materials, supplies, services, and other.....	0	47	119	284	490	736	1,004	1,535	2,284
3. Payments to use public sewer systems.....	0	20	40	60	100	139	179	218	242
4. Solid waste disposal.....	0	26	56	87	127	167	225	289	362
Depreciation:									
5. Motor vehicle emission abatement ¹	0	3	10	19	31	48	72	111	174
6. Air and water pollution abatement except motor vehicle emissions.....	0	17	50	116	198	295	426	660	976
7. Solid waste disposal.....	0	1	2	5	9	14	24	37	53
Net opportunity cost of invested capital:									
8. Motor vehicle emission abatement ¹	0	3	10	17	28	42	60	89	136
9. Air and water pollution abatement except motor vehicle emissions.....	0	56	144	341	589	883	1,285	1,947	2,756
10. Solid waste disposal.....	0	1	3	7	13	23	33	51	68
Less:									
11. Value of materials and energy reclaimed.....	0	8	17	27	48	74	93	136	266
Total incremental cost.....	0	276	658	1,313	2,185	3,210	4,599	6,896	9,549

1. Business vehicles only.

capital stock series (which is unofficial and was prepared by ACEB) measures net stock in current prices as of July 1. It is shown in the addendum line of table 2.

The baseline value of current expenditures for air and water pollution abatement, like the baseline value of most other types of pollution abatement costs, was calculated on the assumption that expenditures would have moved like output in nonfarm nonresidential business in the absence of changes in environmental requirements. (Farm output is excluded because the expenditures exclude those made in farming—which were, in any case, small.) Consequently, to obtain an annual series for baseline current expenditures, the figure of \$687 million, which had been obtained for actual expenditures in 1967, was extrapolated to all later years by NNP originating in nonfarm nonresidential business. Baseline current expenditures were then deducted from total current expenditures to secure incremental expenditures.

My estimates for 1974 and 1975 can be compared with CEQ estimates. With values expressed in billions of dollars, the comparison is as follows.¹⁵

	Total cost	Baseline cost	Incremental cost
1974: Denison.....	3.4	1.2	2.2
CEQ.....	3.0	1.3	1.7
1975: Denison.....	4.4	1.2	3.2
CEQ.....	5.6	2.1	3.5

In 1974, the two estimates of baseline cost are fairly similar while the estimates of incremental cost diverge, whereas in 1975, the opposite is the case. Such different results for the 2 years are possible because CEQ's estimates for 1974 are not comparable with its estimates for 1975.

For subsequent calculations, it is desirable to divide the series for incremental expenditures between direct labor costs and other current costs. The Census Bureau reports already cited provide such data for total environmental expenditures by manufacturing establishments: labor costs were 34.0 percent of the total in 1973, 30.9 percent in 1974, and 29.0 percent in

1975. Lines 2a and 2b of table 1 were calculated on the assumption that direct labor cost constituted the same percentage of the incremental cost in all industries combined as it did of the total cost in manufacturing. The 1973 percentage was used for earlier years.

3. Current costs: payments to use public sewer systems

Payments to use public sewer systems are not counted in water pollution expenditures of private business in line 2 of table 1, so there is no duplication between lines 2 and 3. The incremental cost to be counted in line 3 is not large, however, even though public sewer systems are in the business sector (they are classified as government enterprises) and their current expenditures are large (\$1.6 billion in 1974 according to the February 1977 SURVEY, p. 15, table 1). Most costs of public sewer systems are excluded from incremental cost, both because they are allocated to dwellings rather than nonresidential business and because they cover ordinary sewage disposal and treatment no different from practices already customary in 1967.

There were no new Federal controls in the period covered by this study. The cost that is to be counted arises in part because new local environmental regulations sometimes required secondary and tertiary treatment of sewage from nonresidential business firms, which entailed higher charges to the firms, and in part because the raising of standards for primary treatment itself increased charges to nonresidential business along with other users.

Manufacturers paid \$178 million in 1973, \$203 million in 1974, and \$228 million in 1975 to governmental units (all levels) for "public sewage use," according to the Bureau of the Census.¹⁶ ACEB analysts suggested that two-thirds of the 1973 outlay may have been attributable to new environmental requirements. Thus, the 1973 payments of \$178 million divide into \$59 million of baseline cost and \$119 million of incremental cost. The 1973 baseline cost was extrapolated to 1974 and 1975 by NNP originating in nonfarm nonresidential business; the resulting series was then subtracted from total pay-

ments to secure incremental costs for manufacturers in 1974 and 1975. To allow for nonmanufacturing industries, for which not even figures for total payments are available, the incremental cost for manufacturers was raised one-half.

No usable data for years before 1973 were located. Incremental cost was set at zero in 1967, and the intervening years were estimated on the assumption that the absolute annual increase from 1970 to 1973 was double that from 1967 to 1970.

4. Current costs: solid waste disposal

Trash collection and disposition, and other solid waste disposal, may be performed by governments or privately. Unlike sewerage, solid waste disposal by governments is not considered a government enterprise in the NIPA's (see NIPA tables 3.13 and 3.14) but, instead, an activity of government. As a result, government purchases for solid waste disposal are final products. Consequently, diversion of resources to solid waste disposal by government does not reduce measured output, and costs incurred by government must not be counted in table 1—not even when governments impose a charge for their services. BEA and CEQ use classifications to report environmental statistics that distinguish government from private solid waste disposal so government expenditures are readily omitted.

BEA provided unpublished estimates of the nonresidential portion of the series for total private current expenditures for solid waste disposal that is shown for 1972-74 in the February 1977 SURVEY, p. 15, table 1. BEA also divided the nonresidential expenditures among manufacturing (\$476 million in 1974), commercial nonmanufacturing (consisting of retail trade, finance, and services, and amounting to \$974 million in 1974), and other nonmanufacturing (\$932 million in 1974). The commercial nonmanufacturing series was provided for 1970-71 as well as for 1972-74.

Of the three components, only the manufacturing series rose appreciably faster during the period for which it was available than did nonfarm non-

residential business NNP. The absence of a sharp increase in the other components suggests that the incremental cost of pollution abatement was not a large part of total cost except in manufacturing. ACEB analysts suggested that it would be reasonable to assume that about 14 percent of the total 1975 private cost was incremental cost in nonresidential business as a whole, and about 30 percent in manufacturing. These percentages, which implied about 10.1 percent for nonmanufacturing industries, were incorporated into the estimates.

The exact procedure for securing the series for incremental cost shown in table 1, line 4, will now be described. It is the sum of series for manufacturing and nonmanufacturing.

The 1972-74 series for total expenditures by manufacturers was first extended to 1975 on the assumption that the ratio of such expenditures to nonfarm nonresidential business NNP increased the same amount in 1975 as in 1974. The 1975 incremental cost in manufacturing was taken as 30 percent of total cost (or \$157 million). The percentage was assumed to have increased a constant 3.75 points a year, from zero in 1967. These data and assumptions yielded 1972-75 estimates of incremental cost. To secure estimates for 1968-71, when total manufacturing costs were not available, the ratio of incremental cost to nonresidential business NNP was assumed to have increased the same amount each year from 1968 to 1972.

To complete a 1967-75 series for total expenditures by nonmanufacturing industries, the 1972-74 estimates were extrapolated back to 1970 by the "commercial" component. The resulting 1970 figure was extrapolated back to 1967, and the 1974 figure to 1975, by NNP originating in nonfarm nonresidential business. (It may be noted that the percentage change from 1973 to 1974 was the same in the two series.) Incremental expenditures of all nonresidential business in 1975, computed as already stated at 14 percent of total expenditures, came to \$362 million.¹⁷ Subtraction of the estimate of \$157 million for manufacturing left \$205 million as the incremental cost in nonmanufacturing

industries, equal as already stated to 10.1 percent of the total cost in these industries. To secure incremental costs in earlier years, this percentage was estimated to have increased linearly from zero in 1967.

5. Depreciation: motor vehicle emission abatement

See description of line 8.

6. Depreciation: air and water pollution abatement except motor vehicle emissions

Estimates of total depreciation in current prices for the years 1967-74 were provided by ACEB. ACEB derived them as part of the calculations to obtain the estimates of capital stock provided for this study. The estimates rise from \$223 million in 1967 (\$173 million in manufacturing and \$50 million in nonmanufacturing, including electric utilities) to \$1,036 million in 1974 (\$721 million in manufacturing and \$315 million in nonmanufacturing).¹⁸ A preliminary estimate was made for 1975 on the basis of the previous pattern of increase in constant-price depreciation and the rise in the BEA implicit price deflator for fixed nonresidential investment (NIPA table 7.1).

Baseline depreciation was estimated by extrapolating 1967 depreciation by NNP of nonfarm nonresidential business. Incremental depreciation is equal to total depreciation minus baseline depreciation.

7. Depreciation: solid waste disposal

See description of line 10.

8. Net opportunity cost of invested capital: motor vehicle emission abatement

This line and line 5 (depreciation), which is also described here, are the sum of series for automobiles and trucks. The automobile component is the larger by far.

Automobiles.—Series for gross and net capital stock and depreciation were compiled in the following steps.

(a) The dollar increase in average retail value of automobiles that resulted from pollution abatement devices that were added in each model year was assembled from BLS releases titled

"Report on Quality Changes for (year) Model Passenger Cars." There were increases in every model year from 1968 through 1977, except in 1969; much the biggest increase was in 1975.

(b) The series was converted to a calendar-year basis on the assumption that each model year's addition applied to one-fourth of the previous calendar year's cars.

(c) The calendar-year series was converted to 1967 prices by deflating the current-price series by the BLS Consumer Price Index for new cars. The constant-price series was then cumulated to secure the increment to the price per car due to additions to pollution control costs since 1967, valued in 1967 prices. The cumulated increments were then multiplied by the passenger car price index to place them in current prices.

(d) Average prices of new cars in current dollars were obtained from annual issues of *Automobile Facts and Figures* (published by the Motor Vehicle Manufacturers Association of the United States, Inc. [MVMA], Detroit).¹⁹

(e) The ratio of the cumulated incremental pollution abatement cost per car (computed in step c) to the price per car (described in step d) was computed for each year.

(f) This ratio (which reached 5 percent in 1975) was multiplied by the "new autos" component of BEA's series for producers' durable equipment in 1972 prices (NIPA table 1.17) to obtain the value in 1972 prices of pollution abatement devices included in new business automobiles.

(g) The undepreciated value of the pollution abatement devices contained in used automobiles sold by business to consumers (minus devices sold by consumers to business) was subtracted from the value of devices in automobiles newly purchased by business to secure gross capital formation in the form of antipollution devices.²⁰ (All of these data were in 1972 prices.)

(h) Gross capital stock in 1972 prices was computed from the series for gross capital formation by use of the 10-year average service life for cars used by BEA in computing capital stock and depreciation in the NIPA's.²¹ (The Winfrey distribution was not intro-

duced.) Because the period since capital formation began was less than 10 years, pollution abatement devices in all cars that were not sold remained in the business stock throughout the period. Gross capital stock in 1972 prices at yearend was obtained by cumulating past investment, and a yearly average of the values at the beginning and end of the year was calculated.

(i) Depreciation in 1972 prices was calculated as 10 percent of this gross stock series. Depreciation was converted to current prices (as shown in table 1, line 5) by use of the BLS price index for new automobiles.

(j) Net capital stock in 1972 prices at yearend was obtained by deducting the depreciation in 1972 prices accumulated during the previous and current years from yearend gross stock in 1972 prices. Values at the start and end of each year were averaged. This constant-price series was multiplied by the BLS price index for new automobiles, shifted to a 1972 base, to obtain the value of the net stock in current prices. This series represents the incremental net stock.

To secure the opportunity cost of invested capital, the incremental net capital stock was multiplied by an estimate of the ratio of earnings to net stock in alternative uses for capital. For the latter series, I used the ratio of nonlabor earnings in nonfarm corporations to the value of the net stock of capital and land in such corporations. This series is described in *Accounting*, appendix J; revisions in NIPA's and other data entering into its calculation were incorporated.

The actual ratio for nonfarm corporations is strongly affected by the business cycle, and collapsed in 1974-75 after falling sharply earlier in the 1970's. However, I wish to use a series from which the effects of business cycle swings have been removed in order to prevent the adverse effect of pollution abatement costs on output per unit of input from diminishing in recessions because of cyclical drops in the general ratio of earnings to capital stock.

To do this, I substituted trend values for the actual ratios. Two periods from which least squares trends might reasonably be computed are 1947-69 and

1947-73. The former yields trend percentages that decline slowly from 11.6 percent in 1969 to 11.4 percent in 1975. The latter yields percentages that are lower and fall more sharply, from 10.5 percent in 1969 to 9.8 percent in 1975. Use of either period implies that the 1974-75 figures were greatly reduced by recession. For the pollution abatement calculation, I have averaged the values from these two trend lines, securing a cyclically adjusted series that drops from 0.112 in 1967 to 0.111 in 1969 and to 0.106 in 1975.

The ratios of earnings to asset values, actual and cyclically adjusted, from 1967 to 1975 are shown in table 3. The estimate of net opportunity cost is the product of net stock and the cyclically adjusted ratio.

Trucks.—The estimated cost of pollution abatement devices in new trucks purchased by business each year is the sum of estimates for gasoline-fueled trucks with a gross vehicle weight (GVW) of 6,000 pounds or less and those with a GVW of 6,001 pounds or more.²² This division was necessary because these classes were subject to different controls.

(a) The first step was to obtain the number of trucks in each category in each calendar year. The National Income and Wealth Division of BEA provided annual estimates of the number of new trucks purchased by private buyers, divided between consumer and business purchases, with each category divided between trucks of 10,000 pounds or less GVW and heavier trucks. It was necessary to estimate the number of gasoline-fueled trucks purchased by business and their division between trucks of 6,000 pounds or less GVW and heavier trucks.

Private purchases of all trucks of 10,000 pounds or less GVW were allocated between the 6,000 or less and 6,001-10,000 pound classes in proportion to domestic factory sales in these size classes, as reported by MVMA. Business purchases of gasoline-fueled trucks in the 6,000 pounds or less size class were then estimated on two assumptions: (1) the ratio of business purchases to total private purchases was one-third lower in the 0-6,000 pounds size class than in the

6,001-10,000 size class and (2) all trucks in the former class were gasoline fueled. Business purchases of gasoline-fueled trucks of 6,001 pounds or more GVW were then approximated by eliminating from total business purchases of trucks those of 6,000 pounds or less GVW, as well as domestic factory sales of diesel trucks as reported by MVMA.

(b) The next step was to obtain the value in 1967 prices of pollution abatement equipment included in business purchases of new trucks each year. The two size classes were estimated separately.

Trucks in the 0-6,000 pounds size class were subject to the same requirements as automobiles and requirements were met with the same devices.²³ The number of trucks purchased by business was therefore multiplied by the calendar-year cost per automobile, in 1967 prices (see paragraph c under automobiles), to secure capital outlays for pollution abatement devices in 1967 prices.²⁴

Gasoline-fueled trucks of more than 6,000 pounds GVW were subject to less stringent standards than automobiles. EPA put the cumulated cost per truck at \$21.50 in 1970 prices in 1970-73, and at \$45.50 in 1974 prices in 1974-75. These amounts were converted to 1967 prices and multiplied by the number of trucks to obtain total outlays in 1967 prices. I used the cost per vehicle for lighter trucks in the 1968 and 1969 model years; little money is involved in this decision.

(c) Trucks leave the gross capital stock of business by sale to consumers or by retirement. Based on BEA data for business purchases and resales of trucks, I estimated that one-ninth of the pollution abatement devices on trucks acquired by business eventually leave the stock by sale to consumers and eight-ninths by retirement. For purposes of the calculation, one-half those sold were assumed to be 4 years old and one-half 5 years old. All retirements were assumed to be at 9 years, the average service life that BEA uses for trucks in computing its capital stock series. Consequently, the estimate of retirements is zero in the period, which

ends at 1975, that is covered by my estimates.

(d) The gross stock of pollution abatement equipment in trucks at yearend, valued in 1967 prices, was calculated by cumulating business investment in such devices in new trucks each year and deducting the undepreciated value of those sold. (As stated, there were no retirements in the period covered.)

(e) Remaining estimation procedures were the same as for automobiles, except that depreciation was computed at one-ninth of gross stock.

9. Net opportunity cost of invested capital: air and water pollution abatement except motor vehicle emissions

ACEB provided estimates of the net stock of nonresidential business capital acquired for air and water pollution abatement, valued in current prices, annually (as of July 1) from 1967 to 1975. The capital stock estimates have the same coverage as the BEA surveys of plant and equipment expenditures for air and water pollution abatement. The estimates, prepared by the perpetual inventory method, are the sum of six components: stocks for air and water pollution abatement, separately, in manufacturing, electric utilities, and other nonmanufacturing industries.

The principal sources that ACEB used for capital outlays were the BEA surveys of expenditures for pollution abatement plant and equipment, available annually from 1973, and the similar surveys by the McGraw-Hill Publications Company, available annually from 1967, and capital outlays from the Census Bureau surveys of pollution abatement expenditures by manufacturing establishments. Other sources were also used. The estimates were constructed by use of straight-line depreciation, BEA deflators for business fixed nonresidential investment, and expected useful lives that were suggested for water pollution controls by EPA in the Federal Register of September 10, 1973, and for air pollution controls by the Bureau of Internal Revenue in its Bulletin F. (ACEB used 85 percent of Bulletin F lives.)

The net capital stock rises from \$5.0

billion in 1967 to \$35.0 billion in 1975. A series for the value of the baseline stock was obtained by extrapolating the 1967 figure by the net domestic product of nonfarm nonresidential business. Subtraction from the total stock yielded a series for the value of the incremental stock (\$26.0 billion in 1975). Both total and incremental stock are shown in table 2.

The value of the incremental stock each year was multiplied by the cyclically adjusted ratio of nonlabor earnings to asset values in nonfarm corporations (table 3) to secure net opportunity cost of invested capital (table 1, line 9).

10. Net opportunity cost of invested capital: solid waste disposal

CEQ estimated that incremental private capital costs ("depreciation and interest," including imputed interest) of solid waste disposal were \$0.1 billion in 1975 (7th Annual Report, p. 145). This estimate is comparable to the sum of my estimates for depreciation and net opportunity cost, but was not used directly because of the absence of comparable data for other years. However, it agrees with the estimate of \$121 million that I obtain as the sum of depreciation and net opportunity cost in 1975.

BEA (SURVEY, February 1977, p. 15, table 1) estimates capital outlays by nonresidential business for solid waste disposal at \$315 million in 1972, \$403 million in 1973, and \$424 million in 1974. A 1975 estimate of \$422 million is obtained by assuming the same percentage change as in plant and equipment expenditures for solid waste disposal, as reported in the SURVEY, July

1976, p. 14, table 1. The latter source provides an industrial distribution of plant and equipment expenditures for solid waste disposal. For 1974 and 1975, combined, electric utilities accounted for 23 percent, petroleum 20, primary metals 10, chemicals 9, paper 7, and all other industries 33. Discussion with ACEB staff elicited an opinion that the portion of such spending that was due to strengthened requirements for pollution abatement (that is, the portion that was incremental) was perhaps 35 percent in 1974, having risen gradually until about 1970 and more rapidly thereafter. (From 1973 to 1976 outlays for solid waste disposal did not increase in real terms and their share of capital outlays did not rise.)

A series for incremental capital outlay for pollution abatement was constructed as follows. I assigned 35 percent (\$148 million) of the 1974 total to the incremental outlay and 65 percent (\$276 million) to baseline capital outlay. The baseline outlay in other years from 1972 through 1975 was assumed to be the same percentage as in 1974 (0.246) of total expenditures for new plant and equipment by U.S. business for all purposes (as reported in the SURVEY, March 1977, p. 31, and earlier issues). Incremental outlays in these years were obtained by subtraction. For earlier years, they were estimated on the assumption that the annual increase from 1967 (when they were zero) to 1970 was one-half that from 1970 to 1972.

From this series, and two assumptions, series for gross stock, net stock, and depreciation in current and constant prices were calculated by the perpetual inventory method, using straight-line depreciation. The assumptions are (1) that the capital included had an average service life of 15 years (a sheer guess, but the importance of trucks in capital suggests a fairly short life) and (2) that the BEA implicit price deflator for gross private domestic nonresidential fixed investment (NIPA table 7.1) is applicable to solid waste disposal capital.

A check on the depreciation estimate is provided by engineering data which, ACEB analysts inform me, suggest that depreciation equals about 15

Table 3.—Nonfarm Corporations: Ratios of Nonlabor Earnings to Asset Values

	Ratios	
	Actual	Cyclically adjusted
1967.....	0.123	0.112
1968.....	.122	.111
1969.....	.107	.111
1970.....	.085	.110
1971.....	.087	.109
1972.....	.094	.109
1973.....	.086	.108
1974.....	.064	.107
1975.....	.069	.106

percent of current cost in an ongoing situation. My 1975 estimate is \$53 million; 15 percent of current cost would be \$54 million.

The net opportunity cost is the product of the net stock in current prices (average of values at the beginning and end of the year), which is shown in table 2, and the cyclically adjusted ratio of earnings to asset values in nonfarm corporations shown in table 3.

II. Value of materials and energy reclaimed

Against incremental costs incurred by business must be set the value of materials and energy reclaimed as a result of the incremental expenditures.

BEA estimates the total value of materials and energy reclaimed at \$415 million in 1972, \$470 million in 1973, and \$538 million in 1974.²⁵ The 1974 estimate compares with a total for manufacturing of \$534 million reported by the Census Bureau; the \$4 million difference is BEA's allowance for public utilities.²⁶ The 1974 BEA estimate was extrapolated to 1975 by the Census Bureau series for manufacturing, yielding an estimate of \$693 million.

The BEA estimates for materials and energy reclaimed equaled 0.05254 percent of nonfarm nonresidential business NNP in 1972 and 0.05811 percent in 1974, an increase of 0.00279 percentage points a year. Ratios for earlier years were estimated on the assumption that

the yearly increase in the ratio from 1970 to 1972 was the same as the average increase from 1972 to 1974, and that from 1967 to 1970 it was half that big. The ratio was multiplied by nonfarm nonresidential business NNP to secure an estimate of the total value of materials and energy reclaimed for each year from 1967 to 1971.

The 1967 ratio so derived, 0.04278 percent, was multiplied by nonfarm nonresidential business NNP each year to secure a baseline series for materials and energy reclaimed. The baseline value was deducted from the total value to obtain the series for the incremental value of materials and energy reclaimed. The results imply that the incremental value comprised 38 percent of the total value in 1975. This conforms to my general impression that the larger part of the value of materials and energy reclaimed, which is widely dispersed by industry, would have been reclaimed under practices prevailing before the new legislation and is not an appropriate deduction from incremental costs.

Omitted Items

Four types of incremental business costs are omitted because of lack of information or because their inclusion would be conceptually questionable.

Land and inventories

An opportunity cost estimate for land and inventories required for pol-

lution abatement should be included. It would be the product of the value of such land and inventories and the ratio of earnings to assets that was used to secure net opportunity cost estimates for fixed capital. Information concerning incremental stocks of land and inventories devoted to pollution abatement has not been located.

Noise, radiation, and pesticide pollution abatement

BEA estimates of national expenditures for PAC include noise, radiation, and pesticide control; however, none of the expenditures that appear in its accounting are made by business (SURVEY, February 1977, p. 15, table 1). CEQ shows only an estimate for nuclear power plants, put at \$0.0 billion—i.e., less than \$50 million—in 1975 (7th Annual Report, pp. 145, 167). This omission clearly is of no importance.

Agriculture, real estate operators, and independent professional practitioners

BEA data for business do not cover agriculture, real estate operators, and independent professional practitioners in legal and medical services (including proprietary hospitals). The total omission from incremental expenditures for nonresidential business is believed negligible. (Expenditures by owners of large cattle feeding lots may be the largest component.)

Table 4.—Pollution Abatement Costs: Calculation of Effect Upon Output Per Unit of Input in Nonresidential Business

	Nonresidential business output (billions of dollars)		Incremental pollution abatement costs (millions of dollars)		Ratios of input diverted to pollution abatement to input not so diverted			Ratios of input diverted to pollution abatement to total input	Ratios of input not diverted to pollution abatement to total input	Index of effect of pollution abatement costs upon output per unit of input
	Measured by:		Direct labor and net opportunity costs of invested capital	Other costs including depreciation	Col. 3 ÷ col. 1	Col. 4 ÷ col. 2	Col. 5 + col. 6	Col. 7 + (one + col. 7)	One - col. 8	From col. 9 (1972=100)
	National income	Net national product								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1967	509.1	566.7	0	0	0.0000	0.0000	0.0000	0.0000	1.0000	100.41
1968	554.5	619.7	84	192	.00015	.00031	.00046	.00046	.9954	100.37
1969	595.5	666.4	218	440	.00037	.00066	.00103	.00103	.9897	100.31
1970	610.3	685.8	512	801	.00084	.00117	.00201	.00201	.9979	100.21
1971	650.9	734.7	882	1,303	.00136	.00177	.00313	.00312	.99688	100.10
1972	724.6	814.5	1,327	1,883	.00183	.00231	.00414	.00412	.99588	100.00
1973	817.3	914.9	1,895	2,704	.00232	.00296	.00528	.00525	.99475	99.89
1974	862.2	970.1	2,773	4,123	.00322	.00425	.00747	.00741	.99259	99.67
1975	916.5	1,032.6	3,894	5,685	.00425	.00551	.00976	.00967	.99033	99.44

Research and development expenditures

Incremental research and development (R. & D.) expenditures for pollution abatement probably should not be regarded as subtracting from output per unit of input and I have deliberately omitted them from the incremental pollution abatement costs that affect it. The reason is that R. & D. by business is not counted as a final product regardless of its purpose, so that R. & D. expenditures by business reduce productivity when they are made whether or not the R. & D. is for pollution abatement. Diversion of resources to pollution abatement R. & D. from other R. & D. thus has no immediate effect on productivity.²⁷ Output per unit of input is adversely affected by an increase in R. & D. expenditures for pollution abatement at the time it occurs only if the resources are diverted from uses other than R. & D. (If resources added to R. & D. were previously unemployed, their addition will reduce output per unit of input whether they are allocated to R. & D. for pollution abatement or for other purposes.)

Even if incremental R. & D. costs are included, they have no appreciable effect on the growth rate of output per unit of input. BEA reports that R. & D. expenditures by business for PAC amounted to \$518 million in 1972, \$568 million in 1973, and \$594 million in 1974; four-fifths was concerned with air pollution (SURVEY, February 1977, p. 15, table 1; its source is the National Science Foundation). Earlier data are absent. Even if there were no R. & D. expenditures for pollution abatement in 1969, so that incremental expenditures in 1974 were the same as total expenditures, and if none of the 1974 R. & D. expenditures used for pollution abatement was diverted from other R. & D., the reduction in the 1969-74 growth rate of output per unit of input in nonresidential business would have been only 0.01 percentage points.

Index of Effect of Pollution Abatement Costs Upon Output Per Unit of Input

The percentage that incremental

costs of pollution abatement represented each year of the value of output plus these costs was next computed. As explained earlier, this is the percentage by which measured output per unit of input was reduced by the diversion of inputs to pollution abatement as a result of changes occurring after 1967. The following paragraphs describe the calculations; table 4 shows them in detail.

To refine the calculation slightly, incremental costs were first divided into two parts, one of which is compared with NI and the other with NNP. The direct labor component of the incremental current cost of air and water pollution abatement and the net opportunity cost of invested capital (lines 2a, 8, 9, and 10 of table 1) represent direct factor costs. To calculate the ratio of these costs to net output, net output is also valued at factor cost. Other current costs are business purchases from other enterprises and are therefore valued at their market price, i.e., they include indirect taxes in their value. Depreciation is also at market price, because it is based on capital stock data that are derived from gross capital formation at market price. To calculate the ratio of incremental cost in these categories to net output in the nonresidential business sector, net output is also valued at market price. The sum of the two ratios is shown in table 4, column 7.²⁸ In 1975, it was 0.00976 or 0.976 percent. If environmental pro-

tection in 1975 had been as it was in 1967, the resources used in production in 1975 would have provided a measured net product 0.976 percent larger than they actually provided. This is equivalent to saying that 1975 resources provided a measured net product 0.967 percent smaller than if environmental protection had been as it was in 1967 (table 4, column 8). Thus, by 1975 changes in environmental constraints since 1967 had diverted nearly 1 percent of the total input in nonresidential business to pollution abatement that is not counted as measured output.

The ratio of input not so diverted to total input, shown in table 4, column 9, is converted to index form in column 10. This is an index of the course that measured output per unit of input in nonresidential business would have followed if nothing had changed except pollution abatement. The index is expressed with 1972 equal to 100 to conform to the broader study of which this is a part.²⁹

The index shows that the increasing diversion of labor and capital to pollution abatement was impairing the growth of measured output per unit of input importantly by the mid-1970's and that the amount was growing. From zero before 1967, the amount of impairment increased to an annual average of one-twentieth of a percentage point from 1967 to 1969, one-tenth of a point from 1969 to 1973, and nearly one-fourth of a point from 1973 to 1975.

Part 3: Costs Incurred To Protect the Safety and Health of Workers

Major changes in legislation, regulations, and other provisions controlling the protection of the safety and health of workers have become effective since 1967. In the measurement of national income and product, expenditures made to conform with the new requirements are treated in the same way as expenditures to conform with requirements to protect the physical environment. As in the environmental case, to obtain the

effect on output per unit of input it is necessary to estimate the proportion of input in nonresidential business that has been diverted from the production of measured NI and NNP. This requires knowledge of the incremental costs that business has incurred to conform to the new provisions. The costs that must be counted are, as before, current costs (labor and purchases from other enterprises), depreciation, and the net oppor-

tunity cost of invested capital. The proportion of output diverted to protect employee safety and health is estimated as the sum of three major components.

The first component consists of new safety features on motor vehicles. Price and output measures treat these features, like antipollution devices, as additions to real product. As a result, only safety features added to vehicles that are sold to business need to be considered here. Safety features on business vehicles may, of course, protect the general public as well as employees who drive and ride in them, but the effect on output per unit of input is the same.

The second component consists of the incremental costs of protecting employee safety and health in coal, metal, and nonmetal mining. These costs arise largely as a result of legislation that applies only to mining. Safety and health costs have been much larger in mining than in other industries.

The last component consists of the costs incurred by business in all industries except the three mining industries. They have arisen as a result of the Occupational Safety and Health Act.

According to the estimates derived in this section, measured output per unit of input in 1975 was reduced 0.42 percent by the diversion of inputs after 1967 to protect the safety and health of workers. Of this amount, 0.09 percentage points were attributable to safety features on motor vehicles, 0.24

points to programs in mining, and 0.09 points to programs in other industries, which began to have an impact only toward the end of the 1967-75 period.

Safety Requirements for Motor Vehicles

New safety features on automobiles and trucks affect output per unit of input in just the same way as do features required to reduce pollution: only when the vehicles are sold to business users is output per unit of input affected.

Computations of costs were confined to capital costs: depreciation and the net opportunity cost of invested capital. Current expenses may be affected either favorably or unfavorably by safety requirements. For example, better bumpers may reduce damage sustained in collisions and hence repair costs but increased weight may reduce gas mileage; moreover, some devices require maintenance, repair, or replacement. In the absence of information, favorable and unfavorable effects are assumed to be offsetting, and no allowance is made for changes in current costs.

Capital cost estimates were made separately for automobiles and trucks. Automobiles accounted for three-fourths of their combined cost to business in 1975 and more in earlier years.

Automobiles

From the 1968 model year on, changes in automobiles have been made every year to meet actual and anticipated Federal safety standards. BLS provides an annual release (already cited) that enumerates each of the changes adopted in the latest model year and its estimated retail value. Column 1 of table 5 shows the costs of each model year's improvements, in that year's prices.

Starting with these data, I derived gross and net stock, depreciation, and the net opportunity cost of invested capital in just the same way as the corresponding estimates for abatement of air pollution by automobiles, which are fully described above. The estimates imply that by 1975, some 8.9 percent of the price of new cars represented incremental safety equipment compared with 5.0 percent for pollution abatement. Table 5, column 2 shows the net stock of incremental safety equipment, expressed in current prices, based on an average of values at the beginning and end of each year. Columns 4 and 6 show the cost estimates.

Trucks

Safety improvements on trucks, like those on automobiles, are treated as additions to real product rather than price increases in the NIPA's, so the conceptually correct treatment of costs is the same.

Trucks have long been subject to safety regulations by various agencies, but the cost of changes that correspond to those counted for automobiles or that were required to meet orders of the National Highway Traffic Safety Administration (NHTSA) may properly be counted as incremental cost. Estimation is difficult, in part because of lack of information on the number of business trucks affected by any regulation.

The estimates are the sum of two series.

One, covering trucks, bought by business, that had a gross vehicle weight of 10,000 pounds or less, assumes that in this weight class the cost per truck was the same as the cost per automobile.

Table 5.—Incremental Costs of Safety Equipment on Business Motor Vehicles

	[Millions of dollars]									
	Costs of new provisions for safety, automobiles, model year		Net capital stock of incremental safety equipment, average for year, current prices		Depreciation, current prices		Net opportunity cost of invested capital, current prices		Total incremental cost of safety equipment	
	Dollars	Autos	Trucks	Autos	Trucks	Autos	Trucks	Millions of dollars (Cols. 4+5+6+7)	Percentage of nonresidential business NNP	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
1967										
1968	42.00	81	20	9	2	9	2	22	0.00	
1969	14.00	238	60	26	7	26	7	66	.01	
1970	26.50	437	114	50	15	48	13	126	.02	
1971	10.00	665	173	80	23	72	19	194	.03	
1972	12.00	907	215	113	31	99	23	266	.03	
1973	85.60	1,313	292	168	44	142	32	386	.04	
1974	107.60	1,973	485	258	72	211	52	593	.06	
1975	10.70	2,701	921	368	134	286	98	886	.09	
1976	13.40									

NOTE.—Except for column 1, estimates refer to calendar years. Estimates for 1967 ignore small amounts deriving from 1968 cars bought in 1967.

The second covers trucks, bought by business, with a GVW of more than 10,000 pounds. The only significant cost of compliance resulted from an amendment to the NHTSA Standard No. 121, which required expensive improvements to air brake systems on trucks produced after March 1, 1975. BLS estimates of the additional cost, at wholesale, for various kinds of trucks were mainly in the range of \$500 to \$1,200. The Planning and Evaluation Division of the U.S. Department of Transportation informally estimated the average cost per vehicle at \$1,000 to \$1,500. I have used \$1,000 as an estimate of the average cost of compliance per vehicle with GVW of more than 10,000 pounds for vehicles produced under the Standard in 1975. My estimates assume that two-thirds of 1975 business purchases of such trucks, by number, consisted of vehicles produced in accordance with the Standard.

Once the cost of safety equipment in new trucks purchased by business was established, the procedure was the same as for pollution abatement devices in trucks. Columns 3, 5, and 7 of table 5 show resulting estimates for net stock, depreciation, and the net opportunity cost of invested capital.

Total incremental cost

The total incremental cost for automobiles and trucks is shown in table 5, column 8. (It will be recalled that nothing is included for current costs.) Cost is expressed as a percentage of nonresidential business NNP in column 9.

Mining Industries

This section covers mining of coal, metal, and nonmetallic minerals, but not oil and gas extraction. In the mining industries, recent actions affecting the safety and health of workers have involved Federal and State governments and unions. The major Federal laws were the Federal Metal and Nonmetallic Mine Safety Act of 1966 (the "Metal Nonmetal Act") and the Federal Coal Mine Health and Safety Act of 1969. Enforcement responsibility was

originally placed in the Bureau of Mines, U.S. Department of Interior, but dissatisfaction with the vigor of enforcement led in 1973 to creation of the Mining Enforcement and Safety Administration (MESA), which was formed from the pertinent organizational components of the Bureau of Mines. MESA employs a large inspection staff. Tightening of State regulation often accompanied or preceded Federal actions. Under the Metal Nonmetal Act, six States currently operate inspection systems in accordance with Federal standards and under MESA's supervision. In coal, the United Mine Workers of America (UMW) has its own safety department, which was strengthened in 1973. The union itself inspects for safety. Union locals may shut down mines until violations are corrected.

Information is insufficient to estimate the effect of these developments by the methodology used up to this point in the article. Instead, the estimate is based upon the amounts by which productivity trends have deteriorated and the opinion of informed persons that the change in trends resulted from stronger controls for the protection of safety and health.

Productivity in all three mining industries has declined in recent years after long periods of strong advance.³⁰ Output per person employed peaked in 1968 in coal mining, even though

descriptive evidence suggests that technology has continued to advance, and even though earlier trends in the composition of mining by type of mine and process and degree of mechanization, continued uninterrupted. Peaks in output per person employed were reached in 1970 in both copper mining and iron mining, which together account for about seven-tenths of employment in metal mining.³¹ The peak was reached in 1973 in nonmetallic minerals.

Individuals familiar with mining consider that controls imposed to promote safety were responsible for the sudden reversals of productivity trends in these industries. Coal mining, the largest mining industry, has been discussed most. For example, Harold Davis, editor-in-chief of *Coal Age* began an article in the February 1973 issue (p. 111) with the sentence: "The coal industry looks back upon three years of declining productivity that stems from stringent new safety regulations which must be lived with."

In its July 1975 issue (p. 98), *Coal Age* "posed a series of questions" on productivity to officials of UMW and summarized the interchange as follows:

"*Coal Age*: The decline in productivity that is affecting the coal industry has resulted largely from the requirements specified in the 1969 Coal Mine Health and Safety Act. How does the leadership of the United Mine Workers relate the need for improved safety to the need for improved productivity?"

Table 6.—Coal Mining: Derivation of Employment Required by Strengthened Controls for Worker Safety and Health

	Index of output per employee (1967=100)		Col. 1÷col. 2	Employment in coal mining ¹ (thousands)		
	Actual	If growth rate were 6.5 percent after 1968		Actual	Without strengthened controls Col. 3×col. 4	Required by strengthened controls Col. 4÷col. 5
	(1)	(2)		(3)	(4)	(5)	(6)
1968.....	101.3	² 101.3	1.000	133	133	0
1969.....	99.6	107.9	.923	136	126	10
1970.....	97.5	114.9	.849	146	124	22
1971.....	87.4	122.4	.714	148	106	42
1972.....	83.3	130.3	.639	161	103	58
1973.....	81.9	138.8	.590	161	95	66
1974.....	76.9	147.8	.520	180	94	87
1975.....	70.9	157.4	.450	214	96	118

1. Full-time and part-time employment.
2. Set equal to column 1.

Sources: Column 1, U.S. Department of Labor, Bureau of Labor Statistics, Bulletin 1938, table 11. Column 4, U.S. Department of Commerce, Bureau of Economic Analysis, NIPA, table 6.7.

“*UMW*: We believe that until recently, productivity in the United States was artificially inflated because of safety risks that coal companies were willing and able to take in their efforts to mine more coal with less men. . . .

“It is our opinion that over the years, operators have cut back on work crews beyond the limit where it is safe. They have not allowed enough men to man equipment, and they’ve cut back on maintenance, ventilation, and dust control teams.

“. . . when we talk about ‘productivity,’ we should be meaning ‘productivity consistent with safety.’ ”

Clearly, *Coal Age* and *UMW* officials agree that safety legislation was responsible for the reversal of the former upward trend in coal output per worker or man-hour.

Business executives and the Bureau of Mines also regard safety regulations as the obvious and main reason for the reversal of the productivity trend.³² Other factors, particularly an influx of inexperienced workers, wildcat strikes, and increased absenteeism, are mentioned but regarded as secondary influences.³³ I shall base my estimate for mining on the opinion that failure to continue the past trends in output per worker was due, through 1975, to the strengthened controls to protect workers’ safety and health. I shall estimate the amount by which the actual number employed in mining exceeds the number that would have been required to obtain the same output if the former trends in output per worker had continued. When this amount is expressed as a percentage of total employment in nonresidential business, an estimate is

secured of the percentage by which output per unit of labor input in nonresidential business was reduced by the strengthening of safety and health controls in mining. The same percentage is used for the reduction of output per unit of input, the main justification being that labor is a large percentage of gross factor cost. (The assumption implies that the ratio of depreciation and the net opportunity cost of invested capital to labor cost in mining was not altered by the controls.)

For coal mining, I start the calculation of the effect of strengthened safety and health controls from 1968 (when they are assumed to have had no effect) and, based on the 1957–68 period, use 6.5 percent as the past annual growth rate of output per person employed. Rates for some possible alternative periods are 5.8 percent for 1948–68, 7.0 percent for 1953–68, and 7.1 percent for 1960–68. All these rates are higher if the period is ended in 1967; the 1957–67 rate was 7.0 percent as against the 6.5 percent rate for 1957–68. Actual coal mining employment increased from 1968 to 1973, then more sharply from 1973 to 1975. My calculation implies that in the absence of strengthened controls, employment would have declined until 1973 and then stabilized. By 1975, actual employment was 214,000. The calculation implies that only 96,000 would have been needed to obtain the same output in the absence of strengthened safety and health controls. Table 6 shows the calculation.

For nonmetallic minerals, the calculation starts from the 1973 productivity peak, and as the past growth rate of output per person employed I

used 3.5 percent, based on the 1955–73 period. Rates for some other reasonable periods were 3.6 percent for 1957–73, and 3.5 percent for 1964–73. The rate was 3.7 percent from 1955 to 1969 and 3.0 percent from 1969 to 1973. By 1975 actual employment was 116,000, and the calculation implies that it would have been 97,000 in the absence of strengthened safety and health controls.

For iron and copper mining, the calculation starts from a 1970 productivity peak. In both these small industries, in which annual changes in productivity tend to be erratic, the past growth rate of output per person employed was based on the change from the 1952–56 average to the 1966–70 average: 2.2 percent in iron mining and 2.8 percent in copper mining. To obtain estimates for “other” metal mining, I assumed that the ratio of employment in the absence of strengthened safety and health controls to actual employment would have been the same as in iron and copper mining combined. It is estimated for metal mining as a whole that actual employment was 95,000 and that it would have been only 72,000 in the absence of new safety legislation.

Columns 1 to 6 of table 7 show the annual estimates of the additional employment that stronger safety and health controls necessitated, given the actual output of the mining industries. The estimate for 1975 is 160,000, which is equal to 0.24 percent of total employment in all nonresidential business (as shown in column 7 of table 7). As stated earlier, the same figure is used as the percentage of total input in nonresidential business that was diverted from production of final products to protection of safety and health in mining. The percentage is remarkably large for the effect of strengthened controls in such small industries. It may, of course, be an overestimate if safety and health controls were not the only cause of the productivity turnaround.

The recession, by lowering output, contributed to poor productivity performance in the economy as a whole in 1974 and 1975. If the recession also contributed to poor performances in the mining industries, the effect of

Table 7.—Mining (Except Oil and Gas): Employment Required by Strengthened Controls for Worker Safety and Health

	Employment required by strengthened controls, by type of mining (thousands)						Col. 6 as a percentage of nonresidential business employment
	Coal	Nonmetal	Iron	Copper	Other metal	Total mining	
	(1)	(2)	(3)	(4)	(5)	(6)		(7)
1968.....							
1969.....	10					10	0.02
1970.....	22					22	.04
1971.....	42		2	3	3	50	.08
1972.....	58		4	5	4	71	.11
1973.....	66		3	7	4	80	.12
1974.....	87	6	3	13	7	116	.17
1975.....	118	19	3	12	8	160	.24

Table 8.—Plant and Equipment Expenditures for Safety and Health, Business Except Mining

	Expenditures in current prices		Expenditures in constant (1972) prices
	Millions of dollars	Percentage of nonfarm nonresidential business NNP	Millions of dollars
	(1)	(2)	(3)
1972.....	2,425	0.308	2,425
1973.....	2,485	.286	2,443
1974.....	2,922	.315	2,656
1975.....	2,608	.263	2,047

Sources: Column 1: Economics Department, McGraw-Hill Publications Company.

safety and health controls is overestimated in these years. This may be so in metal and nonmetal mining, but seems unlikely in coal, the biggest industry, because, as measured by BLS, output actually rose 8 percent, and employment 24 percent, from 1973 to 1975.

Industries Other Than Mining

The Williams-Steiger Occupational Safety and Health Act, effective April 28, 1971, covers business in general. This section is confined to the effects of this law, which is administered by the Occupational Safety and Health Administration (OSHA) of the Department of Labor.

Through 1975, the last year covered by the estimates in this article, only moderate costs seem to have been imposed upon business by this legislation. This was partly because OSHA regulation consisted mainly of the codification of existing standards in the field of safety, and safety (as distinguished from health) has been promoted by business for many years both on its own volition and under the prodding of State agencies and insurers. OSHA, in accordance with the law, began its work by issuing as its own regulations a book of "consensus" standards—safety standards that had previously been adopted by trade associations and professional societies. This initial package was effective August 27, 1971, and most subsequent standards were similar in character.

Through 1975, relatively little OSHA regulation had been imposed in the

area of health.³⁴ Health regulation is likely to be much more costly because it is new and will require greater changes in existing practices. Costs will be especially large if OSHA adheres to the principle that personal protective equipment, such as earplugs and earmuffs to reduce noise, should not be relied upon to meet standards.

Enforcement policy was based on belief that business would comply voluntarily if it understood OSHA standards, an approach that could be expected to secure compliance only gradually and after a lapse of time. Firms were never or rarely cited for violating the majority of OSHA standards; violations were concentrated in only a few standards. Penalties were small. As of the end of 1975, nonserious violations discovered (98.7 percent of the total) drew fines averaging \$16 and serious violations (the remainder) fines averaging \$648.³⁵

The McGraw-Hill Publications Company, which regularly surveys plant and equipment expenditures by U.S. business, has collected capital outlays for employee safety and health for years beginning with 1972. Table 8, columns 1 and 2, shows expenditures by industries other than mining in millions of dollars and as a percentage of nonfarm nonresidential business NNP. Column 3 shows the series in constant prices that is obtained when current-dollar outlays are divided by the NIPA implicit price deflator for producers' durable equipment. These data refer to total, rather than incremental, capital outlays; the amounts that stem from OSHA's requirements are not reported separately.

It appears to be the general view that OSHA is responsible for a substantial fraction of the total. Thus, McGraw-Hill states in its annual releases: "Investment in job health and safety is related, in part, to the present enforcement of the 1970 Occupational Safety and Health Act (OSHA). This is still a relatively new area of large-scale capital expenditures. . . ." ³⁶ Also, Murray L. Weidenbaum, after noting difficulties of reporting and interpretation, says the data "should be taken mainly as illustrative of the substantial costs involved in meeting federally mandated requirements." ³⁷

However, the trend of capital outlays from 1972 to 1975 suggests a different interpretation: that nearly all of the reported expenditure would have been made in the absence of new legislation. In this period, capital outlays for safety and health showed no uptrend relative to output or, when measured in constant prices, even in absolute value. The absence of an increase after 1972 suggests that capital outlays resulting from OSHA regulations could not have been large unless capital outlays in 1972 were already raised substantially by OSHA regulations. But it is not likely that OSHA could have had a substantial impact fast enough to raise outlays to a substantially higher plateau as early as 1972. The law became effective only April 28, 1971, the first standards did not go into effect until August 27, 1971, and the early standards were not regarded as stringent. Weidenbaum regards 1973 as "the first year of operation" of OSHA and to assess the effectiveness of the new safety legislation, examines changes in accidents from 1972 to 1973.³⁸

Table 9.—Incremental Costs of Protecting Worker Safety and Health, Nonresidential Business Except Mining

	Incremental costs (millions of dollars)				Total incremental costs as percentage of nonresidential business NNP plus incremental costs
	Current costs	Depreciation	Net opportunity cost of invested capital	Total	
	(1)	(2)	(3)	(4)	
1970.....	0	0	0	0	0.00
1971.....	26	14	14	54	.01
1972.....	113	59	60	232	.03
1973.....	197	117	105	419	.05
1974.....	319	197	177	693	.07
1975.....	450	285	237	972	.09

I compromise the opposing views in the following way. First, I carry the series for capital expenditures for safety and health shown in table 8 back to 1970 by assuming that in 1970 the ratio of such expenditures to nonfarm nonresidential business NNP was three-fourths of the 1972 ratio, or 0.231 percent, and that in 1971 it was midway between the 1972 and assumed 1970 ratios. Second, I assume that in the absence of OSHA the 1970 ratio would have continued until 1975. This ratio, 0.231 percent, was multiplied by nonfarm nonresidential business NNP to obtain baseline capital expenditures. Baseline capital expenditures were deducted from total expenditures to secure a 1971-75 series for incremental capital expenditures. The incremental capital expenditures series was then used to construct series for the gross and net stock of safety and health capital, and of depreciation. A service life of 10 years for capital goods bought with these outlays and the straight-line formula for computing depreciation were used, and the BEA implicit deflator for fixed nonresidential investment was adopted as a price series in the calculations.

Depreciation in 1975, calculated as 10 percent of the average gross stock value at the start and end of 1975, was \$285 million in current prices (table 9, column 2). The net stock averaged \$2,232 million in 1975. The cyclically adjusted ratio of earnings to asset values of 10.6 percent (table 3) was multiplied by this value to secure the net opportunity cost of the incremental stock, \$237 million in 1975 (table 9, column 3). Total capital cost, then, was \$522 million in 1975 (\$285 million plus \$237 million).

Data for current-account expenditures are unavailable and little is known even qualitatively about their importance. Complaints about needs to keep track of regulations, maintain records, and report were widespread during the period up to 1975, but whether current costs for other purposes—such as hiring additional safety and health personnel, testing, cleaning, diverting worktime to safety instruction, adopting more costly work layout, and so on—represented an appreciable burden is not known.

Even the few published projections of future costs usually do not separate current costs, if they count them at all. Three analyses that do make a separation, suggest current costs at least as large as annual capital costs but may not be representative.³⁹

To complete the estimates, I assume that current costs bear the same ratio to annual capital costs (depreciation plus net opportunity cost of invested capital) as they do for air and water pollution abatement (excluding motor vehicles). This ratio was 0.86 in 1975 (table 1, ratio of row 2 to the sum of rows 6 and 9). Column 1 of table 9 shows the resulting estimates of current costs, and column 4 shows incremental cost of all types.

Total incremental cost is shown in column 5 of table 9 as a percentage of nonresidential business NNP.⁴⁰ This is an estimate of the percentage by which net output (NI or NNP) per unit of input in nonresidential business would have been higher if there had been no costs imposed by the Occupational Safety and Health Act. The percentage had reached only 0.09 by 1975. The incremental cost imposed by the act was reducing the growth rate by about 0.02 percent a year after 1971.

Index of Effect of Costs of Protecting Worker Safety and Health Upon Output Per Unit of Input

Table 10 brings together the ratios of incremental cost to net output that

were computed for three types of programs to protect the safety and health of employed persons. The sum of the ratios is 0.42 percent in 1975 (column 4), and the figure is unchanged to this degree of rounding if incremental cost is stated as a percentage of the sum of measured product and the incremental cost ($0.0042/1.0042=0.0042$). As in the case of pollution abatement, this calculation yields the effect upon output per unit of input so the diversion of resources to protection of the safety and health of employed persons reduced measured output per unit of input by 0.42 percent in 1975. Ratios for all years are shown in column 5. Column 6 measures the ratio of input not so diverted to the total, and column 7 presents the same series in index form.

This index measures the course that output per unit of input in the nonresidential business sector would have followed if nothing had changed except provisions for the safety and health of workers (including regulations concerning motor vehicle safety). From 1967 to 1975, the index fell 0.42 percent, a growth rate of -0.05 percent. Mining was responsible for nearly three-fifths of the drop. The decline was accelerating throughout the period and by 1975 the rate had reached -0.12 percent. These growth rates are also the amounts, expressed in percentage points, by which the changes described were reducing the growth rate of output per unit of input in nonresidential business.

Part 4: Costs of Dishonesty and Crime

The number and costs of criminal acts, including those committed against business, have increased in the United States. There is no need to decide whether this results from changes in the governmental system of criminal justice or from changes in individuals' attitudes toward dishonesty and crime. Regardless of its cause, the increase in crime, and the apparent decline in the ability to rely upon the honesty of

other people, is an important change in the human environment within which business must operate.

Business is affected by an increase in dishonesty and crime among the public in general—and among customers, employees, and suppliers in particular—in two ways, both of which reduce measured output per unit of input. First, in an effort to limit its losses, business may

Table 10.—Costs of Protecting Worker Safety and Health: Calculation of Effects Upon Output Per Unit of Input in Nonresidential Business

	Ratios of incremental costs to net output in nonresidential business				Ratio of input diverted to protection to total input Col. 4 ÷ one + Col. 4	Ratio of input not diverted to protection to total input One—Col. 5	Index of effect of protection costs upon output per unit of input From Col. 6 (1972=100)
	Safety equipment on motor vehicles ¹	Mining ²	Other industries ²	Total			
	(1)	(2)	(3)	(4)				(5)	(6)	(7)
1967						1.0000	100.17
1968	0.0000			0.0000	0.0000	1.0000	100.17
1969	.0001	0.0002		.0003	.0003	.9997	100.14
1970	.0002	.0004		.0006	.0006	.9994	100.11
1971	.0003	.0008	0.0001	.0012	.0012	.9988	100.05
1972	.0003	.0011	.0003	.0017	.0017	.9983	100.00
1973	.0004	.0012	.0005	.0021	.0021	.9979	99.96
1974	.0006	.0017	.0007	.0030	.0030	.9970	99.87
1975	.0009	.0024	.0009	.0042	.0042	.9958	99.75

1. Business vehicles only.

2. Excludes safety features on cars and trucks.

Table 11.—Industries Providing Protective Services Against Crime: Receipts and Employment Based Upon the Census of Business

	Receipts (millions of dollars)				Wage and salary workers employed in March (thousands)			
	Detective agencies and protective services	Armored car services	Burglar and fire alarm systems	Total, three industries	Detective agencies and protective services	Armored car services	Burglar and fire alarm systems	Total, three industries
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1954	60	n.a.	n.a.	² 93	³ 17	n.a.	n.a.	n.a.
1958	177	n.a.	n.a.	² 272	³ 42	n.a.	n.a.	n.a.
1963	289	67	n.a.	² 443	67	8	n.a.	² 80
1967	¹ 444	¹ 91	n.a.	² 668	92	9	n.a.	² 109
1972	¹ 938	¹ 233	¹ 283	1,453	176	21	14	212

n.a. Not available.

1. Receipts of firms with no employees are estimated.

2. Includes estimates for components not shown.

3. Week ended nearest November 15.

Source: U.S. Department of Commerce, Bureau of the Census, *Census of Business*.**Table 12.—Industries Providing Protective Services Against Crime, and Selected Occupations: Employment and Wage Data Based on Various Sources**

	Detective and protective service industry: data from <i>County Business Patterns</i>		Guards and watchmen employed in business service industries: data from <i>Census of Population</i>	Private wage and salary workers: data from Current Population Survey (yearly average, in thousands)		
	March employment (thousands)	First-quarter taxable wages (millions of dollars)		March employment (thousands)	Private police-men and detectives	Private guards and watchmen
	(1)	(2)		(3)	(4)	(5)
1959		¹ 21	¹ 12	n.a.	n.a.	n.a.
1960		n.a.	n.a.	² 24	n.a.	n.a.
1964		62	48	n.a.	n.a.	n.a.
1967		97	79	n.a.	n.a.	n.a.
1969		133	123	n.a.	n.a.	n.a.
1970		152	144	² 61	n.a.	n.a.
1971		164	163	n.a.	20	239
1972		183	193	n.a.	20	281
1973		203	220	n.a.	21	272
1974		250	288	n.a.	21	311
1975		253	320	n.a.	19	332
1976		n.a.	n.a.	n.a.	21	352

n.a. Not available.

1. Private detective agencies only.

2. Proprietors and unpaid family workers are included. Estimation was required to include persons not reporting occupation and/or industry, to include females in 1960, and to exclude persons employed by nonprofit organizations.

Sources: U.S. Department of Commerce, Bureau of the Census, *County Business Patterns* (columns 1 and 2) and *Census of Population* (column 3). U.S. Department of Labor, Bureau of Labor Statistics (columns 4 and 5).

divert resources from the production of measured output to protection against criminal and dishonest acts. A highly visible example has been the appearance of guards in many drug and grocery stores. In comparison with the period before crime increased, input in these stores is raised but output is not. From the standpoint of the economy, labor that could otherwise be used to produce measured output is no longer available for that purpose. Second, business sustains increased costs as a result of criminal acts that nevertheless occur. Theft of merchandise is the main example. The production of merchandise that is stolen from inventories before it reaches a final buyer absorbs inputs that are measured but the merchandise stolen is not counted as output. Costs resulting from various other types of crime, such as the cost of repairing property damaged by vandalism, also reduce output per unit of input.

Some costs of protection are so indirect that measurement seems nearly impossible, and it was not attempted. For example, extensive dishonesty among the public completely bars self-service at retail stores in some areas, and high crime rates may prevent placing businesses in cities or neighborhoods that would otherwise provide the most advantageous locations.

I shall, with one exception, initially measure the total rather than the incremental cost of crime.⁴¹ But to judge the effect of crime on the course of output per unit of input, attention must, of course, be directed to changes in the cost burden, that is, to the incremental cost.

Data for crime costs are inadequate. They are increasingly so as one moves back in time. However, it is clear that the increase in crime started much before 1967, the starting point for the estimates presented in parts 2 and 3 of this article. To avoid a discontinuity, I have carried the series back to 1957.

Costs of Protection

The costs of protection against dishonesty and crime can be divided between the protection that firms provide for themselves, particularly the direct hiring of guards and detectives, and the

purchase of protective services from firms specializing in this activity.

The former is probably the larger; it occupies most of the persons engaged in these activities. But the increase in protective activity during the past two decades, in excess of that associated with growth of the economy, seems to have been confined to the purchase of protective services from specialized firms. To measure the increase in the cost of protection, therefore, direct hiring of protective service workers can be disregarded. The estimates of the cost of purchased services were based on the receipts of the specialized firms. Two tables providing data used in the analysis will be introduced at this point. I shall then describe, first, the statistical basis for the judgment that direct hiring could be disregarded and, second, the derivation of the estimates for purchased services.

Table 11 shows receipts and employment of firms specializing in protection against crime, based on the *Census of Business*.⁴² Receipts of such firms are an approximation to expenditures by business firms although they include some receipts from individuals and others. These receipts represent the following percentages of NI originating in nonresidential business.

Year	Percent
1954.....	0.038
1958.....	.093
1963.....	.117
1967.....	.131
1972.....	.201

Social Security (Old Age and Survivors' Insurance) data reported in *County Business Patterns (CBP)* provide March employment for detective and protective services in a number of years. The series (table 12, column 1) appears tolerably consistent with *Census of Business* data (table 11, column 5) although it runs slightly higher. This series and corresponding data for taxable payrolls (table 12, column 2) can be used to interpolate and extrapolate *Census of Business* data. Other data in table 12 will be mentioned shortly.

Protection that firms provide for themselves

Statistical information related to the provision that business makes directly for its own protection consists chiefly of the numbers employed in business in two occupations, "policemen and detectives" and "guards and watchmen," and the division of the number in the latter occupation between business service and other industries. Practically all guards and watchmen

in the business service industry are employed in protective service components so "business service" and "protective services" can be used interchangeably in this context. From the 1960 and 1970 *Censuses of Population*, the following approximations were obtained to the total numbers in the two occupations employed by all private business and, for guards and watchmen, the distribution between business service and other industries (data in thousands):

	March 1960			March 1970		
	Policemen and detectives	Guards and watchmen	Both	Policemen and detectives	Guards and watchmen	Both
Total private business.....	17	176	193	17	224	241
Business service.....	n.a.	24	n.a.	n.a.	61	n.a.
Other industries.....	n.a.	152	n.a.	n.a.	163	n.a.

n.a. Not available.

The increase from 1960 to 1970 in employment of private guards and watchmen was concentrated in the business service industry. The number employed directly in the rest of the business sector did not increase more than total employment. The number of private policemen and detectives is too small to permit this finding to be altered by their inclusion.⁴³ I conclude that from 1960 to 1970, the ratio of directly hired protective service workers to total business employment did not change much.

What happened after 1970? The *Current Population Survey (CPS)* provides annual averages of the numbers of private wage and salary workers employed in the two occupations. The data appear in table 12, columns 4 and 5. Because the number of private policemen and detectives is both small and stable, attention can be confined to guards and watchmen. The number shown for 1971, the first year available, probably is not indicative of the level around that time. This is inferred from the *CPS* series for the total number of guards and watchmen, which is available without a division between private and government workers for a longer time period. In this series, the 1971 figure is erratically low, probably as a

result of a sampling fluctuation. Stated in thousands, the numbers were 377 in 1969, 373 in 1970, 350 in 1971, 412 in 1972, and 420 in 1973. It is reasonable to infer that the private component, which represented 68 percent of the total in both 1971 and 1972, was also erratically low in 1971. Extrapolation of the number of private guards and watchmen backwards from 1971 by the series that includes government workers yields 255,000 as the estimated 1970 number that is comparable to the 332,000 in 1975 and the figures for other years shown in table 12, column 5.

Estimates based on the *Census of Population* for 1970, already provided, showed that 27 percent of 244,000 private guards and watchmen in nonresidential business were employed in business service and 73 percent in other industries. When the 255,000 estimated to be comparable to the *CPS* series for later years are similarly divided, 69,000 fall in business service, which is to say in the three protective service industries, and 186,000 in other industries.

From 1970 to 1975, *CBP* data for employment in protective service industries (table 12, column 1) rose 66.45 percent. If the number of private guards and watchmen in these industries rose by the same percentage, they

increased from 69,000 in 1970 to 115,000 in 1975. Since the total number of private guards and watchmen is estimated to have increased from 255,000 to 332,000, the number in other industries can be estimated by subtraction to have increased from 186,000 in 1970 to 217,000 in 1975. This would represent a minor increase in the percentage of total nonresidential business employment in this category, but it is too small a change to suggest a diversion of inputs sufficient to affect output per unit of input perceptibly.

I conclude that the costs to business of policemen, detectives, guards, and watchmen who are employed directly by the enterprises they protect did not change enough to affect output per unit of input either before or after 1970. It can be inferred that this was also true of related costs, such as those for supervision or uniforms. I therefore simply omit all these costs from the totals analyzed.⁴⁴

Protection purchased from specialized firms

Receipts of the protective service industries in *Census of Business* years (table 11, column 4) were interpolated and extrapolated by first-quarter taxable wages (table 12, column 2) to obtain a series covering 1954, 1958, 1963, 1967, and all years from 1969 to 1975. The ratio of these receipts—regarded as payments by business for protection—to NI originating in nonresidential business was computed for all these years to supplement the ratios presented earlier for census years. Ratios for years that were needed but still missing (1957, 1959–62, 1964–66, and 1968) were estimated by geometric interpolation.

Index of effects of costs of protection

To secure an index of the effects of costs of protection on output per unit of input, these percentages were deducted from 100 percent, and the remainders converted to an index with 1972 equal to 100 (table 13, column 1). For example, costs of protection provided by business service firms were 0.117 percent of NI in 1963 and 0.201 percent in 1972; the remainders were

therefore 99.883 in 1963 and 99.799 in 1972; and the indexes 100.08 in 1963 and 100.00 in 1972.⁴⁵ The meaning is that if no determinant of output per unit of input except costs of protection had changed, output per unit of input would have been 0.08 percent higher in 1963 than in 1972.

This estimate covers only payments to the protective service industries and costs of direct hiring of police, guards, and watchmen. Other costs of protection include special design of buildings (notably banks), shutters and locks, safes, closed-circuit TV, alarm signals purchased independently of services, bookkeeping safeguards, packaging small consumer items in large containers (to discourage shoplifting), and procedures for validating checks and credit cards, among others, but I have no information as to whether the sum of these costs has changed relative to the value of output. It is unlikely that it has changed enough to affect the course of productivity appreciably.

Thefts of Merchandise and Damage to Property

The value of measured output is reduced by the value of goods, including those in transit, that are stolen from business inventories or are destroyed by arson or vandalism. This is so whether the value of output is derived from the NIPA's as the sum of national product components or as the sum of "charges" against national product. In the former case, this outcome results because goods stolen reduce the change in business inventories without raising any component of final sales. In the latter case, the outcome is the same because the value of goods stolen re-

Table 13.—Effects of Changes in Costs of Dishonesty and Crime Upon Output Per Unit of Input in Nonresidential Business

	Type of cost		
	Protection	Losses	Total
	(1)	(2)	(3)
1957.....	100.13	100.20	100.33
1958.....	100.11	100.16	100.27
1959.....	100.10	100.18	100.28
1960.....	100.10	100.12	100.22
1961.....	100.09	100.11	100.20
1962.....	100.09	100.11	100.20
1963.....	100.08	100.09	100.17
1964.....	100.08	100.07	100.15
1965.....	100.08	100.08	100.16
1966.....	100.07	100.07	100.14
1967.....	100.07	100.02	100.09
1968.....	100.05	99.99	100.04
1969.....	100.03	99.95	99.98
1970.....	100.01	99.90	99.91
1971.....	100.01	99.88	99.89
1972.....	100.00	100.00	100.00
1973.....	100.00	99.95	99.95
1974.....	99.95	99.88	99.83
1975.....	99.94	99.73	99.67

duces corporate profits or proprietors' income and is not included in business transfer payments nor any other charge against national product. Since inputs used to produce goods stolen from inventory are counted in total input, thefts of merchandise from business reduce output per unit of input. When repairs to structures, equipment, and goods in inventory become necessary because of damage sustained from vandalism or arson, they too absorb input without providing final product, and thus reduce output per unit of input. To measure the effect on output per unit of input, losses sustained by business must be estimated.

The Bureau of Domestic Commerce (BDC) of the U.S. Department of Commerce has the only time series of which I am aware for the costs that crime has imposed upon business. Its estimates cover 1971, 1973, 1974, and 1975. BDC has sought to provide

Table 14.—Bureau of Domestic Commerce Estimates of the Cost of Crime Against Business

	Costs of crime (billions of dollars)			Nonresidential business national income	Costs of crime as percentages of nonresidential business national income		
	Preventive	All other	Total		Preventive	All other	Total
1971.....	3.3	12.4	15.7	650.9	0.51	1.91	2.41
1972.....	n.a.	n.a.	n.a.	724.6	n.a.	n.a.	n.a.
1973.....	3.5	14.8	18.3	817.3	.43	1.81	2.24
1974.....	3.9	16.4	20.3	862.2	.45	1.90	2.36
1975.....	4.5	19.1	23.6	916.5	.49	2.08	2.58

n.a. Not available.

Source: Costs of crime from U.S. Department of Commerce, Bureau of Domestic Commerce, *The Cost of Crimes Against Business*, p. 7.

comparable data for the 4 years. The estimates are shown, with a two-way breakdown, in table 14. Costs of prevention are those discussed in the previous section. The definition of other costs differs from that which is desired mainly in that it covers not only losses of tangible property but also unrecovered losses of money—by theft, fraud (including passing of bad checks), forgery, embezzlement, and so on.

The data exclude some costs that BDC does not regard as "ordinary." For example, the costs of special measures by the airlines to prevent hijacking are excluded from protection costs.

The BDC estimates are admittedly based on fragmentary information, and the Bureau makes no claim as to their accuracy. BDC describes them as follows:

"To gather current information, a review of articles in the trade press on crime problems within particular industries was conducted, while many industry associations supplied information and estimates based on the experiences of their memberships. Various Federal Government agencies also provided statistics on crimes.

"This report, therefore, presents a detailed summary of the available knowledge of both the industries themselves and the Fed-

eral Government on the extent of the dollar loss of American business to crime in the period since 1971. In almost every case the estimates are conservatively stated. The report also demonstrates that accurate data with which to quantify the economic impact of crimes against business are either scarce or, as is most likely, not available."⁴⁶

The BDC estimates for components that can be compared seem higher, after allowance for differences in dates, than those derivable from earlier reports by the Task Force on Assessment of The President's Commission on Law Enforcement and Administration of Justice and the Small Business Administration.⁴⁷ Much of the difference stems from higher estimates by BDC of the value of employee thefts. Personnel of the office now believe that even their higher estimates of inventory losses in retail trade from employee thefts and shoplifting are too low.

No direct use is made here of the BDC series for costs of protection, which implies that the rise in such costs subtracted 0.01 percentage points from the 1971-75 growth rate. My series, derived in the preceding section, yields the same result for this period.

I reduced the BDC series for "all other" costs by 20 percent (\$3.8 billion in 1975). The intent was to eliminate unrecovered losses of money because

they do not reduce measured output, at least in principle.⁴⁸

The ratio of the remaining costs to NI was calculated for each of the years for which BDC provides data. The first column of the text table below shows these ratios in percentage form. They represent the percentages by which output per unit of input was reduced by losses from crime.

To test the plausibility of the movement of this series, an independent measure of the prevalence of crime is needed. The Federal Bureau of Investigation (FBI) selects certain types of crimes for inclusion in its crime index and classifies three of these types as property crimes. They are burglary, larceny-theft, and motor vehicle theft.⁴⁹ I calculated the ratio of the number of FBI "index" property crimes to NI originating in nonresidential business—measured in constant prices because the number of crimes does not rise with the price level. The ratio is expressed as thousands of FBI "index" property crimes per billion dollars of NI, measured in 1972 prices.

The two ratios are as follows:

	Costs (except protection and cash losses) as a percentage of NI (current prices)	Thousands of FBI index property crimes per billion dollars of NI in 1972 prices
1971.....	1.524	11.49
1972.....	n.a.	10.23
1973.....	1.449	10.22
1974.....	1.522	12.51
1975.....	1.667	14.32

n.a. Not available.

Table 15.—Indexes of the Effects of Changes in Three Aspects of the Institutional and Human Environment Upon Output Per Unit of Input in Nonresidential Business

	Indexes, 1972=100				Percentage change in indexes from previous year			
	Pollution abatement (table 4)	Worker safety and health (table 10)	Dishonesty and crime (table 13)	Total	Pollution abatement	Worker safety and health	Dishonesty and crime	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1957.....	100.41	100.17	100.33	100.91				
1958.....	100.41	100.17	100.27	100.85			-.06	-.06
1959.....	100.41	100.17	100.28	100.86			.01	.01
1960.....	100.41	100.17	100.22	100.80			-.06	-.06
1961.....	100.41	100.17	100.20	100.78			-.02	-.02
1962.....	100.41	100.17	100.20	100.78			.00	.00
1963.....	100.41	100.17	100.17	100.75			-.03	-.03
1964.....	100.41	100.17	100.15	100.73			-.02	-.02
1965.....	100.41	100.17	100.16	100.74			.01	.01
1966.....	100.41	100.17	100.14	100.72			-.02	-.02
1967.....	100.41	100.17	100.09	100.67			-.05	-.05
1968.....	100.37	100.17	100.04	100.58	-0.04	0.00	-.05	-.09
1969.....	100.31	100.14	99.98	100.43	-.06	-.03	-.06	-.15
1970.....	100.21	100.11	99.91	100.23	-.10	-.03	-.07	-.20
1971.....	100.10	100.05	99.89	100.04	-.11	-.06	-.02	-.19
1972.....	100.00	100.00	100.00	100.00	-.10	-.05	.11	-.04
1973.....	99.89	99.96	99.95	99.80	-.11	-.04	-.05	-.20
1974.....	99.67	99.87	99.83	99.37	-.22	-.09	-.12	-.43
1975.....	99.44	99.75	99.67	98.86	-.23	-.12	-.16	-.51

The FBI series is introduced only as a general indicator of crime prevalence; it does not count most crimes against business and does count many crimes against others. But it does tend to confirm the dip from 1971 to 1973 in the cost ratio based on BDC data, which I would regard with skepticism in the absence of some independent confirmation.

Percentages comparable to the first column of the text table were needed for other years. A percentage for 1972, 1.404 percent, was obtained by interpolating the first column of the text table by the second column. To serve as a basis to estimate similar cost percentages for earlier years, the second column was carried back to 1957.⁵⁰ However, a simple extrapolation of the first column by the second would not have been satisfactory, because the amplitude of fluctuation in the two columns is not the same. Instead,

it was assumed that the value of the first column in each year before 1971 differed from its value in 1971 by 0.0506 of the difference between the 2 years in column 2. The ratio is based on the differences between 1971 and 1975 in the preceding text table: $0.0506 = (1.667 - 1.524) \div (14.316 - 11.490)$.

From the series of cost percentages obtained by thus extending the first column of the text table, an index of the effect of losses on output per unit of input (table 13, column 2) was computed by the procedure used for costs of protection.⁵¹ The product of these two series, shown in column 3, measures the course that output per unit of input in nonresidential business would have followed if nothing had changed except costs incurred as a consequence of changes in the prevalence of crime and dishonesty.

experience without them. The data base for their computation needs to be strengthened.

These estimates refer to output per unit of input when output is measured by NI or NNP. The effects on the growth rate of output per unit of input would be about one-tenth smaller if output were measured gross of depreciation, that is, by gross national income or GNP.⁵² Although dollar costs of pollution abatement, protection of employee safety and health, and dishonesty and crime are the same in absolute terms, the percentage of gross output lost from diversion of resources is smaller because the value of gross output, the denominator in the percentage calculation, is larger by the value of depreciation.

Annual growth rates in 1948-69 were derived in *Accounting* for total output (measured by NI) in nonresidential business and for a number of related series. These rates included 3.7 percent for total output, 2.6 percent for output per person employed, 3.1 percent for output per hour worked, 2.1 percent for output per unit of input, and 1.4 percent for the index that measures the contribution of advances in knowledge and miscellaneous determinants to these growth rates. In the 1948-69 period, the reduction in all these rates that resulted from the effect on output per unit of input of changes in the three determinants examined in this article had been only 0.02 percentage points.⁵³ The transition to a situation in which, by 1975, the same determinants were deducting 0.5 percentage points has been a large drag upon the recent growth rate of all these measures—large, that is to say, when compared with their growth rates in the past. Thus, costs arising from protection of the physical environment, protection of employee safety and health, and crime help to explain why all these rates have fallen in recent years. It is likely that costs imposed by other new governmental controls, including those intended to protect the health and pocketbooks of consumers and to minimize fuel imports, are responsible for an additional portion of the drop in growth rates, but estimates for these determinants are yet to be attempted.

Part 5: Combined Effects

The indexes of the effects of changes in the three conditions discussed in this article upon output per unit of input in nonresidential business are repeated in the first three columns of table 15. An index of their combined effect, the product of the first three columns, is shown in column 4. This index is a measure of the course that output per unit of input in nonresidential business would have followed if there had been no change in the provisions adopted by business to protect the physical environment and the safety and health of employed persons, and no change in the prevalence of dishonesty and crime. Costs of pollution abatement increased annually after 1967 and costs of employee safety and health after 1968, while costs of dishonesty and crime fluctuated about an upward trend. The 1967 indexes for pollution abatement and worker safety and health are used for all earlier years because there is believed to have been no significant change in them until that time.

The last four columns of table 15 show the annual percentage changes in the indexes. By the mid-1970's, the three determinants were importantly retarding the growth of output per unit of input in nonresidential business. Together, they subtracted 0.2 percentage points from the percentage change in output per unit of input in 1973, 0.4 points in 1974, and 0.5 points in 1975.

Over the 6 years from 1969 to 1975, the three determinants subtracted 0.26 percentage points from the growth rate of output per unit of input. Costs of pollution abatement subtracted 0.15 points, costs of protecting safety and health of workers 0.07 points, and costs imposed by dishonesty and crime 0.05 points. From 1973 to 1975, the subtraction from the growth rate had reached 0.47 percentage points, with half the deduction due to pollution abatement. Estimates of this type are subject to substantial error, but it is not possible to appraise recent growth

Footnotes

1. Edward F. Denison, *Accounting for United States Economic Growth 1929-1969*, The Brookings Institution, Washington, D.C., 1974.
2. *Accounting*, p. 62, table 6-1. Additional possible determinants were specifically estimated to have had no effect (p. 76).
3. *Accounting*, pp. 78-79.
4. The first two estimates cover the entire effect upon measured output per unit of input of changes in motor vehicles that were introduced to reduce air pollution and to make vehicles safer. As is explained later, this results in part because costly changes in vehicles reduce output per unit of input only if the vehicles are used by business, and in part because all of the costs of safety improvement on business-owned vehicles is included in the estimates for worker safety and health even though the public as well as worker-occupants of the vehicles may benefit.
5. Among the more important are probably legislation intended to protect consumers against dangerous products and deceptive practices, and controls intended to reduce dependence on foreign energy sources.
6. Complications caused by the difference between market price and factor cost values of output are discussed later.
7. For further explanation, see John E. Cremeans and Frank W. Segel, "National Expenditures for Pollution Abatement and Control, 1972," *SURVEY OF CURRENT BUSINESS*, February 1975.
8. Total input might change, for example, if provision for environmental protection raised total investment, and thereby the capital stock, by raising total capital needs of business, or if it lowered total investment by lowering profits. It could have increased total hours worked by improving health or reduced them by worsening real wages. If profits or investment were affected, this might in turn have changed the gap between actual and potential employment. None of these possible effects seem likely to be amenable to confirmation and measurement.
9. This statement needs expansion to cover one minor point. If the economy operates under increasing returns to scale, as the estimates in my broader study imply, a change in input changes output more than proportionally. The difference appears in output per unit of input in my main classification of growth sources, though not in an alternative classification. (See *Accounting*, pp. 113-114.) For those interested in relating this article to my broader study, I note that in neither classification are gains from economies of scale included in the residual series for "advances in knowledge and all other determinants" from which I seek to isolate the effects of pollution abatement.
10. Frank W. Segel and Gary L. Rutledge, "Capital Expenditures by Business for Air, Water, and Solid Waste Pollution Abatement, 1975 and Planned 1976," *SURVEY*, July 1976, pp. 14-17. Frank W. Segel, Gary L. Rutledge, and Frederick J. Dreiling, "Pollution Abatement and Control Expenditures, 1974," *SURVEY*, February 1977, pp. 14-16. Earlier articles describe concepts and some of the series more fully, but do not provide additional data; see *SURVEY*, July 1974, July 1975, February 1975, and February 1976. The June 1977 issue provides later data for capital outlays.
11. U.S. Department of Commerce, Bureau of the Census, *Pollution Abatement Costs and Expenditures 1973*, *Pollution Abatement Costs and Expenditures 1974*, and *Pollution Abatement Costs and Expenditures 1975*.
12. The same figures are variously described as in December 1974 dollars and in 1974 dollars.
13. One other qualification is needed. As explained later, all the BEA data for environmental expenditures exclude farming, real estate operators, and independent professional practitioners.
14. From 1972 to 1974 current-account expenditures increased 17 percent a year and the capital stock 20 percent. If a bias adjustment based on this experience were introduced and carried back to 1967, a reasonable alternative to simple extrapolation, the net result would be to raise the incremental cost estimates about \$200 million a year in the period from 1972 to 1974.
15. The CEQ data cited are for operating and maintenance costs for air and water pollution control in the private "industrial" and "utilities" categories. They are from CEQ's 6th *Annual Report*, pp. 534 and 564, and 7th *Annual Report*, pp. 145 and 167.
16. Source: table 3A of the 1973, 1974, and 1975 issues of the Census Bureau report, *Pollution Abatement Costs and Expenditures*. Census Bureau instructions informed respondents to its surveys that the item refers to "all payments to governmental units for sewerage service. Include payments to government for overstrength effluent charges, sewer district tax assessments, etc. Include sewage payments which are included in your local tax bill. Estimate if necessary."
17. The 1975 estimate for nonresidential business, \$362 million, compares with CEQ's published estimate of \$0.3 billion. CEQ 7th *Annual Report*, p. 145.
18. This estimate of \$1,036 million in 1974 compares with a figure of \$784 million for the same components that had been obtained earlier by the ACEB by adjustment of book depreciation, and that was included in the capital consumption allowance estimate of \$1,566 million shown in the February 1977 *SURVEY*, p. 15, table 1.
19. An estimate for 1975, not available from MVMA, was based on the change from 1974 in the price index and adjustments for costs of safety improvements and pollution controls.
20. The deduction was estimated as follows. The depreciated value in 1972 prices of used automobiles sold by business to consumers, after deduction of automobiles sold by consumers to business, was obtained from NIPA table 1.17. It was divided by 0.55 to secure an estimate of the value in 1972 prices before depreciation. The ratio of 0.55 is based on a 10-year service life and straight-line depreciation and an estimated average age of 4½ years when sold. To obtain the undepreciated value in 1972 prices of the pollution abatement devices in these cars, the undepreciated value of the cars was multiplied by the average, during the preceding 8 years, of the ratios (step e) of the value of the devices to the value of the cars. This would be the correct ratio if the cars sold were equally divided over the age range of 1 to 8 years.
21. U.S. Department of Commerce, Bureau of Economic Analysis, *Fixed Nonresidential Business and Residential Capital in the United States, 1925-1975*, June 1976, p. T-6.
22. No estimate was included for diesel-fueled trucks, for which the pollution abatement problem is quite different. EPA considers that costs of equipment for pollution abatement were nominal. EPA, *The Cost of Clean Air*, p. III-31.
23. EPA, *The Cost of Clean Air*, pp. III-15, 28. This was literally true only through 1974. Starting in 1975, standards were lower for trucks but I have been unable to find an estimate of the cost differential, if any, on 1975 models. See *Ibid.*, pp. III-6 to 9.
24. To maintain uniformity with the automobile estimates, the automobile price index is assumed to be appropriate for abatement costs of trucks, and was used to convert devices in trucks from one price level to another.
25. *SURVEY*, February 1977, p. 15, table 1.
26. Census Bureau data are from *Pollution Abatement Costs and Expenditures*, (1973, 1974, and 1975 editions), table 3-A. Census Bureau instructions to respondents read as follows: "The estimate of costs recovered through abatement activities may have two parts: (1) The value of reclaimed materials or energy reclaimed . . . that were reused in production, and (2) revenue that was obtained from the sale of materials or energy reclaimed. . . . Heat is an example of reclaimed energy. Value and revenue are net of any additional cost incurred for additional processing of materials or energy to make them reusable or salable." The Census Bureau did not report a 1972 figure. Its 1973 figure for manufacturing was only \$376 million but ACEB considered this too small relative to 1972 and 1974 on the basis of technical information and the impact of legislation in force at the time.
27. R. & D. not for pollution abatement would provide new knowledge of a different kind. Insofar as it would otherwise be of a type that would raise measured output per unit of input, productivity growth will eventually be adversely affected by diversion to pollution abatement R. & D., but the retardation will be in some future period.
28. The division of incremental costs between those valued at factor cost and those valued at market price is, obviously, an approximation but the combined ratio is not very sensitive to errors in this division. It would rise only to 1.045 percent even if all costs were compared with NI and fall only to 0.928 percent if all costs were compared with NNP.
29. This difference from the illustration in which 1967 was taken as 100 does not affect the definition or movement of the series.
30. Data are from U.S. Department of Labor, Bureau of Labor Statistics, *Productivity Indexes for Selected Industries*, 1976 Edition, Bulletin 1938, 1977.
31. For copper, I use the series in which output is measured by copper ore and, for iron, the series in which output is measured by usable ore.
32. See *Business Week*, January 27, 1975, p. 130; *Coal Age*, February 1973, p. 88; and U.S. Department of the Interior, Bureau of Mines, *Mineral Facts and Problems*, 1975 Edition, Bulletin 667, preprint "Bituminous Coal and Lignite," p. 10.
33. The influx of inexperienced workers was itself due indirectly to safety legislation because, with output increasing only modestly, only the adverse behavior of productivity resulting from the legislation made rapid employment expansion necessary. The need to hire new workers was intensified by requirements to replace experienced supervisors and miners who were hired as government safety inspectors. The new young workers were also active in wildcat strikes and were the cause of higher absenteeism. The cost of hiring new workers was itself raised by regulations that imposed safety training course requirements for new and reassigned workers.
34. A standard for asbestos fibers in the atmosphere was introduced in December 1971; standards for 14 carcinogens and for pesticides (the standard for the latter was promptly voided by the courts) in April and May 1973; for vinyl chloride in May 1974; and for a series of toxic substances during fiscal 1976.
35. Based on Robert Stewart Smith, *The Occupational Safety and Health Act, Its Goals and Its Achievements*, American Enterprise Institute for Public Policy Research, Washington, 1976, pp. 60-64.
36. Economics Department, McGraw-Hill Publications Company, *4th Annual McGraw-Hill Survey Investment in Employee Safety and Health*, May 28, 1976, p. 4.
37. Murray L. Weidenbaum, *Government-Mandated Price Increases*, American Enterprise Institute for Public Policy Research, 1975, p. 51.
38. "Reducing Inflationary Pressures by Reforming Government Regulation," in William Fellner, Editor, *Contemporary Economic Problems*, American Enterprise Institute for Public Policy Research, 1976, p. 277.
39. These examples are cited by the Regulatory Policy Committee of the U.S. Department of Commerce in *Toward Regulatory Reasonableness*, January 13, 1977, p. 61.
40. In deriving such percentages for pollution abatement, it may be recalled, costs were divided between those best related to NNP and those best related to NI. This refinement was not attempted for safety and health, for which estimates are smaller and cruder, nor was it for dishonesty and crime, which is considered in part 4. Instead, all incremental costs were related to the measure that seemed more appropriate: NNP for safety and health (except the large mining component, for which the percentage was based on employment), and NI for dishonesty and crime.
41. The exception is costs of protection that firms provide for themselves.
42. Numbers shown are partly estimated, as footnotes to the table indicate. Estimated receipts of industries not separately reported amounted to one-fifth of the total in 1963 and 1967, and about one-third in 1954 and 1958. Receipts of component industries not separately reported in the earlier censuses were assumed to have moved like receipts of industries that were reported.
43. For example, if one-third of them were employed outside business service in both years, employment outside business service in the two occupations combined increased from 158,000 to 169,000. This is an increase of only 9 percent, which is less than the 16-percent increase in total business employment. Even an assumption that the percentage of policemen and detectives who were employed outside business service increased sharply would not do more than close the gap between the two percentages.
44. The series shown in the preceding table and the alternative series show irregular fluctuations that could be incorporated into the estimates. But I think they are more likely to reflect errors of estimate than reality and therefore ignore them.
45. Examination of the ratios suggests that the 1954 census may have understated receipts of detectives agencies. If so, my estimate of protection cost in 1957 is understated about one-fourth as much. Other years are unaffected.
46. U.S. Department of Commerce, Bureau of Domestic Commerce, *The Cost of Crimes Against Business*, January 1976, p. 2.

47. The President's Commission on Law Enforcement and Administration of Justice, *Crime and Its Impact—An Assessment*, U.S. Government Printing Office, 1967. U.S. Small Business Administration, *Crime Against Small Business*, Senate Document 91-14, 1969, p. 3.

48. When, as in my estimates, the value of output is measured as the sum of charges against national product, the inclusion of unrecovered cash losses in business transfer payments offsets the reduction that the losses cause in business profits. However, only \$121 million, less than 1 percent of the BDC figure for "all other" costs, is included in the NIPA transfer payment series in 1975. The BDC series surely implies a larger amount.

49. The weights of the three types, which simply reflect the numbers of crimes, have been fairly stable. They were, respectively, 29 percent, 60 percent, and 11 percent in 1960 and 32, 58, and 10 in 1975.

50. The number of index property crimes from 1960 onward is from Federal Bureau of Investigation, *Crime in the United States 1975, Uniform Crime Reports*, p. 49. The 1960 figure was extrapolated back to 1957 by an earlier series for the number of property crimes reported in

the FBI's uniform crime reports. The source is U.S. Department of Commerce, Bureau of the Census, *Historical Statistics of the United States Colonial Times to 1970*, Series 958.

51. One check on a small segment of the index is provided by statistics from Underwriters' Laboratories (UL). From 1963 to 1967, the number of burglary attempts against UL-certificated business installations of alarms increased from 6.1 per 100 protected properties to 8.8, with more than one-half of the 4-year increase occurring from 1966 to 1967. (*Crime Against Small Business*, p. 23). My series shows an even greater concentration of the 1963-67 increase in costs occurring in 1966-67. (The 44-percent increase in attempts over the 4 years is much larger than the increase in my series for costs of crime, but burglaries are only part of crime costs.)

52. From 1972 to 1975, the ratio of NNP to GNP averaged 0.901 at market prices.

53. This calculation uses the 1957 index in table 15 for 1948. This seems reasonable, and it is unlikely that any different plausible assumption about crime costs would raise the figure above 0.03.

(Continued from page 18)

Sales and sales prices

Manufacturers expect their sales to increase 10 percent in 1978 (table 3). The actual increase in 1977 was 13 percent, compared with an expected

increase of 10½ percent. Trade firms expect an increase of 10½ percent; last year, they had a 10-percent increase, compared with an expected 9 percent. The corresponding figures for public utilities are 11, 19, and 14½ percent.

Information on price changes of goods and services sold by manufacturers and public utilities is shown in table 4. Manufacturers expect a larger sales price increase this year than last; utilities expect a smaller increase.

ERRATA

Corrections are shown here for certain items in the National Income and Product Tables published in the July 1977 SURVEY OF CURRENT BUSINESS. Additional corrections were published in the August and September SURVEYS.

Gross Nonfarm Business Product

Period	Fixed-weighted price index, 1972=100 (Table 7.2, line 22)		Percent change from preceding period, fixed-weighted price index (Table 8.9, line 100)		Percent change from preceding period, chain price index (Table 8.9, line 99)	
	Published	Correct	Published	Correct	Published	Correct
1973.....	104.1	104.0	4.1	4.0	4.1	4.0
1974.....	116.4	115.5	11.9	11.1	11.4	10.6
1975.....	127.7	127.4	9.7	10.3	(*)	(*)
1976.....	134.7	134.5	5.5	5.6	(*)	(*)
1973:IV.....	106.6	106.8	9.8	9.5	(*)	(*)
1974:I.....	110.5	109.5	15.5	10.5	15.5	10.2
1974:II.....	114.4	113.7	14.8	16.4	(*)	(*)
1974:III.....	118.1	117.3	13.7	13.3	(*)	(*)
1974:IV.....	121.8	120.8	12.9	12.2	(*)	(*)
1975:I.....	124.7	124.2	9.8	11.8	(*)	(*)
1975:II.....	126.3	126.0	5.4	5.9	(*)	(*)
1975:III.....	128.4	128.1	6.7	6.9	(*)	(*)
1975:IV.....	130.2	130.0	5.7	6.1	(*)	(*)
1976:I.....	131.7	131.6	(*)	(*)	(*)	(*)
1976:II.....	133.3	133.0	5.0	4.4	(*)	(*)
1976:III.....	135.2	134.9	5.5	5.9	(*)	(*)
1976:IV.....	137.2	137.1	6.2	6.7	(*)	(*)
1977:I.....	139.4	139.0	6.5	5.8	(*)	(*)
1977:II.....	141.9	141.6	7.2	7.5	(*)	(*)

*Correct as published.

CURRENT BUSINESS STATISTICS

THE STATISTICS here update series published in the 1975 edition of BUSINESS STATISTICS, biennial statistical supplement to the SURVEY OF CURRENT BUSINESS. That volume (available from the Superintendent of Documents for \$6.80) provides a description of each series, references to sources of earlier figures, and historical data as follows: For all series, monthly or quarterly, 1971 through 1974 (1964-74 for major quarterly series), annually, 1947-74; for selected series, monthly or quarterly, 1947-74 (where available). Series added or significantly revised after the 1975 BUSINESS STATISTICS went to press are indicated by an asterisk (*) and a dagger (†), respectively. Unless otherwise noted, revised monthly data for periods not shown herein corresponding to revised annual data are available upon request.

The sources of the data are given in the 1975 edition of BUSINESS STATISTICS; they appear in the main descriptive note for each series, and are also listed alphabetically on pages 187-88. Statistics originating in Government agencies are not copyrighted and may be reprinted freely. Data from private sources are provided through the courtesy of the compilers, and are subject to their copyrights.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1974	1975	1976	1974	1975					1976				1977			
	Annual total			IV	I	II	III	IV	I	II	III	IV	I	II	III	IV ^p	
	Seasonally adjusted quarterly totals at annual rates																

GENERAL BUSINESS INDICATORS—Quarterly Series

NATIONAL INCOME AND PRODUCT†																
Gross national product, total†.....bil.\$.	1,412.9	1,528.8	1,706.5	1,452.4	1,453.9	1,496.6	1,564.9	1,600.7	1,651.2	1,691.9	1,727.3	1,755.4	1,810.8	1,869.9	1,915.9	1,965.1
Personal consumption expenditures, total.....do....	889.6	980.4	1,094.0	916.2	936.5	965.9	995.1	1,024.1	1,056.0	1,078.5	1,102.2	1,139.0	1,172.4	1,194.0	1,218.9	1,255.3
Durable goods, total.....do....	122.0	132.9	158.9	118.7	122.8	127.8	136.7	144.3	153.3	156.7	159.3	166.3	177.0	178.6	177.6	184.6
Motor vehicles and parts.....do....	48.0	53.9	71.9	44.8	48.0	49.9	56.5	61.3	68.8	71.0	72.1	75.7	85.3	84.5	81.2	84.1
Furniture and household equipment.....do....	54.9	58.0	63.9	54.7	54.8	57.4	58.7	61.0	62.0	63.0	63.9	66.5	67.4	69.3	70.9	73.9
Nondurable goods, total.....do....	376.3	409.3	442.7	388.5	394.0	406.4	415.0	421.9	430.4	437.1	444.7	458.8	466.6	474.4	481.8	497.7
Clothing and shoes.....do....	65.3	70.2	76.3	65.0	66.6	69.8	71.5	73.0	74.2	74.3	76.9	79.9	79.3	80.4	83.3	87.5
Food.....do....	189.8	209.5	225.5	198.1	202.6	207.9	212.1	215.4	219.3	223.9	227.0	232.0	237.9	244.8	248.3	254.2
Gasoline and oil.....do....	36.4	39.1	41.4	39.2	38.2	39.7	39.1	39.8	40.6	40.3	41.2	43.5	44.1	44.3	44.2	46.4
Services, total.....do....	391.3	438.2	492.3	408.9	419.7	431.7	443.4	457.9	472.4	484.6	498.2	513.9	528.8	541.1	559.5	572.9
Household operation.....do....	56.1	64.2	73.0	59.3	61.4	63.7	65.3	66.3	69.5	70.4	73.1	78.8	80.7	79.2	85.2	87.2
Housing.....do....	138.5	150.8	167.9	141.7	145.1	148.5	152.4	157.2	161.5	166.2	170.4	173.7	177.6	181.9	186.7	191.6
Transportation.....do....	30.7	32.2	36.8	31.6	31.6	31.6	32.2	33.2	34.8	36.3	37.6	38.7	39.5	40.5	42.3	43.1
Gross private domestic investment, total.....do....	214.6	189.1	243.3	210.4	175.1	171.2	205.4	204.7	231.3	244.4	254.3	243.4	271.8	294.9	303.6	307.0
Fixed investment.....do....	205.7	200.6	230.0	203.6	197.1	198.3	200.5	208.4	216.8	226.1	232.8	244.3	258.0	273.2	280.0	295.1
Nonresidential.....do....	150.6	149.1	161.9	153.2	149.8	147.7	148.2	150.7	155.4	159.8	164.9	167.6	177.0	182.4	187.5	195.5
Structures.....do....	54.5	52.9	55.8	55.6	53.3	51.9	52.8	53.4	54.7	55.8	56.0	57.0	57.9	61.0	62.6	64.9
Producers' durable equipment.....do....	96.2	96.3	106.1	97.5	96.5	95.7	95.4	97.4	100.8	104.0	109.0	110.6	119.2	121.4	124.9	130.7
Residential.....do....	55.1	51.5	68.0	50.5	47.3	48.6	52.3	57.6	61.4	66.3	67.8	76.7	81.0	90.8	92.5	99.5
Change in business inventories.....do....	8.9	-11.5	13.3	6.8	-22.0	-25.1	4.9	-3.6	14.5	18.3	21.5	-9.9	13.8	21.7	23.6	11.9
Nonfarm.....do....	10.8	-15.1	14.9	10.7	-25.9	-26.9	1.4	-9.2	15.9	20.4	22.0	1.4	14.1	22.4	23.1	10.4
Net exports of goods and services.....do....	6.0	20.4	7.8	8.2	15.4	24.3	20.8	20.8	10.2	10.2	7.9	3.0	-8.2	-9.7	-7.5	-10.8
Exports.....do....	137.9	147.3	162.9	150.5	147.4	142.7	146.9	152.1	153.9	160.6	168.4	168.5	170.4	178.1	179.9	174.3
Imports.....do....	131.9	126.9	155.1	142.3	131.9	118.3	126.1	131.3	143.7	150.4	160.6	165.6	173.6	187.7	187.4	185.1
Govt. purchases of goods and services, total.....do....	302.7	338.9	361.4	317.5	326.0	335.2	343.5	351.0	353.6	358.9	363.0	370.0	374.9	390.6	400.9	413.6
Federal.....do....	111.1	123.3	130.1	116.9	119.6	121.8	123.8	128.1	127.6	128.5	130.2	134.2	136.3	143.6	148.1	153.8
National defense.....do....	77.0	83.9	86.8	79.6	81.6	83.0	84.4	86.7	86.3	86.0	86.4	88.4	89.7	93.4	95.6	98.6
State and local.....do....	191.5	215.6	231.2	200.7	206.4	213.3	219.7	222.9	225.9	230.4	232.7	235.8	238.5	247.0	252.9	259.8
By major type of product:†																
Final sales, total.....do....	1,404.0	1,540.3	1,693.1	1,445.5	1,475.0	1,521.7	1,506.6	1,604.4	1,636.7	1,673.7	1,705.8	1,756.3	1,797.0	1,848.2	1,892.2	1,933.2
Goods, total.....do....	629.7	697.7	750.9	643.7	665.8	692.9	706.6	725.2	730.0	743.4	734.5	775.6	792.1	805.4	819.9	849.6
Durable goods.....do....	240.8	267.5	299.3	241.3	250.6	263.8	272.5	283.1	287.6	294.9	302.7	312.0	326.6	329.5	332.1	344.9
Nondurable goods.....do....	389.0	430.2	451.6	402.3	415.2	429.1	434.2	442.1	442.4	448.5	451.8	463.6	465.6	475.9	487.8	504.8
Services.....do....	626.8	699.2	782.0	656.7	670.5	689.5	708.4	728.3	751.6	770.8	791.8	813.8	833.7	853.3	881.6	903.1
Structures.....do....	147.4	143.5	160.2	145.1	138.8	139.3	145.0	150.8	155.0	159.4	159.6	166.9	171.2	187.5	190.7	200.4
Change in business inventories.....do....	8.9	-11.5	13.3	6.8	-22.0	-25.1	4.9	-3.6	14.5	18.3	21.5	-9.9	13.8	21.7	23.6	11.9
Durable goods.....do....	7.1	-9.2	4.1	12.2	-12.8	-11.7	-2.1	-10.3	-2.0	7.0	10.7	6.6	7.8	11.5	10.3	5.5
Nondurable goods.....do....	1.8	-2.2	9.3	-5.4	-9.2	-13.4	7.0	6.7	16.6	11.2	10.9	-1.6	6.0	10.2	13.4	6.4
GNP in constant (1972) dollars†																
Gross national product, total†.....bil.\$.	1,217.8	1,202.1	1,274.7	1,199.7	1,169.8	1,188.2	1,220.7	1,229.8	1,256.0	1,271.5	1,283.7	1,287.4	1,311.0	1,330.7	1,347.4	1,361.4
Personal consumption expenditures, total.....do....	760.7	775.1	821.3	752.9	756.9	770.4	780.2	792.8	807.2	815.5	822.7	839.8	850.4	854.1	860.4	876.4
Durable goods.....do....	112.5	112.7	127.5	104.3	106.2	109.0	115.4	120.2	125.4	126.7	127.1	130.7	136.9	137.9	136.5	140.8
Nondurable goods.....do....	303.9	307.6	321.6	301.2	301.8	308.4	308.6	311.5	316.1	319.3	321.5	329.7	329.7	330.0	332.4	340.9
Services.....do....	344.3	354.8	372.2	347.4	349.0	353.0	356.2	361.2	365.6	369.6	374.0	379.7	383.8	386.3	391.4	394.7
Gross private domestic investment, total.....do....	183.6	141.6	173.0	170.6	133.0	130.9	153.1	149.2	168.1	175.2	179.4	169.2	186.7	197.2	200.8	197.6
Fixed investment.....do....	175.6	151.5	164.5	163.8	152.9	148.9	150.2	153.8	158.4	163.1	165.6	171.0	177.0	184.0	185.1	190.0
Nonresidential.....do....	130.6	112.7	116.8	124.1	116.6	112.0	111.0	111.3	113.7	115.9	118.5	119.0	124.3	126.4	127.6	130.2
Residential.....do....	45.0	38.8	47.7	39.7	36.3	36.9	39.3	42.6	44.8	47.1	47.1	52.0	52.7	57.6	57.5	59.8
Change in business inventories.....do....	8.0	-9.9	8.5	6.8	-20.0	-18.0	2.9	-4.6	9.7	12.1	13.8	-1.8	9.7	13.2	15.7	7.7
Net exports of goods and services.....do....	15.9	22.5	16.0	17.9	20.5	24.5	22.7	22.3	16.8	16.4	17.0	13.8	10.6	9.4	12.2	10.6
Govt. purchases of goods and services, total.....do....	257.7	263.0	264.4	258.3	259.4	262.3	264.8	265.4	263.9	264.5	264.6	264.6	263.3	270.0	274.0	276.8
Federal.....do....	95.8	96.7	96.5	95.7	96.0	96.5	96.9	97.4	96.4	96.1	96.7	97.1	97.0	101.1	103.3	104.1
State and local.....do....	161.8	166.3	167.9	162.6	163.4	165.8	167.8	168.0	167.5	168.4	168.0	167.5	166.4	168.9	170.7	172.8

* Revised. † Preliminary. ‡ Revised series. Estimates of national income and product and personal income have been revised back to 1973 (see p. 16 ff. of the July 1977 SURVEY);

revisions prior to May 1976 for personal income appear on p. 28 of the July 1977 SURVEY. † Includes data for items not shown separately.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1974	1975	1976	1975					1976				1977 ^p			
	Annual total			IV	I	II	III	IV	I	II	III	IV	I	II	III	IV

GENERAL BUSINESS INDICATORS—Quarterly Series—Continued

U.S. INTERNATIONAL TRANSACTIONS																
<i>Quarterly Data Are Seasonally Adjusted (Credits +; debits -)</i>																
Exports of goods and services (excl. transfers under military grants) mil. \$.																
Merchandise, adjusted, excl. military	138,303	147,600	163,265	37,668	36,907	35,719	36,780	38,195	38,591	40,237	42,196	42,243	43,074	44,951	45,402	
Transfers under U.S. military agency sales contracts	2,952	3,919	5,213	850	924	874	957	1,164	1,095	1,189	1,472	1,457	1,845	1,714	2,008	
Receipts of income on U.S. assets abroad	19,763	17,330	21,369	5,584	4,283	4,306	4,403	4,338	5,298	5,167	5,483	5,421	6,133	6,660	6,430	
Other services	17,281	19,263	21,990	4,633	4,682	4,688	4,858	5,036	5,198	5,501	5,638	5,654	5,638	5,987	6,095	
Imports of goods and services do.																
Merchandise, adjusted, excl. military	-136,143	-131,436	-159,668	-36,713	-34,199	-30,688	-32,645	-33,906	-37,039	-38,732	-41,321	-42,580	-46,069	-48,340	-48,352	
Direct defense expenditures	-5,035	-4,795	-4,847	-1,319	-1,317	-1,185	-1,096	-1,198	-1,160	-1,228	-1,237	-1,222	-1,329	-1,403	-1,431	
Payments of income on foreign assets in the U.S.	-11,019	-11,376	-11,561	-3,029	-3,052	-2,799	-2,784	-2,741	-2,861	-2,887	-2,816	-2,997	-2,881	-3,156	-3,215	
Other services	-16,416	-17,221	-19,247	-4,369	-4,267	-4,138	-4,282	-4,536	-4,675	-4,662	-4,857	-5,056	-5,298	-5,434	-5,326	
Unilateral transfers (excl. military grants), net mil. \$.																
U.S. Government grants (excl. military)	-7,188	-4,612	-5,023	-1,098	-1,195	-1,110	-1,070	-1,238	-1,029	-1,015	-1,936	-1,045	-1,163	-1,215	-1,352	
Other	-5,475	-2,893	-3,146	-660	-753	-718	-617	-805	-544	-556	-1,475	-572	-637	-723	-785	
U.S. assets abroad, net	-1,714	-1,719	-1,878	-438	-442	-392	-453	-433	-485	-459	-471	-473	-526	-492	-567	
U.S. assets abroad, net do.																
U.S. official reserve, net	-27,029	-31,548	-42,959	-10,023	-8,749	-7,881	-3,081	-11,836	-10,751	-9,779	-8,409	-14,022	331	-10,283	-3,396	
U.S. Gov't, other than official reserve, net	-1,434	-607	-2,530	137	-325	-29	-342	89	-773	-1,578	-407	228	-388	6	151	
U.S. private, net	365	-3,463	-4,213	-937	-874	-867	-745	-977	-723	-944	-1,405	-1,142	-909	-825	-1,175	
Direct investments abroad	-25,960	-27,478	-36,216	-9,223	-7,550	-6,985	-1,994	-10,948	-9,254	-7,257	-6,597	-13,108	1,627	-9,464	-2,372	
Foreign assets in the U.S., net	-1,368	-6,264	-4,596	-2,980	-2,193	-2,292	527	-2,306	-2,427	-142	-1,205	-822	-142	-1,998	-1,100	
Foreign assets in the U.S., net do.																
Foreign official, net	33,612	14,336	34,520	9,162	2,443	3,663	2,416	5,814	6,856	7,385	8,201	12,079	2,510	13,781	12,923	
Other foreign, net	10,981	6,960	17,945	4,256	3,452	2,279	-1,603	2,832	3,847	4,051	3,077	6,977	5,719	7,908	8,243	
Direct investments in the U.S.	22,631	7,376	16,575	4,906	-1,009	1,384	4,019	2,982	3,009	3,333	5,131	5,102	-3,209	5,873	4,680	
Statistical discrepancy	3,695	1,414	2,176	759	93	526	-342	1,137	709	504	561	403	537	568	511	
Allocation of special drawing rights do.																
Statistical discrepancy	-1,555	5,660	9,866	1,004	4,793	297	-2,400	2,971	3,372	1,905	1,268	3,325	1,317	1,106	-5,225	
Memoranda:																
Balance on merchandise trade	-5,367	9,045	-9,320	-1,395	1,455	3,285	2,079	2,226	-1,343	-1,575	-2,808	-3,594	-7,103	-7,757	-7,509	
Balance on goods and services	2,160	16,164	3,596	955	2,708	5,031	4,135	4,289	1,552	1,505	875	-337	-2,995	-3,389	-2,950	
Balance on goods, services, and remittances	447	14,444	1,719	517	2,266	4,639	3,682	3,856	1,067	1,046	414	-810	-3,521	-3,881	-3,517	
Balance on current account	-5,028	11,552	-1,427	-143	1,513	3,921	3,065	3,051	523	490	-1,061	-1,382	-4,158	-4,604	-4,302	

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec. ^p

GENERAL BUSINESS INDICATORS—Monthly Series

PERSONAL INCOME BY SOURCE†																
Seasonally adjusted, at annual rates:‡																
Total personal income	1,253.4	1,382.7	1,432.1	1,450.2	1,454.3	1,477.0	1,409.1	1,510.1	1,517.3	1,524.3	1,539.2	1,549.0	1,561.3	1,583.8	1,599.6	1,617.9
Wage and salary disbursements, total do.																
Commodity-producing industries, total	805.7	891.8	923.9	931.7	937.3	951.7	964.9	974.1	982.0	986.5	992.9	997.9	1,006.0	1,022.1	1,027.8	1,031.4
Manufacturing	275.0	308.5	318.5	321.1	320.5	328.7	337.6	341.7	345.3	349.1	350.6	345.5	352.9	358.1	361.0	360.0
Distributive industries	211.0	238.2	245.8	248.2	250.3	255.3	260.7	262.8	266.2	268.7	269.2	271.1	271.1	275.3	277.5	279.8
Service industries	195.4	217.1	226.1	228.9	231.4	235.5	236.8	239.6	241.1	240.9	242.8	244.5	246.0	249.4	250.4	252.4
Govt. and gov't. enterprises do.																
Other labor income	159.9	179.0	186.6	188.4	191.4	192.7	194.9	196.4	198.3	198.4	200.4	203.2	204.9	208.8	209.3	211.1
Proprietors' income:Δ	175.4	187.2	192.7	193.3	194.0	194.8	195.6	196.4	197.2	198.1	199.1	200.7	202.1	205.8	207.1	207.9
Farm	64.9	75.9	80.0	81.0	82.1	83.2	84.4	85.5	86.7	87.9	89.1	90.3	91.5	92.8	94.0	95.3
Nonfarm	23.2	18.6	16.4	18.1	19.6	21.0	21.7	20.9	19.8	18.4	16.5	15.1	14.9	17.2	20.6	28.5
Rental income of persons, with capital consumption adjustment	62.8	69.4	72.1	73.2	72.5	74.4	76.0	76.9	77.2	77.6	79.2	80.2	80.8	81.5	82.1	82.5
Dividends	22.3	23.3	24.1	24.4	24.4	24.6	24.6	24.3	24.8	25.6	24.7	25.7	26.0	26.2	26.4	26.6
Personal interest income	32.4	35.8	37.2	41.2	37.9	38.5	39.0	39.3	39.6	41.9	42.0	42.4	42.6	42.7	42.9	45.2
Transfer payments	115.6	130.3	136.4	137.6	139.0	140.3	141.8	143.5	145.2	147.4	149.1	150.4	151.5	153.1	155.5	158.2
Less personal contributions for social insurance bill	176.8	192.8	198.4	200.0	200.5	203.0	206.9	206.0	202.9	200.0	207.2	208.6	210.2	210.9	213.1	213.4
Total nonfarm income	50.4	55.2	56.7	57.0	59.0	59.6	60.2	60.6	60.9	61.0	61.5	61.6	62.0	62.6	62.9	63.1
Total personal income	1,218.8	1,351.3	1,402.1	1,418.5	1,421.1	1,442.4	1,463.7	1,475.3	1,483.5	1,491.6	1,508.3	1,519.5	1,531.8	1,551.9	1,564.1	1,574.3
FARM INCOME AND MARKETING‡																
Cash receipts from farming, including Government payments, total‡ mil. \$.																
Farm marketings and CCC loans, total	88,884	95,060	10,093	8,751	8,170	6,742	6,970	6,557	6,866	7,224	7,385	7,673	8,034	8,600		
Crops	88,077	94,326	9,999	8,608	8,067	6,632	6,847	6,486	6,828	7,192	7,354	7,625	7,946	10,480	10,200	
Livestock and products, total	45,053	47,987	6,166	4,787	4,452	2,987	2,897	2,694	2,824	3,304	3,570	3,664	3,938	5,608	6,000	
Dairy products	43,024	46,389	3,833	3,821	3,615	3,645	3,950	3,792	4,004	3,888	3,784	3,961	4,008	4,440	4,200	
Meat animals	9,909	11,425	901	939	943	879	982	966	1,042	1,021	1,006	1,995	972	977	1,000	
Poultry and eggs	25,818	27,188	2,291	2,223	2,063	2,181	2,309	2,161	2,326	2,201	2,096	2,278	2,359	2,810	2,500	
Indexes of cash receipts from marketings and CCC loans, unadjusted:†																
All commodities	206	220	280	241	226	186	192	184	191	202	206	214	223	282	376	
Crops	244	260	401	312	290	194	189	175	184	215	232	239	256	365	385	
Livestock and products	176	190	189	188	178	179	194	187	197	191	186	195	197	219	240	
Indexes of volume of farm marketings, unadjusted:†																
All commodities	113	121	162	135	123	102	103	97	100	111	117	120	128	167	156	
Crops	124	134	221	166	146	96	88	81	82	111	134	141	148	222	207	
Livestock and products	106	111	121	114	107	106	114	109	113	112	106	112	113	128	119	

† Revised. ‡ Preliminary. § See corresponding note on p. S-1. Δ Includes inventory valuation and capital consumption adjustments. § Series revised beginning 1973; revisions for periods prior to May 1976 are available from the U.S. Dept. of Agr., Economic Research Service. ¶ Includes data for items not shown separately.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^p	Dec. ¹
GENERAL BUSINESS INDICATORS—Continued																
INDUSTRIAL PRODUCTION^o																
<i>Federal Reserve Board Index of Quantity Output</i>																
Not Seasonally Adjusted																
Total index.....1967=100.....	117.8	129.8	132.1	128.3	128.8	133.6	135.7	136.2	137.2	141.5	134.1	138.2	142.4	142.9	139.9	134.9
By market groupings:																
Products, total.....do.....	119.3	129.3	131.9	127.1	128.4	132.9	134.3	135.0	135.9	141.5	135.0	139.5	145.1	* 144.1	140.0	133.5
Final products.....do.....	118.2	127.2	129.7	125.1	127.2	131.7	132.6	133.1	133.5	139.4	132.5	136.4	* 142.9	* 141.9	137.5	131.2
Consumer goods.....do.....	124.0	136.2	138.2	131.0	135.0	140.1	141.9	141.8	142.0	149.2	140.0	145.9	* 152.9	* 152.5	145.6	136.2
Durable consumer goods.....do.....	121.4	141.4	147.1	137.1	142.2	150.8	156.7	155.6	156.8	164.2	142.3	140.0	* 158.8	* 158.3	158.1	144.3
Nondurable consumer goods.....do.....	125.1	134.1	134.7	128.6	132.1	135.8	136.0	136.3	136.1	143.3	139.1	148.2	* 150.5	* 146.3	140.6	133.0
Equipment.....do.....	110.2	114.6	117.9	116.8	116.5	120.0	119.8	121.1	121.9	126.0	122.1	123.5	129.2	127.4	126.4	124.2
Intermediate products.....do.....	123.1	137.2	140.1	134.3	133.2	137.4	140.4	142.5	144.7	149.2	144.5	150.9	* 153.2	* 152.2	149.0	142.3
Materials.....do.....	115.5	130.6	132.4	130.1	129.3	134.5	137.7	137.7	139.2	141.4	132.6	136.3	* 138.0	140.8	139.7	137.0
By industry groupings:																
Mining and utilities.....do.....	128.5	131.6	132.2	136.5	140.1	138.1	125.0	132.4	132.6	136.9	140.6	138.8	* 137.3	* 133.5	134.2	135.3
Manufacturing.....do.....	116.3	129.5	132.0	127.1	127.2	132.8	135.7	136.4	137.8	141.9	133.2	138.2	* 142.8	* 144.0	140.3	134.5
Nondurable manufactures.....do.....	126.4	140.9	143.3	136.0	137.0	143.2	146.0	146.3	147.8	152.8	144.1	154.1	* 156.2	* 155.9	151.0	142.9
Durable manufactures.....do.....	109.3	121.7	124.2	120.8	120.5	125.7	128.5	129.7	130.8	134.3	125.6	127.2	133.7	* 135.7	132.8	128.8
Seasonally Adjusted																
Total index.....1967=100.....	117.8	129.8	131.5	133.0	132.3	133.2	135.3	136.1	137.0	137.8	138.7	138.1	* 138.5	* 138.8	139.3	139.6
By market groupings:																
Products, total.....do.....	119.3	129.3	131.3	133.4	133.1	133.6	135.1	135.8	136.5	137.3	138.7	138.4	138.8	138.9	139.3	140.0
Final products.....do.....	118.2	127.2	129.3	131.5	130.8	131.6	133.3	134.1	134.7	135.4	136.8	136.3	136.8	* 136.6	137.0	137.6
Consumer goods.....do.....	124.0	136.2	138.4	141.3	139.9	140.5	142.9	142.9	143.1	143.8	145.4	144.7	144.9	* 145.2	145.7	146.2
Durable consumer goods.....do.....	121.4	141.4	143.7	150.5	145.4	146.1	152.4	151.5	152.2	155.8	158.0	154.7	* 155.6	* 157.2	155.6	155.9
Automotive products.....do.....	125.8	154.8	161.6	178.8	164.2	161.7	178.3	173.9	172.8	179.8	184.8	177.2	* 177.0	* 180.1	173.7	173.5
Autos and utility vehicles.....do.....	113.7	149.8	154.0	176.9	155.8	152.7	176.1	171.2	167.4	177.4	184.1	173.1	* 172.6	* 176.7	167.7	166.7
Autos.....do.....	101.1	132.0	138.4	156.3	136.9	132.8	155.8	150.6	148.5	156.8	161.4	150.9	151.6	154.3	147.5	143.6
Auto parts and allied goods.....do.....	156.6	167.6	180.5	183.4	185.6	184.3	184.1	181.3	186.6	185.8	186.6	187.3	* 188.1	* 189.0	189.2	191.0
Home goods.....do.....	118.8	133.9	133.7	134.5	134.8	137.3	137.9	138.8	140.6	142.3	142.9	142.1	* 143.6	* 144.4	145.3	146.2
Appliances, air cond., and TV.....do.....	98.0	114.6	114.9	110.3	113.4	118.5	124.1	126.4	131.0	133.1	130.1	129.6	129.4	* 129.8	133.1	133.0
Carpeting and furniture.....do.....	126.8	144.1	143.6	144.7	143.7	146.0	144.6	145.0	147.3	151.2	154.1	154.8	159.0	* 160.0	158.9	-----
Nondurable consumer goods.....do.....	125.1	134.1	136.2	137.6	137.7	138.3	139.1	139.4	139.5	139.1	140.3	140.6	* 140.7	140.5	141.6	142.2
Clothing.....do.....	111.6	124.0	123.1	124.1	123.7	123.6	123.9	124.4	123.5	125.7	124.1	126.4	128.3	128.9	-----	-----
Consumer staples.....do.....	128.8	136.9	139.8	141.3	141.7	142.2	143.3	143.6	143.4	142.9	144.8	144.6	* 144.1	* 143.8	145.0	145.5
Consumer foods and tobacco.....do.....	122.8	130.7	132.4	131.8	131.5	133.3	136.0	136.1	135.0	135.4	137.1	137.9	* 137.1	* 137.1	137.0	-----
Nonfood staples.....do.....	135.8	144.1	148.2	152.3	153.4	152.6	151.8	152.5	153.2	151.7	153.8	152.4	* 152.4	* 152.7	154.4	154.7
Equipment.....do.....	110.2	114.6	116.8	118.0	118.4	119.2	120.0	122.1	123.2	124.1	124.8	124.9	125.6	* 124.9	125.3	126.0
Business equipment.....do.....	128.2	136.3	140.1	142.3	142.3	143.5	144.8	147.1	148.9	150.1	151.2	151.1	* 152.1	* 152.3	152.7	153.3
Industrial equipment.....do.....	121.2	128.0	131.1	132.3	131.3	133.2	134.4	136.3	138.4	140.0	140.7	140.4	141.4	* 141.6	142.2	143.1
Building and mining equipment.....do.....	168.3	177.7	181.5	183.7	187.4	192.9	197.9	200.5	205.3	208.1	210.6	203.9	204.5	* 204.9	203.5	204.8
Manufacturing equipment.....do.....	99.9	108.5	109.9	110.8	107.8	108.5	109.0	112.0	112.8	115.0	114.3	115.3	117.6	* 118.8	119.3	120.1
Commercial, transit, farm eq......do.....	136.3	145.8	150.6	154.1	155.0	155.3	156.9	159.5	161.2	161.9	163.3	163.4	* 164.4	* 164.6	164.7	165.2
Commercial equipment.....do.....	157.8	173.5	179.6	184.3	185.2	185.6	186.1	189.7	191.1	191.4	191.3	193.0	193.7	* 194.9	196.1	197.2
Transit equipment.....do.....	101.9	104.1	107.8	108.0	108.4	108.7	113.0	115.2	116.5	118.5	121.5	121.9	* 125.1	* 121.4	119.2	119.0
Defense and space equipment.....do.....	80.0	78.4	77.6	77.2	78.0	78.5	78.5	79.9	80.0	80.3	80.4	80.8	80.9	* 78.9	79.2	79.9
Intermediate products.....do.....	123.1	137.2	139.0	140.5	142.2	141.6	141.8	142.3	143.5	144.7	146.3	146.1	* 146.5	* 147.0	147.9	149.2
Construction supplies.....do.....	116.3	132.6	135.8	135.5	136.2	135.6	136.4	137.2	138.7	139.9	141.2	141.7	* 141.4	* 144.4	146.0	147.1
Business supplies.....do.....	129.8	141.8	141.9	145.3	148.0	147.6	147.3	147.5	148.4	149.6	151.3	150.6	* 149.7	* 149.7	149.8	-----
Materials.....do.....	115.5	130.6	131.9	132.0	131.1	132.7	135.5	136.5	137.8	138.7	138.9	137.6	* 137.9	* 138.8	139.2	139.1
Durable goods materials.....do.....	109.1	126.8	128.2	128.7	127.4	128.4	131.9	133.8	135.2	136.4	136.8	135.4	135.7	* 137.0	137.3	138.3
Durable consumer parts.....do.....	97.7	121.6	126.2	126.3	121.8	124.1	126.8	129.4	132.0	134.5	137.2	135.2	* 135.8	* 136.0	136.7	137.7
Equipment parts.....do.....	118.9	133.9	137.2	138.8	135.1	137.3	137.8	140.7	141.7	143.0	145.0	145.6	146.8	* 147.2	147.9	149.0
Nondurable goods materials.....do.....	126.6	146.3	147.3	145.8	144.8	150.4	153.3	153.7	155.4	154.7	154.1	155.1	* 153.9	* 154.7	155.7	156.7
Textile, paper, and chemical.....do.....	129.0	151.1	151.4	150.3	149.3	153.9	158.4	159.0	160.7	160.1	158.9	159.6	* 159.0	* 159.9	160.0	160.9
Energy materials.....do.....	117.2	120.2	121.9	123.4	123.3	120.8	121.8	121.3	122.3	124.3	125.2	121.4	* 123.5	123.9	123.3	-----
By industry groupings:																
Mining and utilities.....do.....	128.5	131.6	133.8	135.4	137.0	137.1	136.6	135.7	137.1	138.8	139.4	134.4	* 135.1	* 135.3	136.0	134.3
Mining.....do.....	112.8	114.2	115.3	115.4	112.8	116.3	120.6	119.2	119.5	122.8	119.8	115.4	* 118.0	* 119.1	118.3	113.4
Metal mining.....do.....	115.8	122.8	124.5	126.8	130.6	128.5	133.8	126.1	120.5	121.3	101.9	70.0	71.4	* 79.8	84.6	-----
Coal.....do.....	113.4	117.2	122.1	120.6	95.3	100.8	124.1	118.4	122.4	133.4	120.7	113.6	133.0	141.4	140.6	74.6
Oil and gas extraction.....do.....	113.3	112.0	112.3	112.8	112.0	115.8	117.5	117.5	118.3	121.3	120.6	119.3	* 119.6	* 118.9	117.2	117.8
Crude oil.....do.....	94.9	92.2	91.2	91.5	89.7	91.3	90.7	91.0	89.3	93.9	94.3	92.8	94.7	93.7	92.3	-----
Natural gas.....do.....	111.0	109.5	108.3	111.3	109.5	112.8	112.0	110.1	113.1	114.0	112.6	-----	105.4	-----	-----	-----
Stone and earth minerals.....do.....	107.0	118.3	120.8	118.0	121.6	124.9	126.1	124.0	123.0	122.5	126.7	125.0	126.7	* 126.7	128.3	-----
Utilities.....do.....	146.0	151.0	154.6	157.9	163.8	160.3	154.8	154.0	156.7	156.8	161.4	155.7	* 154.1	* 153.5	155.7	157.4
Electric.....do.....	160.8	167.6	171.8	176.1	183.6	179.1	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Manufacturing.....do.....	116.3	129.5	131.4	132.5	131.6	132.6	135.1	135.8	137.1	137.8	138.5	138.6	* 139.0	* 139.2	139.6	140.4
Nondurable manufactures.....do.....	126.4	140.9	143.0	143.3	143.4	145.3	147.0	147.0	148.5							

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975		1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^p	Dec. ¹
	GENERAL BUSINESS INDICATORS—Continued															
INDUSTRIAL PRODUCTION†—Continued																
<i>Federal Reserve Board Index of Quantity Output—Continued</i>																
Seasonally Adjusted—Continued																
By industry groupings—Continued																
Manufacturing—Continued																
Durable manufactures.....1967=100	109.3	121.7	123.4	125.0	123.4	124.0	126.8	128.0	129.3	130.5	131.6	131.3	*131.7	*132.3	132.2	133.0
Ordnance, pvt. and govt.....do	76.6	72.7	71.6	71.3	72.6	72.6	72.8	74.6	74.4	74.1	75.0	75.5	*75.1	*74.0	73.7	74.7
Lumber and products.....do	107.6	125.1	129.5	128.1	132.7	122.2	132.1	130.6	133.0	132.4	132.9	131.8	*137.1	*136.2	137.4	---
Lumber.....do	93.9	105.8	108.5	96.9	113.9	109.9	109.0	109.2	112.5	104.9	112.4	107.2	111.2	115.7	---	---
Furniture and fixtures.....do	118.2	132.7	133.7	135.7	135.1	137.1	135.1	135.4	137.5	139.9	143.0	142.9	145.6	*146.5	146.6	---
Clay, glass, and stone products.....do	117.8	137.1	143.2	142.8	137.1	139.0	143.7	145.0	145.0	147.7	148.0	148.8	145.5	*147.3	150.9	---
Primary metals.....do	96.4	108.9	104.6	101.5	100.8	100.2	108.3	112.2	117.1	114.7	114.4	112.5	109.0	*113.7	111.9	111.2
Iron and steel.....do	95.8	104.9	100.3	93.4	89.7	91.3	97.9	103.9	111.0	109.2	110.9	110.6	104.6	*108.1	105.6	---
Basic iron and steel.....do	92.9	100.7	95.7	90.1	84.6	87.7	95.4	97.8	104.0	106.5	101.0	102.8	101.3	*99.1	95.3	---
Steel mill products.....do	99.5	108.9	100.7	94.9	88.7	91.4	98.2	106.8	116.7	110.4	116.3	114.1	102.2	110.4	104.2	---
Nonferrous metals.....do	97.5	115.9	112.4	116.1	121.7	116.4	126.8	126.8	127.9	124.0	118.0	114.5	117.0	*123.7	121.8	---
Fabricated metal products.....do	109.9	123.3	126.7	128.1	125.7	125.8	127.5	127.6	128.2	130.8	132.0	134.0	*133.6	*134.4	135.2	136.0
Nonelectrical machinery.....do	125.1	135.0	137.5	141.5	139.9	139.8	139.8	142.9	142.6	144.0	145.7	145.2	147.4	*148.2	148.9	150.4
Electrical machinery.....do	116.5	131.6	135.7	135.1	134.0	137.6	137.6	139.6	141.8	142.6	143.6	143.9	*144.6	*144.2	145.1	146.6
Transportation equipment.....do	97.4	110.6	112.7	117.4	113.5	113.4	120.5	119.8	120.3	123.7	125.6	124.3	125.5	*124.1	121.9	122.2
Motor vehicles and parts.....do	111.1	140.7	145.5	155.0	145.5	145.4	161.2	158.1	157.7	163.2	166.2	164.4	165.6	*167.9	163.0	161.9
Aerospace and misc. trans. eq.....do	84.5	82.2	81.7	81.9	83.4	83.3	82.3	83.8	85.2	86.5	87.3	86.5	87.7	*82.8	83.1	84.7
Instruments.....do	132.3	148.2	150.3	155.8	153.7	157.0	156.9	157.8	157.4	158.2	159.0	158.3	160.3	*161.8	161.3	162.0
BUSINESS SALES ‡																
Mfg. and trade sales (unadj.), total †⊕Δ . mil. \$	2,162,751	2,401,414	205,014	216,551	191,565	203,279	227,787	223,233	224,288	232,457	213,326	226,193	229,699	232,594	231,033	---
Mfg. and trade sales (seas. adj.), total †⊕Δ . do	2,162,751	2,401,414	203,731	212,095	209,950	215,281	221,903	221,167	221,327	222,240	221,255	223,604	224,242	226,536	229,303	---
Manufacturing, total †⊕ . do	2,046,710	2,178,013	99,919	104,475	103,569	106,133	111,241	109,640	109,458	110,680	109,208	111,376	111,921	113,119	113,295	---
Durable goods industries . do	526,950	604,706	51,238	55,295	53,341	54,703	58,849	56,764	56,717	57,570	56,820	58,087	58,608	*59,262	58,979	---
Nondurable goods industries⊕ . do	519,760	573,499	48,681	49,180	50,228	51,430	52,392	53,876	52,741	53,110	52,388	53,289	53,313	*53,857	54,316	---
Retail trade, total . do	580,445	642,507	54,822	56,685	55,703	57,291	57,990	58,142	58,003	57,825	58,552	59,020	59,014	*60,778	61,482	---
Durable goods stores . do	178,887	210,530	18,098	19,038	18,860	19,382	19,863	19,833	19,516	19,436	19,505	19,984	19,763	*20,895	20,640	---
Nondurable goods stores . do	401,558	431,977	36,724	37,647	36,843	37,909	38,127	38,309	38,487	38,389	39,047	39,036	39,251	*39,883	40,842	---
Merchant wholesalers, total . do	535,596	580,894	48,990	50,935	50,678	51,857	52,672	53,385	53,866	53,735	53,495	53,208	53,307	*53,639	55,126	---
Durable goods establishments . do	220,094	246,732	21,151	21,642	21,785	22,625	22,621	22,941	23,275	23,419	23,620	24,390	24,150	*24,997	25,268	---
Nondurable goods establishments . do	315,502	334,162	27,839	29,293	28,893	29,232	30,051	30,444	30,591	30,316	29,875	28,818	29,157	*28,642	29,858	---
BUSINESS INVENTORIES §																
Mfg. and trade inventories, book value, end of year or month (unadj.), total †Δ . mil. \$	281,100	306,412	310,518	306,412	309,471	313,189	317,913	320,078	320,660	321,209	320,596	321,713	326,017	332,282	336,791	---
Mfg. and trade inventories, book value, end of year or month (seas. adj.), total †Δ . mil. \$	281,837	306,325	306,151	306,325	309,063	311,232	314,875	317,873	320,492	322,899	324,107	326,849	*328,928	330,701	331,988	---
Manufacturing, total† . do	155,693	166,587	167,114	166,587	167,482	168,449	169,379	170,747	172,629	173,818	174,571	175,104	176,164	176,829	177,101	---
Durable goods industries . do	100,310	105,729	106,128	105,729	106,562	107,222	107,685	108,190	109,154	110,421	110,978	111,452	111,787	112,075	112,468	---
Nondurable goods industries . do	55,382	60,858	60,986	60,858	60,920	61,227	61,694	62,557	63,475	63,397	63,593	63,652	64,377	64,754	64,633	---
Retail trade, totalΔ . do	71,031	78,431	77,988	78,431	79,458	79,721	81,196	81,825	83,025	84,134	85,326	86,650	87,208	87,462	88,465	---
Durable goods stores . do	31,632	35,067	34,875	35,067	35,588	35,516	36,150	36,094	36,818	37,104	38,130	38,577	38,520	38,752	39,134	---
Nondurable goods stores . do	39,399	43,364	43,113	43,364	43,870	44,205	45,046	45,731	46,207	47,030	47,196	48,073	48,688	48,710	49,331	---
Merchant wholesalers, totalΔ . do	55,113	61,307	61,049	61,307	62,123	63,062	64,300	65,301	64,838	64,947	64,210	65,095	66,119	*66,209	66,422	---
Durable goods establishments . do	34,605	38,177	38,205	38,177	38,819	39,264	39,527	39,809	40,224	40,876	41,404	42,396	42,896	*43,014	43,122	---
Nondurable goods establishments . do	20,508	23,130	22,844	23,130	23,304	23,798	24,773	25,492	24,614	24,071	22,806	22,699	23,223	*23,195	23,300	---
BUSINESS INVENTORY-SALES RATIOS																
Manufacturing and trade, total†⊕Δ . ratio	1.57	1.47	1.50	1.44	1.47	1.45	1.42	1.44	1.45	1.45	1.46	1.46	1.47	1.46	1.44	---
Manufacturing, total†⊕ . do	1.80	1.64	1.67	1.59	1.62	1.59	1.52	1.56	1.58	1.57	1.60	1.57	1.57	1.56	1.56	---
Durable goods industries† . do	2.34	2.04	*2.07	1.90	2.00	1.96	1.83	1.91	1.92	1.92	1.95	1.92	1.91	1.89	1.91	---
Materials and supplies . do	---	---	.69	.62	.66	.64	.61	.63	.65	.65	.65	.64	.64	.63	.63	---
Work in process . do	---	---	.84	.77	.81	.80	.74	.77	.76	.75	.78	.77	.76	.75	.76	---
Finished goods . do	---	---	.54	.51	.53	.52	.49	.50	.51	.51	.52	.51	.50	.51	.51	---
Nondurable goods industries†⊕ . do	1.26	1.23	1.25	1.24	1.21	1.19	1.18	1.18	1.20	1.19	1.21	1.21	1.21	1.20	1.19	---
Materials and supplies . do	---	---	.53	.53	.51	.51	.50	.51	.51	.51	.50	.50	.50	.49	.49	---
Work in process . do	---	---	.19	.19	.18	.18	.18	.18	.18	.18	.18	.18	.18	.18	.18	---
Finished goods . do	---	---	.53	.52	.52	.51	.49	.50	.51	.51	.52	.52	.52	.53	.52	---
Retail trade, totalΔ . do	1.45	1.41	1.42	1.38	1.43	1.39	1.40	1.41	1.43	1.45	1.46	1.47	1.48	1.44	1.44	---
Durable goods stores . do	2.07	1.89	1.93	1.84	1.89	1.83	1.82	1.82	1.89	1.91	1.95	1.93	1.95	1.87	1.90	---
Nondurable goods stores . do	1.17	1.17	1.17	1.15	1.19	1.17	1.18	1.19	1.20	1.23	1.21	1.23	1.24	1.22	1.21	---
Merchant wholesalers, totalΔ . do	1.24	1.21	1.25	1.20	1.23	1.22	1.22	1.22	1.20	1.21	1.20	1.22	1.24	*1.23	1.20	---
Durable goods establishments . do	1.88	1.78	1.81	1.76	1.78	1.74	1.75	1.74	1.73	1.75	1.75	1.74	1.78	*1.72	1.71	---
Nondurable goods establishments . do	.90	.79	.82	.79	.81	.81	.82	.84	.80	.79	.76	.79	.80	*.81	.78	---
MANUFACTURERS' SALES, INVENTORIES, AND ORDERS																
Manufacturers' export sales: ⊙	---															
Durable goods industries:	---															
Unadjusted, total . mil. \$	50,516	60,547	5,391	6,041	4,399	4,697	5,677	5,491	5,363	5,580	4,741	4,633	5,149	5,696	5,420	---
Seasonally adj., total . do	---	---	5,393	5,502	4,690	4,870	5,312	5,378	5,148	5,430	5,277	5,089	5,206	5,641	5,374	---
Shipments (not seas. adj.), total†⊕ . do	1,046,710	1,178,013	100,128	98,023	96,387	106,743	114,201	111,242	110,762	116,636	102,201	109,894	116,833	118,252	113,557	---
Durable goods industries, total †⊕ . do	526,950	604,514	51,345	50,798	48,858	54,715	60,550	58,171	58,405	62,349	52,379	55,768	61,415	62,694	59,266	157,689
Stone, clay, and glass products . do	27,314	30,435	2,573	2,320	2,286	2,545	2,943	2,904	2,991	3,249	2,856					

Table with columns for years 1975, 1976, 1977 (Jan-Dec) and rows for various business indicators including Shipments, Inventories, and Orders. Includes sub-sections like 'Durable goods industries' and 'Nondurable goods industries'.

Revised. 1 Based on data not seasonally adjusted. 2 Advance estimate; total mfrs. shipments for Nov. 1977 do not reflect revisions for selected components. 3 Revised series. Data revised back to Jan. 1958 to reflect (1) updating of benchmarks used in developing shipments and inventory estimates, (2) recalculation of estimated new orders, (3) changes required to conform to revised 1972 SIC categories, and (4) use of new seas. adj. factors. A detailed description of this comprehensive revision and historical data appear in report M3-1.6, 'Manufacturers' Shipments, Inventories, and Orders: 1958-1976 (Revised)' available for \$2.25 from the Subscribers Services Section, Bur. of the Census, Wash., D.C. 20233. Data back to Jan. 1958 for mfg. and trade sales and invent. and inventory sales appear on p. 22 ff. of the Jan. 1977 SURVEY. See corresponding note on p. 8-5. 4 Includes data for items not shown separately.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
GENERAL BUSINESS INDICATORS—Continued																
MANUFACTURERS' SALES, INVENTORIES, AND ORDERS†—Continued																
Inventories, end of year or month†—Continued																
Book value (seasonally adjusted)—Continued																
By market category:†																
Home goods and apparel..... mil. \$	13,005	14,039	14,143	14,039	14,003	14,056	14,296	14,608	14,747	14,888	14,699	14,708	14,614	14,566	14,534	
Consumer staples..... do.	21,526	23,119	23,307	23,119	23,164	23,327	23,531	23,928	24,137	23,943	23,962	24,217	24,911	24,914	24,797	
Equip. and defense prod., excl. auto. do.	38,429	38,842	38,943	38,842	39,044	39,231	39,993	39,638	39,855	40,267	40,701	40,901	41,250	41,139	41,407	
Automotive equipm ent..... do.	7,885	8,430	8,983	8,430	8,601	8,718	8,728	8,691	8,777	9,363	9,189	9,298	9,278	9,315	9,511	
Construction materials and supplies..... do.	13,323	14,161	13,983	14,161	14,615	14,663	14,560	14,523	14,536	14,290	14,465	14,462	14,677	14,861	14,961	
Other materials and supplies..... do.	61,525	67,996	67,685	67,996	68,055	68,454	68,871	69,359	70,577	71,067	71,555	71,518	71,434	71,994	71,831	
Supplementary series:																
Household durables..... do.	6,578	6,923	6,996	6,923	6,936	7,117	7,275	7,407	7,494	7,565	7,487	7,559	7,517	7,488	7,447	
Capital goods industries..... do.	42,341	43,104	43,124	43,104	43,311	43,737	43,992	4,335	44,671	45,206	45,391	45,641	45,897	45,730	46,070	
Nondefense..... do.	35,772	36,527	36,277	36,527	36,702	37,112	37,475	47,733	38,034	38,332	38,455	38,715	39,043	39,134	39,444	
Defense..... do.	6,568	6,577	6,847	6,577	6,609	6,625	6,517	36,602	6,637	6,864	6,936	6,926	6,854	6,596	6,626	
New orders, net (not seas. adj.), total †Δ..... do.	1,027,905	1,183,468	1,00,039	99,575	98,810	107,379	114,873	113,054	111,066	117,795	103,311	111,036	117,055	121,661	115,429	
Durable goods industries, total..... do.	505,969	608,170	51,386	52,139	51,048	55,651	60,900	59,824	58,899	63,372	53,317	57,107	61,713	66,022	61,156	160,574
Nondurable goods industries, totalΔ..... do.	521,936	573,796	48,653	47,436	47,762	52,228	53,973	53,230	52,167	54,224	49,994	53,929	55,342	55,639	54,450	
New orders, net (seas. adj.), total †Δ..... do.	2,027,905	2,183,468	100,784	106,608	105,288	106,575	111,788	111,547	111,693	111,702	108,598	111,494	112,441	116,543	116,098	
By industry group:																
Durable goods industries, total†..... do.	505,969	609,450	52,235	57,040	55,037	55,133	59,160	58,552	59,176	58,378	56,031	58,270	58,048	62,503	61,984	165,373
Primary metals..... do.	71,792	90,046	7,529	7,252	7,987	7,974	8,647	7,904	9,079	7,959	8,311	8,576	8,692	8,094	8,901	18,772
Blast furnaces, steel mills..... do.	35,779	45,846	3,650	3,608	4,054	4,068	4,304	3,906	5,089	3,945	4,316	4,382	4,513	4,140	4,753	
Nonferrous and other primary met..... do.	28,209	34,956	3,880	2,299	3,040	3,081	3,438	3,102	3,062	3,077	3,057	3,234	3,208	3,310	3,128	
Fabricated metal products..... do.	66,712	79,256	6,805	7,072	6,924	6,960	7,832	7,363	7,337	7,236	6,798	7,346	7,204	7,759	8,054	
Machinery, except electrical..... do.	92,795	108,236	9,211	9,509	10,219	9,998	9,991	9,791	10,143	10,572	10,130	10,897	10,823	11,162	10,854	
Electrical machinery..... do.	61,720	74,111	6,433	6,127	6,871	6,713	6,338	6,941	7,163	6,866	6,901	6,973	7,070	7,112	7,612	
Transportation equipment..... do.	109,511	138,649	12,102	15,487	12,630	12,614	14,564	15,128	14,179	14,725	12,667	12,417	13,145	16,141	14,413	16,557
Aircraft, missiles, and parts..... do.	26,316	30,009	2,882	3,924	2,311	2,329	2,887	4,252	3,421	3,814	2,123	2,183	2,682	4,251	3,210	
Nondurable goods industries, totalΔ..... do.	521,936	574,016	48,549	49,560	50,251	51,442	52,628	52,895	52,517	53,146	52,567	53,224	53,393	54,040	54,308	
Industries with unfilled orders⊕..... do.	113,179	127,856	11,243	11,289	11,019	11,240	11,772	11,789	11,484	11,787	11,756	11,922	11,965	12,088	11,971	
Industries without unfilled orders†Δ..... do.	408,757	446,160	37,306	38,271	39,232	40,202	40,856	41,106	41,033	41,359	40,811	41,302	41,408	42,002	42,337	
By market category:†																
Home goods and apparelΔ..... do.	83,408	93,224	7,945	7,981	8,171	8,413	8,273	8,377	8,588	8,549	8,796	9,161	9,025	9,451	9,201	
Consumer staples..... do.	210,267	217,424	18,274	18,310	18,124	19,008	19,316	19,514	19,032	19,310	19,660	19,432	19,536	19,536	19,968	
Equip. and defense prod., excl. auto. do.	214,257	216,818	13,857	13,929	13,994	14,323	14,478	16,169	15,948	15,799	14,484	14,332	15,242	17,899	17,194	
Automotive equipm ent..... do.	84,741	110,631	9,628	11,800	10,482	10,717	12,413	11,627	11,074	11,542	11,022	11,016	11,016	11,443	11,209	
Construction materials and supplies..... do.	81,372	99,180	8,721	9,075	8,733	9,227	9,706	9,545	9,564	9,688	9,418	10,129	9,883	10,300	10,654	
Other materials and supplies..... do.	246,941	298,255	42,319	43,505	45,284	44,884	47,570	46,315	47,487	46,440	45,770	47,138	47,843	47,894	47,872	
Supplementary series:																
Household durables..... do.	35,509	38,599	3,284	3,314	3,351	3,510	3,425	3,443	3,493	3,587	3,589	3,931	3,773	4,066	3,944	14,225
Capital goods industries..... do.	155,968	213,614	15,875	17,885	16,570	16,136	16,775	18,276	18,233	17,717	16,341	16,676	17,819	20,770	19,453	121,569
Nondefense..... do.	130,782	153,845	12,734	13,835	14,621	14,249	14,561	14,079	15,000	15,535	14,409	14,678	16,189	16,883	17,443	
Defense..... do.	25,185	29,338	3,141	4,050	1,949	1,887	2,214	3,597	3,293	2,182	1,932	1,998	1,630	4,268	3,570	14,326
Unfilled orders, end of year or month (unadjusted), total..... mil. \$	170,243	174,222	172,646	174,222	176,648	177,780	178,453	180,255	180,563	181,521	182,632	183,774	183,974	187,386	189,255	
Durable goods industries, total..... do.	162,726	166,408	165,040	166,408	168,599	169,532	169,884	171,526	172,024	173,045	173,984	175,322	175,617	178,950	180,840	183,719
Nondur. goods ind. with unfilled orders⊕..... do.	7,517	7,814	7,606	7,814	8,049	8,248	8,569	8,729	8,539	8,476	8,648	8,452	8,357	8,436	8,437	
Unfilled orders, end of year or month (seasonally adjusted) total..... mil. \$	171,438	175,453	173,333	175,453	177,179	177,623	178,167	180,065	182,301	183,150	182,541	182,646	183,166	186,590	189,395	
By industry group:																
Durable goods industries, total ♀..... do.	163,582	167,261	165,519	167,261	168,962	169,394	169,704	171,587	174,047	174,859	174,072	174,245	174,682	177,923	180,750	184,548
Primary metals..... do.	14,742	16,004	16,051	16,004	16,588	17,041	17,122	16,890	17,673	17,205	17,342	17,634	17,887	17,733	18,312	18,487
Blast furnaces, steel mills..... do.	9,927	9,993	9,768	9,993	10,550	10,930	10,977	10,851	11,696	11,171	11,239	11,347	11,489	11,385	11,839	
Nonferrous and other primary met..... do.	4,091	4,980	5,261	4,980	5,000	5,012	5,063	4,914	4,807	4,834	4,880	5,040	5,129	5,090	5,177	
Fabricated metal products..... do.	23,690	23,302	23,192	23,302	23,464	23,374	23,501	23,494	23,577	23,353	23,179	23,222	22,995	23,152	23,786	
Machinery, except electrical..... do.	45,472	43,808	43,843	43,808	44,279	44,419	44,361	44,133	44,215	44,894	45,988	45,420	45,909	46,462	46,736	
Electrical machinery..... do.	21,230	23,251	22,812	23,251	23,575	23,741	23,437	23,772	24,388	24,247	24,500	24,556	24,679	24,740	25,127	
Transportation equipment..... do.	59,236	52,753	51,445	52,753	52,744	52,534	52,729	54,517	55,371	56,234	55,351	54,575	54,114	56,431	57,327	159,816
Aircraft, missiles, and parts..... do.	33,106	34,746	33,553	34,746	34,793	34,537	34,692	36,387	36,941	38,022	37,425	36,928	36,839	38,199	38,860	
Nondur. goods ind. with unfilled orders⊕..... do.	7,856	8,192	7,814	8,192	8,217	8,229	8,463	8,478	8,254	8,291	8,469	8,401	8,484	8,667	8,658	
By market category:†																
Home goods, apparel, consumer staples..... do.	3,209	3,302	3,303	3,303	3,366	3,501	3,370	3,445	3,507	3,498	3,622	3,903	3,916	4,147	4,187	
Equip. and defense prod., incl. auto. do.	98,742	101,063	99,712	101,063	100,978	101,108	101,119	102,888	104,032	105,334	104,906	104,111	103,950	106,247	107,821	
Construction materials and supplies..... do.	19,197	18,014	17,836	18,014	18,135	18,129	18,040	18,102	18,235	18,253	18,335	18,335	18,068	18,175	18,792	
Other materials and supplies..... do.	50,290	53,074	52,482	53,074	54,700	54,885	55,638	56,527	56,695	56,827	56,927	57,232	58,021	58,595	59,295	
Supplementary series:																
Household durables..... do.	2,623	2,644	2,650	2,644	2,663	2,807	2,692	2,761	2,835	2,790	2,874	3,115	3,135	3,352	3,344	13,469
Capital goods industries..... do.	138,533	110,060	108,623	110,060	110,415	110,163	110,119	111,064	113,020	114,159	113,391	112,630	112,935	115,730	117,310	120,351
Nondefense..... do.	79,323	77,829	77,925	77,829	78,879	79,354	79,708	80,152	80,794	82,302	82,179	81,923	83,167	84,236	84,892	86,299
Defense..... do.	29,210	32,231	30,698	32,231	31,536	30,809	30,411	31,512	32,226	31,857	31,212	30,707	29,768	31,494		

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975		1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
COMMODITY PRICES																
PRICES RECEIVED AND PAID BY FARMERS†																
Prices received, all farm products..... 1910-14=100.....	463	465	432	446	457	468	474	477	484	461	451	438	435	444	r 448	453
Crops ♀..... do.....	452	444	419	427	445	457	475	479	482	447	410	390	384	401	r 417	412
Commercial vegetables..... do.....	458	456	482	456	574	637	641	507	482	435	447	438	449	476	r 525	444
Cotton..... do.....	348	504	550	533	526	540	589	572	567	516	533	514	499	448	r 434	412
Feed grains and hay..... do.....	400	379	322	347	361	362	365	359	352	328	291	260	255	264	r 290	302
Food grains..... do.....	426	354	283	277	282	287	282	277	261	245	243	259	263	281	r 305	309
Fruit..... do.....	313	300	295	274	271	276	297	319	374	354	342	383	400	503	r 443	421
Tobacco..... do.....	899	907	948	973	959	954	957	967	966	966	841	977	1,074	983	1,025	1,015
Livestock and products ♀..... do.....	474	485	446	465	467	478	471	473	485	476	493	487	487	488	r 479	495
Dairy products..... do.....	537	591	603	595	590	584	577	577	571	574	581	593	612	624	r 624	624
Meat animals..... do.....	567	569	487	523	530	546	544	551	585	568	590	579	569	573	554	584
Poultry and eggs..... do.....	235	233	231	241	240	252	240	232	220	217	231	223	226	214	216	219
Prices paid:																
All commodities and services..... do.....	533	565	504	569	578	584	590	597	601	597	595	591	589	591	593	596
Family living items..... do.....	533	563	575	578	553	556	562	565	570	573	577	579	582	584	588	588
Production items..... do.....	528	560	554	559	569	578	583	592	594	588	582	576	572	574	576	579
All commodities and services, interest, taxes, and wage rates (parity index)..... 1910-14=100.....	614	653	652	657	673	679	685	692	695	692	690	686	685	684	687	689
Parity ratio %..... do.....	76	71	66	68	68	69	69	69	70	67	65	64	64	65	65	66
CONSUMER PRICES (U.S. Department of Labor Indexes)																
Not Seasonally Adjusted																
All items..... 1967=100.....	161.2	170.5	173.8	174.3	175.3	177.1	178.2	179.6	180.6	181.8	182.6	183.3	184.0	184.5	185.4	186.1
Special group indexes:																
All items less shelter..... do.....	159.1	168.3	171.6	172.2	173.1	175.0	176.1	177.5	178.4	179.6	180.2	180.8	181.2	181.7	182.5	183.0
All items less food..... do.....	157.1	167.5	171.6	172.2	172.9	174.0	175.1	176.2	177.3	178.4	179.1	179.8	180.9	181.6	182.5	183.1
All items less medical care..... do.....	160.9	169.7	172.7	173.2	174.2	176.0	177.0	178.4	179.4	180.6	181.4	182.0	182.6	183.1	184.1	184.7
Commodities..... do.....	158.4	165.2	167.7	168.1	168.7	170.9	171.8	173.3	174.3	175.4	175.8	176.3	176.6	177.0	177.9	178.3
Nondurables..... do.....	163.2	169.2	171.3	171.7	172.4	175.0	175.9	177.4	178.3	179.7	180.1	180.8	181.0	181.4	182.4	182.9
Nondurables less food..... do.....	151.7	158.3	161.9	162.3	161.9	163.1	163.9	164.7	165.7	166.6	166.3	167.3	168.4	169.2	170.1	170.3
Durables..... do.....	145.5	154.3	158.0	158.4	158.9	159.7	160.8	162.2	163.4	163.9	164.3	164.3	164.5	165.0	165.5	165.9
Commodities less food..... do.....	149.1	156.6	160.3	160.6	160.6	161.6	162.6	163.6	164.7	165.4	165.6	166.0	166.7	167.4	168.1	168.4
Services..... do.....	166.6	180.4	185.1	185.8	187.4	188.7	190.0	191.2	192.2	193.7	195.3	196.3	197.7	198.5	199.5	200.5
Services less rent..... do.....	171.9	186.8	191.8	192.6	194.3	195.6	197.0	198.4	199.4	201.1	202.8	203.8	205.3	206.2	207.2	208.2
Food ♀..... do.....	175.4	180.8	181.1	181.7	183.4	187.7	188.6	190.9	191.7	193.6	194.6	195.2	194.5	194.4	195.6	196.3
Meats, poultry, and fish..... do.....	178.0	179.4	172.0	170.2	172.3	174.7	175.9	174.6	175.9	178.5	180.4	181.8	182.1	180.9	181.9	182.1
Dairy products..... do.....	156.6	169.3	171.7	171.4	171.3	171.1	171.2	171.4	173.1	174.3	174.1	175.1	175.4	176.2	176.5	176.9
Fruits and vegetables..... do.....	171.0	175.4	174.8	175.5	177.6	194.7	196.8	203.0	195.1	196.8	191.1	192.1	183.2	184.0	188.7	192.5
Housing..... do.....	166.8	177.2	180.7	181.6	183.1	184.3	185.5	186.7	187.6	189.0	190.5	191.4	192.7	193.6	194.6	195.7
Shelter ♀..... do.....	169.7	179.0	182.1	182.4	184.1	185.3	186.3	187.7	188.9	190.3	192.2	193.2	194.7	195.6	196.9	198.2
Rent..... do.....	137.3	144.7	147.5	148.3	149.5	150.2	150.8	151.6	152.2	152.9	153.6	154.4	155.3	156.1	157.0	157.9
Homeownership..... do.....	181.7	191.7	194.8	195.0	196.7	198.1	199.3	201.0	202.3	203.9	206.2	207.4	209.1	210.0	211.5	213.0
Fuel and utilities ♀..... do.....	167.8	182.7	188.2	192.0	194.8	196.4	198.5	199.4	200.2	201.8	203.5	204.5	205.5	206.8	207.4	207.6
Fuel oil and coal..... do.....	235.3	250.8	258.0	264.5	271.7	278.3	281.4	282.0	282.6	283.1	283.7	284.1	285.1	287.2	289.9	291.9
Gas and electricity..... do.....	169.6	189.0	195.5	201.4	204.2	205.4	208.5	209.8	210.9	213.0	216.0	217.4	218.0	219.3	219.5	218.9
Household furnishings and operation..... do.....	158.1	168.5	171.7	172.3	172.6	173.6	174.6	175.4	175.9	177.1	177.4	178.1	178.9	179.5	180.1	181.1
Apparel and upkeep..... do.....	142.3	147.6	151.9	151.8	150.0	150.8	151.7	152.3	153.4	153.9	154.3	154.8	156.2	157.2	158.5	158.2
Transportation..... do.....	150.6	165.5	171.4	171.4	172.2	173.2	174.7	176.7	178.1	179.1	179.2	178.8	178.4	178.6	178.7	178.8
Private..... do.....	149.8	164.6	170.6	170.7	171.5	172.6	174.0	176.2	177.7	178.6	178.7	178.2	177.8	177.9	178.0	178.0
New cars..... do.....	127.6	135.7	139.7	140.4	141.1	140.7	140.9	140.6	141.4	141.7	141.6	141.1	145.7	148.2	150.5	150.5
Used cars..... do.....	146.4	167.9	179.0	178.0	177.7	179.1	182.7	187.8	191.4	192.2	196.6	186.4	182.5	178.0	175.0	170.7
Public..... do.....	158.6	174.2	177.6	178.0	178.7	178.9	180.4	180.4	181.5	183.2	183.5	183.5	184.1	184.4	184.7	185.7
Health and recreation ♀..... do.....	153.5	163.3	167.3	168.0	169.0	169.8	170.7	171.4	172.3	173.2	174.1	174.7	176.1	177.1	177.9	178.5
Medical care..... do.....	168.6	184.7	191.3	192.3	194.1	195.8	197.6	199.1	200.5	201.8	203.5	204.9	206.3	207.2	208.1	209.3
Personal care..... do.....	150.7	160.5	164.8	165.2	166.2	166.7	167.3	168.4	169.5	170.6	171.3	172.1	172.8	173.9	175.5	176.3
Reading and recreation..... do.....	144.4	151.2	154.1	154.4	154.9	155.5	155.8	156.0	156.8	157.6	157.7	158.1	159.8	160.6	160.9	161.3
Seasonally Adjusted‡																
All items, percent change from previous month.....			0.3	0.4	0.8	1.0	0.6	0.8	0.6	0.6	0.4	0.3	0.3	0.3	0.5	0.4
Commodities..... 1967=100.....			167.4	168.0	*169.4	171.4	172.2	173.6	174.5	175.3	175.5	176.0	176.3	176.7	177.6	178.3
Commodities less food..... do.....			159.6	*160.5	*161.6	162.7	163.4	164.0	164.7	165.1	165.3	165.8	166.2	166.7	167.5	168.3
Food..... do.....			181.7	181.9	*183.5	187.1	188.2	191.0	192.4	193.9	194.0	194.5	194.7	194.9	196.1	196.5
Food at home..... do.....			179.6	179.7	*181.3	185.4	186.4	189.3	190.7	192.1	191.9	192.3	192.4	192.5	193.9	194.1
Fuels and utilities..... do.....			188.7	191.8	*194.0	194.6	197.3	198.4	199.8	202.0	204.3	205.9	206.9	208.3	208.0	207.4
Fuel oil and coal..... do.....			257.0	261.4	*266.6	272.0	278.1	280.6	282.9	285.4	287.1	289.6	290.9	291.0	288.7	288.4
Apparel and upkeep..... do.....			149.9	150.6	*151.7	152.0	152.3	152.6	153.2	154.2	154.8	155.4	155.4	155.6	156.3	156.9
Transportation..... do.....			171.0	171.9	*173.5	175.1	176.2	177.9	178.4	178.1	177.4	177.6	177.7	177.9	178.3	179.3
Private..... do.....			170.3	171.5	*173.0	174.8	175.7	177.4	177.6	177.5	176.8	177.1	177.2	177.6	178.7	
New cars..... do.....			138.6	139.2	*140.0	140.1	140.6	140.5	141.7	142.0	142.3	143.2	144.0	144.8	147.0	149.2
Services..... do.....			184.8	185.5	*187.2	188.4	189.9	191.4	192.7	194.2	195.7	196.7	197.7	198.4	199.2	200.1
WHOLESALE PRICES♂ (U.S. Department of Labor Indexes)																
Not Seasonally Adjusted																
Spot market prices, basic commodities:																
22 Commodities..... 1967=100.....	198.2	201.0	197.2	200.6	207.3	213.0	218.4									

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
COMMODITY PRICES—Continued																
WHOLESALE PRICES^σ—Continued (U.S. Department of Labor Indexes)—Continued																
All commodities—Continued																
Farm prod., processed foods and feeds. 1967=100..	184.2	183.1	178.3	183.9	184.8	188.4	190.9	195.9	196.8	191.5	189.3	184.2	183.9	184.2	186.8	189.5
Farm products ^γ.....do.....	186.7	191.0	183.6	191.6	193.5	199.1	202.5	208.2	204.3	192.7	190.5	181.2	181.9	182.4	185.5	188.3
Fruits and vegetables, fresh and dried.....do.....	183.7	178.4	166.5	174.5	*198.5	*212.7	219.2	205.7	201.8	176.2	182.0	176.4	182.8	187.9	192.9	170.1
Grains.....do.....	223.9	205.9	175.4	180.6	184.9	185.8	183.4	184.4	171.2	157.7	153.3	142.5	144.2	144.7	164.6	167.3
Live poultry.....do.....	189.8	166.9	139.1	145.7	153.7	183.7	177.2	182.3	183.1	182.7	193.7	176.1	181.7	170.5	162.7	157.8
Livestock.....do.....	187.9	173.3	154.4	166.1	166.0	166.2	163.5	167.9	180.2	172.3	180.5	175.2	172.9	177.5	171.6	182.7
Foods and feeds, processed ^γ.....do.....	182.6	178.0	174.8	179.0	179.3	181.9	183.9	188.5	191.9	190.1	187.8	185.1	184.2	184.5	186.7	189.3
Beverages and beverage materials.....do.....	162.4	173.5	178.8	183.8	184.1	189.3	199.6	202.1	206.0	207.7	204.7	205.5	204.8	204.3	200.6	201.3
Cereal and bakery products.....do.....	178.0	172.1	168.7	168.6	168.4	169.9	171.5	171.6	172.0	171.3	172.0	172.1	172.8	175.4	179.7	182.0
Dairy products.....do.....	155.8	168.5	168.1	167.3	168.8	166.9	168.0	173.5	174.2	174.3	175.1	175.3	175.7	175.9	176.9	178.2
Fruits and vegetables, processed.....do.....	169.8	170.2	175.7	175.6	175.4	182.9	184.0	185.2	185.8	187.8	188.5	190.1	191.2	190.3	193.0	194.4
Meats, poultry, and fish.....do.....	191.0	181.6	168.4	176.9	176.6	177.4	174.2	174.9	183.8	183.4	189.5	182.7	182.7	184.7	183.4	190.8
Industrial commodities.....do.....	171.5	182.4	187.1	187.4	188.4	190.0	191.7	193.3	194.2	194.6	195.8	196.9	197.8	199.1	199.2	200.0
Chemicals and allied products ^γ.....do.....	181.3	187.2	188.6	188.2	188.9	190.1	191.2	192.9	194.0	193.9	193.5	193.5	193.2	193.5	193.8	193.9
Agric. chemicals and chem. prod.....do.....	203.6	188.3	184.1	183.4	182.2	183.5	187.1	189.0	187.7	189.0	188.4	188.9	189.9	190.0	188.1	186.9
Chemicals, industrial.....do.....	206.9	219.3	222.6	221.5	222.1	222.9	222.4	223.5	224.0	224.1	224.4	224.7	224.2	224.7	224.9	225.2
Drugs and pharmaceuticals.....do.....	126.6	134.0	135.9	136.4	137.5	138.4	139.0	139.6	139.7	140.8	141.2	141.2	141.4	141.8	142.2	142.9
Fats and oils, inedible.....do.....	255.2	249.9	251.2	254.6	253.9	253.9	273.7	304.9	337.5	318.8	281.9	268.9	246.9	260.9	265.4	266.1
Prepared paint.....do.....	166.9	174.4	177.3	177.3	177.3	177.3	178.9	180.6	181.7	182.3	183.9	183.9	185.1	185.1	186.7	185.9
Fuels and related prod., and power ^γ.....do.....	245.1	265.6	281.6	279.0	278.8	289.1	293.7	298.8	302.4	304.0	306.6	309.5	309.7	310.6	310.4	311.9
Coal.....do.....	385.8	368.7	369.1	374.0	376.3	377.5	378.8	379.8	386.9	390.6	393.0	394.5	395.2	397.8	400.1	402.2
Electric power.....do.....	193.4	207.6	214.0	211.5	214.0	219.8	223.4	229.4	230.7	234.4	239.2	244.7	242.7	242.6	237.8	237.2
Gas fuels.....do.....	216.7	286.8	365.0	337.6	322.2	363.7	370.9	379.0	390.2	386.6	391.9	400.9	405.4	407.0	414.1	422.4
Petroleum products, refined.....do.....	257.5	276.6	285.8	287.6	289.2	295.1	301.9	306.8	310.1	311.6	312.9	313.0	312.8	313.8	313.4	313.7
Furniture and household durables ^γ.....do.....	139.7	145.6	147.5	147.9	148.8	149.1	149.6	150.1	150.6	151.3	151.2	152.4	152.5	153.0	153.6	154.0
Appliances, household.....do.....	132.3	139.2	140.6	141.0	141.2	142.1	142.9	143.3	143.2	144.5	145.4	146.2	147.1	147.4	147.5	147.6
Furniture, household.....do.....	146.3	153.6	157.5	158.6	158.7	158.9	159.7	160.7	161.1	162.2	162.8	163.1	163.1	164.1	165.1	166.4
Home electronic equipment.....do.....	93.5	91.3	91.0	90.9	89.6	89.3	89.4	88.3	88.4	88.3	86.8	86.8	86.3	86.3	86.4	86.4
Hides, skins, and leather products ^γ.....do.....	148.5	167.8	169.8	171.5	175.3	176.9	177.9	179.9	181.9	179.7	180.3	180.5	179.9	179.6	180.3	181.8
Footwear.....do.....	147.8	158.9	162.9	*182.9	164.5	165.9	166.4	167.2	168.2	168.6	170.3	170.4	170.5	171.7	172.0	172.1
Hides and skins.....do.....	174.5	258.4	231.8	251.2	278.9	282.5	285.9	305.0	313.0	288.8	291.5	288.3	274.4	268.3	273.2	291.9
Leather.....do.....	151.5	188.1	191.4	191.7	192.9	201.3	201.4	204.1	210.7	202.1	198.6	200.3	200.5	196.4	197.0	200.4
Lumber and wood products.....do.....	176.9	205.6	214.3	220.0	222.8	224.4	229.0	229.8	229.5	228.7	235.5	242.7	252.4	247.3	243.2	249.1
Lumber.....do.....	192.5	233.0	244.3	252.1	257.8	259.3	266.4	268.8	267.8	264.6	275.9	286.4	301.3	292.4	284.8	291.0
Machinery and equipment ^γ.....do.....	161.4	171.0	174.5	175.4	176.7	177.5	178.2	178.9	180.0	180.8	181.9	182.8	183.9	185.7	186.7	187.3
Agricultural machinery and equip.....do.....	168.6	183.0	188.8	190.6	192.3	193.3	194.5	194.8	195.1	196.0	196.6	198.4	200.4	201.4	209.1	205.2
Construction machinery and equip.....do.....	185.2	198.9	204.5	205.8	208.8	209.1	208.3	210.2	213.0	213.2	214.9	215.8	215.7	218.3	221.4	221.8
Electrical machinery and equip.....do.....	140.7	146.7	149.5	150.0	151.3	151.1	152.0	151.9	152.7	153.0	154.1	154.6	155.8	157.3	157.8	157.9
Metalworking machinery and equip.....do.....	171.6	182.7	187.3	188.7	190.9	192.7	193.7	194.7	195.7	197.9	199.2	200.6	201.7	203.6	204.9	205.8
Metals and metal products ^γ.....do.....	185.6	195.9	200.1	200.9	202.1	203.2	206.5	208.2	208.5	207.8	210.7	211.7	212.6	211.8	212.0	213.3
Heating equipment.....do.....	150.7	158.0	160.9	161.8	162.9	163.1	163.7	163.5	164.0	164.5	165.4	166.0	166.3	168.0	168.3	169.3
Iron and steel.....do.....	200.9	215.9	218.9	222.6	224.2	224.7	227.4	228.3	227.9	226.9	231.1	233.1	235.7	234.2	233.4	235.5
Nonferrous metals.....do.....	171.6	181.6	187.5	185.1	185.3	188.3	195.8	200.1	200.9	197.3	198.0	198.5	195.1	193.5	194.2	195.1
Nonmetallic mineral products ^γ.....do.....	174.0	186.3	189.5	189.6	192.4	193.6	195.1	198.6	199.3	200.4	201.5	202.4	204.2	205.3	205.6	206.5
Clay prod., structural, excl. refrac.....do.....	151.2	163.5	168.2	168.8	170.1	167.8	170.7	177.5	174.2	180.2	183.8	184.5	185.7	187.8	185.1	185.5
Concrete products.....do.....	170.5	180.1	182.4	183.0	187.0	187.8	188.4	189.9	190.5	190.9	192.8	193.5	194.0	195.0	195.4	195.7
Gypsum products.....do.....	144.0	154.4	160.1	160.1	160.8	160.8	164.0	172.2	175.9	187.1	186.6	189.8	193.7	201.6	203.2	204.9
Pulp, paper, and allied products.....do.....	170.4	179.4	181.5	181.8	182.9	183.0	183.6	185.3	186.2	187.3	187.7	187.8	188.5	188.8	188.3	187.6
Paper.....do.....	172.9	182.3	188.2	186.6	188.9	189.4	192.0	193.3	194.1	194.3	195.6	196.2	196.3	197.1	197.5	197.1
Rubber and plastics products.....do.....	150.2	159.2	164.8	164.7	164.6	164.2	164.6	165.7	166.3	167.4	168.9	169.1	169.4	170.0	170.0	169.8
Tires and tubes.....do.....	148.5	161.5	172.1	172.3	170.0	163.6	165.6	169.9	167.8	167.9	171.3	171.1	171.1	171.9	171.6	171.9
Textile products and apparel ^γ.....do.....	137.9	148.2	150.1	149.9	150.8	151.7	152.4	153.7	154.0	154.4	154.4	154.4	155.1	155.2	155.3	155.9
Synthetic fibers.....Dec. 1975=100.....	102.4	101.7	101.6	102.6	103.4	103.2	106.4	107.0	107.0	109.5	109.2	109.6	109.6	109.5	109.6	109.6
Processed yarns and threads.....do.....	99.5	97.5	97.2	96.6	97.2	98.7	101.5	102.3	103.4	103.4	103.4	103.0	102.1	101.2	100.4	100.6
Gray fabrics.....do.....	106.1	109.1	107.7	105.1	103.8	104.5	105.0	105.1	104.5	104.9	104.9	103.3	103.0	103.7	105.2	107.2
Finished fabrics.....do.....	101.1	101.4	101.5	100.4	101.2	103.0	104.3	104.9	104.5	104.3	104.2	104.2	104.2	104.1	103.3	103.4
Apparel.....1967=100.....	133.4	139.9	142.9	142.9	144.8	145.6	146.0	146.5	146.6	147.2	147.2	147.4	148.4	148.6	149.1	149.4
Textile house furnishings.....do.....	151.9	159.3	163.2	162.7	165.5	167.1	170.4	170.4	169.7	169.7	169.7	171.2	174.7	175.6	175.6	175.7
Transportation equipment ^γ.....Dec. 1968=100.....	141.5	151.1	156.2	157.0	157.1	157.2	158.4	158.7	159.1	159.4	159.5	160.6	161.4	167.9	168.0	168.3
Motor vehicles and equip.....1967=100.....	144.6	153.8	159.2	159.5	159.2	159.4	160.7	161.0	161.4	161.8	161.8	163.1	163.8	170.8	170.6	170.9
Seasonally Adjusted[‡]																

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual	Annual	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
CONSTRUCTION AND REAL ESTATE																
CONSTRUCTION PUT IN PLACE †																
New construction (unadjusted), total.....mil. \$..	134,293	147,481	13,588	12,107	10,028	10,052	11,739	13,150	14,619	15,752	15,839	16,385	16,632	16,585	15,805	
Private, total ♀.....do.....	93,623	109,500	10,496	9,518	7,940	7,915	9,300	10,392	11,418	12,115	12,265	12,565	12,809	12,929	12,606	
Residential (including farm).....do.....	46,472	60,520	6,026	5,261	4,365	4,368	5,353	6,230	7,124	7,611	7,717	7,844	7,976	7,941	7,662	
New housing units.....do.....	34,408	47,277	4,694	4,053	3,438	3,536	4,351	4,839	5,518	6,037	6,306	6,471	6,494	6,513	6,305	
Nonresidential buildings, except farm and public utilities, total ♀.....mil. \$..	26,407	26,091	2,281	2,179	1,804	1,836	2,078	2,204	2,254	2,394	2,497	2,595	2,677	2,704	2,613	
Industrial.....do.....	8,018	7,183	581	591	456	468	554	582	600	602	620	658	656	675	633	
Commercial.....do.....	12,806	12,756	1,129	1,062	906	915	1,051	1,108	1,142	1,265	1,329	1,380	1,452	1,471	1,402	
Public utilities:																
Telephone and telegraph.....do.....	3,683	3,777	367	348	240	263	349	333	364	401	354	410	401	411		
Public, total ♀.....do.....	40,670	37,981	3,093	2,590	2,088	2,137	2,439	2,759	3,201	3,637	3,574	3,820	3,823	3,656	3,198	
Buildings (excluding military) ♀.....do.....	15,254	13,214	978	917	895	822	924	998	1,005	1,126	1,132	1,147	1,189	1,126		
Housing and redevelopment.....do.....	668	628	54	58	58	59	71	66	76	98	91	71	86	80		
Industrial.....do.....	918	971	73	72	84	80	92	96	95	105	91	101	106	95		
Military facilities.....do.....	1,390	1,508	133	125	121	122	120	120	136	131	127	124	134	114		
Highways and streets.....do.....	10,861	9,754	811	515	312	323	439	583	809	1,073	1,087	1,138	1,047	1,081		
New construction (seasonally adjusted at annual rates), total.....bil. \$..			153.8	155.4	148.1	156.9	163.8	167.6	172.2	174.4	172.3	170.9	175.9	177.9	178.0	
Private, total ♀.....do.....			119.0	121.2	116.2	122.4	128.4	131.4	133.8	135.0	133.0	132.7	136.7	140.2	142.1	
Residential (including farm).....do.....			69.6	71.1	66.5	72.1	76.7	79.6	82.5	82.2	79.6	79.1	82.4	85.8	87.9	
New housing units.....do.....			52.7	54.8	52.1	58.3	62.2	63.5	65.8	66.0	65.1	65.1	66.4	68.9	70.7	
Nonresidential buildings, except farm and public utilities, total ♀.....bil. \$..			25.8	25.9	24.8	24.9	26.7	27.4	27.0	28.5	29.2	29.2	29.9	29.8	29.4	
Industrial.....do.....			6.7	6.6	6.2	6.3	7.2	7.3	7.2	7.1	7.2	7.6	7.5	7.6	7.3	
Commercial.....do.....			12.6	12.8	12.5	12.5	13.7	13.9	13.8	15.2	15.5	15.3	16.0	15.8	15.6	
Public utilities:																
Telephone and telegraph.....do.....			4.1	4.0	4.0	3.9	4.0	4.0	4.3	4.4	4.3	4.5	4.5	4.6		
Public, total ♀.....do.....			34.9	34.3	32.0	34.5	35.4	36.2	38.4	39.4	39.2	38.2	39.3	37.7	35.9	
Buildings (excluding military) ♀.....do.....			11.1	10.8	11.8	11.5	11.8	12.4	12.2	13.1	13.8	12.7	13.4	12.1	12.1	
Housing and redevelopment.....do.....			.6	.6	.8	1.0	1.0	.9	1.0	1.2	1.0	.8	.9	.8	.7	
Industrial.....do.....			1.0	.8	1.0	1.0	1.1	1.0	1.1	1.3	1.4	1.4	1.4	1.3	1.3	
Military facilities.....do.....			1.5	1.5	1.5	1.6	1.5	1.5	1.6	1.6	1.5	1.5	1.5	1.4	1.3	
Highways and streets.....do.....			8.5	8.2	7.2	8.4	9.2	9.1	9.8	10.8	9.5	9.4	8.9	9.5	8.4	
CONSTRUCTION CONTRACTS																
Construction contracts in 50 States (F. W. Dodge Division, McGraw-Hill):																
Valuation, total.....mil. \$..	92,659	107,158	7,691	7,196	6,748	7,523	9,937	12,079	15,932	15,417	11,246	14,231	13,713	10,581	10,391	
Index (mo. data seas. adj.).....1967=100..	1168	1194	210	183	203	212	207	250	317	307	218	267	279	244	258	
Public ownership.....mil. \$..	32,198	29,246	2,123	2,391	1,793	2,007	2,655	2,576	2,956	5,424	2,688	3,458	3,249	2,855	3,100	
Private ownership.....do.....	60,460	77,913	5,568	5,106	4,955	5,516	7,282	9,502	12,976	9,993	8,558	10,772	10,464	7,725	7,290	
By type of building:																
Nonresidential.....do.....	31,647	30,045	2,491	2,133	2,163	1,879	3,003	2,890	3,047	3,063	2,997	3,785	3,617	3,154	3,107	
Residential.....do.....	31,261	43,651	3,716	3,236	2,927	3,427	5,149	5,266	5,660	5,945	5,548	6,148	5,518	5,452	5,281	
Non-building construction.....do.....	29,751	33,463	1,484	1,828	1,658	2,217	1,785	3,922	7,225	6,409	2,702	4,297	4,578	1,975	2,003	
New construction planning (Engineering News-Record) Ⓞ.....do.....	83,795	88,457	9,771	10,674	9,351	4,438	6,441	5,526	6,979	7,045	6,844	7,736	9,091	8,238	7,313	12,700
HOUSING STARTS AND PERMITS																
New housing units started:																
Unadjusted:																
Total (private and public).....thous. .	1,171.4	1,547.6	128.2	108.1	81.5	112.7	173.6	182.4	201.3	197.8	189.8	194.2	177.8	193.2	156.0	128.6
Inside SMSA's.....do.....	766.8	1,048.3	89.5	78.6	63.9	80.7	124.4	126.4	134.7	131.1	130.3	129.9	121.2	130.1	110.1	95.1
Privately owned.....do.....	1,160.4	1,537.5	127.1	107.4	81.3	112.5	173.6	182.2	201.3	197.6	189.8	194.0	177.7	193.1	154.9	128.4
One-family structures.....do.....	892.2	1,162.4	89.4	71.6	55.7	87.2	125.8	138.8	152.2	149.1	138.2	140.5	131.6	135.4	110.0	86.9
Seasonally adjusted at annual rates:																
Total privately owned.....do.....			1,706	1,889	1,384	1,802	2,089	1,880	1,937	1,897	2,063	2,029	2,065	2,203	2,121	2,295
One-family structures.....do.....			1,236	1,324	1,006	1,424	1,503	1,413	1,455	1,389	1,437	1,453	1,523	1,562	1,543	1,605
New private housing units authorized by building permits (14,000 permit-issuing places):																
Monthly data are seas. adj. at annual rates:																
Total.....thous. .	939	1,296	1,583	1,532	1,333	1,526	1,687	1,605	1,615	1,678	1,639	1,772	1,695	1,850	1,893	1,858
One-family structures.....do.....	676	894	1,055	1,047	930	1,060	1,188	1,051	1,077	1,105	1,089	1,156	1,135	1,216	1,257	1,223
Manufacturers' shipments of mobile homes (Manufactured Housing Institute):																
Unadjusted.....thous. .	212.7	246.1	17.8	15.0	14.7	18.0	23.4	24.2	24.9	26.8	22.3	27.3	26.8	27.4	22.6	
Seasonally adjusted at annual rates.....do.....			247	248	258	275	275	252	251	264	251	270	300	319	318	
CONSTRUCTION COST INDEXES																
Dept. of Commerce composite Ⓢ.....1972=100..	138.2	143.5	146.1	146.9	149.0	150.5	150.9	152.7	154.4	156.2	155.2	157.1	158.4	157.9	159.7	
American Appraisal Co., The:																
Average, 30 cities.....1913=100..	1,716	1,870	1,912	1,916	1,921	1,931	1,938	1,949	1,967	1,988	2,014	2,037	2,050	2,052	2,062	2,069
Atlanta.....do.....	1,871	2,009	2,044	2,050	2,088	2,090	2,098	2,112	2,116	2,118	2,143	2,181	2,190	2,182	2,187	2,187
New York.....do.....	1,827	1,943	1,980	1,983	1,990	1,994	2,000	2,003	2,012	2,013	2,115	2,132	2,136	2,127	2,129	2,131
San Francisco.....do.....	1,698	1,906	1,957	1,961	1,967	2,009	2,017	2,022	2,027	2,029	2,044	2,082	2,173	2,166	2,166	2,180
St. Louis.....do.....	1,659	1,803	1,839	1,842	1,850	1,851	1,860	1,864	1,868	1,895	1,921	1,942	1,946	1,938	1,959	1,967
Boeckh indexes:																
Average, 20 cities:																
Apartments, hotels, office buildings \$..1972=100..	127.2	137.3	142.6		143.6		146.3		147.8		149.9		151.5		152.5	
Commercial and factory buildings.....do.....	130.4	141.5	147.0		147.8		150.1		151.6		154.2		155.7		157.5	
Residences.....do.....	125.9	136.2	142.9		143.3		145.3		147.0		149.9		152.2		153.2	

† Revised. ♀ Preliminary. Ⓢ Computed from cumulative valuation total. Ⓞ Unadjusted data for Jan.-Dec. 1976 and seasonally adjusted data for Jan. 1974-Dec. 1976 will be available later. Ⓢ Data for new construction have been revised back to Jan. 1973. The revised data are available from the Bureau of the Census, Washington, D. C. 20233. Ⓞ Data for Dec. 1976 and Mar., June, Sept., Dec. 1977 are for 5 weeks; other months, 4 weeks. Ⓢ Includes data for items not shown separately. Ⓢ This index has been revised to a new comparison base (1972=100); monthly data back to Jan. 1964 are available upon request. Ⓢ These indexes are restated on the 1972=100 base; monthly data for earlier periods will be available later. Ⓞ Corrected.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
CONSTRUCTION AND REAL ESTATE—Continued																
CONSTRUCTION COST INDEXES—Con.																
Engineering News-Record:																
Building.....1967=100.....	193.3	210.9	218.9	219.7	220.4	221.9	222.6	222.9	223.0	225.2	227.8	230.0	234.9	239.6	237.4	237.9
Construction.....do.....	205.7	223.4	231.5	231.8	232.2	233.2	234.0	235.0	234.1	236.5	240.1	243.0	246.2	249.0	247.6	248.5
Federal Highway Adm.—Highway construction:																
Composite (avg. for year or qtr.).....1967=100.....	203.8	199.3		200.4				202.2								
CONSTRUCTION MATERIALS																
Output index:																
Composite, unadjusted φ.....1947-49=100.....	160.4	174.3	163.4	152.4	139.6	147.7	188.1	179.0								
Seasonally adjusted φ.....do.....			171.9	176.1	147.5	167.8	195.5	174.8								
Iron and steel products, unadjusted.....do.....	140.9	141.9	129.0	122.7	106.5	118.8	160.2	149.0	156.8	167.0	146.0					
Lumber and wood products, unadj.....do.....	166.9	191.2	188.7	186.9	185.5	184.2	217.3	201.2								
Portland cement, unadjusted.....do.....	182.9	192.3	190.4	138.6	83.5	125.0	187.5	213.6	238.3	269.5	242.5					
REAL ESTATE[†]																
Mortgage applications for new home construction:																
FHA net applications.....thous. units.....	82.3	95.0	9.1	8.7	6.8	11.2	10.6	10.8	12.3	9.1	9.2	10.0	9.6	7.9	9.1	6.7
Seasonally adjusted annual rates.....do.....			115	125	107	156	111	125	126	95	116	112	108	96	115	96
Requests for VA appraisals.....do.....	157.7	183.4	16.0	14.5	15.6	18.6	22.5	19.7	18.4	20.0	17.3	19.9	15.8	15.8	15.4	12.8
Seasonally adjusted annual rates.....do.....			193	234	230	254	240	216	203	216	205	207	187	194	185	206
Home mortgages insured or guaranteed by—																
Fed. Hous. Adm.: Face amount.....mil. \$.....	6,166.12	6,362.12	557.75	508.00	608.67	699.49	676.86	654.86	996.87	654.11	680.64	874.33	660.71	707.90	830.30	479.48
Ver. Adm.: Face amount\$.....do.....	8,863.84	10,414.77	1,053.18	962.30	989.22	988.50	1,041.52	903.75	1,137.86	1,184.57	942.53	1,527.21	1,541.53	1,070.96	1,311.79	1,216.71
Federal Home Loan Banks, outstanding advances to member institutions, end of period.....mil. \$.....	17,845	15,862	15,765	15,862	15,183	14,816	14,462	14,952	15,148	15,717	15,861	16,369	17,054	17,746	18,492	20,173
New mortgage loans of all savings and loan associations, estimated total.....mil. \$.....	55,040	78,792	6,526	7,287	5,448	5,631	8,211	8,966	9,800	11,269	9,664	10,893	9,869	* 9,281	9,150	-----
By purpose of loan:																
Home construction.....do.....	10,097	14,820	1,306	1,421	1,005	1,071	1,716	1,758	1,919	2,104	1,841	2,084	1,894	* 1,801	1,781	-----
Home purchase.....do.....	32,106	48,252	3,958	4,178	3,310	3,375	4,780	5,426	6,021	7,105	6,183	6,947	6,240	* 5,698	5,558	-----
All other purposes.....do.....	12,837	15,720	1,262	1,688	1,133	1,185	1,715	1,782	1,860	2,060	1,640	1,862	1,735	* 1,782	1,811	-----
Foreclosures.....number.....	142,803															
Fire losses (on bldgs., contents, etc.).....mil. \$.....	3,560	3,558	238	314	334	362	347	323	306	304	310	338	285	274	259	-----

DOMESTIC TRADE

ADVERTISING																
McCann-Erickson national advertising index, seasonally adjusted:																
Combined index.....1967=100.....	147	180	189	183	192	192	200	199	210	205	209	217	209	217	219	-----
Network TV.....do.....	160	191	206	194	215	212	223	227	229	239	234	241	225	247	252	-----
Spot TV.....do.....	166	215	226	209	213	213	219	210	225	215	234	240	230	220	229	-----
Magazines.....do.....	119	143	146	151	148	163	168	166	184	176	169	168	180	175	180	-----
Newspapers.....do.....	142	175	178	180	194	177	187	184	198	178	193	221	198	225	205	-----
Magazine advertising (general and natl. farm magazines):																
Cost, total.....mil. \$.....	*1,328.7	1,622.0	194.0	141.5	111.7	135.9	154.4	176.6	200.5	150.7	119.1	122.3	173.1	221.4	222.3	-----
Apparel and accessories.....do.....	* 46.0	56.4	6.3	4.2	3.4	3.2	5.9	7.1	7.2	3.5	2.2	4.6	9.4	8.4	8.6	-----
Automotive, incl. accessories.....do.....	* 101.3	142.0	18.9	8.8	9.6	13.5	14.8	17.4	20.6	15.9	10.5	9.7	8.5	21.3	20.9	-----
Building materials.....do.....	* 20.6	28.4	2.2	2.1	1.4	2.0	3.5	4.5	4.6	3.3	1.7	1.4	3.9	4.5	3.2	-----
Drugs and toiletries.....do.....	* 138.1	165.2	16.9	14.4	12.3	16.0	17.0	17.2	21.3	17.8	13.0	14.1	16.9	20.2	18.6	-----
Foods, soft drinks, confectionery.....do.....	* 91.0	120.5	17.2	12.7	6.8	11.7	11.5	13.7	14.1	12.0	10.4	10.7	11.9	16.1	18.4	-----
Beer, wine, liquors.....do.....	* 100.7	110.9	15.8	17.3	4.1	5.0	8.0	9.6	11.2	10.6	7.2	6.9	10.5	17.7	18.9	-----
Household equip., supplies, furnishings.....do.....	* 55.0	83.6	11.7	6.3	3.1	5.3	8.8	11.0	15.0	7.7	7.1	6.0	11.9	13.3	14.8	-----
Industrial materials.....do.....	* 34.2	46.9	5.4	3.8	2.9	3.6	3.7	4.7	6.0	4.1	2.5	2.9	5.3	4.8	5.1	-----
Soaps, cleansers, etc.....do.....	* 19.4	25.0	2.6	1.9	2.2	2.8	2.7	3.7	4.2	2.0	1.8	2.2	2.9	3.5	3.4	-----
Smoking materials.....do.....	* 143.4	161.7	14.9	12.8	12.9	13.6	13.3	13.7	16.9	15.7	17.0	17.8	15.8	20.8	19.5	-----
All other.....do.....	* 579.1	681.2	82.1	57.0	52.9	59.1	65.0	74.0	79.4	58.1	45.7	46.0	76.2	90.7	91.1	-----
Newspaper advertising expenditures (64 cities): \oplus																
Total.....mil. \$.....	4,117.4	5,068.5	478.4	446.6	429.3	393.1	494.7	492.6	555.7	505.5	456.5	472.0	501.3	586.7	584.2	-----
Automotive.....do.....	93.3	120.6	12.3	7.3	12.1	12.1	14.6	14.5	14.8	13.3	11.2	10.9	12.0	16.7	14.1	-----
Classified.....do.....	982.2	1,255.6	100.0	83.1	116.8	101.9	130.3	133.6	146.9	136.3	142.7	141.3	134.0	151.5	128.5	-----
Financial.....do.....	130.8	139.8	11.2	12.0	13.7	9.3	13.4	13.9	13.0	14.7	13.4	9.4	13.3	17.6	14.5	-----
General.....do.....	547.1	694.6	68.4	51.9	61.4	55.9	69.3	69.0	81.8	66.1	48.9	54.9	72.2	86.5	81.6	-----
Retail.....do.....	2,364.0	2,858.0	286.6	292.3	225.3	214.0	267.1	261.7	299.3	275.1	240.4	255.4	269.8	314.4	345.5	-----
WHOLESALE TRADE \odot																
Merchant wholesalers sales (unadj.), total \odot mil. \$.....	535,596	580,894	49,525	51,217	46,352	47,683	56,383	53,357	54,633	55,794	51,290	55,597	54,505	* 54,251	55,613	-----
Durable goods establishments.....do.....	200,094	246,732	20,904	20,758	18,895	20,013	24,008	23,356	24,159	25,292	22,915	25,998	25,461	* 25,389	25,015	-----
Nondurable goods establishments.....do.....	315,502	334,162	28,621	30,459	27,457	27,670	32,375	30,001	30,474	30,502	28,375	29,599	29,044	* 28,882	30,598	-----
Merchant wholesalers inventories, book value, end of year or month (unadj.), total \odot mil. \$.....	55,727	62,056	62,179	62,056	62,910	63,985	65,097	65,042	64,088	64,117	63,666	64,105	65,291	* 66,530	67,468	-----
Durable goods establishments.....do.....	34,123	37,628	37,879	37,628	38,455	39,362	39,965	40,168	40,763	41,593	41,738	42,142	42,484	* 42,627	42,738	-----
Nondurable goods establishments.....do.....	21,604	24,429	24,300	24,429	24,455	24,624	25,131	24,874	23,324	22,523	21,928	21,963	22,807	* 23,903	24,730	-----

* Revised. \circ Preliminary. \oplus Index as of Jan. 1, 1978: Building, 238.1; construction, 248.8. \odot Includes data for items not shown separately. \S Data include guaranteed direct loans sold.
 \dagger Home mortgage rates (conventional 1st mortgages) are under money and interest rate on p. S-18.
 \oplus Source: Media Records, Inc. 64—City Newspaper Advertising Trend Chart. \circ Monthly revisions back to Jan. 1974 will be shown later.

\odot Beginning Nov. 1977 SURVEY, data revised to reflect new sample design, benchmarking to the 1967 and 1972 Censuses, conversion of the classifications to the 1972 SIC, addition of farm assemblers and bulk petroleum establishments, and revision and updating of seasonal factors. Revisions back to Jan. 1967, as well as a summary of the changes, appear in the report, Monthly Wholesale Trade: January 1967—August 1977 (Revised) available from the Census Bureau, Washington, D.C. 20233.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1977															
	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
DOMESTIC TRADE—Continued																
RETAIL TRADE																
All retail stores: †																
Estimated sales (unadj.), total † mil. \$	580,445	642,507	55,361	67,311	48,826	48,853	57,203	58,634	58,893	60,027	59,835	60,702	58,341	*60,836	*61,863	†73,074
Durable goods stores ‡																
Building materials, hardware, garden supply, and mobile home dealers ‡ mil. \$	178,887	210,530	17,592	19,591	15,438	16,349	20,328	20,559	20,961	21,829	20,553	21,182	19,551	*20,788	*19,961	†20,640
Building materials and supply stores do	26,262	32,226	2,793	2,837	2,027	2,198	2,865	3,251	3,515	3,622	3,493	3,657	3,547	*3,591	*3,194	†2,941
Hardware stores do	17,793	22,206	1,966	1,791	1,428	1,595	2,043	2,189	2,338	2,538	2,485	2,669	2,587	*2,599	*2,279	†2,279
Automotive dealers ‡	4,935	5,659	500	607	367	363	477	579	592	593	585	556	549	*567	*567	†556
Motor vehicle dealers do	105,288	125,685	10,162	10,204	9,556	10,329	13,057	12,871	12,878	13,555	12,520	12,713	11,327	*12,418	11,520	†10,633
Auto and home supply stores do	*95,902	*115,596	*9,270	*9,264	*8,771	*9,556	*12,036	*11,800	*11,850	*12,456	*11,462	*11,641	10,273	†11,313	10,402	†10,402
Furniture, home furn., and equip do	9,386	10,089	892	940	785	773	1,021	1,051	1,028	1,099	1,058	1,072	1,054	*1,105	1,118	†1,118
Furniture, home furnishings stores do	28,114	31,368	2,831	3,488	2,384	2,406	2,787	2,730	2,763	2,852	2,884	2,946	2,842	*2,911	*3,157	†3,858
Household appliance, radio, TV do	16,740	18,665	1,722	1,883	1,434	1,474	1,722	1,691	1,715	1,782	1,751	1,823	1,695	*1,761	*1,892	†1,892
Nondurable goods stores do	8,898	9,784	856	1,192	735	720	846	825	823	851	907	883	885	*887	*983	†983
General merch. group stores do	401,558	431,977	37,769	47,720	33,388	32,504	36,875	38,075	37,932	38,198	39,282	39,520	38,790	*40,048	*41,902	†52,434
Department stores do	73,761	79,258	7,764	12,242	4,828	4,903	6,347	6,911	6,860	6,887	6,920	7,258	7,143	*7,616	*8,991	†13,996
Variety stores do	57,442	62,900	6,242	9,805	3,840	3,873	5,044	5,470	5,457	5,487	5,492	5,837	5,797	*6,179	*7,311	†11,305
Food stores do	8,309	7,598	674	1,270	426	459	584	673	635	645	655	639	639	*639	*716	†716
Grocery stores do	138,006	145,939	11,907	13,728	11,905	11,461	12,695	13,047	12,846	13,102	13,783	13,082	13,194	*13,169	*13,118	†14,976
Gasoline service stations do	128,875	136,100	11,108	12,811	11,178	10,729	11,855	12,172	11,984	12,208	12,900	12,220	12,349	*12,250	*12,201	†13,942
Apparel and accessory stores do	47,387	51,265	4,411	4,604	4,326	4,014	4,477	4,631	4,826	4,804	5,113	5,070	4,787	*4,856	*4,751	†4,848
Men's and boys' clothing do	31,669	33,188	2,966	4,689	2,224	2,110	2,524	2,754	2,543	2,524	2,465	2,733	2,694	*2,891	*3,116	†5,009
Women's clothing, spec. stores, furriers do	6,802	6,683	599	1,041	470	419	475	542	508	526	469	495	484	*543	648	†648
Shoe stores do	11,760	12,702	1,149	1,699	823	827	977	1,010	975	939	929	1,038	1,083	*1,160	1,204	†1,204
Eating and drinking places do	5,534	5,575	470	642	377	346	437	505	435	424	436	504	520	*519	536	†536
Drug and proprietary stores do	51,427	58,008	4,689	4,943	4,466	4,542	5,073	5,250	5,466	5,607	5,611	5,898	5,485	*5,508	*5,339	†5,609
Liquor stores do	19,412	20,716	1,731	2,444	1,647	1,652	1,792	1,797	1,825	1,828	1,831	1,833	1,794	*1,847	*1,837	†2,572
Mail-order houses (dept. store mdse.) § do	12,169	12,734	1,065	1,503	919	950	1,012	1,066	1,064	1,067	1,135	1,067	1,028	*1,067	*1,104	†1,104
Estimated sales (seas. adj.), total † do	5,541	6,099	810	657	390	418	601	514	473	463	470	573	549	*720	873	†873
Durable goods stores ‡																
Building materials, hardware, garden supply, and mobile home dealers ‡ mil. \$																
Building materials and supply stores do																
Hardware stores do																
Automotive dealers ‡																
Motor vehicle dealers do																
Auto and home supply stores do																
Furniture, home furn., and equip. ‡ do																
Furniture, home furnishings stores do																
Household appliance, radio, TV do																
Nondurable goods stores do																
General merch. group stores do																
Department stores do																
Variety stores do																
Food stores do																
Grocery stores do																
Gasoline service stations do																
Apparel and accessory stores do																
Men's and boys' clothing do																
Women's clothing, spec. stores, furriers do																
Shoe stores do																
Eating and drinking places do																
Drug and proprietary stores do																
Liquor stores do																
Mail-order houses (dept. store mdse.) § do																
Estimated inventories, end of year or month: †																
Book value (unadjusted), total † mil. \$	69,548	77,057	81,811	77,057	77,261	78,808	81,998	83,150	83,485	84,070	84,028	83,878	86,565	90,158	92,900	-----
Durable goods stores ‡	31,166	34,924	34,988	34,924	35,361	36,017	37,336	37,616	37,789	37,950	37,762	36,072	36,739	37,964	39,279	-----
Building materials and supply stores do	4,479	4,957	5,100	4,957	5,057	5,281	5,467	5,474	5,511	5,450	5,384	5,389	5,487	5,429	5,463	-----
Automotive dealers do	16,690	18,852	18,043	18,852	19,117	19,521	20,339	20,432	20,414	20,461	20,263	18,385	18,444	19,317	20,411	-----
Furniture, home furn., and equip do	5,294	5,726	6,028	5,726	5,778	5,908	6,049	6,162	6,226	6,322	6,273	6,326	6,577	6,701	6,886	-----
Nondurable goods stores ‡	38,382	42,133	46,823	42,133	41,900	42,791	44,662	45,534	45,696	46,120	46,266	47,806	49,826	52,194	53,621	-----
General merch. group stores do	14,555	16,790	19,914	16,790	16,809	17,719	18,694	19,367	19,755	20,093	20,432	21,593	22,705	24,398	24,983	-----
Department stores do	9,735	11,429	13,825	11,429	11,380	12,000	12,796	13,220	13,457	13,574	13,591	14,360	15,155	16,614	17,271	-----
Food stores do	8,189	8,873	9,153	8,873	8,704	8,353	8,832	8,895	8,970	8,995	8,863	8,773	8,913	9,175	9,518	-----
Apparel and accessory stores do	5,342	6,066	6,909	6,066	5,900	6,042	6,395	6,498	6,418	6,445	6,460	6,682	7,059	7,324	7,466	-----
Book value (seas. adj.), total † do	71,031	78,431	77,988	78,431	79,438	79,721	81,825	81,825	83,025	84,134	85,326	86,650	87,227	87,462	88,465	-----
Durable goods stores ‡ do	31,632	35,067	34,875	35,067	35,588	35,516	36,150	36,094	36,818	37,104	38,130	38,577	38,515	38,752	39,134	-----
Building materials and supply stores do	4,080	5,180	5,236	5,180	5,197	5,276	5,339	5,288	5,350	5,271	5,378	5,406	5,571	5,484	5,569	-----
Automotive dealers do	16,876	18,684	18,207	18,684	18,965	18,824	19,224	19,149	19,591	19,827	20,351	20,571	20,157	20,334	20,659	-----
Furniture, home furn., and equip do	5,315	5,743	5,737	5,743	5,890	6,066	6,166	6,181	6,289	6,373	6,336	6,332	6,499	6,449	6,558	-----
Nondurable goods stores ‡ do	39,399	43,364	43,113	43,364	43,870	44,205	45,646	45,731	46,207	47,030	47,196	48,073	48,712	48,710	49,331	-----
General merch. group stores do	16,876	18,119	17,660	18,119	18,273	18,837	19,075	19,467	19,931	20,446	20,698	21,444	*21,804	21,956	22,238	-----
Department stores do	10,502	12,342	12,053	12,342	12,410	12,875	13,057	13,233	13,525	13,894	13,911	14,360	*14,586	14,847	15,110	-----
Food stores do	8,060	8,733	8,776	8,733	8,801	8,641	8,859	8,904	9,024	9,086	8,998	8,943	*9,012	8,986	9,099	-----
Apparel and accessory stores do	5,594	6,342	6,287	6,342	6,392	6,294	6,414	6,514	6,516	6,631	6,653	6,629	*6,691	6,725	6,831	-----

† Revised. † Advance estimate. ‡ Effective Nov. 1977 SURVEY OF CURRENT BUSINESS, estimates have been revised to reflect a new sample design, benchmarking to the 1967 and 1972 Censuses, redefinition of sales to exclude sales taxes and finance charges, classifications based on the 1972 Standard Industrial Classification (SIC), and revision and updating of seasonal adjustment factors. Revisions back to Jan. 1967, as well as a summary of the

changes, appear in the report, Monthly Retail Sales: January 1967—August 1977 (Revised), available from the Census Bureau, Washington, D.C. 20233. ‡ Includes data not shown separately. § Includes sales of mail-order catalog desks within department stores of mail-order firms. ¶ Series revised, beginning Jan. 1967, to reflect the 1972 SIC designations. Revised historical data will be available later. * Corrected.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

DOMESTIC TRADE—Continued

RETAIL TRADE—Continued																	
Firms with 11 or more stores:																	
Estimated sales (unadjusted), total†	mil. \$																
Durable goods stores	do																
Auto and home supply stores	do																
Nondurable goods stores	do																
General merchandise group stores	do																
Department stores	do																
Variety stores	do																
Miscellaneous general stores	do																
Food stores	do																
Grocery stores	do																
Apparel and accessory stores	do																
Women's clothing, specialty stores, furriers	mil. \$																
Family clothing stores	do																
Shoe stores	do																
Eating places	do																
Drug stores and proprietary stores	do																
Estimated sales (seas. adj.), total‡	do																
Auto and home supply stores	do																
Department stores	do																
Variety stores	do																
Grocery stores	do																
Apparel and accessory stores	do																
Women's clothing, spec. stores, furriers	do																
Shoe stores	do																
Drug stores and proprietary stores	do																
All retail stores, accts. receivable, end of yr. or mo.:																	
Total (unadjusted)	mil. \$	29,625	32,153	29,963	32,153	30,789	30,222	30,227	30,755	31,435	31,259	30,922	30,103	30,405	30,972		
Durable goods stores	do	8,901	9,515	9,398	9,515	9,037	9,052	9,348	9,628	9,965	10,218	10,120	9,983	9,995	10,138		
Nondurable goods stores	do	20,724	22,638	20,565	22,638	21,752	21,170	20,879	21,127	21,470	20,988	20,802	20,120	20,410	20,834		
Charge accounts	do	11,428	12,889	12,406	12,889	12,215	12,126	12,424	12,881	13,418	13,254	12,824	9,729	9,918	10,175		
Installment accounts	do	18,197	19,264	17,557	19,264	18,574	18,096	17,803	17,874	18,017	18,005	18,098	20,374	20,487	20,797		
Total (seasonally adjusted)	do	27,764	30,323	29,698	30,323	30,500	30,664	30,885	31,078	31,288	31,274	31,466	30,555	30,615	31,064		
Durable goods stores	do	8,790	9,481	9,385	9,481	9,419	9,537	9,770	9,846	9,852	10,001	9,907	9,794	9,696	9,873		
Nondurable goods stores	do	18,965	20,842	20,313	20,842	21,081	21,127	21,115	21,232	21,436	21,273	21,559	20,761	20,919	21,191		
Charge accounts	do	11,028	12,591	12,313	12,591	12,596	12,711	12,871	12,883	12,957	12,899	12,809	9,738	9,811	9,958		
Installment accounts	do	16,736	17,732	17,385	17,732	17,904	17,953	18,014	18,195	18,331	18,375	18,657	20,817	20,804	21,106		

LABOR FORCE, EMPLOYMENT, AND EARNINGS

POPULATION OF THE UNITED STATES																	
Total, incl. armed forces overseas†	mil.	213.56	215.14	215.76	215.89	216.02	216.15	216.26	216.40	216.53	216.67	216.82	216.99	217.16	217.33	217.48	217.61
LABOR FORCE‡																	
Not Seasonally Adjusted																	
Labor force, total (including armed forces), persons																	
16 years of age and over	thous.	94,793	96,917	97,786	97,662	96,837	97,478	97,909	97,958	98,321	101,264	101,449	101,210	99,815	100,585	100,951	100,632
Civilian labor force	do	92,613	94,773	95,637	95,517	94,704	95,340	95,771	95,826	96,193	99,135	99,314	99,073	97,684	98,451	98,819	98,503
Employed, total	do	84,783	87,485	88,542	88,494	86,856	87,231	88,215	89,258	90,042	91,682	92,372	92,315	91,247	92,230	92,473	92,623
Agriculture	do	3,380	3,297	3,081	2,850	2,672	2,709	2,804	3,140	3,478	3,820	3,790	3,682	3,326	3,408	3,181	2,914
Nonagricultural industries	do	81,403	84,188	85,460	85,645	84,184	84,522	85,411	86,118	86,564	87,862	88,582	88,633	87,921	88,822	89,292	89,710
Unemployed	do	7,830	7,288	7,095	7,022	7,848	8,109	7,556	6,568	6,151	7,453	6,941	6,757	6,437	6,221	6,346	5,880
Seasonally Adjusted‡																	
Civilian labor force	do			95,871	95,960	95,516	96,145	96,539	96,760	97,158	97,641	97,305	97,697	97,868	98,102	98,998	98,926
Employed, total	do			88,220	88,441	88,558	88,962	89,475	90,023	90,408	90,679	90,561	90,771	91,095	91,230	92,180	92,580
Agriculture	do			3,248	3,257	3,090	3,090	3,116	3,260	3,386	3,338	3,213	3,252	3,215	3,272	3,362	3,331
Nonagricultural industries	do			84,972	85,184	85,468	85,872	86,359	86,763	87,022	87,341	87,348	87,519	87,880	87,958	88,818	89,258
Unemployed	do			7,651	7,519	6,958	7,183	7,064	6,737	6,750	6,962	6,744	6,926	6,773	6,872	6,818	6,337
Long-term, 15 weeks and over	do	2,483	2,339	2,517	2,514	2,283	2,182	1,923	1,816	1,836	1,737	1,834	1,808	1,866	1,862	1,933	1,838
Rates (unemployed in each group as percent of total in the group):																	
All civilian workers		8.5	7.7	8.0	7.8	7.4	7.6	7.4	7.1	7.1	7.1	6.9	7.0	6.8	6.8	6.7	6.4
Men, 20 years and over		6.7	5.9	6.3	6.2	5.6	5.8	5.4	5.0	5.3	5.0	5.1	5.2	4.9	5.3	4.9	4.7
Women, 20 years and over		8.0	7.4	7.6	7.4	6.9	7.2	7.2	7.0	6.6	7.2	6.9	7.1	7.0	6.8	7.1	6.7
Both sexes, 16-19 years		19.9	19.0	19.2	19.0	18.7	18.5	18.8	17.8	17.9	18.6	17.4	17.5	18.1	17.3	17.1	15.4
White		7.8	7.0	7.3	7.1	6.7	6.7	6.6	6.3	6.2	6.3	6.1	6.1	6.1	6.1	6.0	5.6
Black and other		13.9	13.1	13.5	13.4	12.5	13.1	12.7	12.3	12.9	13.2	13.2	14.5	13.1	13.9	13.8	12.5
Married men, wife present		5.1	4.2	4.5	4.3	3.8	4.1	3.7	3.6	3.6	3.4	3.4	3.5	3.4	3.7	3.4	3.3
Occupation: White-collar workers		4.7	4.6	4.7	4.5	4.5	4.6	4.7	4.4	4.3	4.2	4.0	4.2	4.2	4.1	4.3	3.9
Blue-collar workers		11.7	9.4	9.7	9.6	8.4	8.7	8.3	7.8	7.9	7.7	8.2	8.4	7.9	8.3	7.9	7.3
Industry of last job (nonagricultural):																	
Private wage and salary workers		9.2	7.9	8.2	7.9	7.4	7.6	7.4	7.0	7.1	6.9	6.8	7.0	6.9	7.1	6.9	6.3
Construction		18.1	15.6	15.4	14.1	14.9	15.2	14.2	12.0	13.0	12.6	11.5	10.4	12.2	11.3	10.5	
Manufacturing		10.9	7.9	8.2	8.2	6.9	7.1	6.6	6.7	6.2	6.3	6.7	7.0	7.2	7.0	6.8	5.8
Durable goods		11.3	7.7	7.7	8.0	6.5	7.0	6.1	6.0	5.7	5.6	6.1	6.5	6.6	6.3	6.3	5.7

†Revised. ‡As of July 1. § See note "¶" on p. S-12; revised data for earlier periods for 11 or more stores sales are not available. ¶ Beginning Aug. 1977, data reflect use of new sample and are not strictly comparable with those for earlier periods; see note "¶" for p. S-12.

§ See note "¶" on p. S-12.

¶ Revisions back to Oct. 1973 appear in "Population Estimates and Projections: Estimates

of the Population of the United States and Components of Change—1930-75," P-25, No. 632 (July 1976), Bureau of the Census.

¶ Effective with the Feb. 1977 SURVEY, the labor force series reflect new seasonal factors. Data have been revised back to 1972; comparable monthly figures for 1972-75 appear in EMPLOYMENT AND EARNINGS (Feb. 1977), U.S. Department of Labor, Bureau of Labor Statistics.

Table with columns for years (1975, 1976, 1976, 1977) and months (Annual, Nov., Dec., Jan., Feb., Mar., Apr., May, June, July, Aug., Sept., Oct., Nov., Dec.). Rows include EMPLOYMENT, Employees on payrolls, Seasonally Adjusted, Production or nonsupervisory workers, and various industry sub-categories.

* Revised. † Preliminary. ‡ See end of note for this page. † Beginning in the Dec. 1976 SURVEY, figures for employees on payrolls of establishments as well as hours, earnings, and labor turnover reflect revised seasonal factors.

revision as follows: Manufacturing, durable and nondurable goods beginning 1947, total private and total trade, 1964, overtime hours, 1956. Effective with the Feb. 1977 SURVEY, the data reflect corrections made (back to July 1975) to employment levels in 4 divisions (construction, retail trade, services, and State and local government) to adjust for the formation of new businesses during the recovery phase of the 1973-75 recession.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. P	Dec. P

LABOR FORCE, EMPLOYMENT, AND EARNINGS—Continued

AVERAGE HOURS PER WEEK†																
Seasonally Adjusted†																
Avg. weekly hours per worker on private nonagric. payrolls:† Seasonally adjusted†																
Not seasonally adjusted																
Mining.....do	42.3	42.8	43.3	43.6	43.1	43.5	44.2	44.3	44.1	44.1	44.8	44.2	44.3	* 44.6	* 44.6	43.2
Contract construction.....do	36.6	37.1	37.3	37.2	35.4	37.5	37.2	37.3	37.4	36.8	36.9	36.5	36.4	* 36.8	* 36.9	36.5
Manufacturing: Not seasonally adjusted.....do	39.4	40.0	40.3	40.6	39.0	39.9	40.2	40.0	40.3	40.8	40.1	40.3	40.6	* 40.5	* 40.6	40.6
Seasonally adjusted.....do			40.1	40.0	39.5	40.3	40.4	40.3	40.4	40.5	40.2	40.3	40.3	* 40.4	* 40.5	40.3
Overtime hours.....do	2.6	3.1	3.1	3.2	3.2	3.3	3.3	3.4	3.4	3.4	3.4	3.3	3.3	3.5	3.5	3.4
Durable goods.....do	39.9	40.6	40.7	40.5	40.0	40.8	41.0	40.8	41.0	41.2	40.9	* 41.0	41.0	41.2	* 41.1	40.9
Overtime hours.....do	2.5	3.1	3.2	3.3	3.4	3.4	3.5	3.5	3.6	3.6	3.6	3.5	3.5	* 3.8	* 3.7	3.6
Ordinance and accessories.....do	41.3	40.7	40.6	40.9	40.6	40.8	40.7	41.0	41.1	40.8	40.3	40.2	40.6	* 40.8	* 40.2	40.8
Lumber and wood products.....do	39.1	40.2	40.3	40.3	40.0	40.4	40.2	40.0	40.0	39.9	40.4	39.6	40.0	* 40.1	* 40.5	39.9
Furniture and fixtures.....do	37.9	38.7	38.6	38.5	36.9	38.2	38.6	38.5	38.7	38.9	38.8	39.0	39.2	* 39.5	* 39.5	39.5
Stone, clay, and glass products.....do	40.6	41.2	41.2	41.2	40.0	41.4	41.4	41.7	41.6	41.4	41.4	41.4	41.0	* 41.1	* 41.7	41.4
Primary metal industries.....do	40.0	40.6	40.4	40.2	40.1	40.7	41.1	41.4	41.5	41.5	41.1	41.0	40.9	* 41.3	* 41.3	41.3
Fabricated metal products.....do	40.0	40.7	40.8	40.5	39.8	40.8	41.0	40.8	41.0	41.3	41.0	40.9	40.9	* 41.1	* 41.1	41.0
Machinery, except electrical.....do	40.9	41.1	41.4	41.2	40.5	41.4	41.5	41.4	41.6	42.0	41.8	41.3	41.8	42.0	* 41.9	41.8
Electrical equipment and supplies.....do	39.5	40.0	40.2	40.2	39.4	40.5	40.3	40.1	40.2	40.4	40.2	40.3	40.3	* 40.3	* 40.2	40.5
Transportation equipment.....do	40.3	41.6	42.0	41.2	41.6	41.6	42.6	42.0	42.5	42.8	42.0	42.3	42.6	* 42.7	* 42.5	41.5
Instruments and related products.....do	39.5	40.4	40.4	40.6	39.7	40.9	40.4	40.3	40.4	40.7	40.3	40.3	40.3	* 40.6	* 40.4	40.0
Miscellaneous manufacturing ind.....do	38.3	38.7	38.9	38.9	38.1	39.5	39.2	39.0	39.0	39.3	38.7	38.8	39.0	* 39.1	* 39.2	39.2
Non-durable goods.....do	38.8	39.3	39.2	39.3	38.8	39.5	39.5	39.6	39.5	39.5	39.3	39.3	39.3	39.4	39.5	39.4
Overtime hours.....do	2.7	3.0	* 3.0	* 3.0	3.0	3.2	3.1	3.2	* 3.2	3.1	3.0	3.1	3.0	3.1	3.2	3.2
Food and kindred products.....do	40.3	40.3	40.3	40.1	39.4	40.3	40.2	40.3	40.0	40.0	39.8	39.7	39.5	* 39.5	* 39.8	39.5
Tobacco manufactures.....do	38.0	37.8	36.8	37.5	36.1	39.1	38.2	38.2	38.4	38.7	38.6	37.8	38.6	* 38.2	* 38.7	37.6
Textile mill products.....do	39.2	40.1	39.8	40.1	40.1	40.5	40.7	40.5	40.5	40.3	40.1	40.2	40.3	* 40.5	* 40.6	40.7
Apparel and other textile products.....do	35.1	35.6	35.2	35.2	34.2	35.6	35.6	35.3	35.6	35.8	35.3	35.5	35.3	* 35.6	* 35.7	35.8
Paper and allied products.....do	41.6	42.4	42.4	42.5	41.9	42.7	42.8	43.5	42.9	43.1	42.7	42.4	42.7	42.8	42.7	43.1
Printing and publishing.....do	37.0	37.5	37.6	37.7	37.5	37.8	37.7	37.8	37.6	37.7	37.8	37.7	38.0	37.9	* 37.9	37.8
Chemicals and allied products.....do	40.9	41.6	41.7	41.7	41.6	41.7	41.8	41.8	41.7	41.9	41.7	41.8	41.7	41.6	41.7	41.4
Petroleum and coal products.....do	41.6	42.2	42.0	42.4	42.3	42.4	42.9	42.7	42.6	43.1	42.8	43.0	42.8	* 43.2	* 43.3	43.6
Rubber and plastics products, nec.....do	39.7	40.7	41.2	41.4	40.9	41.3	41.2	41.3	41.2	41.2	40.6	40.8	40.7	40.9	* 40.9	40.8
Leather and leather products.....do	37.4	37.3	36.4	36.4	35.3	36.8	36.5	37.3	37.1	37.2	36.8	37.3	37.6	* 37.7	* 37.7	37.2
Trans., comm., elec., gas, etc.....do	39.6	39.9	40.2	40.4	39.8	40.5	40.3	40.1	40.3	40.1	39.9	40.0	39.9	* 39.7	* 39.9	40.0
Wholesale and retail trade.....do	33.8	33.6	33.4	33.6	33.3	33.4	33.4	33.4	33.5	33.3	33.3	33.2	33.2	33.5	* 33.3	33.2
Wholesale trade.....do	38.6	38.8	38.7	38.6	38.7	39.1	38.9	38.9	38.8	38.8	38.8	38.8	38.8	39.1	* 39.0	38.8
Retail trade.....do	32.4	32.1	31.9	32.2	31.7	31.8	31.8	31.8	31.9	31.7	31.7	31.6	31.6	31.9	* 31.6	31.6
Finance, insurance, and real estate.....do	36.5	36.6	36.7	36.7	36.7	36.6	36.7	36.6	36.7	36.6	36.6	36.6	36.6	36.7	* 36.7	36.5
Services.....do	33.8	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.5	33.3	33.2	33.2	33.2	* 33.5	33.3	33.3
AGGREGATE EMPLOYEE-HOURS																
Seasonally Adjusted																
Employee-hours, wage & salary workers in non-agric. establish, for 1 week in the month, seasonally adjusted at annual rate†																
Total private sector.....do	146.92	151.39	152.59	153.61	* 152.26	* 154.87	* 155.35	* 155.81	* 156.50	* 156.62	157.11	156.99	157.14	* 158.69	* 157.99	158.12
Mining.....do	1.64	1.74	1.81	1.84	* 1.83	* 1.86	* 1.93	* 1.95	* 1.94	* 1.96	1.94	1.88	1.97	1.99	2.00	1.60
Contract construction.....do	6.68	6.93	7.00	6.99	* 6.53	* 7.14	* 7.27	* 7.43	* 7.49	* 7.44	7.51	7.39	7.37	* 7.48	* 7.57	7.52
Manufacturing.....do	37.63	39.31	39.56	39.56	* 39.46	* 40.13	* 40.50	* 40.62	* 40.82	* 41.00	40.92	40.77	40.86	* 41.09	* 41.18	41.40
Transportation, comm., elec., gas.....do	9.26	9.36	9.46	9.59	* 9.40	* 9.59	* 9.56	* 9.54	* 9.61	* 9.57	9.49	9.53	9.58	* 9.52	* 9.61	9.69
Wholesale and retail trade.....do	29.99	31.02	31.12	31.40	* 31.24	* 31.47	* 31.51	* 31.67	* 31.76	* 31.73	31.82	31.84	31.94	* 32.20	* 32.08	32.09
Finance, insurance, and real estate.....do	8.02	8.21	8.36	8.40	* 8.43	* 8.43	8.50	8.49	8.55	8.55	8.58	8.63	8.65	8.72	* 8.78	8.76
Services.....do	24.62	25.51	25.88	26.02	* 26.15	* 26.25	26.39	26.45	26.47	26.42	26.54	26.67	26.73	* 27.06	* 27.02	27.14
Government.....do	29.09	29.30	29.40	29.81	* 29.22	* 29.98	29.62	29.66	* 29.85	* 29.95	30.32	30.27	30.05	* 30.65	* 29.75	29.91
Indexes of employee-hours (aggregate weekly):†† 1967=100																
Private nonagric. payrolls, total.....do	107.5	111.9	112.8	113.3	112.3	114.2	115.0	115.4	115.9	115.8	115.8	115.6	115.9	116.8	* 117.1	117.0
Goods-producing.....do	91.2	96.3	* 97.1	97.0	95.2	98.6	100.1	100.8	101.4	101.8	101.4	100.6	100.9	101.7	* 102.4	101.8
Mining.....do	119.5	127.0	132.6	133.7	131.3	134.3	140.6	141.6	140.6	142.3	139.9	134.7	142.5	* 143.9	* 144.8	112.2
Contract construction.....do	100.6	103.6	104.9	104.0	95.9	105.8	108.7	111.7	112.4	111.8	112.8	110.8	110.4	* 112.3	* 113.9	113.2
Manufacturing.....do	88.8	94.0	94.5	94.5	93.9	96.1	97.2	97.5	98.1	98.7	98.0	97.6	97.8	* 98.4	* 98.9	99.4
Durable goods.....do	87.5	92.7	93.8	93.7	93.2	95.2	96.8	96.9	97.8	98.3	98.3	98.1	98.4	* 99.3	* 99.6	100.3
Non-durable goods.....do	90.8	95.8	95.6	95.7	94.9	97.3	97.7	98.5	98.5	98.7	97.7	96.9	96.9	97.1	* 97.8	98.1
Service-producing.....do	118.8	122.1	123.7	124.7	124.1	125.0	125.3	125.5	125.9	125.6	125.8	126.1	126.4	127.2	* 127.3	127.6
Transportation, comm., elec., gas.....do	101.7	102.4	103.3	104.9	102.7	104.4	104.1	103.8	104.6	104.1	103.1	103.5	103.9	102.9	* 104.1	105.4
Wholesale and retail trade.....do	114.7	118.9	119.1	120.3	119.4	120.3	120.7	121.0	121.4	121.2	121.6	121.6	121.8	122.7	* 122.3	122.2
Wholesale trade.....do	111.6	114.3	114.8	114.8	115.4	117.1	116.9	117.3	117.3	117.3	117.5	117.5	117.8	118.7	* 119.1	118.8
Retail trade.....do	115.8	120.6	120.7	122.3	120.8	121.6	122.1	122.4	123.0	122.7	123.1	123.1	123.3	124.2	* 123.4	123.4
Finance, insurance, and real estate.....do	123.5	126.9	129.1	129.6	130.1	130.2	131.0	131.0	131.6	131.7	132.3	132.7	133.2	134.2	* 135.2	134.9
Services.....do	130.9	135.8	137.7	138.3	138.8	139.3	139.8	140.1	140.3	139.6	140.1	140.6	140.9	* 142.7	* 142.6	143.1
HOURLY AND WEEKLY EARNINGS																
Average hourly earnings per worker:†																
Not seasonally adjusted:																
Private nonagric. payrolls.....dollars	4.54	4.87	5.00	5.02	5.07	5.09	5.12	5.15	5.19	5.22	5.25	5.26	5.36	5.40	* 5.41	5.41
Mining.....do	5.90	6.42	6.62	6.71	6.76	6.76	6.78	6.80	6.81	6.88	6.90	6.86	7.05	* 7.08	* 7.11	6.61
Contract construction.....do	7.25	7.68	7.86	7.88	7.96	7.88	7.87	7.88	7.91	7.97	8.00	8.06	8.20	* 8.25	* 8.22	8.23
Manufacturing.....do	4.81	5.19	5.34	5.42	5.46	5.43	5.48	5.52	5.56	5.60	5.65	5.65	5.75	5		

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. ^p	Dec. ^p

LABOR FORCE, EMPLOYMENT, AND EARNINGS—Continued

HOURLY AND WEEKLY EARNINGS—Con.																
Avg. hourly earnings per worker, private nonagric. payrolls. Not seas. adj. †—Continued																
Manufacturing—Continued																
Nondurable goods..... dollars.	4.35	4.68	4.84	4.90	4.95	4.93	4.95	4.99	4.99	5.03	5.10	5.11	5.17	5.17	5.21	5.25
Excluding overtime..... do.	4.20	4.51	4.67	4.71	4.77	4.75	4.77	4.81	4.81	4.83	4.91	4.92	4.96	4.97	5.00	5.04
Food and kindred products..... do.	4.57	4.96	5.09	5.16	5.22	5.22	5.22	5.26	5.28	5.28	5.32	5.36	5.42	5.42	5.50	5.54
Tobacco manufactures..... do.	4.51	4.91	4.87	5.04	5.16	5.37	5.36	5.69	5.58	5.77	5.68	5.43	5.37	5.31	5.58	5.76
Textile mill products..... do.	3.40	3.67	3.81	3.83	3.83	3.84	3.85	3.87	3.86	3.90	4.02	4.05	4.08	4.08	4.10	4.10
Apparel and other textile products..... do.	3.19	3.41	3.50	3.52	3.57	3.55	3.57	3.57	3.56	3.62	3.59	3.62	3.68	3.69	3.71	3.74
Paper and allied products..... do.	4.99	5.43	5.62	5.66	5.69	5.69	5.72	5.79	5.80	5.86	5.97	6.00	6.07	6.10	6.13	6.19
Printing and publishing..... do.	5.36	5.69	5.82	5.86	5.92	5.93	5.97	5.98	6.02	6.06	6.09	6.15	6.21	6.23	6.25	6.27
Chemicals and allied products..... do.	5.37	5.89	6.09	6.14	6.18	6.18	6.21	6.27	6.29	6.35	6.44	6.45	6.52	6.56	6.59	6.65
Petroleum and coal products..... do.	6.42	7.14	7.26	7.29	7.40	7.63	7.68	7.70	7.69	7.73	7.78	7.73	7.79	7.81	7.81	7.84
Rubber and plastics products, nec..... do.	4.35	4.62	4.94	5.01	5.07	5.03	5.03	5.06	5.05	5.12	5.14	5.14	5.18	5.19	5.21	5.25
Leather and leather products..... do.	3.23	3.44	3.50	3.53	3.57	3.60	3.61	3.61	3.63	3.63	3.60	3.62	3.67	3.70	3.71	3.71
Transportation, comm., elec., gas..... do.	5.92	6.46	6.65	6.65	6.70	6.74	6.71	6.80	6.83	6.83	6.97	6.99	7.10	7.10	7.20	7.23
Wholesale and retail trade..... do.	3.75	3.97	4.08	4.07	4.17	4.20	4.20	4.23	4.25	4.26	4.28	4.28	4.34	4.38	4.38	4.38
Wholesale trade..... do.	4.89	5.18	5.31	5.34	5.41	5.40	5.41	5.48	5.52	5.51	5.56	5.56	5.63	5.69	5.69	5.75
Retail trade..... do.	3.34	3.55	3.65	3.65	3.73	3.76	3.76	3.78	3.80	3.82	3.84	3.83	3.88	3.90	3.91	3.92
Finance, insurance, and real estate..... do.	4.13	4.36	4.40	4.43	4.52	4.52	4.51	4.54	4.58	4.54	4.59	4.60	4.65	4.72	4.71	4.75
Services..... do.	4.06	4.36	4.49	4.52	4.60	4.61	4.62	4.64	4.67	4.66	4.68	4.68	4.80	4.85	4.86	4.89
Seasonally adjusted: †																
Private nonagricultural payrolls..... do.	4.54	4.87	5.00	5.02	5.07	5.10	5.13	5.17	5.20	5.22	5.27	5.28	5.32	5.37	5.39	5.42
Mining..... do.	5.90	6.42	6.61	6.67	6.69	6.71	6.77	6.79	6.82	6.91	6.95	6.92	7.03	7.12	7.08	7.12
Contract construction..... do.	7.25	7.68	7.81	7.83	7.92	7.90	7.91	7.95	7.97	8.04	8.06	8.08	8.09	8.16	8.15	8.15
Manufacturing..... do.	4.81	5.19	5.34	5.38	5.43	5.45	5.49	5.53	5.57	5.61	5.66	5.68	5.73	5.79	5.81	5.81
Transportation, comm., elec., gas..... do.	5.92	6.46	6.62	6.65	6.70	6.74	6.76	6.83	6.88	6.88	7.00	6.93	7.03	7.07	7.15	7.15
Wholesale and retail trade..... do.	3.75	3.97	4.08	4.11	4.15	4.17	4.20	4.23	4.24	4.26	4.30	4.31	4.33	4.36	4.37	4.37
Finance, insurance, and real estate..... do.	4.13	4.36	4.43	4.43	4.52	4.48	4.50	4.54	4.56	4.54	4.60	4.61	4.65	4.74	4.73	4.75
Services..... do.	4.06	4.36	4.48	4.50	4.58	4.58	4.61	4.64	4.66	4.64	4.72	4.76	4.78	4.84	4.84	4.84
Indexes of avg. hourly earnings, seas. adj.: † ‡																
Private nonfarm economy:																
Current dollars..... 1967=100	172.5	185.0	189.7	190.7	192.6	193.2	194.2	195.6	196.4	197.4	199.4	199.9	201.2	203.3	204.0	204.8
1967 dollars..... do.	107.0	108.5	109.3	109.4	109.7	109.0	108.8	108.8	108.6	108.5	109.2	109.1	109.5	110.3	110.1	110.2
Mining..... do.	182.9	199.2	205.2	207.3	208.2	209.9	210.6	211.5	213.1	215.4	217.1	217.4	218.8	221.7	221.1	216.1
Contract construction..... do.	175.4	185.6	189.2	189.8	191.8	191.4	191.8	193.2	193.3	194.9	197.1	195.8	196.2	197.8	198.1	198.4
Manufacturing..... do.	171.6	184.7	189.8	191.0	192.3	193.4	194.3	195.6	196.9	198.5	200.3	201.2	202.7	204.2	205.4	205.7
Transportation, comm., elec., gas..... do.	181.8	198.6	203.5	203.5	205.3	206.2	206.9	209.2	209.9	210.3	214.3	212.4	215.0	217.8	218.9	221.2
Wholesale and retail trade..... do.	168.0	178.6	183.4	184.7	186.2	187.4	188.7	190.0	190.6	191.1	193.1	193.3	194.4	196.2	196.8	198.5
Finance, insurance, and real estate..... do.	161.5	180.5	173.3	173.1	176.7	175.5	176.1	177.8	178.5	177.7	180.3	180.6	181.8	185.2	185.4	185.9
Services..... do.	175.2	188.4	193.2	194.4	197.5	197.3	198.7	199.9	200.5	201.4	203.5	204.8	205.8	208.6	208.5	209.3
Hourly wages, not seasonally adjusted:																
Construction wages, 20 cities (ENR): ♂																
Common labor..... \$ per hr.	8.30	8.93	9.19	9.20	9.20	9.22	9.24	9.24	9.24	9.37	9.55	9.64	9.68	9.68	9.69	9.74
Skilled labor..... do.	11.01	11.85	12.16	12.21	12.21	12.25	12.25	12.27	12.27	12.49	12.75	12.75	12.85	12.87	12.90	12.74
Farm (U.S.) wage rates, hired workers, by method of pay:																
All workers, including piece-rate..... \$ per hr.	2.43	2.66			2.96				2.82		2.77			2.99		
All workers, other than piece-rate..... do.	2.38	2.61			2.90				2.77		2.74			2.92		
Workers receiving cash wages only..... do.	2.60	2.81			3.12				3.00		2.98			3.24		
Workers paid per hour, cash wages only..... do.	2.45	2.65			2.86				2.84		2.81			3.08		
Railroad wages (average, class I)..... do.	6.237	6.929		6.987												
Avg. weekly earnings per worker, † private nonfarm: ‡																
Current dollars, seasonally adjusted..... do.	163.89	176.29	181.00	181.72	181.51	184.62	185.71	187.15	188.76	188.96	190.25	190.08	191.52	194.76	194.58	194.76
1967 dollars, seasonally adjusted..... do.	101.67	103.40	104.32	104.32	103.37	104.13	104.10	104.09	104.34	103.88	104.19	103.76	104.20	105.68	105.06	104.77
Spendable earnings (worker with 3 dependents):																
Current dollars, seasonally adjusted..... do.	145.93	156.50	160.04	160.58	160.42	162.76	163.58	164.66	165.87	172.67	173.69	173.55	174.69	177.23	177.09	177.23
1967 dollars, seasonally adjusted..... do.	90.53	91.79	92.24	92.18	91.36	91.80	91.69	91.58	91.69	94.93	95.12	94.73	95.04	96.16	95.62	95.34
Current dollars, not seasonally adjusted:																
Private nonfarm, total..... dollars.	163.89	176.29	180.50	182.73	179.48	182.73	183.96	185.40	187.36	190.01	191.63	191.99	194.03	195.48	194.76	195.84
Mining..... do.	249.57	274.78	288.63	293.23	286.62	292.71	296.29	298.52	300.32	306.85	309.81	303.21	315.14	319.31	319.24	286.21
Contract construction..... do.	265.35	284.93	289.25	289.98	260.84	288.41	289.62	291.56	296.63	298.08	302.40	301.44	304.22	310.20	299.21	297.10
Manufacturing..... do.	189.61	207.60	215.20	220.05	212.94	216.66	220.30	220.80	224.07	228.48	226.57	227.70	233.45	234.09	235.89	240.08
Durable goods..... do.	205.09	225.33	232.31	238.71	229.50	233.92	238.27	239.32	243.95	249.00	244.82	246.02	253.58	255.03	256.47	261.46
Nondurable goods..... do.	168.78	183.92	190.70	194.53	189.59	192.76	194.54	195.11	196.11	200.19	200.43	201.85	204.73	204.22	206.84	208.95
Transportation, comm., elec., gas..... do.	234.43	257.75	267.33	269.33	264.65	270.95	267.73	271.32	273.20	275.25	280.89	282.40	284.71	286.08	287.28	289.92
Wholesale and retail trade..... do.	126.75	133.39	135.46	137.97	136.78	138.60	139.02	140.01	141.10	143.14	145.95	145.52	144.52	145.85	144.54	146.73
Wholesale trade..... do.	188.75	200.98	205.50	208.826	208.29	209.52	209.37	212.08	213.62	214.34	216.84	216.28	219.01	222.48	221.91	225.40
Retail trade..... do.	108.22	113.96	115.34	118.63	116.00	117.69	118.06	119.07	120.08	122.62	125.57	124.86	122.61	123.24	122.38	125.05
Finance, insurance, and real estate..... do.	150.75	159.58	161.04	162.58	166.34	165.88	165.07	166.16	167.63	166.16	168.45	169.28	169.73	173.22	172.39	173.38
Services..... do.	137.23	146.06	149.97	150.97	153.18	153.97	153.85	154.51	155.51	156.11	158.18	157.72	159.36	161.99	161.35	162.35
HELP-WANTED ADVERTISING																
Seasonally adjusted index..... 1967=100	80	95	99	105	105	106	108	109	112	114	121	122	120	128	133	140
LABOR TURNOVER																
Manufacturing establishments:																
Unadjusted for seasonal variation:																
Accession rate, total																
mo. rate per 100 employees..... do.	3.7	3.9	3.0	2.2	3.7	3.7	4.0	3.8	4.6	4.9	4.2	5.2	4.6	3.8	3.0	2.3
New hires..... do.	2.0	2.6	1.9	1.3	2.2	2.1	2.6	2.7	3.4	3.7	3.9	3.9	3.5	2.9	2.2	

Table header with columns for years 1975, 1976, and 1977 (Jan-Dec). Includes a note: 'Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS'.

LABOR FORCE, EMPLOYMENT, AND EARNINGS—Continued

Table for LABOR FORCE, EMPLOYMENT, AND EARNINGS. Sub-section: UNEMPLOYMENT INSURANCE. Rows include Unemployment insurance programs, Insured unemployment, State programs, Federal employees, and Railroad program.

FINANCE

Table for FINANCE. Sub-section: BANKING. Rows include Open market paper outstanding, Agricultural loans, Bank debits, Federal Reserve banks, and Large commercial banks reporting to Federal Reserve System.

* Revised. † Preliminary. ‡ Average for Dec. § Insured unemployment (all programs) data include claims filed under extended duration provisions of regular State laws; amounts paid under these programs are excluded from State benefits paid data. ¶ Includes data not shown separately. ♂ For demand deposits, the term "adjusted" denotes demand deposits other than domestic commercial bank and U.S. Government, less cash items in process of collection; for loans, exclusive of loans to and Federal funds transactions with domestic commercial banks and after deduction of valuation reserves (individual loan items are shown gross; i.e., before deduction of valuation reserves). © Total SMSA's include some cities and counties not designated as SMSA's. ¶ Includes Boston, Philadelphia, Chicago, Detroit, San Francisco-Oakland, and Los Angeles-Long Beach.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977										
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

FINANCE—Continued

BANKING—Continued																
Commercial bank credit (last Wed. of mo., except for June 30 and Dec. 31 call dates), seas adj.†																
Total loans and investments⊙	721.1	784.4	778.8	784.4	786.6	796.4	803.0	812.4	819.4	825.5	831.8	840.4	843.1	852.6	866.1	865.4
Loans⊙	496.9	538.9	533.1	538.9	540.9	545.4	551.0	557.7	562.1	567.0	574.5	582.4	587.6	597.8	611.2	612.9
U.S. Government securities	79.4	97.3	95.4	97.3	96.9	101.5	103.6	102.8	104.6	105.3	102.9	102.6	99.5	97.2	95.0	93.5
Other securities	144.8	148.2	150.3	148.2	148.8	149.5	148.4	151.9	152.7	153.2	154.4	155.4	156.0	157.6	159.9	159.0
Money and interest rates:§																
Bank rates on short-term business loans:																
In 35 centers percent per annum	1 8.65	7.52	7.28													
New York City	1 8.37	7.12	6.88													
7 other northeast centers	1 8.91	7.88	7.62													
8 north central centers	1 8.54	7.48	7.28													
7 southeast centers	1 9.01	7.74	7.51													
8 southwest centers	1 8.75	7.54	7.33													
4 west coast centers	1 8.86	7.80	7.52													
Discount rate (N.Y.F.R. Bank), end of year or month	6.00	5.25	5.43	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.25	5.27	5.75	5.80	6.00	6.00
Federal intermediate credit bank loans	1 8.14	1 7.35	7.11	7.10	7.03	7.05	6.97	6.85	6.78	6.76	6.75	6.78	6.89	6.95	7.08	
Home mortgage rates (conventional 1st mortgages):¶																
New home purchase (U.S. avg.)	1 8.75	1 8.76	8.83	8.87	8.82	8.78	8.74	8.73	8.74	8.78	8.79	8.81	8.82	8.84	8.85	8.87
Existing home purchase (U.S. avg.)	1 9.01	1 8.92	8.91	8.90	8.84	8.80	8.76	8.74	8.75	8.78	8.83	8.86	8.86	8.88	8.89	8.93
Open market rates, New York City:																
Bankers' acceptances (prime, 90 days)	2 6.29	2 5.19	4.90	4.62	4.81	4.83	4.80	4.78	5.34	5.39	5.43	5.88	6.16	6.57	6.58	6.60
Commercial paper (prime, 4-6 months)	2 6.32	2 5.35	5.05	4.70	4.74	4.82	4.87	4.87	5.35	5.49	5.41	5.84	6.17	6.55	6.59	6.64
Finance co. paper placed directly, 3-6 mo.	2 6.15	2 5.22	4.92	4.56	4.64	4.75	4.77	4.81	5.13	5.38	5.38	5.71	6.04	6.41	6.49	6.52
Stock Exchange call loans, going rate	2 8.02		7.50													
Yield on U.S. Government securities (taxable):																
3-month bills (rate on new issue)	2 5.838	2 4.999	4.810	4.354	4.597	4.662	4.613	4.540	4.942	5.004	5.146	5.500	5.770	6.188	6.160	6.063
3-5 year issues	2 7.55	2 6.94	6.35	5.96	6.49	6.69	6.73	6.58	6.76	6.58	6.67	6.90	6.92	7.23	7.28	7.40
CONSUMER CREDIT† (Short- and Intermediate-term)																
Installment credit extended and liquidated:																
Unadjusted:																
Extended, total ♀	164,169	193,328	16,813	19,588	14,051	14,571	18,899	18,733	19,275	20,765	18,801	21,314	19,298	18,784	19,721	
Automobile paper	51,413	62,988	5,004	5,162	4,297	4,949	6,711	6,304	6,473	7,197	6,286	7,035	6,178	5,898	5,924	
Mobile home	4,323	4,841	387	382	272	322	453	493	445	496	484	540	454	464	442	
Home improvement	5,556	6,736	567	551	410	461	652	690	704	821	740	856	740	696	701	
Revolving:																
Bank credit card	20,428	25,862	2,305	3,050	2,207	1,945	2,267	2,361	2,485	2,666	2,453	2,934	2,937	2,818	2,878	
Bank check credit	4,024	4,783	431	505	454	417	467	446	472	506	493	555	513	498	498	
Liquidated, total ♀	156,665	172,795	15,062	15,337	14,813	14,532	16,888	15,790	16,167	16,591	15,828	16,927	16,361	16,937	16,788	
Automobile paper	48,406	52,750	4,577	4,514	4,483	4,407	5,334	4,856	4,914	5,225	4,811	5,312	4,998	5,260	5,013	
Mobile home	4,517	4,691	384	371	366	380	428	417	426	410	398	440	386	415	372	
Home improvement	4,675	5,151	436	432	443	438	509	498	512	529	509	553	536	525	526	
Revolving:																
Bank credit card	19,208	24,012	2,167	2,262	2,273	2,107	2,370	2,167	2,412	2,390	2,261	2,461	2,513	2,640	2,612	
Bank check credit	4,010	4,552	401	407	429	404	472	426	418	424	428	441	418	429	447	
Seasonally adjusted:																
Extended, total ♀			16,712	17,677	17,241	17,595	18,496	18,784	18,503	18,810	18,631	19,204	19,164	19,787	19,680	
Automobile paper			5,312	5,869	5,511	5,819	6,199	6,106	6,048	6,063	5,966	6,155	6,109	6,083	6,330	
Mobile home			403	470	372	383	445	479	415	420	455	479	424	457	464	
Home improvement			622	624	571	577	648	668	636	686	671	733	679	718	761	
Revolving:																
Bank credit card			2,260	2,297	2,182	2,408	2,406	2,576	2,621	2,640	2,566	2,711	2,847	2,973	2,828	
Bank check credit			430	441	465	465	475	475	506	521	499	510	485	487	492	
Liquidated, total ♀			15,077	15,236	15,084	15,610	15,525	15,886	15,849	16,388	16,167	16,553	16,814	17,160	16,826	
Automobile paper			4,630	4,667	4,712	4,801	4,816	4,901	4,801	5,100	4,897	5,104	5,005	5,234	5,089	
Mobile home			406	385	393	412	391	414	421	386	397	424	392	413	390	
Home improvement			459	463	463	478	480	480	502	505	506	551	536	517	550	
Revolving:																
Bank credit card			2,148	2,228	2,176	2,201	2,142	2,298	2,430	2,403	2,382	2,396	2,567	2,687	2,585	
Bank check credit			403	415	421	420	422	415	402	431	459	450	436	430	466	
Total installment credit outstanding, end of year or month	164,955	185,489	181,237	185,489	184,728	184,766	186,776	189,720	192,828	196,998	199,971	204,358	207,294	209,141	212,074	
By credit type:																
Automobile	55,879	66,116	65,469	66,116	65,930	66,473	67,850	69,298	70,857	72,829	74,304	76,027	77,207	77,845	78,757	
Mobile home	14,423	14,572	14,561	14,572	14,479	14,421	14,447	14,521	14,540	14,627	14,713	14,812	14,880	14,929	14,999	
Home improvement	9,405	10,990	10,891	10,990	10,956	10,978	11,122	11,315	11,507	11,794	12,025	12,329	12,532	12,703	12,879	
Revolving:																
Bank credit card	9,501	11,351	10,563	11,351	11,285	11,123	10,020	11,215	11,287	11,563	11,754	12,227	12,651	12,829	13,096	
Bank check credit	2,810	3,041	2,943	3,041	3,066	3,080	3,075	3,094	3,148	3,230	3,295	3,409	3,504	3,551	3,601	
All other	72,937	79,418	76,810	79,418	79,012	78,691	79,263	80,277	81,488	82,955	83,880	85,554	86,519	87,283	88,743	
By holder:																
Commercial banks	78,667	89,511	88,112	89,511	89,393	89,484	90,585	92,377	93,875	96,149	97,794	100,059	101,564	102,504	103,469	
Finance companies	35,994	38,639	38,090	38,639	38,790	38,868	39,188	39,561	40,127	40,712	41,398	41,987	42,333	42,704	43,322	
Credit unions	25,666	30,546	30,053	30,546	30,410	30,701	31,448	31,912	32,704	33,750	34,122	35,077	35,779	35,993	36,488	
Retailers	18,002	19,052	17,335	19,052	18,378	17,860	17,585	17,734	17,911	18,032	18,137	18,475	18,725	18,961	19,629	
Others	6,626	7,741	7,647	7,741	7,757	7,852	7,971	8,136	8,211	8,355	8,520	8,780	8,894	8,978	9,166	

† Revised. † Preliminary. † Average for year. † Daily average. ⊙ Adjusted to exclude interbank loans. § For bond yields, see p. S-21. † Beginning Jan. 1959, monthly data have been revised to reflect new seasonal factors and adjustment to benchmark for the latest call date (Dec. 31, 1975). Revisions are available from the Federal Reserve Board, Washington, D.C. 20551. † Data have been revised back to 1970, noninstallment credit

is no longer available on a monthly basis. "Personal loans" and "other consumer goods paper" have been combined to form an "all other" category. Earlier monthly data are available from the Federal Reserve Board, Washington, D.C. 20551. † Beginning Jan. 1973, data have been revised; revisions for Jan. 1973-April 1975 will be shown later. † Includes data for items not shown separately.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977										
	Annual	Annual	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

FINANCE—Continued

FEDERAL GOVERNMENT FINANCE																
Budget receipts and outlays:																
Receipts (net).....mil. \$	280,997	299,197	25,694	29,471	29,954	24,182	24,817	39,832	27,549	43,075	24,952	29,676	36,642	24,127		
Outlays (net).....do.	326,105	365,648	33,079	31,890	32,617	30,735	34,292	35,363	33,592	32,881	33,630	34,720	35,097	38,790		
Budget surplus or deficit (-).....do.	-45,108	-66,451	-7,385	-2,419	-2,664	-6,554	-9,475	4,469	-6,043	10,194	-8,678	-5,044	1,545	-14,663		
Budget financing, total.....do.																
Borrowing from the public.....do.	145,108	166,451	7,385	2,419	2,664	6,554	9,475	-4,469	6,043	-10,194	8,678	5,044	-1,545	14,663		
Reduction in cash balances.....do.	150,853	182,913	6,738	6,306	3,157	9,118	5,351	1,206	-2,871	518	-1,803	7,780	10,024	1,851		
Gross amount of debt outstanding.....do.	544,131	631,385	656,282	664,794	664,852	674,280	680,141	681,905	682,965	685,249	684,592	695,485	709,138	707,693		
Held by the public.....do.	396,906	479,819	509,451	515,757	518,914	528,083	533,383	534,590	531,719	532,237	534,039	541,819	551,843	553,694		
Budget receipts by source and outlays by agency:																
Receipts (net), total.....mil. \$	280,997	299,197	25,694	29,471	29,954	24,182	24,817	39,832	27,549	43,075	24,952	29,676	36,642	24,127		
Individual income taxes (net).....do.	122,386	130,795	12,530	12,662	18,085	8,370	5,777	18,476	9,289	17,949	12,438	12,725	17,327	13,275		
Corporation income taxes (net).....do.	140,621	141,409	699	7,633	1,694	948	8,719	7,974	1,096	14,379	1,538	809	8,376	1,445		
Social insurance taxes and contributions (net).....do.																
Other.....mil. \$	186,441	192,714	9,432	6,207	7,320	10,764	7,413	10,703	14,203	7,696	7,961	12,958	7,828	6,550		
Outlays, total.....do.	326,105	365,648	33,079	31,890	32,617	30,735	34,292	35,363	33,592	32,881	33,630	34,720	35,097	38,790		
Agriculture Department.....do.	19,725	12,796	1,875	1,165	1,372	1,286	1,705	1,825	1,102	1,316	965	1,674	1,471	1,773		
Defense Department, military.....do.	85,420	88,036	7,820	8,305	8,004	7,907	8,146	7,745	7,954	8,364	8,317	7,851	8,094	7,992		
Health, Education, and Welfare Department.....do.																
Treasury Department.....mil. \$	112,411	128,785	11,983	11,968	11,918	12,136	12,458	12,318	12,311	12,434	12,387	12,961	12,944	12,774		
National Aeronautics and Space Adm.....do.	141,177	143,527	3,286	6,256	4,666	2,889	2,736	3,053	3,053	6,031	4,930	3,113	2,970	5,385		
Veterans Administration.....do.	3,267	3,670	359	345	275	321	352	322	309	314	299	355	324	310		
Receipts and expenditures (national income and product accounts basis), qtrly. totals seas. adj. at annual rates:†																
Federal Government receipts, total.....bil. \$	286.9	332.3		344.5			364.9			371.2			373.2			
Personal tax and nontax receipts.....do.	125.6	147.3		157.1			170.0			168.6			168.6			p 175.5
Corporate profit tax accruals.....do.	43.1	55.9		55.1			55.4			59.9			59.5			p 25.2
Indirect business tax and nontax accruals.....do.	24.0	23.4		23.8			24.2			24.6			25.4			p 122.4
Contributions for social insurance.....do.	94.2	105.7		108.4			115.4			118.1			119.7			
Federal Government expenditures, total.....do.	357.1	386.3		400.4			403.7			411.5			432.1			p 446.7
Purchases of goods and services.....do.	123.3	130.1		134.2			136.3			143.6			148.1			p 153.8
National defense.....do.	83.9	86.8		88.4			89.7			93.4			95.6			p 98.6
Transfer payments.....do.	149.1	162.0		166.3			170.7			169.3			174.8			p 177.6
Grants-in-aid to State and local govts.....do.	54.6	61.0		65.5			62.0			63.6			72.7			p 72.2
Net interest paid.....do.	23.3	27.2		28.5			28.6			29.1			29.4			p 30.9
Subsidies less current surplus of government enterprises.....bil. \$	6.7	5.9		6.0			6.1			5.9			7.2			p 12.3
Less: Wage accruals less disbursements.....do.	.0	.0		.0			.0			.0			.0			p .0
Surplus or deficit (-).....do.	-70.2	-54.0		-55.9			-38.8			-40.3			-58.9			
LIFE INSURANCE																
Institute of Life Insurance:																
Assets, total, all U.S. life insurance cos.....bil. \$	289.30	321.55	317.50	321.55	322.49	324.16	326.75	328.79	331.03	334.39	336.65	338.96	341.38	343.74		
Government securities.....do.	15.18	20.26	20.66	20.26	19.75	20.12	20.98	21.03	21.08	21.25	21.64	21.98	22.54	22.79		
Corporate securities.....do.	133.90	154.93	152.11	154.93	157.26	158.38	158.70	160.29	161.52	164.19	165.78	166.94	167.58	168.73		
Mortgage loans, total.....do.	89.17	91.55	90.79	91.55	91.62	91.65	91.79	92.20	92.36	92.85	93.11	93.33	94.07	94.68		
Nonfarm.....do.	82.41	84.13	83.50	84.13	84.19	84.13	84.15	84.38	84.43	84.71	84.87	85.00	85.60	86.12		
Real estate.....do.	9.62	10.48	10.24	10.48	10.55	10.63	10.74	10.80	10.82	10.90	10.90	10.93	10.93	11.02		
Policy loans and premium notes.....do.	24.47	25.83	25.70	25.83	25.92	26.05	26.21	26.36	26.50	26.66	26.78	26.95	27.09	27.22		
Cash.....do.	1.92	2.00	1.17	2.00	1.51	1.37	1.56	1.48	1.62	1.56	1.50	1.60	1.60	1.46		
Other assets.....do.	15.05	16.50	16.82	16.50	15.88	15.96	16.75	16.63	17.12	16.98	16.95	17.24	17.57	17.83		
Life Insurance Agency Management Association:																
Insurance written (new paid-for insurance):																
Value, estimated total.....mil. \$	288,857	321,167	28,001	39,151	26,002	24,722	30,116	26,722	27,414	30,990	27,191	29,961	33,217	29,396	30,391	
Ordinary (incl. mass-marketed ord.).....do.	185,779	212,003	18,716	22,319	15,970	17,114	20,858	19,400	20,115	21,024	17,833	20,418	19,689	20,750	21,322	
Group.....do.	96,349	102,791	8,779	16,855	9,534	7,114	8,649	6,786	6,717	9,430	8,624	9,036	13,020	8,088	8,549	
Industrial.....do.	6,729	6,373	506	477	498	494	609	536	582	536	734	507	508	558	520	
MONETARY STATISTICS																
Gold and silver:																
Gold:																
Monetary stock, U.S. (end of period).....mil. \$	11,599	11,598	11,598	11,598	11,658	11,650	11,636	11,636	11,629	11,620	11,595	11,595	11,595	11,595	11,595	
Net release from earmark.....do.	93	331	48	43	71	39	33	-11	61	37	5	62	44	85	116	
Exports.....thous. \$	458,853	347,516	8,395	52,805	142,509	65,292	5,898	1,908	67,104	27,107	245,864	96,536	7,456	263,126		
Imports.....do.	456,638	331,017	23,134	33,933	30,384	23,349	25,981	23,716	28,825	99,552	26,458	42,507	88,226	43,052		
Production:¶																
South Africa.....mil. \$	960.9	962.4	81.1	75.2	73.5	72.6	78.5	78.5	79.0	80.2	81.1	83.2	84.4	80.2	80.2	
Canada.....do.	68.7	65.2	6.1	6.3	5.8	5.8	6.4	5.7	6.9	5.9	6.0	5.8	5.5	5.6		
Silver:																
Exports.....thous. \$	147,568	161,434	2,912	5,304	5,367	6,987	3,557	6,714	4,629	4,632	14,562	7,824	10,688	4,565	454	
Imports.....do.	330,556	325,252	31,533	38,765	36,458	23,672	41,854	31,170	25,796	30,236	17,886	31,290	31,776	26,395	32,698	
Price at New York.....dol. per fine oz.	4.419	4.353	4.369	4.348	4.409	4.535	4.842	4.777	4.692	4.443	4.498	4.444	4.539	4.763	4.828	
Production:																
United States.....thous. fine oz.	36,627	26,708	2,430	4,388	2,085	2,026	1,644	2,169	2,446	2,800	1,054	2,267	1,982	1,481	3,280	

† Revised. ¶ Preliminary. † Data shown in 1975 and 1976 annual columns are for fiscal years ending June 30 of the respective years; they include revisions not distributed to months. ‡ Includes \$1,694 mil. Vets group life ins. § Includes data for items not shown separately.

† Data have been revised back to 1946 (see table 3.2 in the Jan. 1976 and July 1977 SURVEYS for earlier data). § Or increase in earmarked gold (-). ¶ Valued at \$38 per fine ounce from Jan. 1972-Sept. 1973; at \$42.22 thereafter.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
FINANCE—Continued																
MONETARY STATISTICS—Continued																
Currency in circulation (end of period)..... bil. \$..	86.5	93.7	93.0	93.7	91.2	91.7	93.4	94.0	95.6	96.7	97.0	97.9	97.8	98.9	101.9	-----
Money supply and related data (avg. of daily fig.): ⊕																
Unadjusted for seasonal variation:																
Total money supply..... bil. \$..	289.5	304.2	312.3	321.3	319.7	309.9	312.4	322.3	315.5	321.4	372.2	325.2	328.2	332.5	335.3	344.9
Currency outside banks..... do..	71.0	77.8	80.7	82.0	80.5	80.8	81.6	82.8	83.4	84.2	85.7	85.8	86.1	86.9	88.4	90.0
Demand deposits..... do..	218.5	226.5	231.6	239.3	239.2	229.1	230.9	239.6	232.1	237.1	241.4	239.3	242.1	245.6	246.9	254.9
Time deposits adjusted [¶] do..	436.1	468.0	480.5	488.2	494.6	498.6	504.6	507.7	511.8	516.1	519.6	523.7	526.1	532.2	536.2	542.7
U.S. Government demand deposits [¶] do..	3.7	4.2	4.2	4.7	4.2	4.4	4.5	5.6	3.8	5.2	3.9	3.7	5.4	4.1	3.8	5.5
Adjusted for seasonal variation:																
Total money supply..... do..	-----	-----	310.4	312.4	313.8	314.0	315.4	320.5	320.7	321.9	326.8	328.4	330.4	333.7	333.2	335.4
Currency outside banks..... do..	-----	-----	80.2	80.5	81.1	81.8	82.2	83.1	83.6	84.0	85.1	85.5	86.4	87.1	87.8	88.4
Demand deposits..... do..	-----	-----	230.2	231.9	232.7	232.1	233.2	237.4	237.1	237.9	241.7	242.9	244.0	246.6	245.5	247.0
Time deposits adjusted [¶] do..	-----	-----	484.2	491.1	495.6	500.0	502.8	505.7	509.2	514.8	519.5	522.5	525.8	532.2	540.3	545.8
Turnover of demand deposits except interbank and U.S. Govt., annual rates, seas. adjusted:																
Total (233 SMSA's) [⊙] ratio of debits to deposits..	128.3	143.9	147.3	153.5	154.3	153.3	155.2	158.2	160.2	160.6	-----	-----	-----	-----	-----	-----
New York SMSA..... do..	335.0	391.9	395.1	419.8	443.5	437.3	436.0	465.2	474.9	452.1	-----	-----	-----	-----	-----	-----
Total 232 SMSA's (except N.Y.)..... do..	82.9	90.7	92.2	97.0	94.6	93.8	97.3	96.8	97.7	100.8	-----	-----	-----	-----	-----	-----
6 other leading SMSA's [⊙] do..	119.1	129.4	131.7	136.9	132.9	129.9	135.2	134.7	139.8	135.9	-----	-----	-----	-----	-----	-----
226 other SMSA's..... do..	68.8	75.7	78.4	81.7	79.4	79.9	82.5	82.1	81.7	87.7	-----	-----	-----	-----	-----	-----
PROFITS AND DIVIDENDS (QTRLY.)																
Manufacturing corps. (Fed. Trade Comm.):																
Net profit after taxes, all industries..... mil. \$..	49,135	64,519	-----	15,575	-----	-----	15,584	-----	-----	19,722	-----	-----	16,753	-----	-----	-----
Food and kindred products..... do..	5,154	5,826	-----	1,314	-----	-----	1,164	-----	-----	1,573	-----	-----	1,383	-----	-----	-----
Textile mill products..... do..	409	809	-----	133	-----	-----	168	-----	-----	168	-----	-----	168	-----	-----	-----
Paper and allied products..... do..	1,801	2,270	-----	471	-----	-----	482	-----	-----	618	-----	-----	568	-----	-----	-----
Chemicals and allied products..... do..	6,703	7,610	-----	1,630	-----	-----	1,934	-----	-----	2,248	-----	-----	2,004	-----	-----	-----
Petroleum and coal products..... do..	9,307	11,725	-----	2,963	-----	-----	2,999	-----	-----	3,057	-----	-----	3,092	-----	-----	-----
Stone, clay, and glass products..... do..	968	1,447	-----	344	-----	-----	160	-----	-----	542	-----	-----	577	-----	-----	-----
Primary nonferrous metal..... do..	663	913	-----	190	-----	-----	258	-----	-----	364	-----	-----	181	-----	-----	-----
Primary iron and steel..... do..	2,280	2,085	-----	468	-----	-----	204	-----	-----	520	-----	-----	-250	-----	-----	-----
Fabricated metal products (except ordnance, machinery, and transport. equip.)..... mil. \$..	2,523	3,196	-----	681	-----	-----	726	-----	-----	1,040	-----	-----	888	-----	-----	-----
Machinery (except electrical)..... do..	6,311	7,889	-----	2,041	-----	-----	1,937	-----	-----	2,401	-----	-----	2,241	-----	-----	-----
Elec. machinery, equip., and supplies..... do..	2,564	4,073	-----	1,200	-----	-----	1,055	-----	-----	1,434	-----	-----	1,332	-----	-----	-----
Transportation equipment (except motor vehicles, etc.)..... mil. \$..	1,039	1,687	-----	401	-----	-----	446	-----	-----	583	-----	-----	518	-----	-----	-----
Motor vehicles and equipment..... do..	1,737	5,099	-----	1,284	-----	-----	1,655	-----	-----	2,008	-----	-----	939	-----	-----	-----
All other manufacturing industries..... do..	7,481	9,890	-----	2,455	-----	-----	2,396	-----	-----	3,171	-----	-----	3,044	-----	-----	-----
Dividends paid (cash), all industries..... do..	19,968	22,763	-----	6,582	-----	-----	6,049	-----	-----	6,537	-----	-----	6,209	-----	-----	-----
SECURITIES ISSUED																
Securities and Exchange Commission: [§]																
Estimated gross proceeds, total..... mil. \$..	256,131	57,647	4,175	6,456	3,908	3,137	6,314	3,312	4,111	5,954	4,076	3,336	4,203	-----	-----	-----
By type of security:																
Bonds and notes, corporate..... do..	41,664	41,070	2,614	5,290	3,002	1,833	4,644	2,721	2,604	4,064	3,158	2,615	2,972	-----	-----	-----
Common stock..... do..	7,413	8,305	408	612	499	692	675	428	1,036	703	368	379	279	-----	-----	-----
Preferred stock..... do..	3,458	2,789	282	308	103	128	520	163	212	332	327	178	347	-----	-----	-----
By type of issuer:																
Corporate, total [¶] mil. \$..	52,539	52,161	3,304	6,210	3,604	2,653	5,839	3,312	3,852	5,099	3,853	3,172	3,598	-----	-----	-----
Manufacturing..... do..	18,651	15,479	510	2,385	906	743	1,125	1,348	652	1,182	1,309	966	551	-----	-----	-----
Extractive (mining)..... do..	1,628	1,771	104	275	206	172	154	147	133	399	289	296	166	-----	-----	-----
Public utility..... do..	15,894	14,395	1,327	1,156	986	435	1,598	774	1,612	1,466	568	497	1,417	-----	-----	-----
Transportation..... do..	2,634	3,596	112	462	36	1	317	100	129	128	231	195	60	-----	-----	-----
Communication..... do..	4,464	3,561	190	196	50	537	808	334	294	416	277	45	322	-----	-----	-----
Financial and real estate..... do..	6,838	10,229	754	1,217	998	477	1,462	529	928	1,144	1,150	1,092	717	-----	-----	-----
State and municipal issues (Bond Buyer):																
Long-term..... do..	29,326	33,845	3,249	2,333	3,371	3,136	4,026	3,448	4,237	5,668	3,107	3,997	3,787	3,635	3,112	3,391
Short-term..... do..	28,973	21,905	1,510	1,126	1,363	1,324	1,506	5,000	1,334	2,294	1,417	1,398	2,223	1,101	1,339	1,039
SECURITY MARKETS																
Stock Market Customer Financing																
Margin credit at brokers and banks, end of month, total..... mil. \$..	16,500	9,011	8,640	9,011	9,301	9,523	9,701	9,885	10,068	10,255	10,490	10,592	10,617	10,583	-----	-----
At brokers..... do..	15,540	8,166	7,790	8,166	8,469	8,679	8,891	9,078	9,267	9,432	9,667	9,763	9,793	9,756	-----	-----
At banks..... do..	1,960	845	850	845	832	844	810	807	801	823	823	829	824	827	-----	-----
Free credit balances at brokers:																
Margin accounts..... do..	1,475	585	615	585	645	605	605	615	625	595	600	605	600	615	-----	-----
Cash accounts..... do..	1,525	1,855	1,740	1,855	1,930	1,815	1,720	1,715	1,710	1,805	1,860	1,745	1,745	1,850	-----	-----

[¶] Revised. [⊕] Preliminary. ¹ End of year. ² Beginning Jan. 1973, does not include noncorporate bonds and notes formerly included. [⊙] Effective February 1976 SURVEY, data revised to reflect: Annual review of seasonal factors; regular benchmark adjustment; effect of changes in check collection procedures (Regulation J); and adjustments to include new figures from internationally oriented banking institutions. Monthly revisions back to 1970 are in the Feb. 1976 Federal Reserve Bulletin.

[¶] At all commercial banks. [⊙] Total SMSA's include some cities and counties not designated as SMSA's. [⊕] Includes Boston, Philadelphia, Chicago, Detroit, San Francisco-Oakland, and Los Angeles-Long Beach. [§] Data revised back to 1973; no monthly revisions for 1973-75 are available. [¶] Includes data not shown separately. [⊕] Corrected.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977										
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

FINANCE—Continued

SECURITY MARKETS—Continued																
Bonds																
Prices:																
Standard & Poor's Corporation:																
High grade corporate:																
Composite ♂..... dol. per \$100 bond.....	56.2	58.0	59.2	61.3	60.3	59.4	59.1	59.4	59.2	60.1	60.0	60.1	60.4	59.5	59.2	58.4
Domestic municipal (15 bonds)..... do.....	68.9	72.5	76.4	80.0	79.9	79.3	79.3	80.8	80.5	81.6	81.9	82.4	83.3	81.2	83.2	81.7
U.S. Treasury bonds, taxable ¶..... do.....	57.44	58.96	60.21	62.05	59.73	56.23	55.83	56.31	56.06	57.38	57.48	57.30	57.77	56.68	56.24	55.62
Sales:																
Total, excl. U.S. Government bonds (SEC):																
All registered exchanges:																
Market value..... mil. \$.....	9,345.90															
Face value..... do.....	10,703.85															
New York Stock Exchange:																
Market value..... do.....	9,070.20															
Face value..... do.....	10,302.08															
New York Stock Exchange, exclusive of some stopped sales, face value, total..... mil. \$.....	5,178.34	5,262.11	387.33	519.59	495.77	366.81	412.69	347.46	390.74	450.47	365.10	391.43	335.65	335.80	353.57	400.87
Yields:																
Domestic corporate (Moody's) §..... percent.....																
By rating:																
Aaa..... do.....	8.83	8.43	8.25	7.98	7.96	8.04	8.10	8.04	8.05	7.95	7.94	7.98	7.92	8.04	8.08	8.19
Aa..... do.....	9.17	8.75	8.46	8.24	8.16	8.26	8.28	8.28	8.28	8.19	8.12	8.17	8.15	8.26	8.34	8.40
A..... do.....	9.65	9.09	8.69	8.53	8.45	8.49	8.55	8.55	8.55	8.46	8.40	8.40	8.37	8.48	8.56	8.57
Baa..... do.....	10.61	9.75	9.23	9.12	9.08	9.12	9.12	9.07	9.01	8.91	8.87	8.82	8.80	8.89	8.95	8.99
By group:																
Industrials..... do.....	9.25	8.84	8.54	8.33	8.24	8.33	8.36	8.32	8.30	8.23	8.18	8.21	8.19	8.27	8.36	8.42
Public utilities..... do.....	9.88	9.17	8.77	8.61	8.59	8.63	8.66	8.65	8.64	8.53	8.48	8.47	8.43	8.56	8.61	8.65
Railroads..... do.....	9.39	8.85	8.48	8.39	8.27	8.26	8.26	8.17	8.12	8.06	8.02	8.05	8.03	8.07	8.10	8.10
Domestic municipal:																
Bond Buyer (20 bonds)..... do.....	7.08	6.56	6.03	5.83	5.93	5.92	5.85	5.68	5.72	5.56	5.62	5.54	5.51	5.55	5.47	5.66
Standard & Poor's Corp. (15 bonds)..... do.....	6.89	6.49	6.05	5.69	5.70	5.75	5.76	5.61	5.64	5.53	5.50	5.46	5.37	5.53	5.38	5.48
U.S. Treasury bonds, taxable ○..... do.....	6.98	6.78	6.62	6.39	6.68	7.15	7.20	7.14	7.17	6.99	6.97	7.00	6.94	7.08	7.14	7.23
Stocks																
Dividend rates, prices, yields, and earnings, common stocks (Moody's):																
Dividends per share, annual rate, composite																
Industrials..... dollars.....	(1)															
Public utilities..... do.....																
Railroads..... do.....																
N.Y. banks..... do.....																
Property and casualty insurance cos..... do.....																
Price per share, end of mo., composite..... do.....	(1)															
Industrials..... do.....																
Public utilities..... do.....																
Railroads..... do.....																
Yields, composite..... percent.....	(1)															
Industrials..... do.....																
Public utilities..... do.....																
Railroads..... do.....																
N.Y. banks..... do.....																
Property and casualty insurance cos..... do.....																
Earnings per share (indust., qrtly. at ann. rate; pub. util. and RR., for 12 mo. ending each qtr.):																
Industrials..... dollars.....	(1)															
Public utilities..... do.....																
Railroads..... do.....																
Dividend yields, preferred stocks, 10 high-grade (Standard & Poor's Corp.)..... percent.....	8.36	8.06	7.80	7.70	7.54	7.55	7.56	7.60	7.63	7.62	7.51	7.55	7.58	7.62	7.67	7.85
Prices:																
Dow-Jones averages (65 stocks):																
Industrial (30 stocks).....	247.25	303.91	303.03	317.03	317.79	308.93	309.63	308.71	312.74	311.38	311.20	296.79	291.30	283.38	284.77	283.84
Public utility (15 stocks).....	79.81	92.28	99.59	105.33	108.88	107.49	106.48	107.71	110.49	113.63	117.11	113.34	112.37	111.76	110.85	111.45
Transportation (20 stocks).....	163.39	214.03	217.63	232.43	232.67	227.29	225.94	231.00	240.75	237.48	236.39	219.46	215.34	209.30	212.22	214.02
Standard & Poor's Corporation: ♂																
Combined index (500 Stocks)..... 1941-43=10.....																
Industrial, total (400 Stocks) ♀..... do.....	86.16	102.01	101.19	104.66	103.81	100.96	100.57	99.05	98.76	99.29	100.18	97.75	96.23	93.74	94.28	93.82
Capital goods (111 Stocks)..... do.....	94.63	115.52	111.33	114.30	113.12	110.71	111.52	110.76	109.28	108.17	107.69	105.52	102.76	99.79	100.76	101.36
Consumer goods (189 Stocks)..... do.....	81.18	92.73	90.98	92.90	91.21	87.93	86.85	84.03	83.43	84.36	85.21	85.13	85.20	83.15	83.90	82.89
Utilities (40 Stocks)..... do.....	41.17	48.16	50.55	53.01	54.01	52.88	52.14	52.57	53.68	55.29	56.95	55.42	54.61	54.26	54.46	54.54
Transportation (20 Stocks)*..... 1970=10.....			13.99	14.97	14.85	14.12	14.08	14.38	15.00	14.82	14.68	13.74	13.45	12.97	13.23	13.34
Railroads (10 Stocks)..... 1941-43=10.....	37.48	45.87	46.93	50.48	50.24	49.27	50.21	52.83	54.14	53.06	53.12	49.19	48.11	46.23	46.44	46.46
Financial (40 Stocks)*..... 1970=10.....			11.58	12.42	12.30	11.75	11.57	11.41	11.59	11.74	12.11	11.95	11.61	11.09	11.25	11.15
New York City banks (6 Stocks)..... 1941-43=10.....	51.48	52.14	47.73	51.25	53.49	51.20	49.34	47.94	47.63	47.61	50.04	48.39	45.84	42.36	42.57	41.63
Banks outside N.Y.C. (10 Stocks)..... do.....	80.52	97.96	94.88	106.37	107.79	102.44	100.68	97.47	96.14	95.30	98.88	99.68	97.22	94.40	94.92	93.73
Property-Casualty Insurance (6 Stocks)..... do.....	88.72	105.01	113.66	119.40	115.06	109.29	107.00	108.19	117.06	121.39	121.13	114.79	111.00	106.53	109.22	108.45

1 No longer available. § Revised yields by rating for Jan. 1974-Nov. 1976 will be shown later. ♂ Number of issues represents number currently used; the change in number does not affect continuity of the series. ¶ Prices are derived from average yields on basis of an assumed 3 percent 20-year bond. ○ For bonds due or callable in 10 years or more. ♀ Includes data not shown separately. * New series.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
FINANCE—Continued																
SECURITY MARKETS—Continued																
Stocks—Continued																
Prices—Continued																
New York Stock Exchange common stock indexes:																
Composite.....12/31/65=50.....	45.73	54.46	54.17	56.34	56.28	54.93	54.67	53.92	53.96	54.30	54.94	53.51	52.66	51.37	51.87	51.83
Industrial.....do.....	50.52	60.44	59.45	61.54	61.26	59.65	59.56	58.47	58.13	58.44	58.90	57.30	56.41	54.99	55.62	55.55
Transportation.....do.....	31.10	39.57	39.28	41.77	41.93	40.59	40.52	41.51	43.25	43.29	43.52	41.04	39.99	38.33	39.30	39.75
Utility.....do.....	31.50	36.97	38.85	40.61	41.13	40.86	40.18	40.24	41.14	41.59	42.44	41.50	40.93	40.38	40.33	40.36
Finance.....do.....	47.14	52.94	53.25	57.45	57.86	55.65	54.84	54.30	54.80	55.29	57.29	56.52	55.33	53.24	54.04	53.85
Sales:																
Total on all registered exchanges (SEC):																
Market value.....mil. \$.....	157,260	194,969	12,983	18,759	17,436	15,794	15,890	15,645	15,949	15,619	16,635	15,754	13,673	13,168		
Shares sold.....millions.....	6,221	7,036	504	685	647	575	579	554	569	617	610	617	509	511		
On New York Stock Exchange:																
Market value.....mil. \$.....	133,684	164,545	11,089	15,692	14,526	13,309	13,223	12,884	13,370	13,244	13,779	13,411	11,378	11,343		
Shares sold (cleared or settled).....millions.....	5,051	5,649	413	541	509	457	453	429	454	504	483	507	404	423		
New York Stock Exchange:																
Exclusive of odd-lot and stopped stock sales (sales effected).....millions.....	4,693	5,360	381	535	502	398	435	403	426	484	450	433	384	414	495	451
Shares listed, N.Y. Stock Exchange, end of period:																
Market value, all listed shares.....bil. \$.....	685.11	858.30	810.81	858.30	822.53	802.50	795.83	800.08	788.31	828.46	815.74	799.18	798.95	766.20	793.99	796.64
Number of shares listed.....millions.....	22,478	24,500	24,354	24,500	24,532	24,612	24,681	24,787	25,092	25,428	25,668	25,733	25,875	25,913	26,000	26,093

FOREIGN TRADE OF THE UNITED STATES

VALUE OF EXPORTS																
Exports (mdse.), incl. reexports, total [♣]mil. \$.....	107,591.6	114,992.4	9,691.9	10,784.9	8,992.7	9,408.7	11,052.3	10,546.0	10,866.4	10,254.9	9,508.5	8,881.9	10,361.7	9,312.1	9,648.0	
Excl. Dept. of Defense shipments.....do.....	107,130.4	114,802.3	9,686.7	10,870.8	8,975.9	9,403.7	11,044.5	10,540.5	10,861.3	10,251.9	9,505.3	8,879.0	10,358.1	9,309.5	9,645.6	
Seasonally adjusted.....do.....			9,593.6	10,397.1	9,598.9	9,807.8	10,071.6	9,970.2	10,394.6	10,112.3	10,149.8	9,562.7	10,915.9	9,190.0	9,304.1	
By geographic regions:																
Africa.....do.....	4,948.9	5,205.9	417.0	510.3	371.2	413.0	525.9	483.6	523.7	458.9	486.7	413.4	541.6	378.6		
Asia.....do.....	28,223.2	29,731.2	2,400.2	2,710.2	2,430.5	2,367.5	2,825.0	2,698.5	2,963.5	2,679.5	2,577.5	2,413.1	2,526.6	2,246.8		
Australia and Oceania.....do.....	2,339.5	2,689.9	235.3	267.1	195.5	238.8	245.2	241.2	222.3	215.0	244.8	249.6	278.2	227.5		
Europe.....do.....	32,731.8	35,902.9	3,097.7	3,564.8	2,922.1	3,140.9	3,507.3	3,358.2	3,260.2	3,087.9	2,745.3	2,434.2	3,009.4	2,586.7		
Northern North America.....do.....	21,752.4	24,113.5	2,070.3	2,053.8	1,891.4	2,012.8	2,500.4	2,260.7	2,438.5	2,322.8	1,817.8	1,768.3	2,145.2	2,381.3		
Southern North America.....do.....	8,288.1	8,367.7	662.4	778.2	562.5	584.8	730.5	687.1	674.5	708.2	794.8	737.3	809.2	767.2		
South America.....do.....	8,802.6	8,600.5	742.7	906.3	619.4	650.8	717.9	772.0	748.4	765.3	817.6	818.9	1,021.1	672.1		
By leading countries:																
Africa:																
Egypt.....do.....	682.7	810.0	55.9	64.9	60.2	76.8	121.3	104.9	102.3	73.9	101.6	65.5	78.4	43.2		
Republic of South Africa.....do.....	1,302.4	1,347.8	103.5	113.5	88.7	128.9	91.5	87.9	95.4	76.3	87.8	82.8	84.0	77.3		
Asia; Australia and Oceania:																
Australia, including New Guinea.....do.....	1,835.0	2,199.2	195.5	224.1	161.1	199.5	202.2	201.1	180.6	181.6	202.3	210.3	233.2	196.2		
India.....do.....	1,289.7	1,134.7	79.7	80.3	57.1	39.9	74.3	39.4	87.1	94.3	62.7	46.3	48.7	62.3		
Pakistan.....do.....	372.0	394.3	25.1	28.7	23.5	14.1	31.9	35.7	48.3	21.4	38.1	16.5	14.8	21.2		
Malaysia.....do.....	393.4	535.6	47.8	46.9	44.2	40.5	41.8	44.5	38.8	37.4	45.1	45.2	49.0	79.7		
Indonesia.....do.....	810.1	1,036.0	55.7	92.9	57.5	58.7	72.9	64.9	56.5	77.4	65.9	53.3	51.8	67.6		
Philippines.....do.....	831.5	818.6	61.7	54.5	58.2	78.3	71.0	61.7	69.8	83.3	69.2	88.2	88.8	54.8		
Japan.....do.....	9,562.7	10,143.9	915.3	894.8	899.2	914.3	976.9	859.7	901.7	814.0	871.6	787.4	801.9	752.2		
Europe:																
France.....do.....	3,031.0	3,448.9	285.0	295.0	271.8	317.7	333.3	319.6	311.8	287.5	247.2	245.6	321.4	247.9		
German Democratic Republic (formerly E. Germany).....mil. \$.....	17.3	64.9	6.9	3.6	4.2	4.3	4.8	.6	2.1	.9	4.5	1.3	.3	3.1		
Federal Republic of Germany (formerly W. Germany).....mil. \$.....	5,194.1	5,729.8	576.1	606.2	471.4	484.6	543.2	539.8	550.1	523.8	448.9	428.5	501.9	440.8		
Italy.....do.....	2,866.9	3,068.4	260.0	277.0	229.3	255.1	307.9	289.8	254.9	227.7	182.5	169.9	208.1	175.9		
Union of Soviet Socialist Republics.....do.....	1,834.6	2,308.2	174.2	172.4	179.6	196.0	223.6	239.8	104.9	107.5	91.4	48.4	88.8	39.2		
United Kingdom.....do.....	4,527.4	4,798.5	381.6	454.0	411.3	446.5	485.9	460.9	456.3	568.9	465.7	382.4	440.0	387.6		
North and South America:																
Canada.....do.....	21,743.9	24,108.9	2,070.0	2,053.7	1,891.2	2,012.7	2,500.1	2,260.3	2,438.1	2,322.5	1,817.6	1,768.1	2,144.8	2,381.0		
Latin American Republics, total[♀].....do.....																
Argentina.....do.....	15,655.0	15,492.1	1,267.5	1,543.7	1,063.2	1,113.1	1,320.5	1,326.8	1,305.7	1,340.6	1,486.9	1,419.4	1,676.1	1,305.5		
Brazil.....do.....	628.3	543.7	51.7	102.5	46.5	38.1	55.2	57.2	52.5	78.9	65.2	65.6	59.5	65.9		
Chile.....do.....	3,056.2	2,809.1	211.9	221.1	177.1	195.1	182.4	233.9	210.9	174.8	225.1	218.8	317.8	132.3		
Colombia.....do.....	533.4	507.7	42.6	58.7	46.1	30.1	48.6	35.8	46.2	34.3	40.0	50.7	45.1	52.6		
Cuba.....do.....	643.0	702.7	56.6	85.5	43.1	46.8	76.4	61.5	67.7	63.4	60.8	64.6	85.2	72.9		
Mexico.....do.....	5,141.3	4,989.5	358.1	436.6	294.1	312.1	408.9	361.3	373.0	371.8	477.6	408.6	418.2	454.8		
Venezuela.....do.....	2,243.3	2,627.8	265.7	278.1	205.0	223.6	240.8	250.6	247.6	272.1	288.3	259.6	354.4	228.6		
Exports of U.S. merchandise, total [♣]do.....	106,102.1	113,318.5	9,539.4	10,596.3	8,834.3	9,275.7	10,857.2	10,348.1	10,674.0	10,040.1	9,347.6	8,708.6	10,148.0	9,119.1		
Excluding military grant-aid.....do.....	105,641.0	113,128.4	9,534.2	10,592.3	8,817.6	9,270.7	10,849.3	10,342.6	10,669.0	10,037.1	9,344.4	8,705.7	10,144.4	9,116.5		
Agricultural products, total.....do.....	21,885.7	22,996.3	2,120.9	2,081.4	1,906.8	2,045.9	2,293.1	2,208.9	2,199.4	1,882.1	1,748.9	1,541.6	1,733.8	1,705.1		
Nonagricultural products, total.....do.....	84,216.5	90,326.8	7,414.0	8,528.6	6,927.5	7,229.9	8,564.1	8,139.3	8,474.7	8,158.0	7,598.8	7,167.0	8,414.2	7,414.0		
By commodity groups and principal commodities:																
Food and live animals [♠]mil. \$.....	15,484.3	15,710.1	1,299.2	1,220.8	1,077.0	1,114.1	1,287.7	1,232.6	1,232.2	1,145.9	1,161.9	1,138.4	1,244.3	985.3	1,140.3	
Meats and preparations (incl. poultry).....do.....	527.7	798.0	63.5	69.0	54.4	60.7	65.4	64.9	69.2	62.6	67.0	67.5	75.3	65.1		
Grains and cereal preparations.....do.....	11,641.7	10,910.9	852.7	770.8	679.4	741.6	801.9	780.1	755.7	718.3	725.1	684.0	777.7	556.1		
Beverages and tobacco.....do.....	1,308.4	1,523.5	126.5	191.9	166.3	133.7	157.2	112.0	128.8	142.5	156.6	155.6	201.8	67.3	142.4	
Crude materials, inedible, exc. fuels [♀]do.....	9,783.6	10,890.7	1,118.2	1,101.9	1,040.8	1,188.2	1,241.8	1,308.2	1,310.8	1,051.0	908.7	686.2	798.9	1,017.0	1,112.1	
Cotton, raw, excl. linters and waste.....do.....	991.2	1,048.7	93.9	130.4	126.2	181.5	189.3	189.4	143.0	167.5	98.4	61.6	67.0	45.9		
Soybeans, exc. canned or prepared.....do.....	2,865.2	3,315.4	448.7	386.3	369.2	433.9	455.1	518.4	528.1	294.8	223.3	133.4	113.6	448.1		
Metal ores, concentrates, and scrap.....do.....	1,355.2	1,284.5	100.7	104.5	93.5	73.8	94.6	101.4	110.6	140.6	125.0	89.5	104.5	82.2		

[♠] Revised. [♠] Annual total reflects revisions not distributed to the monthly data.

[♣] Data may not equal the sum of the geographic regions, or commodity groups and prin-

cipal commodities, because of revisions to the totals not reflected in the component items.

[♀] Includes data not shown separately. ^{*} Corrected.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	

FOREIGN TRADE OF THE UNITED STATES—Continued

VALUE OF EXPORTS—Continued															
Exports of U.S. merchandise—Continued															
By commodity groups and principal commodities—Continued															
Mineral fuels, lubricants, etc. ♀	4,469.5	4,225.8	379.1	361.1	217.3	267.8	290.4	397.3	432.3	398.1	397.8	333.6	401.4	366.2	362.1
Coal and related products	3,343.0	2,988.2	270.3	234.0	122.3	158.3	180.6	280.9	284.3	295.5	258.8	206.7	259.7	259.0	
Petroleum and products	907.9	997.9	88.8	110.0	80.7	97.9	101.0	97.3	134.1	98.3	108.8	109.2	134.1	92.3	
Animal and vegetable oils, fats, waxes	943.8	978.1	79.0	94.8	77.3	94.8	134.5	106.1	127.3	122.5	129.3	106.6	108.3	99.8	114.9
Chemicals	8,691.2	9,958.7	829.3	928.9	809.3	910.0	943.1	903.3	918.8	918.9	957.9	883.2	1,062.4	740.9	736.3
Manufactured goods ♀ †	10,919.2	11,206.1	904.8	996.4	871.0	926.0	1,035.7	1,003.9	1,002.1	981.6	890.8	862.4	1,054.3	779.0	847.8
Textiles	1,624.5	1,970.0	170.5	178.9	159.5	170.7	185.6	175.7	164.3	169.6	156.9	140.0	194.8	120.7	
Iron and steel	2,457.0	1,906.2	147.6	167.9	130.1	140.6	147.1	157.3	139.1	139.5	132.0	133.7	152.7	113.1	
Nonferrous base metals	1,090.0	1,088.4	92.0	95.7	87.3	79.9	95.0	103.8	100.4	93.4	87.0	80.2	97.2	61.4	
Machinery and transport equipment, total mil. \$	45,667.6	49,501.2	4,067.7	4,822.0	3,824.5	3,869.2	4,819.7	4,416.1	4,633.6	4,325.9	3,868.6	3,677.2	4,367.4	4,236.6	4,145.7
Machinery, total ♀	28,477.1	31,289.0	2,530.4	2,857.5	2,520.3	2,545.5	3,009.5	2,789.1	2,826.8	2,753.7	2,627.7	2,432.5	2,860.0	2,442.6	
Agricultural	2,092.2	2,107.7	150.2	162.4	152.2	165.4	196.2	183.2	160.3	163.4	156.9	125.5	147.3	125.7	
Metalworking	918.2	949.2	78.8	86.7	62.2	67.8	67.0	66.0	75.1	59.8	55.0	48.2	68.9	42.3	
Construction, excav. and mining	4,733.8	4,945.1	374.8	441.7	359.9	382.6	410.3	401.3	401.5	374.2	362.2	305.4	404.6	298.0	
Electrical	7,582.0	9,278.5	733.2	892.5	759.0	764.7	960.5	879.4	876.7	851.6	844.2	778.4	901.7	819.5	878.5
Transport equipment, total	17,190.5	18,210.4	1,537.3	1,984.2	1,304.2	1,323.7	1,810.2	1,627.0	1,806.8	1,572.2	1,204.8	1,244.7	1,507.7	1,794.0	1,501.4
Motor vehicles and parts	10,028.2	10,949.1	997.6	1,018.1	868.7	884.1	1,182.8	988.5	1,156.5	1,037.8	786.7	711.8	1,048.9	1,119.5	
Miscellaneous manufactured articles	5,672.7	6,574.9	544.5	611.0	518.1	556.8	654.4	601.4	622.3	648.1	607.0	587.3	666.8	597.1	606.6
Commodities not classified	3,162.0	2,749.4	101.2	267.5	232.9	215.2	292.5	267.3	265.8	305.7	269.0	278.2	242.5	230.0	270.1
VALUE OF IMPORTS															
General imports, total	96,116.0	120,677.6	11,061.6	11,450.2	10,932.9	10,505.2	13,551.7	12,434.6	11,906.3	13,569.7	11,859.8	12,661.5	12,475.7	11,813.6	11,798.6
Seasonally adjusted			10,622.9	11,020.4	11,268.7	11,673.7	12,459.0	12,593.3	11,615.9	12,932.1	12,476.1	12,232.2	12,361.1	12,287.9	11,386.4
By geographic regions:															
Africa	8,304.6	12,639.3	1,110.3	1,333.3	1,244.0	1,197.7	1,610.1	1,722.4	1,274.7	1,583.7	1,306.1	1,382.5	1,466.8	1,264.3	
Asia	27,054.6	39,366.1	3,714.5	3,578.3	3,759.7	3,299.7	4,209.8	3,871.1	4,004.3	4,625.6	4,228.9	4,593.1	4,382.4	4,117.3	
Australia and Oceania	1,508.2	1,671.1	153.0	160.7	105.3	144.5	122.5	128.3	136.8	142.6	148.0	179.5	149.9	145.3	
Europe	21,465.9	23,640.2	2,168.7	2,162.3	2,040.8	1,903.2	2,677.7	2,309.5	2,356.5	2,603.8	2,376.6	2,631.8	2,389.1	2,229.2	
Northern North America	21,754.7	26,246.9	2,338.4	2,438.7	1,986.7	2,184.6	2,732.5	2,482.3	2,504.6	2,791.4	2,233.5	2,146.1	2,487.5	2,495.9	
Southern North America	8,821.6	9,347.1	836.0	912.9	925.6	958.2	1,273.2	1,095.0	905.7	1,005.5	901.3	992.4	808.8	842.3	
South America	7,219.3	7,760.5	742.4	863.6	870.5	816.7	934.6	825.0	720.1	816.4	664.8	734.7	790.3	718.6	
By leading countries:															
Africa:															
Egypt	27.5	92.5	.9	1.1	1.0	.8	2.1	17.1	18.7	18.6	16.2	12.9	27.9	36.9	
Republic of South Africa	840.9	924.8	95.0	76.0	74.6	76.3	90.3	104.0	115.1	93.1	101.6	100.2	117.1	111.7	
Asia; Australia and Oceania:															
Australia, including New Guinea	1,183.0	1,285.7	117.3	127.0	76.2	99.4	96.4	83.8	97.8	104.8	95.1	127.1	117.2	124.7	
India	548.2	708.2	53.3	48.8	47.7	55.8	61.3	65.4	72.2	75.0	63.1	64.3	67.2	63.8	
Pakistan	48.8	69.8	5.7	5.3	4.4	5.9	5.1	5.2	4.6	5.1	7.4	4.2	3.7	3.1	
Malaysia	766.4	939.6	105.7	83.1	101.3	90.0	107.7	82.4	113.8	117.0	109.9	143.6	113.1	102.5	
Indonesia	2,220.6	3,004.3	296.6	250.2	306.4	273.1	334.5	366.7	240.3	319.8	340.4	272.4	296.7	207.5	
Philippines	754.2	882.9	92.1	100.5	71.5	79.2	82.3	93.2	75.6	110.8	89.5	99.0	120.2	71.4	
Japan	11,268.0	15,504.2	1,426.9	1,412.8	1,411.6	1,197.7	1,541.6	1,411.9	1,545.4	1,619.8	1,520.7	1,763.3	1,624.2	1,620.4	
Europe:															
France	2,136.9	2,509.3	294.8	230.3	233.0	191.7	242.1	217.9	253.4	268.5	270.6	298.4	250.3	281.3	
German Democratic Republic (formerly E. Germany) mil. \$	11.2	13.6	1.5	.9	1.1	1.3	1.8	.7	1.8	1.4	.8	1.3	2.2	.9	
Federal Republic of Germany (formerly W. Germany) mil. \$	5,381.5	5,591.2	541.7	538.1	523.1	444.2	577.0	572.6	589.5	661.7	625.5	648.7	627.0	605.6	
Italy	2,397.1	2,529.7	214.4	238.1	207.9	209.5	310.7	265.0	240.1	276.9	248.1	311.3	252.9	221.0	
Union of Soviet Socialist Republics	254.4	220.2	20.4	16.6	12.8	15.8	30.8	23.0	22.0	21.0	24.8	26.0	10.9	16.0	
United Kingdom	3,784.4	4,253.7	356.5	383.2	341.8	310.0	492.2	434.9	422.3	507.0	416.2	498.1	459.1	380.3	
North and South America:															
Canada	21,746.7	26,237.6	2,337.4	2,436.9	1,985.4	2,183.4	2,721.4	2,480.7	2,504.5	2,789.0	2,231.7	2,142.8	2,485.7	2,494.8	
Latin American Republics, total ♀	11,839.8	13,226.6	1,264.7	1,397.7	1,380.4	1,369.5	1,608.5	1,554.1	1,308.7	1,424.7	1,197.2	1,304.1	1,268.9	1,210.8	
Argentina	214.6	307.9	29.5	30.5	30.6	27.7	26.6	26.4	28.4	28.5	33.5	37.3	26.3	35.0	
Brazil	1,464.3	1,736.6	210.5	209.6	238.9	211.1	182.8	242.3	181.2	193.5	168.0	182.2	141.2	155.2	
Chile	137.7	221.6	16.6	22.6	23.4	13.0	18.8	26.8	34.2	17.6	24.2	18.5	18.5	19.1	
Colombia	590.2	654.8	62.9	69.9	83.2	99.5	97.3	53.3	66.0	62.4	41.2	35.7	51.1	77.4	
Mexico	3,058.6	3,598.1	356.5	361.1	325.3	369.1	431.5	462.2	386.4	417.4	344.5	369.5	322.5	377.6	
Venezuela	3,623.9	3,574.4	304.5	396.3	386.9	349.7	478.0	354.2	255.9	348.4	296.6	343.9	411.3	311.1	
By commodity groups and principal commodities:															
Agricultural products, total	9,489.8	11,178.7	990.0	1,106.0	1,124.6	1,142.5	1,343.1	1,404.3	1,279.9	1,251.7	1,010.5	1,019.9	1,013.3	835.6	
Nonagricultural products, total	86,650.5	109,498.7	10,071.7	10,344.2	9,808.3	9,362.6	12,208.6	11,030.3	10,626.4	12,318.0	10,849.3	11,641.6	11,462.4	10,978.1	
Food and live animals ♀	8,503.3	10,267.4	924.3	1,031.4	1,008.1	1,042.3	1,214.1	1,325.0	1,182.3	1,139.2	938.9	934.6	895.9	784.4	805.1
Cocoa or cacao beans	321.1	357.9	23.8	31.7	57.2	46.9	44.1	41.6	70.0	43.6	38.7	37.9	25.3	36.1	
Coffee	1,560.9	2,632.3	294.9	343.7	401.6	385.0	478.5	519.0	389.1	360.5	244.7	215.1	177.5	152.7	
Meats and preparations	1,141.2	1,447.0	110.1	90.9	88.7	109.5	114.3	114.5	109.5	102.7	106.4	112.9	111.4	82.8	
Sugar	1,870.1	1,154.0	55.5	86.2	45.4	86.5	62.1	87.9	82.9	78.8	86.2	89.6	108.4	89.4	
Beverages and tobacco	1,419.5	1,623.7	137.9	155.4	128.1	117.8	156.4	119.5	142.7	152.3	112.5	162.5	187.0	139.7	102.0
Crude materials, inedible, exc. fuels ♀	5,566.2	7,013.8	578.3	668.1	545.0	547.0	639.1	626.0	681.5	775.9	677.2	734.0	708.0	640.1	665.3
Metal ores	1,976.7	2,250.8	171.3	225.6	139.0	126.4	116.1	150.9	207.9	246.1	206.5	238.9	197.8	181.8	
Paper base stocks	1,067.5	1,275.5	102.0	102.4	91.9	111.6	117.5	102.5	100.6	127.2	94.8	113.6	91.4	90.3	
Textile															

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

FOREIGN TRADE OF THE UNITED STATES—Continued

VALUE OF IMPORTS—Continued																
General imports—Continued																
By commodity groups and principal commodities—Continued																
Machinery and transport equipment.....mil. \$	23,457.2	29,823.9	2,723.7	2,795.4	2,569.3	2,504.5	3,151.4	2,864.5	2,951.0	3,294.6	2,881.7	2,852.6	2,874.9	3,069.4	3,044.7	
Machinery, total ?	11,727.4	15,183.7	1,429.3	1,452.5	1,311.6	1,229.7	1,527.3	1,363.8	1,477.8	1,623.5	1,490.3	1,534.7	1,531.2	1,505.9		
Metalworking.....do	361.5	361.8	29.6	33.5	34.4	30.5	35.8	32.2	40.7	37.1	32.6	39.8	39.7	32.9		
Electrical.....do	4,911.2	7,424.2	746.8	676.3	609.1	563.7	712.5	624.5	687.8	781.7	733.8	741.4	766.6	761.3		
Transport equipment.....do	11,737.2	14,640.2	1,294.3	1,343.0	1,257.7	1,274.8	1,624.1	1,500.7	1,473.2	1,671.1	1,391.4	1,317.9	1,343.7	1,563.5		
Automobiles and parts.....do	9,920.7	13,103.9	1,173.8	1,228.8	1,132.0	1,153.6	1,465.0	1,340.9	1,325.5	1,474.2	1,234.5	1,118.3	1,193.8	1,387.9		
Miscellaneous manufactured articles.....do	9,224.4	12,563.9	1,231.3	1,114.2	1,045.9	1,002.2	1,169.6	1,047.3	1,125.2	1,328.5	1,294.9	1,471.8	1,332.7	1,354.5	1,240.8	
Commodities not classified.....do	2,517.6	2,537.7	*253.5	220.1	170.6	201.5	205.3	201.4	235.6	295.2	204.9	233.2	218.7	227.8	233.4	
Indexes																
Exports (U.S. mdse., excl. military grant-aid):																
Unit value.....1967=100	195.1	202.1	207.3	209.1	209.0	208.1	211.3	212.2	213.4	212.6	211.3	211.0	212.2	210.6	213.0	
Quantity.....do	176.7	182.7	180.0	198.6	165.2	174.4	201.1	190.9	195.7	184.9	173.2	161.5	187.2	169.5	174.2	
Value.....do	344.9	369.1	373.1	415.3	345.3	363.0	424.8	405.0	417.8	393.0	365.9	340.9	397.2	357.0	371.0	
General imports:																
Unit value.....do	241.2	248.8	253.7	255.4	259.2	260.3	267.3	265.5	272.6	268.7	270.4	273.3	273.4	272.6	275.5	
Quantity.....do	149.4	182.1	196.3	201.8	189.7	181.5	228.0	210.4	196.7	227.3	197.0	207.6	204.7	194.7	192.5	
Value.....do	360.5	452.9	498.0	515.4	491.7	472.4	609.5	558.6	536.1	610.9	532.7	567.4	559.5	530.8	530.3	
Shipping Weight and Value																
Waterborne trade:																
Exports (incl. reexports):																
Shipping weight.....thous. sh. tons	269,182	283,070	25,608	24,036	18,358	20,251	21,946	24,776	24,928	24,062	24,085	21,624				
Value.....mil. \$	61,408	64,712	5,605	6,023	4,982	5,342	5,951	5,976	6,055	5,617	5,490	4,880				
General imports:																
Shipping weight.....thous. sh. tons	427,865	517,450	46,144	49,169	48,422	42,517	58,314	50,723	45,746	56,066	49,434	54,324				
Value.....mil. \$	63,469	81,171	7,409	7,770	7,813	7,128	9,447	8,600	8,175	9,495	8,488	9,281				

TRANSPORTATION AND COMMUNICATION

TRANSPORTATION																
Air Carriers (Scheduled Service)																
Certificated route carriers:																
Passenger-miles (revenue).....bil.	162.81	178.99	12.99	15.19	15.09	12.94	15.46	15.39	15.34	17.02	18.85	19.49	15.61	p 16.16	p 14.84	
Passenger-load factor %	53.7	55.4	51.9	54.6	53.8	51.0	54.7	55.6	54.0	57.6	60.1	61.8	54.1	p 55.3	p 53.9	
Ton-miles (revenue), total†	22,186	24,121	1,832	2,066	1,952	1,747	2,098	2,057	2,060	2,240	2,425	2,515	2,128	p 2,255	p 2,116	
Operating revenues (quarterly) ?	15,356	p17,506		p4,428			4,437			p 4,896						
Passenger revenues.....do	12,354	p14,267		p3,542			3,638			p 4,026						
Cargo revenues.....do	1,310	p1,497		p405			375			p 407						
Mail revenues.....do	311	p328		p104			79			p 80						
Operating expenses (quarterly) ?	15,228	p16,783		p4,304			4,446			p 4,651						
Net income after taxes (quarterly) ?	-72	p415		p62			-37			p 216						
Domestic operations:																
Passenger-miles (revenue).....bil.	131.73	145.27	10.74	12.56	12.23	10.72	12.83	12.59	12.31	13.69	15.00	15.62	12.34	p 13.02	p 12.24	p12.64
Cargo ton-miles.....mil.	2,747	2,909	238	245	211	213	265	250	259	272	263	278	269	p 292	p 281	
Mail ton-miles.....do	583	719	64	84	57	56	66	63	58	61	57	60	60	p 62	p 65	
Operating revenues (quarterly) ?	12,020	p13,901		p3,568			3,590			p 3,885						
Operating expenses (quarterly) ?	11,902	p13,326		p3,455			3,580			p 3,695						
Net income after taxes (quarterly) ?	-46	p331		p51			-25			p 159						
International operations:																
Passenger-mile (revenue).....bil.	31.08	33.72	2.25	2.63	2.87	222	263	280	303	332	384	396	327	p 313	p 260	
Cargo ton-miles.....mil.	2,048	2,187	194	172	146	153	185	171	173	172	186	194	206	p 254	p 252	
Mail ton-miles.....do	426	407	36	47	30	30	35	34	35	35	34	34	31	p 32	p 35	
Operating revenues (quarterly) ?	3,336	p3,605		p861			847			p 1,011						
Operating expenses (quarterly) ?	3,326	p3,457		p849			865			p 956						
Net income after taxes (quarterly) ?	-25	p120		p11			-11			p 56						
Urban Transit Systems																
Passengers carried (revenue).....mil.	5,643	5,690	* 463	492	474	465	577	463	467	471	426	442	463	489	479	
Motor Carriers																
Carriers of property, large, class I, qtrly.*																
Number of reporting carriers	99	99		99			100			100						
Operating revenues, total.....mil. \$	9,703	p 11,362		3,040			3,030			3,395						
Net income, after extraordinary and prior period charges and credits.....mil. \$	239	341		90			54			123						
Tonnage hauled (revenue), common and contract carrier service.....mil. tons	177	199		53			51			57						
Freight carried—volume indexes, class I and II intercity truck tonnage (ATA):																
Common and contract carriers of property (qtrly.) ? average same period, 1967=100	121	137		127			147									
Common carriers of general freight, seas. adj.† 1967=100	131.7	152.3	154.0	154.8	159.5	165.6	165.5	166.4	166.6	165.8	168.1	167.5	165.6	166.8	163.6	
Class I Railroads△																
Financial operations, qtrly, (AAR), excl. Amtrak:																
Operating revenues, total⊕ ?	16,357	18,560		4,742			4,738			5,269			5,002			
Freight.....do	15,346	17,422		4,448			4,459			4,972			4,693			
Passenger, excl. Amtrak.....do	297	330		83			81			84			84			
Operating expenses⊕.....do	13,207	14,948		3,864			3,902			4,148			4,158			
Tax accruals and rents.....do	2,799	3,182		776			825			893			838			
Net railway operating income.....do	351	430		102			11			228			6			
Net income (after taxes)⊕.....do	108	1273		121			1-29			1228						

* Revised. † Preliminary. ‡ Before extraordinary and prior period items. § Annual total; quarterly revisions not available. ¶ Includes data not shown separately. † Applies to passengers, baggage, cargo, and mail carried. ‡ Passenger-mile as a percent of available seat-miles in revenue service reflects proportion of seating capacity actually sold and utilized. § Total revenues, expenses, and income for all groups of carriers also reflect nonscheduled service. * New Series. Source: ICC (no comparable data prior to 1972). † Indexes are comparable for the identical quarter of each year (and from year to year).

△ Effective 1976, defined as those with annual revenues of \$10 million or more; restated 1975 data reflect changes. ⊕ Natl. Railroad Pass. Corp. (Amtrak) operations (not included in AAR data above), 1975 and 1976 (mil. \$): Oper. revenues, 235; 287; net loss, 353; 469 (ICC). * Domestic trunk operations only (domestic trunks average about 90% of total domestic operations). † Effective Mar. 1977 SURVEY, revised back to 1957 to new trading day and seas. adj. factors.

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	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
TRANSPORTATION AND COMMUNICATION—Continued																
TRANSPORTATION—Continued																
Class I Railroads△—Continued																
Traffic:																
Ton-miles of freight (net), total, qtrly..... bil..	778.4	822.5	202.1	208.9	207.7					224.9						
Revenue ton-miles, qtrly. (AAR)..... do.....	754.3	794.9		200.8	195.6					216.0				205.3		198.1
Revenue per ton-mile..... cents.	2.043															
Price index for railroad freight..... 1969=100..	169.4	186.6	191.1	191.6	198.0	198.0	198.2	198.3	198.2	198.2	198.4	198.4	198.5	198.5	198.6	207.8
Passengers (revenue) carried 1 mile..... mil..	9,765															
Travel																
Hotels and motor-hotels:																
Restaurant sales index..... same month 1967=100.	118	127	122	128	114	122	145	128	144	147	157	138	138	155	138	
Hotels: Average room sale ¹ dollars.....	28.76	31.32	32.54	31.46	34.45	33.71	33.92	34.69	35.72	34.89	34.06	34.98	35.20	36.68	35.70	
Rooms occupied..... % of total.....	60	63	63	46	57	63	67	64	70	71	64	69	67	76	67	
Motor-hotels: Average room sale ¹ dollars.....	20.98	22.48	22.07	21.88	23.15	23.27	23.66	24.06	24.29	25.07	25.81	26.10	25.07	25.72	24.96	
Rooms occupied..... % of total.....	64	67	60	50	61	65	71	70	72	77	78	81	71	76	66	
Foreign travel:																
U.S. citizens: Arrivals ² thous.....	18,050	7,700	535	468	588	511	618	645	643	710	919	1,002	719	760	575	
Departures ² do.....	8,177	7,755	496	578	552	549	625	646	733	853	926	801	746	628	520	
Aliens: Arrivals..... do.....	6,176	6,264	408	452	493	354	472	480	488	572	729	769	614	528	457	
Departures..... do.....	5,326	5,382	374	405	399	304	347	399	419	462	548	661	500	471	409	
Passports issued..... do.....	2,334	2,817	172	183	207	222	330	357	354	371	288	271	206	158	180	162
National parks, visits ³ do.....	60,527	60,521	2,608	1,849	1,698	1,971	2,417	3,691	4,567	8,252	12,107	11,159	6,355	5,086	2,634	2,050
COMMUNICATION																
Telephone carriers:																
Operating revenues ⁴ mil. \$.....	32,070	36,602	3,151	3,174	3,222	3,159	3,364	3,360	3,364	3,397	3,290	3,488	3,467	3,508		
Station revenues..... do.....	15,256	16,621	1,474	1,438	1,488	1,488	1,520	1,531	1,545	1,548	1,547	1,557	1,586	1,608		
Tolls, message..... do.....	12,692	14,618	1,242	1,259	1,295	1,216	1,391	1,288	1,351	1,368	1,323	1,450	1,376	1,398		
Operating expenses (excluding taxes)..... do.....	20,664	23,321	2,031	2,173	2,033	1,985	2,163	2,224	2,142	2,163	1,959	2,243	2,291	2,232		
Net operating income (after taxes)..... do.....	5,792	6,679	576	497	587	578	585	399	607	624	827	631	591	637		
Phones in service, end of period..... mil.....	132.3	138.5	138.1	138.5	138.9	139.5	139.9	140.3	140.1	141.0	141.5	142.1	143.0	143.6		
Telegraph carriers:																
Domestic:																
Operating revenues..... mil. \$.....	504.8	527.7	44.1	45.1	43.2	43.3	47.9	46.0	46.6	48.4	45.2	47.4	46.8	46.7		
Operating expenses..... do.....	403.9	423.0	34.5	36.7	34.4	33.7	37.6	34.6	35.8	37.4	36.2	38.1	37.9	37.3		
Net operating revenues (before taxes)..... do.....	70.7	75.4	7.1	6.0	6.2	7.1	7.6	9.0	8.2	8.4	6.6	6.7	6.3	6.8		
Overseas, total: ⁵																
Operating revenues..... do.....	315.9	349.5	29.8	30.6	31.1	29.8	34.8	31.7	32.9	33.1	31.8	33.8	34.3	34.0		
Operating expenses..... do.....	223.6	256.3	21.0	23.6	21.3	21.0	22.6	23.1	22.4	20.0	22.5	22.9	22.6	22.5		
Net operating revenues (before taxes)..... do.....	74.6	71.9	6.8	4.7	7.6	7.1	10.3	8.3	8.9	11.5	7.7	9.3	9.7	9.8		

CHEMICALS AND ALLIED PRODUCTS

CHEMICALS																
Inorganic Chemicals																
Production:																
Aluminum sulfate, commercial (17% Al ₂ O ₃): thous. sh. tons.....	1,163	1,230	104	101	78	82	93	104	97	98	112	94	100			
Chlorine gas (100% Cl ₂): do.....	9,167	10,378	880	889	792	794	883	901	866	917	820	877	904			
Hydrochloric acid (100% HCl): do.....	2,009	2,496	204	207	179	183	203	214	204	232	220	243	216			
Phosphorus, elemental: do.....	450	437	34	41	33	33	39	38	41	38	34	32	34			
Sodium carbonate (soda ash), synthetic (58% Na ₂ O): thous. sh. tons.....	2,802	2,344	189	165	131	138	159	168	160	148	154	161	147	152		
Sodium hydroxide (100% NaOH): do.....	9,635	10,516	893	884	791	797	896	882	886	895	848	860	859	886		
Sodium silicate, anhydrous: do.....	724	747	64	65	63	58	65	61	66	63	65	79	61	63		
Sodium sulfate, anhydrous: do.....	1,227	1,232	114	101	103	107	101	117	118	104	90	95	94	95		
Sodium tripolyphosphate (100% Na ₃ P ₃ O ₁₀): do.....	770	724	63	61	50	58	68	61	60	62	54	61	58	61		
Titanium dioxide (composite and pure): do.....	603	713	53	52	47	48	60	57	61	61	57	63	62	57		
Sulfur, native (Frasch) and recovered: Production..... thous. lg. tons.....	10,180	9,402	728	768	740	711	774	784	801	826	826	787	770	776		
Stocks (producers') end of period..... do.....	5,126	5,563	5,598	5,563	5,631	5,613	5,616	5,607	5,562	5,578	5,584	5,552	5,446	5,401	5,413	
Inorganic Fertilizer Materials																
Production:																
Ammonia, synthetic anhydrous: thous. sh. tons.....	16,419	16,716	1,335	1,598	1,104	1,149	1,543	1,617	1,571	1,491	1,510	1,552	1,499	1,476	1,440	
Ammonium nitrate, original solution: do.....	7,088	7,186	639	646	550	557	716	704	723	614	587	585	607	636	607	
Nitric acid (100% HNO ₃): do.....	2,106	2,010	134	186	157	136	173	163	178	178	151	195	125	150		
Nitrogen solutions (100% N): do.....	7,527	7,892	678	691	567	579	710	708	722	649	640	670	660	680	661	
Phosphoric acid (100% P ₂ O ₅): do.....	2,068	2,068	183	177	156	183	244	253	298	189	212	222	229	209	223	
Sulfuric acid (100% H ₂ SO ₄): do.....	7,677	7,955	724	736	631	654	771	745	710	714	663	702	719	757	640	
Superphosphate and other phosphatic fertilizers (100% P ₂ O ₅): Production..... thous. sh. tons.....	5,573	5,824	520	514	474	493	571	595	600	581	526	564	590	604	500	
Stocks, end of period..... do.....	569	469	458	469	396	388	261	244	343	428	432	407	471	552	630	
Potash, deliveries (K ₂ O): do.....	5,079	6,282	437	434	527	431	803	947	528	394	427	756	497	363	408	316
Exports, total ⁶ do.....	19,614	18,324	1,847	1,981	1,588	1,757	1,873	1,764	1,719	1,810	1,909	2,043	2,311	2,101	1,984	
Nitrogenous materials..... do.....	1,397	1,239	88	126	29	60	68	85	69	63	105	108	151	124	174	
Phosphate materials..... do.....	13,789	12,351	1,323	1,308	1,070	1,259	1,364	1,480	1,275	1,309	1,332	1,467	1,666	1,561	1,420	
Potash materials..... do.....	1,419	1,670	156	171	144	147	122	72	113	131	155	173	214	88	179	
Imports:																
Ammonium nitrate..... do.....	245	312	23	28	24	29	37	76	46	15	16	19	13	19	21	
Ammonium sulfate..... do.....	219	566	63	72	23	48	42	54	34	28	13	10	10	8	36	
Potassium chloride..... do.....	6,132	7,475	602	498	641	501	913	940	723	632	571	757	852	505	553	
Sodium nitrate..... do.....	139	103	5	4	3	16	19	22	23	13	11	0	19	18	0	

¹ Revised. ² Preliminary. ³ Annual total; monthly revisions are not available. ⁴ For six months ending in month shown. ⁵ For month shown. ⁶ Restated 4th qtr. 1975.
⁷ See "Δ" note, p. S-24. ⁸ Average daily rent per occupied room, not scheduled rates.
⁹ Includes data not shown separately.
¹⁰ Effective 1976, data are compiled by U.S. Dept. of Transportation from INS records and refer to air travel; travel by sea is omitted (for 1973-75, average annual arrivals and departures by sea are as follows—units and order as above: 814; 784; 159; 129).

¹¹ Effective Jan. 1976, data include visits to Voyageurs National Park (no count of visits for earlier periods is available); data for Mar.-July 1976 are restated to delete visits to Platt National Park which was reclassified as a national recreation area.
¹² Includes data for Western Union Int. Cable & Wireless.
¹³ Monthly revisions back to 1971 are available upon request. ¹⁴ Corrected

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975		1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
CHEMICALS AND ALLIED PRODUCTS—Continued																
CHEMICALS—Continued																
Industrial Gases†																
Production:																
Acetylene.....mil. cu. ft.	6,704	7,111	557	537	565	531	538	428	544	509	457	505	467	452	-----	-----
Carbon dioxide, liquid, gas, and solid thous. sh. tons	1,850	1,967	164	154	141	160	184	185	186	197	204	217	199	195	-----	-----
Hydrogen (high and low purity).....mil. cu. ft.	73,552	81,641	6,958	6,876	6,265	6,348	7,329	7,031	7,169	7,404	7,244	7,374	6,831	7,308	-----	-----
Nitrogen (high and low purity).....do.	252,368	289,926	25,568	26,159	24,744	23,655	26,349	25,576	27,119	29,651	27,342	28,876	29,191	31,040	-----	-----
Oxygen (high and low purity).....do.	352,554	382,914	30,729	29,989	29,867	28,938	34,653	33,401	34,943	33,028	31,401	32,287	30,446	31,643	-----	-----
Organic Chemicals^c																
Production:																
Acetylsalicylic acid (aspirin).....mil. lb.	125.4	128.3	2.5	2.7	2.2	2.3	2.5	2.5	3.2	2.7	2.1	2.4	1.7	1.2	1.8	-----
Creosote oil.....mil. gal.	179.2	177.1	11.9	11.4	8.9	19.2	14.3	11.2	11.2	15.2	11.2	13.1	13.5	11.5	13.0	-----
Ethyl acetate (85%).....mil. lb.	1171.2	1215.6	12.2	14.7	10.3	11.9	12.0	15.8	10.1	11.5	14.2	11.2	7.8	14.4	14.4	-----
Formaldehyde (37% HCHO).....do.	14,558.1	15,449.3	460.0	464.5	352.8	338.1	405.5	530.6	504.5	497.0	465.2	491.6	512.6	546.7	542.6	-----
Glycerin, refined, all grades.....do.	264.4	321.2	28.2	25.4	25.5	22.8	25.1	20.2	19.2	24.3	20.2	27.4	26.6	25.6	24.6	-----
Methanol, synthetic.....mil. gal.	1779.6	1940.1	78.2	82.2	81.2	71.2	94.1	92.6	68.9	84.5	97.4	90.5	70.3	82.8	83.3	-----
Phthalic anhydride.....mil. lb.	1702.2	1902.4	67.0	73.1	82.0	75.5	86.3	82.5	71.1	84.8	83.6	72.9	72.1	73.7	68.1	-----
ALCOHOL‡																
Ethyl alcohol and spirits:																
Production.....mil. tax gal.	526.4	499.6	42.8	47.7	36.5	37.7	42.8	39.2	43.5	43.2	40.3	40.9	41.0	-----	-----	-----
Used for denaturation.....do.	391.2	416.0	33.6	30.5	32.8	34.8	38.8	35.5	33.5	41.4	27.2	36.7	35.0	-----	-----	-----
Taxable withdrawals.....do.	77.8	78.4	7.1	7.1	5.8	5.1	7.6	6.0	6.5	7.4	5.7	7.5	7.0	-----	-----	-----
Stocks, end of period.....do.	106.1	85.3	77.0	85.3	77.5	79.0	75.4	72.0	77.7	73.7	79.0	81.4	69.8	-----	-----	-----
Denatured alcohol:																
Production.....mil. wine gal.	207.3	225.1	18.7	16.7	17.6	18.9	20.7	19.1	18.0	22.4	14.9	19.8	18.7	-----	-----	-----
Consumption (withdrawals).....do.	207.1	225.4	18.3	16.9	18.5	18.4	20.7	19.3	17.5	22.8	14.7	20.1	18.6	-----	-----	-----
Stocks, end of period.....do.	2.7	3.2	3.4	3.2	2.5	3.0	2.9	2.7	3.0	3.5	2.8	2.7	2.7	-----	-----	-----
PLASTICS AND RESIN MATERIALS																
Production:																
Phenolic resins.....mil. lb.	11,274.9	11,305.3	128.3	120.6	125.3	129.1	143.0	142.1	138.5	141.1	125.4	138.4	146.3	151.1	144.1	-----
Polyethylene and copolymers.....do.	17,482.7	18,774.7	743.7	773.3	729.6	654.4	851.3	833.7	853.1	838.3	882.7	874.7	841.5	891.0	834.1	-----
Polypropylene.....do.	11,903.4	12,551.0	196.6	168.5	237.0	243.6	229.9	236.2	229.1	202.3	197.8	197.8	218.9	239.1	224.3	-----
Polystyrene and copolymers.....do.	13,877.3	14,742.9	390.3	389.9	329.9	358.9	472.9	461.9	449.7	458.7	406.5	423.9	423.1	441.7	468.9	-----
Polyvinyl chloride and copolymers.....do.	13,694.6	14,544.8	403.2	355.2	337.9	376.2	443.0	451.4	450.0	462.7	441.1	439.2	417.8	451.9	417.4	-----
MISCELLANEOUS PRODUCTS																
Explosives (industrial), shipments, quarterly mil. lb.	2,325.7	2,543.0	-----	653.6	-----	-----	623.2	-----	-----	697.1	-----	-----	707.4	-----	-----	-----
Paints, varnish, and lacquer, factory shipments: Total shipments.....mil. \$	4,026.6	4,685.9	342.9	280.0	285.9	311.9	393.1	377.8	429.7	445.5	393.3	445.1	410.7	366.3	-----	-----
Trade products.....do.	2,079.0	2,446.4	165.7	122.6	127.2	141.1	200.8	197.9	231.6	237.7	216.6	239.6	207.0	171.3	-----	-----
Industrial finishes.....do.	1,947.6	2,239.6	177.2	157.5	158.7	170.8	192.3	179.9	198.2	207.9	176.7	205.4	203.7	195.0	-----	-----

ELECTRIC POWER AND GAS

ELECTRIC POWER																
Production (utility and industrial), total mil. kw.-hr.	2,001,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Electric utilities, total.....do.	1,916,000	2,036,487	168,994	183,080	196,308	162,840	168,641	156,885	168,163	180,236	197,930	195,861	-----	-----	-----	-----
By fuels.....do.	1,616,000	1,752,807	149,192	162,868	175,574	147,543	148,832	138,247	149,466	163,089	181,138	179,289	-----	-----	-----	-----
By waterpower.....do.	300,000	283,680	19,802	20,212	20,734	15,298	19,808	18,637	18,697	17,197	16,791	16,572	-----	-----	-----	-----
Industrial establishments, total.....do.	84,969	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
By fuels.....do.	81,649	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
By waterpower.....do.	3,320	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Sales to ultimate customers, total (Edison Electric Institute).....mil. kw.-hr.	1,733,024	1,849,625	151,824	161,850	170,277	165,226	156,887	150,833	149,545	160,170	172,569	176,889	172,074	-----	-----	-----
Commercial and industrial:																
Small light and power\$.....do.	418,069	440,625	35,760	36,916	39,133	37,945	36,222	35,341	36,227	39,511	43,180	44,345	43,167	-----	-----	-----
Large light and power\$.....do.	661,558	725,169	61,511	61,956	60,314	59,493	62,043	62,004	63,549	65,493	63,584	64,971	65,140	-----	-----	-----
Railways and railroads.....do.	4,273	4,338	365	392	402	451	335	331	328	336	331	332	329	-----	-----	-----
Residential or domestic.....do.	586,149	613,072	48,582	56,893	64,516	61,705	52,686	47,736	44,005	49,481	59,748	61,544	57,687	-----	-----	-----
Street and highway lighting.....do.	13,907	14,413	1,314	1,319	1,376	1,241	1,185	1,123	1,113	1,074	1,141	1,123	1,163	-----	-----	-----
Other public authorities.....do.	43,625	45,625	3,742	3,839	3,982	3,815	3,837	3,710	3,729	3,705	4,008	4,009	3,977	-----	-----	-----
Interdepartmental.....do.	5,443	6,383	550	535	554	576	580	588	595	571	575	569	611	-----	-----	-----
Revenue from sales to ultimate customers (Edison Electric Institute).....mil. \$	46,853.5	53,462.9	4,453.3	4,734.9	5,107.7	5,005.4	4,846.9	4,685.5	4,683.4	5,100.6	5,775.4	5,967.7	5,819.1	-----	-----	-----
GAS																
Total utility gas, quarterly (American Gas Association):																
Customers, end of period, total.....thous.	44,839	45,128	-----	45,128	-----	-----	45,670	-----	-----	45,295	-----	-----	-----	-----	-----	-----
Residential.....do.	41,210	41,519	-----	41,519	-----	-----	41,950	-----	-----	41,685	-----	-----	-----	-----	-----	-----
Commercial.....do.	3,393	3,377	-----	3,377	-----	-----	3,483	-----	-----	3,378	-----	-----	-----	-----	-----	-----
Industrial.....do.	182	2179	-----	179	-----	-----	184	-----	-----	178	-----	-----	-----	-----	-----	-----
Other.....do.	54	253	-----	53	-----	-----	54	-----	-----	53	-----	-----	-----	-----	-----	-----
Sales to customers, total.....tril. Btu.	14,863	14,814	-----	3,890	-----	-----	4,949	-----	-----	3,067	-----	-----	-----	-----	-----	-----
Residential.....do.	4,991	5,014	-----	1,438	-----	-----	2,348	-----	-----	851	-----	-----	-----	-----	-----	-----
Commercial.....do.	2,387	2,423	-----	683	-----	-----	1,002	-----	-----	441	-----	-----	-----	-----	-----	-----
Industrial.....do.	6,837	2,7107	-----	1,692	-----	-----	1,412	-----	-----	1,723	-----	-----	-----	-----	-----	-----
Other.....do.	648	2270	-----	75	-----	-----	187	-----	-----	51	-----	-----	-----	-----	-----	-----
Revenue from sales to customers, total.....mil. \$	19,074	23,701	-----	6,738	-----	-----	9,498	-----	-----	5,898	-----	-----	-----	-----	-----	-----
Residential.....do.	8,445	9,941	-----	2,966	-----	-----	5,021	-----	-----	2,088	-----	-----	-----	-----	-----	-----
Commercial.....do.	3,303	4,075	-----	1,247	-----	-----	1,974	-----	-----	852	-----	-----	-----	-----	-----	-----
Industrial.....do.	6,718	20,374	-----	2,435	-----	-----	2,263	-----	-----	2,887	-----	-----	-----	-----	-----	-----
Other.....do.	608	2311	-----	91	-----	-----	240	-----	-----	71	-----	-----	-----	-----	-----	-----

† Revised. ‡ Preliminary. § Reported annual total; revisions are not distributed to the monthly data. ¶ Beginning 1976, Industrial includes electric generation, prior to 1976, electric generation was included with other. § Data are not wholly comparable on a year to year basis because of changes from one classification to another. ¶ Data are reported on the basis of 100 percent content of the specified material unless otherwise indicated. § Monthly revisions back to 1973 are available upon request. ¶ Corrected.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

FOOD AND KINDRED PRODUCTS; TOBACCO

ALCOHOLIC BEVERAGES²																
Beer:																
Production.....mil. bbl.	160.60	163.66	11.29	11.19	11.98	11.48	16.20	16.03	16.79	16.90	15.92	15.31	13.30	12.61		
Taxable withdrawals.....do.	148.64	150.39	10.52	10.83	10.01	10.43	14.55	14.28	15.00	15.71	14.80	14.64	12.89	11.65		
Stocks, end of period.....do.	12.74	11.94	13.48	11.94	14.01	13.95	14.59	15.03	15.57	15.37	15.13	14.44	13.57	13.53		
Distilled spirits (total):																
Production.....mil. tax gal.	144.24	160.42	14.91	12.16	11.33	12.98	14.84	13.61	15.25	13.85	11.24	11.40	13.82			
Consumption, apparent, for beverage purposes.....mil. wine gal.	1422.61	1425.89	41.81	53.41	28.97	28.16	36.67	33.29	32.76	38.62	31.11	33.40				
Taxable withdrawals.....mil. tax gal.	229.74	216.34	20.87	17.46	16.85	15.41	19.51	17.44	16.85	17.79	14.45	19.79				
Stocks, end of period.....do.	793.87	752.85	756.50	752.85	747.64	745.49	743.22	740.35	737.50	737.26	735.02	728.33	725.51			
Imports.....mil. proof gal.	113.46	112.71	13.37	12.14	7.08	7.03	9.47	8.28	8.78	9.23	7.94	7.21	11.58	13.27	11.59	
Whisky:																
Production.....mil. tax gal.	59.64	79.12	6.16	5.36	5.81	6.71	7.85	7.78	8.14	8.08	6.14	6.17	6.16			
Taxable withdrawals.....do.	140.82	126.62	12.63	9.71	10.12	9.11	11.04	10.04	9.18	9.70	7.84	11.40	11.22			
Stocks, end of period.....do.	787.39	692.34	696.27	692.34	687.72	685.03	682.68	680.51	678.26	678.68	677.94	672.33	668.17			
Imports.....mil. proof gal.	94.98	92.07	10.99	9.93	5.59	5.62	7.58	6.66	6.97	7.56	6.12	5.82	9.33	10.91	9.70	
Rectified spirits and wines, production, total.....mil. proof gal.	112.50	107.71	10.04	9.79	7.92	7.23	10.34	8.07	8.89	9.50	7.48	9.84	9.52			
Whisky.....do.	46.64	41.84	3.94	3.51	2.95	2.74	3.83	2.80	3.20	3.48	3.01	3.65	3.72			
Wines and distilling materials:																
Effervescent wines:																
Production.....mil. wine gal.	19.37	20.59	2.14	1.75	1.86	1.92	1.92	1.77	1.25	1.13	1.29	2.13	2.02			
Taxable withdrawals.....do.	18.46	19.22	2.86	2.34	1.06	.96	1.41	1.01	1.70	1.60	1.06	1.57	2.13			
Stocks, end of period.....do.	7.90	8.35	8.99	8.35	9.05	9.94	10.37	11.03	10.60	10.00	10.17	10.60	10.41			
Imports.....do.	1.93	2.56	.39	.40	.25	.16	.21	.22	.25	.21	.17	.24	.38	.27	.26	
Still wines:																
Production.....do.	384.82	405.78	45.88	15.19	6.89	6.37	7.38	7.51	6.65	4.05	3.55	19.58	123.68			
Taxable withdrawals.....do.	300.25	298.25	26.13	27.34	23.31	21.31	31.19	25.02	24.29	26.32	22.29	25.93	25.98			
Stocks, end of period.....do.	451.84	473.70	499.43	473.70	452.46	429.28	398.63	378.12	357.30	332.30	309.38	298.78	302.22			
Imports.....do.	47.39	56.36	5.36	5.80	5.16	4.63	5.13	5.19	5.91	6.33	6.26	6.39	6.97	5.55	2.92	
Distilling materials produced at wineries.....do.	339.31	344.77	36.84	16.48	8.58	16.62	10.73	6.93	8.80	6.06	2.67	19.87	89.85			
DAIRY PRODUCTS																
Butter, creamery:																
Production (factory).....mil. lb.	983.8	978.6	77.6	92.5	105.6	96.2	98.4	100.4	103.9	95.0	84.2	78.2	75.5	84.9	81.8	
Stocks, cold storage, end of period.....do.	10.9	47.1	47.3	47.1	67.6	94.3	106.4	128.5	164.0	201.3	208.4	207.7	203.4	198.3	193.7	187.5
Price, wholesale, 52 score (N.Y.).....\$ per lb.	.818	.944	.929	.929	.927	.929	.952	1.032	1.029	1.029	1.031	1.037	1.051	1.056	1.050	1.060
Cheese:																
Production (factory) total.....mil. lb.	2,811.4	3,336.6	257.0	281.1	284.8	254.0	290.2	301.9	326.6	314.1	282.6	271.6	251.4	254.3	248.5	
American, whole milk.....do.	1,654.6	2,062.4	146.8	169.1	166.8	158.8	183.4	193.8	211.9	200.3	176.2	162.7	142.8	145.2	136.0	
Stocks, cold storage, end of period.....do.	367.8	478.4	482.0	478.4	485.7	470.6	486.9	511.4	558.5	583.9	592.3	590.1	554.0	502.8	479.2	466.0
American, whole milk.....do.	307.0	411.3	414.0	411.3	417.1	403.5	422.5	447.4	491.5	510.6	518.3	516.9	483.2	437.5	417.7	403.7
Imports.....do.	179.5	206.8	23.4	42.6	18.0	10.6	12.5	11.2	11.4	17.1	16.9	16.6	18.7	17.7	15.2	
Price, wholesale, American, single daisies (Chicago).....\$ per lb.	1.044	1.161	1.140	1.140	1.140	1.140	1.152	1.193	1.193	1.194	1.194	1.194	1.205	1.206	1.211	1.224
Condensed and evaporated milk:																
Production, case goods.....mil. lb.	926.9	895.5	50.2	61.3	62.5	63.3	68.8	81.6	85.7	80.2	76.9	71.7	59.6	53.3	46.1	
Stocks, manufacturers', case goods, end of month or year.....mil. lb.	58.6	70.6	96.9	70.6	66.3	63.5	63.0	66.4	101.5	127.7	133.2	158.7	148.6	134.3	101.0	
Exports:																
Condensed (sweetened).....do.	1.8	4.4	.2	.5	.3	.4	.6	.9	.2	.3	.1	.2	.4	.2	.3	
Evaporated (unsweetened).....do.	53.0	44.5	1.9	2.4	3.0	1.8	2.3	3.6	2.6	1.1	2.1	1.5	2.7	2.8	2.3	
Fluid milk:																
Production on farms.....do.	115,326	120,356	9,233	9,678	9,910	9,351	10,562	10,741	11,295	11,103	10,715	10,410	9,907	9,902	9,497	9,838
Utilization in mfd. dairy products.....do.	59,230	63,672	4,563	5,066	5,259	5,100	5,847	5,992	6,465	6,360	5,825	5,580	4,985	4,861	4,631	
Price, wholesale, U.S. average.....\$ per 100 lb.	8.75	9.66	9.89	9.72	9.65	9.54	9.43	9.43	9.34	9.38	9.50	9.69	10.00	10.20	10.20	10.20
Dry milk:																
Production:																
Dry whole milk.....mil. lb.	63.1	78.1	5.2	5.0	6.1	6.4	7.6	6.3	7.6	5.6	4.3	6.5	4.2	4.2	5.5	
Nonfat dry milk (human food).....do.	1,001.5	926.2	53.9	73.7	71.5	72.3	87.5	107.1	119.6	132.7	120.7	100.6	78.4	71.5	65.9	
Stocks, manufacturers', end of period:																
Dry whole milk.....do.	5.6	9.1	10.7	9.1	11.1	8.8	8.5	10.1	8.7	10.0	9.4	6.2	6.3	5.8	6.0	
Nonfat dry milk (human food).....do.	47.1	94.0	89.2	94.0	87.8	84.9	78.9	106.6	119.7	127.1	128.8	109.4	88.6	69.3	59.6	
Exports:																
Dry whole milk.....do.	35.5	31.6	1.9	1.8	2.4	1.6	2.5	2.3	2.5	1.9	2.3	2.1	2.0	1.7	1.5	
Nonfat dry milk (human food).....do.	90.6	10.3	3.2	.3	.2	.1	.1	.1	4.3	11.8	3.7	4.9	4.8	1.4	3.1	
Price, manufacturers' average selling, nonfat dry milk (human food).....\$ per lb.	.633	.635	.632	.625	.624	.623	.628	.653	.677	.679	.678	.679	.680	.680	.680	
GRAIN AND GRAIN PRODUCTS																
Exports (barley, corn, oats, rye, wheat).....mil. bu.	2,529.0	2,813.6	244.0	201.4	182.6	191.5	208.8	219.4	219.2	212.8	214.2	225.1	257.6	198.0	207.2	
Barley:																
Production (crop estimate).....do.	374.4	372.5														415.8
Stocks (domestic), end of period.....do.	276.4	272.0														
On farms.....do.	162.9	154.5														
Off farms.....do.	113.5	117.5														
Exports, including malt \$.....do.	31.8	52.1	7.3	6.8	3.4	8.5	1.1	1.8	8.7	7.7	11.4	6.3	9.5	8.1	2.4	
Prices, wholesale (Minneapolis):																
No. 2, malting.....\$ per bu.	3.80	3.11	3.11	2.75	2.76	2.80	2.90	2.79	2.72	2.28	1.95	1.84	2.21	2.23	2.33	2.33
No. 3, straight.....do.	3.60	3.06	3.09	2.75	2.80	2.75	2.85	2.79	2.75	2.32	1.97	1.86	2.09	2.27	2.32	2.32
Corn:																
Production (crop estimate, grain only).....mil. bu.	5,829.0	6,266.4														6,357.4
Stocks (domestic), end of period, total.....do.	4,448.6	4,860.7														
On farms.....do.	3,179.2	3,317.0														
Off farms.....do.	1,269.4	1,543.7														
Exports, including meal and flour.....do.	1,321.8	1,748.0	180.2	136.6	127.2	119.7	150.9	141.6	139.2	125.9	116.5	121.6	137.5	119.2	143.3	
Price, wholesale:																
Weighted avg., selected markets, all grades.....\$ per bu.	2.88	2.56	2.40	2.48	2.60	2.61	2.50	2.39	2.42	2.26	2.04	1.86	1.80	1.86	2.08	2.23

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

FOOD AND KINDRED PRODUCTS; TOBACCO—Continued

GRAIN AND GRAIN PRODUCTS—Con.																
Rice:																
Production (crop estimate)Δ..... mil. bags ♀	128.4	115.6														99.2
California mills:																
Receipts, domestic, rough..... mil. lb.	2,346	2,220	122	104	110	88	163	147	216	275	219	305	85	189	261	
Shipments from mills, milled rice..... do.	1,705	1,492	83	32	76	74	121	113	114	153	177	245	121	36	149	
Stocks, rough and cleaned (cleaned basis), end of period..... mil. lb.	138	158	127	158	156	138	136	132	171	209	185	149	82	166	191	
Southern States mills (Ark., La., Tenn., Tex.):																
Receipts, rough, from producers..... mil. lb.	8,461	9,563	709	575	624	729	505	292	199	207	123	1,242	3,474	753	779	
Shipments from mills, milled rice..... do.	5,312	5,481	573	572	521	507	587	526	555	521	407	518	556	531	545	
Stocks, domestic, rough and cleaned (cleaned basis), end of period..... mil. lb.	2,150	2,682	2,877	2,682	2,475	2,454	2,161	1,850	1,424	1,044	750	1,087	2,763	2,693	2,647	
Exports..... do.	4,711	4,640	406	574	233	313	487	263	529	381	498	494	511	188	634	
Price, wholesale, No. 2, medium grain (Southwest Louisiana)..... \$ per lb.	.190	.140	.123	.123	.113	.118	.121	.133	.156	.155	.153	.145	.150	.164	.205	.215
Rye:																
Production (crop estimate)Δ..... mil. bu.	116.0	115.0														17.0
Stocks (domestic), end of period..... do.	9.5	9.3		9.3			6.4			4.5			14.7			
Price, wholesale, No. 2 (Minneapolis)..... \$ per bu.	2.78	2.92	2.59	2.66	2.82	2.87	2.88	2.84	2.87	2.56	1.92	1.82	2.23	2.26	2.55	2.55
Wheat:																
Production (crop estimate), totalΔ..... mil. bu.	1,222	1,242														2,026
Spring wheatΔ..... do.	1,482	1,582														499
Winter wheatΔ..... do.	1,640	1,560														1,527
Distribution, quarterly ♂..... do.	1,860	1,754		406			392			278			742			
Stocks (domestic), end of period, total..... do.	1,384.6	1,780.1		1,780.1			1,388.1		1,110.8				2,396.5			
On farms..... do.	546.6	663.8		663.8			509.5		424.9				1,031.6			
Off farms..... do.	838.0	1,116.4		1,116.4			878.5		685.9				1,364.9			
Exports, total, including flour..... do.	1,158.2	1,001.3	54.3	57.4	51.9	63.1	56.5	75.7	70.8	78.5	85.6	96.1	110.2	69.4	58.5	
Wheat only..... do.	1,134.5	968.9	53.3	56.9	49.0	57.7	50.7	68.1	66.4	75.6	82.8	93.4	108.5	68.3	56.7	
Prices, wholesale:																
No. 1, dark northern spring (Minneapolis)..... \$ per bu.	4.60	4.10	3.17	3.08	3.08	3.08	3.11	3.03	2.87	2.72	2.57	2.59	2.86	2.92	3.02	2.94
No. 2, hd. and dk. hd. winter (Kans. City)..... do.	3.96	3.50	2.79	2.71	2.68	2.77	2.76	2.60	2.41	2.38	2.38	2.35	2.52	2.60	2.84	2.88
Weighted avg., selected markets, all grades..... \$ per bu.	4.84	3.87	3.08	2.96	2.97	3.01	3.00	2.94	2.82	2.64	2.57	2.55	2.82	3.04	3.13	3.05
Wheat flour:																
Production:																
Flour..... thous. sacks (100 lb.)	247,080	259,483	21,031	20,804	21,320	21,425	24,321	20,632	20,861	20,529	19,393	23,023	22,039	22,054	22,419	
Offal..... thous. sh. tons.	4,485	4,643	380	373	380	385	430	370	375	367	345	410	378	383	389	
Grindings of wheat..... thous. bu.	555,891	584,082	47,486	46,931	48,035	48,023	54,434	46,402	46,870	46,261	43,518	51,712	49,258	49,360	50,116	
Stocks held by mills, end of period..... thous. sacks (100 lb.)	3,907	4,334		4,334			4,248		4,167				3,537			
Exports..... do.	10,178	13,907	447	188	1,218	2,334	2,519	3,272	1,857	1,248	1,194	1,146	730	473	766	
Prices, wholesale:																
Spring, standard patent (Minneapolis)..... \$ per 100 lb.	10.552	9.509	7.913	7.838	7.750	7.863	7.725	7.125	6.925	6.500	6.588	6.688	7.025	7.188	7.338	7.200
Winter, hard, 95% patent (Kans. City)..... do.	9.365	8.303	6.938	6.838	6.763	6.813	6.525	6.200	5.838	5.575	5.850	5.913	6.088	6.325	6.575	6.488
LIVESTOCK																
Cattle and calves:																
Slaughter (federally inspected):																
Calves..... thous. animals	3,894	4,438	388	420	408	380	457	389	353	368	352	411	403	392	398	387
Cattle..... do.	36,904	38,992	3,154	3,205	3,272	3,041	3,330	3,033	3,054	3,374	3,085	3,489	3,320	3,282	3,244	3,200
Prices, wholesale:																
Beef steers (Omaha)..... \$ per 100 lb.	44.61	39.11	39.15	39.96	38.38	37.98	37.28	40.08	41.98	40.24	40.94	40.11	40.35	42.29	41.83	43.13
Steers, stocker and feeder (Kansas City)..... do.	33.42	37.65	35.07	35.19	34.87	36.54	38.29	41.33	39.88	38.22	38.90	39.61	39.04	40.18	38.79	39.71
Calves, vealers (So. St. Paul)..... do.	40.44	45.18	44.90	49.58	53.12	54.88	52.26	52.88	54.92	51.60	46.95	46.20	41.54	42.50	40.98	40.50
Hogs:																
Slaughter (federally inspected)..... thous. animals																
	64,926	70,454	7,110	6,525	5,840	5,825	7,236	6,400	5,877	5,695	4,908	6,149	6,514	6,507	6,885	6,186
Prices:																
Wholesale, average, all weights (Sioux City)⊕..... \$ per 100 lb.	48.30	43.19	31.96	38.28	39.65	40.40	37.61	37.20	41.94	43.89	45.76	44.34	41.39	40.97	39.44	44.13
Hog-corn price ratio (bu. of corn equal in value to 100 lb. live hog).....	17.1	17.5	15.4	16.2	16.2	16.8	15.8	15.6	18.4	19.8	23.9	26.3	25.1	23.9	19.9	21.0
Sheep and lambs:																
Slaughter (federally inspected)..... thous. animals																
	7,552	6,474	517	534	498	461	579	539	474	550	468	553	568	525	477	441
Price, wholesale, lambs, average (Omaha)..... \$ per 100 lb.	44.42	47.84	39.00	45.00	49.50	50.25	51.50	56.75	56.75	53.00	41.25	50.75	55.75	56.88	50.00	58.50
MEATS																
Total meats (excluding lard):																
Production, total..... mil. lb.	36,213	39,060	3,453	3,367	3,238	3,084	3,549	3,200	3,122	3,298	2,925	3,405	3,354	3,344	3,416	3,239
Stocks, cold storage, end of period ⊙..... do.	675	733	726	733	745	755	795	818	798	726	629	568	580	530	566	585
Exports (meat and meat preparations)..... do.	864	1,305	117	128	100	100	103	113	110	103	112	110	125	106	109	
Imports (meat and meat preparations)..... do.	1,694	1,868	134	94	131	150	143	147	147	130	147	158	167	117	87	
Beef and veal:																
Production, total..... do.	24,500	26,480	2,168	2,190	2,185	2,044	2,259	2,049	2,052	2,247	2,031	2,302	2,193	2,165	2,147	2,106
Stocks, cold storage, end of period ⊙..... do.	360	464	439	464	486	485	504	484	456	425	385	361	357	308	302	323
Exports..... do.	46	82	7	6	6	7	8	6	7	8	8	10	8	8	8	
Imports..... do.	1,304	1,467	104	64	100	123	107	111	113	101	115	129	140	95	71	
Price, wholesale, beef, fresh, steer carcasses, choice (600-700 lbs.) (East Coast)..... \$ per lb.	.754	.644	.645	.662	.638	.630	.605	.640	.675	.660	.668	.661	.667	.694	.690	.715
Lamb and mutton:																
Production, total..... mil. lb.	399	361	30	31	29	27	34	31	25	29	25	29	30	29	27	25
Stocks, cold storage, end of period..... do.	12	15	17	15	14	14	12	13	15	14	14	14	12	10	9	9

⊕ Revised. ⊙ Crop estimate for the year. ⊕ See "♂" note, this page. ⊙ Stocks as of June 1. ⊙ Previous year's crop; new crop not reported until June (beginning of new crop year). ⊙ See "⊙" note, this page. ⊙ Average for 11 months (Jan.-June, Aug.-Dec.). ⊙ Reflects revisions not available by months. ⊙ Crop estimate for 1977. ⊙ Bags of 100 lbs. ⊙ Data are quarterly except that beginning 1975, June figures cover Apr., May and Sept. covers June-Sept. ⊙ Effective April 1977 SURVEY, data beginning Feb. 1976 are restated to exclude cooler meats; comparable earlier data will be shown later. ⊕ See corresponding note, p. S-29. ⊕ Effective July 1977 SURVEY, monthly prices are restated through May 1977 to coincide with published annual averages which are for "all weights, excluding hogs"; comparable monthly data prior to May 1976 will be shown later. ⊕ Revised crop estimates for 1971-1974 are available.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977										
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

FOOD AND KINDRED PRODUCTS; TOBACCO—Continued

MEATS—Continued																
Pork (excluding lard):																
Production, total† mil. lb.	11,314	12,219	1,255	1,146	1,024	1,013	1,256	1,120	1,044	1,022	869	1,074	1,131	1,150	1,241	1,108
Stocks, cold storage, end of periodΔ do.	249	212	219	212	197	200	223	261	268	229	179	145	159	167	208	187
Exports do.	207	311	26	21	18	21	28	22	26	25	21	23	27	26	28	28
Imports do.	327	4318	25	26	26	23	30	29	27	29	27	24	22	18	12	-----
Prices, wholesale:																
Hams, smoked composite \$ per lb.	.882	.855	.875	1.007	.758	.787	.836	.742	.749	.742	5.740	.801	.776	.889	.971	1.013
Fresh loins, 8-14 lb. average (New York) do.	.993	.977	.760	.860	.971	.916	.832	.855	.932	1.004	1.042	.979	.986	.984	.901	1.029
POULTRY AND EGGS																
Poultry:																
Slaughter (commercial production) mil. lb.	10,434	11,739	1,021	928	849	780	938	895	988	1,095	988	1,179	1,115	1,092	1,028	-----
Stocks, cold storage (frozen), end of period, total mil. lb.	314	363	453	363	335	303	279	266	281	353	408	481	566	602	420	317
Turkeys do.	195	203	299	203	190	168	142	130	138	201	252	328	408	446	269	167
Price, in Georgia producing area, live broilers \$ per lb.	.269	.240	.200	.195	.220	.240	.250	.250	.250	.255	.270	.245	.245	.235	.215	.205
Eggs:																
Production on farms † mil. cases○	178.9	180.1	14.8	15.4	15.2	13.7	15.4	14.8	15.2	14.5	14.7	14.9	14.8	15.5	15.3	-----
Stocks, cold storage, end of period:																
Shell do.	22	28	25	28	29	44	42	42	33	40	38	47	49	49	51	38
Frozen do.	36	26	26	26	27	25	25	25	28	32	35	35	34	33	31	30
Price, wholesale, large (delivered; Chicago) \$ per doz.	.594	.678	.767	.823	.787	.756	.675	.624	.557	.570	.628	.593	.593	.537	.550	.615
MISCELLANEOUS FOOD PRODUCTS																
Cocoa (cacao) beans:																
Imports (incl. shells) thous. lg. tons.	233.0	235.4	11.6	16.5	30.6	21.5	19.0	16.1	25.1	13.6	10.9	10.8	6.2	8.1	4.7	-----
Price, wholesale, Accra (New York) \$ per lb.	.759	1.092	1.615	1.543	1.730	1.903	2.075	1.983	1.993	1.993	1.993	1.993	2.560	2.500	2.500	2.500
Coffee (green):																
Inventories (roasters', importers', dealers'), end of period thous. bags○	3,300	2,805	-----	2,805	-----	-----	3,519	-----	-----	3,115	-----	-----	2,617	-----	-----	-----
Roastings (green weight) do.	18,551	19,063	-----	4,621	-----	-----	4,752	-----	-----	3,239	-----	-----	2,350	-----	-----	-----
Imports, total do.	20,280	19,788	1,649	1,858	1,994	1,707	1,839	1,824	1,224	1,137	756	695	678	635	972	-----
From Brazil do.	3,748	3,092	477	500	641	466	225	483	198	154	98	71	5	1	3	-----
Price, wholesale, Santos, No. 4 (N.Y.) \$ per lb.	1.678	1.228	282	233	223	270	280	211	192	188	135	284	327	275	267	-----
Confectionery, manufacturers' sales mil. \$	2,830	2,912	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Fish:																
Stocks, cold storage, end of period† mil. lb.	356	371	381	371	362	316	312	308	301	323	366	393	424	416	431	442
Sugar (United States):																
Deliveries and supply (raw basis):\$																
Production and receipts:																
Production thous. sh. tons.	5,192	5,742	1,174	1,214	775	459	275	202	206	104	68	73	147	681	-----	-----
Deliveries, total do.	10,127	10,926	827	831	832	764	1,024	898	878	1,030	976	1,130	1,005	914	-----	-----
For domestic consumption do.	9,974	10,859	816	827	828	761	1,017	895	875	1,028	974	1,128	1,000	914	-----	-----
Stocks, raw and ref., end of period do.	2,731	3,324	2,504	3,324	3,624	3,758	3,430	3,302	3,191	2,782	2,424	2,019	1,951	2,259	2,931	-----
Exports, raw and refined sh. tons.	205,989	69,735	13,510	4,356	3,246	2,112	3,000	3,031	1,550	1,293	935	727	1,764	807	494	-----
Imports:																
Raw sugar, total thous. sh. tons.	3,680	4,331	269	427	247	418	321	407	389	388	456	474	569	481	418	-----
From the Philippines do.	415	900	79	125	53	72	109	107	67	86	111	78	181	84	141	-----
Refined sugar, total do.	148	214	26	1	2	21	13	31	33	13	7	8	24	16	20	-----
Prices (New York):																
Raw, wholesale \$ per lb.	.229	.135	.106	.102	.105	.113	.117	.124	.112	.100	.095	.110	.108	.098	.114	.114
Refined:																
Retail (incl. N.E. New Jersey) \$ per 5 lb.	1.986	1.262	1.114	1.115	1.101	1.106	1.121	1.142	1.155	1.131	1.126	1.115	1.134	1.112	-----	-----
Wholesale (excl. excise tax) \$ per lb.	.311	.190	.160	.156	.160	.167	.171	.181	.172	.157	.151	.172	.165	.155	.191	.185
Tea, imports do.	159,287	181,304	16,133	18,273	16,059	15,064	22,389	23,302	27,345	22,335	22,252	15,932	9,994	9,702	7,213	-----
FATS, OILS, AND RELATED PRODUCTS																
Baking or frying fats (incl. shortening):																
Production† mil. lb.	3,687.3	3,913.4	324.3	309.6	296.7	301.2	357.9	313.8	331.2	295.5	260.6	325.1	325.5	343.6	347.9	-----
Stocks, end of period⊕ do.	124.7	127.7	120.5	127.7	127.8	119.8	113.9	115.3	144.7	134.1	138.2	125.8	117.9	112.1	110.2	-----
Salad or cooking oils:																
Production† do.	3,947.2	4,343.0	351.4	344.8	311.5	316.9	399.5	340.2	372.4	340.4	327.1	374.8	364.9	376.2	386.4	-----
Stocks, end of period⊕ do.	90.8	104.0	89.4	104.0	117.8	118.1	97.9	91.5	105.8	100.3	101.5	90.6	88.7	109.3	101.1	-----
Margarine:																
Production do.	2,399.3	2,629.7	233.2	246.0	242.3	236.5	232.7	197.3	178.8	179.8	164.8	198.2	209.1	221.8	227.2	-----
Stocks, end of period⊕ do.	60.1	67.2	69.8	67.2	67.4	70.7	71.8	77.3	91.0	81.0	73.7	68.6	58.9	74.0	68.7	-----
Price, wholesale (colored; mfr. to wholesaler or large retailer; delivered) \$ per lb.	.525	.443	.455	.455	.455	.455	.462	.518	.528	.544	.547	.518	.535	.513	.513	.500
Animal and fish fats:																
Tallow, edible:																
Production (quantities rendered) mil. lb.	513.5	535.5	42.5	43.5	42.4	42.9	49.9	45.7	45.2	44.2	39.2	43.4	47.6	63.9	65.6	-----
Consumption in end products do.	649.7	660.5	59.7	63.7	58.5	58.9	74.7	60.9	60.6	63.1	59.2	68.4	74.9	72.3	67.8	-----
Stocks, end of period‡ do.	37.8	47.5	49.8	47.5	49.1	51.7	43.6	58.5	59.5	58.8	56.3	51.8	33.5	32.0	33.8	-----
Tallow and grease (except wool), inedible:																
Production (quantities rendered) do.	4,655.4	5,674.6	487.4	501.8	464.1	440.9	484.4	422.2	439.6	450.5	398.1	432.1	422.2	427.4	439.7	-----
Consumption in end products† do.	2,908.4	3,367.2	265.6	261.4	261.7	237.5	270.9	265.0	274.0	276.5	242.0	262.1	255.7	262.1	246.2	-----
Stocks, end of period‡ do.	276.6	354.8	384.5	354.8	377.9	357.5	402.7	359.3	372.8	352.6	326.0	356.0	359.3	350.8	328.8	-----

† Revised. ‡ Preliminary. § Average for Jan. and Feb. ¶ Average for 2 mos. (May and Sept.). † See "Δ" note, this page. ‡ Reflects revisions not distributed to the months. § Beginning July 1977, prices represent Midwest and Los Angeles and are not comparable with those for earlier periods which represent East coast and Los Angeles. ○ Cases of 30 dozen. ⊕ Bags of 132.276 lb. † Monthly data reflect cumulative revisions or prior periods. ⊕ Producers' and warehouse stocks. ‡ Factory and warehouse

stocks. † Monthly revisions back to 1974 are available. Δ Effective April 1977 SURVEY, data beginning Feb. 1976 are restated to exclude cooler pork; comparable earlier data will be shown later. † Revised series. Beginning May 1977 SURVEY, data represent total commercial slaughter (excluding rendered pork fat and lard), whereas the price for calves (p. S-28), represents a different market. Comparable data prior to Mar. 1976 will be shown later. † Corrected.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

FOOD AND KINDRED PRODUCTS; TOBACCO—Continued

FATS, OILS, AND RELATED PRODUCTS—Continued																
Vegetable oils and related products:																
Coconut oil:																
Production, refined..... mil. lb.	716.2	849.2	72.0	58.5	57.0	60.2	67.3	59.3	67.6	69.8	67.1	49.1	59.4	56.5	61.0	-----
Consumption in end products..... do.	865.3	990.3	87.1	75.1	73.4	69.9	82.6	73.0	73.9	79.1	63.1	71.9	73.1	76.3	78.9	-----
Stocks, refined, end of period †..... do.	26.7	40.1	42.1	40.1	35.3	38.6	33.4	37.7	46.9	41.4	48.0	42.9	40.1	37.9	31.0	-----
Imports..... do.	869.1	1,206.9	175.9	144.1	86.8	128.8	99.2	64.9	89.4	108.8	66.3	75.0	76.1	29.4	75.1	-----
Corn oil:																
Production: Crude..... do.	458.8	692.4	50.4	51.3	48.1	49.0	59.2	55.6	58.1	57.9	64.0	59.3	53.7	58.9	58.4	-----
Refined..... do.	496.6	562.2	45.7	44.9	47.2	44.0	51.1	42.4	50.7	46.3	43.9	53.2	49.0	51.6	48.6	-----
Consumption in end products..... do.	475.6	517.0	43.2	43.6	47.7	45.2	41.7	37.1	44.0	39.3	40.7	49.1	48.2	46.5	47.5	-----
Stocks, crude and ref., end of period †..... do.	39.5	42.1	43.1	42.1	33.4	28.6	32.4	43.2	61.2	62.1	64.7	54.8	45.8	39.5	48.4	-----
Cottonseed oil:																
Production: Crude..... do.	1,215.0	984.3	129.2	135.6	135.0	134.3	134.4	91.1	89.3	78.5	67.3	63.0	60.1	115.1	146.2	-----
Refined..... do.	1,112.7	819.8	73.0	86.2	95.4	98.0	103.5	79.2	82.0	73.3	55.8	57.8	48.7	77.8	111.4	-----
Consumption in end products..... do.	660.7	578.8	56.6	48.0	47.9	47.8	55.7	56.7	56.1	56.2	45.9	51.8	48.6	47.5	52.6	-----
Stocks, crude and ref., end of period †..... do.	160.3	191.6	167.2	191.6	207.7	233.0	237.5	226.9	214.0	182.5	153.0	122.2	79.4	91.5	111.9	-----
Exports (crude and refined)..... do.	656.5	520.9	15.7	76.6	50.4	80.5	104.2	72.4	23.0	58.3	57.4	52.5	65.5	35.4	64.2	-----
Price, wholesale (N.Y.)..... \$ per lb.	.322	.297	.290	.283	.278	.283	.323	.350	.360	.360	.280	.275	.245	.265	.300	-----
Soybean oil:																
Production: Crude..... mil. lb.	7,861.7	9,639.6	804.0	805.7	786.7	791.2	823.7	747.3	682.4	631.1	566.6	553.6	578.2	821.9	921.4	-----
Refined..... do.	6,422.9	7,185.4	596.3	578.0	553.5	567.3	698.7	624.7	639.1	578.1	553.1	648.4	612.0	686.8	749.8	-----
Consumption in end products..... do.	6,830.3	7,576.6	609.1	613.8	571.5	591.2	694.5	597.0	611.0	553.8	517.9	629.8	621.5	658.6	682.2	-----
Stocks, crude and ref., end of period †..... do.	799.9	1,488.1	1,431.9	1,488.1	1,599.5	1,609.4	1,486.4	1,478.9	1,355.0	1,168.4	1,032.0	937.3	766.6	752.1	765.6	-----
Exports (crude and refined)..... do.	758.0	1,088.4	107.7	75.8	103.7	92.3	236.4	103.3	209.4	159.9	154.2	72.0	66.0	108.8	185.5	-----
Price, wholesale (refined; N.Y.)..... \$ per lb.	.286	.244	.276	.262	.252	.275	.318	.358	.353	.330	.271	.275	.249	.246	.285	-----
TOBACCO																
Leaf:																
Production (crop estimate)..... mil. lb.	1,218.2	1,213.6	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1,934
Stocks, dealers' and manufacturers', end of period..... mil. lb.	4,738	4,978	-----	4,978	-----	-----	-----	4,797	-----	-----	4,425	-----	4,719	-----	-----	-----
Exports, incl. scrap and stems..... thous. lb.	563,030	577,997	51,307	75,600	78,832	52,964	54,605	31,271	38,003	41,525	49,692	47,506	66,331	17,850	49,515	-----
Imports, incl. scrap and stems..... do.	320,318	310,393	17,573	25,764	26,580	26,118	22,075	36,471	17,482	22,762	27,333	32,360	33,271	22,997	25,072	-----
Manufactured:																
Consumption (withdrawals):																
Cigarettes (small):																
Tax-exempt..... millions	62,278	72,125	6,185	6,032	4,896	5,295	7,085	6,371	6,432	7,991	5,935	8,031	7,716	5,693	-----	-----
Taxable..... do.	588,345	617,112	50,541	43,739	49,029	49,198	53,374	45,071	46,687	55,079	43,260	56,151	49,144	50,779	-----	-----
Cigars (large), taxable..... do.	4,476	4,041	340	264	247	280	332	295	344	350	274	314	242	384	-----	-----
Exports, cigarettes..... do.	49,935	61,370	4,383	5,987	3,823	4,161	6,180	5,676	6,267	5,781	5,887	6,442	7,530	3,570	4,177	-----

LEATHER AND PRODUCTS

HIDES AND SKINS																
Exports:																
Value, total †..... thous. \$.	296,279	552,276	46,132	48,522	50,536	47,158	55,844	53,264	48,048	49,051	51,786	46,500	50,381	39,260	38,207	-----
Calf and kip skins..... thous. skins.	2,403	2,162	145	158	194	182	144	250	174	171	246	187	249	179	196	-----
Cattle hides..... thous. hides.	21,269	25,270	2,042	2,282	2,276	1,998	2,289	2,167	2,016	2,023	2,189	1,937	2,157	1,631	1,572	-----
Imports:																
Value, total †..... thous. \$.	78,100	89,100	4,400	3,500	5,200	6,300	9,400	7,700	12,200	10,600	9,600	9,400	9,500	5,000	-----	-----
Sheep and lamb skins..... thous. pieces.	15,520	16,603	523	467	815	1,166	1,942	1,355	2,260	1,724	1,601	1,385	1,295	482	155	-----
Goat and kid skins..... do.	879	1,255	55	122	136	116	118	144	123	83	68	72	151	44	3	-----
Prices, wholesale, f.o.b. shipping point:																
Calfskins, packer, heavy, 9 1/2 lb..... \$ per lb.	3.350	7.754	.700	.700	.800	.900	.900	.900	1.150	1.150	.900	.900	.900	.750	.800	-----
Hides, steer, heavy, native, over 53 lb..... do.	.234	.338	.290	.323	.358	.363	.373	.401	.413	.363	.381	.368	.348	.338	.348	-----
LEATHER																
Production:																
Calf and whole kip..... thous. skins.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Cattle hide and side kip..... thous. hides and kips.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Goat and kid..... thous. skins.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Sheep and lamb..... do.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
Exports:																
Upper and lining leather..... thous. sq. ft.	2 184,104	2 203,707	15,108	18,388	18,630	19,272	23,315	18,338	16,714	16,205	18,612	12,276	16,838	12,807	14,980	-----
Prices, wholesale, f.o.b. tannery:																
Sole, bends, light..... index, 1967=100.	4 151.1	8 197.9	195.6	-----	-----	211.4	211.4	211.4	211.4	201.3	207.1	207.1	207.1	192.7	201.3	201.3
Upper, chrome calf, B and C grades..... index, 1967=100.	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
LEATHER MANUFACTURES																
Shoes and slippers:																
Production total..... thous. pairs.	413,080	422,507	29,969	29,232	30,898	31,316	34,600	31,305	32,798	33,220	24,931	34,600	32,926	33,546	-----	-----
Shoes, sandals, and play shoes, except athletic..... thous. pairs.	331,232	345,433	23,556	24,860	25,489	25,479	26,295	25,029	26,050	26,242	20,509	27,260	25,832	25,947	-----	-----
Slippers..... do.	70,536	64,880	5,483	3,294	4,392	4,745	4,961	5,149	5,566	5,867	3,870	6,134	6,006	6,532	-----	-----
Athletic..... do.	7,917	10,064	775	923	825	872	1,081	965	989	927	441	925	846	798	-----	-----
Other footwear..... do.	3,392	2,130	155	155	192	220	243	162	193	184	111	281	242	269	-----	-----
Exports..... do.	2 4,332	6,023	498	564	391	436	475	463	412	477	422	475	549	369	489	-----
Prices, wholesale f.o.b. factory:																
Men's and boys' oxfords, dress, elk or side upper, Goodyear welt..... index, 1967=100.	165.0	179.1	184.1	184.1	184.1	188.9	191.3	192.5	192.5	192.5	194.8	194.8	194.8	197.9	197.9	197.9
Women's oxfords, elk side upper, Goodyear welt..... index, 1967=100.	151.8	163.8	169.3	169.3	169.3	169.3	173.0	173.0	173.0	173.0	170.2	170.2	170.2	173.3	173.3	173.3
Women's pumps, low-medium quality..... do.	133.5	143.4	145.1	145.1	145.2	145.2	145.2	143.8	143.8	143.8	143.8	143.8	143.8	146.8	146.8	146.8

† Revised. † Crop estimate for the year. ‡ Annual total reflects revisions not distributed to the monthly data. § Average for Jan.-May and July-Dec. ¶ Jan.-June and Aug.-Dec. ¶ Jan., Feb., and Dec. ¶ Data include imports for Oct. ¶ Average for Jan., Feb., and Apr.-Dec. § Average for Jan.-Nov. ¶ Crop estimate for 1977. ¶ Includes data for items not shown separately. ¶ Factory and warehouse stocks.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

LUMBER AND PRODUCTS

LUMBER—ALL TYPES ⁹																
National Forest Products Association:																
Production, total.....mil. bd. ft.	132,087	137,153	2,972	2,921	2,822	2,930	3,388	3,260	3,253	3,160	2,975	3,290	3,368	3,268		
Hardwoods.....do.	5,872	6,830	496	428	370	460	532	536	545	575	507	583	526	552		
Softwoods.....do.	26,215	30,323	2,476	2,493	2,452	2,470	2,856	2,724	2,708	2,585	2,468	2,707	2,842	2,734		
Shipments, total.....do.	132,254	137,030	2,911	2,951	2,683	2,873	3,362	3,364	3,314	3,387	3,077	3,358	3,296	3,260		
Hardwoods.....do.	5,799	6,833	510	426	385	478	543	575	548	590	492	583	516	576		
Softwoods.....do.	26,455	30,197	2,401	2,525	2,298	2,395	2,819	2,789	2,766	2,797	2,585	2,775	2,780	2,693		
Stocks (gross), mill, end of period, total.....do.	4,967	5,091	5,062	* 5,091	5,171	5,228	5,325	5,197	5,133	4,964	4,845	4,787	4,859	4,876		
Hardwoods.....do.	875	882	843	* 882	830	812	867	802	796	781	788	789	799	775		
Softwoods.....do.	4,092	4,209	4,219	* 4,209	4,341	4,416	4,458	4,395	4,337	4,183	4,066	3,998	4,060	4,101		
Exports, total sawmill products.....do.	1,643	1,909	140	150	144	147	169	142	167	150	116	156	128	99	108	
Imports, total sawmill products.....do.	5,968	8,178	759	779	691	721	906	890	996	999	934	920	938	858	956	
SOFTWOODS																
Douglas fir:																
Orders, new.....mil. bd. ft.	7,430	8,377	673	696	675	674	771	733	725	748	537	715	663	726		
Orders, unfilled, end of period.....do.	550	634	618	634	638	637	672	621	573	631	547	573	504	497		
Production.....do.	7,134	8,322	700	675	720	686	743	745	737	656	599	682	772	747		
Shipments.....do.	7,196	8,293	677	680	671	675	736	784	773	690	621	689	732	733		
Stocks (gross), mill, end of period.....do.	920	949	954	949	998	1,009	1,016	977	941	907	885	878	918	932		
Exports, total sawmill products.....do.	505	602	31	45	42	37	65	38	53	43	34	35	30	25	28	
Sawed timber.....do.	125	180	8	18	10	13	8	8	16	12	13	11	8	8	6	
Boards, planks, scantlings, etc.....do.	398	422	23	27	31	24	57	30	37	31	21	24	21	17	22	
Price, wholesale:																
Dimension, construction, dried, 2" x 4", R. L. \$ per M bd. ft.	158.88	191.24	204.02	218.76	228.38	225.50	232.09	226.05	225.42	213.79	230.93	242.51	256.92	237.27	218.03	227.70
Southern pine:																
Orders, new.....mil. bd. ft.	17,251	17,879	699	660	587	735	790	790	757	838	707	798	646	739		
Orders, unfilled, end of period.....do.	453	443	441	443	416	499	495	505	509	562	523	524	447	434		
Production.....do.	16,967	17,987	656	663	651	702	787	778	729	728	708	759	742	764		
Shipments.....do.	17,142	17,889	633	658	614	652	794	780	753	785	746	797	723	752		
Stocks (gross), mill and concentration yards, end of period.....mil. bd. ft.	1,134	1,232	1,227	1,232	1,269	1,319	1,312	1,310	1,286	1,229	1,191	1,153	1,172	1,184		
Exports, total sawmill products.....M bd. ft.	67,502	140,386	12,833	17,349	9,455	16,361	13,413	17,548	14,938	18,473	9,194	15,682	14,242	9,272	10,223	
Prices, wholesale (indexes):																
Boards, No. 2 and better, 1" x 6", R. L. 1967=100.	166.6	207.5	244.3	246.1	249.2	247.8	252.4	258.5	259.9	263.7	275.9	284.2	287.9	288.6	200.6	294.3
Flooring, C and better, F. G., 1" x 4", S. L. 1967=100.	226.9	233.6	238.4	238.4	238.4	238.4	240.5	242.7	243.8	246.0	251.5	254.8	259.1	260.2	262.4	264.6
Western pine:																
Orders, new.....mil. bd. ft.	8,665	9,760	812	786	669	738	922	808	812	1,015	824	908	884	847		
Orders, unfilled, end of period.....do.	538	554	604	554	550	555	589	576	540	637	604	606	554	563		
Production.....do.	8,445	9,789	781	822	732	753	914	820	876	840	822	892	941	860		
Shipments.....do.	8,519	9,744	763	836	673	733	888	821	848	918	857	906	936	838		
Stocks (gross), mill, end of period.....do.	1,270	1,315	1,329	1,315	1,374	1,394	1,420	1,419	1,447	1,369	1,334	1,320	1,325	1,347		
Price, wholesale, Ponderosa, boards, No. 3, 1" x 12", R. L. (6' and over) \$ per M bd. ft.	131.97	184.31	198.57	206.15	227.16	232.18	245.58	251.21	239.98	216.44	219.96	232.57	236.48	235.28	215.40	226.2
HARDWOOD FLOORING																
Oak:																
Orders, new.....mil. bd. ft.	104.2	114.5	8.0	8.5	9.3	7.4	11.8	10.1	7.6	9.4	9.6	11.1	9.4	9.1	9.8	
Orders, unfilled, end of period.....do.	4.5	4.2	4.4	4.2	5.1	5.0	6.2	7.0	5.3	5.6	7.0	7.6	7.3	6.4	6.8	
Production.....do.	93.8	104.5	8.3	8.8	7.8	7.9	9.8	9.4	9.1	9.5	8.3	10.0	10.1	9.7	9.3	
Shipments.....do.	98.8	109.3	8.3	8.1	8.5	7.5	10.5	9.3	9.3	9.1	8.7	10.6	9.7	10.0	9.4	
Stocks (gross), mill, end of period.....do.	12.5	8.9	7.1	8.9	8.1	8.5	7.7	7.2	7.1	6.1	5.6	5.1	5.4	5.1	4.9	

METALS AND MANUFACTURES

IRON AND STEEL																
Exports:																
Steel mill products.....thous. sh. tons.	2,953	2,654	186	228	162	205	202	233	178	151	136	143	171	125	148	
Scrap.....do.	9,608	8,120	554	634	511	465	532	449	524	654	594	438	598	474	462	
Pig iron.....do.	60	57	6	6	4	3	11	4	10	6	4	3	3	2	2	
Imports:																
Steel mill products.....do.	12,012	14,285	1,597	1,364	1,121	1,002	1,175	1,115	1,817	1,819	1,582	1,831	2,057	1,762	1,938	
Scrap.....do.	305	507	50	34	55	53	62	80	43	41	35	67	62	40	39	
Pig iron.....do.	478	415	23	64	6	20	17	14	36	58	22	19	25	54	48	
Iron and Steel Scrap [‡]																
Production.....thous. sh. tons.	146,042	150,035	3,786	3,661	3,497	3,591	4,436	4,333	4,571	4,570	3,961	4,207	* 4,187	* 4,251		
Receipts, net.....do.	136,753	141,144	3,090	2,940	3,338	3,567	4,393	4,340	4,456	3,961	4,051	* 4,035	* 4,076			
Consumption.....do.	182,331	189,914	6,873	6,508	6,735	6,663	8,255	8,107	8,570	8,507	7,527	7,734	* 7,605	* 7,972		
Stocks, end of period.....do.	18,766	19,988	9,890	9,988	9,723	9,828	9,864	9,908	9,720	10,625	10,553	9,760	* 9,917	* 9,741		
Prices, steel scrap, No. 1 heavy melting:																
Composite (5 markets) \$ per lg. ton.	70.83	73.62	60.02	63.22	67.03	68.76	73.66	74.03	68.01	63.32	* 60.47	* 60.65	* 59.53	* 51.77	* 47.17	
Pittsburgh district.....do.	72.50	79.10	64.00	69.00	74.00	74.00	76.00	75.50	70.50	67.50	67.00	66.50	64.00	56.00	51.00	61.50

Revised. * Preliminary. † Annual data; monthly revisions are not available.
² Effective with Feb. 1977, composite reflects substitution of Los Angeles for San Francisco; effective July 1977, it reflects addition of Detroit and Houston.
⁹ Totals include data for types of lumber not shown separately.
† Effective Aug. 1976 SURVEY, scrap excludes imports of rerolling rails and pig iron excludes sponge iron imports previously included.
‡ Effective with 1974 annual and Jan. 1975 figures, data reflect expanded sample and exclusion of direct-reduced (pre-reduced) iron, previously included in scrap series.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

METALS AND MANUFACTURES—Continued

IRON AND STEEL—Continued																
Ore																
Iron ore (operations in all U.S. districts):																
Mine production.....thous. lg. tons	178,866	79,200	6,690	6,134	5,642	5,968	6,205	6,084	6,971	7,429	6,677	1,805	1,763	1,548	-----	-----
Shipments from mines.....do.	175,967	77,216	6,806	5,528	2,220	2,139	2,156	4,824	8,176	9,432	9,616	5,590	2,459	2,579	-----	-----
Imports.....do.	46,742	44,390	3,904	3,422	2,252	1,184	881	2,051	3,078	4,299	3,520	4,961	4,245	4,083	4,207	-----
U.S. and foreign ores and ore agglomerates:																
Receipts at iron and steel plants.....do.	112,718	117,697	10,053	9,274	3,471	3,232	4,251	7,058	11,119	12,680	13,174	10,566	7,958	7,351	6,387	-----
Consumption at iron and steel plants.....do.	106,230	114,324	8,205	8,195	7,873	7,890	9,641	9,667	10,930	10,108	9,436	9,074	8,504	8,685	8,185	-----
Exports.....do.	2,538	2,913	268	238	123	2	31	364	376	393	598	147	2	100	18	-----
Stocks, total, end of period.....do.	169,144	75,035	73,240	75,035	73,533	72,233	70,055	68,485	67,701	68,502	69,691	67,211	65,923	63,523	-----	-----
At mines.....do.	12,299	14,026	13,460	14,026	17,117	20,928	24,978	26,220	25,012	23,002	20,247	16,460	15,739	14,605	-----	-----
At furnace yards.....do.	52,231	56,246	55,167	56,246	51,843	47,186	41,804	39,195	38,381	41,991	45,793	47,224	46,678	45,344	43,354	-----
At U.S. docks.....do.	4,614	4,763	4,613	4,763	4,573	4,119	3,273	3,070	3,308	3,509	3,651	3,527	3,506	3,484	3,018	-----
Manganese (mn. content), general imports.....do.	1,033	1,053	93	114	70	53	29	48	121	119	62	87	110	49	21	-----
Pig Iron and Iron Products																
Pig iron:																
Production (excluding production of ferroalloys).....thous. sh. tons	79,923	86,870	6,382	6,272	5,985	5,827	7,174	7,382	7,962	7,530	7,008	6,763	6,566	6,636	6,108	-----
Consumption.....do.	79,638	86,929	6,402	6,275	5,984	5,860	7,227	7,396	8,053	7,535	7,001	6,832	6,650	6,753	-----	-----
Stocks, end of period.....do.	1,435	1,513	1,491	1,513	1,530	1,520	1,505	1,526	1,508	1,526	1,564	1,573	1,530	1,419	-----	-----
Price, basic furnace.....\$ per sh. ton	181.76	182.33	182.25	182.25	182.25	-----	178.00	178.00	178.00	178.00	178.00	178.00	191.00	191.00	191.00	191.00
Castings, gray and ductile iron:																
Orders, unfilled, for sale, end of period.....thous. sh. tons	991	832	816	834	883	901	884	920	964	920	923	940	870	897	-----	-----
Shipments, total.....do.	12,407	14,168	1,160	1,036	1,098	1,130	1,362	1,302	1,357	1,425	1,106	1,276	1,264	1,319	-----	-----
For sale.....do.	6,397	6,859	546	482	479	507	629	632	660	698	557	658	632	641	-----	-----
Castings, malleable iron:																
Orders, unfilled, for sale, end of period.....thous. sh. tons	64	56	65	56	62	68	69	68	75	67	72	71	70	69	-----	-----
Shipments, total.....do.	729	848	69	63	66	66	80	69	69	72	58	73	75	77	-----	-----
For sale.....do.	431	491	39	34	37	39	46	36	36	37	31	42	43	44	-----	-----
Steel, Raw and Semifinished																
Steel (raw):																
Production.....thous. sh. tons	116,642	127,943	9,494	9,215	9,089	8,859	11,049	11,167	12,201	11,384	10,319	10,392	10,050	10,442	9,748	-----
Rate of capability utilization.....percent	76.2	80.9	72.2	67.8	66.8	72.1	81.2	83.3	88.1	84.9	76.7	77.2	77.2	77.7	75.0	-----
Steel castings:																
Orders, unfilled, for sale, end of period.....thous. sh. tons	748	431	424	432	450	446	436	447	439	427	444	441	438	429	-----	-----
Shipments, total.....do.	1,974	1,804	145	144	137	131	160	145	156	165	113	131	152	154	-----	-----
For sale, total.....do.	1,622	1,513	123	125	121	116	139	123	133	143	97	111	132	135	-----	-----
Steel Mill Products																
Steel products, net shipments:																
Total (all grades).....thous. sh. tons	79,957	89,447	6,717	6,334	6,459	6,690	8,750	7,981	8,369	8,811	6,986	7,737	7,662	7,400	7,188	-----
By product:																
Semifinished products.....do.	3,911	4,384	319	321	275	295	389	386	385	401	265	311	357	359	321	-----
Structural shapes (heavy), steel piling.....do.	5,121	4,187	307	303	299	320	380	374	417	410	339	409	362	334	355	-----
Plates.....do.	8,761	7,160	510	540	525	554	750	702	713	719	577	581	587	581	613	-----
Rails and accessories.....do.	1,965	2,017	182	187	143	141	193	164	175	164	134	145	169	155	140	-----
Bars and tool steel, total.....do.	13,367	14,234	1,041	1,013	1,024	1,086	1,425	1,373	1,417	1,514	1,140	1,296	1,297	1,297	1,253	-----
Bars: Hot rolled (incl. light shapes).....do.	8,146	8,664	614	611	624	663	874	834	848	926	642	757	775	791	786	-----
Reinforcing.....do.	3,666	3,876	291	274	285	281	377	373	397	408	384	372	369	343	314	-----
Cold finished.....do.	1,486	1,618	128	122	129	136	166	159	164	173	128	160	146	155	146	-----
Pipe and tubing.....do.	8,228	6,265	456	460	437	528	679	614	625	677	625	677	654	657	639	-----
Wire and wire products.....do.	2,154	2,461	168	166	170	183	239	234	221	240	172	199	203	201	174	-----
Tin mill products.....do.	5,687	6,436	457	470	622	505	782	457	474	561	502	656	539	453	400	-----
Sheets and strip (incl. electrical), total.....do.	30,763	42,303	3,279	2,873	2,963	3,077	3,913	3,678	3,941	4,124	3,233	3,463	3,493	3,363	3,292	-----
Sheets: Hot rolled.....do.	11,222	15,090	1,127	1,037	1,004	1,113	1,363	1,292	1,412	1,429	1,144	1,205	1,164	1,156	1,099	-----
Cold rolled.....do.	12,841	18,265	1,474	1,228	1,322	1,343	1,697	1,595	1,665	1,724	1,354	1,422	1,480	1,407	1,417	-----
By market (quarterly shipments):																
Service centers and distributors⊕.....do.	15,622	14,615	3,156	-----	-----	-----	3,492	-----	-----	4,271	-----	3,844	2,179	2,122	-----	-----
Construction, incl. maintenance⊕.....do.	8,767	7,508	1,713	-----	-----	-----	1,681	-----	-----	2,161	-----	1,957	2,603	2,570	-----	-----
Contractors' products.....do.	3,927	4,502	960	-----	-----	-----	972	-----	-----	1,328	-----	1,148	2,370	2,367	-----	-----
Automotive.....do.	15,214	21,351	4,873	-----	-----	-----	5,324	-----	-----	5,963	-----	5,109	2,805	2,725	-----	-----
Rail transportation.....do.	3,152	3,056	848	-----	-----	-----	788	-----	-----	889	-----	806	2,258	2,248	-----	-----
Machinery, industrial equip., tools.....do.	5,173	5,180	1,237	-----	-----	-----	1,318	-----	-----	1,496	-----	1,324	2,492	2,484	-----	-----
Containers, packaging, ship. materials.....do.	6,053	6,914	1,428	-----	-----	-----	1,971	-----	-----	1,697	-----	1,748	2,481	2,412	-----	-----
Other⊕.....do.	22,049	26,371	5,828	-----	-----	-----	6,371	-----	-----	7,374	-----	6,446	2,212	2,160	-----	-----
Steel mill shapes and forms, inventories, end of period—total for the specified sectors:																
Producing mills, inventory, end of period.....mil. sh. tons	33.9	36.4	36.1	36.4	36.1	35.5	34.4	34.7	35.4	34.8	35.5	35.5	-----	-----	-----	-----
Steel in process.....do.	10.0	12.2	12.2	12.2	12.2	11.9	11.1	11.0	11.2	10.9	11.4	11.5	10.6	-----	-----	-----
Finished steel.....do.	6.7	7.5	7.2	7.5	7.3	7.1	6.9	7.1	7.4	7.0	7.0	6.9	7.1	-----	-----	-----
Service centers (warehouses), inventory, end of period.....mil. sh. tons	6.7	6.5	6.4	6.5	6.4	6.3	6.3	6.4	6.5	6.4	6.6	6.6	-----	-----	-----	-----
Consumers (manufacturers only):																
Inventory, end of period.....do.	10.5	10.2	10.3	10.2	10.2	10.2	10.1	10.2	10.3	10.5	10.5	10.5	10.1	10.1	-----	-----
Receipts during period.....do.	58.9	62.6	5.0	4.5	4.8	5.0	5.7	5.8	5.9	6.1	4.6	5.3	5.3	5.5	-----	-----
Consumption during period.....do.	62.1	62.9	4.9	4.6	4.8	4.8	5.7	5.7	5.8	5.9	4.6	5.3	5.7	5.5	-----	-----

⊕ Revised. ⊕ Preliminary. 1 Annual data; monthly or quarterly revisions are not available. 2 For month shown. 3 Avg. for 8 months; price not available for July-Oct. 1976. 4 See note "⊕" for this page. ⊕ New series. Source: American Iron and Steel Institute. The production rate of capability utilization is based on tonnage capability to produce raw steel for a full order book

based on the current availability of raw materials, fuels and supplies, and of the industry's coke, iron, steelmaking, rolling and finishing facilities. Data prior to 1975 are not available. ⊕ Beginning Jan. 1976, data are not comparable with those for earlier periods since oil & gas supply houses and pipelines, which were formerly shown in "Service centers and distributors" and "Construction, incl. maintenance," respectively, are now included in "Other."

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual	Annual	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

METALS AND MANUFACTURES—Continued

NONFERROUS METALS AND PRODUCTS																
Aluminum:																
Production, primary (dom. and foreign ores) (thous. sh. tons.)	3,879	4,251	387	400	399	352	379	371	382	369	381	376	367			
Recovery from scrap (aluminum content) (do.)	1,156	1,346	119	106	109	109	124	123	120	117	103	116	119			
Imports (general):																
Metal and alloys, crude (do.)	457.9	568.7	33.6	25.9	15.8	48.5	68.6	59.3	59.8	74.1	67.5	75.9	42.2	49.6	54.5	
Plates, sheets, bars, etc. (do.)	61.0	87.1	6.5	6.5	5.5	5.0	6.0	6.1	4.8	6.8	5.8	8.0	8.0	5.8	5.1	
Exports:																
Metal and alloys, crude (do.)	185.8	152.4	13.1	12.7	9.8	10.6	8.7	12.5	4.4	6.7	7.9	9.3	9.0	2.9	8.9	
Plates, sheets, bars, etc. (do.)	187.0	222.1	19.2	21.0	13.2	18.1	21.2	20.0	20.2	18.1	14.6	18.7	15.7	13.9	11.6	
Price, primary ingot, 99.5% minimum (do.) \$ per lb.	.3979	.4449	.4800	.4800	.4800	.4800	.4878	.5100	.5100	.5100	.5300	.5300	.5300	.5300	.5300	
Aluminum products:																
Shipments:																
Ingot and mill prod. (net ship.) (mil. lb.)	9,804	12,568	960.9	1,055.6	885.8	976.9	1,432.1	1,204.6	1,175.1	1,208.4	975.2	1,063.8	1,050.4	1,072.7		
Mill products, total (do.)	7,427	9,716	742.5	802.3	742.5	752.7	1,022.6	952.1	948.3	915.4	800.3	866.9	878.3	864.8		
Sheet and plate (do.)	4,052	5,584	432.5	494.3	422.5	429.6	606.3	557.4	541.6	528.2	472.3	496.6	509.3	506.7		
Castings (do.)	1,376	1,845	160.6	147.6	168.7	166.9	186.7	166.2	172.8	176.5	130.2	165.2	165.8	174.4		
Inventories, total (ingot, mill products, and scrap), end of period (mil. lb.)	5,999	5,631	5,689	5,631	5,804	5,874	5,648	5,579	5,535	5,452	5,591	5,644	5,606	5,596		
Copper:																
Production:																
Mine, recoverable copper (thous. sh. tons.)	1,413.4	1,611.3	135.9	138.4	142.0	131.9	159.0	147.1	146.5	138.6	70.1	102.5	107.5	123.7		
Refinery, primary (do.)	1,443.4	1,539.3	133.0	136.0	125.5	123.6	169.6	166.2	166.9	176.9	46.2	69.1	88.5	118.2		
From domestic ores (do.)	1,286.2	1,422.7	121.1	124.0	118.0	114.4	160.1	157.3	156.4	166.5	44.4	66.3	85.1	110.9		
From foreign ores (do.)	157.2	116.6	11.8	12.0	7.5	9.2	9.5	8.8	10.5	10.4	1.8	2.8	3.4	7.3		
Secondary, recovered as refined (do.)	330.0		41.0	30.0	30.0	31.0	32.0	36.0	39.0	46.0	24.0	21.0				
Imports (general):																
Refined, unrefined, scrap (copper cont.) (do.)	330.0	547.4	19.1	40.6	39.2	29.9	34.1	49.6	44.2	41.9	45.2	49.1	37.3	42.5	43.8	
Refined (do.)	146.8	384.1	10.4	26.8	26.8	21.7	17.7	35.0	28.6	36.0	40.4	39.7	31.7	32.1	28.6	
Exports:																
Refined and scrap (do.)	333.1	250.0	20.4	17.1	13.9	11.1	14.6	14.8	14.7	36.0	21.5	17.5	22.0	16.6	14.7	
Refined (do.)	172.4	113.1	7.3	6.8	3.7	1.8	3.6	5.2	5.2	5.2	5.5	1.6	4.4	4.6	5.0	
Consumption, refined (by mills, etc.) (do.)	1,541	1,995		499						635	4148	4211				
Stocks, refined, end of period (do.)	538	651	568	651	647	668	666	662	679	683	656	598				
Fabricators' (do.)	177	177	152	177	178	181	194	220	226	248	247	227				
Price, electrolytic (wirebars), dom., delivered \$ per lb.	.6416	.6956	.7062	.6577	.6624	.6862	.7255	.7439	.7261	.7120	.6800	.6379	.6062	.6062	.6062	
Copper-base mill and foundry products, shipments (quarterly total):																
Brass mill products (mil. lb.)	2,025	2,517		582			701			729						
Copper wire mill products (copper cont.) (do.)	2,056	2,383		581			659			724						
Brass and bronze foundry products (do.)	512	547		142			145			155						
Lead:																
Production:																
Mine, recoverable lead (thous. sh. tons.)	1,621.5	1,609.5	49.7	51.2	45.0	49.1	56.8	53.2	48.4	50.5	39.0	52.1	46.2	49.1	49.0	
Recovered from scrap (lead cont.) (do.)	1,658.5	682.5	64.9	57.3	54.3	58.3	68.2	61.4	61.1	64.9	54.0	62.6	65.7	62.6		
Imports (general), ore (lead cont.), metal (do.)																
188.6	224.6	18.5	24.3	19.7	24.0	22.3	15.4	19.8	6.2	21.2	39.8	10.0	4.6	9.2		
Consumption, total (do.)	1,297.1	1,429.1	122.5	120.0	123.4	114.5	134.4	126.9	121.8	126.2	105.0	124.0	133.5	132.7		
Stocks, end of period:																
Producers', ore, base bullion, and in process (lead cont.), ABMS (thous. sh. tons.)	191.4	180.7	187.2	180.7	169.8	173.2	162.5	163.4	158.0	157.1	163.1	183.4	192.7	189.7		
Refiners' (primary), refined and antimonial (lead cont.) (thous. sh. tons.)	81.3	43.7	43.8	43.7	36.5	27.1	22.7	20.5	19.7	14.5	13.2	12.7	11.1	13.5		
Consumers' (lead cont.) (do.)	133.3	110.1	108.0	110.1	104.2	106.1	104.9	101.6	101.1	115.2	120.8	119.7	118.2	112.9		
Scrap (lead-base, purchased), all smelters (gross weight) (thous. sh. tons.)	87.8	96.0	95.6	96.0	85.0	84.0	89.3	90.6	89.0	85.2	90.6	90.5	88.7	84.8		
Price, common grade, delivered (do.) \$ per lb.	.2153	.2310	.2579	.2582	.2686	.2869	.3100	.3100	.3100	.3100	.3100	.3100	.3100	.3102	.3200	
Tin:																
Imports (for consumption):																
Ore (tin content) (metric tons.)	6,415	5,733	838	1,346	2	1,079	522	499	497	2,429	0	0	0	607		
Metal, unwrought, unalloyed (do.)	44,365	45,055	3,484	4,956	4,016	4,577	4,523	3,955	3,711	3,549	4,084	4,406	3,541	4,056	4,120	
Recovery from scrap, total (tin cont.) (do.)	15,869	14,057	1,245	1,275	1,140	1,275	1,480	1,300	1,205	1,205	1,160	1,425				
As metal (do.)	1,917	2,393	208	193	120	125	150	150	135	155	175	155				
Consumption, total (do.)	55,800	67,567	5,950	5,700	5,600	5,500	6,800	5,800	5,800	6,000	5,200	5,800	5,900			
Primary (do.)	43,620	53,850	4,690	4,600	4,400	4,500	5,300	4,600	4,700	4,800	4,200	4,500	4,700			
Exports, incl. reexports (metal) (do.)																
3,597	2,337	266	352	594	606	667	370	281	381	568	235	498	594	238		
Stocks, pig (industrial), end of period (do.)	9,536	7,287	7,213	7,282	8,032	7,883	5,874	6,175	5,644	4,720	6,305	5,557	5,378			
Price, Straits quality (delivered) \$ per lb.	3.3982	3.7982	4.0778	4.1817	4.6347	5.0743	5.1893	4.8007	4.8861	4.8179	5.1804	5.5637	5.5638	6.0794	6.2093	
Zinc:																
Mine prod., recoverable zinc (thous. sh. tons.)																
469.4	484.5	37.3	36.6	39.1	40.5	41.9	40.2	38.9	39.0	32.4	41.2	36.4	37.2			
Imports (general):																
Ores (zinc content) (do.)	145.0	97.1	8.9	8.0	10.3	4.3	7.3	4.7	4.6	8.1	11.3	11.3	9.3	11.8	26.5	
Metal (slab, blocks) (do.)	380.4	714.5	52.4	62.5	34.0	37.8	51.6	60.8	52.1	36.2	43.5	55.4	42.2	47.1	54.4	
Consumption (recoverable zinc content):																
Ores (do.)	182.7	96.6	6.8	7.1	6.3	7.7	8.1	8.3	9.3	8.5	8.6	9.2	10.6	7.7		
Scrap, all types (do.)	223.8	202.3	15.7	15.1	15.0	15.2	16.4	16.4	16.2	15.8	15.3	15.8				
Slab zinc: \$																
Production (primary smelter), from domestic and foreign ores (thous. sh. tons.)																
438.1	498.9	37.0	41.4	42.5	36.8	38.8	40.2	32.7	27.8	23.6	21.7	22.5	31.1			
Secondary (redistilled) production (do.)	57.9	63.6	4.2	3.7	3.1	2.8	4.8	2.7	4.5	4.1	3.2	3.7	3.4	3.1		
Consumption, fabricators (do.)	925.3	1,127.1	81.4	79.1	83.6	82.0	106.2	96.2	96.5	100.4	80.6	98.4	96.0	95.0		
Exports (do.)	6.9	3.5	.2	.1	.1	0	(?)	(?)	(?)	(?)	(?)	(?)	(?)	(?)		
Stocks, end of period:																
Producers', at smelter (ABMS) (do.)	75.7	88.8	82.7	88.8	90.5	84.2	58.9	67.9	78.9	77.3	74.9	64.7	59.7	60.3	65.3	
Consumers' (do.)	107.3	111.8	124.3	111.8	112.9	105.2	108.0	116.7	107.7	89.1	83.6	86.2	81.9	76.9		
Price, Prime Western (do.) \$ per lb.	.3896	.3701	.3700	.3700	.3700	.3700	.3700	.3700	.3557	.3400	.3400	.3400	.3400	.3190	.3073	

Revised. ¹ Annual data; monthly revisions are not available. ² Less than 50 tons. ³ See "()" note. ⁴ For month shown. ⁵ Includes secondary smelters' lead stocks in refinery shapes and in copper-base scrap. ⁶ All data (except annual production figures) reflect U.S.A. remelted zinc and zinc purchased for direct shipment. ⁷ Revised Dec. 31 stocks for 1970-73 (thous. tons): 124.2; 48.6; 30.1, 25.9. Producers' stocks elsewhere, end of Nov. 1977, 40,654 tons. ⁸ New series effective with data for Jan. 1976. Source: Metals Week. MW Composite monthly price (Straits quality, delivered) is based on average of daily prices at two markets (Penang, Malaysia—settlement, and LME 3-month—High grade), and includes fixed charges plus dealer's and consumer's 70-day financing costs; no comparable earlier prices are available. ⁹ Effective with the Apr. 1977 SURVEY, data are expressed in metric tons (to convert U.S. long tons to metric tons, multiply by factor, 1.01605).

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	

METALS AND MANUFACTURES—Continued

MACHINERY AND EQUIPMENT															
Heating, combustion, atmosphere equipment, new orders (domestic), net, qtrly. \varnothing mil. \$.	146.4	184.3		45.5			49.0			39.3			36.2		
Electric processing heating equip. do.	43.6	35.8		10.7			12.6			17.0			18.5		
Fuel-fired processing heating equip. do.	52.4	77.3		18.2			18.1			22.3			17.6		
Material handling equipment (industrial): Orders (new), index, seas. adj. 1967=100.	135.6	167.5	177.9	198.5	209.7	226.1	227.7	235.7	220.6	236.4	139.0	206.7			
Industrial trucks (electric), shipments: Hand (motorized) number.	15,063	15,786	1,527	1,396	1,242	1,439	1,569	1,385	1,351	1,676	1,011	1,535	1,705	1,760	
Rider-type do.	19,381	16,152	1,629	1,618	1,678	1,660	1,912	1,674	1,929	2,182	1,171	1,844	1,661	1,930	
Industrial trucks and tractors (internal combustion engines), shipments, number.	36,388	33,930	3,520	2,594	3,669	4,014	4,274	3,677	3,666	3,956	2,686	3,442	3,887	3,809	
Industrial supplies, machinery and equipment: New orders index, seas. adjusted 1967-69=100.	142.3	165.4	171.9	178.7	187.6	188.3	194.6	201.7	198.8	199.1	199.5	195.4	200.0	206.2	207.5
Industrial suppliers distribution: Sales index, seas. adjusted 1967=100.	165.2	183.8	186.8	187.5	191.2	186.4	196.9	205.0	201.9	207.5	207.9	218.6	224.7	214.7	212.3
Price index, not seas. adj. (tools, material handling equip., valves, fittings, abrasives, fasteners, metal products, etc.) 1967=100.	169.4	178.4	182.9	183.7	185.8	187.5	188.2	188.7	189.4	190.3	192.0	192.7	193.6	195.4	196.3
Machine tools: Metal cutting type tools: Orders, new (net), total mil. \$.	915.90	1,662.15	201.30	171.10	153.45	135.35	200.20	196.75	199.70	187.25	150.00	147.70	198.50	160.10	223.00
Domestic do.	780.50	1,476.60	191.35	150.50	139.70	117.20	186.95	188.05	175.00	159.55	124.95	135.95	174.40	150.55	206.20
Shipments, total do.	1,878.65	1,482.10	117.10	161.95	94.30	111.90	129.90	125.25	130.50	155.05	122.40	106.25	166.50	141.55	162.50
Domestic do.	1,548.10	1,269.85	106.10	145.70	80.55	99.50	117.50	110.95	118.20	136.50	114.00	97.75	147.55	131.40	140.05
Order backlog, end of period do.	1,062.4	1,242.4	1,233.2	1,242.4	1,301.6	1,325.1	1,395.4	1,466.9	1,536.1	1,568.2	1,595.8	1,637.3	1,669.3	1,687.8	1,748.3
Metal forming type tools: Orders, new (net), total do.	270.45	568.05	43.85	58.15	46.15	56.55	62.55	55.15	66.25	70.00	70.05	102.95	53.65	79.80	64.15
Domestic do.	212.65	508.95	39.00	53.50	42.50	52.65	53.00	51.35	60.10	62.30	64.50	97.35	50.80	74.85	59.80
Shipments, total do.	573.05	577.55	59.90	47.55	50.75	56.75	53.30	51.50	55.20	67.20	45.25	38.70	44.95	51.55	60.05
Domestic do.	484.50	473.50	46.60	40.65	36.45	50.65	49.15	45.70	50.65	64.30	41.55	34.05	41.10	47.15	49.95
Order backlog, end of period do.	218.6	209.2	198.6	209.2	204.6	204.4	213.6	217.3	228.3	231.1	225.9	320.2	328.9	357.2	361.3
Tractors used in construction, shipments, qtrly: Tracklaying, total units.	20,453	19,533		4,321			4,963			5,368			4,560	3,891	
mil. \$.	1,111.5	1,025.7		248.6			267.8			291.1			265.2	109.0	
Wheel (contractors' off-highway) units.	4,592	3,772		813			1,119			1,263					
mil. \$.	289.6	238.3		49.5			69.8			84.2					
Tractor shovel loaders (integral units only), wheel and tracklaying types units.	37,956	34,543		7,628			10,827			11,619					
mil. \$.	1,132.7	975.7		222.9			322.4			361.9					
Tractors, wheel, farm, nonfarm (ex. garden and construction types), ship., qtrly units.	224,259	207,036		43,112			60,072			60,039			39,271	19,795	
mil. \$.	2,321.5	2,451.5		522.3			785.5			770.2			534.6	272.1	
ELECTRICAL EQUIPMENT															
Batteries (auto-type replacement), ship. thous.	42,582	49,203	5,052	5,460	4,909	4,314	3,947	3,183	3,302	3,513	3,280	5,079	5,685	6,060	5,190
Radio sets, production, total market. thous.	34,516	44,102	3,616	3,526	2,697	2,738	3,832	2,935	3,391	3,684	4,404	5,853	7,209	4,891	5,061
Television sets (incl. combination models), production, total market. thous.	10,637	14,131	1,219	1,216	1,103	1,141	1,346	1,203	1,255	1,431	1,127	1,068	1,653	1,380	1,366
Household major appliances (electrical), factory shipments (domestic and export) \varnothing thous.	24,292	25,800	2,125	1,714	1,967	2,179	2,903	2,506	2,580	3,036	2,556	2,828	2,732	2,647	2,529
Air conditioners (room) do.	2,670	2,962	95.5	196.9	219.2	253.4	427.7	488.1	440.8	393.4	411.1	108.0	91.3	101.8	152.8
Dishwashers do.	2,702	3,140	301.5	245.3	239.4	272.0	316.4	255.7	255.5	327.8	202.5	311.9	276.4	339.1	321.1
Disposers (food waste) do.	2,080	2,515	192.1	202.4	224.3	228.7	252.1	225.5	229.1	256.4	228.4	274.2	270.8	272.0	271.9
Ranges do.	2,082	2,462	208.4	187.5	187.0	193.4	250.4	215.5	242.3	288.9	222.9	290.2	285.2	277.7	280.1
Refrigerators do.	4,577	4,817	350.7	289.5	354.9	374.6	505.8	419.9	456.7	659.1	525.0	590.2	565.7	461.4	435.4
Freezers do.	2,457	1,548	82.9	81.3	101.1	107.1	152.5	114.9	136.2	196.3	194.8	207.8	142.9	97.1	77.4
Washers do.	4,228	4,492	345.0	277.1	352.0	406.6	478.3	361.5	404.9	465.4	361.8	495.2	467.9	413.6	385.0
Dryers (incl. gas) do.	2,869	3,173	295.3	217.8	247.7	292.2	336.5	241.5	246.3	291.3	246.3	330.2	375.6	343.5	329.2
Vacuum cleaners (qtrly.) do.	7,817	9,285		2,490.9			2,489.3								
GAS EQUIPMENT (RESIDENTIAL)															
Furnaces, gravity and forced-air, shipments, thous.	1,186	1,554	132.6	125.1	129.2	118.5	127.9	120.9	99.5	116.8	102.8	128.3	144.0	152.9	125.7
Ranges, total, sales do.	1,618	1,824	136.1	152.4	113.6	133.7	170.0	142.5	151.8	161.3	118.9	146.6	161.3	142.8	148.5
Water heaters (storage), automatic, sales do.	2,645	3,112	240.4	251.5	249.9	273.7	296.9	298.8	286.2	288.4					

PETROLEUM, COAL, AND PRODUCTS

COAL															
Anthracite: Production \ddagger thous. sh. tons.	6,203	6,228	493	475	405	435	600	500	550	575	400	605	550	550	600
Exports do.	640	615	56	23	36	42	59	18	84	26	64	55	94	60	75
Price, wholesale, chestnut, f.o.b. car at mine \$ per sh. ton.	44.856	46.428	46.428	46.428	46.550	46.550	46.550	46.550	46.550	46.550	46.650	46.579	46.579	46.579	46.579
Bituminous: Production \ddagger thous. sh. tons.	648,438	678,685	56,995	57,046	44,555	50,365	65,020	58,893	60,799	61,078	47,785	55,920	65,505	64,415	65,345

\ddagger Revised. \P Preliminary. \S Annual data; monthly or quarterly revisions not avail. \S Includes data not shown separately. \S Monthly revisions back to 1973 are available upon request. \S Effective 1976, data reflect additional reporting firms.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

PETROLEUM, COAL, AND PRODUCTS—Continued

COAL—Continued																
Bituminous—Continued †																
Industrial consumption and retail deliveries, total †	thous. sh. tons	2,556,201	597,479	51,320	55,642	57,052	50,776	50,238	46,888	50,015	52,294	57,287	55,627	51,342	50,936	
Electric power utilities	do	403,249	443,750	38,178	40,950	43,094	37,524	37,145	33,851	37,023	39,940	44,737	43,957	40,008	38,220	
Mfg. and mining industries, total	do	145,746	144,817	12,401	13,521	12,808	12,522	12,568	12,456	12,566	11,987	12,109	11,344	10,923	12,185	
Coke plants (oven and beehive)	do	83,272	84,324	6,901	6,941	6,408	7,463	7,043	6,806	6,991	6,807	6,679	6,164	5,883	6,335	
Retail deliveries to other consumers	do	27,282	6,900	740	1,170	1,150	730	525	580	425	365	380	325	410	530	
Stocks, industrial and retail dealers' end of period, total																
Electric power utilities	do	127,115	133,673	134,117	133,673	118,080	114,387	122,584	129,830	137,518	144,269	137,462	136,832	144,953	158,164	
Mfg. and mining industries, total	do	109,707	116,551	117,322	116,554	103,863	101,065	107,374	113,631	120,358	125,399	121,052	121,249	127,723	137,165	
Oven-coke plants	do	17,175	16,879	16,585	16,879	14,067	13,182	15,055	16,059	17,000	18,695	16,210	15,393	16,990	20,724	
Retail dealers	do	8,671	9,804	9,605	9,804	8,107	7,463	9,025	9,898	10,625	12,035	9,815	9,043	10,410	12,599	
Exports	do	233	240	210	240	130	140	155	140	160	175	200	190	240	275	
Price, wholesale	Index, 1967=100	65,669	59,406	5,451	4,625	2,143	3,079	3,390	5,639	5,673	6,019	5,158	4,279	5,037	4,871	4,489
		387.0	367.5	368.0	373.0	375.3	378.5	378.0	379.1	386.1	389.7	392.2	393.7	394.4	397.0	401.6
COKE																
Production:																
Beehive	thous. sh. tons	2,727	605	42	55	49	37	37	36	26	38	38	36	36		
Oven (byproduct)	do	56,494	57,728	4,752	4,751	4,412	4,273	4,696	4,672	4,819	4,666	4,642	4,259	4,087		
Petroleum coke ‡	do	25,848	26,029	2,099	2,211	2,135	2,005	2,239	2,183	2,222	2,206					
Stocks, end of period:																
Oven-coke plants, total	do	4,996	6,487	5,799	6,487	6,970	7,247	7,297	7,054	6,749	6,481	6,531	6,292	6,213		
At furnace plants	do	4,718	6,173	5,539	6,173	6,660	6,953	7,005	6,765	6,514	6,247	6,309	6,084	6,023		
At merchant plants	do	278	314	261	314	310	294	292	290	235	234	221	208	190		
Petroleum coke	do	1,472	2,127	2,081	2,127	2,184	2,282	2,300	2,383	2,434	2,432					
Exports	do	1,273	1,315	90	122	91	51	108	108	95	160	126	136	(4)	159	142
PETROLEUM AND PRODUCTS																
Crude petroleum:																
Oil wells completed	number	216,408	17,020	1,291	1,512	1,391	1,321	1,817	1,405	1,382	1,720	1,304	1,400	1,924	1,562	1,785
Price, wholesale	Index, 1967=100	245.7	253.6	264.4	264.4	262.9	274.2	270.0	271.0	271.0	270.8	270.8	273.1	276.1	278.6	282.9
Gross input to crude oil distillation units	mil. bbl.	4,709.3	5,081.4	437.3	457.0	453.6	425.6	456.3	438.5	462.8	458.0					
Refinery operating ratio	% of capacity	86	89	90	91	89	93	90	89	89	91					
All oils, supply, demand, and stocks:																
New supply, total †	mil. bbl.	5,876.9	6,242.6	532.8	559.1	566.1	549.7	589.0	554.0	566.0	557.3					
Production:																
Crude petroleum †	do	3,056.8	2,971.7	241.3	248.2	241.5	225.9	248.7	242.4	248.3	241.2					
Natural-gas plant liquids	do	609.7	601.0	49.7	50.8	49.2	45.8	53.7	51.5	52.0	50.1					
Imports:																
Crude and unfinished oils	do	1,511.2	1,946.9	179.1	184.8	196.0	186.9	206.7	204.2	212.4	210.6					
Refined products †	do	699.2	723.1	62.7	75.4	79.3	91.1	79.9	56.0	53.4	55.5					
Change in stocks, all oils (decrease, -)	do	11.8	-21.1	-23.0	-69.0	-46.9	-14.4	36.3	34.2	50.2	23.9					
Demand, total †	do	6,033.9	6,465.7	575.8	644.3	640.9	578.5	566.1	533.8	534.7	548.2					
Exports:																
Crude petroleum	do	2.1	2.9	.9	1.1	.4	1.7	1.0	.5	2.8	.3					
Refined products	do	74.3	78.7	9.5	7.6	5.5	4.9	5.4	6.2	6.2	6.5					
Domestic product demand, total †	do	5,957.5	6,384.1	565.4	635.7	634.9	572.0	559.7	527.1	525.8	541.5					
Gasoline	do	2,450.3	2,567.2	212.2	222.2	201.2	194.1	215.0	221.5	219.2	229.3					
Kerosene	do	58.0	61.8	6.5	9.4	11.1	7.4	4.4	3.5	3.2	2.9					
Distillate fuel oil †	do	1,040.6	1,145.6	111.4	144.2	158.4	132.0	106.0	88.3	86.1	83.3					
Residual fuel oil †	do	898.6	1,019.6	97.6	111.8	116.0	102.5	97.6	85.7	84.3	88.6					
Jet fuel	do	365.3	361.4	29.4	31.8	32.7	29.0	32.3	30.6	30.8	29.7					
Lubricants †	do	50.2	55.7	4.5	4.6	4.4	3.5	5.9	4.7	5.3	5.3					
Asphalt	do	147.4	146.8	11.2	6.1	5.0	5.3	8.1	9.9	14.9	10.8					
Liquefied gases	do	486.4	514.0	52.4	59.6	59.8	53.6	42.0	36.8	36.2	37.1					
Stocks, end of period, total																
Crude petroleum	do	1,133.0	1,111.8	1,180.8	1,111.8	1,064.9	1,050.5	1,086.8	1,121.0	1,171.2	1,195.1					
Unfinished oils, natural gasoline, etc.	do	271.4	285.5	298.8	285.5	294.0	291.4	299.5	318.6	328.6	333.6					
Refined products	do	113.7	118.6	120.5	118.6	112.1	108.5	113.6	116.2	122.5	124.6					
Refined petroleum products:																
Gasoline (incl. aviation):																
Production	do	2,393.6	2,517.0	209.3	223.5	215.8	191.6	214.0	210.2	216.8	215.8					
Exports	do	.8	1.3	(1)	.2	.3	.1	(1)	(1)	.1	(1)					
Stocks, end of period	do	238.0	234.3	230.5	234.3	255.5	258.1	264.7	261.5	265.3	259.1					
Prices (excl. aviation):																
Wholesale, regular	Index, 2/73=100	211.8	233.6	243.8	242.2	239.9	240.4	245.6	249.5	254.5	258.9	261.2	260.5	259.6	257.5	256.3
Retail (regular grade, excl. taxes), 55 cities (mid-month)	\$ per gal.	.455	.474	.486	.483	.484	.488	.496	.503	.510	.517	.517	.517	.515	.518	.511
Aviation gasoline:																
Production	mil. bbl.	13.7	13.3	1.1	1.0	.8	.7	1.2	1.1	1.3	1.4					
Exports	do	.1	.2	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)					
Stocks, end of period	do	3.0	2.8	2.8	2.8	2.8	2.6	2.6	2.6	2.8	2.7					
Kerosene:																
Production	do	55.7	55.7	4.9	6.9	7.9	7.1	5.5	3.8	3.7	4.2					
Stocks, end of period	do	15.6	12.5	14.4	12.5	10.5	11.7	13.6	14.1	15.0	16.8					
Price, wholesale (light distillate)	Index, 1967=100	285.6	312.3	320.2	323.2	325.6	339.2	346.6	351.7	355.0	357.2	360.5	362.8	363.5	374.9	379.3

† Revised. ‡ Less than 50 thousand barrels. § Reflects revisions not available by months. ¶ Not comparable with data for earlier periods because stocks cover 100 additional terminals beginning Dec. 1974. ¶ Oct. includes exports for Sept. ¶ Includes data not shown separately. § Includes nonmarketable catalyst coke.

† Includes small amounts of "other hydrocarbons and hydrogen refinery input," not shown separately. ‡ Monthly revisions back to 1973 for bituminous coal and back to 1974 for petroleum and products are available upon request.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976 ^p	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
PETROLEUM, COAL, AND PRODUCTS—Continued																
PETROLEUM AND PRODUCTS—Continued																
Refined petroleum products—Continued																
Distillate fuel oil:																
Production.....mil. bbl.	968.6	1,070.2	95.4	100.9	104.6	103.7	98.6	90.0	96.9	95.9						
Imports [†]do	56.7	52.5	4.0	5.5	10.8	18.6	16.1	4.6	3.1	4.0						
Exports.....do	.3	.4	(?)	(?)	(?)	(?)	(?)	.1	(?)	(?)						
Stocks, end of period.....do	208.8	186.0	223.7	186.0	143.0	133.3	141.9	148.3	162.2	178.9						
Price, wholesale (middle distillate) Index, 1967=100.....	309.4	337.0	344.3	349.8	359.0	369.4	377.8	384.0	387.0	386.8	388.7	388.8	388.9	389.1	392.2	394.2
Residual fuel oil:																
Production.....mil. bbl.	451.0	504.0	47.4	54.9	58.6	54.6	53.2	50.6	51.8	51.4						
Imports [†]do	446.5	511.7	44.2	55.5	49.5	54.4	43.9	33.7	35.5	35.4						
Exports.....do	5.3	4.2	.5	.1	.1	.2	.1	.1	.2	.1						
Stocks, end of period.....do	74.1	72.3	73.3	72.3	64.7	71.4	71.2	70.2	73.4	71.9						
Price, wholesale.....Index, 1967=100.....	495.5	452.9	462.4	480.4	492.3	523.1	533.1	545.9	544.0	524.5	510.2	513.6	512.7	522.1	511.3	510.5
Jet fuel:																
Production.....mil. bbl.	318.0	335.8	27.6	27.9	28.4	27.3	29.6	29.7	30.4	29.9						
Stocks, end of period.....do	30.4	32.1	33.9	32.1	30.2	30.5	30.7	32.4	33.6	34.7						
Lubricants:																
Production.....do	56.2	61.8	5.4	5.4	5.0	4.7	5.5	5.3	5.6	5.3						
Imports [†]do	9.1	9.5	.9	.9	.7	.7	.8	1.0	.9	.9						
Exports.....do	14.3	12.3	12.3	12.3	12.3	13.0	12.0	11.6	11.4	10.6						
Asphalt:																
Production.....do	144.0	139.7	11.1	8.5	6.5	7.6	10.3	11.0	13.7	16.4						
Stocks, end of period.....do	22.8	19.4	16.7	19.4	20.9	23.3	25.6	26.7	25.8	22.5						
Liquefied gases (incl. ethane and ethylene):																
Production, total.....do	557.5	561.9	47.0	48.3	46.3	42.9	48.7	47.4	49.8	46.8						
At gas processing plants (L.P.G.).....do	444.1	487.4	37.1	37.8	36.3	33.5	38.4	37.3	37.4	35.9						
At refineries (L.R.G.).....do	113.4	124.6	9.9	10.6	10.0	9.4	10.2	10.1	12.3	10.9						
Stocks (at plants and refineries).....do	125.1	116.3	134.2	116.3	98.9	86.5	91.2	98.6	109.9	119.3						

PULP, PAPER, AND PAPER PRODUCTS

PULPWOOD AND WASTE PAPER																
Pulpwood:																
Receipts.....thous. cords (128 cu. ft.)	65,456	73,583	5,930	5,897	5,818	6,176	6,595	6,244	6,480	6,530	6,091	6,485				6,454
Consumption.....do	65,421	73,209	6,069	5,571	6,373	6,005	6,562	6,436	6,568	6,489	6,054	6,396	5,899			6,537
Stocks, end of period.....do	6,571	6,805	6,111	6,445	6,180	6,247	6,331	6,046	6,127	6,194	6,141	6,302	6,524			6,454
Waste paper:																
Consumption.....thous. sh. tons	10,367	12,103	829	772	825	815	939	890	931	918	803	920	840			924
Stocks, end of period.....do	731	772	721	772	709	718	732	714	682	701	698	679	680			650
WOODPULP																
Production:																
Total, all grades.....thous. sh. tons	443,084	448,804	3,966	3,336	3,753	3,850	4,112	3,999	4,148	4,083	3,791	4,026	3,668			4,051
Dissolving and special alpha.....do	1,583	1,400	138	112	139	120	152	127	139	124	98	135	110			93
Sulfate.....do	329,213	333,615	2,813	2,438	2,758	2,741	3,026	2,986	3,086	3,053	2,839	3,001	2,738			3,067
Sulfite.....do	1,951	2,079	189	169	180	174	191	172	190	186	164	167	153			169
Groundwood.....do	4,351	4,797	411	337	360	402	390	376	386	382	362	387	358			381
Defibrated or exploded, screenings, etc.....do	(⁴)	(⁴)														
Soda and semichemical.....do	3,201	3,627	415	280	317	413	354	338	348	339	327	337	308			339
Stocks, end of period:																
Total, all mills.....do	51,158	51,344	1,133	1,344	1,020	1,045	1,132	1,132	1,145	1,175	1,185	1,188	1,098			1,063
Pulp mills.....do	519	656	670	656	605	593	640	644	664	677	693	714	642			624
Paper and board mills.....do	552	623	395	623	354	390	424	415	413	424	412	397	392			380
Nonpaper mills.....do	87	65	68	65	62	63	69	72	69	75	80	77	64			59
Exports, all grades, total.....do																
Dissolving and special alpha.....do	12,565	12,518	191	210	184	236	236	246	270	206	213	212	266			170
All other.....do	1,872	1,787	131	156	131	160	172	162	191	150	155	150	183			110
Imports, all grades, total.....do																
Dissolving and special alpha.....do	13,078	13,727	297	303	281	334	359	306	304	385	281	350	286			374
All other.....do	140	188	11	17	17	8	14	19	21	18	10	17	5			19
PAPER AND PAPER PRODUCTS																
Paper and board:																
Production (Bu. of the Census):																
All grades, total, unadjusted.....thous. sh. tons	52,521	60,043	4,912	4,500	4,861	4,682	5,432	5,148	5,351	5,287	4,715	5,416	4,918			5,258
Paper.....do	23,306	26,534	2,100	2,066	2,222	2,135	2,425	2,281	2,357	2,340	2,108	2,397	2,222			2,348
Paperboard.....do	24,452	27,960	2,280	2,028	2,239	2,168	2,502	2,399	2,500	2,460	2,157	2,475	2,239			2,377
Wet-machine board.....do	115	130	10	8	8	7	9	8	9	9	6	9	9			9
Construction paper and board.....do	4,648	5,419	432	397	383	372	496	459	476	478	443	535	448			504
Wholesale price indexes:																
Book paper, A grade.....1967=100	170.3	190.4	178.5	177.5	174.6	173.5	172.6	174.5	179.0	179.5	180.6	180.4	180.1	177.8	174.2	171.1
Paperboard.....do	127.1	138.7	141.8	144.2	144.8	144.5	145.9	148.8	151.3	153.8	157.8	162.4	166.7	168.8	168.3	170.4

^r Revised. ^p Preliminary.

¹ Reported annual total; revisions not allocated to the months. ² Less than 50 thousand barrels. ³ Beginning with January 1975, data for soda combined with those for sulphate; not comparable with data for earlier periods.

⁴ Beginning March 1975, data for defibrated or exploded, screenings, etc., not available; not comparable with those for earlier periods. ⁵ Data exclude small amounts of pulp because reporting would disclose the operations of individual firms. [†] Monthly revisions back to 1974 are available upon request.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

PULP, PAPER, AND PAPER PRODUCTS—Continued

PAPER AND PAPER PRODUCTS—Con.																
Selected types of paper (API):																
Groundwood paper, uncoated:																
Orders, new.....thous. sh. tons.....	1,245	1,300	95	103	99	98	106	113	112	120	112	121	107	110		
Orders, unfilled, end of period.....do.....	172	151	150	151	131	134	138	142	151	167	168	178	180	173		
Shipments.....do.....	1,189	1,278	103	104	107	98	106	107	108	103	111	115	105	112		
Coated paper:																
Orders, new.....do.....	* 3,166	3,956	297	327	362	333	374	360	346	365	319	396	* 358	* 369	331	
Orders, unfilled, end of period.....do.....	* 313	337	345	337	363	369	363	360	387	383	383	400	* 408	* 394	376	
Shipments.....do.....	* 3,194	3,981	338	332	331	331	382	343	350	365	317	383	* 357	* 372	360	
Uncoated free sheet papers:																
Orders, new.....do.....	* 5,481	6,354	504	528	555	557	635	591	557	571	518	565	542	* 578	559	
Shipments.....do.....	* 5,648	* 6,798	* 540	* 523	* 559	* 553	* 649	* 603	* 597	* 604	* 550	* 621	* 580	* 627	597	
Unbleached kraft packaging and industrial converting papers:																
Orders, new.....thous. sh. tons.....																
Orders, unfilled, end of period.....do.....																
Shipments.....do.....	* 3,312	* 3,839	315	300	320	324	350	307	330	331	292	323	322	332	305	
Tissue paper, production.....do.....	3,979	4,186	359	340	363	340	374	360	371	374	342	* 373	* 340	366	360	
Newsprint:																
Canada:																
Production.....do.....	7,679	8,915	794	718	733	690	726	732	755	760	721	783	713	840	835	
Shipments from mills.....do.....	7,727	8,712	813	769	653	648	734	729	747	768	730	757	738	856	810	
Stocks at mills, end of period.....do.....	95	299	350	299	379	420	412	416	424	416	408	434	408	392	416	
United States:																
Production.....do.....	3,614	3,686	322	282	323	291	333	306	323	330	307	336	293	332	322	
Shipments from mills.....do.....	3,613	3,678	321	289	312	285	321	299	324	333	306	331	300	334	327	
Stocks at mills, end of period.....do.....	21	29	36	29	41	47	58	64	63	59	60	65	58	55	51	
Consumption by publishers ¹.....do.....	6,363	6,534	595	575	529	483	572	563	599	556	524	539	561	628	620	
Stocks at and in transit to publishers, end of period.....thous. sh. tons.....	734	921	906	921	873	896	897	873	831	835	832	851	827	800	763	
Imports.....do.....	5,847	6,569	662	594	468	500	599	495	530	608	483	558	532	552	610	
Price, rolls, contract, f.o.b. mill, freight allowed or delivered.....Index, 1967=100.....	184.0	198.2	205.3	207.6	209.4	209.4	216.7	216.7	216.7	216.7	216.7	216.7	216.7	216.7	216.7	216.7
Paperboard (American Paper Institute):																
Orders, new (weekly avg.).....thous. sh. tons.....	479	552	542	385	528	553	596	580	598	577	506	546	518	578	548	479
Orders, unfilled.....do.....	1,031	1,070	1,088	1,070	1,089	1,097	1,189	1,217	1,208	1,182	1,220	1,148	1,135	1,146	1,132	995
Production, total (weekly avg.).....do.....	476	547	561	471	504	561	581	585	599	580	501	572	515	568	550	496
Paper products:																
Shipping containers, corrugated and solid fiber shipments.....mil. sq. ft. surf. area.....	194,329	216,371	18,097	16,672	16,189	17,656	19,783	18,956	19,377	19,505	17,251	19,694	20,002	19,711	19,285	17,898
Folding paper boxes, shipments.....thous. sh. tons.....	2,380.0	2,592.0	210.8	227.1	207.5	197.6	231.0	206.1	219.5	220.0	183.3	* 228.0	* 219.6	* 232.5	214.2	
.....mil. \$.....	1,755.0	1,979.0	165.6	177.4	163.0	157.2	182.3	163.9	176.0	176.8	148.4	* 185.4	* 179.2	* 189.8	171.6	

RUBBER AND RUBBER PRODUCTS

RUBBER																
Natural rubber:																
Consumption.....thous. metric tons.....	669.97	730.73	56.86	59.43	67.27	68.50	77.57	68.60	67.66	72.06	57.43	73.47				
Stocks, end of period.....do.....	105.38	141.84		141.84	119.92	127.04	123.77	118.30	119.10	123.91	126.72	136.14				
Imports, incl. latex and guayule.....thous. lg. tons.....	656.60	712.90	52.30	68.80	70.19	55.61	82.29	72.18	49.98	71.16	72.86	49.28	76.27	73.20		
Price, wholesale, smoked sheets (N.Y.)...\$ per lb.....	.299	.395	.430	.400	.408	.408	.416	.406	.408	.396	.391	.399	.448	.443	.438	.429
Synthetic rubber:																
Production.....thous. metric tons.....	1,937.85	2,303.75	206.33	210.92	203.95	193.03	213.07	204.80	211.45	201.84	191.32	198.83	205,554			
Consumption.....do.....	2,022.43	2,175.26	211.87	206.56	216.92	202.68	238.09	200.42	220.14	206.75	159.78	210.53	211,288			
Stocks, end of period.....do.....	369.86	458.12		458.12	441.37	431.81	407.62	412.85	409.35	402.18	430.43	430.31	422,325			
Exports (Bu. of Census).....thous. lg. tons.....	214.50	267.99	19.86	21.13	19.11	20.97	24.34	21.48	22.06	20.78	24.72	14.86	26.14	14.59	13.80	
Reclaimed rubber:																
Production.....thous. metric tons.....	78.23	78.46	8.31	8.43	6.74	6.77	7.90	7.02	6.75	7.34	6.24	7.62	7.94			
Consumption.....do.....	100.22	81.89	8.44	8.10	9.78	8.96	9.68	9.78	9.40	8.83	8.04	9.86	12.84			
Stocks, end of period.....do.....	10.18	16.81		16.81	15.95	15.83	16.66	16.26	13.99	14.78	15.51	15.97	15.34			
TIRES AND TUBES																
Pneumatic casings, automotive:																
Production.....thous.....	186,705	187,953	18,827	20,194	* 20,638	20,094	22,640	20,087	19,512	20,734	15,050	19,495	19,321	18,926		
Shipments, total.....do.....	196,295	210,702	16,873	16,466	* 16,773	16,609	21,022	20,530	19,790	22,758	17,177	18,262	20,558	20,247		
Original equipment.....do.....	47,467	60,138	5,419	6,241	* 5,835	4,838	6,423	5,766	5,828	6,511	4,474	4,425	5,750	6,124		
Replacement equipment.....do.....	142,706	145,869	11,064	9,731	* 10,496	11,282	14,020	14,313	13,501	15,742	12,298	13,400	14,383	13,818		
Exports.....do.....	6,122	4,695	391	494	* 442	489	579	451	461	504	404	436	425	304		
Stocks, end of period.....do.....	50,020	34,768	30,200	34,768	* 39,010	43,212	45,616	45,832	46,231	44,887	43,460	45,229	44,542	43,841		
Exports (Bu. of Census).....do.....	6,124	4,784	397	519	483	546	637	618	504	525	514	448	544			
Inner tubes, automotive:																
Production.....do.....	32,584	27,548	2,461	2,362												
Shipments.....do.....	34,581	33,304	2,281	2,315												
Stocks, end of period.....do.....	9,212	5,106	4,912	5,106												
Exports (Bu. of Census).....do.....	3,998	3,167	249	357	253	186	240	229	285	193	190	127	170			

¹ Revised. ² Producers' stocks are included; comparable data for earlier periods will be shown later. ³ Beginning Jan. 1977, data cover passenger car and truck and bus tires; motorcycle tires and tires for mobile homes are excluded.

⁴ As reported by publishers accounting for about 75 percent of total newspaper consumption. ⁵ Monthly data are averages for the 4-week period ending on Saturday nearest the end of the month; annual data are as of Dec. 31.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977										
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

STONE, CLAY, AND GLASS PRODUCTS

PORTLAND CEMENT																
Shipments, finished cement.....thous. bbl.	367,436	387,410	31,686	23,165	13,963	20,910	31,346	35,713	40,197	45,090	40,537	45,521	41,952	43,207	34,548	-----
CLAY CONSTRUCTION PRODUCTS																
Shipments:†																
Brick, unglazed (common and face)																
mil. standard brick.....	6,261.9	7,034.4	617.0	489.4	296.6	437.9	687.8	727.3	782.4	792.6	700.0	812.3	740.9	750.5	-----	-----
Structural tile, except facing.....thous. sh. tons.	79.5	71.0	3.7	4.3	2.6	3.4	3.4	4.3	4.1	4.7	4.7	4.2	4.4	4.0	-----	-----
Sewer pipe and fittings, vitrified.....do.	1,189.9	1,097.8	86.4	62.5	45.5	65.8	102.3	107.2	113.6	127.8	109.3	113.7	99.4	97.2	-----	-----
Facing tile (hollow), glazed and unglazed																
mil. brick equivalent.....	73.4	64.8	4.7	4.3	3.3	2.9	5.5	5.6	5.6	5.8	5.3	5.3	6.4	5.6	-----	-----
Floor and wall tile and accessories, glazed and unglazed.....mil. sq. ft.	251.7	276.7	23.1	21.7	18.9	21.6	22.6	22.8	23.8	25.9	22.7	27.9	26.9	25.8	-----	-----
Price index, brick (common), l.o.b. plant or N.Y. dock 1967=100.	160.5	177.0	184.6	185.9	188.2	191.6	194.8	195.8	198.2	201.4	207.8	209.2	212.2	214.2	215.7	215.7
GLASS AND GLASS PRODUCTS																
Flat glass, mfrs.' shipments.....thous. \$.	467,994	644,751		171,412			165,553			182,769			192,768			
Sheet (window) glass, shipments.....do.	76,229	101,739		24,532			(*)									
Plate and other flat glass, shipments.....do.	391,765	543,012		146,880			(*)									
Glass containers:																
Production†.....thous. gross.	283,055	302,500	24,211	21,020	22,636	24,292	28,109	24,433	25,686	27,059	26,481	29,515	21,251	25,842	26,825	-----
Shipments, domestic, total†.....do.	279,022	292,345	21,804	22,943	22,177	22,456	34,176	21,161	23,869	26,526	24,472	35,382	23,828	21,577	23,530	-----
Narrow-neck containers:																
Food.....do.	25,266	25,727	1,486	1,727	2,244	2,115	3,060	1,507	1,925	2,155	1,633	3,289	1,987	1,482	1,620	-----
Beverage.....do.	64,418	65,093	4,926	5,736	4,352	4,608	7,142	4,521	5,450	6,697	6,218	8,451	4,902	4,429	5,054	-----
Beer.....do.	76,835	81,938	5,925	6,070	5,909	5,890	9,074	7,670	8,452	8,794	8,434	10,179	7,574	6,515	6,613	-----
Liquor and wine.....do.	23,406	22,674	1,986	2,004	1,813	1,709	2,849	1,630	1,787	1,939	1,551	2,685	1,821	1,978	2,287	-----
Wide-mouth containers:																
Food (incl. packer's tumblers, jelly glasses, and fruit jars)†.....thous. gross.	59,287	61,504	4,820	4,712	4,784	5,049	7,897	3,471	4,025	4,502	4,324	7,363	5,015	4,692	4,956	-----
Narrow-neck and Wide-mouth containers:																
Medicinal and toilet.....do.	25,775	30,798	2,357	2,373	2,736	2,744	3,687	2,171	1,997	2,150	2,039	2,998	2,226	2,214	2,730	-----
Chemical, household and industrial.....do.	4,035	4,611	304	321	339	341	467	231	233	289	273	417	303	267	270	-----
Stocks, end of period†.....do.	37,666	42,800	45,039	42,800	41,932	43,266	36,408	40,414	41,613	42,077	43,019	37,253	33,976	38,433	41,504	-----
GYPSUM AND PRODUCTS																
Production:																
Crude gypsum (exc. byproduct).....thous. sh. tons.	1,975	1,198	1,160	1,132	940	952	1,092	1,121	1,134	1,151	1,124	1,186	1,187	-----	-----	
Calcined.....do.	1,918	1,106	919	927	863	843	1,046	1,002	1,020	1,044	1,032	1,072	1,048	-----	-----	
Imports, crude gypsum.....do.	5,448	6,231	572	591	533	284	541	515	565	771	600	792	720	-----	-----	
Sales of gypsum products:																
Uncalcined.....do.	1,478	5,030	445	476	312	276	348	459	502	572	528	585	566	-----	-----	
Calcined:																
Industrial plasters.....do.	293	305	27	23	23	22	28	27	27	26	24	25	30	-----	-----	
Building plasters:																
Regular basecoat.....do.	176	162	11	11	9	10	14	12	12	13	10	12	12	-----	-----	
All other (incl. Keene's cement).....do.	360	329	27	23	20	22	27	25	25	29	27	32	28	-----	-----	
Board products, total.....mil. sq. ft.	10,804	13,156	1,135	1,165	949	1,029	1,382	1,201	1,281	1,380	1,262	1,421	1,333	-----	-----	
Lath.....do.	182	184	14	15	11	12	17	13	17	15	14	17	10	-----	-----	
Veneer base.....do.	292	362	32	31	23	24	38	29	35	40	36	41	39	-----	-----	
Gypsum sheathing.....do.	198	1,272	24	23	19	20	30	28	26	31	23	24	25	-----	-----	
Regular gypsum board.....do.	8,214	11,117	876	900	723	799	1,061	917	981	1,055	970	1,102	1,032	-----	-----	
Type X gypsum board.....do.	1,790	2,029	174	183	160	161	214	190	202	219	198	217	206	-----	-----	
Predecorated wallboard.....do.	127	191	15	13	13	14	21	24	19	20	20	20	22	-----	-----	

TEXTILE PRODUCTS

FABRIC (GRAY)																
Knit fabric production off knitting machines (own use, for sale, on commission), qtrly*.....mil. lb.	1,955.8	1,790.9		402.3			749.4			745.3						
Knitting machines active last working day*.....thous.	47.1	43.5		43.5			35.7			35.6						
Woven fabric (gray goods), weaving mills:																
Production, total †.....mil. linear yd.	9,777	10,448	769	923	781	817	1,057	792	820	1,027	613	785	953	-----	-----	
Cotton.....do.	4,326	4,450	327	371	344	352	448	341	348	432	251	315	387	-----	-----	
Manmade fiber.....do.	5,356	5,913	436	545	431	457	600	443	471	585	356	462	558	-----	-----	
Stocks, total, end of period †.....do.	1,099	1,203	1,203	1,203	1,210	1,213	1,196	1,180	1,153	1,212	1,205	1,118	1,062	-----	-----	
Cotton.....do.	489	431	429	431	426	425	425	415	391	388	380	365	345	-----	-----	
Manmade fiber.....do.	605	767	770	767	778	781	766	760	767	817	819	748	712	-----	-----	
Orders, unfilled, total, end of period †.....do.	2,590	1,830	1,912	1,830	1,766	1,770	1,991	2,113	1,980	1,905	1,839	1,722	1,728	-----	-----	
Cotton.....do.	1,144	789	796	789	772	753	869	921	846	794	765	698	742	-----	-----	
Manmade fiber.....do.	1,414	1,008	1,086	1,008	993	1,017	1,081	1,149	1,134	1,111	1,074	1,023	985	-----	-----	
COTTON																
Cotton (excluding linters):																
Production:																
GinningsΔ.....thous. running bales	8,151	10,348	7,658	9,887	10,251		10,580.6				85	695	2,366	7,502	11,722	13,632
Crop estimate.....thous. net weight bales (D)	8,301.6	10,580.6					10,580.6								14,385.8	
Consumption.....thous. running bales	6,142	6,833	501	582	510	528	653	507	507	616	395	492	606	512	503	
Stocks in the United States, total, end of period †.....thous. running bales	9,544	9,610	10,297	9,610	8,716	7,819	6,642	5,570	4,571	3,496	2,920	16,139	14,798	14,680	-----	-----
Domestic cotton, total.....do.	9,523	9,581	10,266	9,581	8,689	7,793	6,618	5,550	4,554	3,483	2,909	16,127	14,787	14,671	-----	-----
On farms and in transit.....do.	945	1,247	3,498	1,247	1,009	944	787	563	375	126	75	13,389	11,270	7,608	-----	-----
Public storage and compresses.....do.	7,431	7,377	5,912	7,377	6,709	5,777	4,707	3,815	3,005	2,264	1,787	1,773	2,638	6,219	-----	-----
Consuming establishments.....do.	1,152	957	856	957	971	1,072	1,124	1,172	1,174	1,093	1,047	965	879	844	-----	-----

* Revised. † Preliminary. ‡ Annual total; revisions not allocated to the months or quarters. ‡ Data cover 5 weeks; other months, 4 weeks. § Crop for the year 1975. ¶ Crop for the year 1976. † Beginning 1st Qtr 1977, data no longer available. Dec. 1 estimate of 1977 crop. † Beginning 1st Qtr 1977, data exclude garment lengths, trimming, and collars; not comparable with earlier data. † Unfilled orders cover wool apparel (including polyester-wool) finished fabrics; production and stocks exclude figures for such finished fabrics. Orders also exclude bedsheets, toweling, and blanketing. Δ Cumulative ginnings to end of month indicated. © Bales of 480 lbs. ⊙ Includes data for "dairy products." * New series. Source: BuCensus. Data cover warp and weft knit yard goods and knit garment lengths, trimmings, and collars; no quarterly data prior to 1974 are available.

Unless otherwise stated in footnotes below, data through 1974 and descriptive notes are as shown in the 1975 edition of BUSINESS STATISTICS	1975	1976	1976		1977											
	Annual		Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

TEXTILE PRODUCTS—Continued

COTTON AND MANUFACTURES—Con.																
Cotton (excluding linters)—Continued																
Exports.....thous. running bales..	3,840	3,431	265	376	354	509	536	548	400	462	282	181	200	149	333	
Imports.....thous. net-weight(bales..	50	96	0	1	2				2	1	18	1	1	1		
Price (farm), American upland.....cents per lb.	151.1	64.7	65.2	63.1	62.3	63.9	69.8	67.8	67.2	61.1	63.1	60.9	59.1	53.1	51.4	
Price, Strict Low Middling, Grade 41, staple 34 (1 1/4"), average 10 markets.....cents per lb.	158.0	73.4	76.5	73.1	67.9	72.2	75.8	73.7	70.6	61.1	58.2	52.5	49.3	49.1	48.0	
Spindle activity (cotton system spindles):																
Active spindles, last working day, total.....mil.	17.1	16.8	16.9	16.8	16.7	16.8	16.9	17.0	16.8	16.8	16.8	16.5	16.5	16.6		
Consuming 100 percent cotton.....do.	8.0	7.5	7.4	7.5	7.4	7.3	7.2	7.1	7.0	7.0	7.0	6.8	6.8	6.8		
Spindle hours operated, all fibers, total.....bil.	93.2	105.6	7.8	2 9.0	8.0	8.2	2 10.3	8.2	8.3	2 10.2	6.7	8.1	2 9.8	8.2		
Average per working day.....do.	.352	.406	.390	.359	.402	.412	.413	.410	.417	.406	.334	.405	.392	.411		
Consuming 100 percent cotton.....do.	46.5	48.1	3.4	2 4.0	3.5	3.5	2 4.4	3.5	3.5	2 4.2	2.8	3.3	2 4.1	3.4		
Cotton cloth:																
Cotton broadwoven goods over 12" in width:																
Production (qtrly.).....mil. lin. yd.	4,095	4,718		1,129			1,207			1,147						
Orders, unfilled, end of period, as compared with avg. weekly production.....No. weeks' prod.	12.3	13.2	11.3	12.0	10.8	10.5	11.5	12.7	11.6	11.0	14.4	10.6	11.3	11.1	10.0	
Inventories, end of period, as compared with avg. weekly production.....No. weeks' prod.	5.9	4.7	4.9	5.0	4.6	4.7	4.5	4.9	4.7	4.7	6.1	4.6	4.3	4.4	4.6	
Ratio of stocks to unfilled orders (at cotton mills), end of period.....do.	.50	.36	.43	.42	.42	.44	.39	.38	.41	.40	.42	.44	.38			
Exports, raw cotton equiv.thous. net-weight(bales	488.3	556.0	45.6	53.2	42.8	51.6	47.1	47.2	36.9	36.5	29.4	31.0	40.2	24.8	26.3	
Imports, raw cotton equivalent.....do.	487.1	718.3	57.7	52.4	47.7	50.2	46.9	41.2	43.7	44.2	39.6	42.7	48.1	35.5	32.3	
MANMADE FIBERS AND MANUFACTURES																
Fiber production, qtrly:																
Filament yarn (acetate).....mil. lb.	301.3	286.9		60.3			71.9			74.8			69.7			
Staple, incl. tow (rayon).....do.	370.9	475.4		121.4			135.5			186.7			132.7			
Noncellulosic, except textile glass:																
Yarn and monofilaments.....do.	4 3,197.2	3,286.5		829.9			882.3			981.8			923.4			
Staple, incl. tow.....do.	2,676.8	3,319.2		833.3			892.0			931.7			898.7			
Textile glass fiber.....do.	546.5	676.0		176.1			160.5			193.2			208.9			
Fiber stocks, producers', end of period:																
Filament yarn (acetate).....mil. lb.	18.6	18.1		18.1			15.4			14.0			13.1			
Staple, incl. tow (rayon).....do.	51.2	30.0		30.0			40.6			41.8			48.0			
Noncellulosic fiber, except textile glass:																
Yarn and monofilaments.....do.	4 280.6	299.8		299.8			298.2			298.8			356.0			
Staple, incl. tow.....do.	234.7	289.0		289.0			300.5			301.0			315.2			
Textile glass fiber.....do.	101.7	79.4		79.4			57.0			57.6			61.2			
Manmade fiber and silk broadwoven fabrics:																
Production (qtrly.), total.....mil. lin. yd.	5,278.3	6,092.4		1,458.8			1,553.8			1,569.1						
Filament yarn (100%) fabrics.....do.	1,688.0	1,984.4		467.7			497.9			510.8						
Chiefly rayon and/or acetate fabrics.....do.	325.3	378.2		96.4			94.0			93.4						
Chiefly nylon fabrics.....do.	279.0	356.8		89.6			96.2			97.9						
Spun yarn (100%) fab., exc. blanketing.....do.	3,036.5	3,500.4		840.0			899.8			907.4						
Rayon and/or acetate fabrics, blends.....do.	172.4	184.8		42.6			53.3			74.6						
Polyester blends with cotton.....do.	2,359.5	2,713.2		647.8			694.1			675.7						
Filament and spun yarn fabrics.....do.	257.1	320.5		83.8			88.3			84.4						
Manmade fiber gray goods, owned by weaving mills:																
Ratio, stocks to unfilled orders, end of period.....do.	.33	.30	.38	.40	.47	.49	.44	.40	.42	.45	.45	.46	.42			
Prices, manufacturer to mfr., f.o.b. mill:*																
50/50 polyester/carded cotton printcloth, gray, 48", 3.90 yds./lb., 78x54-56.....\$ per yd.		.416	.414	.409	.398	.385	.389	.400	.399	.388	.396	.393	.405	.424	.441	
65% poly./35% comb. cot. broadcl., 3.0 oz/sp yd, 45", 128x72, gray-basis, wh. permresfn.....\$ per yd.		.725	.760	.768	.771	.759	.760	.764	.765	.754	.750	.750	.741	.741	.727	
Manmade fiber knit fabric prices, f.o.b. mill:*																
65% acetate/35% nylon tricot, gray, 32 gauge, 54", 3.2 oz./linear yd.....\$ per yd.		.412	.341	.343	.345	.350	.383	.419	.420	.446	.450	.440	.438	.445	.435	
100% textured polyester DK jacquard, 11 oz./linear yd., 60", yarn dyed, finished.....\$ per yd.		1.846	1.824	1.696	1.741	1.789	1.819	1.846		1.695	1.662	1.668	1.642	1.642	1.609	
Manmade fiber manufactures:																
Exports, manmade fiber equivalent.....mil. lbs.	323.73	352.17	31.33	32.12	27.67	30.77	34.18	32.02	31.77	31.55	29.36	27.08	35.02	25.81	27.50	
Yarn, tops, thread, cloth.....do.	188.43	201.92	18.12	18.95	16.50	18.97	20.02	18.07	18.34	17.59	15.82	13.92	18.55	14.11	14.64	
Cloth, woven.....do.	142.89	139.17	11.83	11.65	10.64	10.56	11.82	11.68	11.22	11.19	9.42	9.36	11.88	9.60	9.97	
Manufactured prods., apparel, furnishings.....do.	135.30	150.25	13.21	13.17	11.16	11.79	14.17	13.95	13.43	13.96	13.54	13.16	16.48	11.63	12.86	
Imports, manmade fiber equivalent.....do.	400.38	479.32	40.68	34.55	34.20	32.55	37.00	36.29	43.86	39.03	54.82	55.44	51.85	46.69	37.57	
Yarn, tops, thread, cloth.....do.	69.23	83.82	7.45	7.53	7.57	7.38	9.19	7.50	8.72	9.98	10.36	13.05	10.91	9.31	6.09	
Cloth, woven.....do.	54.02	64.41	5.64	5.66	5.25	4.40	5.15	4.95	5.18	5.81	5.74	7.87	6.56	5.76	4.14	
Manufactured prods., apparel, furnishings.....do.	331.14	395.49	33.22	27.02	26.63	25.17	27.81	28.80	35.14	49.06	44.46	42.39	40.95	37.38	31.48	
Apparel, total.....do.	289.00	343.25	28.61	22.58	22.59	21.50	23.18	24.22	30.83	43.31	39.96	37.13	36.34	32.68	27.22	
Knit apparel.....do.	194.89	209.80	17.42	11.42	11.81	11.49	13.65	14.47	19.73	27.52	24.76	22.94	21.96	20.13	16.28	
WOOL AND MANUFACTURES																
Wool consumption, mill (clean basis):																
Apparel class.....mil. lb.	94.1	106.7	6.9	2 9.0	8.2	8.3	2 10.0	7.9	7.7	2 9.5	5.2	7.4	2 8.6	8.4		
Carpet class.....do.	15.9	15.1	1.3	2 1.5	1.2	1.1	2 1.5	.9	1.1	2 1.3	.6	1.1	2 1.1	.7		
Wool imports, clean yield.....do.	33.6	58.0	3.3	4.4	5.2	5.0	4.7	5.1	7.4	7.4	4.0	4.7	2.4	2.2		
Duty-free (carpet class).....do.	17.0	18.9	1.3	1.6	1.6	2.0	1.4	1.7	2.6	2.5	1.9	1.5	.6	.3		
Wool prices, raw, shorn, clean basis, delivered to U.S. mills:♂																
Domestic—Graded territory, 64's, staple 2 3/4" and up.....cents per lb.	150.2	182.1	192.5	187.5	187.5	187.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	182.5	
Australian, 64's, Type 62, duty-paid.....do.	205.8	217.5	224.0	227.3	229.0	227.3	227.6	228.3	228.0	226.3	227.0	224.0	227.0	227.0	230.5	
Wool broadwoven goods, exc. felts:																
Production (qtrly.).....mil. lin. yd.	78.9	97.3		21.9			26.2			27.1						
FLOOR COVERINGS																
Carpet, rugs, carpeting (woven, tufted, other), shipments, quarterly.....mil. sq. yds.	834.0	921.1		232.6			224.9			248.4			244.5			
APPAREL																
Women's, misses', juniors' apparel cuttings:*																
Coats.....thous. units.	20,876	20,689	1,902	1,406	1,187	1,185	1,087	1,078	1,285	1,744	1,524	2,044	1,974	1,912		
Dresses.....do.	174,695	170,744	12,592	10,353	13,473	15,114	18,524	16,570	14,317	14,533	11,486	13,687	12,827	12,749		
Suits (incl. pant suits, jumpsuits).....do.	34,468	34,050	3,208	3,144	3,402	3,448	3,488	2,697	3,064	3,019	2,264	2,935	2,803	2,996		
Blouses.....thous. dozen.	18,971	19,735	1,605	1,627	1,540	1,540	1,829	1,765	1,647	1,748	1,320	1,706	1,632	1,611		
Skirts.....do.	4,692	4,929	415	312	450	443	568	481	474	466	373	477	425	434		

* Revised. ♂ Preliminary. ♂ Season average. ♂ For 5 weeks, other months, 4 weeks. ♂ Monthly average. ♂ Effective Sept. 1976 SURVEY, data omit production and stocks of saran and spandex yarn. ♂ Effective 1976, production of blanketing is included in 100% spun yarn fabric (prior to 1976, in "all other group," not shown separately). ♂ Avg. for May-Dec. ♂ Average for sales prior to Apr. 1, 1977. ♂ Avg. for Feb.-Dec. ♂ Based on 480-lb. bales, ♂ price reflects sales as of the 15th; ♂ restated ♂ price reflects total quantity purchased and dollars paid for entire month (♂ price includes discounts and premiums). ♂ Includes data not shown separately. ♂ Net-weight (480-lb.) bales. ♂ Effective Jan. 1976, specifications for the price formerly designated fine good French combing and staple have been changed as shown above. Effective with the May 1976 SURVEY the foreign wool price is quoted including duty. ♂ New series. Apparel (BuCensus)—Annual totals derived from firms accounting for 99% of total output of these items; current monthly estimates, from smaller sample. Monthly data for 1975, adjusted to annual totals, are available. Coats exclude all fur, leather, and raincoats. Suits omit garments purchased separately as coordinates. Except for the year 1974, earlier monthly data are available, except for suits. Prices (USDL, BLS)—Data not available prior to 1976.

	1975	1976	1976		1977											
	Annual	Annual	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

TEXTILE PRODUCTS—Continued

APPAREL— Con.																
Men's apparel cuttings:																
Suits,.....thous. units.....	* 13,749	* 16,224	1,265	1,133	1,225	1,361	1,460	1,462	1,355	1,329	868	1,398	1,565	-----	-----	-----
Coats (separate), dress and sport f.....do.....	* 11,544	* 12,874	1,130	1,153	1,161	1,140	1,316	1,046	1,038	1,087	833	1,151	1,349	-----	-----	-----
Trousers (separate), dress and sport f.....do.....	118,944	132,163	9,996	8,185	9,923	11,676	12,780	11,806	11,986	11,734	8,633	10,085	10,682	-----	-----	-----
Slacks (jean cut), casual f.....thous. doz.....	10,940	11,732	822	1,004	941	1,188	1,425	1,316	1,367	1,429	1,163	1,269	1,500	-----	-----	-----
Shirts, dress, sport, inc. knit outerwear f.....do.....	32,645	36,797	2,953	2,653	2,908	2,981	3,127	2,550	2,816	2,959	2,129	2,882	2,875	-----	-----	-----
Hosiery, shipments.....thous. doz. pairs.....	225,514	240,918	19,719	18,157	17,369	18,115	21,399	18,505	18,737	21,618	19,820	24,084	23,283	24,594	22,284	-----

TRANSPORTATION EQUIPMENT

AEROSPACE VEHICLES																
Orders, new (net), qtrly, total.....mil. \$.....	28,995	35,991	-----	11,029	-----	-----	6,554	-----	-----	9,719	-----	-----	-----	-----	-----	-----
U.S. Government.....do.....	18,593	21,056	-----	6,956	-----	-----	4,069	-----	-----	5,309	-----	-----	-----	-----	-----	-----
Prime contract.....do.....	26,647	32,390	-----	9,658	-----	-----	5,692	-----	-----	8,967	-----	-----	-----	-----	-----	-----
Sales (net), receipts, or billings, qtrly, total.....do.....	29,473	30,363	-----	7,485	-----	-----	7,588	-----	-----	8,537	-----	-----	-----	-----	-----	-----
U.S. Government.....do.....	17,314	19,083	-----	5,099	-----	-----	4,950	-----	-----	5,185	-----	-----	-----	-----	-----	-----
Backlog of orders, end of period .....do.....	35,038	39,682	-----	39,682	-----	-----	38,668	-----	-----	39,850	-----	-----	-----	-----	-----	-----
U.S. Government.....do.....	22,168	22,121	-----	22,121	-----	-----	23,260	-----	-----	23,384	-----	-----	-----	-----	-----	-----
Aircraft (complete) and parts.....do.....	15,389	17,321	-----	17,321	-----	-----	16,071	-----	-----	17,750	-----	-----	-----	-----	-----	-----
Engines (aircraft) and parts.....do.....	3,503	3,558	-----	3,558	-----	-----	3,733	-----	-----	3,614	-----	-----	-----	-----	-----	-----
Missiles, space vehicle systems, engines, propulsion units, and parts.....mil. \$.....	6,415	6,286	-----	6,286	-----	-----	6,000	-----	-----	5,741	-----	-----	-----	-----	-----	-----
Other related operations (conversions, modifications), products, services.....mil. \$.....	4,071	5,542	-----	5,542	-----	-----	5,654	-----	-----	5,657	-----	-----	-----	-----	-----	-----
Aircraft (complete):																
Shipments.....do.....	4,967.6	4,646.8	431.6	529.5	210.8	217.9	411.6	374.7	458.3	490.0	325.6	335.7	403.7	565.2	-----	-----
Airframe weight.....thous. lb.....	60,480	50,314	4,037	5,405	2,498	2,794	4,254	4,007	5,578	4,817	3,212	3,578	3,813	4,741	-----	-----
Exports, commercial.....mil. \$.....	13,200	13,207	223.0	420.6	69.6	63.7	286.8	287.9	218.7	287.3	165.3	176.6	170.6	434.5	180.0	-----
MOTOR VEHICLES (NEW)																
Passenger cars:																
Factory sales (from U.S. plants), total.....thous.....	6,713	8,498	766.1	732.7	683.7	675.7	953.1	815.5	868.3	951.4	679.5	505.4	738.9	* 870.7	* 787.7	* 648.3
Domestic.....do.....	6,073	7,838	701.5	679.1	635.8	625.8	871.5	741.5	794.0	885.4	645.2	473.5	671.2	-----	-----	-----
Retail sales, total, not seasonally adj.....do.....	8,640	10,110	840	807	725	811	1,084	1,029	1,054	1,117	913	931	829	1,014	881	p 795
Domestics.....do.....	7,053	8,611	721	695	602	666	896	822	834	920	731	727	657	870	738	646
Imports.....do.....	1,587	1,498	119	112	123	144	189	207	220	198	182	204	172	144	144	p 149
Total, seas. adjusted at annual rate f.....mil.....	-----	-----	9.8	11.3	10.5	11.0	12.2	11.8	11.5	11.7	10.9	11.5	10.5	11.0	10.5	p 11.5
Domestics.....do.....	-----	-----	8.1	9.7	8.8	9.1	10.3	9.4	8.9	9.6	8.7	9.4	8.6	9.1	8.4	9.3
Imports.....do.....	-----	-----	1.7	1.6	1.7	1.9	1.9	2.5	2.5	2.1	2.2	2.1	1.9	1.8	2.1	p 2.2
Retail inventories, end of mo., domestics:.....do.....																
Not seasonally adjusted.....thous.....	1,419	1,465	1,423	1,465	1,594	1,645	1,697	1,697	1,747	1,806	1,763	1,563	1,669	1,629	1,709	1,731
Seasonally adjusted.....do.....	1,460	1,512	1,455	1,512	1,532	1,539	1,578	1,583	1,602	1,627	1,751	1,668	1,718	1,683	1,718	1,794
Inventory-retail sales ratio, domestics.....do.....	2.6	2.1	2.2	1.9	2.1	2.0	1.8	2.0	2.2	2.0	2.4	2.1	2.4	2.2	2.4	2.3
Exports (BuCensus), assembled cars.....thous.....	640.30	680.46	69.38	60.75	50.21	47.06	84.01	65.18	88.62	67.56	38.70	27.85	58.61	70.95	51.61	-----
To Canada.....do.....	550.81	573.47	56.88	44.33	40.56	39.32	74.33	54.55	79.98	60.08	32.35	23.39	49.42	58.61	41.93	-----
Imports (BuCensus), complete units.....do.....	2,074.7	2,536.7	208.02	227.08	210.59	201.76	259.60	245.25	240.46	265.85	231.57	210.38	199.95	225.28	242.62	-----
From Canada, total.....do.....	733.8	825.6	75.51	74.23	62.01	75.11	98.71	91.49	93.77	93.77	63.26	35.17	54.72	61.04	71.31	-----
Registrations, total new vehicles.....do.....	* 8,262	* 9,732	* 762.7	* 845.6	* 726.0	* 717.2	* 826.2	* 916.7	* 1,007.3	* 1,041.6	* 1,005.0	* 1,018.6	* 1,122.5	* 859.1	* 781.7	-----
Imports, incl. domestically sponsored.....do.....	* 1,501	* 1,447	* 130.3	* 124.5	* 110.2	* 126.8	* 149.3	* 175.9	* 202.9	* 198.9	* 173.9	* 200.8	* 198.6	* 137.8	* 122.8	-----
Trucks and buses:																
Factory sales (from U.S. plants), total.....thous.....	2,272	2,979	242.4	243.3	251.8	261.8	334.8	288.4	290.4	316.2	264.6	274.4	305.4	* 323.9	* 286.8	-----
Domestic.....do.....	2,003	2,734	222.3	221.5	230.9	241.2	307.3	266.2	269.2	290.9	245.4	256.9	280.3	-----	-----	-----
Retail sales, seasonally adjusted.....do.....																
Light-duty, up to 14,000 lbs. GVW.....do.....	2,076.0	2,762.8	221.4	243.2	263.0	270.6	290.9	263.0	240.5	252.9	224.4	261.3	248.9	280.6	270.8	295.3
Medium-duty, 14,001-26,000 lbs. GVW.....do.....	168.9	161.7	12.6	12.7	14.1	14.4	17.0	14.4	14.3	15.1	13.7	13.3	12.7	15.0	13.5	14.1
Heavy-duty, 26,001 lbs. and over GVW.....do.....	106.1	119.6	10.5	10.5	13.0	12.8	14.0	14.4	15.3	14.8	13.7	14.6	14.0	15.3	14.5	12.9
Retail inventories, end of period, seasonally adjusted.....thous.....	485.7	546.4	549.3	551.4	563.5	553.5	568.2	565.3	585.6	590.1	630.0	676.5	689.4	719.5	735.6	721.9
Exports (BuCensus), assembled units.....do.....	223.47	199.63	14.67	18.26	17.11	14.99	20.18	15.46	18.63	19.55	19.10	15.48	14.95	15.68	16.52	-----
Imports (BuCensus), including separate chassis and bodies.....thous.....	466.28	812.83	67.54	64.09	67.27	68.54	77.55	75.56	68.94	64.49	52.53	58.75	62.20	78.27	67.02	-----
Registrations, new vehicles, excluding buses not produced on truck chassis.....thous.....	* 2,307	* 3,058	* 240.9	* 264.2	* 235.8	* 238.1	* 273.6	* 290.0	* 305.4	* 318.0	* 298.4	* 313.4	* 307.2	* 282.6	270.9	-----
Truck trailers and chassis, complete (excludes detachables), shipments.....number.....																
Vans.....do.....	78,296	105,401	10,223	9,548	8,756	11,145	13,203	12,788	13,547	14,856	12,785	15,184	* 15,296	15,038	-----	-----
Trailer bodies (detachable), sold separately.....do.....	43,596	61,726	6,125	5,617	5,552	7,057	8,429	8,256	8,205	8,560	7,343	9,598	* 9,728	9,523	-----	-----
Trailer chassis (detachable), sold separately.....do.....	8,072	7,316	504	422	625	746	420	450	753	679	564	653	605	576	-----	-----
Trailer chassis (detachable), sold separately.....do.....	2,936	5,678	1,199	1,148	1,565	1,447	1,349	1,606	1,744	1,519	1,035	1,761	2,222	2,087	-----	-----
RAILROAD EQUIPMENT																
Freight cars (new), for domestic use; all railroads and private car lines (excludes rebuilt cars and cars for export):																
Shipments.....number.....	172,392	152,504	4,103	4,774	3,401	3,344	5,321	3,604	4,982	4,899	3,432	4,370	5,232	3,896	4,009	-----
Equipment manufacturers.....do.....	165,870	145,618	3,680	4,293	3,048	2,852	4,834	3,327	4,459	4,582	3,146	3,887	4,609	3,452	3,477	-----
New orders.....do.....	33,457	36,048	2,494	3,462	4,291	3,548	3,578	3,956	6,234	7,461	6,073	4,412	5,376	5,673	4,053	-----
Equipment manufacturers.....do.....	32,032	30,546	2,494	3,061	3,891	3,448	3,578	3,956	6,234	7,286	6,073	4,412	4,976	3,173	4,053	-----
Unfilled orders, end of period.....do.....	40,135	23,415	24,839	23,415	24,202	24,316	22,642	22,703	24,082	26,063	29,411	29,216	29,343	30,973	30,757	-----
Equipment manufacturers.....do.....	34,025	18,733	20,077	18,733	19,463	19,969	18,782	19,120	20,922	23,545	26,579	26,867	27,127	26,701	27,017	-----
Freight cars (revenue), class 1 railroads (AAR):																
Number owned, end of period.....thous.....	1,359	1,332	1,339	1,332	1,328	1,324	1,323	1,319	1,312	1,310	1,305	1,302	1,299	1,294	1,290	-----
Held for repairs, % of total owned.....do.....	8.6	8.8	8.9	8.8	8.9	8.9	8.8	8.9	8.9	8.6	8.7	8.6	8.7	8.7	8.8	-----
Capacity (carrying), total, end of mo. mil. tons.....do.....	99.09	97.71	99.08	97.71	98.63	99.43	98.48	98.22	97.91	97.96	97.67	97.56	97.46	97.10	97.10	-----
Average per car.....thous. tons.....	72.89	73.37	74.01	73.37	74.27	72.91	74.36	74.46	74.62	74.75	74.85	74.94	75.05	75.13	-----	-----

* Revised. * Preliminary. ¹ Annual total includes revisions not distributed by months. ² Estimate of production, not factory sales. ³ Excludes 2 States. ⁴ Excludes 1 State. ⁵ Excludes 3

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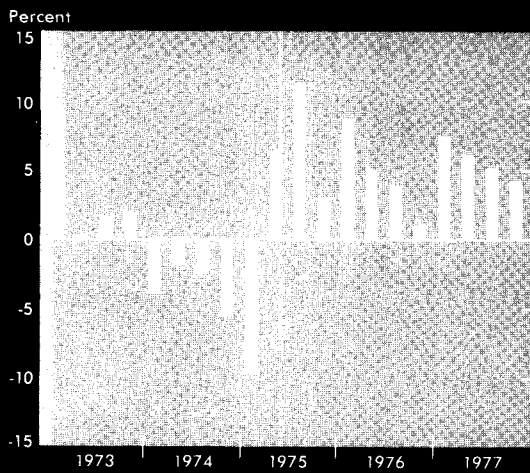
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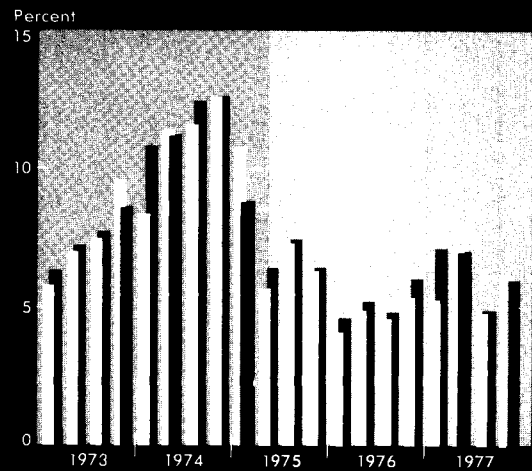
In the fourth quarter

- Real GNP increased at 4 percent compared with 5 percent in the third quarter
- GNP prices increased at 6 percent—more than in the third quarter
- Real disposable personal income increased at 8½ percent compared with 4½ percent in the third quarter

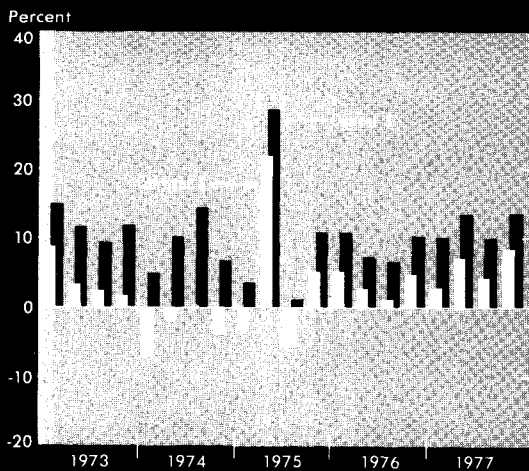
Real GNP



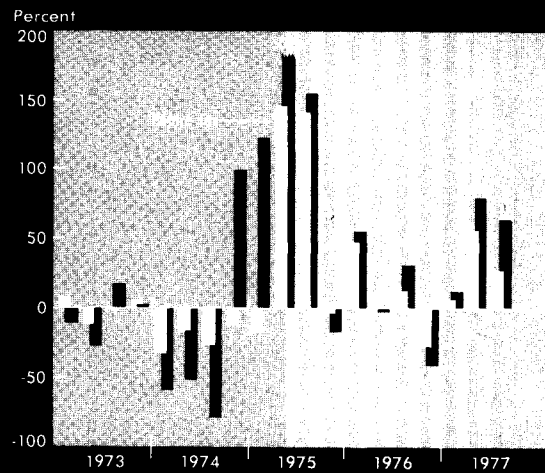
GNP Prices



Disposable Personal Income



Corporate Profits With IVA and CCAj



Percent change from preceding quarter seasonally adjusted at annual rates.