



Section 15 Prices

This section presents indexes of producer and consumer prices, actual prices for selected commodities and energy prices. The primary sources of these data are monthly publications of the Department of Labor, Bureau of Labor Statistics (BLS), which include: *Monthly Labor Review*; *Consumer Price Index, Detailed Report*; *Consumer Prices: Energy and Food*; and *Producer Price Indexes*. The Bureau of Economic Analysis of the Department of Commerce is the source for the gross national product implicit price deflators; see table 775.

Producer price index.—This index, dating from 1890, is the oldest continuous statistical series published by BLS. It is designed to measure average changes in prices received by producers of all commodities, at all stages of processing, produced in the U.S.

The index has undergone several revisions (see *Monthly Labor Review*, February 1962, April 1978, and August 1988). It is now based on approximately 3,100 commodity price series. Indexes for the net output of manufacturing and mining industries have been added in recent years. Prices used in constructing the index are collected from sellers, and generally apply to the first significant large-volume commercial transaction for each commodity—i.e., the manufacturer's or other producer's selling price or the selling price on an organized exchange or at a central market.

The weights used in the index represent the total net selling value of commodities produced or processed in this country. Values are f.o.b. (free-on-board) production point and are exclusive of excise taxes. Effective with the release of data for January 1988, many important producer price indexes were changed to a new reference base year, 1982=100, from 1967=100. The base year 1982 coincides with the reference year of the PPI shipment weights, which have been taken primarily from the 1982 Census of Manufactures.

Consumer price indexes (CPI).—The CPI is a measure of the average change in prices over time in a fixed "market basket" of goods and services purchased either by urban wage earners and clerical workers or by all urban consumers.

In 1919, BLS began to publish complete indexes at semiannual intervals, using a weighting structure based on data collected in the expenditure survey of wage-earner and clerical-worker families in 1917-19 (BLS Bulletin 357, 1924). The first major revision of the CPI occurred in 1940, with subsequent revisions in 1953, 1964, 1978, and 1987.

Beginning with the release of data for January 1988 in February 1988, most Consumer Price Indexes shifted to a new reference base year. All indexes previously expressed on a base of 1967=100, or any other base through December 1981, have been rebased to 1982-84=100. Selection of the 1982-84 period was made to coincide with the updated expenditure weights, which are based upon data tabulated from the Consumer Expenditure Surveys for 1982, 1983, and 1984.

BLS publishes CPI's for two population groups: (1) a CPI for All Urban Consumers (CPI-U) which covers approximately 80 percent of the total population; and (2) a CPI for Urban Wage Earners and Clerical Workers (CPI-W) which covers 32 percent of the total population. The CPI-U includes in addition to wage earners and clerical workers, groups which historically have been excluded from CPI coverage, such as professional, managerial, and technical workers, the self-employed, short-term workers, the unemployed, and retirees and others not in the labor force.

The current CPI is based on prices of food, clothing, shelter, fuels, transportation fares, charges for doctors' and dentists' services, drugs, etc. purchased for day-to-day living. Prices are collected in 85 areas across the country from over 57,000 housing units and 19,000 establishments. Area selection was based on the 1980 census. All taxes directly associated with the purchase and use of items are included in the index. Prices of food, fuels, and a few other items are obtained every month in all 85 locations. Prices of most other commodities and services are collected monthly in the five largest geographic areas and every other month in other areas.

In calculating the index, each item is assigned a weight to account for its relative importance in consumers' budgets. Price changes for the various items in each location are then averaged. Local data are then combined to obtain a U.S. city average. Separate indexes are also published for re-

gions, area size-classes, cross-classifications of regions and size-classes, and for 29 local areas, usually consisting of the Metropolitan Statistical Area (MSA); see Appendix II. Area definitions are those established by the Office of Management and Budget in 1983. Definitions do not include revisions made since 1983. Area indexes do not measure differences in the level of prices among cities, they only measure the average change in prices for each area since the base period. For further detail regarding the CPI, see the BLS *Handbook of Methods*, Bulletin 2285, Chapter 19: the Consumer Price Index, and Report 736, the CPI: 1987 Revision.

In January 1983, the method of measuring homeownership costs in the CPI-U was changed to a rental equivalence approach. This treatment calculates homeowner costs of the shelter based on the implicit rent owners would pay to rent the homes they own. The rental equivalence approach was introduced into the CPI-W in January 1985.

Other price indexes.—The fixed-weighted price index is a weighted average of the detailed price indexes used in the deflation of goods and services that make up the GNP. These price indexes are combined using weights that reflect the composition of GNP in 1982. Because the same weights are used for each period, changes in this index measure changes in prices over any period. The chain price index is an alternative measure of price change. It is a weighted average of the same detailed price indexes, but they are combined using weights that reflect the composition of GNP in the first of two consecutive periods. Thus, changes in this index measure changes in prices only between the consecutive periods.

The implicit price deflator is a by-product of the deflation of GNP. It is derived as the ratio of current- to constant-dollar GNP (multiplied by 100). It is a weighted average of the detailed price indexes used in the deflation of GNP, but they are combined using weights that reflect the composition of GNP in each period. Thus, changes in the implicit price deflator reflect not only changes in prices but also changes in the composition of GNP.

Measures of inflation.—Inflation is defined as a time of generally rising prices for goods and factors of production. The U.S. Bureau of Labor Statistics samples prices of items in a representative market basket and publishes the results as the Consumer Price Index (CPI). The media invariably announce the inflation rate as the percent change in the CPI from month to month. A much more meaningful indicator of inflation is the percent change from the same month of the prior year.

The CPI is the most widely followed measure of inflation. It is broad-ranging and readily comprehensible. Broad as it is, the CPI is not the most comprehensive price yardstick available. That distinction belongs to the Gross national product deflator (GNP). The GNP deflator is issued quarterly by the U.S. Bureau of Economic Analysis. It is a measure of the difference between current dollar GNP and constant dollar GNP. It is obtained by dividing the current dollar GNP for a given period by the constant dollar GNP for the same period. The movement of the deflator usually closely parallels the movement of the CPI but is rarely identical to it. The GNP deflator, in theory, reflects price trends throughout the economy, whereas, the CPI represents price trends at the retail level only.

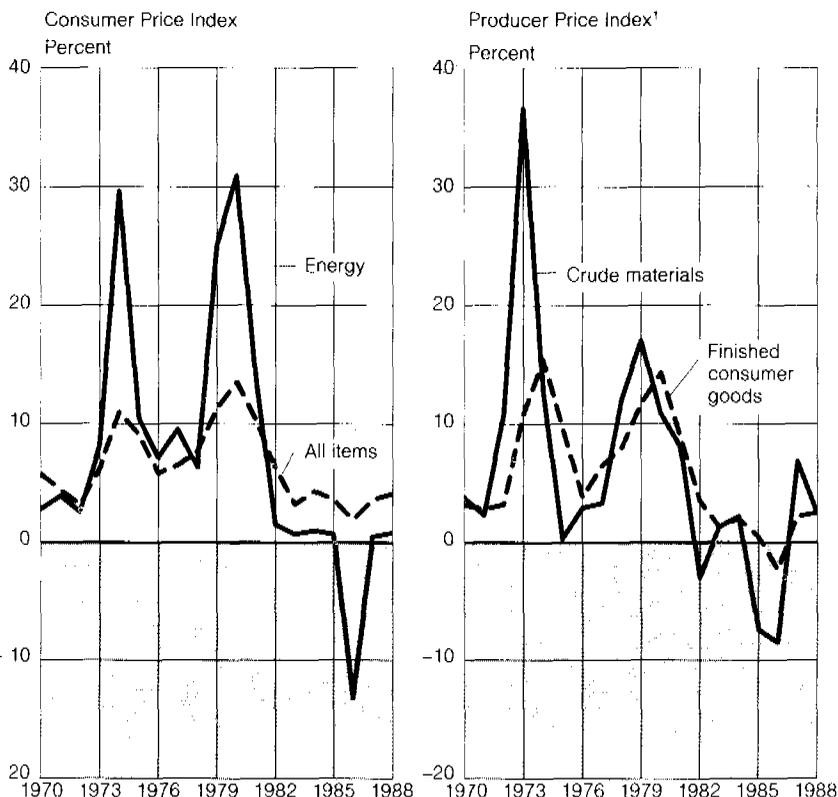
The Producer Price Index (PPI) measures prices at the wholesale level only. The PPI shows the same general pattern of inflation as does the CPI, but is more volatile. The PPI can be roughly viewed as a leading indicator. It often tends to foreshadow trends that later occur in the CPI and the GNP deflator.

Other measures of inflation include: (1) The index of industrial materials prices, (2) The Dow Jones Commodity Spot Price Index, and Futures Price Index.

Statistical reliability.—For a discussion of statistical collection and estimation, sampling procedures, and measures of statistical reliability pertaining to the producer price index and the CPI, see Appendix III.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

Figure 15.1
**Annual Percent Change in Consumer and
 Producer Price Indexes: 1970 to 1988**



¹⁾ Producer price index by stage of processing.

Source: Chart prepared by U.S. Bureau of the Census. For data, see tables 757 and 758

NO. 756. PURCHASING POWER OF THE DOLLAR: 1950 TO 1988

[Indexes: PPI, 1982=\$1.00; CPI, 1982-84=\$1.00. Producer prices prior to 1961, and consumer prices prior to 1964, exclude Alaska and Hawaii. Producer prices based on finished goods index. Obtained by dividing the average price index for the 1982=100, PPI; 1982-84=100, CPI base periods (100.0) by the price index for a given period and expressing the result in dollars and cents. Annual figures are based on average of monthly data]

YEAR	ANNUAL AVERAGE AS MEASURED BY—		YEAR	ANNUAL AVERAGE AS MEASURED BY—		YEAR	ANNUAL AVERAGE AS MEASURED BY—	
	Producer prices	Consumer prices		Producer prices	Consumer prices		Producer prices	Consumer prices
1950	\$3.546	\$4.151	1963	\$2.994	\$3.265	1976	\$1.645	\$1.757
1951	3.247	3.846	1964	2.985	3.220	1977	1.546	1.649
1952	3.268	3.765	1965	2.933	3.166	1978	1.433	1.532
1953	3.300	3.795	1966	2.841	3.080	1979	1.289	1.380
1954	3.289	3.717	1967	2.805	2.993	1980	1.136	1.215
1955	3.279	3.732	1968	2.732	2.873	1981	1.041	1.098
1956	3.195	3.678	1969	2.632	2.726	1982	1.000	1.035
1957	3.077	3.549	1970	2.545	2.574	1983	.984	1.003
1958	3.012	3.457	1971	2.469	2.466	1984	.964	.961
1959	3.021	3.427	1972	2.392	2.391	1985	.955	.928
1960	2.994	3.373	1973	2.193	2.251	1986	.969	.913
1961	2.994	3.340	1974	1.901	2.029	1987	.949	.880
1962	2.985	3.304	1975	1.718	1.859	1988	.926	.846

Source: U.S. Bureau of Labor Statistics. Monthly data in U.S. Bureau of Economic Analysis, *Survey of Current Business*.

No. 757. CONSUMER PRICE INDEXES—PERCENT CHANGE IN MAJOR GROUPS: 1960 TO 1988

[In percent]

YEAR	ALL ITEMS—		Energy	Fuel, and other utilities	Food	Shelter	Transportation	Apparel and upkeep	All commodities	Services
	Total	Less food, energy								
1960.....	1.7	1.3	2.3	2.4	1.0	2.0	-	1.6	.9	3.4
1961.....	1.0	1.3	.4	1.2	1.3	.8	1.0	.9	.6	1.7
1962.....	1.0	1.3	.4	-	.7	1.6	2.3	.4	.9	2.0
1963.....	1.3	1.3	-	1.1	1.6	1.2	.3	1.3	.9	2.0
1964.....	1.3	1.6	-.4	-	1.3	1.5	1.6	.9	1.2	2.0
1965.....	1.6	1.2	1.8	-	2.2	1.9	1.6	1.1	1.1	2.3
1966.....	2.9	2.4	1.7	.4	5.0	3.0	1.3	2.5	2.6	3.8
1967.....	3.1	3.6	2.1	1.5	.9	3.6	3.1	4.1	1.9	4.3
1968.....	4.2	4.6	1.7	1.1	3.5	4.5	3.0	5.3	3.5	5.2
1969.....	5.5	5.8	2.5	2.2	5.1	8.3	4.1	5.8	4.7	6.9
1970.....	5.7	6.3	2.8	3.9	5.7	8.9	5.0	4.2	4.5	6.0
1971.....	4.4	4.7	3.9	6.9	3.1	4.2	5.3	3.2	3.6	5.7
1972.....	3.2	3.0	2.6	4.5	4.2	4.6	1.0	2.0	3.0	3.8
1973.....	6.2	3.6	8.1	5.5	14.5	4.7	3.3	3.7	7.4	4.4
1974.....	11.0	8.3	29.6	18.7	14.3	9.6	11.2	7.4	11.9	9.2
1975.....	9.1	9.1	10.5	11.5	8.5	9.9	9.4	4.5	8.8	9.6
1976.....	5.8	6.5	7.1	8.8	3.0	5.5	10.0	3.7	4.3	6.3
1977.....	6.5	6.3	9.5	10.7	6.3	6.6	7.1	4.5	5.8	7.7
1978.....	7.6	7.4	6.3	6.9	9.9	10.2	4.6	3.6	7.2	8.6
1979.....	11.3	9.8	25.1	10.8	11.0	13.9	14.3	4.3	11.3	11.0
1980.....	13.5	12.4	30.9	16.4	8.6	17.6	17.9	7.1	12.3	15.4
1981.....	10.3	10.4	13.6	14.6	7.8	11.7	12.2	4.8	8.4	13.1
1982.....	6.2	7.4	1.5	9.8	4.1	7.1	4.1	2.6	4.1	9.0
1983.....	3.2	4.0	.7	5.6	2.1	2.3	2.4	2.5	3.9	3.5
1984.....	4.3	5.0	1.0	4.6	3.8	4.9	4.4	1.9	3.4	5.2
1985.....	3.6	4.3	.7	1.6	2.3	5.6	2.6	2.8	2.1	5.1
1986.....	1.9	4.0	-13.2	-2.3	3.2	5.5	-3.9	.9	-9	5.0
1987.....	3.6	4.1	.5	-1.1	4.1	4.7	3.0	4.4	3.2	4.2
1988.....	4.1	4.4	.8	1.4	4.1	4.8	3.1	4.3	3.5	4.6

- Represents zero.

No. 758. STAGE OF PROCESSING PRODUCER PRICES—ANNUAL PERCENT CHANGE: 1960 TO 1988

[1962=100. Yearly averages]

YEAR	FINISHED GOODS			Finished consumer goods except foods	Intermediate materials, supplies and components	Intermediate materials, less food and feedstuff	CRUDE MATERIALS			
	Total	Consumer goods	Capital equipment				Total	Crude foodstuff and feedstuff	Crude nonfood material excluding fuel	Crude fuel
1960.....	.9	.9	.3	.6	-	.7	-2.3	-1.0	-4.3	1.0
1961.....	-	-	.3	-.3	-.6	-1.3	-7	-1.3	1.1	-
1962.....	.3	.3	.3	-	-	-.3	1.0	1.8	-.4	-1.0
1963.....	-.3	-.6	.3	-	.3	-.3	-2.0	-2.8	-1.5	1.0
1964.....	.3	.3	.9	-.3	.3	.7	-1.0	-2.4	1.9	-
1965.....	1.8	1.8	1.2	.9	1.3	1.3	5.1	7.1	1.8	1.0
1966.....	3.2	3.5	2.4	1.5	2.6	2.0	6.4	8.9	2.2	2.8
1967.....	1.1	.6	3.5	1.8	.6	1.3	-5.4	-5.6	-6.4	3.7
1968.....	2.8	2.5	3.4	2.3	2.5	2.5	1.6	1.5	2.3	1.8
1969.....	3.8	3.8	3.5	2.3	3.3	3.4	6.6	7.8	4.8	4.3
1970.....	3.4	3.2	4.7	3.0	3.8	3.6	3.8	2.5	2.5	15.0
1971.....	3.1	2.8	4.0	3.5	4.0	4.0	2.3	2.0	1.0	13.8
1972.....	3.2	3.2	2.6	1.8	3.8	4.1	10.8	11.7	9.9	7.0
1973.....	9.1	10.8	3.3	4.6	11.0	7.7	36.6	41.0	32.8	10.7
1974.....	15.4	15.4	14.3	17.0	23.8	24.4	12.7	5.2	27.0	33.3
1975.....	10.6	9.6	15.2	10.4	10.5	12.1	.3	1.3	-8.3	23.4
1976.....	4.5	3.8	6.7	6.2	5.0	6.0	2.9	-.8	9.8	12.7
1977.....	6.4	6.5	6.4	7.3	6.6	6.8	3.3	.9	2.6	21.7
1978.....	7.9	7.9	7.9	7.1	7.1	7.0	12.1	12.6	9.9	14.8
1979.....	11.2	11.7	8.7	13.3	12.8	12.6	17.0	14.5	22.0	18.9
1980.....	13.4	14.3	10.7	18.5	15.2	15.5	10.9	4.6	21.6	21.1
1981.....	9.2	9.0	10.3	10.3	9.2	9.8	8.1	-.7	19.6	22.2
1982.....	4.1	3.5	5.7	4.1	1.4	1.8	-2.9	-3.8	-8.9	17.9
1983.....	1.6	1.3	2.8	1.2	.6	.5	1.3	1.8	-1.2	5.1
1984.....	2.1	2.0	2.3	1.0	2.5	2.5	2.2	2.8	2.2	-
1985.....	1.0	.5	2.2	1.1	-.4	-.4	-7.4	-9.5	-6.6	-2.3
1986.....	-1.4	-2.3	2.0	-4.6	-3.5	-3.6	-8.5	-1.7	-19.4	-10.2
1987.....	2.1	2.2	1.8	2.2	2.4	2.4	6.8	3.2	16.4	-8.8
1988.....	2.5	2.5	2.3	2.4	5.5	5.1	2.5	10.3	15.0	-2.4

- Represents zero.

Source of tables 757 and 758: U.S. Bureau of Labor Statistics, *Monthly Labor Review*.

**NO. 759. IMPLICIT PRICE DEFLATORS FOR GROSS NATIONAL PRODUCT—ANNUAL PERCENT CHANGE:
1960 TO 1988**

(Minus sign () indicates decrease)

YEAR	Gross national product	Gross domestic product, total	Gross domestic business product	Gross non-farm business product	Personal consumption expenditures	FIXED INVESTMENT ¹			Exports	Imports	Govt. purchases of goods and services
						Total	Residential	Nonresidential			
1960	1.6	1.6	1.2	1.2	1.9	1.4	.7	1.3	1.7	1.3	1.2
1961	1.0	1.0	.9	.6	1.2	-	-	-3	1.6	-1.3	2.0
1962	2.2	2.2	1.8	2.1	1.8	.7	.4	1.3	.3	-9	3.5
1963	1.5	1.5	1.2	1.2	1.5	1.7	-4	1.3	.3	3.1	2.3
1964	2.7	2.7	2.3	2.0	1.7	2.3	1.8	1.9	3.5	2.5	3.3
1965	3.6	3.6	3.1	2.8	3.1	4.2	3.1	3.7	3.7	4.0	4.6
1966	2.6	2.6	2.5	3.0	2.5	3.1	3.3	3.3	2.4	1.9	4.7
1967	5.0	5.0	4.6	4.3	4.5	4.2	5.2	4.4	2.0	1.5	6.1
1968	5.6	5.6	4.9	4.9	4.3	6.9	9.5	5.6	4.0	3.0	6.0
1969	5.5	5.5	4.7	4.9	4.6	4.8	3.9	5.3	5.7	5.8	8.5
1970	5.7	5.7	4.9	4.9	4.7	5.6	5.4	6.3	4.4	4.1	7.6
1971	4.7	4.7	4.0	3.8	4.0	4.9	5.6	4.7	3.2	6.0	6.8
1972	6.5	6.5	6.4	4.7	6.2	5.6	8.7	3.6	12.9	10.9	7.5
1973	9.1	9.1	9.3	9.7	10.5	10.3	11.2	9.8	19.5	42.0	10.8
1974	9.8	9.8	10.0	10.7	8.0	13.1	8.8	14.7	10.3	7.3	10.5
1975	6.4	6.4	6.0	6.3	5.7	6.7	7.0	6.9	4.3	3.0	6.6
1976	6.7	6.7	6.6	6.7	6.5	8.1	11.4	6.8	4.9	7.4	7.0
1977	7.3	7.3	7.3	7.0	7.3	9.5	12.4	8.2	7.1	10.0	7.9
1978	8.9	8.9	9.0	8.8	9.2	9.7	12.1	8.8	12.1	17.2	9.1
1979	9.0	9.0	9.1	9.7	10.7	9.4	9.8	9.4	10.5	24.5	11.3
1980	9.7	9.7	9.7	9.8	9.2	9.2	8.1	9.8	8.1	5.8	9.2
1981	6.4	6.4	6.0	6.4	5.7	6.2	3.5	7.1	2.6	-1.6	7.1
1982	3.9	3.9	3.5	3.6	4.1	-2	2.2	-1.2	1.3	-2.6	4.0
1983	3.7	3.7	3.5	3.2	3.8	.4	3.7	-9	1.9	-3	4.4
1984	3.0	3.1	2.7	3.3	3.2	.4	2.2	-2	-2.1	-2.0	3.4
1985	2.6	2.5	2.4	2.5	2.4	2.3	2.6	1.6	-1.2	-1.6	2.0
1986	3.2	3.2	2.8	2.7	4.8	.2	4.6	-1.8	-3	5.7	3.5
1987	3.3	3.3	3.1	2.8	3.9	1.5	3.0	1.2	3.8	3.7	4.1

- Represents zero. ¹ Gross private domestic fixed investment.Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

**NO. 760. FIXED WEIGHTED PRICE INDEXES FOR PERSONAL CONSUMPTION EXPENDITURES—ANNUAL
PERCENT CHANGE: 1960 TO 1988**

YEAR	Personal consumption expenditures	Motor vehicles and parts	Furniture ¹	Food	Clothing and shoes	Gasoline and oil	Fuel, oil, and coal	Housing	Household operation	Electricity	Transportation	Medical care
1960	1.4	-1.7	.3	1.2	1.2	2.6	-1.5	1.6	3.5	1.3	3.4	3.4
1961	1.1	.2	-1.1	.9	.6	-8	3.7	1.4	1.4	.3	3.6	2.9
1962	.8	.9	-1.8	1.2	.4	.9	-	1.3	.7	-	.6	2.8
1963	1.1	.2	-1.0	1.5	1.0	-	2.1	1.1	1.7	-	-1.3	2.3
1964	1.1	.4	-8	1.8	.8	-4	-2.1	1.0	1.6	-6	-3	3.4
1965	1.3	-9	-1.8	2.0	.9	3.8	2.1	1.0	1.6	-3	3.2	3.3
1966	2.1	-9	-1.5	4.5	2.8	2.4	2.8	1.3	1.6	-	3.4	4.6
1967	2.6	1.3	.7	1.1	4.3	3.2	2.7	2.0	2.2	.6	1.8	6.4
1968	3.8	3.0	2.2	3.8	5.7	1.5	3.3	2.5	3.7	1.0	2.4	7.6
1969	4.4	2.1	2.2	5.2	5.7	3.4	2.6	3.4	3.5	1.9	4.9	5.9
1970	4.4	3.3	1.5	5.7	4.2	.7	3.8	4.2	4.8	3.4	10.2	7.0
1971	4.3	4.4	1.4	2.8	3.3	1.1	6.0	4.7	7.0	6.6	11.3	5.5
1972	3.6	-	1.0	4.8	2.2	1.1	.6	3.6	5.3	4.8	3.4	5.2
1973	5.6	1.1	1.4	13.2	3.7	9.6	15.3	4.5	6.0	5.9	1.3	4.2
1974	9.4	5.9	6.2	13.0	6.6	34.9	58.3	4.1	11.3	18.1	6.0	8.1
1975	7.7	9.6	7.6	7.4	3.2	6.8	8.0	6.8	10.2	13.2	4.1	9.8
1976	5.7	7.8	3.7	2.7	3.2	4.3	7.2	6.9	9.2	6.3	11.9	8.9
1977	6.3	6.0	2.5	4.3	3.8	5.6	13.4	8.8	7.8	6.8	12.4	9.9
1978	7.0	7.0	4.0	9.4	2.4	4.3	5.4	7.2	6.6	8.7	5.7	7.8
1979	8.9	8.1	5.2	10.2	2.8	34.8	35.3	8.4	8.6	7.7	6.7	8.5
1980	10.4	7.9	6.3	8.0	3.9	38.2	37.7	9.8	10.2	15.6	15.5	11.3
1981	9.0	8.2	5.9	8.2	3.2	11.4	21.4	10.8	12.4	15.0	10.9	11.3
1982	5.7	5.5	3.6	4.2	1.9	-5.2	-1.1	7.9	11.4	9.9	7.2	9.5
1983	4.2	2.9	1.1	2.0	1.9	-3.3	-6.1	5.7	6.8	3.2	4.8	7.2
1984	4.0	3.3	.1	4.2	1.3	-1.6	2.3	5.5	5.2	6.4	3.2	7.1
1985	3.5	2.2	-.5	2.2	3.0	.8	-1.9	5.6	3.0	3.6	1.1	5.9
1986	2.8	2.1	.2	3.3	.3	-21.5	-19.1	5.6	2.2	1.4	3.5	4.9
1987	4.7	5.0	1.2	4.5	4.7	3.8	.4	4.6	-	-3	6.4	5.9
1988	4.3	1.8	1.7	4.3	4.3	1.0	.3	4.9	1.4	1.4	5.1	7.0

- Represents zero. ¹ Includes household equipment.Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

NO. 761. CONSUMER PRICE INDEXES FOR SELECTED ITEMS AND GROUPS: 1970 TO 1988

[1982-84=100. Annual averages of monthly figures. See headnote, table 762]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
All items	38.6	53.8	82.4	90.9	96.5	99.6	103.9	107.8	109.6	113.6	118.3
Food and beverages	40.1	60.2	86.7	93.5	97.3	99.5	103.2	105.6	109.1	113.5	118.2
Food	39.2	59.8	86.8	93.6	97.4	99.4	103.2	105.6	109.0	113.5	118.2
Food at home.....	39.9	61.8	88.4	94.8	98.1	99.1	102.8	104.3	107.3	111.9	116.6
Cereals and bakery products.....	37.1	62.9	83.9	92.3	96.5	99.6	103.9	107.9	110.9	114.8	122.1
Meats, poultry, fish and eggs.....	44.6	67.0	92.0	96.0	99.6	99.2	101.3	100.1	104.5	110.5	114.3
Fish and seafood.....	31.3	53.9	87.5	94.8	98.2	99.3	102.5	107.5	117.4	129.9	137.4
Eggs.....	65.6	82.4	88.6	95.9	93.3	97.7	109.1	91.0	97.2	91.5	93.6
Dairy products.....	44.7	62.6	90.9	97.4	98.8	100.0	101.3	103.2	103.3	105.9	108.4
Fruits and vegetables.....	37.8	56.9	82.1	92.0	97.0	97.3	105.7	106.4	109.4	119.1	128.1
Apples.....	37.1	56.4	92.1	84.3	98.8	94.6	106.6	113.1	130.6	131.0	134.2
Coffee.....	31.7	46.4	111.6	96.2	98.5	98.8	102.7	105.5	132.7	116.2	115.0
Alcoholic beverages.....	52.1	65.9	86.4	92.5	96.7	100.4	103.0	106.4	111.1	114.1	118.6
Alcoholic beverages at home.....	(NA)	(NA)	87.3	93.1	97.0	100.3	102.4	105.2	109.3	111.5	114.2
Beer and ale at home.....	49.2	53.4	84.8	90.9	95.2	100.7	104.2	106.7	108.7	110.9	114.4
Distilled spirits at home.....	(NA)	(NA)	89.8	94.9	98.2	100.4	101.4	105.3	113.3	114.4	116.1
Wine at home.....	49.7	65.5	89.5	96.2	100.4	100.5	99.1	100.2	102.4	105.7	107.8
Alcoholic beverages away from home.....	(NA)	(NA)	82.9	90.1	95.2	99.8	105.1	111.1	118.5	123.4	130.6
Lunch away from home.....	(NA)	(NA)	83.8	91.4	96.2	100.0	103.8	107.8	112.0	116.6	121.5
Dinner away from home.....	(NA)	(NA)	84.2	91.4	95.9	99.7	104.4	108.8	112.7	117.0	121.6
Housing	36.4	50.7	81.1	90.4	96.9	99.5	103.6	107.7	110.9	114.2	118.5
Shelter.....	35.5	48.8	81.0	90.5	96.9	99.1	104.0	109.8	115.8	121.3	127.1
Renters' cost.....	(NA)	(NA)	(NA)	(NA)	(NA)	103.0	108.6	115.4	121.9	128.1	133.6
Tenants' insurance.....	(NA)	(NA)	78.9	86.6	94.4	100.7	104.8	109.4	115.8	120.4	124.9
Homeowners' costs.....	(NA)	(NA)	(NA)	(NA)	(NA)	102.5	107.3	113.1	118.4	124.8	131.1
Owners' equivalent rent.....	(NA)	(NA)	-	-	-	102.5	107.3	113.2	119.4	124.8	131.1
Household insurance.....	(NA)	(NA)	-	-	-	103.2	107.5	112.4	119.2	124.0	129.0
Maintenance and repair.....	35.8	54.1	82.4	90.7	96.4	99.9	103.7	106.5	107.9	111.8	114.7
Maintenance and repair services.....	33.1	51.3	80.0	88.5	94.6	99.7	105.7	108.7	111.2	114.8	117.9
Household fuels and other utilities.....	29.1	45.4	75.4	86.4	94.9	100.2	104.8	106.5	104.1	103.0	104.4
Household fuels.....	23.1	39.4	74.8	87.2	95.6	100.5	104.0	104.5	99.2	97.3	98.0
Fuel oil and other household fuel commodities.....	17.0	36.4	86.1	104.6	103.4	97.2	99.4	95.9	77.6	77.9	78.1
Fuel oil.....	16.5	34.9	87.7	107.3	105.0	96.5	98.5	94.6	74.1	75.8	75.8
Gas (piped) and electricity.....	25.4	40.1	71.4	81.9	93.2	101.5	105.4	107.1	105.7	103.8	104.6
Electricity.....	31.8	50.0	75.8	87.2	95.8	99.9	105.3	108.9	110.4	110.0	111.5
Utility (piped) gas.....	19.6	31.1	65.7	74.9	89.8	107.7	105.5	104.8	99.7	95.1	96.0
Telephone services.....	58.7	71.7	77.7	84.6	93.2	99.2	107.5	111.7	117.2	116.5	116.0
Household furnishings and operations.....	46.8	63.4	86.3	93.0	98.0	100.2	101.9	103.8	105.2	107.1	109.4
Household furnishings.....	55.5	69.8	88.5	94.1	98.5	100.4	101.2	101.7	102.2	103.6	105.1
Appliances and electronic equipment.....	69.3	78.8	93.5	97.3	100.5	100.7	96.8	95.2	92.8	91.4	90.2
TV and sound equipment.....	(NA)	(NA)	100.7	102.9	102.9	100.4	96.7	91.9	88.0	86.0	83.6
Apparel and upkeep	59.2	72.5	90.9	95.3	97.8	100.2	102.1	105.0	105.9	110.6	115.4
Apparel commodities.....	63.3	76.7	92.9	96.5	98.3	100.2	101.5	104.0	104.2	108.9	113.7
Apparel commodities less footwear.....	64.5	78.0	93.0	96.5	98.1	100.2	101.6	104.3	104.7	109.6	114.4
Men's and boy's apparel.....	62.2	75.5	89.4	94.2	97.6	100.3	102.1	105.0	106.2	109.1	113.4
Women's and girl's apparel.....	71.8	85.5	96.0	97.5	98.5	100.2	101.3	104.9	104.0	110.4	114.9
Transportation	37.5	50.1	83.1	93.2	97.0	99.3	103.7	106.4	102.3	105.4	108.7
Private transportation.....	37.5	50.6	84.2	93.8	97.1	99.3	103.6	106.2	101.2	104.2	107.6
Automobile maintenance and repair.....	36.6	53.7	81.5	89.2	96.0	100.3	103.8	106.8	110.3	114.8	119.7
Automobile insurance.....	42.0	48.4	82.0	85.9	91.4	100.4	108.2	119.2	135.0	146.2	156.6
Automobile finance charges.....	(NA)	(NA)	86.4	103.2	110.0	92.9	97.1	94.5	86.0	84.9	91.3
Vehicle rental, registration, other.....	(NA)	(NA)	78.3	82.4	93.6	100.2	106.3	111.7	117.2	123.0	128.1
Airline fare.....	28.3	38.0	68.0	85.6	94.4	99.8	105.8	112.5	117.1	122.8	124.2
Medical care.....	34.0	47.5	74.9	82.9	92.5	100.6	106.8	113.5	122.0	130.1	138.6
Prescription drugs.....	47.4	51.2	72.5	80.8	90.2	100.1	109.7	120.1	130.4	140.8	152.0
Nonprescription drugs, medical supplies.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	108.1
Medical care services.....	32.3	46.6	74.8	82.8	92.6	100.7	106.7	113.2	121.9	130.0	139.3
Professional medical services.....	37.0	50.6	77.9	85.9	93.2	99.8	107.0	113.5	120.8	128.8	137.5
Hospital and related services.....	(NA)	(NA)	69.2	79.1	90.3	100.5	109.2	116.1	123.1	131.6	143.9
Entertainment	47.5	62.0	83.6	90.1	96.0	100.1	103.8	107.9	111.6	115.3	120.3
Entertainment commodities.....	46.1	61.7	84.5	91.4	97.0	100.2	102.8	105.8	107.9	110.5	115.0
Reading materials.....	(NA)	(NA)	77.7	85.9	94.3	101.2	104.5	107.7	115.6	119.5	124.3
Sporting goods, equipment.....	(NA)	(NA)	88.5	94.4	98.2	99.4	102.4	104.6	104.0	104.3	108.1
Personal care	43.5	57.9	81.9	89.1	95.4	100.3	104.3	108.3	111.9	115.1	119.4
Personal and educational expenses.....	35.5	48.7	70.9	79.7	90.3	100.0	109.7	119.1	128.6	138.5	147.9
All commodities	41.7	58.2	86.0	93.2	97.0	99.8	103.2	105.4	104.4	107.7	111.5
All commodities less food	43.4	57.6	85.7	93.1	96.9	100.0	103.1	105.2	101.7	104.3	107.7
Durables	44.1	57.4	83.0	89.5	95.1	99.8	105.1	106.8	106.6	108.2	110.4
Nondurables	40.8	58.3	87.6	95.2	97.8	99.7	102.5	104.8	103.5	107.5	111.8
Energy	25.5	42.1	86.0	97.7	99.2	99.9	100.9	101.6	86.2	88.6	89.3

- Represents zero. NA Not available.

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review* and *CPI Detailed Report*, January issues.

Consumer Price Indexes

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NO. 762. CONSUMER PRICE INDEXES, BY MAJOR GROUPS: 1960 TO 1988

[1982-84=100. Represents annual averages of monthly figures. Reflects buying patterns of all urban consumers. See text. See *Historical Statistics, Colonial Times to 1970*, series E 135-173 for similar data]

YEAR	All items	Energy	Food	Shelter	Apparel and upkeep	Transportation	Medical care	Fuel oil	Electricity	Utility (piped) gas	Telephone services	All commodities
1960.....	29.6	22.4	30.0	25.2	45.7	29.8	22.3	13.5	29.9	17.6	58.3	33.6
1961.....	29.9	22.5	30.4	25.4	46.1	30.1	22.9	14.0	29.9	17.9	58.5	33.8
1962.....	30.2	22.6	30.6	25.8	46.3	30.8	23.5	14.0	29.9	17.9	58.5	34.1
1963.....	30.6	22.6	31.1	26.1	45.9	30.9	24.1	14.3	29.9	17.9	58.6	34.4
1964.....	31.0	22.5	31.5	26.5	47.3	31.4	24.6	14.0	29.6	17.9	58.6	34.8
1965.....	31.5	22.9	32.2	27.0	47.8	31.9	25.2	14.3	29.7	18.0	57.7	35.2
1966.....	32.4	23.3	33.8	27.8	49.0	32.3	26.3	14.7	29.7	18.1	56.5	36.1
1967.....	33.4	23.8	34.1	28.8	51.0	33.3	28.2	15.1	29.9	18.1	57.3	36.8
1968.....	34.8	24.2	35.3	30.1	53.7	34.3	29.9	15.6	30.2	18.2	57.3	38.1
1969.....	36.7	24.8	37.1	32.6	56.8	35.7	31.9	15.9	30.8	18.6	58.0	39.9
1970.....	38.8	25.5	39.2	35.5	59.2	37.5	34.0	16.5	31.8	19.6	58.7	41.7
1971.....	40.5	26.5	40.4	37.0	61.1	39.5	36.1	17.6	33.9	21.0	61.6	43.2
1972.....	41.8	27.2	42.1	38.7	62.3	39.9	37.3	17.6	35.6	22.1	65.0	44.5
1973.....	44.4	29.4	48.2	40.5	64.8	41.2	38.8	20.4	37.4	23.1	66.7	47.8
1974.....	49.3	36.1	55.1	44.4	69.4	45.8	42.4	32.2	44.1	26.0	69.5	53.5
1975.....	53.8	42.1	59.8	47.5	72.5	50.1	47.5	34.9	50.0	31.1	71.7	58.2
1976.....	56.9	45.1	61.6	51.5	75.2	55.1	52.0	37.4	53.1	36.3	74.9	60.7
1977.....	60.8	49.4	65.5	54.9	78.6	59.0	57.0	42.4	56.6	43.2	75.2	64.2
1978.....	65.2	52.5	72.0	60.5	81.4	61.7	61.8	44.9	60.9	47.5	76.0	68.8
1979.....	72.6	65.7	79.9	68.9	84.9	70.5	67.5	63.1	65.6	55.1	75.8	76.6
1980.....	82.4	86.0	86.8	81.0	90.9	83.1	74.9	87.7	75.8	65.7	77.7	86.0
1981.....	90.9	97.7	93.6	90.5	95.3	93.2	82.9	107.3	87.2	74.9	84.6	93.2
1982.....	96.5	99.2	97.4	96.9	97.8	97.0	92.5	105.0	95.8	89.8	93.2	97.0
1983.....	99.6	99.9	99.4	99.1	100.2	99.3	100.6	96.5	98.9	104.7	99.2	99.8
1984.....	103.9	100.9	103.2	104.0	102.1	103.7	106.8	98.5	105.3	105.5	107.5	103.2
1985.....	107.5	101.6	105.6	109.8	105.0	106.4	113.5	94.6	108.9	104.8	111.7	105.4
1986.....	109.6	88.2	109.0	115.8	105.9	102.3	122.0	74.1	110.4	99.7	117.2	104.4
1987.....	113.6	88.6	113.5	121.3	110.6	105.4	130.1	75.8	110.0	95.1	116.5	107.7
1988.....	118.3	89.3	118.2	127.1	115.4	106.7	138.6	75.8	111.5	94.5	116.0	111.5

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review* and *Handbook of Labor Statistics*, periodic.

NO. 763. CONSUMER PRICE INDEX BY REGION: 1975 TO 1988

[1982-84=100. For composition of regions, see fig. 1, inside front cover]

ITEM	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
U.S. city average, all items.....	53.8	60.6	65.2	72.6	82.4	90.9	96.5	99.6	103.9	107.6	109.6	113.6	118.3
Food.....	59.8	65.5	72.0	79.9	86.8	93.6	97.4	99.4	103.2	105.6	109.0	113.5	118.2
Housing.....	50.7	57.4	62.4	70.1	81.1	90.4	96.9	99.5	103.6	107.7	110.9	114.2	118.5
Gas (piped) and electricity.....	40.1	50.5	55.0	61.0	71.4	81.9	93.2	101.5	105.4	107.1	105.7	103.8	104.6
Northeast:													
All items.....	55.8	62.3	66.2	72.8	82.2	91.0	95.8	99.8	104.5	108.4	111.1	116.0	121.8
Food.....	60.4	65.9	72.1	79.3	86.5	93.4	97.3	99.4	103.3	106.2	110.1	115.8	121.1
Housing.....	(NA)	(NA)	63.6	70.2	80.7	90.7	95.7	99.7	104.6	109.0	112.7	117.3	124.0
Gas (piped) and electricity.....	(NA)	(NA)	57.9	64.0	73.8	85.4	94.4	100.9	104.7	105.9	104.6	101.2	100.2
North Central:													
All items.....	53.0	59.9	64.7	72.6	82.4	90.1	96.5	99.9	103.6	106.8	108.0	111.9	118.1
Food.....	60.3	66.6	73.5	81.5	88.5	94.9	98.1	99.3	102.7	104.4	107.5	111.8	116.0
Housing.....	(NA)	(NA)	60.6	69.2	80.0	87.7	96.3	100.3	103.5	107.0	109.4	112.4	115.9
Gas (piped) and electricity.....	(NA)	(NA)	55.5	62.1	70.1	79.1	90.7	103.3	106.1	108.6	107.1	104.6	104.3
South:													
All items.....	53.3	60.0	65.0	72.4	81.9	90.7	96.5	99.7	103.8	107.1	108.9	112.4	116.4
Food.....	59.7	65.1	71.7	79.8	86.6	93.5	97.1	99.3	103.6	105.7	108.8	113.1	117.6
Housing.....	(NA)	(NA)	62.6	70.2	80.8	90.4	97.5	98.6	103.0	106.3	109.0	111.0	113.9
Gas (piped) and electricity.....	(NA)	(NA)	56.4	61.7	70.2	82.6	94.1	100.9	105.0	106.0	105.1	104.3	106.1
West:													
All items.....	52.6	59.9	65.0	72.6	83.3	91.9	97.4	99.0	103.6	108.0	110.5	114.3	119.0
Food.....	57.8	63.6	70.7	78.7	85.2	92.3	96.7	99.7	103.6	106.1	109.0	112.9	117.6
Housing.....	(NA)	(NA)	63.2	70.8	83.3	92.6	98.4	98.2	103.3	108.8	113.0	116.5	120.7
Gas (piped) and electricity.....	(NA)	(NA)	47.5	53.1	72.1	80.3	94.6	99.9	105.6	108.1	105.8	105.5	108.8

NA Not available.

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review* and *CPI Detailed Report*, January issues.

No. 764. CONSUMER PRICE INDEXES—SELECTED AREAS: 1970 TO 1988

[1982-84=100. Represents annual averages of monthly figures. Local area CPI indexes are byproducts of the national CPI program. Each local index has a smaller sample size than the national index and is therefore, subject to substantially more sampling and other measurement error. As a result, local area indexes show greater volatility than the national index, although their long-term trends are similar. Area definitions are those established by the Office of Management and Budget in 1983. For further detail see the U.S. Bureau of Labor Statistics Handbook of Methods, Bulletin 2285, Chapter 19, the Consumer Price Index, and Report 736, the CPI: 1987 Revision. See also text, section 15]

AREA	1970	1975	1980	1983	1984	1985	1986	1987	1988
All item index.....	38.8	53.8	82.4	99.6	103.9	107.6	109.6	113.6	118.3
Anchorage, AK MSA	41.1	57.1	85.5	99.2	103.3	105.8	107.8	108.2	108.6
Atlanta, GA MSA	38.6	53.6	80.3	99.9	104.1	108.9	112.2	116.5	120.4
Baltimore, MD MSA.....	39.1	55.2	83.7	99.9	104.5	108.2	110.9	114.2	119.3
Boston-Lawrence-Salem, MA-NH CMSA.....	40.2	55.8	82.6	99.8	104.7	109.4	112.2	117.1	124.2
Buffalo-Niagara Falls, NY CMSA.....	41.2	57.4	83.5	100.9	104.4	108.6	109.6	113.0	117.4
Chicago-Gary-Lake County, IL-IN-WI CMSA.....	38.9	52.8	82.2	100.0	103.8	107.7	110.0	114.5	119.0
Cincinnati-Hamilton, OH-KY-IN CMSA.....	37.4	51.8	82.1	100.8	104.3	106.6	107.6	111.9	116.1
Cleveland-Akron-Lorain, OH CMSA.....	37.2	50.2	78.9	101.2	104.8	107.8	109.4	112.7	116.7
Dallas-Fort Worth, TX CMSA.....	37.6	50.4	81.5	99.7	104.3	108.2	109.9	112.9	116.1
Denver-Boulder, CO CMSA.....	34.5	48.4	78.4	100.5	104.3	107.1	107.9	110.8	113.7
Detroit-Ann Arbor, MI CMSA.....	39.5	53.9	85.3	99.8	103.2	106.8	108.3	111.7	116.1
Honolulu, HI MSA.....	41.5	56.3	83.0	99.3	103.5	106.8	109.4	114.9	121.7
Houston-Galveston-Brazoria, TX CMSA.....	36.4	51.4	82.7	100.0	102.7	104.9	103.9	106.5	109.5
Kansas City, MO-KS CMSA.....	39.0	53.2	83.6	100.5	104.5	107.7	108.7	113.1	117.4
Los Angeles-Anaheim-Riverside, CA CMSA.....	38.7	53.3	83.7	99.1	103.6	108.4	111.9	116.7	122.1
Miami-Fort Lauderdale, FL CMSA.....	(NA)	(NA)	81.1	99.9	103.5	106.5	107.9	111.8	116.8
Milwaukee, WI MSA.....	37.5	50.8	81.4	100.2	103.8	107.0	107.4	111.5	115.9
Minneapolis-St. Paul, MN-WI MSA.....	37.4	51.2	78.9	99.5	103.1	107.0	108.4	111.6	117.2
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA.....	41.2	57.6	82.1	99.8	104.8	108.7	112.3	118.0	123.7
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA.....	40.8	56.8	83.6	99.4	104.1	108.8	111.5	116.8	122.4
Pittsburgh-Beaver Valley, PA CMSA.....	38.1	52.4	81.0	101.1	104.5	108.9	108.2	111.4	114.9
Portland-Vancouver, OR-WA CMSA.....	38.7	53.5	82.2	99.1	102.8	106.7	108.2	110.9	114.7
San Diego, CA MSA.....	34.1	47.6	79.4	99.0	104.8	110.4	113.5	117.5	123.4
San Francisco-Oakland-San Jose, CA CMSA.....	37.7	51.8	80.4	98.4	104.0	108.4	111.6	115.4	120.5
Seattle-Tacoma, WA CMSA.....	37.4	51.1	82.7	99.3	103.0	105.6	106.7	109.2	112.8
St. Louis-East St. Louis, MO-IL CMSA.....	38.8	52.6	82.5	100.1	103.3	107.1	108.6	112.2	115.7
Washington, DC-MD-VA MSA.....	39.8	54.7	82.9	99.8	104.6	109.0	112.2	116.2	121.0
	1988								
	All items	Food and beverages	Food	Housing	Apparel and upkeep	Transportation	Medical care	Entertainment	Fuel and other utilities
Index.....	118.3	118.2	118.2	118.5	115.4	108.7	138.6	120.3	104.4
Baltimore, MD MSA.....	119.3	121.8	122.4	116.2	130.1	111.5	134.7	122.8	93.1
Boston-Lawrence-Salem, MA CMSA.....	124.2	124.4	124.2	123.7	125.8	108.3	152.1	127.0	89.7
Chicago-Gary-Lake County, IL-IN-WI CMSA.....	119.0	117.1	117.0	120.7	116.6	107.6	138.0	122.3	102.0
Cleveland-Akron-Lorain, OH CMSA.....	116.7	116.4	116.6	117.8	105.8	107.3	134.9	119.9	103.7
Dallas-Fort Worth, TX CMSA.....	116.1	120.1	120.2	109.8	123.1	108.0	141.9	127.3	104.7
Detroit-Ann Arbor, MI CMSA.....	116.1	114.7	114.4	116.1	115.2	109.5	140.2	114.7	106.6
Houston-Galveston-Brazoria, TX CMSA.....	109.5	116.2	116.3	98.0	121.1	104.5	136.7	124.5	96.7
Los Angeles-Anaheim-Riverside, CA CMSA.....	122.1	117.2	116.6	126.6	114.3	113.8	139.6	115.4	115.9
Miami-Fort Lauderdale, FL CMSA.....	116.8	118.7	119.4	113.1	123.5	110.7	134.6	115.9	112.2
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA.....	123.7	124.8	124.7	125.1	107.4	112.8	144.8	122.8	93.5
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA.....	122.4	116.0	115.9	124.8	109.9	115.6	142.2	120.8	100.9
Pittsburgh-Beaver Valley, PA CMSA.....	114.9	111.9	111.6	115.7	114.2	102.3	138.2	127.1	108.1
St. Louis-East St. Louis, MO-IL CMSA.....	115.7	117.7	117.7	114.9	112.5	106.0	135.6	117.9	106.0
San Francisco-Oakland-San Jose, CA CMSA.....	120.5	120.4	121.1	126.9	116.7	105.3	136.9	129.1	116.7
Washington, DC-MD-VA MSA.....	121.0	119.2	119.1	123.4	123.1	108.1	137.8	124.8	101.2

NA Not available.

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review*, and *CPI Detailed Report*, January issues.

No. 765. FOOD—RETAIL CONSUMER PRICE INDEXES, SELECTED AREAS: 1970 TO 1988

[1982-84 = 100. See headnote table 764 and text, section 15 regarding MSA's]

AREA	1970	1975	1980	1982	1983	1984	PERCENT CHANGE				
							1985	1986	1987	1988	
Total food	39.2	59.8	86.8	97.4	99.4	103.2	105.6	109.0	113.5	118.2	
Anchorage, AK MSA.....	(NA)	62.6	90.5	97.3	99.7	103.1	106.2	110.8	113.3	114.2	
Atlanta, GA MSA.....	38.2	60.5	85.6	97.0	99.7	103.2	106.1	111.3	112.2	117.7	
Baltimore, MD MSA.....	40.6	61.7	88.2	96.5	99.4	104.0	107.2	112.2	117.1	122.4	
Boston-Lawrence-Salem, MA-NH CMSA.....	41.9	63.9	89.4	96.7	99.0	104.3	108.5	113.5	119.2	124.2	
Buffalo-Niagara Falls, NY CMSA.....	41.0	61.2	86.8	97.5	99.8	102.6	106.0	108.8	112.4	116.4	
Chicago-Gary-Lake County, IL-IN-WI CMSA.....	40.5	61.8	81.2	96.7	99.3	101.9	104.1	108.8	113.1	117.0	
Cincinnati-Hamilton, OH-KY-IN CMSA.....	37.1	57.3	85.8	96.8	99.1	104.1	104.9	107.5	111.0	114.9	
Cleveland-Akron-Lorain, OH CMSA.....	39.5	59.2	85.5	96.2	99.7	104.0	106.2	107.5	111.9	118.6	
Dallas-Fort Worth, TX CMSA.....	38.1	57.3	85.6	96.0	99.6	104.3	107.0	111.0	116.1	120.2	
Denver-Boulder, CO CMSA.....	(NA)	62.1	86.2	96.2	99.4	104.4	106.2	106.9	107.5	109.8	
Detroit-Ann Arbor, MI CMSA.....	41.7	62.2	88.9	99.4	99.2	101.4	103.1	107.1	110.3	114.4	
Honolulu, HI MSA.....	37.0	57.3	84.3	96.9	99.5	103.7	107.7	109.9	114.3	120.2	
Houston-Galveston-Brazoria, TX CMSA.....	35.8	56.2	83.9	96.4	99.2	104.4	105.1	107.4	112.1	118.3	
Kansas City, MO-KS CMSA.....	40.1	61.5	89.8	97.6	99.1	103.3	105.9	109.3	112.5	115.5	
Los Angeles-Anaheim-Riverside, CA CMSA.....	38.5	58.4	85.4	96.9	100.1	103.1	105.5	108.5	112.9	116.6	
Miami-Fort Lauderdale, FL CMSA.....	(NA)	(NA)	84.6	96.8	99.5	103.8	104.5	107.1	113.5	119.4	
Milwaukee, WI PMSA.....	39.2	59.6	87.0	98.3	99.5	102.1	105.9	107.6	112.2	116.4	
Minneapolis-St. Paul, MN-WI MSA.....	38.6	59.3	87.7	96.6	99.4	103.9	106.4	109.1	113.8	119.7	
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA.....	39.5	60.2	85.1	97.4	98.9	103.7	107.3	112.2	118.6	124.7	
Philadelphia-Wilmington-Trenton, PA-NJ-DE- MD CMSA.....	38.5	59.7	86.1	97.7	99.9	102.4	105.0	107.7	112.0	115.9	
Pittsburgh-Beaver Valley, PA CMSA.....	39.7	60.9	87.3	98.1	101.1	100.8	101.9	104.7	109.3	111.6	
Portland-Vancouver, OR-WA CMSA.....	37.9	57.5	85.5	97.1	99.6	103.3	105.8	108.2	111.4	112.1	
San Diego, CA MSA.....	36.9	56.5	83.8	94.7	100.4	105.0	107.1	111.1	115.8	119.7	
San Francisco-Oakland-San Jose, CA CMSA.....	38.1	58.0	84.8	96.9	99.1	103.9	106.0	109.5	114.0	121.1	
Seattle-Tacoma, WA CMSA.....	39.4	58.9	84.5	98.5	100.0	101.5	103.2	106.7	112.2	115.2	
St. Louis-East St. Louis, MO-IL CMSA.....	39.9	60.2	87.1	97.1	99.7	103.2	105.7	109.6	114.1	117.7	
Washington, DC-MD-VA MSA.....	39.1	60.3	88.1	97.2	99.8	103.0	106.1	109.9	113.6	119.1	

NA Not available.

Source: U.S. Bureau of Labor Statistics, *CPI Detailed Report*, January issues.

No. 766. CONSUMER PRICE INDEXES (CPI) OF HOMEOWNERS EQUIVALENT RENT IN SELECTED AREAS: 1984 TO 1988

[1982-84 = 100. Annual averages of monthly figures, except as indicated. Minus sign (-) indicates decrease. See Appendix II]

AREA	1984	1985	1986	1987	1988	PERCENT CHANGE			
						1984-85	1985-86	1986-87	1987-88
Anchorage, AK MSA.....	108.4	107.3	105.2	96.3	90.1	-1.0	-2.0	-8.5	5.5
Atlanta, GA MSA.....	106.0	114.1	121.5	128.4	129.9	7.6	6.5	4.0	2.8
Baltimore, MD MSA.....	108.8	115.3	122.8	127.6	133.8	6.0	6.5	3.9	4.9
Boston-Lawrence-Salem, MA-NH CMSA.....	111.4	119.6	127.7	137.4	149.7	7.4	6.8	7.6	9.0
Buffalo-Niagara Falls, NY CMSA.....	110.5	120.5	125.6	131.7	139.7	9.0	4.2	4.9	6.1
Chicago-Gary-Lake County, IL-IN-WI CMSA.....	107.8	114.5	119.9	125.3	132.6	6.2	4.7	4.5	5.8
Cincinnati-Hamilton, OH-KY-IN CMSA.....	105.9	110.0	113.7	119.2	123.1	3.9	3.4	4.8	3.3
Cleveland-Akron-Lorain, OH CMSA.....	105.4	111.0	116.1	120.3	126.5	5.3	4.6	3.6	5.2
Dallas-Fort Worth, TX CMSA.....	108.8	113.8	118.7	119.1	118.2	4.6	4.3	3	-8
Denver-Boulder, CO CMSA.....	107.0	110.5	111.8	113.2	113.2	3.3	1.2	1.3	-
Detroit-Ann Arbor, MI CMSA.....	103.4	108.2	115.2	121.2	127.8	4.6	6.5	5.2	5.4
Honolulu, HI MSA.....	105.8	110.4	115.8	125.0	136.8	4.3	4.9	7.9	9.4
Houston-Galveston-Brazoria, TX CMSA.....	95.1	93.9	93.8	91.8	91.7	-1.3	1	2.1	-1
Kansas City, MO-KS CMSA.....	107.7	112.1	115.6	118.6	124.6	4.1	3.1	2.6	5.1
Los Angeles-Anaheim-Riverside, CA CMSA.....	110.1	117.1	125.5	133.5	140.6	6.4	7.2	6.4	5.3
Miami-Fort Lauderdale, FL CMSA.....	103.7	106.4	109.0	111.3	115.5	2.6	2.4	2.1	3.8
Milwaukee, WI PMSA.....	109.0	115.4	120.1	129.1	135.5	5.9	4.1	7.5	5.0
Minneapolis-St. Paul, MN-WI MSA.....	105.6	112.0	117.3	122.2	125.2	6.1	4.7	4.2	2.5
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA.....	108.9	115.0	124.4	133.4	145.6	5.6	6.2	7.2	9.1
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA.....	107.7	117.8	125.3	133.7	145.2	9.4	8.4	6.7	8.6
Pittsburgh-Beaver Valley, PA CMSA.....	106.0	109.1	114.2	117.9	121.5	2.9	4.7	3.2	3.1
Portland-Vancouver, OR-WA CMSA.....	103.1	107.5	112.0	116.0	121.7	4.3	4.2	3.6	4.9
San Diego, CA MSA.....	114.9	129.6	139.7	144.3	151.8	12.8	7.8	3.3	5.1
San Francisco-Oakland-San Jose, CA CMSA.....	114.9	123.5	134.9	140.5	146.6	7.5	9.2	4.2	4.3
Seattle-Tacoma, WA CMSA.....	104.5	108.2	112.6	115.3	120.2	3.5	4.1	2.4	4.2
St. Louis-East St. Louis, MO-IL CMSA.....	108.8	116.8	120.8	125.2	129.7	7.4	3.4	3.6	3.6
Washington, DC-MD-VA MSA.....	107.1	113.5	119.9	124.9	131.2	6.0	5.6	4.2	5.0

- Represents or rounds to zero.

Source: U.S. Bureau of Labor Statistics, *CPI Detailed Report*, January issues.

No. 767. COST OF LIVING INDEX—SELECTED METROPOLITAN AREAS: FIRST QUARTER 1989

[This cost of living index measures relative price levels for consumer goods and services in participating areas for a midmanagement standard of living. The national average equals 100, and each participant's index is read as a percentage of the national average. For example, the Albany-Schenectady-Troy, NY MSA's composite cost of living is 7.9 percent above the national average. The index does not measure inflation, but compares prices at a single point in time. Excludes taxes. Metropolitan areas defined as of June 30, 1989. For definitions and components of MSA's, see Appendix II. See source for details.]

METROPOLITAN STATISTICAL AREA (MSA)	Composite index	Grocery items	Housing	Utilities	Transportation	Health care
Albany-Schenectady-Troy, NY MSA	107.9	101.0	116.3	121.6	107.4	103.0
Albuquerque, NM MSA	102.3	95.8	106.4	103.7	109.1	104.9
Augusta, GA-SC MSA	98.7	96.0	94.7	99.5	98.0	99.5
Austin, TX MSA	95.0	99.0	81.8	89.8	100.8	104.5
Bakersfield, CA MSA	112.2	103.3	97.9	115.9	108.3	176.3
Baltimore, MD MSA	107.3	103.4	117.0	106.4	108.4	113.5
Baton Rouge, LA MSA	94.5	96.4	81.9	100.2	99.6	87.5
Beaumont-Port Arthur, TX MSA	98.3	102.3	75.9	115.6	104.6	108.5
Birmingham, AL MSA	98.8	94.9	95.1	110.2	96.5	92.8
Buffalo, NY PMSA	105.9	106.1	99.2	121.0	106.1	99.3
Canton, OH MSA	88.0	86.8	87.3	112.1	84.7	81.0
Charleston, SC MSA	99.0	97.5	94.3	115.5	102.9	87.0
Charlotte-Gastonia-Rock Hill, NC-SC MSA	99.8	93.0	105.0	95.6	99.8	99.3
Chattanooga, TN-GA MSA	91.8	92.0	86.7	97.1	92.8	74.0
Chicago, IL (Naperville)	125.5	102.4	177.7	103.7	117.1	109.7
Cleveland, OH PMSA	109.7	96.4	121.0	115.0	104.4	106.4
Colorado Springs, CO MSA	93.0	91.5	90.0	80.3	98.0	105.6
Columbia, SC MSA	96.0	96.3	92.0	89.6	96.7	97.9
Columbus, OH MSA	104.0	96.1	108.3	102.0	107.1	97.6
Corpus Christi, TX MSA	99.0	99.8	85.2	103.2	106.4	89.4
Dallas, TX PMSA	103.8	106.2	102.3	106.1	111.5	106.7
Davenport-Rock Island-Moline, IA-IL MSA	93.8	99.8	88.3	92.4	93.8	86.5
Dayton-Springfield, OH MSA	103.3	94.7	110.0	104.4	103.8	90.0
Denver, CO PMSA	102.2	82.7	115.6	90.2	104.7	112.7
Des Moines, IA MSA	104.3	98.7	112.2	108.1	102.5	102.5
El Paso, TX MSA	97.2	100.5	93.6	87.2	104.4	90.8
Fresno, CA MSA	108.4	105.0	109.0	104.8	105.3	130.9
Greensboro-Winston Salem-High Point, NC MSA	99.1	98.1	108.0	95.8	94.9	89.0
Greenville-Spartanburg, SC MSA	96.7	96.0	92.3	103.1	94.7	83.7
Harrisburg-Lebanon-Carlisle, PA MSA	104.8	103.4	91.7	124.6	111.5	100.2
Houston, TX PMSA	101.7	107.9	80.1	118.5	116.1	102.7
Huntington-Ashland, WV-KY-OH MSA	92.3	93.9	79.3	94.0	91.1	86.6
Indianapolis, IN MSA	99.2	103.5	96.4	98.4	108.7	99.9
Jacksonville, FL MSA	97.0	93.6	90.7	89.7	107.1	99.1
Kansas City, MO-KS MSA	96.1	94.2	90.7	89.7	96.8	99.7
Knoxville, TN MSA	95.4	94.8	90.9	91.1	98.7	89.5
Lakeland-Winter Haven, FL MSA	101.5	98.3	98.3	119.9	108.1	94.7
Lancaster, PA MSA	104.3	104.1	89.1	139.1	100.9	86.5
Lexington-Fayette, KY MSA	99.4	96.1	104.3	92.7	94.0	100.3
Los Angeles-Long Beach, CA PMSA	124.4	104.8	196.2	70.4	108.4	129.1
Louisville, KY-IN MSA	96.4	102.0	90.9	98.6	99.3	87.1
Melbourne-Titusville-Palm Bay, FL MSA (Cocoa Beach)	107.3	97.7	106.3	111.4	112.7	115.4
Memphis, TN-AR-MS MSA	94.0	99.8	89.2	93.1	92.6	88.6
Miami-Hialeah, FL MSA	111.1	101.9	118.9	115.4	107.0	129.6
Milwaukee, WI PMSA	103.4	99.2	120.5	101.1	102.7	103.3
Minneapolis-St. Paul, MN-WI MSA	101.7	95.3	112.3	102.3	106.0	102.1
Mobile, AL MSA	97.2	99.7	83.8	108.2	107.3	88.5
Nashville-Davidson, TN MSA	99.1	90.7	108.0	109.8	99.6	94.8
Nassau-Suffolk, NY PMSA	156.7	113.3	245.6	182.6	128.6	144.5
New Orleans, LA MSA	95.9	91.4	92.8	120.5	90.1	91.9
Norfolk-Virginia Beach-Newport News, VA MSA	105.0	99.9	110.9	110.1	111.1	94.5
Oklahoma City, OK MSA	93.8	92.8	74.9	104.9	87.4	112.6
Omaha, NE-IA MSA	91.9	87.8	88.2	87.6	108.3	87.2
Orlando, FL MSA	101.1	99.4	106.0	93.0	99.3	103.6
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA	127.2	107.6	143.7	170.1	112.4	134.9
Phoenix, AZ MSA	102.7	98.3	105.6	93.2	101.5	117.6
Pittsburgh-Beaver Valley, PA CMSA	103.9	97.9	105.8	113.3	99.8	107.3
Portland, OR PMSA	103.3	102.8	107.7	73.5	111.1	128.9
Richmond-Petersburg, VA MSA	110.1	101.3	105.3	113.7	112.4	111.0
Sacramento, CA MSA	108.5	103.6	104.8	113.4	110.4	123.8
Salt Lake City-Ogden, UT MSA	95.9	94.8	84.7	89.0	96.9	105.6
San Antonio, TX MSA	95.6	100.2	83.0	100.7	101.7	96.3
San Diego, CA MSA	124.5	102.8	186.4	78.4	125.3	123.0
Scranton-Wilkes-Barre, PA MSA	99.9	103.7	106.3	121.2	80.1	85.5
Spokane, WA MSA	90.4	94.6	88.9	69.1	85.5	111.2
Springfield, MA MSA	119.9	105.1	167.6	113.2	106.5	108.8
St. Louis, MO-IL MSA	98.9	99.7	96.8	108.8	100.0	99.9
Syracuse, NY MSA	95.0	96.4	81.0	122.1	103.8	78.4
Toledo, OH MSA	104.0	103.6	112.9	103.8	101.9	87.6
Tulsa, OK MSA	98.1	101.5	88.7	98.4	93.5	110.8
Washington, DC-MD-VA MSA	129.8	107.5	169.6	127.2	136.5	124.1
West Palm Beach-Boca Raton-Delray Beach, FL MSA	107.8	98.7	108.4	114.6	118.8	111.6
Wichita, KS MSA	95.5	93.4	93.1	107.6	92.7	97.8
York, PA MSA	99.3	100.8	90.8	113.9	99.0	87.0
Youngstown-Warren, OH MSA	80.6	92.5	82.6	118.1	84.8	84.1

Source: American Chamber of Commerce Researchers Association (ACCRA), Alexandria, VA, *Cost of Living Index*, First quarter 1989. (Copyright.)

NO. 768. ANNUAL PERCENT CHANGES IN CONSUMER PRICES, UNITED STATES AND OECD COUNTRIES: 1970 TO 1988

[Covers member countries of Organization for Economic Cooperation and Development (OECD). For consumer price indexes for OECD countries, see section 31]

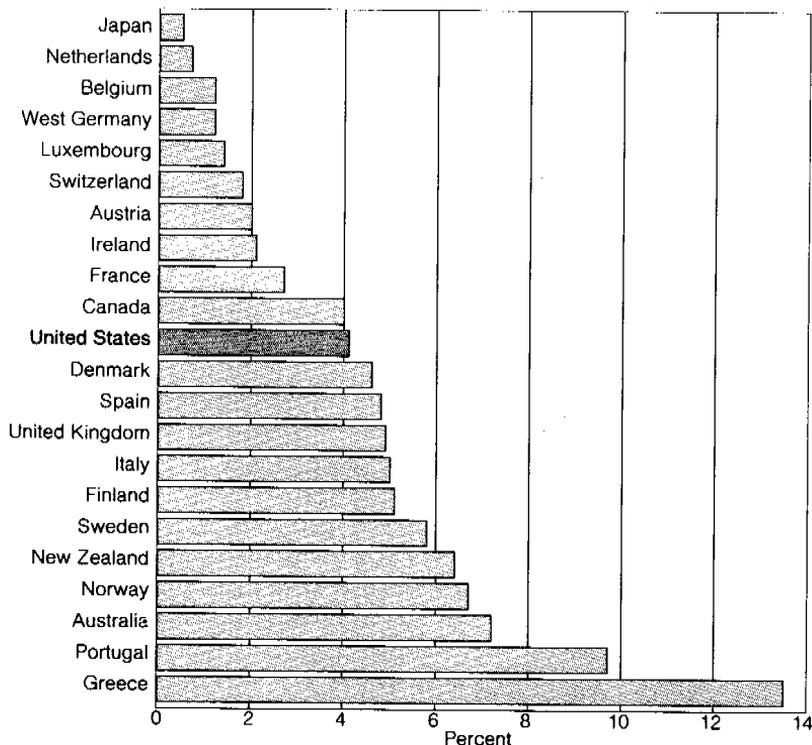
COUNTRY	1970	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
United States.....	5.7	9.1	6.5	7.6	11.3	13.5	10.3	6.2	3.2	4.3	3.6	1.9	3.6	4.1
OECD, total.....	5.8	11.3	8.9	7.8	9.7	13.0	10.5	7.8	5.3	5.2	4.5	2.6	3.2	3.8
OECD, Europe.....	5.6	13.3	11.2	8.9	10.4	14.6	12.1	10.5	8.3	7.5	6.6	4.0	3.9	4.9
Australia.....	3.9	15.1	12.3	7.9	9.1	10.2	9.6	11.1	10.1	3.9	6.8	9.1	8.5	7.2
Canada.....	3.4	10.8	8.0	8.9	9.2	10.2	12.5	10.8	5.8	4.3	4.0	4.2	4.4	4.0
Japan.....	7.7	11.8	8.1	3.8	3.6	8.0	4.9	2.6	1.8	2.3	2.0	.4	-2	5
New Zealand.....	6.5	14.7	14.3	11.9	13.8	17.1	15.4	16.1	7.4	6.2	15.4	13.2	15.7	6.4
Austria.....	4.4	8.4	5.5	3.6	3.7	6.4	6.8	5.4	3.3	5.6	3.2	1.7	1.4	2.0
Belgium.....	3.9	12.8	7.1	4.5	4.5	6.6	7.6	8.2	7.7	6.3	4.9	1.3	1.6	1.2
Denmark.....	5.8	9.6	11.1	10.0	9.6	12.3	11.7	10.1	6.9	6.3	4.7	3.6	4.0	4.6
Finland.....	2.8	17.9	12.6	7.8	7.5	11.6	12.0	9.6	8.3	7.1	5.9	2.9	4.1	5.1
France.....	5.2	11.8	9.4	9.1	10.8	13.6	13.4	11.8	9.6	7.4	5.8	2.7	3.1	2.7
Greece.....	3.2	13.4	12.1	12.6	19.0	24.9	24.5	21.0	20.2	18.4	19.3	23.0	16.4	13.5
Ireland.....	8.2	20.9	13.8	7.6	13.3	18.2	20.4	17.1	10.5	8.6	5.4	3.8	3.2	2.1
Italy.....	5.0	17.0	17.0	12.1	14.8	21.2	17.8	16.6	14.6	10.8	9.2	5.9	4.7	5.0
Luxembourg.....	4.6	10.7	6.7	3.1	4.5	6.3	8.1	9.4	8.7	5.6	4.1	.3	.1	1.4
Netherlands.....	3.6	10.2	6.3	4.1	4.2	6.5	6.7	5.9	2.8	3.3	2.2	.1	-7	.7
Norway.....	10.6	11.7	9.1	8.1	4.8	10.9	13.7	11.3	8.4	6.3	5.7	7.2	8.7	6.7
Portugal ¹	6.3	20.4	27.2	22.5	23.9	16.6	20.0	22.4	25.5	28.8	19.6	11.8	9.4	9.7
Spain.....	5.9	16.9	24.5	19.8	15.6	15.6	14.5	14.4	12.2	11.3	8.8	8.8	5.3	4.8
Sweden.....	7.0	9.8	11.4	10.0	7.2	13.7	12.1	8.6	8.9	8.0	7.4	4.3	4.2	5.8
Switzerland.....	3.6	6.7	1.3	1.1	3.6	4.0	6.5	5.6	3.0	3.0	3.4	.7	1.5	1.8
Turkey ¹	7.9	19.2	27.1	45.3	58.7	110.2	36.6	30.8	31.4	48.4	45.0	34.6	38.9	75.4
United Kingdom.....	6.4	24.2	15.8	8.3	13.4	18.0	11.9	8.6	4.6	5.0	6.1	3.4	4.2	4.9
West Germany.....	3.4	6.0	3.7	2.7	4.1	5.5	6.3	5.3	3.3	2.4	2.2	-2	.2	1.2

¹ Excludes rent.

Source: Organization for Economic Cooperation and Development, Paris, France, *Main Economic Indicators*, monthly.

Figure 15.2

Annual Percent Change in Consumer Prices for the United States and OECD Countries: 1988



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 768.

NO. 769. PRODUCER PRICE INDEXES, BY STAGE OF PROCESSING: 1950 TO 1988

[1982=100. See text, section 15. See *Historical Statistics, Colonial Times to 1970*, series E 73-86 for similar data]

YEAR	Crude materials	Crude foodstuffs and feedstuffs	Intermediate materials	Finished goods	Finished consumer foods	Capital equipment	YEAR	Crude materials	Crude foodstuffs and feedstuffs	Intermediate materials	Finished goods	Finished consumer foods	Capital equipment
1950	32.7	43.4	25.3	28.2	32.7	23.2	1970	35.2	45.2	35.4	39.3	43.8	40.1
1951	37.8	50.2	28.4	30.8	36.7	25.5	1971	36.0	46.1	36.8	40.5	44.5	41.7
1952	34.5	47.3	27.5	30.6	36.4	25.9	1972	39.9	51.5	38.2	41.8	46.9	42.8
1953	31.9	42.3	27.7	30.3	34.5	26.3	1973	54.5	72.6	42.4	45.6	56.5	44.2
1954	31.6	42.3	27.9	30.4	34.2	26.7	1974	61.4	76.4	52.5	52.6	64.4	50.5
1955	30.4	38.4	28.4	30.5	33.4	27.4	1975	61.6	77.4	58.0	58.2	69.8	58.2
1956	30.6	37.6	29.6	31.3	33.3	29.5	1976	63.4	76.8	60.9	60.8	69.6	62.1
1957	31.2	39.2	30.3	32.5	34.4	31.3	1977	65.5	77.5	64.9	64.7	73.3	66.1
1958	31.9	41.6	30.4	33.2	36.5	32.8	1978	73.4	87.3	69.5	69.8	79.9	71.3
1959	31.1	38.8	30.8	33.1	34.8	32.7	1979	85.9	100.0	78.4	77.6	87.3	77.5
1960	30.4	38.4	30.8	33.4	35.5	32.8	1980	95.3	104.6	90.3	88.0	92.4	85.8
1961	30.2	37.9	30.6	33.4	35.4	32.9	1981	103.0	103.9	98.6	96.1	97.8	84.6
1962	30.5	38.6	30.6	33.5	35.7	33.0	1982	100.0	100.0	100.0	100.0	100.0	100.0
1963	29.9	37.5	30.7	33.4	35.3	33.1	1983	101.3	101.8	100.6	101.6	101.0	102.8
1964	29.6	36.6	30.8	33.5	35.4	33.4	1984	103.5	104.3	103.7	103.7	105.4	105.2
1965	31.1	39.2	31.2	34.1	36.8	33.8	1985	95.8	94.8	102.7	104.7	104.6	107.5
1966	33.1	42.7	32.0	35.2	39.2	34.6	1986	87.7	93.2	99.1	103.2	107.3	109.7
1967	31.3	40.3	32.2	35.6	38.5	35.8	1987	93.7	96.2	101.5	105.4	109.5	111.7
1968	31.8	40.9	33.0	36.6	40.0	37.0	1988	96.0	106.1	107.1	108.0	112.6	114.3
1969	33.9	44.1	34.1	38.0	42.4	38.3							

NO. 770. PRODUCER PRICE INDEXES, BY STAGE OF PROCESSING AND COMMODITY: 1970 TO 1988

[1982=100. See *Historical Statistics, Colonial Times to 1970*, series E 73-86 for similar data]

STAGE OF PROCESSING AND COMMODITY	1970	1975	1979	1980	1981	1983	1984	1985	1986	1987	1988
Finished goods.....	39.3	58.2	77.6	88.0	98.1	101.6	103.7	104.7	103.2	105.4	108.0
Finished consumer goods.....	39.1	58.2	77.5	86.6	96.6	101.3	103.3	103.8	101.4	103.6	106.2
Finished consumer foods.....	43.8	69.8	87.3	92.4	97.8	101.0	105.4	104.6	107.3	109.5	112.6
Finished consumer goods excluding foods.....	37.4	53.2	73.5	87.1	96.1	101.2	102.2	103.3	98.5	100.7	103.1
Consumer nondurable goods less food.....	32.5	48.9	69.3	85.1	95.8	100.5	101.1	101.7	93.3	94.9	97.3
Consumer durable goods.....	47.2	61.0	80.8	91.0	96.4	102.8	104.5	106.5	108.9	111.5	115.8
Capital equipment.....	40.1	58.2	77.5	85.8	94.6	102.8	105.2	107.5	109.7	111.7	114.3
Finished goods, excluding foods.....	38.2	54.7	74.6	86.7	95.6	101.8	103.2	104.6	101.9	104.0	106.5
Finished energy goods.....	(NA)	30.7	57.1	85.2	101.5	95.2	91.2	87.6	63.0	61.8	59.8
Finished goods less food and energy.....	(NA)	59.7	78.3	87.1	94.6	103.0	105.5	108.1	110.6	113.3	117.0
Intermediate materials, supplies and components.....	35.4	58.0	78.4	90.3	98.6	100.6	103.1	102.7	99.1	101.5	107.1
Materials and components for manufacturing.....	38.0	61.7	80.9	91.7	98.7	101.2	104.1	103.3	102.2	105.3	113.2
Food manufacturing.....	44.3	82.1	89.9	103.7	102.1	101.3	106.3	101.5	98.4	100.8	106.0
Nondurable manufacturing.....	36.5	61.4	78.3	91.2	100.5	98.5	102.1	100.5	98.1	102.2	112.9
Durable manufacturing.....	37.0	60.8	87.3	97.1	100.7	103.0	104.9	103.3	101.2	106.2	118.7
Components for manufacturing.....	40.6	57.8	75.8	84.6	94.7	102.4	105.0	106.4	107.5	108.8	112.3
Materials and components for construction.....	38.3	60.1	84.2	91.3	97.9	102.8	105.6	107.3	108.1	109.8	116.1
Containers.....	39.0	60.0	79.4	89.1	96.7	100.4	105.9	109.0	110.3	114.5	120.1
Supplies.....	39.7	61.8	80.2	89.9	98.9	101.8	104.1	104.4	105.6	107.7	113.7
Intermediate materials less foods and feeds.....	34.8	56.6	77.4	89.4	98.2	100.5	103.0	103.0	99.3	101.7	106.9
Intermediate energy goods.....	(NA)	38.7	61.1	84.9	100.5	95.3	95.5	92.6	72.6	73.0	70.9
Intermediate materials less food and energy.....	(NA)	60.2	80.7	90.3	97.7	101.6	104.7	105.2	104.9	107.8	115.2
Crude materials.....	35.2	61.6	85.9	95.3	103.0	101.3	103.5	95.8	87.7	93.7	96.0
Crude foodstuffs and feedstuffs.....	45.2	77.4	100.0	104.6	103.9	101.8	104.7	94.8	93.2	96.2	106.1
Crude nonfood materials.....	23.8	43.7	69.6	84.6	101.8	100.7	102.2	96.9	81.6	87.9	85.5
Crude energy materials.....	(NA)	33.3	54.9	73.1	97.7	98.7	98.0	93.3	71.8	75.0	67.7
Crude nonfood materials less energy.....	(NA)	69.3	106.2	113.1	111.7	105.3	111.7	104.9	103.1	115.7	133.0

NA Not available.

NO. 771. PRODUCER PRICE INDEXES—MAJOR COMMODITY GROUPS: 1960 TO 1988

[1982=100. Prior to 1961, excludes Alaska and Hawaii. See text, section 15. See *Historical Statistics, Colonial Times to 1970*, series E 23 and 24 for similar data]

YEAR	All commodities	Farm products ¹	Industrial commodities	Energy ²	Metals and metal products	YEAR	All commodities	Farm products ¹	Industrial commodities	Energy ²	Metals and metal products
1960	31.7	37.7	30.5	13.9	30.6	1981	98.0	101.1	97.4	100.2	99.6
1965	32.3	39.0	30.9	13.8	32.0	1982	100.0	100.0	100.0	100.0	100.0
1970	36.9	44.9	35.2	15.3	38.7	1983	101.3	102.0	101.1	95.9	101.8
1975	58.4	74.0	54.9	35.4	61.5	1984	103.7	105.5	103.3	94.8	104.8
1976	61.1	73.6	58.4	38.3	65.0	1985	103.2	100.7	103.7	91.4	104.4
1977	64.9	75.9	62.5	43.6	69.3	1986	100.2	101.2	100.0	89.8	103.2
1978	69.9	83.0	67.0	46.5	75.3	1987	102.8	103.7	102.6	70.2	107.1
1979	78.7	92.3	75.7	58.9	86.0	1988	106.9	110.0	106.3	66.7	118.7
1980	89.8	98.3	88.0	82.8	95.0						

¹ Farm products and processed foods and feeds. ² Fuels, related products, and power.Source of tables 769-771: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly and annual.

No. 772. PRODUCER PRICE INDEXES, FOR SELECTED COMMODITIES: 1970 TO 1988

[1982=100. See text, section 15, and *Historical Statistics, Colonial Times to 1970*, series E 23-29 for similar data]

COMMODITY GROUP	1970	1975	1979	1980	1981	1983	1984	1985	1986	1987	1988
All commodities¹	38.1	58.4	78.7	89.8	98.0	101.3	103.7	103.2	100.2	102.8	106.9
Food products and processed foods and feeds¹	44.9	74.0	82.3	98.3	101.1	102.0	105.5	100.7	101.2	103.7	110.0
Farm products¹	45.8	77.0	89.6	102.9	105.2	102.4	105.6	95.1	92.9	95.6	104.9
Fresh and dried fruits, vegetables	44.0	72.4	90.3	94.1	105.4	103.3	109.6	102.7	103.9	106.8	108.5
Grains	46.8	106.2	101.8	113.3	117.8	114.0	113.7	96.7	79.9	71.1	97.9
Livestock	45.3	72.9	100.9	98.0	96.2	94.3	97.7	89.2	91.8	102.0	103.3
Live poultry	51.9	98.9	101.2	105.3	104.8	107.6	125.4	117.9	129.7	110.2	121.5
Plant and animal fibers	44.5	75.5	103.4	133.8	119.2	111.9	112.6	97.5	88.4	106.6	98.4
Fluid milk	40.8	63.8	88.5	96.0	101.7	99.8	98.5	93.7	91.0	91.9	89.4
Eggs	71.0	89.4	98.8	95.7	104.7	(NA)	117.9	95.7	99.6	87.6	88.6
Hay, hayseeds, and oilseeds	46.7	94.1	114.8	116.1	128.8	118.0	120.5	96.8	92.9	101.4	138.4
Processed foods and feeds¹	44.6	72.6	88.5	95.9	98.9	101.8	105.4	103.5	105.4	107.9	112.7
Cereal and bakery products	42.4	70.1	82.9	93.0	100.7	102.8	106.6	110.3	111.0	112.6	123.0
Meats, poultry, and fish	45.0	74.2	93.9	94.4	95.6	96.7	98.8	95.9	100.2	104.9	106.6
Dairy products	44.7	62.6	84.9	92.7	98.7	100.7	101.1	100.2	99.9	101.6	102.2
Processed fruits and vegetables	40.3	61.9	80.9	83.3	93.2	101.1	107.3	108.0	104.9	108.6	113.8
Sugar and confectionery	42.9	94.3	79.6	119.8	102.3	108.6	111.7	107.9	109.7	112.7	114.7
Beverages and beverage materials	44.0	63.2	82.0	90.7	96.5	102.6	106.3	107.7	114.6	112.5	114.3
Animal fats and oils	46.3	112.8	105.8	92.1	98.7	101.0	128.4	106.9	84.1	86.1	94.1
Crude vegetable oils	75.8	130.4	152.7	127.1	116.2	121.7	164.3	137.8	84.8	84.2	116.6
Shortening and cooking oils	47.7	90.2	95.4	99.5	101.6	108.7	132.9	124.0	103.3	103.9	118.8
Processed foods	45.5	71.8	87.1	91.4	100.6	102.5	111.8	114.1	118.2	119.8	122.5
Prepared animal feeds	49.1	81.5	103.8	107.3	109.0	108.3	104.4	90.1	94.6	98.5	116.0
Industrial commodities¹	35.2	54.9	75.7	88.0	97.4	101.1	103.3	103.7	100.0	102.6	108.3
Textile products and apparel¹	52.4	67.4	75.4	89.7	87.6	102.5	102.7	102.9	103.2	105.1	109.2
Synthetic fibers	(NA)	(NA)	75.4	83.1	96.5	96.7	98.5	95.5	92.5	91.9	97.3
Processed yarns, threads	(NA)	(NA)	78.9	88.6	99.8	100.1	103.2	102.1	101.7	103.8	108.0
Gray fabrics	(NA)	(NA)	87.5	95.0	101.0	101.2	105.8	104.4	103.7	107.2	114.0
Finished fabrics	(NA)	(NA)	86.2	92.9	100.5	98.9	101.7	101.4	101.4	104.2	109.4
Apparel	57.0	68.6	82.5	88.7	95.7	101.6	103.6	105.0	106.3	108.4	111.7
Textile housefurnishings	43.4	63.7	79.8	86.8	95.1	98.6	100.2	100.6	101.1	101.4	104.4
Hides, skins, leather, related products¹	42.0	56.5	96.1	94.7	99.3	102.3	109.0	108.9	113.0	120.4	131.4
Cattle hides	32.3	51.8	169.3	104.6	104.5	109.8	143.8	126.1	147.7	179.9	205.8
Leather	34.6	48.7	114.6	99.8	106.7	106.2	119.6	113.4	122.9	140.9	167.5
Footwear	46.2	60.3	89.0	95.2	98.3	102.1	102.7	104.8	106.9	109.4	115.1
Fuels, related products, power¹	15.3	35.4	58.9	82.8	100.2	95.9	94.8	91.4	69.8	70.2	66.7
Coal	28.1	72.2	84.3	87.4	93.0	100.5	102.2	102.2	100.8	97.1	95.4
Coke oven products	27.6	21.7	93.0	93.3	98.8	96.3	94.5	93.2	88.0	82.8	84.9
Gas fuels	9.8	20.4	51.3	71.7	88.6	108.1	104.5	96.7	83.2	74.1	71.4
Electric power	26.1	47.6	66.5	79.1	90.3	102.8	108.2	111.6	112.6	110.6	111.2
Crude petroleum	14.5	33.5	51.3	75.9	109.6	92.9	91.3	84.5	46.9	55.5	46.2
Petroleum products, refined	13.3	33.8	58.4	88.6	105.9	89.9	87.4	83.2	53.2	56.8	53.9
Chemicals and allied products¹	35.0	62.0	76.0	89.0	98.4	100.3	102.9	103.7	102.6	106.4	116.3
Industrial chemicals	28.6	58.7	74.9	91.9	103.1	97.3	96.8	96.0	91.5	95.5	106.8
Prepared paint	42.8	63.5	77.8	89.5	95.1	100.7	103.7	105.3	107.0	108.1	112.2
Paint materials	33.3	58.2	79.2	89.9	98.5	100.4	106.2	109.5	104.4	107.3	115.7
Drugs and pharmaceuticals	48.2	60.3	75.9	83.0	92.1	107.6	114.2	122.0	130.1	139.1	148.4
Fats and oils, inedible	49.7	95.5	141.0	111.8	110.7	106.9	139.1	110.6	80.1	92.7	110.9
Agricultural chemicals and products	30.3	69.6	73.3	87.9	97.4	95.9	97.4	96.2	94.2	96.4	104.5
Plastic resins and materials	32.0	63.8	83.2	98.5	102.0	102.8	108.9	107.5	104.4	110.3	132.4
Rubber and plastic products¹	44.9	62.2	80.5	90.1	96.4	100.8	102.3	101.9	101.9	103.0	109.3
Crude rubber	36.4	32.2	79.4	94.8	101.1	100.7	99.3	97.0	91.2	97.7	108.9
Tires and tubes	42.7	58.2	80.7	92.8	98.2	96.1	94.9	93.0	91.7	91.0	94.0
Plastic construction products	65.5	83.5	99.4	103.9	104.3	110.1	115.5	108.6	106.4	108.4	121.1
Laminated plastic sheets	(NA)	66.9	85.3	93.3	101.4	96.3	100.4	101.1	101.2	101.7	106.7
Lumber and wood products¹	39.9	62.1	105.5	101.5	102.8	107.9	108.0	106.6	107.2	112.8	118.9
Lumber	36.6	61.9	114.0	104.9	104.6	113.5	112.5	109.6	110.5	118.2	122.1
Millwork	41.5	57.4	91.0	93.2	97.8	108.2	110.2	111.7	113.7	117.7	121.9
Plywood	46.7	69.4	107.9	106.2	105.9	105.2	104.1	99.6	101.4	102.6	103.4
Pulp, paper, and allied products¹	37.5	59.0	75.9	86.3	94.8	103.3	110.3	113.3	116.1	121.8	130.4
Pulp, paper, and products ²	39.7	62.9	80.6	91.7	99.1	99.3	107.3	106.9	107.6	114.3	124.9
Woodpulp	28.9	74.8	82.9	100.3	104.8	91.5	104.8	91.4	94.7	111.5	136.7
Wastepaper	103.2	90.9	170.5	172.2	145.0	(NA)	108.2	122.9	142.6	181.4	183.6
Paper	38.8	60.4	80.2	89.7	97.7	98.5	105.8	106.0	107.0	111.5	123.2
Paperboard	39.7	66.8	79.3	92.0	101.2	98.4	110.4	107.7	106.6	118.1	133.2
Converted paper and paperboard products	40.8	61.2	79.4	90.2	97.9	100.4	106.4	108.9	109.4	114.7	123.0
Building paper and board	42.2	53.1	76.2	86.1	96.7	104.4	108.2	107.4	108.8	111.2	113.3

See footnotes at end of table.

No. 772. PRODUCER PRICE INDEXES, FOR SELECTED COMMODITIES: 1970 TO 1988—Continued

[1982=100. See headnote, p. 477]

COMMODITY GROUP	1970	1975	1979	1980	1981	1983	1984	1985	1986	1987	1988
Metals and metal products ¹	38.7	61.5	86.0	95.0	99.6	101.8	104.8	104.4	103.2	107.1	118.7
Iron and steel.....	34.0	59.3	83.6	90.0	98.5	101.3	105.3	104.8	101.1	104.6	115.7
Steel mill products.....	32.7	56.4	80.2	86.6	96.6	100.9	104.7	104.7	99.8	102.3	110.7
Nonferrous metals.....	47.3	65.1	99.3	115.7	108.4	104.7	105.1	99.6	98.5	108.9	132.2
Metal containers.....	34.3	58.5	81.9	90.9	96.1	102.1	106.5	109.0	110.2	109.5	110.2
Hardware.....	39.8	58.2	78.0	85.8	95.9	103.7	105.9	109.1	109.5	109.6	113.7
Plumbing fixtures, brass fittings.....	39.9	58.2	77.9	88.5	96.0	103.8	108.8	111.9	115.5	119.7	128.7
Heating equipment.....	46.6	63.5	78.9	87.0	94.5	102.7	106.6	109.5	113.0	115.5	119.2
Fabricated structural metal products.....	36.7	62.0	81.6	88.8	96.9	99.6	101.9	103.2	103.6	105.4	114.3
Miscellaneous metal products.....	40.5	64.1	81.9	88.5	95.8	100.5	104.6	107.1	107.0	107.8	112.1
Machinery and equipment ¹	40.0	57.9	76.7	86.0	94.4	102.7	105.1	107.2	108.8	110.4	113.2
Agricultural.....	36.4	54.2	74.6	83.3	92.7	104.9	108.0	108.7	109.2	109.6	112.7
Construction.....	33.7	53.8	74.5	84.2	93.3	102.3	103.8	105.4	106.7	108.9	111.8
Metalworking.....	35.6	53.5	75.2	85.5	93.9	101.7	104.1	106.6	108.4	110.1	113.5
General purpose.....	37.4	58.7	77.8	87.0	95.0	101.4	103.3	105.7	107.2	108.3	112.8
Special industry.....	35.6	53.6	76.0	84.8	94.7	103.7	107.3	110.8	114.2	117.3	121.7
Electrical.....	45.9	60.7	77.2	87.1	95.1	103.7	107.4	109.8	111.2	112.6	114.5
Miscellaneous.....	42.0	60.5	77.8	85.7	94.1	102.1	102.2	103.3	104.2	105.7	108.6
Furniture and household durables ¹	51.9	67.5	82.8	90.7	95.9	103.4	105.7	107.1	108.2	109.9	113.1
Household furniture.....	48.6	63.6	81.0	89.1	96.4	102.1	105.3	108.5	110.3	113.0	117.6
Commercial furniture.....	41.6	60.5	80.5	85.7	93.5	103.9	107.8	111.9	115.3	118.6	124.2
Floor coverings.....	54.9	69.0	81.7	90.0	98.7	102.4	105.6	105.6	108.3	110.7	114.7
Household appliances.....	52.9	66.5	80.8	87.5	94.1	103.9	108.0	106.7	105.7	105.6	106.0
Home electronic equipment.....	106.0	106.2	103.7	103.8	101.3	97.8	95.2	90.8	89.9	88.8	87.2
Nonmetallic mineral products ¹	35.3	54.4	77.6	88.4	96.7	101.6	105.4	108.6	110.0	110.0	111.2
Flat glass.....	52.2	62.8	80.0	88.7	96.0	103.7	101.4	101.7	104.5	107.2	109.6
Concrete ingredients.....	36.3	55.6	78.7	88.4	95.6	101.1	105.1	108.5	109.4	110.4	112.0
Concrete products.....	37.7	57.3	82.0	92.0	97.8	101.4	103.9	107.5	109.2	109.4	110.0
Clay construction products, exc. refractories.....	42.1	56.0	83.6	88.8	95.8	106.5	110.0	113.5	118.0	121.4	124.9
Refractories.....	35.9	49.2	70.2	78.5	89.7	101.2	107.1	109.7	110.2	110.5	113.8
Asphalt felts and coatings.....	25.8	56.7	81.7	99.6	102.3	96.4	100.3	102.6	97.9	92.4	94.7
Gypsum products.....	38.9	56.2	98.5	100.1	100.1	111.7	135.4	132.3	137.0	125.2	112.9
Glass containers.....	33.9	50.5	73.4	82.3	92.5	99.1	101.4	106.5	111.9	113.0	112.3
Transportation equipment ¹	41.9	66.7	75.3	82.9	94.3	102.8	105.2	107.9	110.5	112.5	114.3
Motor vehicles and equipment.....	43.3	67.6	75.8	83.1	94.6	102.2	104.1	106.4	109.1	111.7	113.1
Motor vehicles.....	47.2	60.6	80.0	87.1	95.4	102.4	107.8	111.4	113.8	114.9	118.9
Railroad equipment.....	33.2	58.1	80.0	90.4	97.0	101.1	102.6	104.9	105.4	104.7	107.5
Miscellaneous products ¹	39.8	53.4	75.5	93.8	95.1	104.8	107.0	109.4	111.6	114.9	120.2
Toys, sporting goods, small arms, etc.....	49.5	69.5	79.6	89.7	95.7	101.7	102.8	104.5	106.6	107.8	111.8
Tobacco products.....	35.2	46.3	67.4	76.0	83.1	113.1	123.3	132.5	142.5	154.7	171.9
Notions.....	39.1	54.5	69.3	78.4	93.8	101.1	102.3	102.9	103.7	105.2	107.9
Photographic equipment and supplies.....	49.9	62.1	73.0	96.4	99.8	102.5	102.0	102.6	104.0	105.4	107.2

NA Not available. ¹ Includes other product groups, not shown separately. ² Except building paper and board.
Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly and annual.

No. 773. PRODUCER PRICE INDEXES—PERCENT CHANGE IN MAJOR COMMODITY GROUPS: 1970 TO 1988

[Minus sign (—) indicates decrease]

COMMODITY GROUP	1970-75	1975-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
All commodities	8.9	9.0	9.1	2.0	1.3	2.4	- .5	2.9	2.6	4.0
Farm products	11.0	6.0	2.2	-4.9	2.4	3.0	-9.9	-2.3	2.8	9.8
Processed foods, feeds.....	10.2	5.7	3.1	1.1	1.8	3.5	-1.8	1.8	2.4	4.4
Textile products, apparel.....	5.2	5.9	8.8	2.5	- .3	2.4	- .2	- .3	1.9	3.9
Hides, skins ¹	6.1	10.9	4.9	- .7	3.2	5.6	- .1	3.8	6.5	9.1
Fuels, related products, power.....	18.3	18.5	21.0	- .2	-4.1	- .1	-3.6	-23.6	- .6	-5.0
Chemicals and allied products.....	12.1	7.5	10.6	1.6	3.3	2.6	8	-1.1	3.7	9.3
Rubber and plastic products.....	6.7	7.7	7.0	3.7	.8	1.5	- .4	-	1.1	6.1
Lumber and wood products	9.3	10.3	1.3	-2.7	7.9	.1	-1.3	.6	5.2	5.4
Pulp, paper, and allied products.....	9.5	7.9	9.8	5.5	3.3	6.8	2.7	2.5	4.9	7.1
Metals and metal products.....	9.7	9.1	4.8	.4	1.8	2.9	- .4	-1.1	3.8	10.8
Machinery and equipment.....	7.7	8.2	9.8	5.9	2.7	2.3	2.0	1.5	1.5	2.5
Furniture and household durables.....	5.4	6.1	5.7	4.3	3.4	2.2	1.3	1.0	1.6	2.9
Nonmetallic mineral products.....	9.0	10.2	9.4	3.4	1.6	3.7	3.0	1.3	-	1.1
Transportation equipment.....	6.2	7.9	13.8	6.0	2.8	2.9	2.6	2.4	1.8	1.6

- Represents zero. ¹ Includes leather and related products.
Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly and annual.

No. 774. PRODUCER PRICE INDEXES FOR THE NET OUTPUT OF SELECTED INDUSTRIES: 1980 TO 1988

[Indexes are based on selling prices reported by establishments of all sizes selected by probability sampling. See text, section 27]

SIC code ¹	ITEM	Unit	1980	1983	1984	1985	1986	1987	1988
2022	Natural and processed cheese.....	June 1981=100..	94.6	101.5	101.5	98.6	96.6	97.5	98.3
2024	Ice cream and frozen desserts.....	June 1983=100..	89.0	100.3	103.2	104.3	105.5	109.5	109.3
2083	Malt and malt byproducts.....	June 1985=100..	114.4	107.1	110.0	100.9	96.0	88.6	100.2
2085	Distilled liquor, except brandy.....	June 1983=100..	85.6	99.3	100.2	101.5	104.4	105.9	107.9
2092	Fresh or frozen packaged fish.....	Dec. 1982=100..	78.8	102.4	102.7	101.4	110.2	120.6	122.2
2095	Coffee.....	June 1981=100..	112.9	104.4	110.4	111.5	141.2	138.1	117.8
2117	Cigarettes.....	Dec. 1982=100..	62.5	93.5	102.3	110.7	120.9	133.4	150.6
2121	Cigars.....	Dec. 1982=100..	88.2	99.8	104.4	110.3	111.5	116.0	121.2
2311	Men's and boys' suits and coats.....	Dec. 1980=100..	98.4	113.2	116.8	119.9	121.6	125.2	131.6
2323	Men's and boys' neckwear.....	Dec. 1983=100..	91.2	99.0	103.2	103.8	105.1	107.3	109.3
2327	Men's and boys' separate trousers.....	Dec. 1981=100..	93.7	103.3	104.6	103.7	106.8	109.2	111.9
2335	Women's, misses', and juniors' dresses.....	Dec. 1980=100..	98.6	107.3	107.2	108.0	110.1	113.0	116.8
2342	Brassieres and allied garments.....	June 1982=100..	85.4	104.2	109.0	114.2	117.1	119.6	122.8
2436	Softwood plywood.....	Dec. 1980=100..	91.4	94.3	91.6	90.0	91.5	93.8	93.1
2451	Mobile homes.....	June 1981=100..	96.3	105.3	105.2	106.1	107.1	108.7	113.9
2492	Particleboard.....	Dec. 1982=100..	91.6	106.1	116.3	110.0	111.8	120.3	124.6
2512	Upholstered wood household furniture.....	June 1982=100..	89.7	102.3	104.2	107.9	109.3	111.8	118.2
2521	Wood office furniture.....	June 1985=100..	77.6	92.7	95.8	100.1	103.1	105.8	109.4
2647	Sanitary paper products.....	June 1983=100..	91.4	100.7	102.4	105.5	106.3	107.9	112.9
2711	Newspaper publishing.....	Dec. 1979=100..	106.6	143.8	153.8	164.0	173.3	181.6	193.9
2721	Periodical publishing.....	Dec. 1979=100..	105.5	137.9	147.8	157.9	167.0	173.8	183.8
2892	Explosives.....	Dec. 1980=100..	95.4	116.3	118.9	121.6	126.2	131.7	144.2
2911	Petroleum refining.....	June 1985=100..	104.6	106.8	102.7	98.3	64.0	67.9	64.7
3011	Tires and inner tubes.....	June 1981=100..	93.9	98.9	98.2	96.8	95.6	95.1	99.4
3021	Rubber and plastic footwear.....	Dec. 1980=100..	97.6	101.5	103.7	99.9	106.6	111.7	114.6
3143	Men's footwear.....	Dec. 1980=100..	98.4	108.3	109.9	111.9	115.0	119.2	127.5
3144	Women's footwear.....	Dec. 1980=100..	98.3	103.6	102.9	104.3	104.7	106.4	110.0
3251	Brick and structural clay tile.....	Dec. 1984=100..	79.6	95.4	99.0	101.4	105.1	108.1	110.5
3253	Ceramic wall and floor tile.....	June 1985=100..	74.8	89.2	92.3	97.3	101.7	104.7	108.4
3271	Concrete block and brick.....	June 1981=100..	94.9	103.3	107.3	112.6	117.2	119.7	121.3
3272	Concrete products.....	Dec. 1979=100..	104.8	115.9	117.4	121.4	128.3	127.9	124.7
3273	Ready-mixed concrete.....	June 1981=100..	92.7	102.3	105.1	108.6	108.5	103.2	101.7
3274	Lime.....	Dec. 1985=100..	86.2	101.5	99.9	101.1	100.5	101.9	101.0
3275	Gypsum products.....	June 1981=100..	98.4	108.3	130.3	127.1	130.9	120.6	110.1
3334	Primary aluminum.....	June 1980=100..	102.6	110.6	113.2	107.1	107.1	116.1	152.2
3425	Hand saws and saw blades.....	June 1983=100..	80.5	100.0	101.5	104.0	106.1	109.4	113.6
3431	Metal sanitary ware.....	Dec. 1980=100..	97.8	112.1	118.0	122.4	122.7	123.4	128.6
3442	Metal doors, sash and trim.....	June 1983=100..	86.0	100.6	104.3	104.8	106.7	109.4	118.4
3482	Small arms ammunition, 30mm and under.....	June 1985=100..	73.2	90.8	95.7	101.8	104.1	100.9	103.8
3523	Farm machinery and equipment.....	Dec. 1982=100..	80.8	101.6	104.8	105.3	105.6	106.0	108.1
3531	Construction machinery.....	Dec. 1980=100..	95.7	114.4	116.7	119.5	120.8	122.6	125.8
3534	Elevators and moving stairways.....	June 1981=100..	95.3	108.1	108.5	109.4	110.8	111.8	115.3
3541	Machine tools, metal cutting types.....	June 1983=100..	83.1	98.9	102.3	105.0	107.3	109.8	114.1
3542	Metal forming machine tools.....	June 1981=100..	91.4	110.5	112.8	115.2	117.1	118.5	121.8
3552	Textile machinery.....	Dec. 1980=100..	95.8	118.8	123.5	127.0	132.0	135.8	140.9
3553	Woodworking machinery.....	Dec. 1980=100..	95.9	104.8	104.2	108.8	110.4	112.9	119.3
3585	Refrigeration and heating equipment.....	Dec. 1982=100..	88.3	101.4	102.8	104.7	105.9	106.7	110.8
3612	Transformers.....	June 1981=100..	86.2	108.7	109.5	111.5	111.7	113.5	115.9
3621	Electric motors and generators.....	June 1983=100..	82.3	101.5	104.8	108.2	109.1	110.8	116.4
3635	Household vacuum cleaners.....	Dec. 1982=100..	94.1	101.9	104.2	106.8	107.1	106.0	107.5
3636	Sewing machines.....	Dec. 1983=100..	82.4	99.6	100.5	101.2	104.6	108.7	110.6
3671	Electron tubes, all types.....	Dec. 1985=100..	44.3	76.6	87.4	96.5	100.2	99.9	104.9
3674	Semiconductors and related devices.....	June 1981=100..	100.5	100.6	107.4	108.6	108.1	108.2	108.2
3675	Electronic capacitors.....	June 1981=100..	95.0	95.5	94.3	93.8	91.7	91.8	96.2
3676	Resistors for electronic applications.....	Dec. 1980=100..	87.3	107.7	108.6	114.0	116.6	118.4	122.0
3678	Connectors for electronic applications.....	Dec. 1980=100..	98.9	109.0	114.2	118.2	122.9	124.7	128.5
3691	Storage batteries.....	Dec. 1984=100..	109.2	101.3	99.3	96.7	99.6	106.6	109.9
3711	Motor vehicles and passenger car bodies.....	June 1982=100..	98.6	102.1	104.6	107.2	111.0	113.0	114.2
3822	Environmental controls.....	Dec. 1979=100..	106.0	133.4	134.9	139.5	143.9	146.3	148.6
3911	Jewelry, precious metal.....	Dec. 1985=100..	122.1	107.9	102.7	100.4	103.0	110.5	114.1
3931	Musical instruments.....	June 1985=100..	88.3	101.5	103.4	101.5	103.5	106.4	110.4
3942	Dolls.....	Dec. 1985=100..	94.4	101.9	99.7	100.0	100.4	98.4	98.8
3995	Burial caskets.....	Dec. 1984=100..	82.8	96.8	99.8	102.0	104.8	108.0	111.6
3996	Hard surface floor coverings.....	Dec. 1985=100..	81.8	92.0	95.4	99.0	101.7	104.2	110.1

¹ Standard Industrial Classification code.

Source: U.S. Bureau of Labor Statistics, *Producer Price indexes*, monthly.

NO. 775. GROSS NATIONAL PRODUCT IMPLICIT PRICE DEFLATORS: 1970 TO 1988

[1982 = 100]

ITEM	1970	1975	1980	1981	1983	1984	1985	1986	1987	1988
Gross national product.....	42.0	59.3	85.7	94.0	103.9	107.7	110.9	113.8	117.4	121.3
Personal consumption expenditures.....	42.9	59.2	86.6	94.6	104.1	108.1	111.6	114.3	119.8	124.5
Gross private domestic investment:										
Fixed investment.....	39.0	56.9	86.3	94.2	99.8	100.2	100.6	102.9	103.1	104.6
Nonresidential.....	39.9	57.9	85.1	93.4	98.8	97.9	97.7	99.3	97.5	98.7
Residential.....	37.0	54.2	89.4	96.6	102.2	106.0	108.3	111.1	116.2	119.7
Exports of goods and services.....	38.7	62.1	90.2	97.5	101.3	103.2	101.0	99.8	99.5	103.3
Imports of goods and services.....	29.0	54.1	96.0	101.6	97.4	97.1	95.2	93.7	99.0	102.7
Government purchases of goods and services.....	38.1	57.7	85.5	93.4	104.0	108.6	112.3	114.5	118.5	123.4
Final sales.....	42.0	59.2	85.8	93.9	103.9	107.7	110.9	113.8	117.4	121.4

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

NO. 776. PERSONAL CONSUMPTION EXPENDITURES FIXED-WEIGHTED PRICE INDEXES: 1970 TO 1988

[1982 = 100]

ITEM	1970	1975	1980	1981	1983	1984	1985	1986	1987	1988
Personal consumption expenditures.....	44.7	60.1	86.8	94.6	104.2	108.4	112.2	115.3	120.7	125.9
Durable goods.....	55.0	66.7	89.6	95.8	102.3	104.1	105.2	106.5	110.3	112.9
Motor vehicles and parts.....	50.1	61.4	87.6	94.8	102.9	106.3	108.6	110.9	116.5	118.6
Furniture and household equipment.....	62.2	73.8	91.1	96.5	101.1	101.2	100.7	100.9	102.1	103.8
Other.....	52.7	65.6	91.2	96.8	102.9	104.8	106.3	108.0	112.7	118.5
Nondurable goods.....	45.2	63.2	89.6	97.0	102.1	105.2	107.9	107.8	112.6	117.2
Food.....	43.0	63.6	88.7	96.0	102.0	106.3	108.6	112.2	117.2	122.2
Clothing and shoes.....	67.4	81.1	95.1	98.1	101.9	103.2	106.3	106.0	111.0	115.8
Gasoline and oil.....	27.4	44.2	94.7	105.5	96.7	95.2	96.0	75.4	78.3	79.1
Other nondurable goods.....	43.3	58.7	85.0	93.6	105.8	108.9	113.9	116.2	121.5	127.5
Fuel oil and coal.....	16.6	34.9	83.3	101.1	93.9	96.1	94.3	76.3	76.6	76.8
Other.....	46.9	61.9	85.2	92.6	107.3	111.6	116.5	121.7	127.8	134.5
Services.....	41.9	56.2	84.0	92.6	106.3	111.8	117.2	123.1	129.4	135.5
Housing.....	44.7	56.4	83.7	92.7	105.7	111.5	117.7	124.3	130.0	136.4
Household operation.....	36.9	54.1	79.9	89.8	106.8	112.4	115.8	118.3	118.3	119.9
Electricity and gas.....	29.1	48.2	77.0	88.1	108.0	112.7	114.9	113.9	111.9	112.7
Other.....	51.2	66.4	82.8	91.4	105.6	112.1	116.8	122.7	124.8	127.4
Transportation.....	39.9	51.3	84.1	93.3	104.8	108.2	109.4	113.2	120.4	126.6
Medical care.....	38.3	52.6	82.0	91.3	107.2	114.8	121.6	127.6	135.1	144.5
Other.....	42.9	60.2	88.3	95.1	106.2	110.4	115.7	123.0	132.2	137.9

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-1982*, and *Survey of Current Business*, July issues.

NO. 777. INDEXES OF SPOT PRIMARY MARKET PRICES: 1970 TO 1989

[1967 = 100. Index computed weekly through 1981; daily, beginning May 27, 1981. Represents unweighted geometric average of price quotations of 22 commodities. This index is much more sensitive to changes in market conditions than is a monthly producer price index.]

ITEM AND NUMBER OF COMMODITIES	1970 (6-16)	1975 (6-24)	1980 (6-24)	1981 (5-26)	1982 (5-25)	1983 (5-23)	1984 (5-22)	1985 (5-21)	1986 (5-20)	1987 (5-26)	1988 (5-27)	1989 (5-26)
All commodities (22).....	113.6	189.9	265.1	267.9	247.6	249.8	293.9	251.4	218.0	250.0	270.3	281.3
Foodstuffs (9).....	112.2	215.3	260.9	244.2	252.8	246.1	299.9	248.1	205.5	215.2	230.1	222.5
Raw industrials (13).....	114.4	174.1	268.0	285.4	243.9	252.3	289.7	253.6	226.9	277.3	302.0	329.0
Livestock and products (5).....	123.6	240.8	250.5	265.2	312.1	278.1	364.5	284.5	231.2	303.3	316.1	285.2
Metals (5).....	125.2	166.8	257.9	287.3	218.2	225.9	253.4	220.2	191.2	239.5	276.7	347.1
Textiles and fibers (4).....	99.9	158.8	234.7	243.0	206.6	208.0	248.1	220.8	216.9	247.1	247.3	253.5
Fats and oils (4).....	128.6	213.6	229.5	238.7	255.7	225.9	363.5	273.1	168.5	201.2	230.4	208.1

Source: 1970-1981, U.S. Bureau of Labor Statistics, *Tuesday Spot Market Price Indexes and Prices*, weekly and monthly, thereafter, Commodity Research Bureau, a Knight-Ridder Business Information Service, New York, NY, *CRB Commodity Index Report*, weekly (copyright).

NO. 778. IMPORT PRICE INDEXES—SELECTED COMMODITIES: 1980 TO 1989

[1985=100, except as noted. As of June quarter. Indexes are weighted by the 1980 Tariff Schedule of the United States Annotated, a scheme for describing and reporting product composition and value of U.S. imports. Import prices are based on U.S. dollar prices paid by importer. F.o.b.=Free on board; c.i.f.=Cost, insurance, and freight; n.e.s.=Not elsewhere specified]

COMMODITY	1980	1981	1982	1983	1984	1985 ¹	1986	1987	1988	1989
All commodities	(NA)	(NA)	NA	102.8	103.9	99.2	98.7	110.0	116.8	120.7
Food	105.1	98.5	92.1	96.6	104.2	98.9	107.3	108.3	114.0	111.4
Meat.....	112.5	114.9	114.2	111.2	107.9	94.0	96.0	108.0	107.0	109.3
Meat and edible meat offals, fresh, chilled or frozen.....	114.5	116.4	115.0	115.0	109.4	93.2	91.1	102.0	104.6	107.7
Meat and edible meat offals, prepared or preserved, n.e.s.; fish extracts.....	108.7	112.7	114.3	102.4	105.8	95.6	106.5	120.6	111.5	112.8
Dairy products and eggs.....	(NA)	100.9	104.4	102.5	100.7	96.7	108.7	122.3	125.0	120.1
Fish.....	94.5	102.4	103.1	101.7	101.9	98.6	110.5	128.0	129.3	123.0
Shellfish, fresh, chilled, frozen, salted, or dried, c.i.f.....	84.0	91.9	101.6	105.4	106.7	96.4	113.3	123.2	123.1	115.0
Fish in airtight containers, c.i.f.....	111.8	117.8	111.5	102.3	102.3	98.1	103.6	113.7	130.2	125.0
Bakery goods ²	95.7	100.8	100.3	95.6	98.4	97.1	112.5	128.2	139.8	140.1
Fruits and vegetables.....	79.2	100.1	88.5	104.4	107.4	103.0	100.0	110.1	120.3	123.3
Sugar ³	(NA)	(NA)	70.0	99.2	101.8	102.3	104.6	109.6	110.0	111.8
Coffee, tea, cocoa.....	114.9	80.6	84.6	89.0	105.6	96.8	117.2	87.0	93.3	85.3
Beverages and tobacco	85.7	92.8	96.2	96.7	98.2	99.2	105.2	112.8	116.2	117.2
Beverages.....	87.2	94.5	97.9	98.2	98.3	98.9	106.1	114.2	120.0	120.7
Alcoholic.....	87.2	94.5	97.9	98.3	98.2	98.9	105.8	113.7	119.3	120.4
Wine of fresh grapes, c.i.f.....	92.7	98.5	100.5	100.1	96.2	98.7	109.7	121.0	127.3	125.3
Beer, c.i.f.....	(NA)	(NA)	97.4	97.5	98.5	100.1	103.2	111.4	114.2	114.6
Spirits, c.i.f.....	80.5	91.9	96.7	97.6	99.4	98.5	104.1	109.1	115.6	119.1
Crude materials	(NA)	(NA)	(NA)	(NA)	108.4	100.5	106.4	116.2	137.8	144.2
Crude rubber ⁴	(NA)	(NA)	(NA)	(NA)	120.9	101.0	99.5	103.7	151.1	103.4
Wood.....	(NA)	(NA)	92.5	119.8	99.8	105.0	104.3	110.2	111.4	112.4
Lumber.....	94.8	99.5	90.6	122.5	99.6	105.4	104.6	110.0	111.1	110.8
Pulp and waste paper.....	(NA)	(NA)	121.2	101.4	121.3	101.4	100.3	132.0	160.5	190.2
Crude minerals.....	(NA)	(NA)	(NA)	(NA)	96.0	100.6	99.0	99.6	101.0	104.3
Metalliferous ores and metal scrap.....	(NA)	(NA)	(NA)	(NA)	114.5	85.8	121.6	124.5	167.6	212.3
Ores and concentrates of base metals, n.e.s.....	(NA)	(NA)	(NA)	(NA)	120.4	94.5	134.0	136.4	192.9	253.1
Crude vegetable and animal materials, n.e.s.....	(NA)	(NA)	(NA)	(NA)	91.6	94.8	111.3	109.0	148.2	110.1
Fuels and related products	(NA)	(NA)	123.5	108.4	108.7	99.7	51.5	74.1	63.4	78.8
Crude petroleum and petroleum products.....	(NA)	(NA)	121.7	106.6	107.2	99.5	49.0	74.4	63.6	80.3
Crude petroleum.....	120.3	131.9	125.1	108.3	107.7	100.5	45.8	68.7	57.5	75.7
Natural gas and LNG.....	(NA)	(NA)	150.6	134.9	131.0	102.3	79.7	67.8	58.7	61.0
Fats and oils	(NA)	(NA)	(NA)	(NA)	174.3	110.0	66.7	87.9	111.2	117.4
Chemicals and related products	(NA)	(NA)	(NA)	103.9	104.5	100.4	99.7	104.8	116.4	120.3
Intermediate manufactured products	105.9	107.0	102.9	101.7	104.2	99.1	103.6	112.5	132.2	136.3
Leather and furskins.....	103.1	101.4	98.9	97.0	105.8	97.9	106.3	116.6	137.0	134.6
Rubber manufactures.....	100.4	106.8	107.9	105.5	102.2	99.5	101.2	104.6	107.0	102.2
Cork and wood manufactures.....	103.7	107.5	101.1	107.0	104.4	99.2	111.0	124.3	138.2	139.8
Paper and paperboard products.....	84.3	90.2	95.3	90.7	95.7	99.9	100.8	104.9	118.3	120.9
Paper and paperboard.....	83.8	89.5	95.1	90.1	95.1	100.0	98.9	102.5	115.5	111.9
Newsprint, c.i.f.....	83.0	88.7	94.6	88.7	94.0	100.1	99.2	105.0	119.1	119.5
Textiles.....	101.5	103.6	99.5	97.8	99.4	98.9	105.4	111.8	120.6	122.3
Non-metallic mineral manufactures.....	100.9	95.5	100.1	105.8	106.0	96.2	105.5	126.7	142.5	149.6
Iron and steel.....	99.2	108.6	106.3	95.4	102.9	100.2	98.9	106.6	127.2	139.9
Non-ferrous metals.....	(NA)	(NA)	107.2	119.2	118.1	100.2	98.9	112.4	159.7	159.1
Silver platinum and other metals of platinum group, c.i.f.....	(NA)	(NA)	100.3	148.6	132.9	94.6	106.8	141.7	136.4	119.2
Copper.....	129.7	123.2	110.0	114.6	104.8	100.6	103.9	107.8	149.0	175.8
Nickel, c.i.f.....	(NA)	(NA)	117.3	96.9	98.1	105.7	88.1	83.5	262.4	258.0
Zinc.....	91.2	106.7	87.0	81.7	128.9	109.4	83.2	101.3	147.1	209.0
Tin, c.i.f.....	148.5	119.4	114.6	116.5	108.6	103.9	49.0	80.4	62.0	83.6
Metal manufactures, n.e.s.....	103.3	106.5	104.3	99.5	100.5	99.2	107.9	112.7	126.9	132.5
Machinery and transport equipment	(NA)	96.5	99.6	100.7	100.5	99.9	110.4	119.9	127.3	129.3
Machinery specialized for particular industries.....	(NA)	(NA)	102.9	104.3	100.1	96.4	116.9	136.1	149.8	145.7
Metalworking machinery.....	109.6	107.0	109.7	106.1	102.1	98.3	113.0	128.1	142.4	139.7
General industrial machinery, parts n.e.s.....	(NA)	107.8	105.9	103.3	101.8	98.0	116.2	130.8	143.7	143.0
Office machines ⁵	109.9	108.6	105.0	104.3	105.8	98.5	109.1	114.0	119.5	119.1
Telecommunications ⁶	115.0	118.1	113.0	110.1	107.4	100.2	106.4	110.3	113.8	115.5
Electric machinery and equipment.....	(NA)	(NA)	115.3	115.7	107.2	100.3	106.4	115.8	124.2	129.8
Road vehicles and parts.....	(NA)	88.0	93.0	94.5	97.2	98.8	110.8	120.5	127.6	129.7
Misc. manufactured articles	100.3	102.6	101.3	101.6	102.7	99.2	106.8	117.8	125.7	126.7
Plumbing, heating and lighting fixtures.....	87.8	89.4	81.8	94.2	96.3	96.6	108.6	117.0	126.9	131.5
Furniture and parts.....	106.8	105.1	107.9	104.8	102.5	98.6	109.0	116.5	124.0	124.7
Footwear, c.i.f.....	101.1	104.1	100.7	97.5	102.0	98.1	108.0	119.8	129.6	128.0
Professional, scientific and controlling instruments and apparatus.....	109.4	110.3	109.6	104.0	102.3	96.1	117.9	135.9	142.5	139.9
Photographic apparatus ⁷	111.1	111.5	104.6	100.1	101.5	98.9	113.8	126.0	129.3	127.9
Misc. manufactured articles, n.e.s.....	(NA)	(NA)	108.4	104.4	103.0	99.6	108.1	121.1	132.1	131.4

NA Not available. ¹ June 1985 may not equal 100 because indexes were reweighted to an "average" trade value in 1985. ² Includes pasta products, grain and grain preparations. ³ Includes sugar preparations and honey. ⁴ Includes synthetic and reclaimed rubber. ⁵ Includes automatic data processing equipment. ⁶ Includes sound recording and reproducing equipment. ⁷ Includes photographic supplies, optical goods, watches and clocks.

Source: U.S. Bureau of Labor Statistics, News, quarterly.

No. 779. EXPORT PRICE INDEXES—SELECTED COMMODITIES: 1980 TO 1989

[1985=100, except as noted. June quarter. Indexes are weighted by 1980 export values according to the Schedule B classification system of the U.S. Bureau of the Census. Prices used in these indexes were collected from a sample of U.S. manufacturers of exports and are factory transaction prices, except as noted. F.a.s.=free alongside ship. N.e.s.=not elsewhere specified. F.o.b.=free on board]

COMMODITY	1980	1981	1982	1983	1984	1985 ¹	1986	1987	1988	1989
All commodities	(NA)	(NA)	(NA)	(NA)	104.1	100.4	99.1	102.2	109.5	113.2
Food.....	(NA)	(NA)	(NA)	(NA)	111.5	116.3	100.5	97.1	89.9	103.4
Meat.....	(NA)	(NA)	(NA)	(NA)	94.4	102.1	98.8	105.2	121.2	131.0
Fish.....	(NA)	(NA)	(NA)	(NA)	94.2	96.3	101.2	108.6	125.8	145.0
Grain and grain preparations.....	106.5	125.8	105.9	117.4	121.8	102.5	89.0	71.0	87.2	106.4
Wheat.....	113.7	118.3	107.5	112.2	110.2	99.8	80.7	66.8	87.8	116.1
Rice.....	128.3	167.1	104.9	118.4	107.2	101.6	67.9	59.1	105.7	95.7
Corn, yellow, f.o.b.....	99.7	128.5	104.3	120.4	131.3	104.0	95.2	72.7	83.7	101.5
Other grain.....	(NA)	(NA)	(NA)	(NA)	(NA)	106.3	96.5	77.7	87.6	104.9
Fruits and vegetables.....	(NA)	(NA)	(NA)	85.7	102.8	100.1	108.8	112.4	104.3	113.5
Feedstuff for animals.....	(NA)	(NA)	(NA)	132.3	129.9	90.9	114.8	123.8	158.1	144.1
Miscellaneous food products.....	(NA)	(NA)	(NA)	91.8	100.5	99.9	97.0	100.6	102.8	108.2
Beverages and tobacco.....	(NA)	(NA)	(NA)	100.4	102.4	100.1	97.4	105.0	110.6	117.6
Tobacco and tobacco products.....	(NA)	(NA)	(NA)	100.7	102.5	100.1	97.1	105.0	110.7	117.9
Crude materials.....	(NA)	(NA)	(NA)	104.5	123.6	101.6	102.2	114.5	139.9	142.9
Raw hides and skins.....	76.4	94.7	89.1	90.3	118.1	97.4	117.1	149.6	166.8	150.0
Oilseeds and oleaginous fruit.....	109.3	132.2	113.7	110.8	154.1	105.5	98.1	101.6	143.0	129.8
Rubber, f.a.s.....	(NA)	(NA)	(NA)	(NA)	100.3	98.8	99.9	101.0	106.1	112.2
Wood.....	122.9	107.7	106.1	99.6	101.3	98.7	101.2	116.2	149.6	171.2
Pulp and waste paper.....	(NA)	(NA)	(NA)	104.4	127.5	100.3	116.4	149.9	179.5	193.6
Textile fibers.....	108.3	120.1	101.8	106.8	120.5	103.5	98.0	112.4	109.9	115.8
Cotton.....	120.5	131.7	103.1	113.2	133.0	103.4	95.5	114.4	108.8	111.3
Crude minerals and fertilizers.....	79.2	91.5	90.9	87.2	88.9	100.4	98.4	94.0	94.2	99.3
Metal ores and scrap.....	(NA)	(NA)	(NA)	(NA)	117.2	100.9	98.0	107.0	146.0	156.9
Scrap metal (iron or steel) f.a.s.....	123.4	113.4	93.3	95.7	112.1	100.2	96.1	95.8	147.7	154.4
Nonferrous base metal waste and scrap, n.e.s., f.a.s.....	(NA)	(NA)	(NA)	117.0	118.9	98.9	101.3	126.9	185.6	195.9
Fuels and related products.....	(NA)	(NA)	(NA)	(NA)	101.5	101.8	76.8	82.8	82.1	86.0
Coal and coke.....	(NA)	(NA)	(NA)	(NA)	(NA)	100.5	94.0	88.2	92.0	94.4
Crude petroleum and petroleum products ²	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	97.2	105.3
Fats and oils.....	(NA)	(NA)	(NA)	79.6	130.9	113.4	67.7	78.8	97.3	87.1
Vegetable oils.....	(NA)	(NA)	(NA)	71.3	125.8	116.8	70.8	71.9	93.7	84.1
Chemicals and related products.....	(NA)	(NA)	(NA)	99.1	102.4	100.2	98.0	106.7	121.6	121.7
Organic chemicals.....	(NA)	(NA)	(NA)	(NA)	106.8	100.6	93.1	118.4	144.6	144.2
Hydrocarbons, n.e.s. and derivatives f.a.s.....	136.3	138.3	117.6	111.7	113.9	101.4	86.4	142.8	169.0	156.7
Alcohols, phenols, phenol-alcohols, and derivatives, f.a.s.....	117.6	115.6	112.0	108.0	107.2	99.9	96.9	102.7	143.8	186.8
Carboxylic acids, f.a.s.....	101.1	103.2	100.7	96.5	104.2	100.7	99.0	103.2	127.5	120.8
Fertilizers, manufactured.....	(NA)	(NA)	(NA)	98.2	107.1	97.2	93.0	91.6	109.8	108.7
Pesticides, starches, glue, gas and oil additives, chemical materials and products, n.e.s.....	(NA)	(NA)	(NA)	(NA)	97.1	99.9	101.8	97.7	101.7	109.4
Intermediate manufactured products.....	(NA)	(NA)	97.9	100.6	101.6	100.2	102.5	107.9	117.7	123.1
Leather and fur skins.....	103.4	103.3	89.7	86.5	104.5	99.1	103.8	126.9	125.1	120.7
Rubber manufactures.....	82.6	92.4	97.8	96.9	98.7	100.2	100.1	102.5	108.8	113.1
Paper and paperboard products.....	86.0	93.4	92.0	89.5	102.0	100.5	104.7	117.0	129.0	133.7
Textiles.....	(NA)	(NA)	(NA)	(NA)	(NA)	100.2	102.9	103.7	107.9	115.2
Non-metallic mineral manufactures ³	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	102.4	108.7	114.1	122.6
Iron and steel.....	(NA)	(NA)	105.0	100.2	100.4	99.5	100.2	102.9	110.8	116.7
Non-ferrous metals.....	(NA)	(NA)	102.6	123.5	111.6	102.0	103.1	113.0	143.5	146.0
Metal manufactures, n.e.s.....	(NA)	(NA)	94.6	95.5	98.3	99.7	100.8	101.3	107.6	114.0
Machinery and transport equipment ⁴	79.1	86.4	93.0	94.9	97.8	100.0	100.8	101.8	104.0	107.2
Power generating machinery ⁵	70.5	80.4	85.5	90.8	93.2	100.1	102.4	103.7	106.4	112.3
Internal combustion piston engines, parts.....	73.5	82.9	91.2	96.2	98.8	99.8	101.4	102.9	107.1	108.9
Electric motors, generators, and other rotating plant, f.o.b., factory.....	84.5	88.4	95.9	95.8	95.7	101.0	103.2	107.7	117.9	124.9
Machinery specialized for particular industries.....	76.9	86.3	93.7	95.6	98.1	100.0	100.3	100.1	103.6	108.7
Agricultural machinery and parts ⁶	72.6	80.1	86.6	93.6	97.6	99.7	100.4	101.2	102.1	104.9
Civil engineering and contractors, plant and equipment ⁷	77.4	89.3	99.5	87.5	99.6	100.3	98.4	96.0	98.5	105.1
Metalworking machinery.....	77.5	86.1	93.8	95.2	97.0	99.7	102.0	106.7	110.8	117.4
General industrial machines, parts, n.e.s.....	76.6	85.7	93.1	94.6	97.2	100.0	101.6	104.5	108.1	113.3
Office machines ⁸	101.6	106.5	106.0	104.6	102.4	99.8	99.0	96.1	95.7	94.9
Telecommunications ⁹	88.9	91.5	96.7	95.9	98.8	98.6	98.9	101.4	104.6	107.9
Electrical machinery, equipment.....	87.6	90.0	94.9	94.9	98.4	100.9	99.2	102.1	103.4	108.4
Road vehicles and parts.....	76.8	83.3	90.1	93.4	97.5	100.1	101.7	103.5	104.9	107.8
Other transport equipment ⁴	64.4	73.2	83.8	88.5	94.5	99.2	103.1	105.5	109.6	114.9

NA Not available. ¹ June 1985 may not equal 100 because indexes were reweighted to an "average" trade value in 1985. ² December 1987=100. ³ September 1985=100. ⁴ Excludes military and commercial aircraft. ⁵ Includes equipment. ⁶ Excludes tractors. ⁷ Includes parts. ⁸ Includes data processing equipment. ⁹ Includes sound recording and reproducing equipment.

Source: U.S. Bureau of Labor Statistics, *News*, quarterly.

NO. 780. SELECTED MINERAL PRODUCTS—AVERAGE PRICES: 1975 TO 1988

[Represents average price except as noted. Excludes Alaska and Hawaii, except as noted. See also *Historical Statistics, Colonial Times to 1970*, series M96, 139, 148, 209, 248, and 262]

MINERAL	Unit	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988, prel.
Aluminum ¹	Cents/lb	39.8	54.0	61.0	71.6	76.0	76.0	77.8	81.0	81.0	81.0	72.3	110.1
Bituminous coal ² ³	Dol./sh. ton	19.23	21.78	23.65	24.52	26.29	27.14	25.85	25.51	25.10	23.70	23.00	22.00
Cobalt ⁴	Dol./lb	3.98	^a 6.40	24.58	25.00	14.58	8.56	5.76	10.40	11.43	7.49	6.56	7.09
Copper, electrolytic	Cents/lb	64.2	66.5	93.3	101.3	84.2	72.8	76.5	66.8	67.0	66.1	82.5	102.5
Gold	Dol./fine oz.	161	194	308	613	460	376	424	361	318	368	448	436
Lead (NY)	Cents/lb	21.5	33.7	52.6	42.5	36.5	25.5	21.7	25.6	19.1	22.1	35.9	37.1
Natural gas ² ^a	Dol./1,000 cu. ft.	.45	.91	1.18	1.59	1.98	2.46	2.59	2.66	2.51	1.94	1.67	1.71
Nickel ⁷	Dol./lb	2.20	2.10	3.20	2.96	2.71	2.18	2.18	2.16	2.26	1.76	2.19	6.25
Petroleum, crude ⁸	Dol./bbf	7.67	9.00	12.64	21.59	31.77	28.52	26.19	25.88	24.09	12.51	15.40	12.57
Platinum ⁸	Dol./troy oz.	164	237	352	439	475	475	475	475	519	600	600	800
Silver	Dol./fine oz.	4.42	5.40	11.09	20.64	10.52	7.95	11.44	8.14	6.14	5.47	7.01	6.54
Tungsten concentrate ⁹	Dol./lb	5.30	8.22	8.40	8.38	7.96	6.35	4.70	5.18	4.22	3.21	2.88	(NA)
Zinc ¹⁰	Cents/lb	39.0	31.0	37.3	37.4	44.6	38.5	41.4	48.6	40.4	38.0	41.9	60.2

NA Not available. ¹ 99.5 percent primary aluminum ingot. ² Average value at point of production; includes Alaska. Source: U.S. Energy Information Administration, *Annual Energy Review* and *Monthly Energy Review*. ³ Includes subbituminous coal and lignite. ⁴ Weighted average based on the market price quoted by a major U.S. cobalt dealer, otherwise based on range of prices. ⁵ Represents low price for year. Price ranged from low 6.40 lb. to 20.00 per lb. ⁶ Average value of marketed production. ⁷ 1975-1979, peak price quoted U.S. buyers by International Nickel Co., Inc., for electrolytic nickel, includes U.S. duty f.o.b. Port Colborne, Ontario; thereafter, from New York dealer. ⁸ Producer prices. ⁹ Average value of shipments. ¹⁰ Delivered price.

Source: Except as noted, U.S. Bureau of Mines, *Minerals Yearbook*.

NO. 781. COMMODITY RESEARCH BUREAU FUTURES PRICE INDEX: 1975 TO 1988

[1967=100. Index computed daily. Represents unweighted geometric average of commodity futures prices (through 9 months forward) of 21 major commodity futures markets. Represents end of year index]

ITEM	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
All commodities	191.0	200.3	227.6	281.5	308.5	254.9	234.0	277.6	244.2	229.2	209.1	232.5	251.8
Imported	259.4	334.8	345.0	425.3	426.0	357.0	269.0	326.0	291.7	398.2	321.2	356.1	365.2
Industrial	154.8	175.0	222.1	354.8	324.6	249.2	249.9	249.0	217.0	211.7	210.4	252.5	248.2
Grains	195.6	179.0	187.8	251.9	312.1	251.3	215.1	249.6	224.9	198.5	164.6	186.1	261.9
Oilseeds	181.6	208.6	240.6	258.1	314.6	271.0	236.9	316.6	273.5	245.4	189.8	223.6	309.6
Livestock and meats	180.8	166.9	196.4	195.0	217.4	195.3	219.9	229.7	240.8	206.0	200.2	189.9	199.1
Metals (precious) ¹	141.0	163.8	230.4	658.0	531.4	319.7	366.0	328.5	243.3	256.6	296.6	346.4	318.7

¹ Prior to 1979, index for metals only.

Source: Commodity Research Bureau (CRB), New York City, NY, *CRB Commodity Index Report*, weekly. (Copyright.)

NO. 782. FOOD PRICES—FARM VALUE AND RETAIL PRICE FOR SELECTED ITEMS: 1980 TO 1988

[In dollars per retail unit indicated. The farm value is the payment to farmers for the quantity of farm products equivalent to the unit sold at retail minus imputed value of byproducts. Because of losses from processing, waste, and spoilage, the farm value represents larger quantities than the retail unit]

FOOD ITEM	Unit	FARM VALUE					RETAIL PRICE				
		1980	1985	1986	1987	1988	1980	1985	1986	1987	1988
Beef, choice	Lb	1.45	1.27	1.24	1.38	1.47	2.38	2.33	2.31	2.42	2.55
Pork	Lb	.63	.71	.82	.83	.69	1.40	1.62	1.78	1.88	1.83
Broilers	Lb	.39	.42	.49	.40	.48	.71	.76	.84	.78	.85
Eggs, grade A	Doz	.51	.51	.55	.46	.46	.84	.80	.87	.78	.79
Milk, sold in stores	½ gal	.56	.56	.55	.56	.54	1.05	1.13	1.11	1.14	1.16
Bread, white ¹	Lb	.05	.05	.04	.04	.05	.51	.55	.56	.55	.61
Potatoes, Northeast white round	10 lb	.62	.37	.50	.62	.50	1.80	1.60	1.56	2.40	2.28
Oranges, California	Lb	.05	.12	.08	.10	.12	.36	.53	.48	.55	.56
Lettuce, California ²	Lb	.05	.08	.07	.11	.10	.46	.53	.54	.60	.60
Orange juice, frozen	12 oz	.36	.62	.40	.42	.52	.88	1.32	1.07	1.11	1.33
Tomatoes, California ³	Lb	.05	.05	.05	.04	.42	.52	.51	.51	.51	.54
Sugar	Lb	.13	.13	.13	.14	.14	.35	.35	.34	.34	.34
Flour, wheat	5 lb	(NA)	(NA)	.28	.27	.33	(NA)	(NA)	1.04	1.02	1.07
Cheese, natural cheddar	Lb	(NA)	(NA)	1.10	1.10	1.08	(NA)	(NA)	3.05	3.06	3.16
Potatoes, frozen, french fried	Lb	(NA)	(NA)	.08	.08	.08	(NA)	(NA)	.70	.69	.70
Peanut butter	Lb	(NA)	(NA)	.44	.46	.46	(NA)	(NA)	1.60	1.80	1.79
Shortening	3 lb	(NA)	(NA)	.46	.44	.66	(NA)	(NA)	2.60	2.33	2.56
Margarine	Lb	(NA)	(NA)	.13	.12	.19	(NA)	(NA)	.79	.69	.73
Rice, long grain	Lb	(NA)	(NA)	.07	.06	.11	(NA)	(NA)	.45	.40	.48

NA Not available.

¹ Farm value includes value for wheat, lard, soybean oil, high fructose corn syrup, and soy-whey blend.

² Farm value represents value in the field. Harvesting and packing, a contract operation, appears as processing or packing cost.

³ Whole canned tomatoes.

Source: U.S. Dept. of Agriculture, Economic Research Service, *Food Cost Review*, 1988.

NO. 783. WEEKLY FOOD COST FOR FAMILIES, BY TYPE OF FAMILY: 1975 TO 1989

(In dollars. As of December, except as indicated. Based on moderate-cost food plan; assumes all meals are eaten at home or taken from home)

FAMILY TYPE	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	
										Jan.	May
Couple, 20-50 years old ¹	37.10	52.00	54.60	54.70	56.50	58.30	60.40	63.50	66.70	68.00	69.90
Couple, 51 years and over ¹	32.40	45.80	48.10	52.00	53.90	55.70	57.80	60.70	64.00	65.10	67.20
Couple * with children:											
1 child, 1-5 years old.....	44.80	62.80	66.00	66.90	69.20	71.30	73.90	77.50	81.60	83.20	85.50
1 child, 15-19 years old.....	53.50	74.80	78.50	77.80	80.50	83.00	85.80	90.10	94.80	96.60	99.20
2 children, 1-5 years old.....	51.80	72.80	76.20	77.80	80.50	82.90	85.80	90.00	94.90	96.70	98.30
2 children, 6-11 years old.....	63.00	88.10	92.60	93.50	97.10	99.80	103.30	108.30	114.10	116.20	119.50
2 children, 12-19 years old.....	67.20	93.80	98.80	98.00	101.60	104.60	108.20	113.50	119.40	121.80	125.00

¹ Prior to 1983, costs based on 1974 food plans with age groups 20-54 years old and 55 years old and over.
* Couple 20-50 years old.

Source: U.S. Dept. of Agriculture, Human Nutrition Information Service, *Adm. 329*, monthly.

NO. 784. FOOD—RETAIL PRICES OF SELECTED ITEMS: 1985 AND 1988

(In dollars per pound, except as indicated)

FOOD	1985	1988	Percent change 1985-88	FOOD	1985	1988	Percent change 1985-88
Ground beef.....	1.24	1.36	9.7	Apples, red Delicious.....	.68	.73	7.4
Chuck, ground.....	1.68	1.76	4.8	Bananas.....	.37	.42	13.5
Rib roast.....	3.28	3.89	18.6	Peaches.....	.69	.68	-1.4
Round steak.....	2.82	2.98	5.7	Pears, Anjou.....	.70	.63	-10.0
Sirloin steak, bone-in.....	2.96	3.29	11.1	Potatoes, white.....	.21	.26	23.8
T-bone steak.....	3.97	4.64	16.9	Lettuces, iceberg.....	.54	.63	16.7
Bacon, sliced.....	1.94	1.88	-3.1	Tomatoes, field grown.....	.78	.83	6.4
Chops, center cut.....	2.34	2.77	18.4	Beans, green.....	.82	.96	17.1
Ham, rump.....	1.28	1.60	25.0	Corn on the cob.....	.39	.59	51.3
Sausage.....	1.74	1.97	13.2	Onions, yellow.....	.30	.38	26.7
Ham, canned.....	2.56	2.73	6.6	Peppers, sweet.....	.94	.79	-16.0
Chicken, fresh, whole.....	.76	.85	11.8	Tomatoes, canned.....	.52	.53	1.9
Chicken breast.....	1.66	1.93	16.3	Margarine, stick.....	.80	.73	-8.8
Turkey, frozen.....	1.05	.96	-8.6	Shortening.....	.88	.85	-3.4
Tuna, canned.....	2.01	2.16	7.5	Peanut butter.....	1.54	1.79	16.2
Eggs, Grade A, large (dozen).....	.80	.79	-1.3	Sugar, white.....	.35	.37	5.7
Milk, fresh, whole (½ gal.).....	1.13	1.16	2.7	Coffee, roasted.....	2.58	2.77	7.4
Ice cream (½ gal.).....	2.30	2.44	6.1				

NO. 785. AVERAGE PRICE OF ENERGY IN SELECTED METROPOLITAN AREAS: 1989

(In dollars per unit shown. One therm contains approximately 100 cubic feet of natural gas. As of January. See Appendix II)

CITY/MSA	Utility (pipel) gas (100 therms)	Electricity (500 kWh)	Fuel oil No. 2 (gallon)	GASOLINE (gallon)			
				All types ¹	Leaded regular	Unleaded regular	Unleaded premium
U.S. city average.....	56.07	40.83	.883	.944	.876	.918	1.091
Baltimore, MD MSA.....	58.59	37.56	.901	1.030	.955	.976	1.167
Boston-Lawrence-Salem, MA-NH CMSA.....	72.54	40.97	.927	1.020	.972	.971	1.139
Chicago-Gary-Lake County, IL-IN-WI CMSA.....	48.91	50.26	.911	1.012	.926	.980	1.189
Cleveland-Akron-Lorain, OH CMSA.....	49.43	46.36	(NA)	.942	(NA)	.888	1.096
Dallas-Fort Worth, TX CMSA.....	53.14	39.40	(NA)	.876	.854	.856	.982
Detroit-Ann Arbor, MI CMSA.....	52.53	46.63	.947	.950	.899	.948	1.117
Houston-Galveston-Braxoria, TX CMSA.....	46.05	38.25	(NA)	.913	.827	.872	1.069
Los Angeles-Anaheim-Riverside, CA CMSA.....	56.57	50.97	(NA)	.864	.830	.834	1.047
Miami-Fort Lauderdale, FL CMSA.....	64.37	44.46	(NA)	1.019	.852	.966	1.093
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA.....	70.12	58.24	.943	1.036	.912	.967	1.165
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA.....	68.09	53.48	.886	.959	.935	.910	1.106
Pittsburgh-Beaver Valley, PA CMSA.....	56.68	43.62	.748	.935	.949	.900	1.096
St. Louis-East St. Louis, MO-IL CMSA.....	51.65	38.75	(NA)	.822	.824	.859	1.100
San Francisco-Oakland-San Jose, CA CMSA.....	51.27	51.01	(NA)	.943	.827	.943	1.053
Washington, DC-MD-VA MSA.....	71.12	39.23	.973	1.118	.998	1.051	1.314

NA Not available. ¹ Includes types of gasoline not shown separately.

Source of tables 784 and 785: U.S. Bureau of Labor Statistics, *CPI Detailed Report*, January issues.

NO. 786. AVERAGE MONTHLY RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL BILLS FOR ELECTRICITY: 1980 TO 1988

[In dollars. As of January 1. Represents composite averages, derived using census data; for 1980 data, the 1970 census was used; thereafter, 1980 Census was used. Residential, for cities of 2,500 or more population; commercial and industrial, for 455 large cities in United States and Puerto Rico. kW=Kilowatts; kWh . Kilowatt-hours. Beginning in 1988, commercial and industrial national average data are no longer available by demand level. See source for coverage detail]

ITEM	1980	1985	1987	1988, prel.	ITEM	1980	1985	1987	1988, prel.
RESIDENTIAL					COMMERCIAL--Con.				
Average bill, dollars:					Average bill, cents per kWh:				
500 kWh.....	27.80	41.86	40.88	41.21	6 kW, 750 kWh.....	7.5	10.7	10.1	(NA)
750 kWh.....	36.94	57.86	56.78	57.39	12 kW, 1,500 kWh.....	7.6	10.9	10.4	(NA)
1,000 kWh.....	48.79	76.37	74.57	74.15	30 kW, 6,000 kWh.....	6.4	9.6	8.8	(NA)
Average bill, cents per kWh:					40 kW, 10,000 kWh.....	5.9	8.9	8.2	(NA)
500 kWh.....	5.6	8.4	8.2	8.2	INDUSTRIAL				
750 kWh.....	4.9	7.7	7.6	7.7	Average bill, dollars:				
1,000 kWh.....	4.9	7.6	7.5	7.4	150 kW, 30,000 kWh.....	1,757	2,792	2,572	(NA)
COMMERCIAL					300 kW, 60,000 kWh.....	3,431	5,353	5,046	(NA)
Average bill, dollars:					1,000 kW, 200,000 kWh.....	10,910	17,012	16,226	(NA)
6 kW, 750 kWh.....	57	80	76	(NA)	Average bill, cents per kWh:				
12 kW, 1,500 kWh.....	114	163	155	(NA)	150 kW, 30,000 kWh.....	5.9	9.1	8.6	(NA)
30 kW, 6,000 kWh.....	385	576	530	(NA)	300 kW, 60,000 kWh.....	5.7	8.9	8.4	(NA)
40 kW, 10,000 kWh.....	590	892	820	(NA)	1,000 kW, 200,000 kWh.....	5.5	8.5	8.1	(NA)

NA Not available.

NO. 787. NET MONTHLY RESIDENTIAL ELECTRIC BILLS (LOWEST AND HIGHEST) FOR 500 KILOWATT-HOURS USE, 1970 TO 1988, AND BY STATE, 1988

[In dollars. Based on rates as of January 1 for communities of 2,500 inhabitants or more. Consumption for lighting, appliances, refrigeration and cooking. Does not include domestic water heating usage which in 1983 represented 19 percent of total U.S. households. For composition of regions, see fig. 1, inside front cover]

YEAR, REGION, DIVISION, AND STATE	Low-est bill	High-est bill	DIVISION AND STATE	Low-est bill	High-est bill	DIVISION AND STATE	Low-est bill	High-est bill
1970.....	5.00	25.00	E. No. Cent.:			E. So. Cent.:		
1975.....	5.10	41.14	OH.....	22.81	52.63	KY.....	21.78	40.86
1980.....	5.84	64.47	IN.....	26.93	53.42	TN.....	25.97	32.56
1985.....	9.49	77.88	IL.....	26.56	46.35	AL.....	26.62	36.69
1986.....	8.90	79.37	MI.....	20.50	56.39	MS.....	26.27	49.32
1987.....	8.90	64.60	WI.....	21.10	35.85	W. So. Cent.:		
1988, U.S.	8.90	62.87	W. No. Cent.:			AR.....	22.33	51.25
Region:			MN.....	14.95	44.53	LA.....	22.72	56.39
Northeast.....	10.68	62.35	IA.....	21.50	46.32	OK.....	25.69	46.40
Midwest.....	14.95	57.60	MO.....	18.23	50.49	TX.....	19.44	51.54
South.....	16.00	56.39	ND.....	22.50	40.18	Mt.:		
West.....	8.90	62.87	SD.....	16.75	51.81	MT.....	20.50	37.86
N. Eng.:			NE.....	23.30	41.89	ID.....	20.35	29.57
ME.....	34.15	47.93	KS.....	24.86	57.60	WY.....	21.50	47.69
NH.....	36.97	55.96	So. Atl.:			CO.....	17.00	44.25
VT.....	27.45	56.50	DE.....	40.99	48.35	NM.....	25.58	54.15
MA.....	25.45	61.39	MD.....	31.93	48.21	AZ.....	30.94	59.96
RI.....	42.73	50.68	VA.....	25.97	25.97	UT.....	23.80	44.79
CT.....	36.22	54.76	DC.....	27.82	40.25	NV.....	22.00	50.28
Mid. Atl.:			WV.....	28.06	42.06	Pac.:		
NY.....	10.68	62.35	NC.....	33.80	51.05	WA.....	8.90	29.80
NJ.....	43.49	55.23	SC.....	29.79	47.05	OR.....	15.83	29.00
PA.....	18.00	57.54	GA.....	16.00	46.44	CA.....	23.70	58.45
			FL.....	27.30	54.01	AK.....	36.00	56.53
						HI.....	45.11	62.87

Source of tables 786 and 787: Through 1975, U.S. Federal Power Commission, *Typical Electric Bills*, annual; thereafter, U.S. Energy Information Administration, *Typical Electric Bills*, annual.

NO. 788. AVERAGE PRICES OF SELECTED FUELS AND ELECTRICITY: 1973 TO 1988

[In dollars per unit, except electricity, in cents per kWh. Represents price to end-users, except as noted]

ITEM	Unit ¹	1973	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Crude oil, composite ²	Barrel.....	4.15	10.38	17.72	28.07	35.24	31.87	28.99	28.63	26.75	14.55	17.90	14.71
Motor gasoline: ³													
Leaded regular.....	Gallon.....	.39	.57	.86	1.19	1.31	1.22	1.16	1.13	1.12	.86	.90	.90
Unleaded regular.....	Gallon.....	(NA)	(NA)	.90	1.25	1.38	1.30	1.24	1.21	1.20	.93	.95	.95
Unleaded premium.....	Gallon.....	(NA)	(NA)	(NA)	1.47	1.42	1.42	1.38	1.37	1.34	1.09	1.09	1.11
No. 2 heating oil.....	Gallon.....	(NA)	(NA)	.52	.79	.91	.91	.92	.92	.85	.56	.58	.54
No. 2 diesel fuel.....	Gallon.....	(NA)	(NA)	.59	.82	1.00	.94	.83	.82	.79	.48	.55	.50
Residual fuel oil.....	Gallon.....	(NA)	(NA)	.44	.61	.76	.68	.65	.69	.61	.34	.42	.33
Natural gas, residential.....	1,000 cu. ft.....	1.29	1.71	2.98	3.68	4.29	5.17	6.06	6.12	6.12	5.83	5.54	5.49
Electricity, residential.....	kWh.....	2.54	3.51	4.64	5.36	6.20	6.86	7.18	7.54	7.79	7.41	7.41	7.49

NA Not available. ¹ See footnote. ² Refiner acquisition cost. ³ Average, all service.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, April 1989.

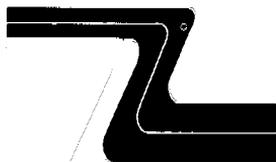
NO. 789. SALES PRICE OF MOTOR GASOLINE, BY GRADE AND STATE: 1987 TO 1989

[In cents per gallon. As of March. Represents all refinery and gas plant operators' sales through company-operated retail outlets. Gasoline prices exclude excise taxes]

STATE	Gasoline excise taxes 1988 ¹	AVERAGE, ALL GRADES			LEADED REGULAR			UNLEADED REGULAR			PREMIUM		
		1987	1988	1989	1987	1988	1989	1987	1988	1989	1987	1988	1989
United States	14.5	64.0	64.0	70.5	60.4	59.6	66.6	62.6	61.7	67.3	74.5	74.7	81.7
Alabama.....	² 11.0	68.2	62.9	70.0	60.6	58.9	67.0	66.3	62.0	67.0	75.3	71.4	79.2
Alaska.....	8.0	85.3	(NA)	94.3	89.0	(NA)	96.1	82.3	(NA)	92.5	91.3	96.0	(NA)
Arizona.....	16.0	64.2	63.2	70.4	68.3	59.9	65.6	72.2	61.5	68.8	84.0	76.8	85.5
Arkansas.....	13.5	60.2	62.2	65.4	56.9	57.9	63.9	60.6	60.9	63.3	67.9	72.0	74.1
California.....	² 9.0	68.8	65.5	73.2	63.5	60.4	67.8	67.5	63.6	71.1	81.5	77.5	84.6
Colorado.....	18.0	62.2	60.2	69.5	57.5	57.6	65.7	63.6	59.8	68.9	72.4	69.4	78.1
Connecticut.....	20.0	68.6	72.0	82.8	61.5	64.6	74.8	65.9	69.3	76.8	77.0	81.2	91.4
Delaware.....	16.0	64.2	62.3	73.0	59.8	59.5	68.9	61.7	58.6	68.5	73.0	72.0	85.0
District of Columbia.....	15.5	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)	(d)
Florida.....	² 4.0	62.5	65.9	72.8	56.8	61.5	66.4	61.0	62.5	68.2	74.6	74.9	81.8
Georgia.....	7.5	64.4	61.2	68.6	56.4	54.3	61.7	62.4	57.7	64.1	77.0	73.5	79.5
Hawaii.....	² 11.0	83.6	87.4	87.8	74.4	79.5	82.5	86.0	84.6	83.1	(0)	93.3	100.9
Idaho.....	18.0	62.6	64.9	66.4	60.8	64.0	65.2	62.8	64.2	65.6	80.7	77.5	77.5
Illinois.....	² 13.0	66.1	64.1	69.2	67.4	61.2	68.5	62.7	61.0	66.0	75.2	75.5	79.8
Indiana.....	15.0	61.5	61.2	66.8	58.9	60.8	69.0	61.0	59.1	64.3	66.7	66.6	77.7
Iowa.....	18.0	63.8	62.3	67.9	61.9	61.2	68.4	64.9	61.9	66.9	67.3	69.7	77.5
Kansas.....	11.0	62.7	63.6	66.2	60.6	62.3	66.8	62.7	63.2	64.6	69.1	71.3	74.1
Kentucky.....	15.0	63.4	62.9	70.6	58.9	59.5	67.6	62.2	60.7	67.1	73.2	71.8	82.7
Louisiana.....	16.0	61.3	60.6	70.4	56.3	54.8	66.0	59.3	57.4	67.6	70.3	70.9	78.8
Maine.....	16.0	71.4	71.2	80.2	66.5	67.8	77.5	69.8	69.8	76.8	81.4	81.2	91.4
Maryland.....	18.5	65.3	68.5	74.7	60.7	64.1	69.2	63.2	65.9	70.9	73.8	75.7	85.3
Massachusetts.....	11.0	(NA)	74.5	79.8	59.8	65.0	73.1	(NA)	70.4	74.9	76.9	83.7	90.1
Michigan.....	15.0	59.9	60.2	66.9	57.6	59.8	71.2	58.9	58.2	63.9	70.6	68.5	77.9
Minnesota.....	20.0	62.9	64.8	69.5	60.5	63.6	69.5	63.3	64.4	67.9	68.6	70.4	78.0
Mississippi.....	² 17.0	67.8	65.2	71.4	63.0	59.6	66.7	67.9	64.3	68.0	75.5	73.8	81.2
Missouri.....	11.0	62.6	61.7	66.0	59.7	58.3	65.5	62.3	60.2	63.4	71.9	71.9	76.6
Montana.....	20.0	61.9	64.8	69.8	61.5	64.4	68.9	61.9	64.9	69.0	64.6	66.1	74.1
Nebraska.....	18.2	67.7	62.1	69.5	67.4	61.3	69.4	66.9	62.1	69.3	66.7	65.6	73.0
Nevada.....	² 16.3	61.4	59.4	67.1	57.8	55.9	63.9	62.1	58.7	64.9	71.4	69.9	80.1
New Hampshire.....	14.0	70.1	74.5	78.4	64.3	68.2	76.1	67.8	71.0	74.7	79.6	86.4	88.0
New Jersey.....	10.5	65.7	71.7	78.2	58.8	63.7	69.9	61.6	66.1	72.0	76.1	82.9	90.1
New Mexico.....	14.2	64.6	66.7	73.3	61.0	64.8	72.0	65.3	66.4	72.9	74.4	76.5	82.0
New York.....	² 8.0	65.9	69.7	75.5	61.9	65.5	70.4	63.5	66.1	70.6	78.0	80.0	87.7
North Carolina.....	14.0	64.5	63.2	69.5	58.0	56.3	63.4	63.0	60.9	65.8	74.7	73.7	80.9
North Dakota.....	17.0	66.6	66.8	72.5	66.0	66.6	72.1	67.1	66.8	72.4	70.0	70.0	78.9
Ohio.....	14.8	65.7	62.6	71.8	60.7	58.2	71.3	63.6	59.6	68.4	78.6	76.1	86.3
Oklahoma.....	16.0	61.3	60.2	66.1	58.4	57.6	65.8	60.8	59.5	64.6	69.0	67.7	72.7
Oregon.....	² 14.0	60.1	64.3	71.4	57.6	61.5	68.3	60.3	63.8	70.8	72.4	77.0	84.7
Pennsylvania.....	12.0	62.6	63.5	70.6	58.2	59.4	67.7	59.9	59.3	65.5	74.7	75.7	83.6
Rhode Island.....	15.0	68.1	69.5	77.3	61.0	62.5	74.2	64.6	65.4	72.6	74.6	79.8	86.4
South Carolina.....	15.0	63.0	63.6	69.1	57.6	57.3	64.8	62.5	61.7	65.8	73.0	75.4	82.4
South Dakota.....	² 18.0	63.5	62.8	70.5	63.8	63.0	70.2	63.0	62.6	70.5	74.3	69.3	79.8
Tennessee.....	² 17.0	61.6	60.3	68.3	56.1	54.7	63.0	60.5	58.0	64.3	72.3	72.4	80.8
Texas.....	15.0	62.0	63.0	67.9	58.0	57.7	64.3	60.5	61.2	64.6	72.1	73.3	77.6
Utah.....	19.0	61.7	63.9	66.6	58.7	61.9	64.2	62.0	63.5	65.9	70.4	71.7	73.2
Vermont.....	13.0	73.8	76.4	80.7	67.0	70.9	75.0	72.1	73.5	76.9	84.1	87.4	91.2
Virginia.....	² 17.5	65.5	68.1	74.7	59.2	61.3	65.6	62.8	66.0	71.1	76.7	77.3	84.7
Washington.....	18.0	61.4	65.0	66.7	57.7	61.4	62.6	61.1	63.5	64.9	73.3	75.9	79.1
West Virginia.....	10.5	68.5	69.9	75.1	63.7	65.6	71.4	67.3	67.3	70.4	78.1	79.8	88.1
Wisconsin.....	20.9	62.2	60.3	67.9	60.3	58.8	68.6	61.6	68.7	65.7	70.6	68.0	77.1
Wyoming.....	8.0	66.2	64.7	70.6	65.1	63.2	69.7	65.5	58.2	69.7	79.0	71.4	77.7

D Withheld to avoid disclosure of data. NA Not available. ¹ Source: U.S. Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism*, 1989 Edition, vol. I, based on CCH, *State Tax Reporter*. ² Plus local taxes, if any.

Source: Except as noted, U.S. Energy Information Administration, *Petroleum Marketing Monthly*, March 1989.



Section 16

Banking, Finance, and Insurance

This section presents data on the Nation's finances, various types of financial institutions, money and credit, securities, and insurance. The primary sources of these data are publications of several departments of the Federal Government, especially the Treasury Department, and independent agencies such as the Federal Deposit Insurance Corporation, the Federal Reserve System, and the Securities and Exchange Commission. National data on insurance are available primarily from private organizations, such as the American Council of Life Insurance.

Flow of funds.—The flow of funds accounts of the Federal Reserve System (see tables 793 to 797) bring together statistics on all of the major forms of financial transactions and financial claims to present an economy-wide view of asset and liability relationships. In flow form, the accounts relate borrowing and lending to one another and to the nonfinancial activities that generate income and production. Each claim outstanding is included simultaneously as an asset of the lender and as a liability of the debtor. The accounts also indicate the balance between asset totals and liability totals over the economy as a whole. Several publications of the Board of Governors of the Federal Reserve System contain information on the flow of funds accounts: Summary data on flows, in the *Federal Reserve Bulletin*, *Flow of Funds Accounts* (quarterly), and *Annual Statistical Digest*; and concepts and organization of the accounts, in *Introduction to Flow of Funds* (June 1980).

Banking system.—Banks in this country are organized under the laws of both the States and the Federal Government and are regulated by several bank supervisory agencies. State-chartered banks are supervised by officials of the respective States. National banks are supervised by the Comptroller of the Currency. *Reports of Condition* have been collected from national banks since 1863. Summaries of these reports are published in the Comptroller's *Annual Report*, which also presents data on the structure of the national banking system.

The Federal Reserve System was established in 1913 to exercise central banking functions, some of which are shared with the U.S. Treasury. It includes national banks and such State banks as voluntarily join the System. Statements of State bank members are consolidated by the Board of Governors of the Federal Reserve System with data for national banks collected by the Comptroller of the Currency into totals for all member banks of the System. Balance sheet data for member banks and other commercial banks are published quarterly in the *Federal Reserve Bulletin*.

The Federal Deposit Insurance Corporation (FDIC), established in 1933, insures each depositor up to \$100,000 currently in banks that are members of the Federal Reserve System and in such nonmember banks as join the insurance fund. Major item balance sheets for all commercial banks are published monthly in the *Federal Reserve Bulletin*.

Savings institutions and other credit agencies.—Savings institutions, insurance companies, finance companies dealing primarily in installment sales financing, credit unions, and personal loan companies represent important sources of funds for the credit market. Savings institutions are primarily involved in credit extension in the form of mortgage loans. Statistics on savings institutions are collected by the U.S. Office of Thrift Supervision (formerly the Federal Home Loan Bank Board). Statistics on loans, investments, cash, etc., of life insurance companies are published principally by the American Council of Life Insurance in its *Life Insurance Fact Book*. Consumer credit data are published currently in the *Federal Reserve Bulletin*.

Federally chartered credit unions are under the supervision of the National Credit Union Administration, established in 1970. State-chartered credit unions are supervised by the respective State supervisory authorities. The Administration publishes comprehensive program and statistical information on all Federal and federally insured State credit unions in the *Annual Report of the National Credit Union Administration*. Deposit insurance (up to \$100,000 per account) is provided to members of all Federal and those State credit unions that are federally-insured by the National Credit Union Share Insurance Fund which was established in 1970. Deposit insurance for State chartered

credit unions is also available in some States under private or State-administered insurance programs.

Government corporations and credit agencies make available credit of specified types or to specified groups of private borrowers, either by lending directly or by insuring or guaranteeing loans made by private lending institutions. Data on operations of Government credit agencies, along with other Government corporations, are available in reports of individual agencies; data on their debt outstanding are published in the *Federal Reserve Bulletin*.

Currency.—Currency, including coin and paper money, represents more than one-fourth of all media of exchange in the United States, with most payments made by check. All currency is now issued by the Federal Reserve Banks.

Securities.—The Securities and Exchange Commission (SEC) was established in 1934 to protect the interests of the public and investors against malpractices in the securities and financial markets and to provide the fullest possible disclosure of information regarding securities to the investing public. Statistical data are published in the *SEC Annual Report* and *SEC Monthly Statistical Review*.

Insurance.—Insuring companies, which are regulated by the various States or the District of Columbia, are classified as either life or property. Companies that underwrite accident and health insurance only and those that underwrite accident and health insurance in addition to one or more property lines are included with property insurance. Insuring companies, other than those classified as life, are permitted to underwrite one or more property lines provided they are so licensed and have the necessary capital or surplus.

There are a number of published sources for statistics on the various classes of insurance—life, health, fire, marine, and casualty. Individual States collect data on all insurers operating within their respective jurisdictions, and many of the States publish an annual insurance report giving individual company data and aggregates of certain items for the companies operating within the State. Organizations representing certain classes of insurers publish reports for these classes. Among them are the annual commercial publishers, such as The National Underwriter Company whose *Argus Health Chart* (annual) contains financial and operating data for individual health and accident insurance companies, including Blue Cross and Blue Shield Plans. The American Council of Life Insurance publishes statistics on life insurance purchases, ownership, benefit payments, and assets in its biennial *Life Insurance Fact Book*.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

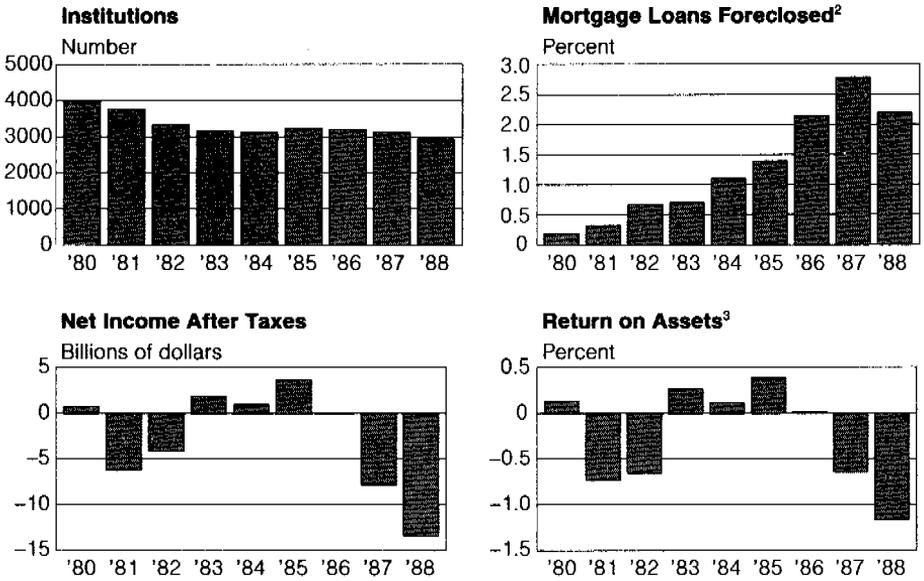
NO. 790. GROSS NATIONAL PRODUCT IN FINANCE, INSURANCE, AND REAL ESTATE IN CURRENT AND CONSTANT (1982) DOLLARS: 1970 TO 1987

[In billions of dollars, except percent. For definition of gross national product, see text, section 14. Based on 1972 Standard Industrial Classification]

INDUSTRY	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
CURRENT DOLLARS										
Finance, insurance, real estate, total	145.8	221.7	400.6	449.3	475.1	536.4	572.8	639.5	708.6	775.4
Percent of gross national product.....	14.4	13.9	14.7	14.7	15.0	15.8	15.2	15.9	16.7	17.1
Banking.....	18.4	25.8	51.1	54.4	59.8	68.1	70.6	78.2	80.6	84.9
Credit agencies other than banks.....	1.7	3.3	5.5	6.5	5.4	10.6	9.8	11.6	16.4	17.0
Security and commodity brokers, and services.....	3.3	5.0	9.7	11.4	13.1	20.7	19.7	24.1	31.6	36.7
Insurance carriers.....	11.6	17.2	37.0	34.7	29.8	36.5	34.9	44.2	61.1	72.7
Insurance agents and brokers, and services.....	4.8	7.8	14.4	15.5	17.0	17.6	20.1	22.4	25.5	28.7
Real estate.....	105.4	161.8	281.5	318.7	342.7	374.2	409.1	446.7	479.4	519.3
Holding and other investment companies.....	.6	.7	1.3	8.1	7.2	8.7	8.5	12.3	14.0	16.2
CONSTANT (1982) DOLLARS										
Finance, insurance, real estate, total	320.7	387.6	464.3	474.2	475.1	489.0	506.6	624.3	537.6	559.4
Percent of gross national product.....	13.3	14.4	14.6	14.6	15.0	14.9	14.5	14.5	14.4	14.5
Banking.....	38.2	46.4	56.7	58.9	59.8	60.5	61.0	61.9	62.9	63.2
Credit agencies other than banks.....	3.4	4.1	5.2	5.4	5.4	6.0	6.6	7.0	7.8	8.3
Security and commodity brokers, and services.....	9.1	7.9	10.7	12.1	13.1	14.9	16.1	16.9	18.6	21.3
Insurance carriers.....	21.3	25.3	28.6	28.9	29.8	30.1	31.5	33.5	35.8	37.0
Insurance agents and brokers, and services.....	13.7	16.0	17.3	17.1	17.0	17.4	17.9	20.0	21.9	23.9
Real estate.....	232.2	283.4	338.6	345.3	342.7	352.7	365.3	376.0	380.8	394.8
Holding and other investment companies.....	2.8	4.5	6.3	6.5	7.2	7.4	8.2	9.0	9.8	10.9

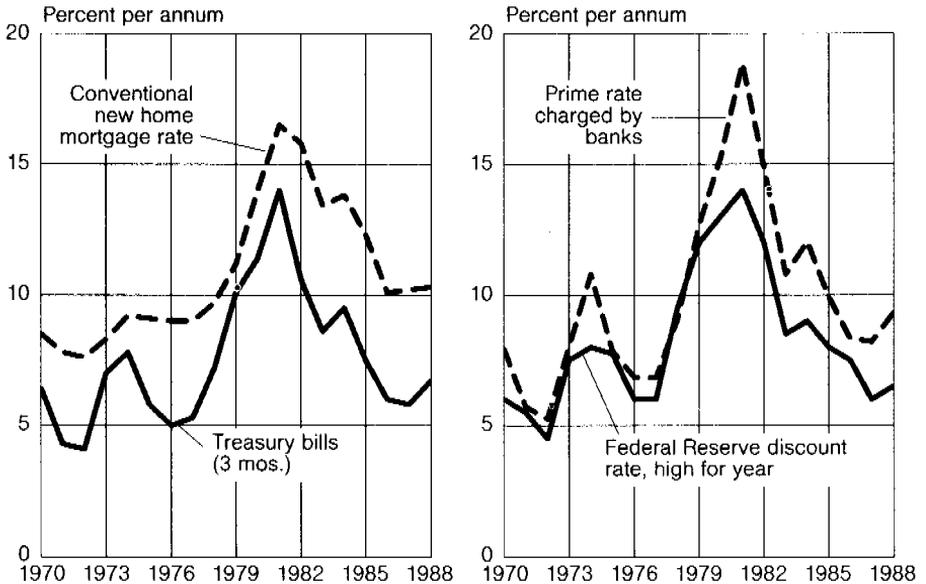
Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

Figure 16.1
FSLIC¹—Insured Savings Institutions: 1980 to 1988



¹Federal Savings and Loan Insurance Corporation. ²Based on amount of mortgages foreclosed.
³Net after-taxes income to average assets.
 Source: Chart prepared by U.S. Bureau of the Census. For data, see tables 815, 817, and 819.

Figure 16.2
Interest Rates: 1970 to 1988



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 836.

NO. 791. PERSONS WORKING IN FINANCE, INSURANCE, AND REAL ESTATE INDUSTRIES: 1970 TO 1988

(In thousands. Data represent worker-years of full-time equivalent employment by persons working for wages or salaries and number of active partners and proprietors of unincorporated businesses who devote a majority of their working hours to their unincorporated businesses. Based on 1972 Standard Industrial Classification)

INDUSTRY	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
Finance, insurance, real estate, total.....	3,749	5,481	5,622	5,725	5,909	6,137	6,363	6,666	6,966	7,110
Average annual percent change ¹	3.1	3.9	2.6	1.8	3.2	3.9	3.7	4.8	4.5	2.0
Banking.....	1,010	1,497	1,554	1,580	1,585	1,800	1,825	1,851	1,857	1,647
Credit agencies other than banks.....	350	546	563	564	620	686	734	809	867	872
Security and commodity brokers, and services.....	219	259	292	317	360	390	409	451	516	509
Insurance carriers.....	986	1,225	1,238	1,236	1,236	1,249	1,276	1,347	1,395	1,424
Insurance agents and brokers, and services.....	355	553	596	623	628	655	665	719	744	780
Real estate.....	777	1,286	1,259	1,273	1,344	1,407	1,469	1,509	1,589	1,667
Holding and other investment companies.....	52	115	120	132	135	150	165	180	200	211

¹ For explanation of average annual percent change, see Guide to Tabular Presentation. For 1970, change from 1960.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

NO. 792. FINANCE, INSURANCE, AND REAL ESTATE—ESTABLISHMENTS, EMPLOYEES, AND PAYROLL: 1980 TO 1986

(Excludes government employees, railroad employees, self-employed persons, etc. For statement on methodology, see Appendix III)

SIC ¹ code	INDUSTRY	ESTABLISHMENTS			EMPLOYEES (1,000)			Payroll, 1986 (bil. dol.)
		1980	1985	1986	1980	1985	1986	
(H)	Finance, insurance, real estate.....	420,976	487,750	504,052	5,295	6,004	6,371	151
80	Banking ²	46,184	52,215	54,759	1,508	1,586	1,640	33
801	Federal reserve banks.....	50	86	85	21	24	25	1
602	Commercial and stock savings banks.....	41,908	47,174	49,449	1,380	1,451	1,498	30
603	Mutual savings banks.....	2,223	2,476	2,597	59	67	72	1
605	Functions closely related to banking.....	1,630	2,177	2,332	28	40	38	1
61	Credit agencies other than banks ³	60,339	61,145	62,347	588	743	813	18
612	Savings and loan associations.....	15,065	17,766	17,963	235	322	337	6
613	Agricultural credit institutions.....	1,360	1,305	993	16	16	16	(2)
614	Personal credit institutions.....	36,133	29,923	29,779	218	217	236	4
615	Business credit institutions.....	2,416	2,933	3,033	50	73	82	2
616	Mortgage bankers and brokers.....	4,652	6,419	9,717	63	105	132	4
62	Security, commodity brokers and services ²	11,279	18,843	19,988	215	338	377	21
621	Security brokers and dealers.....	7,611	11,703	12,283	174	269	300	18
622	Commodity contracts brokers, dealers.....	863	1,020	916	9	14	13	(2)
623	Security and commodity exchanges.....	110	124	113	6	7	7	(2)
628	Security and commodity services.....	2,493	5,148	5,730	24	45	53	2
63	Insurance carriers ²	33,167	34,630	35,304	1,237	1,253	1,313	32
631	Life insurance.....	15,615	14,871	14,839	563	565	576	14
632	Medical service and health insurance ³	1,576	1,917	1,934	125	145	164	4
6321	Accident and health insurance.....	845	1,093	1,086	27	35	42	1
6324	Hospital and medical service plans.....	725	815	840	97	109	120	3
633	Fire, marine, and casualty insurance.....	9,236	10,625	10,475	449	453	475	12
635	Surety insurance.....	450	495	471	8	9	9	(2)
636	Title insurance.....	2,714	2,721	2,713	51	49	52	1
637	Pension, health, and welfare funds.....	3,157	3,160	3,914	33	22	26	(2)
64	Insurance agents, brokers and services.....	78,833	96,282	99,039	463	553	597	14
65	Real estate ²	169,952	198,460	205,597	989	1,145	1,220	22
651	Real estate operators and lessors.....	94,750	98,813	98,329	462	470	481	7
653	Real estate agents and managers.....	50,998	69,049	74,081	362	492	526	11
654	Title abstract offices.....	2,695	3,019	3,211	21	21	25	1
655	Subdividers and developers ³	13,029	17,511	18,824	111	130	146	3
6552	Subdividers and developers, n.e.c. ³	7,591	10,108	10,809	72	87	97	2
6553	Cemetery subdividers and developers.....	4,292	4,526	4,589	33	33	34	1
66	Combined real estate, insurance, etc.....	6,426	4,973	4,695	30	24	25	(2)
67	Holding and other investment offices ²	13,135	19,258	20,246	139	193	210	6
671	Holding offices.....	3,605	5,664	5,687	63	97	108	4
672	Investment offices.....	764	803	750	7	8	9	(2)
673	Trusts.....	4,240	6,280	7,107	40	46	48	1
679	Miscellaneous investing.....	3,701	5,950	5,862	25	41	42	1
	Administrative and auxiliary.....	1,661	1,944	2,097	125	167	175	4

² Less than \$500 million. ¹ Standard Industrial Classification; see text, section 13. ³ Includes industries not shown separately. ⁴ N.e.c.=Not elsewhere classified.

Source: U.S. Bureau of the Census, *County Business Patterns*, annual.

NO. 793. FLOW OF FUNDS ACCOUNTS—FINANCIAL ASSETS AND LIABILITIES OF FINANCIAL AND NONFINANCIAL INSTITUTIONS, BY SECTOR AND TYPE OF INSTRUMENT: 1988

[In billions of dollars. As of Dec. 31. Preliminary. A=Assets; L=Liabilities; SDR=Special drawing rights; IMF=International Monetary Fund. RPs=Repurchase Agreements. "N.e.c."=Not elsewhere classified]

TYPE OF INSTRUMENT	ALL SECTORS, TOTAL 1			PRIVATE DOMESTIC NONFINANCIAL INSTITUTIONS						U.S. GOVERNMENT			FINANCIAL INSTITUTIONS									
	A	L	Total	Households 2		Business		State and local govs.		Total	Monetary authority		Commercial banking		Non-bank finance		Federally sponsored credit agencies and mortgage pools					
				A	L	A	L	A	L		A	L	A	L	A	L	A	L				
																			A	L	A	L
Total	27,730	22,174	14,849	8,097	12,138	3,246	2,226	4,237	564	614	323	2,394	11,196	10,944	305	2,922	2,908	6,738	6,505	1,235	1,227	
Gold stock and SDR's.....	21	10	-	-	-	-	-	-	-	-	10	10	11	11	-	-	-	-	-	-	-	
IMF position.....	17	17	-	-	-	-	-	-	-	-	10	10	8	8	-	-	-	-	-	-	-	
Official foreign exchange.....	24	20	-	-	-	-	-	-	-	-	20	20	24	24	-	-	-	-	-	-	-	
Reservary currency, SDR certificates.....	846	963	713	-	505	186	186	21	21	31	31	20	60	60	3	560	78	93	2	2	2	
Checkable deposits, currency.....	2,426	2,525	2,525	-	2,236	288	288	61	61	1	1	-	178	2,748	7	1,488	176	1,259	129	37	37	
Time and savings accounts.....	328	339	321	-	298	23	23	66	66	-	-	-	136	368	7	236	112	129	17	17	17	
Federally sponsored credit RPs 3.....	338	339	321	-	298	23	23	66	66	-	-	-	136	368	7	236	112	129	17	17	17	
Money market fund shares.....	44	44	14	-	313	14	14	-	-	-	-	11	30	30	-	30	30	30	30	30	30	
Life insurance reserves.....	313	313	313	-	313	-	-	-	-	-	-	208	70	2,376	-	2,377	-	2,377	-	-	-	-
Pension fund reserves.....	2,585	2,585	2,585	-	2,585	-	-	-	-	-	208	208	70	2,376	-	2,377	-	2,377	-	-	-	-
Interbank claims.....	75	52	-	-	-	-	-	-	-	-	-	-	45	45	67	-	14	45	478	-	-	
Mutual fund shares 4.....	478	478	433	-	417	16	16	-	-	-	-	-	45	45	-	-	-	-	-	-	-	
Other corporate equities 5.....	3,123	1,816	1,816	-	1,816	-	-	-	-	-	-	-	1,112	1,112	(2)	1,112	45	478	-	-	-	
Credit market instruments 6.....	11,415	1,978	6,932	270	3,137	270	3,209	385	566	220	2,118	2,118	6,566	2,118	241	2,466	184	4,704	769	1,176	1,164	
U.S. Treasury securities 6.....	2,095	841	569	87	185	87	185	91	91	192	209	209	906	906	234	192	461	19	19	19	19	
Federal agency securities 7.....	1,182	314	222	222	222	222	222	222	222	23	23	23	832	1,159	7	173	651	317	317	(2)	1,159	
Tax-exempt securities.....	757	757	288	756	288	79	11	116	10	562	48	(2)	1,083	386	83	151	317	308	308	308	308	
Corporate and foreign bonds.....	1,336	72	861	72	861	72	861	861	861	861	861	861	1,083	386	83	151	317	308	308	308	308	
Mortgages.....	3,233	264	3,230	111	2,182	55	1,048	99	99	48	(2)	2,921	3	689	34	669	78	1,000	3	963	963	
Nonresumer credit.....	744	744	45	744	45	744	45	660	660	660	660	660	757	34	757	34	34	34	34	34	34	
Bank loans, n.e.c.....	758	758	15	701	15	701	15	701	701	701	701	701	757	34	757	34	34	34	34	34	34	
Other paper.....	119	119	53	72	42	72	85	85	85	85	85	85	354	377	11	34	43	66	66	66	66	
Security credit.....	2,406	119	2,406	37	2,406	37	2,406	53	53	53	53	53	77	86	11	34	43	66	66	66	66	
Proprietors' equity.....	859	725	755	659	37	755	583	583	29	32	31	31	39	7	39	7	7	7	7	7	7	
Trade credit.....	39	36	34	-	34	-	-	-	-	-	-	-	3	3	-	-	-	-	-	-	-	
Taxes payable.....	39	36	34	-	34	-	-	-	-	-	-	-	3	3	-	-	-	-	-	-	-	
Miscellaneous claims.....	1,950	2,025	847	419	199	19	648	401	401	22	6	6	767	1,205	11	8	352	453	396	685	19	

1 Represents zero. 2 Less than \$500 million. 3 Includes personal trust and nonprofit organizations. 4 Includes liability attributed to issuer stocks that are not included in the flow of funds accounts. 5 Includes "Other loans" not shown separately. 6 Assets shown at market value. 7 Non-specific liability attributed to issuer stocks that are not included in the flow of funds accounts. 8 Includes savings bonds and other nonmarketable debt held by public agencies in the budget and by sponsored credit agencies in financial sectors, issues backed by mortgage pools, and loan participation certificates. 9 Asset is corporate only; noncorporate credit deducted in liability total to conform to quarterly flow tables. Source: Board of Governors of the Federal Reserve System, Annual Statistical Digest.

NO. 794. FLOW OF FUNDS ACCOUNTS—FINANCIAL ASSETS OF FINANCIAL AND NONFINANCIAL INSTITUTIONS, BY HOLDER SECTOR: 1970 TO 1988

[In billions of dollars. As of Dec. 31. See also *Historical Statistics, Colonial Times to 1970*, series X 192, X 229, X 821, and X 835]

SECTOR	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
All holders	4,641	13,123	14,258	15,420	17,092	18,764	21,237	23,903	25,541	27,730
Household ¹	2,487	6,548	7,036	7,570	8,311	8,817	9,842	10,737	11,236	12,139
Nonfinancial business.....	414	1,187	1,334	1,367	1,510	1,682	1,824	2,004	2,138	2,226
Farm.....	11	24	26	28	29	29	32	35	38	41
Nonfarm noncorporate.....	33	148	192	198	231	279	317	360	394	423
Nonfinancial corporations.....	370	1,015	1,116	1,142	1,250	1,375	1,475	1,609	1,706	1,762
U.S. Government.....	90	225	247	270	283	314	348	357	330	323
U.S. Government-sponsored credit agencies and mortgage pools.....	52	309	362	434	502	588	695	914	1,095	1,235
State and local government.....	72	234	240	282	301	349	465	524	559	584
Monetary authorities.....	86	174	182	194	204	219	243	275	286	305
Commercial banking ²	518	1,482	1,613	1,724	1,874	2,108	2,345	2,598	2,744	2,922
Domestic commercial banks.....	490	1,266	1,365	1,472	1,603	1,801	1,994	2,172	2,262	2,390
Foreign banking offices in U.S.....	9	101	125	111	113	126	147	187	231	263
Nonbank finance.....	825	2,559	2,845	3,196	3,630	4,123	4,772	5,577	6,078	6,738
Savings and loan associations ³	173	622	658	708	830	990	1,058	1,141	1,247	1,360
Life insurance.....	201	464	508	568	633	693	791	901	998	1,113
Other insurance.....	50	174	186	203	225	241	286	343	388	445
Private pension funds.....	112	470	487	576	683	714	848	942	1,001	1,140
Govt. retirement funds ⁴	60	198	224	263	311	357	405	469	517	605
Finance companies.....	84	202	226	237	264	302	352	410	450	489
Money market funds.....	-	76	186	220	179	234	244	292	318	338
Mutual savings banks ⁵	79	172	175	174	194	205	219	239	263	265
Investment companies.....	47	62	60	77	112	137	240	414	460	478
Credit unions.....	18	69	72	83	98	113	137	166	182	196
Security brokers, dealers.....	16	46	61	85	92	121	159	188	142	160
CMO ⁶ issuers.....	-	-	-	(2)	4	14	25	64	103	136
Real estate investment trusts.....	4	3	3	4	4	6	8	9	11	12
Rest of the world.....	99	405	399	403	477	566	703	917	1,075	1,260

- Represents zero. Z Less than \$500 million. ¹ Includes personal trusts and nonprofit organizations. ² Includes other sectors not shown separately. ³ See footnote 2, table 796. ⁴ State and local. ⁵ Includes Federal savings banks insured by Federal Deposit Insurance Corporation and a few insured by Federal Savings and Loan Insurance Corporation. ⁶ Collateralized mortgage obligations.

Source: Board of Governors of the Federal Reserve System, *Annual Statistical Digest*.

NO. 795. FLOW OF FUNDS ACCOUNTS—ASSETS AND LIABILITIES OF HOUSEHOLDS: 1970 TO 1988

[As of December 31. Includes personal trusts and nonprofit organizations. See also *Historical Statistics, Colonial Times to 1970*, series X 114-147]

TYPE OF INSTRUMENT	TOTAL (bil. dol.)							PERCENT DISTRIBUTION		
	1970	1980	1984	1985	1986	1987	1988	1970	1980	1988
Total financial assets	2,487	6,548	8,817	9,842	10,737	11,236	12,139	100.0	100.0	100.0
Deposit and market instrument ¹	791	2,130	3,237	3,540	3,765	4,038	4,361	31.8	32.5	35.9
Checkable deposits and currency.....	118	261	364	388	476	490	505	4.7	4.0	4.2
Small time and savings deposits.....	411	1,141	1,686	1,830	1,948	2,005	2,119	16.5	17.4	17.5
Money market fund shares.....	-	85	202	215	249	278	298	-	1.0	2.5
Large time deposits.....	15	112	129	99	69	89	118	.6	1.7	1.1
Credit market instruments.....	247	553	856	1,009	1,026	1,176	1,321	9.9	8.4	10.9
U.S. Government securities.....	102	259	481	552	579	660	791	4.1	4.0	6.5
Treasury issues.....	84	219	427	470	465	518	569	3.4	3.3	4.7
Savings bonds.....	52	73	75	80	93	101	110	2.1	1.1	.9
Other Treasury.....	32	146	352	391	372	417	460	1.3	2.2	3.8
Agency issues.....	18	40	54	82	114	142	222	.7	.6	1.8
Tax-exempt obligations.....	46	87	183	223	207	250	268	1.8	1.3	2.2
Corporate and foreign bonds.....	36	59	45	46	80	85	72	1.4	.9	.6
Mortgages.....	52	107	128	128	114	115	111	2.1	1.6	.9
Open-market paper.....	12	40	20	59	46	67	79	.5	.8	.7
Mutual fund shares.....	45	52	118	203	357	409	417	1.8	.8	3.4
Other corporate equities.....	683	1,111	1,323	1,685	1,851	1,712	1,816	27.5	17.0	15.0
Life insurance reserves.....	131	216	246	257	274	300	313	5.3	3.3	2.6
Pension fund reserves ²	241	916	1,532	1,802	2,058	2,245	2,585	9.7	14.0	21.3
Equity in noncorporate business.....	567	2,034	2,237	2,196	2,235	2,325	2,406	22.8	31.1	19.8
Security credit.....	4	16	22	35	44	38	42	.2	.2	.3
Miscellaneous assets.....	26	72	103	124	154	171	199	1.0	1.1	1.6
Total liabilities	493	1,489	2,116	2,414	2,724	2,963	3,246	100.0	100.0	100.0
Credit market instruments.....	472	1,430	2,038	2,315	2,615	2,864	3,137	95.7	96.0	96.6
Mortgages.....	308	974	1,362	1,504	1,737	1,961	2,182	62.7	65.4	67.2
Installment consumer credit.....	106	302	450	527	582	618	671	21.5	20.3	20.7
Other consumer credit.....	29	53	70	75	78	75	72	5.9	3.6	2.2
Tax-exempt debt.....	-	17	51	81	79	78	79	-	1.1	2.4
Bank loans, not elsewhere classified.....	8	30	37	44	50	45	42	1.6	2.0	1.3
Other loans.....	21	55	79	83	88	87	91	4.3	3.7	2.8
Security credit.....	10	29	37	57	65	50	53	2.0	1.9	1.6
Trade credit.....	5	17	26	28	31	33	37	1.0	1.1	.6
Unpaid life insurance premiums ³	5	13	15	15	14	15	19	1.0	.9	.6

- Represents zero. ¹ Excludes corporate equities. ² See also table 591. ³ Includes deferred premiums.

Source: Board of Governors of the Federal Reserve System, *Annual Statistical Digest*.

NO. 796. FLOW OF FUNDS ACCOUNTS—ASSETS AND LIABILITIES OF PRIVATE NONBANK FINANCIAL INSTITUTIONS, BY TYPE OF INSTRUMENT: 1988

[In billions of dollars. As of Dec. 31. Preliminary. A = Assets; L = Liabilities; "N.e.c." = Not elsewhere classified; RP's = Repurchase agreements]

TYPE OF INSTRUMENT	TOTAL ¹		SAVINGS AND LOAN ASSOCIATIONS ²		LIFE INSURANCE COMPANIES		PRIVATE PENSION FUNDS		STATE AND LOCAL GOVERNMENT RETIREMENT FUNDS		FINANCE COMPANIES	
	A	L	A	L	A	L	A	L	A	L	A	L
Total	6,738	6,505	1,360	1,326	1,113	1,049	1,140	1,140	605	605	489	553
Checkable deposits.....	76	93	12	42	5	-	11	-	3	-	10	-
Time and savings accounts.....	176	1,259	7	930	-	-	92	-	19	-	-	-
Federal funds, security RP's.....	112	129	28	98	-	-	-	-	-	-	-	-
Money market fund shares.....	17	338	-	-	8	-	9	-	-	-	-	-
Foreign deposits.....	30	-	-	-	-	-	-	-	-	-	-	-
Reserves:												
Life insurance.....	-	302	-	-	-	302	-	-	-	-	-	-
Pension fund.....	-	2,377	-	-	-	632	-	1,140	-	605	-	-
Mutual fund shares.....	45	478	-	-	13	-	31	-	-	-	-	-
Other corporate equities.....	1,112	-	-	-	95	-	511	-	224	-	-	-
Credit market instruments.....	4,704	789	1,167	219	906	-	416	-	359	-	480	406
Securities:												
U.S. Treasury.....	461	-	16	-	61	-	88	-	128	-	-	-
Federal agency.....	651	-	211	-	74	-	52	-	57	-	-	-
Tax-exempt.....	317	-	1	-	11	-	-	-	-	-	-	-
Corporate and foreign bonds.....	1,000	308	54	17	437	-	180	-	157	-	-	152
Mortgages.....	1,288	3	766	-	293	-	6	-	16	-	-	69
Consumer credit.....	328	-	60	-	-	-	-	-	-	-	174	-
Bank loans, n.e.c.....	-	34	-	48	-	-	-	-	-	-	-	-16
Open market paper.....	342	271	31	-	38	-	91	-	-	-	-	270
Other loans.....	316	153	26	153	53	-	-	-	-	-	237	-
Security credit.....	43	66	-	-	-	-	-	-	-	-	-	-
Trade credit.....	39	7	-	-	-	-	-	-	-	-	-	-
Taxes payable.....	-	2	-	-	-	-	-	-	-	-	-	-
Miscellaneous.....	386	685	145	36	86	114	68	-	-	-	-	147

- Represents or rounds to zero. ¹ Includes other institutions, not shown separately. ² Includes most Federal savings banks insured by FSILIC. A few of them are included with mutual savings banks, not shown separately.

NO. 797. FLOW OF FUNDS ACCOUNTS—CREDIT MARKET DEBT OUTSTANDING: 1970 TO 1988

[In billions of dollars; except percent. As of Dec. 31. "N.e.c." = Not elsewhere classified]

ITEM	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
Credit market debt	1,596	4,666	5,161	5,623	6,290	7,195	8,238	9,419	10,435	11,415
Government.....	450	1,038	1,132	1,315	1,536	1,762	2,077	2,336	2,515	2,703
Federal.....	301	743	830	991	1,178	1,377	1,600	1,815	1,960	2,118
State and local.....	149	295	302	324	358	385	477	520	554	586
Non-government.....	1,146	3,627	4,029	4,308	4,754	5,433	6,161	7,084	7,921	8,712
Financial.....	120	563	655	758	858	1,006	1,206	1,545	1,863	2,118
Sponsored credit agencies ²	39	163	195	210	212	242	264	279	308	353
Mortgage pools.....	5	114	129	179	245	289	369	565	718	811
Commercial banks ³	13	91	112	130	148	171	180	177	187	184
Savings and loan associations.....	11	58	73	76	74	93	116	145	180	219
Finance companies.....	51	133	152	159	172	193	247	308	359	406
Foreign.....	52	197	220	210	227	235	235	236	242	248
Private domestic nonfinancial.....	973	2,868	3,144	3,340	3,669	4,192	4,720	5,303	5,815	6,346
Corporations ¹	352	828	925	966	1,023	1,197	1,334	1,530	1,696	1,875
Bonds.....	167	412	448	482	507	574	670	781	880	978
Mortgages.....	59	89	89	55	58	65	54	78	117	117
Bank loans, n.e.c.....	104	226	252	294	306	352	375	423	419	461
Nonbank finance loans.....	11	44	50	51	58	75	87	99	116	131
Individuals.....	621	2,039	2,219	2,374	2,646	2,995	3,386	3,773	4,119	4,472
By sector:										
Households ⁴	472	1,430	1,549	1,626	1,812	2,038	2,315	2,615	2,864	3,137
Farm.....	48	162	178	185	188	188	173	157	146	141
Nonfarm noncorporate.....	102	448	492	564	646	769	898	1,002	1,109	1,193
By type of instrument:										
Mortgages.....	410	1,360	1,469	1,581	1,765	1,984	2,234	2,537	2,834	3,113
Consumer credit.....	134	355	372	389	438	519	602	660	693	744
Policy loans.....	17	43	50	54	55	56	55	55	55	55
Bank loans, n.e.c.....	31	140	162	170	184	201	218	232	235	241
Other loans.....	30	124	144	151	163	184	196	210	225	240
Tax-exempt debt.....	-	17	21	30	41	51	81	79	78	79
ANNUAL PERCENT CHANGE⁵										
Credit market debt	7.4	10.2	10.6	9.0	11.9	14.4	14.5	14.3	10.8	9.4
Federal government.....	4.1	11.9	11.7	19.4	18.9	16.9	16.2	13.4	8.0	8.1
State and local government.....	8.2	6.2	2.4	7.3	10.5	7.5	23.9	9.0	6.5	5.8
Non-government.....	15.0	13.1	18.1	14.0	13.2	17.3	19.9	28.1	20.6	13.7
Financial.....	5.9	14.0	11.7	-4.5	8.1	3.5	-	4	2.5	2.5
Foreign.....	5.2	9.1	8.3	5.0	11.4	12.5	13.8	13.0	9.5	9.5
Households.....	9.7	9.6	11.0	7.4	8.3	16.0	11.7	11.8	9.8	8.7
Nonfinancial business.....										

- Represents zero. ¹ Includes other types, not shown separately. ² U.S. Government. ³ Includes bank affiliates. ⁴ See footnote 2, table 793. ⁵ Percent change from immediate preceding year. Source of tables 796 and 797: Board of Governors of the Federal Reserve System, *Annual Statistical Digest*.

NO. 798. OWNERSHIP OF PUBLIC DEBT SECURITIES BY PRIVATE INVESTORS: 1970 TO 1988

[As of December. Par values. Estimated]

INVESTOR	AMOUNT (bil. dol.)							PERCENT DISTRIBUTION			
	1970	1980	1984	1985	1986	1987	1988	1970	1980	1985	1988
Total privately held.....	229.1	616.4	1,212.5	1,417.2	1,602.0	1,745.2	1,852.8	100.0	100.0	100.0	100.0
Commercial banks ¹	62.7	112.1	186.0	198.2	203.5	201.5	192.2	27.4	18.2	14.0	10.4
Nonbank investors.....	166.4	504.3	1,026.5	1,219.0	1,398.5	1,543.7	1,660.6	72.6	81.8	86.0	89.6
Individuals ²	81.2	117.1	143.8	154.8	162.8	173.4	187.4	35.4	19.0	10.9	10.1
Insurance companies.....	7.4	24.0	64.5	78.5	105.6	104.9	111.2	3.2	3.9	5.5	6.0
Money market funds.....	(NA)	3.5	25.9	25.1	29.0	14.6	11.8	(NA)	.6	1.8	.6
Corporations ³	7.3	19.3	50.1	59.0	68.8	84.6	86.5	3.2	3.1	4.2	4.7
State and local governments ⁴	27.8	87.9	173.0	226.7	262.8	284.6	313.6	12.1	14.3	16.0	16.9
Foreign and international ⁵	19.8	129.7	192.9	212.5	251.6	287.3	349.5	8.6	21.0	15.0	18.9
Other investors ⁶	23.0	122.8	376.3	462.4	518.9	594.3	600.6	10.0	19.9	32.6	32.4

NA Not available. ¹ Consists of domestically chartered banks, U.S. branches and agencies of foreign banks, NY investment companies majority owned by foreign banks, and Edge Act corporations owned by domestically chartered and foreign banks. ² Includes partnerships and personal trust accounts. ³ Exclusive of banks and insurance companies. ⁴ Includes State and local pension funds. ⁵ Consists of the investment of foreign balances and international accounts in the United States. ⁶ Consists of savings and loan associations, credit unions, mutual savings banks, nonprofit institutions, money market funds (1970), corporate pension trust funds, and dealers and brokers. Also included are certain government deposit accounts and government-sponsored agencies.

Source: U.S. Dept. of the Treasury, *Treasury Bulletin*, quarterly.

NO. 799. SELECTED FINANCIAL INSTITUTIONS—NUMBER AND ASSETS, BY ASSET SIZE: 1988

[As of December. FDIC=Federal Deposit Insurance Corporation]

ASSET SIZE	NUMBER OF INSTITUTIONS				ASSETS (bil. dol.)			
	F.D.I.C.-insured commercial banks	F.S.I.L.C.-insured savings institutions ¹	F.D.I.C.-insured savings banks	Credit unions ²	F.D.I.C.-insured commercial banks ³	F.S.I.L.C.-insured savings institutions ¹	F.D.I.C.-insured savings banks	Credit unions ²
Total.....	13,139	2,949	492	13,878	3,130.7	1,351.5	284.1	175.3
Less than \$5.0 million.....	185		1	9,235	6		(2)	13.5
\$5.0 million-\$9.9 million.....	731	301	6	1,635	5.7	4.7	(3)	11.5
\$10.0 million-\$24.9 million.....	3,225	20	20	1,567	56.2		2	24.8
\$25.0 million-\$49.9 million.....	3,383	493	47	732	122.1	18.1	1.7	25.3
\$50.0 million-\$99.9 million.....	2,784	668	77	390	194.1	47.7	5.6	27.2
\$100.0 million-\$499.9 million.....	2,249	1,064	222	304	440.2	231.6	51.3	52.9
\$500.0 million or more.....	582	423	119	15	2,311.8	1,049.3	225.2	20.1
PERCENT DISTRIBUTION								
Total.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than \$5.0 million.....	1.4		.2	66.5	(2)		(2)	7.7
\$5.0 million-\$9.9 million.....	5.6	10.2	1.2	11.8	.2	.3	(1)	6.6
\$10.0 million-\$24.9 million.....	24.5		4.1	11.3	1.8		.7	14.1
\$25.0 million-\$49.9 million.....	25.7	16.7	9.6	5.3	3.9	1.3	.6	14.4
\$50.0 million-\$99.9 million.....	21.2	22.7	15.7	2.8	6.2	3.5	2.0	15.5
\$100.0 million-\$499.9 million.....	17.1	36.1	45.1	2.2	14.1	17.2	18.1	30.2
\$500.0 million or more.....	4.4	14.4	24.2	.1	73.8	77.7	79.3	11.5

¹ Less than \$50 million or .05 percent. ² Source: U.S. League of Savings Institutions, Washington, DC, *Savings Institutions Sourcebook*, annual. F.S.I.L.C.=Federal Savings and Loan Insurance Corporation. ³ Source: National Credit Union Administration, *National Credit Union Administration Yearend Statistics 1988*. Excludes nonfederally insured State chartered credit unions and federally insured corporate credit unions. ⁴ Includes foreign branches of U.S. banks.

NO. 800. FDIC-INSURED BANKS—NUMBER, BANKING OFFICES, AND DEPOSITS, BY BANK CLASS: 1988

[As of June 30. Includes Puerto Rico and outlying areas. FDIC=Federal Deposit Insurance Corporation]

CLASS OF BANK	Banks (number)	Banking offices (number)	Total ¹	DEPOSITS (mil. dol.)			Government
				Individuals, partnerships and corporations			
				Total	Transaction accounts ²	Non-transaction accounts	
Total.....	13,911	63,167	2,245,310	(NA)	(NA)	(NA)	(NA)
Commercial banks.....	13,419	59,444	2,027,195	1,831,703	537,360	1,294,343	111,763
National banks.....	4,482	28,969	1,162,054	1,050,603	316,468	734,135	62,500
State (Federal Reserve, member bank).....	1,072	6,496	286,112	252,337	81,840	170,497	12,133
State (non-Federal Reserve member).....	7,865	23,979	579,029	528,763	139,052	389,711	37,130
Savings banks.....	492	3,671	214,034	(NA)	(NA)	(NA)	(NA)
U.S. branches of foreign banks.....	-	52	4,081	3,842	(NA)	(NA)	(NA)

- Represents zero. NA Not available. ¹ Includes other types of deposits, not shown separately. ² A transaction account is a deposit or account on which the depositor or account holder is permitted to make withdrawals by negotiable or transferable instrument, payment orders of withdrawal, telephone transfers, or other similar devices for the purpose of making payments or transfers to others.

Source of tables 799 and 800: Except as noted, U.S. Federal Deposit Insurance Corporation, *Data Book, Operating Banks and Branches, June 30, 1988*, and unpublished data.

No. 801. BANKING OFFICES, BY DEPOSIT INSURANCE STATUS: 1970 TO 1988

[As of December 31. Includes Puerto Rico and outlying areas. Beginning 1982, excludes automatic teller machines that were previously being reported by many banks as branches. See also *Historical Statistics, Colonial Times to 1970*, series X 716-724]

ITEM	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
All banking offices.....	37,166	57,232	59,348	57,913	59,050	60,067	60,890	61,897	62,914	64,047
Commercial banks, total.....	35,585	53,649	55,749	54,829	55,960	57,010	57,764	58,565	59,423	60,284
Member, Federal Reserve System.....	21,989	29,985	31,414	30,921	31,946	32,809	33,854	34,542	35,196	35,833
National banks.....	17,191	24,217	25,221	24,867	26,080	27,037	27,844	28,218	28,744	29,344
State banks.....	4,798	5,768	6,193	6,054	5,866	5,772	6,010	6,324	6,452	6,489
Nonmember banks.....	13,596	23,664	24,335	23,908	24,014	24,201	23,910	24,023	24,227	24,451
Insured.....	13,332	23,165	23,788	23,314	23,380	23,535	23,910	24,023	24,227	24,451
Noninsured.....	264	478	547	594	634	666	(NA)	(NA)	(NA)	(NA)
Savings banks, total.....	1,581	3,583	3,599	3,084	3,090	3,057	3,126	3,332	3,491	3,763
Insured.....	1,223	3,066	3,217	2,733	2,760	2,728	3,126	3,332	3,491	3,763
Noninsured.....	358	517	382	351	330	329	(NA)	(NA)	(NA)	(NA)

NA Not available.

Source: U.S. Federal Deposit Insurance Corporation, *Statistics on Banking*, annual.

No. 802. CHANGES IN NUMBER OF OPERATING BANKING OFFICES: 1970 TO 1988

[As of December 31. Includes Puerto Rico and outlying areas. Beginning 1985, excludes noninsured institutions. Minus sign (–) indicates decrease]

TYPE OF CHANGE	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
Banking offices¹.....	37,166	57,232	59,348	57,913	59,050	60,067	60,890	61,897	62,914	64,047
Number of banks.....	14,199	15,330	15,355	15,412	15,489	15,489	14,809	14,681	14,207	13,631
Number of branches ¹	22,967	41,902	43,993	42,501	43,610	44,578	46,081	47,216	48,707	50,416
Net change during year.....	1,584	2,306	2,116	-1,435	1,137	1,017	1,759	1,007	1,017	1,133
Offices opened.....	1,864	2,800	2,901	2,387	2,119	2,338	2,874	2,756	3,144	3,534
Banks.....	186	271	265	379	432	488	482	396	271	247
Branches.....	1,678	2,529	2,636	2,008	1,687	1,852	2,392	2,360	2,873	3,287
Offices closed.....	280	494	785	3,822	982	1,321	1,115	1,749	2,127	2,401
Banks.....	165	142	240	322	404	427	460	524	745	824
Branches.....	115	352	545	² 3,500	578	894	655	1,225	1,382	1,577

¹ See headnote, table 801. ² Includes 3,000 automatic teller machines that were previously reported as branches.

Source: U.S. Federal Deposit Insurance Corporation, *Statistics on Banking*, annual.

No. 803. 500 LARGEST BANKS IN THE WORLD—NUMBER AND DEPOSITS, BY LOCATION OF BANK: 1970 TO 1988

[Deposits in billions of dollars, except percent. Data cover U.S. commercial banks and foreign banks that conduct a commercial banking business; beginning 1983, includes U.S. and foreign savings banks. Beginning 1981, covers top 500 banks in assets available. Number of banks includes banks more than 50 percent owned by other banks. To avoid double-counting of deposits, banks more than 50 percent owned by other banks are excluded from deposit totals if their parent bank consolidates their deposits]

LOCATION OF BANK	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	PERCENT			
											1970	1980	1988	
NUMBER														
U.S. banks.....	185	93	97	97	102	115	110	102	90	107	37.0	18.6	21.4	
Foreign banks.....	315	407	403	403	398	385	390	398	410	393	63.0	81.4	78.6	
DEPOSITS														
Total.....	890	4,994	5,213	5,230	5,683	5,854	7,022	9,220	12,090	12,837	100.0	100.0	100.0	
U.S. banks.....	296	754	806	794	882	961	1,014	1,084	1,108	1,347	33.3	15.1	10.5	
Foreign banks.....	594	4,240	4,407	4,436	4,801	4,893	6,008	8,136	10,982	11,489	66.7	84.9	89.5	

Source: *American Banker*, New York, NY, selected July issues.

No. 804. BANK HOLDING COMPANIES—OFFICES, ASSETS, AND DEPOSITS: 1970 TO 1987

[As of Dec. 31. A "bank holding company" means any company which has control over any bank or over any company that is, or becomes, a bank holding company by virtue of the Bank Holding Company Act and its amendments. Represents domestic data only]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Number of companies.....	121	1,821	2,905	3,500	4,285	5,399	5,702	5,946	6,467	6,503
Banking offices.....	4,155	22,056	29,924	33,733	37,068	41,349	44,870	47,106	48,935	50,878
Banks.....	895	3,674	4,954	5,689	6,731	7,835	8,840	9,156	9,404	9,316
Branches.....	3,260	18,382	24,970	28,044	30,337	33,514	35,830	37,950	39,531	41,362
Assets (bil. dol.).....	.92.9	661.3	1,134.4	1,296.7	1,531.0	1,734.9	1,891.5	2,151.5	2,344.0	2,371.5
Percent of all										
commercial banks.....	16.1	68.5	74.1	77.3	82.6	86.0	89.4	90.2	90.9	91.1
Deposits (bil. dol.).....	78.1	527.5	840.6	938.7	1,108.5	1,279.4	1,411.6	1,595.2	1,757.5	1,785.4

Source: Board of Governors of the Federal Reserve System, *Banking and Monetary Statistics, 1941-1970; Annual Statistical Digest*; and unpublished data.

NO. 805. INSURED COMMERCIAL BANKS—ASSETS AND LIABILITIES: 1980 TO 1988

[In billions of dollars, except as indicated. As of Dec. 31. Includes outlying areas. Except as noted, includes foreign branches of U.S. banks. See *Historical Statistics, Colonial Times to 1970*, series X 588-609, for related data.]

ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988
Number of banks.....	14,434	14,414	14,452	14,465	14,481	14,404	14,200	13,701	13,139
Assets, total.....	1,855.7	2,029.1	2,194.3	2,342.1	2,508.6	2,731.0	2,941.1	2,999.8	3,130.8
Net loans and leases.....	1,006.4	1,120.2	1,211.1	1,301.3	1,489.7	1,607.8	1,727.8	1,779.2	1,885.9
Real estate loans.....	269.1	291.4	307.8	336.8	385.6	438.4	515.3	600.1	676.6
Commercial and industrial loans.....	391.0	454.6	504.1	524.9	565.2	577.7	600.9	589.3	599.0
Loans to individuals.....	167.4	193.0	199.2	224.6	266.8	308.9	335.7	351.2	377.8
Farm loans.....	32.3	33.7	37.0	39.8	40.4	36.1	31.7	29.4	30.2
Other loans and leases.....	136.8	158.9	176.2	190.6	250.4	269.9	273.1	259.1	248.7
Less: Reserve for losses.....	10.1	11.4	13.2	15.4	18.7	23.2	28.9	49.9	46.4
Temporary investments.....					410.3	451.9	463.5	451.2	465.8
Securities over 1 year in length.....	849.3	908.9	983.2	1,040.8	252.0	297.8	357.6	396.5	382.7
Other.....					356.8	373.5	392.1	372.8	396.5
Domestic office assets.....	1,533.0	1,681.1	1,868.7	2,027.6	2,108.5	2,325.5	2,532.9	2,574.7	2,726.1
Foreign office assets.....	322.7	348.0	325.5	314.5	400.1	405.5	408.2	425.1	404.6
Liabilities and capital, total.....	1,855.7	2,029.1	2,194.3	2,342.1	2,508.6	2,731.0	2,941.1	2,999.8	3,130.8
Noninterest-bearing deposits ¹	432.3	385.4	371.7	389.7	431.6	471.3	532.3	477.6	479.4
Interest-bearing deposits ²	1,048.9	1,203.4	1,334.7	1,452.6	1,531.2	1,646.4	1,751.1	1,857.6	1,952.1
Subordinated debt.....	6.5	6.5	7.3	7.1	10.2	14.7	17.0	17.6	17.3
Other liabilities.....	260.4	315.5	351.7	352.2	381.3	429.4	458.4	466.4	485.3
Equity capital.....	107.6	118.3	128.9	140.5	154.3	169.2	182.2	180.5	196.7
Domestic office deposits.....	1,187.2	1,269.4	1,399.7	1,539.9	1,645.2	1,795.9	1,969.7	1,993.6	2,116.5
Foreign office deposits.....	294.0	319.4	306.7	308.4	317.6	321.8	313.8	341.6	315.1

¹ Prior to 1984, demand deposits.

² Prior to 1984, time and savings deposits.

Source: U.S. Federal Deposit Insurance Corporation, *The FDIC Quarterly Banking Profile, Annual Report, and Statistics on Banking*, annual.

NO. 806. INSURED COMMERCIAL BANKS—DOMESTIC ASSETS AND DEPOSITS, STATES AND OTHER AREAS: 1987 AND 1988

[In billions of dollars. As of December 31. Excludes foreign branches of U.S. banks.]

STATE	ASSETS		DEPOSITS		STATE OR OTHER AREA	ASSETS		DEPOSITS	
	1987	1988	1987	1988		1987	1988	1987	1988
Total.....	2,574.7	2,726.1	1,993.6	2,116.5					
U.S.....	2,562.0	2,711.2	1,981.8	2,103.9	S.A.—Con.				
N.E.	155.3	178.2	117.8	130.4	NC.....	59.2	63.9	41.1	46.5
ME.....	6.8	7.8	5.8	6.4	SC.....	17.9	20.2	13.7	15.3
NH.....	9.1	10.5	7.6	8.5	GA.....	52.0	57.9	40.4	44.7
VT.....	4.9	5.4	4.4	4.8	FL.....	109.8	118.8	90.8	99.3
MA.....	86.6	101.1	63.8	72.1	E.S.C.	123.9	132.4	101.3	108.7
RI.....	12.8	14.2	8.8	9.5	KY.....	34.6	37.0	27.5	29.6
CT.....	35.1	39.2	27.4	29.1	TN.....	40.5	42.8	33.7	35.8
M.A.	593.3	622.2	414.9	446.0	AL.....	30.5	33.5	24.3	26.8
NY.....	381.0	389.4	247.9	263.9	MS.....	18.3	19.1	15.8	16.5
NJ.....	75.3	84.4	61.7	69.1	W.S.C.	265.7	246.9	216.6	210.9
PA.....	137.0	148.4	105.3	113.0	AR.....	17.8	18.6	15.7	16.4
E.N.C.	409.2	438.6	325.5	348.6	LA.....	35.1	35.3	30.5	30.5
OH.....	91.9	100.0	72.7	79.2	OK.....	27.0	26.1	23.7	23.0
IN.....	49.3	53.8	41.3	43.9	TX.....	185.8	166.9	146.7	141.0
IL.....	151.3	162.2	113.2	121.4	Mt.	101.7	106.8	82.8	84.3
MI.....	76.5	80.2	64.4	68.7	MT.....	7.3	7.0	6.2	6.1
WI.....	40.2	42.4	34.2	35.4	ID.....	7.2	7.5	5.9	6.1
W.N.C.	204.4	207.9	160.8	164.3	WY.....	4.2	4.2	3.8	3.8
MN.....	52.5	50.4	39.7	39.6	CO.....	24.6	25.4	20.3	21.1
IA.....	30.2	30.9	26.0	26.3	NM.....	9.8	10.2	8.4	8.6
MO.....	52.7	54.7	44.6	46.2	AZ.....	27.7	28.2	23.4	23.4
ND.....	7.0	6.9	6.1	6.1	UT.....	10.8	11.0	8.7	8.7
SD.....	20.5	22.3	8.3	8.9	NV.....	10.1	13.3	6.1	6.5
NE.....	16.8	17.5	14.5	15.1	Pac.	297.4	319.3	253.8	269.7
KS.....	24.7	25.2	21.6	22.1	WA.....	30.9	32.6	25.6	27.4
S.A.	411.0	450.0	308.3	340.6	OR.....	18.3	19.4	14.7	15.3
DE.....	43.0	57.0	19.8	23.7	CA.....	233.1	251.1	199.3	212.4
MD.....	43.5	47.7	32.7	36.6	AK.....	5.0	4.5	4.0	3.7
DC.....	15.2	16.3	11.8	12.5	HI.....	10.1	11.7	10.2	10.9
VA.....	55.2	61.1	44.8	48.1	AM	(z)	(z)	(z)	(z)
WV.....	15.2	16.1	13.2	13.9	PR.....	13.0	14.1	10.9	11.9
					GU.....	3	4	3	3
					Pacific Islands.....	(z)	(z)	(z)	(z)

Z Less than \$50 million.

Source: U.S. Federal Deposit Insurance Corporation, unpublished data.

NO. 807. INSURED COMMERCIAL BANKS—INCOME AND SELECTED MEASURES OF FINANCIAL CONDITION: 1980 TO 1988

[In billions of dollars, except as indicated. Includes outlying areas. Includes foreign branches of U.S. banks. See *Historical Statistics, Colonial Times to 1970*, series X 588-609, for related data]

ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988
Interest income.....	177.4	231.3	238.3	217.3	264.2	248.2	237.8	244.8	272.3
Interest expense.....	120.1	169.8	169.3	143.9	161.2	157.3	142.8	144.9	165.0
Net interest income.....	57.3	61.5	69.0	73.4	83.0	90.9	95.0	99.9	107.3
Provisions for loan losses.....	4.5	5.1	8.3	10.7	13.7	17.7	22.1	37.5	17.0
Noninterest income.....	13.3	17.5	20.2	23.3	27.7	31.0	35.9	41.5	44.9
Noninterest expense.....	46.7	53.7	61.6	66.9	76.4	82.3	90.2	97.3	101.3
Income taxes.....	5.0	4.6	3.7	4.1	4.9	5.6	5.3	5.4	10.0
Net operating income.....	14.5	15.6	15.6	15.0	15.7	16.3	13.3	1.1	23.9
Securities gain/loss, net.....	-.5	-.9	-.7	-.1	-.1	1.6	4.0	1.4	.3
Extraordinary gains, net.....	-	.1	-.1	.1	.2	.2	.3	.2	.8
Net income.....	14.0	14.8	15.0	15.1	15.8	18.1	17.5	2.8	25.1
RATIOS OF CONDITION									
Return on assets ¹ (percent).....	.80	.78	.71	.66	.64	.70	.63	.10	.83
Return on equity ² (percent).....	13.66	13.08	12.11	10.70	10.48	11.15	9.99	1.54	13.43
Equity capital to assets (percent).....	5.80	5.83	5.87	6.00	6.14	6.19	6.19	6.02	6.28
Nonperforming assets.....	(NA)	(NA)	40.5	46.0	49.5	51.0	57.7	73.8	67.1
Nonperforming assets to assets (percent).....	(NA)	(NA)	1.85	1.97	1.97	1.87	1.95	2.46	2.14
Net charge-offs ³	3.6	3.8	6.6	8.5	10.8	13.6	16.5	16.4	18.5
Net charge-offs to loans and leases (percent).....	.36	.37	.58	.87	.75	.84	.99	.93	.99
Net interest margin ⁴ (percent).....	3.66	3.63	3.87	3.81	3.95	4.09	3.98	3.89	4.06
Percentage of banks losing money.....	3.7	5.1	8.3	10.6	14.0	17.1	20.7	18.6	14.2

- Represents or rounds to zero. NA Not available. ¹ Net income (including securities transactions and nonrecurring items) as a percentage of average total assets. ² Net income as a percentage of average total equity capital. ³ Total loans and leases charged off (removed from balance sheet because of uncollectibility), less amounts recovered on loans and leases previously charged off. ⁴ Interest income less interest expense as a percentage of average earning assets (i.e. the profit margin a bank earns on its loans and investments).

NO. 808. INSURED COMMERCIAL BANKS—SELECTED MEASURES OF FINANCIAL CONDITION, BY ASSET SIZE AND REGION: 1988

[In percent. See headnote, table 807. Minus sign (-) indicates loss]

ASSET SIZE AND REGION	Return on assets	Return on equity	Equity capital to assets	Nonperforming assets to total assets	Net charge-offs to loans and leases	Percentage of banks losing money
Total.....	.83	13.43	6.28	2.14	.99	14.2
Less than \$100 million.....	.66	7.37	8.74	1.91	.87	15.9
\$100 million to \$1 billion.....	.75	10.16	7.24	1.73	.78	8.5
\$1 billion to \$10 billion.....	.79	12.73	6.16	1.52	1.06	7.4
\$10 billion or more.....	.96	20.25	5.10	2.96	1.07	5.0
Northeast ¹.....	.98	17.35	5.93	2.35	.82	9.8
Southeast ².....	.98	14.00	6.94	1.01	.63	13.9
Central ³	1.07	15.96	6.76	1.14	.72	4.5
Midwest ⁴.....	.90	11.85	7.45	1.51	1.33	8.0
Southwest ⁵	-.71	-11.84	5.68	4.55	2.37	30.9
West ⁶.....	.85	14.70	5.91	2.66	1.23	21.3

¹ CT, DE, DC, ME, MD, MA, NH, NJ, NY, PA, PR, RI, and VT. ² AL, FL, GA, MS, NC, SC, TN, VA, and WV. ³ IL, IN, KY, MI, OH, and WI. ⁴ IA, KS, MN, MO, NE, ND, and SD. ⁵ AR, LA, NM, OK, and TX. ⁶ AK, AZ, CA, CO, HI, ID, MT, NV, OR, Pacific Islands, UT, WA, and WY.

NO. 809. FDIC-INSURED BANKS CLOSED OR ASSISTED DUE TO FINANCIAL DIFFICULTIES, AND PROBLEM BANKS: 1971 TO 1988

[Banks are closed either permanently or temporarily by order of supervisory authorities or by directors of banks. F.D.I.C.—Federal Deposit Insurance Corporation. See *Historical Statistics, Colonial Times to 1970*, series X 741, 748, 756, and 761]

ITEM	Unit	1971-1980	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total banks closed or assisted.....	Number...	84	10	11	10	42	48	80	120	145	203	221
Agricultural banks ¹	Number...	(NA)	(NA)	(NA)	1	7	7	31	62	59	57	29
Deposits, closed and assisted banks.....	Mil. dol....	10,851	111	5,216	3,826	9,908	5,442	29,883	8,059	6,597	8,568	37,215
Agricultural banks ¹	Mil. dol....	(NA)	(NA)	(NA)	7	112	114	421	866	1,408	906	409
Problem banks ²	Number...	(X)	287	217	223	369	642	848	1,140	1,484	1,575	1,406

NA Not available. X Not applicable. ¹ Banks with at least 25 percent of their portfolios devoted to farm loans. ² FDIC-insured commercial and savings banks considered to be problem banks by the supervisory authorities, end-of-period. Source of tables 807-809: U.S. Federal Deposit Insurance Corporation, *Annual Report, The FDIC Quarterly Banking Profile; Statistics on Banking*, annual; and unpublished data.

NO. 810. FDIC-INSURED COMMERCIAL BANKS CLOSED OR ASSISTED DUE TO FINANCIAL DIFFICULTIES, BY STATE: 1988

[See headnote, table 809. For composition of regions, see fig. 1, inside front cover]

REGION, DIVISION, AND STATE	Total number of banks ¹	BANKS CLOSED OR ASSISTED		DIVISION AND STATE	Total number of banks ¹	BANKS CLOSED OR ASSISTED	
		Number	Deposits (mil. dol.)			Number	Deposits (mil. dol.)
Total	13,139	221	37,215	S.A.—Con.			
U.S.	13,121	221	37,215	MD.....	99	-	-
Region:				DC.....	24	-	-
Northeast	898	1	37	VA.....	184	-	-
Midwest	5,706	35	659	WV.....	199	-	-
South	4,522	161	34,824	NC.....	71	-	-
West	1,595	24	1,695	SC.....	77	-	-
N. Eng.	277	-	-	GA.....	379	-	-
ME.....	19	-	-	FL.....	415	3	707
NH.....	52	-	-	E.S.C.	952	1	8
VT.....	26	-	-	KY.....	332	1	8
MA.....	103	-	-	TN.....	272	-	-
RI.....	12	-	-	AL.....	223	-	-
CT.....	65	-	-	MS.....	125	-	-
Mid. Atl.	621	1	37	W.S.C.	2,476	156	33,937
NY.....	199	1	37	AR.....	256	1	17
NJ.....	129	-	-	LA.....	253	13	1,012
PA.....	293	-	-	OK.....	466	25	760
E.N.C.	2,597	6	147	TX.....	1,501	117	32,148
OH.....	299	2	31	Mt.	948	17	443
IN.....	338	1	47	MT.....	169	1	22
IL.....	1,150	2	32	ID.....	22	-	-
MI.....	287	1	37	WY.....	95	1	6
WI.....	523	-	-	CO.....	450	10	82
W.N.C.	3,109	29	514	NM.....	93	1	94
MN.....	653	8	123	AZ.....	47	1	30
IA.....	585	7	116	UT.....	55	3	209
MO.....	577	2	18	NV.....	17	-	-
ND.....	159	1	12	Pac.	647	7	1,252
SD.....	133	2	73	WA.....	90	1	19
NE.....	412	1	3	OR.....	52	-	-
KS.....	590	8	169	CA.....	478	3	84
S.A.	1,494	4	879	AK.....	10	3	1,149
DE.....	46	1	172	HI.....	22	-	-
				Puerto Rico.....	15	-	-
				Pacific Islands.....	3	-	-

- Represents zero. ¹ As of December 31.

Source: U.S. Federal Deposit Insurance Corporation, unpublished data.

NO. 811. U.S. BANKING OFFICES OF FOREIGN BANKS—SUMMARY: 1975 TO 1988

[In billions of dollars, except as indicated. As of December, except as indicated. Covers agencies, branches, subsidiary commercial banks, New York State investment companies, and, for data by country only, finance companies]

YEAR	Assets	LOANS		Deposits	COUNTRY	NUMBER OF—		Assets	Loans, commercial and industrial	Deposits
		Total	Business			Banks with U.S. offices	U.S. offices			
1975.....	52.4	29.9	19.9	22.6	1988, total ²	266	666	638.3	164.3	331.2
1980.....	200.6	121.4	59.6	80.4	Japan.....	33	116	328.7	83.1	162.1
1981.....	250.6	157.7	73.6	101.8	Canada.....	6	46	46.3	13.1	21.9
1982.....	299.8	185.2	82.4	154.3	United Kingdom.....	11	46	45.4	15.1	30.0
1983.....	328.8	192.4	84.5	181.3	Italy.....	12	25	37.8	9.1	13.5
					Hong Kong.....	10	32	27.5	7.2	19.8
1984.....	394.4	220.1	97.8	233.7						
1985.....	440.8	247.4	108.8	236.7	France.....	14	41	27.3	5.0	15.1
1986.....	524.3	276.9	126.8	278.2	Switzerland.....	6	17	22.6	7.2	11.8
1987.....	592.6	310.9	147.9	316.1	West Germany.....	13	22	13.5	2.7	6.9
1988.....	650.6	338.8	167.3	335.1	Israel.....	4	26	10.6	3.2	9.2
					Netherlands.....	4	17	10.1	3.0	4.4
SHARE ¹										
1975.....	5.3	5.7	10.4	2.9						
1980.....	11.9	13.4	18.2	6.6						
1985.....	16.1	15.4	22.5	12.1						
1988.....	19.6	16.9	28.2	14.1						

¹ Percent of "domestically owned" commercial banks plus U.S. offices of foreign banks. ² As of June 30. Includes other countries not shown separately. Source: American Banker, New York, NY, selected issues.

- Source: Except as noted, Board of Governors of the Federal Reserve System, unpublished data.

NO. 812. FOREIGN BRANCHES OF U.S. FEDERAL RESERVE MEMBER BANKS—NUMBER AND ASSETS: 1970 TO 1988

[As of year end. The foreign branch activities of nonmember banks are not significant]

ITEM	Unit	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
Member banks operating foreign branches.....	Number.....	79	159	159	182	166	163	162	151	146	132
Foreign branches.....	Number.....	532	787	841	900	892	905	916	899	868	849
Assets of foreign branches ¹ &.....	Bil. dol.....	50	311	343	341	333	291	290	285	342	318
Percent of total assets of all insured commercial banks ³	Percent.....	7.3	16.3	16.1	14.2	11.9	10.3	8.9	8.0	8.3	7.4
Assets of branches in United Kingdom ¹	Bil. dol.....	24	107	112	111	132	87	94	82	110	100
Assets of branches in The Bahamas and Cayman Islands ¹	Bil. dol.....	4	93	105	101	117	86	77	82	95	101

¹ Data exclude claims on other foreign branches of the same bank. ² Includes assets of foreign branches in countries in addition to those shown separately. ³ Percentages reflect adjustments to exclude foreign branch claims on the U.S. offices of their parent banks.

Source: Board of Governors of the Federal Reserve System, unpublished data.

NO. 813. FOREIGN LENDING BY LARGE U.S. BANKS, BY MATURITY, TYPE OF BORROWER, AND COUNTRY: 1988

[In millions of dollars, except percent. As of December. Covers 178 U.S. banking organizations which do nearly all of the foreign lending in the country. Data represent claims on foreign residents and institutions held at all domestic and foreign offices of covered banks. Data cover only cross-border and non-local currency lending. These result from a U.S. bank's office in one country lending to residents of another country or lending in a currency other than that of the borrower's country. Excludes local currency loans and other claims and local currency liabilities held by banks' foreign offices on residents of the country in which the office was located (e.g. Deutsche mark loans to German residents booked at the German branch of the reporting U.S. bank). Criteria for country selection is \$800 million or more]

COUNTRY	CLAIMS		Bank borrowers	Public borrowers	COUNTRY	CLAIMS		Bank borrowers	Public borrowers
	Total ¹	Per-cent short-term ²				Total ¹	Per-cent short-term ²		
Total ³	221,280	68	108,626	62,691	Japan.....	23,448	87	18,711	336
Argentina.....	7,879	31	801	5,768	Mexico.....	17,887	29	2,818	12,999
Australia.....	2,416	75	513	274	Netherlands.....	2,565	77	1,151	214
Austria.....	937	88	813	99	Netherlands Antilles.....	886	68	199	7
Bahamas, The.....	3,014	92	2,779	39	New Zealand.....	872	68	158	110
Belgium-Luxembourg.....	7,758	84	5,803	812	Nigeria.....	817	54	68	625
Brazil.....	19,391	45	3,031	14,188	Norway.....	1,906	62	392	247
British West Indies.....	10,701	96	9,800	242	Panama.....	964	59	107	369
Canada.....	8,051	68	3,327	735	Philippines.....	3,993	29	377	2,866
Chile.....	5,044	45	845	3,320	Singapore.....	4,524	93	3,594	137
China:					South Africa.....	2,510	39	1,578	645
Taiwan.....	2,859	95	1,384	199	South Korea.....	3,857	87	1,928	221
Colombia.....	2,117	38	381	1,296	Spain.....	2,375	74	1,088	519
Denmark.....	1,198	63	580	171	Sweden.....	1,808	90	1,310	176
Ecuador.....	1,519	67	15	1,453	Switzerland.....	3,126	89	1,602	58
Finland.....	1,075	81	809	112	Thailand.....	943	86	668	82
France.....	7,317	80	5,586	1,158	Turkey.....	1,599	69	292	1,072
Greece.....	1,575	49	26	454	United Kingdom.....	33,575	87	23,188	619
Hong Kong.....	7,069	90	4,947	36	Uruguay.....	889	18	31	765
India.....	817	62	398	180	Venezuela.....	8,001	29	1,447	5,256
Indonesia.....	1,133	64	56	401	West Germany.....	4,560	55	1,283	1,686
Israel.....	844	55	454	201	Yugoslavia.....	1,871	15	331	1,506
Italy.....	5,630	77	3,957	1,038					

¹ Includes private nonbank borrowers, not shown separately. ² Maturity, one year or less. ³ Includes countries not shown separately.

Source: Board of Governors of the Federal Reserve System, Federal Financial Institutions Examination Council, statistical release.

NO. 814. FEDERAL AND STATE-CHARTERED CREDIT UNIONS—SUMMARY: 1970 TO 1988

[As of December 31. Federal data include District of Columbia, Puerto Rico, Canal Zone, Guam, and Virgin Islands. Beginning 1984, excludes State-insured and non-insured State-chartered credit unions and corporate central credit unions which have mainly other credit unions as members. See also *Historical Statistics, Colonial Times to 1970*, series X 864-B78]

YEAR	OPERATING CREDIT UNIONS		MEMBERS (1,000)		ASSETS (mil. dol.)		LOANS OUTSTANDING (mil. dol.)		SAVINGS (mil. dol.)	
	Federal	State	Federal	State	Federal	State	Federal	State	Federal	State
1970.....	12,977	10,679	11,966	10,853	8,861	9,089	6,969	7,137	7,629	7,857
1980.....	12,440	9,025	24,519	19,235	40,092	33,143	26,350	22,633	36,263	29,480
1984.....	10,548	4,645	28,170	15,205	63,657	29,188	42,132	19,951	57,927	26,327
1985.....	10,125	4,920	29,576	15,689	78,205	41,525	48,241	26,168	71,616	37,917
1986.....	9,758	4,935	31,045	17,363	95,484	52,244	55,305	30,834	87,954	48,097
1987.....	9,401	4,934	32,067	17,999	105,190	56,972	63,638	35,211	96,346	52,083
1988.....	9,118	4,760	34,438	18,519	114,565	60,740	73,224	39,712	104,431	55,217

Source: National Credit Union Administration, *Annual Report of the National Credit Union Administration*, and unpublished data.

NO. 815. SAVINGS INSTITUTIONS—FINANCIAL SUMMARY, BY TYPE: 1970 TO 1988

[In billions of dollars, except number of institutions. As of December 31. Includes Puerto Rico, Guam, and Virgin Islands. FSLIC=Federal Savings and Loan Insurance Corporation. FDIC=Federal Deposit Insurance Corporation. See also *Historical Statistics, Colonial Times to 1970*, series X 834-844]

TYPE OF INSTITUTION	1970	1980	1982	1983	1984	1985	1986	1987	1988
NUMBER OF INSTITUTIONS									
Savings institutions, total	6,182	5,076	4,248	4,036	3,978	3,939	3,969	3,869	3,639
Savings and loan associations.....	5,669	4,613	3,825	3,502	3,362	3,233	3,084	2,886	2,526
FSLIC-insured.....	4,365	4,002	3,343	3,040	2,907	2,944	2,817	2,648	2,328
State insured and non-insured.....	1,304	611	483	462	455	289	267	238	103
FDIC-insured.....	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	95
Savings banks.....	493	463	423	534	616	706	885	983	1,113
FSLIC-insured.....	(x)	3	6	143	229	302	403	499	621
FDIC-insured.....	328	323	315	294	291	392	482	484	492
Federally chartered.....	(x)	(x)	(x)	18	24	28	27	22	21
State chartered.....	328	323	315	276	267	364	455	462	471
State insured and non-insured.....	165	137	102	97	96	12	-	-	-
FSLIC-insured institutions.....	4,365	4,005	3,349	3,183	3,136	3,246	3,220	3,147	2,949
FDIC-insured institutions.....	328	323	315	294	291	392	482	484	587
State insured and non-insured.....	1,469	748	585	559	551	301	267	238	103
ASSETS									
Savings institutions, total	255.3	796.6	892.2	1,034.0	1,206.6	1,315.1	1,422.2	1,520.5	1,642.2
Savings and loan associations.....	176.1	629.8	707.6	773.4	902.0	948.2	961.8	974.3	932.0
FSLIC-insured.....	170.6	618.5	692.7	754.2	879.0	938.1	953.6	966.6	924.5
State insured and non-insured.....	5.5	11.2	15.1	19.2	23.0	10.1	8.2	7.7	.3
FDIC-insured.....	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	7.2
Savings banks.....	79.2	166.8	184.4	260.6	304.6	366.9	460.4	546.2	710.2
FSLIC-insured.....	(x)	2.2	6.9	65.0	98.4	131.9	210.3	284.3	426.0
FDIC-insured.....	68.7	152.6	155.3	170.7	179.1	205.4	250.1	261.9	284.2
Federally chartered.....	(x)	(x)	(x)	36.7	43.5	48.0	52.4	44.8	46.2
State chartered.....	68.7	152.6	155.3	184.0	135.6	157.4	197.7	217.1	238.0
State insured and non-insured.....	10.5	12.0	22.2	24.9	27.1	29.6	-	-	-
FSLIC-insured institutions.....	170.6	620.6	699.5	819.2	977.5	1,070.0	1,163.9	1,250.9	1,350.5
FDIC-insured institutions.....	68.7	152.6	155.3	170.7	179.1	205.4	250.1	261.9	291.4
State insured and non-insured.....	16.0	23.2	37.3	44.1	50.1	39.7	8.2	7.7	.3
DEPOSITS									
Savings institutions, total	218.8	673.5	733.2	863.7	988.3	1,057.4	1,096.5	1,143.7	1,198.8
Savings and loan associations.....	146.7	511.0	568.0	634.5	725.0	749.2	740.0	736.0	679.9
FSLIC-insured.....	141.7	501.2	554.6	617.8	704.9	740.5	732.9	729.4	673.5
State insured and non-insured.....	5.0	9.8	13.4	16.6	19.9	8.7	7.1	6.6	2.2
FDIC-insured.....	(x)	(x)	(x)	(x)	(x)	(x)	(x)	(x)	6.2
Savings banks.....	72.1	162.5	165.2	229.3	263.5	308.2	356.5	407.7	518.9
FSLIC-insured.....	(x)	1.9	5.9	53.2	79.6	103.5	157.7	203.2	298.2
FDIC-insured.....	62.7	149.9	139.5	153.8	159.8	178.6	198.8	204.5	220.7
Federally chartered.....	(x)	(x)	(x)	33.0	38.3	39.8	39.3	30.7	31.5
State chartered.....	62.7	149.9	139.5	120.8	121.5	138.8	159.5	173.8	189.2
State insured and non-insured.....	9.4	10.7	19.8	22.3	24.1	26.1	-	-	-
FSLIC-insured institutions.....	141.7	503.2	560.5	671.1	784.5	843.9	890.7	932.6	971.7
FDIC-insured institutions.....	62.7	149.9	139.5	153.8	159.8	178.6	198.8	204.5	226.9
State insured and non-insured.....	14.4	21.1	33.2	38.9	44.0	34.8	7.1	6.6	.2

- Represents zero. X Not applicable.

Source: U.S. Office of Thrift Supervision (formerly U.S. Federal Home Loan Bank Board), *Savings and Home Financing Source Book*, annual, and unpublished data.

NO. 816. SAVINGS INSTITUTIONS (FSLIC-INSURED) APPROVED FOR MERGER, BY TYPE OF MERGER: 1980 TO 1988

[Assets in billions of dollars. Covers all institutions approved for merger by the U.S. Office of Thrift Supervision except for holding company acquisitions. See headnote, table 817]

YEAR	NUMBER				ASSETS			
	Total	Voluntary	Supervisory	FSLIC-assisted	Total	Voluntary	Supervisory	FSLIC-assisted
1980.....	120	88	21	11	10.1	7.2	1.4	1.5
1981.....	315	234	54	27	33.9	18.9	3.4	11.6
1982.....	483	229	189	65	81.7	24.2	21.4	16.1
1983.....	157	90	35	32	26.9	21.9	2.6	4.4
1984.....	60	33	14	13	9.9	5.4	1.0	3.5
1985.....	77	49	6	22	23.7	17.4	2.8	3.5
1986.....	65	45	5	25	23.7	16.8	7	6.2
1987.....	107	74	4	29	34.1	27.2	.4	6.5
1988.....	240	34	9	197	109.2	10.5	1.0	97.7

Source: U.S. Office of Thrift Supervision (formerly U.S. Federal Home Loan Bank Board), *Savings and Home Financing Source Book*, annual.

**No. 817. SAVINGS INSTITUTIONS (FSLIC-INSURED)—SELECTED FINANCIAL ITEMS AND RATIOS OF
CONDITION: 1970 TO 1988**

[As of Dec. 31 for assets, liabilities and net worth; calendar year for other items. Includes Puerto Rico, Guam, and Virgin Islands. FSLIC = Federal Savings and Loan Insurance Corporation. Beginning 1983, includes FSLIC-insured savings and loan associations which changed to FSLIC-insured savings banks. Minus sign (-) indicates either loss or outflow]

ITEM	Unit	1970	1980	1982	1983	1984	1985	1986	1987	1988
Assets ¹	Bil. dol....	170.6	620.6	699.5	819.2	977.5	1,070.0	1,163.9	1,250.9	1,350.5
Mortgage assets ²	Bil. dol....	146.0	494.9	477.0	521.3	593.0	645.5	655.7	679.2	726.6
Mortgage-backed securities.....	Bil. dol....	(NA)	27.3	62.8	90.9	112.7	115.5	158.2	201.8	214.6
Cash and securities.....	Bil. dol....	15.8	57.0	84.4	109.9	136.7	143.5	164.8	169.7	187.0
Liabilities ¹	Bil. dol....	158.8	588.0	674.0	786.2	940.3	1,023.4	1,111.6	1,204.5	1,295.3
Deposit accounts.....	Bil. dol....	141.7	503.2	560.5	671.1	784.5	843.9	890.7	932.6	971.7
FHLB advances.....	Bil. dol....	10.5	47.0	64.3	57.3	71.7	84.4	100.0	116.4	134.2
Other borrowed money.....	Bil. dol....	.3	17.2	33.9	41.3	66.2	73.3	96.9	133.5	165.2
Net worth.....	Bil. dol....	11.8	32.6	25.6	33.0	37.2	46.7	52.3	46.4	55.2
Net worth to total assets ratio.....	Ratio	6.9	5.2	3.7	4.0	3.8	4.4	4.5	3.7	4.1
Operating income.....	Bil. dol....	10.7	56.1	71.0	81.7	101.2	110.6	110.8	107.5	113.6
Operating expenses.....	Bil. dol....	1.9	7.8	9.9	12.4	15.3	19.2	22.6	24.1	23.8
Interest expense.....	Bil. dol....	7.7	47.5	69.8	69.3	85.0	87.7	83.5	80.5	89.3
Net income before taxes.....	Bil. dol....	1.2	1.2	-5.7	2.5	1.8	5.8	3.3	-5.1	-11.6
Net income after taxes.....	Bil. dol....	.9	.8	-4.1	1.9	1.0	3.7	.1	7.8	13.4
Average cost of funds.....	Percent	5.30	8.94	11.38	9.83	10.03	9.19	8.06	7.20	7.49
Average effective dividend rate paid.....	Percent	5.14	8.78	11.19	9.71	9.92	9.02	7.84	6.92	7.20
Average interest return on mortgages.....	Percent	6.56	9.34	10.68	11.17	11.65	11.52	10.65	9.70	9.62
Net after taxes income to average assets.....	Percent	.57	.14	-.65	.27	.12	.39	.02	.64	1.08

NA Not available. ¹ Includes other items, not shown separately. ² Beginning 1982, reflects deductions from asset accounts.

Source: U.S. Office of Thrift Supervision (formerly U.S. Federal Home Loan Bank Board), *Savings and Home Financing Source Book*, annual.

**No. 818. SAVINGS INSTITUTIONS (FSLIC-INSURED)—NUMBER, ASSETS, AND INCOME, BY CAPITAL/
ASSET RATIO: 1985 TO 1988**

[In billions of dollars, except as indicated. As of December 31. See headnote, table 817]

ITEM	Total	CAPITAL AS A PERCENT OF ASSETS		
		Less than 1.5 percent	Between 1.5 and 3 percent	More than 3 percent
Number:				
1985.....	3,246	714	455	2,077
1986.....	3,220	671	332	2,217
1987.....	3,147	682	262	2,203
1988.....	2,949	498	252	2,199
Assets:				
1985.....	1,070	239	172	659
1986.....	1,164	244	145	775
1987.....	1,251	265	143	842
1988.....	1,351	224	191	935
Net income after taxes:				
1985.....	3.7	-1.7	.6	4.8
1986.....	.1	6.5	.4	6.2
1987.....	-7.8	-12.5	.2	4.8
1988.....	13.4	16.6	.5	3.6

Source: U.S. Office of Thrift Supervision (formerly U.S. Federal Home Loan Bank Board), unpublished data.

NO. 819. SAVINGS INSTITUTIONS (FSLIC-INSURED)—DEPOSIT ACCOUNTS AND MORTGAGE ACTIVITY: 1970 TO 1988

[See headnote, table 817]

ITEM	Unit	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
DEPOSIT ACCOUNTS											
Number of accounts.....	Millions...	46.5	92.2	98.7	99.0	103.2	111.9	111.5	110.1	110.6	110.1
Average balance.....	Dollars	3,045	5,410	5,188	5,556	6,466	7,008	7,572	8,087	8,433	8,825
Net deposit gain ¹	Bil. dol....	10.8	41.0	13.4	37.3	110.2	113.9	53.0	55.1	46.6	44.7
Net new deposits received ²	Bil. dol....	5.3	10.7	-25.4	-6.4	63.2	59.8	-2.7	3.2	-1.6	-7.2
MORTGAGE LOANS											
Number of borrowers.....	Millions...	10.6	15.7	15.8	15.4	15.3	15.8	15.0	14.1	13.6	13.7
Average balance.....	Dollars	13,728	31,311	32,231	32,204	33,764	39,969	45,603	48,645	52,348	55,768
Mortgage loans closed ³	Bil. dol....	20.8	85.5	62.8	61.1	151.1	181.3	196.8	265.5	253.4	238.7
Purchase of 1- to 4-family homes.....	Bil. dol....	12.3	60.2	41.7	34.5	83.8	95.7	107.8	175.7	172.9	158.6
Refinancing loans.....	Bil. dol....	1.7	10.6	8.1	10.8	31.8	31.7	(NA)	(NA)	71.6	42.0
Delinquent mortgage loans: ⁴											
Amount.....	Bil. dol....	(NA)	7.3	11.3	10.2	11.0	12.6	21.7	32.6	37.7	33.3
Percent of mortgage holdings.....	Percent..	(NA)	1.48	2.21	2.13	2.11	2.12	3.36	4.97	5.56	4.58
Mortgage loans foreclosed: ⁵											
Number.....	1,000.....	(NA)	20.3	29.1	51.2	62.5	57.0	75.2	90.9	99.9	101.8
Percent of mortgages held.....	Percent..	(NA)	.13	.18	.33	.41	.37	.33	.63	.74	.74
Amount.....	Bil. dol....	.3	.9	1.6	3.3	4.2	6.2	8.7	13.9	18.4	18.9
Percent of mortgages held.....	Percent..	.22	.19	.32	.68	.71	1.11	1.40	2.15	2.79	2.23

NA Not available. ¹ Net new deposits received plus interest credited. ² New deposits received less deposits withdrawn. ³ Reported on a gross basis including refinancing and combination construction-purchase loan. ⁴ Prior to 1987, covers all mortgage loans 90 or more days delinquent. Beginning 1987, covers construction and land loans past due, permanent loans secured by 1-4 dwelling unit properties 90 or more days delinquent, and all other permanent loans past due. ⁵ Foreclosures are reported as of judgment date, even if subject to a redemption period.

NO. 820. SAVINGS INSTITUTIONS (FSLIC-INSURED)—SELECTED FINANCIAL ITEMS, STATES AND OTHER AREAS: 1988

[In millions of dollars, except percent. See headnote, table 817]

DIVISION AND STATE	Net new deposits received	Mortgage loans fore-closed, percent of avg. mortgage bal-ances ¹	Net income after taxes	Return on assets ² (per-cent)	DIVISION AND STATE	Net new deposits received	Mortgage loans fore-closed, percent of avg. mortgage bal-ances ¹	Net income after taxes	Return on assets ² (per-cent)
Total	-7,248.3	2.23	-13,439.0	-1.08	So. Atl.—Con.				
U.S.	-7,566.4	(NA)	-13,472.8	(NA)	NC.....	-124.7	2.27	84.4	.49
N. Eng.	463.4	(NA)	71.0	(NA)	SC.....	13.8	.79	43.9	.38
ME.....	-4.8	.48	3.5	.52	GA.....	-194.1	1.18	37.8	.20
NH.....	37.3	.28	8.0	.41	FL.....	340.0	1.70	-484.7	-.57
VT.....	30.3	.02	2.8	.51	E. So. Cent.	-659.6	(NA)	-57.8	(NA)
MA.....	201.7	.50	35.0	.34	KY.....	-119.7	.46	38.9	.52
RI.....	-117.4	1.28	20.1	.51	TN.....	-50.8	2.33	18.8	.16
CT.....	316.2	.23	1.5	.02	AL.....	-454.0	2.54	-25.2	-.31
Mid. Atl.	-689.2	(NA)	240.1	(NA)	MS.....	-35.1	3.43	-90.3	-1.71
NY.....	-716.0	.44	140.8	.25	W. So. Cent.	-5,623.7	(NA)	-11,485.3	(NA)
NJ.....	-618.4	2.22	80.3	.15	AR.....	-223.1	5.70	-485.0	-7.26
PA.....	665.2	1.21	19.1	.05	LA.....	-223.8	5.63	-248.3	-1.00
E. No. Cent.	-3,503.0	(NA)	529.6	(NA)	OK.....	-400.8	6.53	-255.4	-2.42
OH.....	-880.1	.72	188.1	.35	TX.....	-4,775.9	11.57	-10,496.6	-11.32
IN.....	-386.1	.42	54.5	.40	Mt.	-1,286.3	(NA)	-2,125.6	(NA)
IL.....	-1,505.0	.68	66.3	.09	MT.....	-100.9	1.80	4.8	.43
MI.....	-433.3	.25	134.8	.35	ID.....	-21.8	.73	1.4	.32
WI.....	-298.5	1.10	85.9	.51	WY.....	-96.1	8.34	-37.4	-3.27
W. No. Cent.	-1,443.7	(NA)	-701.3	(NA)	CO.....	-626.3	7.72	-596.5	-4.88
MN.....	-448.8	1.06	-355.1	.230	NM.....	-40.4	5.41	-563.1	-9.62
IA.....	-427.6	2.45	-97.9	-1.18	AZ.....	-61.2	12.85	-887.6	3.61
MO.....	721.7	1.46	-112.5	-46	UT.....	-356.5	2.74	-75.3	-1.01
ND.....	-31.0	1.55	3.8	.09	NV.....	16.9	.28	28.2	.57
SD.....	-68.3	.33	6.3	.39	Pa.	3,671.4	(NA)	300.8	(NA)
NE.....	-381.8	1.53	-91.5	-78	WA.....	-54.7	.95	56.9	.25
KS.....	615.5	2.21	-54.5	-.24	OR.....	-293.1	1.40	-15.3	-.17
So. Atl.	1,484.3	(NA)	-244.3	(NA)	CA.....	3,449.7	1.36	284.2	.18
DE.....	.9	-	-.3	-.09	AK.....	-49.3	8.36	-76.9	-17.02
MD.....	805.9	1.31	68.0	.31	HI.....	509.4	.47	51.9	.87
DC.....	-51.5	-	-6.7	-.23	PR	302.7	.48	32.5	.51
VA.....	812.6	1.08	4.0	.01	GU.....	7.1	-	1.6	1.58
WV.....	-118.6	1.31	9.3	.45	VI.....	8.3	-	-.4	-6.11

- Represents or rounds to zero. NA Not available. ¹ See footnote 5, table 819. ² Net income after taxes as a percent of average assets.

Source of tables 819 and 820: U.S. Office of Thrift Supervision (formerly U.S. Federal Home Loan Bank Board), *Savings and Home Financing Source Book*, annual.

Mortgage Debt Outstanding

503

NO. 821. MORTGAGE DEBT OUTSTANDING, BY TYPE OF PROPERTY AND HOLDER: 1970 TO 1988

[In billions of dollars. As of Dec. 31. Includes Puerto Rico and Guam. See also *Historical Statistics, Colonial Times to 1970*, series N 273 and N 276]

TYPE OF PROPERTY AND HOLDER	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
Mortgage debt, total	474	792	1,460	1,567	1,638	1,832	2,061	2,303	2,618	2,977	3,254
Residential nonfarm.....	358	583	1,107	1,182	1,226	1,366	1,529	1,716	1,968	2,234	2,466
1- to 4-family homes.....	297	482	965	1,040	1,080	1,206	1,344	1,501	1,720	1,960	2,176
Savings institutions.....	167	274	487	501	458	482	529	554	559	602	666
Mortgage pools or trusts ¹	3	28	125	147	201	271	322	407	553	702	789
Government National Mortgage Assoc.....	(2)	18	92	103	116	156	176	207	257	310	331
Federal Home Loan Mortgage Corp.....	-	1	15	20	43	57	70	100	167	206	220
Commercial banks.....	42	77	160	170	174	183	196	213	236	276	313
Individuals and others ²	36	44	99	119	134	147	161	176	198	202	215
Federal and related agencies.....	22	38	61	68	78	87	98	110	127	124	134
Federal National Mortgage Assoc.....	15	26	52	56	67	73	82	92	91	90	98
Finance companies.....	1	4	14	17	19	21	24	29	34	40	44
Life insurance companies.....	27	18	18	17	17	15	14	12	13	13	15
5 or more units.....	60	101	142	142	146	161	185	214	248	274	289
Commercial.....	86	159	255	278	301	352	419	482	555	655	702
Farm.....	30	50	97	107	111	114	112	106	96	89	87
TYPE OF HOLDER											
Savings institutions.....	208	356	603	619	578	627	710	760	778	860	916
Commercial banks.....	73	136	263	284	301	331	379	429	503	591	669
Life insurance companies.....	74	89	131	138	142	151	157	172	194	212	233
Finance companies.....	1	4	14	17	19	21	24	29	34	40	44
Individuals and others ²	79	106	189	215	235	258	282	307	341	362	382
Mortgage pools or trusts ¹	5	34	146	168	224	297	351	439	565	718	811
Government National Mortgage Assoc.....	(2)	18	94	106	119	160	180	212	263	318	341
Federal Home Loan Mortgage Corp.....	-	2	17	20	43	58	71	100	171	213	226
Federal National Mortgage Association.....	-	-	-	1	14	25	36	55	97	140	178
Farmers Home Administration ³	4	14	32	37	40	42	45	48	(2)	(2)	(2)
Federal and related agencies.....	34	67	115	126	139	148	159	167	204	193	201
Federal National Mortgage Association.....	16	32	57	61	72	79	88	98	98	97	103
Farmers Home Administration ³	2	1	3	2	2	2	1	1	48	43	42
Federal Land Banks.....	7	17	38	47	51	52	52	47	40	34	32
Federal Home Loan Mortgage Corp.....	(2)	5	5	5	5	8	10	14	12	13	17
Federal Housing and Veterans Admin.....	4	5	6	6	5	5	5	5	5	6	6
Government National Mortgage Assoc.....	5	7	5	5	4	3	2	1	1	(2)	(2)

- Represents zero. Z Less than \$500 million. ¹ Outstanding principal balances of mortgage pools backing securities insured or guaranteed by the agency indicated. Includes private pools not shown separately. ² Includes mortgage companies, real estate investment trusts, state and local retirement funds, noninsured pension funds, credit unions, and other U.S. agencies. ³ FmHA-guaranteed securities sold to the Federal Financing Bank were reallocated from FmHA mortgage pools to FmHA mortgage holdings in 1986 because of accounting changes by the Farmers Home Administration.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly.

NO. 822. HOLDINGS OF CONSTRUCTION, LONG-TERM MORTGAGE, AND LAND LOANS, BY TYPE OF LOAN, 1970 TO 1988, AND BY LENDER, 1988

[In billions of dollars. As of end of year]

TYPE OF LOAN	1970	1975	1980	1984	1985	1986	1987	1988					
								Total ¹	Lender				
									Savings and loan assn.	Commercial banks	Life insurance companies	Federal credit agencies	Mortgage pools
Mortgage credits, total	422	731	1,318	1,987	2,059	2,373	2,693	2,926	770	640	232	169	764
Construction loans.....	18	41	63	146	152	173	196	199	52	125	1	1	-
1-4 unit family homes.....	5	13	26	39	34	36	39	40	20	16	-	-	-
Multifamily residential.....	6	12	14	26	28	37	42	39	15	15	(z)	1	-
Nonresidential.....	7	17	22	81	90	100	115	121	16	93	1	-	-
Farm properties.....	(z)	-	-	-	-	-	-	-	-	-	-	-	-
Long-term mortgage loans.....	400	679	1,242	1,711	1,872	2,160	2,444	2,676	693	490	230	168	764
1-4 unit family homes.....	267	435	857	1,193	1,294	1,507	1,712	1,898	512	283	14	118	736
FHA insured.....	82	68	105	155	176	221	246	261	1	7	2	9	224
VA guaranteed.....	37	57	91	120	127	135	139	138	6	4	1	4	116
Conventional.....	168	310	661	908	991	1,151	1,327	1,499	506	271	11	105	397
Multifamily.....	46	82	114	146	161	190	207	223	77	17	24	28	20
Nonresidential.....	66	128	205	299	338	393	466	505	104	175	183	5	(z)
Farm properties.....	20	34	66	84	79	70	58	50	-	15	9	17	9
Land loans.....	4	11	13	29	36	40	54	51	26	24	1	-	-

- Represents zero. Z Less than \$500 million. ¹ Includes other lenders not shown separately.

Source: U.S. Dept. of Housing and Urban Development, *The Supply of Mortgage Credit, 1970-1979*; and monthly and quarterly press releases based on Survey of Mortgage Lending Activity.

NO. 823. MORTGAGE ACTIVITY BY TYPE OF LENDER: 1970 TO 1988

[In billions of dollars. Loans outstanding are as of end of year. Bank and savings and loan data include Puerto Rico. See also *Historical Statistics, Colonial Times to 1970*, series N 266-267, X 836-839, and X 911]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
Savings and loan associations:											
Loans acquired ^{1 2}	22.0	58.3	81.7	58.5	67.2	148.9	194.2	210.6	289.6	275.0	251.1
Loans outstanding ³	150.3	278.6	502.8	517.9	492.2	512.9	641.4	658.2	667.0	731.3	769.6
FHA-insured	10.2	16.5	12.8	12.0	12.1	12.8	12.3	11.1	8.8	5.0	2.4
VA-guaranteed	8.5	14.0	15.0	14.2	14.0	15.5	15.0	13.7	11.1	7.8	5.8
Conventional	131.7	248.0	475.0	491.7	466.1	484.6	614.1	633.4	647.1	718.6	761.6
Commercial banks:⁴											
Loans outstanding	73.3	136.2	262.3	282.7	299.0	328.0	374.8	425.3	497.9	582.5	639.9
Nonfarm residential	45.6	82.9	170.2	181.7	185.5	196.2	212.9	229.2	259.7	297.1	332.1
FHA-insured	7.9	6.3	4.4	4.5	4.6	5.6	5.8	5.7	7.0	8.8	7.7
VA-guaranteed	2.6	3.1	2.4	2.4	2.7	3.1	3.0	3.3	4.1	5.3	4.5
Conventional	35.1	73.5	163.3	174.7	178.2	187.5	204.1	220.2	248.6	283.0	320.0
Other nonfarm	23.3	46.9	83.5	92.7	105.1	122.4	151.3	184.8	225.4	270.9	292.3
Farm	4.4	6.4	8.5	8.3	8.4	9.3	10.5	11.4	12.8	14.5	15.4
Life insurance companies:											
Loans acquired ¹	6.6	8.8	18.3	13.0	10.0	18.8	19.2	31.7	40.6	39.5	40.8
Nonfarm	6.3	7.7	16.5	11.8	9.3	17.6	18.2	30.6	39.4	38.5	40.0
Farm	.3	1.1	1.8	1.2	.7	1.2	1.0	1.1	1.2	1.0	.8
Loans outstanding	74.4	89.2	127.9	135.6	138.5	148.4	154.5	167.9	190.4	209.3	231.6
Nonfarm	68.7	82.4	115.0	122.5	125.7	135.7	142.1	156.1	179.4	199.4	222.2
FHA-insured	11.4	7.9	5.5	5.1	4.8	4.4	4.1	3.2	2.7	2.1	2.0
VA-guaranteed	5.4	3.9	2.8	2.6	2.5	2.3	2.0	1.5	1.2	1.0	.8
Conventional	51.9	70.6	106.7	114.8	118.4	129.0	136.0	151.4	175.5	196.3	219.3
Farm	5.6	6.8	12.8	13.1	12.8	12.7	12.4	11.8	11.0	9.9	9.4

¹ Mortgage loans on all types of property acquired either by origination or purchase. Long term loans only, excluding construction and land loans. ² Includes Guam. ³ Includes shares pledged against mortgage loans, junior liens and real estate sold on contract. ⁴ Includes loans held by nondeposit trust companies; excludes holdings of trust departments of commercial banks.

Source: U.S. Dept. of Housing and Urban Development, *The Supply of Mortgage Credit, 1970-1979*; and monthly and quarterly press releases based on the Survey of Mortgage Lending Activity.

NO. 824. VOLUME OF LONG-TERM MORTGAGE LOANS ORIGINATED, BY TYPE OF PROPERTY, 1970 TO 1988, AND BY LENDER, 1988

[In billions of dollars. Covers credit extended in primary mortgage markets for financing real estate acquisitions]

TYPE OF PROPERTY	1970	1975	1980	1983	1984	1985	1986	1987	1988, BY LENDER				
									Total ¹	Savings and loan	Commercial banks	Mortgage companies	Mutual savings
Loans, total	59.8	120.7	197.2	295.6	319.2	383.3	662.1	671.6	595.1	195.5	226.8	90.9	34.0
1-4 unit family home	35.6	77.9	133.7	201.9	203.7	243.0	455.1	449.5	374.4	160.7	95.5	85.3	25.5
New units	12.6	24.6	49.1	47.4	53.7	53.6	82.8	89.5	85.8	28.5	23.8	27.5	4.2
Existing units	23.0	53.3	84.6	154.5	150.0	189.4	372.2	360.0	288.6	132.2	71.7	57.8	21.3
Multifamily residential	8.8	10.7	12.5	21.4	27.6	31.9	49.9	45.0	37.9	17.5	7.0	4.5	2.9
New units	7.0	5.8	8.6	8.8	11.1	10.6	15.3	14.1	8.8	1.9	1.8	1.3	.5
Existing units	1.8	4.9	3.9	12.6	16.5	21.3	34.6	30.9	29.1	15.6	5.2	3.2	2.4
Non-residential	12.5	24.2	35.9	62.4	77.3	99.4	147.4	168.7	175.8	17.3	119.9	1.0	5.7
Farm properties	3.0	7.9	15.0	9.9	10.5	9.0	9.8	8.4	7.1	-	4.4	-	-

- Represents zero. ¹ Includes life insurance companies and other lenders not shown separately.

Source: U.S. Dept. of Housing and Urban Development, *Survey of Mortgage Lending Activity, 1970-1979*, and monthly and quarterly press releases based on the Survey of Mortgage Lending Activity.

NO. 825. PURCHASES AND SALES OF MORTGAGE LOANS, BY LENDER: 1970 TO 1988

[In billions of dollars. Covers all types of property]

LENDER	PURCHASES						SALES					
	1970	1980	1985	1986	1987	1988	1970	1980	1985	1986	1987	1988
Total	16.4	78.1	257.7	497.9	428.3	334.2	18.9	77.1	224.3	418.5	366.2	290.0
Savings associations ¹	3.7	13.2	65.0	71.3	64.6	55.6	1.0	16.1	103.2	164.6	123.6	107.2
Savings banks	1.8	1.2	2.9	3.4	3.5	3.5	.3	.8	6.0	13.0	12.9	10.8
Commercial banks	.8	4.9	12.0	42.8	23.2	23.8	2.0	8.4	19.2	40.1	52.8	38.3
Mortgage companies	.1	3.4	20.9	55.2	50.1	36.3	12.5	37.0	78.0	181.2	166.5	123.1
Federal credit agencies	5.7	16.3	33.0	39.5	25.2	31.3	2.6	10.5	8.0	15.9	7.2	6.7
Mortgage pools	2.7	29.4	114.3	280.4	230.7	148.4	.3	4.1	5.5	1.4	.3	.5
Other	1.6	9.7	9.6	25.3	31.2	35.4	.3	.3	4.4	2.3	3.4	3.5

¹ Includes Federal savings banks insured by the Federal Savings and Loan Insurance Corporation.

Source: United States League of Savings Institutions, Washington, DC, *Savings Institutions Sourcebook*, annual. Data from U.S. Department of Housing and Urban Development.

NO. 826. MORTGAGE DELINQUENCY AND FORECLOSURE RATES AND PRIVATE AND GOVERNMENT MORTGAGE INSURANCE: 1970 TO 1988

(In percent, except as indicated. Covers one- to four-family residential nonfarm homes)

ITEM	1970	1975	1980	1983	1984	1985	1986	1987	1988
Delinquency rates: ¹									
Total	3.13	4.37	4.97	5.59	5.67	5.83	5.56	4.97	4.79
Conventional loans	1.77	2.72	3.09	3.88	3.86	4.05	3.79	3.15	2.94
VA loans	3.03	4.16	5.34	6.09	6.40	6.63	6.57	6.22	6.23
FHA loans	3.65	5.44	6.55	7.06	7.29	7.44	7.15	6.57	6.56
Foreclosure rates: ²									
Total	.33	.38	.38	.67	.73	.81	.98	1.06	.95
Conventional loans	.08	.16	.17	.46	.47	.51	.69	.87	.56
VA loans	.25	.36	.46	.76	.82	.88	1.14	1.28	1.25
FHA loans	.47	.46	.53	.84	.96	1.01	1.22	1.44	1.40
Claims paid by private mortgage insurers ³ (mil. dol.)	(NA)	(NA)	58.7	356.8	472.1	971.1	1,261.9	1,573.5	(NA)
Mortgage insurance outstanding: ⁴									
Private (bil. dol.)	7.3	40.0	105.3	148.0	192.0	223.7	230.3	224.2	⁵ 195.1
Government (bil. dol.)	97.3	127.7	195.2	248.8	265.9	288.8	328.9	387.4	(NA)

NA Not available. ¹ Number of loans delinquent 30 days or more as percentage of mortgage loans serviced in survey. Annual average quarterly figures, seasonally adjusted. ² Percentage of loans in the foreclosure process at yearend, not seasonally adjusted. ³ Source: Mortgage Insurance Companies of America, Washington, DC, unpublished data. ⁴ Source: United States League of Savings Institutions, Washington, DC, *Savings Institutions Sourcebook*, annual. ⁵ Preliminary. Source: Except as noted, Mortgage Bankers Association of America, Washington, DC, *National Delinquency Survey*, quarterly.

NO. 827. HOME EQUITY LOANS—DOMESTIC COMMERCIAL BANKS OFFERING LOANS AND HOME EQUITY BALANCES, BY ASSET-SIZE OF BANK: 1987 AND 1988

[As of December 31, Based on Federal Reserve Board's Report of Condition]

ITEM	1987					1988				
	Total	Asset-size				Total	Asset-size			
		Less than \$100 million	\$100-\$249 million	\$250-\$999 million	\$1 billion or more		Less than \$100 million	\$100-\$249 million	\$250-\$999 million	\$1 billion or more
Banks offering home equity loans	4,346	2,539	1,015	499	293	4,707	2,720	1,116	555	316
Percent of all commercial banks	32	23	59	72	85	36	26	64	78	88
Home equity debt outstanding (bil. dol.)	29.0	1.6	2.5	4.3	20.5	40.0	2.2	3.1	5.7	29.0
All commercial banks:										
Home equity debt as percent of consumer loans plus home equity debt	8	4	7	9	9	10	5	9	11	11
Home equity debt as percent of consumer loans plus all loans secured by homes	5	2	4	5	6	6	2	4	6	7
Banks offering home equity loans:										
Home equity debt as percent of consumer loans plus home equity debt	10	10	11	11	10	12	13	12	13	12
Home equity debt as percent of consumer loans plus all loans secured by homes	6	5	6	7	7	8	6	6	8	8

Source: Board of Governors of the Federal Reserve System, *Assets and Liabilities of Insured Domestically-Chartered and Foreign-Related Banking Institutions, Federal Reserve Statistical Release H.8*, weekly.

NO. 828. INSTALLMENT CREDIT—FINANCE RATES ON SELECTED TYPES OF CREDIT FOR COMMERCIAL BANKS AND FINANCE COMPANIES: 1975 TO 1988

(In percent. Annual averages. Commercial bank rates are "most common" rates for direct loans with specified maturities; finance company rates are weighted averages for purchased contracts)

TYPE	1975	1976	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Commercial banks:												
New automobiles (48 months) ¹	11.36	11.02	12.02	14.30	16.54	16.83	13.92	13.71	12.91	11.33	10.46	10.86
Mobile homes (120 months) ¹	11.82	12.09	12.77	14.99	17.45	18.05	15.91	15.58	14.96	13.99	13.38	13.54
Other consumer goods (24 months)	13.08	13.19	13.85	15.47	18.09	18.65	16.68	16.47	15.94	14.82	14.23	14.68
Credit-card plans	17.16	17.03	17.03	17.31	17.78	18.51	18.78	18.77	18.89	18.26	17.93	17.79
Finance companies:												
New automobiles	13.12	13.15	13.51	14.82	16.17	16.15	12.58	14.62	11.98	9.44	10.73	12.60
Used automobiles	17.63	17.67	17.98	19.10	20.00	20.75	18.74	17.85	17.59	15.95	14.61	15.11

¹ For 1975-1982, maturities were 36 months for new car loans and 84 months for mobile home loans.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly; *Annual Statistical Digest*; and unpublished data.

NO. 829. CONSUMER CREDIT OUTSTANDING: 1970 TO 1988

[In billions of dollars, except percent. Estimated amounts of credit outstanding as of end of year. Seasonally adjusted. See also *Historical Statistics, Colonial Times to 1970*, series X 551-560]

TYPE OF CREDIT	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Credit outstanding	131.6	204.9	308.3	347.5	349.4	368.6	381.1	430.4	511.8	592.4	647.2	679.2	728.9
Ratio to disposable personal income ¹ (percent).....	18.3	17.9	19.8	20.0	18.2	17.2	16.9	17.7	19.1	20.8	21.4	21.2	21.0
Installment	103.9	167.0	262.0	296.5	297.6	310.7	323.5	367.9	442.5	517.8	572.0	607.7	658.5
Automobile paper ²	36.3	56.9	98.7	112.4	111.9	118.9	124.2	143.7	173.7	209.6	247.3	266.0	281.2
Revolving.....	4.9	14.5	45.2	53.3	54.8	60.8	66.2	78.6	100.2	122.0	137.0	153.9	174.8
Mobile home paper.....	2.4	15.3	16.9	18.2	18.6	20.3	22.8	23.7	25.7	26.8	27.4	26.4	25.7
All other loans.....	60.2	80.1	101.1	112.4	112.1	110.5	110.2	121.6	142.8	159.2	160.4	161.5	177.8
Commercial banks	46.6	82.9	135.5	152.7	145.5	146.0	149.1	169.3	209.1	241.6	263.0	282.9	318.9
Finance companies.....	27.2	32.7	45.7	57.1	61.9	69.7	74.9	82.9	89.5	111.0	133.9	140.3	145.2
Credit unions.....	12.8	25.4	43.9	46.1	43.6	45.5	46.8	52.9	65.5	71.9	76.2	80.1	86.1
Retailers ³	12.9	16.6	23.6	25.5	26.1	28.4	29.4	34.1	37.2	39.1	39.4	41.0	43.5
Other ³	2.3	9.2	13.0	14.9	20.3	20.8	23.2	28.4	41.1	53.9	59.4	63.5	65.8
Noninstallment	27.7	37.9	46.3	51.0	51.8	56.0	57.6	62.5	69.2	74.7	75.1	71.4	69.4
Single-payment loans.....	18.9	26.8	35.1	39.1	39.6	43.8	45.5	48.8	54.6	59.1	58.4	53.0	49.0
Charge accounts.....	8.7	11.0	11.2	11.8	12.1	12.1	12.0	13.6	14.6	15.6	16.7	18.5	20.4

¹ Based on fourth quarter seasonally adjusted disposable personal income at annual rates as published by the U.S. Bureau of Economic Analysis in sources listed in table 700. ² Excludes 30-day charge credit held by travel and entertainment companies. ³ Comprises savings institutions and gasoline companies.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly; *Annual Statistical Digest*; and unpublished data.

NO. 830. DELINQUENCY RATES ON BANK INSTALLMENT LOANS BY TYPE OF LOAN: 1970 TO 1988

[In percent, except as indicated. As of end of year; seasonally adjusted, except as noted. Number of loans having an installment past due for 30 days or more as a percentage of total installment loans outstanding]

TYPE OF CREDIT	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	
DELINQUENCY RATES												
Closed-end installment loans, total.....		2.14	2.77	2.82	2.61	2.39	1.94	2.09	2.32	2.26	2.47	2.49
Personal loans ¹		2.39	3.43	3.53	3.20	3.04	2.84	3.16	3.63	3.11	3.66	3.34
Automobile, direct loans.....		1.43	1.54	1.81	1.80	1.68	1.53	1.47	1.64	1.80	1.59	1.92
Automobile, indirect loans.....		1.94	1.95	2.29	2.03	1.73	1.50	1.77	2.02	2.09	2.20	2.46
Property improvement ²		1.96	1.96	1.93	1.98	1.98	2.14	2.00	1.91	1.77	1.88	2.06
Home equity and second mortgage loans ³		(NA)	(NA)	(NA)	(NA)	(NA)	1.94	1.77	2.06	1.85	2.01	1.86
Mobile home loans.....		2.59	3.82	3.14	3.37	2.69	2.44	2.56	2.39	3.04	2.57	3.12
Recreational vehicle loans.....		(NA)	2.21	1.94	2.05	1.88	1.58	1.87	1.84	1.92	1.99	2.07
Bank card loans.....		(NA)	2.33	2.72	2.53	2.38	2.08	2.81	2.95	3.15	2.33	2.19
Revolving credit loans.....		(NA)	2.16	2.70	2.86	2.16	1.44	1.50	1.96	1.53	2.33	2.87
Home equity lines of credit loans (open-end) ³		(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	.74	.68
REPOSSITIONS PER 1,000 LOANS OUTSTANDING												
Mobile home.....		3.59	2.26	1.57	1.47	1.14	1.23	1.29	1.21	2.50	1.58	1.77
Automobile, direct loans.....		1.52	.65	1.10	.99	.90	.70	.72	1.11	1.15	.86	1.03
Automobile, indirect loans.....		4.88	1.75	2.75	2.40	2.13	1.56	1.58	2.08	1.95	2.04	1.86

NA Not available. ¹ Beginning 1983, includes home appliance loans. ² Beginning 1983, own plan and FHA Title I loans. ³ Seasonally not adjusted.

Source: American Bankers Association, Washington, DC, *Consumer Credit Delinquency Bulletin*, quarterly.

NO. 831. CREDIT CARDS—HOLDERS, NUMBERS, SPENDING AND DEBT: 1980 TO 1988

TYPE OF CREDIT CARD	CARDHOLDERS (mil.)			NUMBER OF CARDS (mil.)			CREDIT CARD SPENDING (bil. dol.)			CREDIT CARD DEBT (bil. dol.)		
	1980	1985	1988	1980	1985	1988	1980	1985	1988	1980	1985	1988
Total	(NA)	(NA)	108.4	(NA)	(NA)	859.5	205.4	322.7	397.1	81.2	128.0	180.0
Bank.....	63.3	73.3	83.1	110.6	161.4	197.8	52.9	125.9	189.9	25.0	65.6	113.5
Travel and entertainment.....	10.5	15.5	20.2	10.3	18.8	24.2	21.2	51.0	84.6	2.7	6.4	12.3
Retail store.....	83.0	91.0	93.5	290.5	341.0	400.9	74.4	90.0	64.9	47.3	50.5	41.8
Oil company marketers.....	68.5	78.0	80.1	109.6	117.0	118.6	28.9	28.8	21.9	2.2	2.7	2.5
Other ²	(NA)	(NA)	89.0	(NA)	(NA)	118.0	28.0	27.0	35.8	4.0	2.8	9.9

NA Not available. ¹ Cardholders may hold more than one type of card. ² Includes airline, automobile rental, telephone company, hotel, motel, and other miscellaneous credit cards.

Source: HSN Consultants Inc., Los Angeles, CA, *The Nilson Report*, bimonthly. (Copyright used by permission.)

No. 832. MONEY STOCK AND LIQUID ASSETS: 1970 TO 1989

[In billions of dollars. As of December. Seasonally adjusted averages of daily figures. See *Historical Statistics, Colonial Times to 1970*, series X 410-417 for similar data]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989, June
M1, total	214	288	412	439	478	522	552	621	726	752	790	770
Currency ¹	49	73	115	122	133	146	156	168	180	196	212	217
Travelers checks ²	1	2	4	4	4	5	5	6	6	7	8	7
Demand deposits ³	165	212	281	231	234	239	244	267	303	288	289	275
Other checkable deposits ⁴	(2)	1	31	81	105	132	146	179	236	260	282	271
M2, total	628	1,023	1,633	1,796	1,955	2,186	2,367	2,567	2,811	2,910	3,070	3,088
M1.....	214	288	412	439	476	522	552	621	726	752	790	770
Nontransaction components in M2 ⁵	414	736	1,221	1,357	1,478	1,664	1,815	1,947	2,085	2,158	2,279	2,318
Overnight repurchase (RP) agreements and Eurodollars ⁶	1	6	28	36	39	54	56	70	78	78	78	76
Money market funds, general purpose and broker/dealer ⁷	(2)	3	62	151	185	198	167	177	208	221	238	265
Money market deposit accounts ⁸	(2)	(2)	(2)	(2)	43	379	417	514	572	526	503	457
Commercial banks.....	(2)	(2)	(2)	(2)	26	231	267	333	360	359	352	328
Thrift institutions.....	(2)	(2)	(2)	(2)	17	149	149	181	193	167	150	129
Savings deposits.....	261	389	400	344	357	306	285	302	371	416	431	402
Commercial banks.....	99	161	186	159	164	133	123	125	156	179	192	181
Thrift institutions.....	162	228	215	185	193	172	163	177	215	238	239	221
Small time deposits ⁹	151	388	729	823	851	784	866	883	854	914	1,025	1,119
Commercial banks.....	79	142	286	348	390	351	386	383	365	385	443	502
Thrift institutions.....	72	196	442	475	471	433	500	499	489	529	582	617
M3, total.....	677	1,172	1,991	2,237	2,444	2,694	2,982	3,202	3,495	3,678	3,915	3,974
M2.....	628	1,023	1,633	1,796	1,955	2,186	2,367	2,567	2,811	2,910	3,070	3,088
Nontransaction components in M3 ¹⁰	49	149	358	441	489	508	615	634	684	768	846	886
Large time deposits ¹¹	45	130	260	303	327	327	417	437	439	487	538	573
Commercial banks ⁹	45	123	215	249	263	231	270	285	289	325	365	396
Thrift institutions.....	1	6	45	54	64	97	147	152	150	162	173	177
Term RP's and term Eurodollars ¹⁰	4	18	84	104	116	143	145	142	168	200	230	229
Money market funds, institution only ¹²	(2)	(2)	15	38	51	43	63	65	84	90	88	95
L, total.....	816	1,267	2,328	2,599	2,854	3,155	3,523	3,831	4,137	4,340	4,672	4,759
M3.....	677	1,172	1,991	2,237	2,444	2,694	2,982	3,202	3,495	3,678	3,915	3,974
Savings bonds.....	52	67	72	68	68	71	74	79	92	100	109	114
Short-term Treasury securities ¹¹	49	68	133	149	184	212	261	300	282	257	271	279
Bankers' acceptances.....	3	11	32	40	44	45	45	42	37	45	41	41
Commercial paper ¹²	34	48	99	105	114	133	161	207	231	260	336	351

Z. Less than \$500 million. ¹ Currency outside U.S. Treasury, Federal Reserve Banks and the vaults of depository institutions. ² Outstanding amount of nonbank issuers. ³ At commercial banks and foreign-related institutions. ⁴ Consists of negotiable order of withdrawal (NOW) and automatic transfer service (ATS) accounts at all depository institutions, credit union share draft balances and demand deposits at thrift institutions. ⁵ This sum is seasonally adjusted as a whole. ⁶ Not seasonally adjusted. ⁷ Issued in amounts of less than \$100,000. Includes retail repurchase agreements. Excludes individual retirement accounts (IRAs) and Keogh accounts. ⁸ Issued in amounts of \$100,000 or more. Excludes those booked at international banking facilities. ⁹ Excludes those held by money market mutual funds, depository institutions and foreign banks and official institutions. ¹⁰ Excludes those held by depository institutions and money market mutual funds. ¹¹ U.S. Treasury bills and coupons with remaining maturities of less than 12 months held by other than depository institutions, Federal Reserve banks, money market mutual funds and foreign entities. ¹² Excludes commercial paper held by money market mutual funds.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly, and *Money Stock, Liquid Assets, and Debt Measures, Federal Reserve Statistical Release H.6*, weekly.

No. 833. SELECTED TIME DEPOSITS AND OTHER ACCOUNTS AT INSURED COMMERCIAL BANKS—DEPOSITS AND INTEREST RATES: 1985 TO 1989

[Estimates based on data collected from a sample of about 500 banks]

TYPE OF DEPOSIT	AMOUNT OUTSTANDING (mil. dol.)					AVERAGE RATE PAID (percent)				
	1985, Dec.	1986, Dec.	1987, Dec.	1988, Dec.	1989, Mar.	1985, Dec.	1986, Dec.	1987, Dec.	1988, Dec.	1989, Mar.
"Super NOW" ¹ accounts.....	44,545	164,247	174,752	190,521	184,817	5.99	5.00	4.95	4.96	5.00
Money market deposit accounts ²	330,077	379,988	353,807	346,407	335,532	6.71	5.19	5.43	5.87	6.29
Money market certificates ³										
7-31 day.....	5,318	6,101	7,145	6,391	7,639	6.85	5.45	6.02	6.77	7.50
32-91 day.....	20,966	21,601	23,306	24,844	30,190	7.16	5.62	6.26	7.20	8.16
92-182 day.....	147,777	131,483	132,440	136,327	144,910	7.50	5.70	6.75	7.84	8.66
183 day-1 year.....	66,131	72,227	96,799	128,027	141,339	7.77	5.93	7.14	8.19	8.97
1-2½ year.....	81,172	83,761	89,619	107,204	112,728	8.24	6.22	7.46	8.30	8.99
2½ year or more.....	115,355	120,699	121,325	133,040	133,573	8.73	6.81	7.86	8.39	8.84
All IRA and Keogh Plan deposits.....	59,352	73,127	83,241	93,977	98,232	(NA)	(NA)	(NA)	(NA)	(NA)
Retail repurchase agreements ⁴	1,294	1,062	767	1,574	1,821	6.77	5.37	5.46	6.77	7.94

NA Not available. ¹ Negotiable order of withdrawal accounts containing an agreement between depositor and depository such that some or all funds deposited are eligible to earn more than 5.25 percent. As of January 1, 1986 interest rate ceilings were removed from all NOW accounts. Beginning with the December 1986 data the "Super NOW" accounts category includes all NOW accounts, including those accounts which were subject to a 5.25 percent regulatory interest rate restriction prior to January 1, 1986. Estimates for NOW accounts beginning in December 1986 are based on reports of deposits. ² Deposits with no minimum balance requirement and no required minimum maturity but institutions must reserve the right to require at least seven days' notice prior to withdrawal, no restrictions on depositor eligibility, or limitations on the amount of interest that may be paid; such accounts may allow up to six transfers per month, no more than three of which may be draft and may permit unlimited withdrawals by mail, messenger, or in person. Estimates based on reports of deposits. ³ All interest-bearing time certificates and open account time deposits with balances of less than \$100,000, including those held in IRAs and Keogh Plan deposits. ⁴ Retail repurchase agreements are in denominations of less than \$100,000 with maturities of less than 90 days that arise from the transfer of direct obligations of, or obligations fully-guaranteed as to principal and interest by, the U.S. Government or an agency thereof.

Source: Board of Governors of the Federal Reserve System, *Money Stock, Liquid Assets, and Debt Measures, Federal Reserve Statistical Release H.6*, weekly.

NO. 834. BANK DEBITS AND DEPOSIT TURNOVER: 1975 TO 1988

[Debits in trillions of dollars; turnover as ratio of debits to deposits. Annual averages of monthly data]

ITEM	1975	1976	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Debits to—												
Demand deposits, all banks ¹	25.1	40.2	49.9	63.1	81.3	96.5	112.3	131.6	156.3	188.5	217.1	227.0
Major New York City banks	9.7	15.0	18.5	25.3	34.1	39.8	47.8	57.3	70.7	91.5	104.5	107.5
Other banks	15.4	25.2	31.3	37.9	47.2	56.7	64.7	74.2	85.6	97.0	112.6	119.5
ATS/NOW accounts ²	(NA)	(2)	1	2	7	1.0	1.4	1.6	1.8	2.2	2.4	2.8
Money market deposit accounts	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	.6	.9	1.2	1.6	2.0	2.4
Savings deposits ³	(NA)	.4	.6	.7	.7	.7	.7	.4	.4	.4	.5	.6
Deposit turnover:												
All banks ¹	105	139	164	203	286	343	386	441	501	557	612	642
Major New York City banks	358	543	645	816	1,116	1,354	1,522	1,840	2,200	2,499	2,875	2,901
Other banks	73	96	113	135	186	225	249	278	306	321	357	377

NA Not available. Z Less than \$50 billion. ¹ Represents accounts of individuals, partnerships, and corporations, and of States and political subdivisions at insured commercial banks. ² Accounts authorized for negotiable orders of withdrawal (NOW) and accounts authorized for automatic transfer to demand deposits (ATS). ³ Excludes ATS and NOW accounts, money market deposit accounts, and special club accounts, such as Christmas and vacation clubs.

NO. 835. FEDERAL RESERVE BANK OF NEW YORK—DISCOUNT RATES: 1978 TO 1989

[Percent per year. Rates for short-term adjustment credit. For rates applicable to other types of discount window credit, see source. See also *Historical Statistics, Colonial Times to 1970*, series X 454-455]

EFFECTIVE DATE	Rate	EFFECTIVE DATE	Rate	EFFECTIVE DATE	Rate	EFFECTIVE DATE	Rate
1978: Jan. 9	6½	1980: 1 Feb. 15	13	1982: July 20	11½	1985: May 20	7½
May 11	7	May 30	12	Aug. 2	11	1986: March 7	7
July 3	7½	June 13	11	Aug. 16	10½	April 21	6½
Aug. 21	7¾	July 28	10	Aug. 27	10	July 11	6
Sept. 22	8	Sept. 26	11	Oct. 12	9½	Aug. 21	5½
Oct. 16	8½	Nov. 17	12	Nov. 22	9	1987: Sept. 4	6
Nov. 1	9½	Dec. 5	13	Dec. 15	8½	1988: Aug. 9	6½
1979: July 20	10	1981: 1 May 5	14	1984: April 9	9	1989: Feb. 24	7
Aug. 17	10½	Nov. 2	13	Nov. 21	8½		
Sept. 19	11	Dec. 4	12	Dec. 24	8		
Oct. 8	12					In effect, August 25, 1989	7

¹ See table 836, footnote 5.

NO. 836. MONEY MARKET INTEREST RATES AND MORTGAGE RATES: 1970 TO 1988

[Percent per year. Annual averages of monthly data, except as indicated. See also *Historical Statistics, Colonial Times to 1970*, series X 444-453]

TYPE	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Federal funds, effective rate	7.18	5.82	11.19	13.36	16.38	12.26	9.09	10.23	8.10	6.80	6.88	7.57
Commercial paper, 3-month ^{1 2}	(NA)	6.25	10.97	12.66	15.33	11.89	8.88	10.10	7.95	6.49	6.81	7.66
Prime rate charged by banks	7.91	7.86	12.67	15.27	18.87	14.86	10.79	12.04	9.93	8.33	8.21	9.32
Eurodollar deposits, 3-month	8.52	7.03	11.96	14.00	16.79	13.12	9.57	10.75	8.27	6.70	7.07	7.86
Finance paper, 3-month ³	7.16	6.15	10.47	11.49	14.09	11.23	8.70	9.73	7.77	6.38	6.54	7.38
Bankers acceptances, 90-day ⁴	7.91	6.29	10.99	12.72	15.32	11.69	8.90	10.14	7.92	6.39	6.74	7.56
Large negotiable CDs, 3-month, secondary market	7.56	6.44	11.22	13.07	15.91	12.27	9.07	10.37	8.05	6.52	6.86	7.73
Federal Reserve discount rate ⁵	5½-6	6-7¾	9½-12	10-13	12-14	8½-12	8½	8-9	7½-8	5½-7½	5½-6	6-6½
Taxable money market funds ⁶	(NA)	6.36	11.08	12.68	16.82	12.23	8.58	10.04	7.71	6.26	6.12	7.11
Certificates of deposit (CDs): ⁷												
6-month	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	9.99	7.83	6.51	6.47	7.18
1-year	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	10.37	8.29	6.75	6.77	7.47
2½-year	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	10.06	10.82	9.00	7.13	7.16
5-year	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	11.25	9.68	7.60	7.88	8.11
U.S. Government securities: ⁸												
3-month Treasury bill	6.39	5.78	10.07	11.43	14.03	10.81	8.61	9.52	7.48	5.98	5.77	6.67
6-month Treasury bill	6.51	6.09	10.05	11.37	13.80	11.07	8.73	9.76	7.65	6.03	6.03	6.91
1-year Treasury bill	6.48	6.28	9.75	10.89	13.14	11.07	8.80	9.92	7.81	6.08	6.32	7.13
Prime 1-year municipals ⁹	4.35	3.91	5.34	6.25	7.92	7.88	5.29	6.05	5.12	4.33	4.44	5.15
Home mortgages: ¹⁰												
HUD series: ¹⁰												
FHA insured, secondary market ¹¹	9.03	9.19	10.87	13.44	16.31	15.31	13.11	13.82	12.24	9.91	10.16	10.49
Conventional, new-home ^{12 13}	8.52	9.10	11.15	13.95	16.52	15.79	13.43	13.80	12.28	10.07	10.17	10.30
Conventional, existing-home ¹²	8.56	9.14	11.16	13.95	16.55	15.82	13.45	13.81	12.29	10.09	10.17	10.31
Conventional, 15 yr. fixed ⁷	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	10.05	10.04	10.14

NA Not available. ¹ Based on daily offering rates of dealers. ² Yields are quoted on a bank-discount basis, rather than an investment yield basis (which would give a higher figure). ³ Placed directly; averages of daily offering rates quoted by finance companies. ⁴ Based on the most representative daily offering rates of dealers. Beginning Aug. 15, 1974, closing rates were used, and from Jan. 1, 1981, rates of top-rated banks only. ⁵ Federal Reserve Bank of New York, low and high. The discount rates for 1980 and 1981 do not include the surcharge applied to frequent borrowings by large institutions. The surcharge reached 3 percent in 1980 and 4 percent in 1981. Surcharge was eliminated in Nov. 1981. ⁶ 12 month yield for period ending December 31. Source: The Donoghue Organization, Inc., Holliston, MA, *IBC/Donoghue's Money Fund Report*, weekly (copyright). ⁷ Annual averages. Source: Advertising News Service, Inc., North Palm Beach, FL, *Bank Rate Monitor*, weekly (copyright). ⁸ Averages based on daily closing bid yields in secondary market, bank discount basis. ⁹ Averages based on quotations for one day each month. Source: Salomon Brothers, Inc., New York, NY, *An Analytical Record of Yields and Yield Spreads*. ¹⁰ HUD = Housing and Urban Development. ¹¹ Averages based on quotations for 1 day each month as compiled by FHA. ¹² Primary market. ¹³ Average contract rates on new commitments.

Source of tables 834-836: Except as noted, Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly, and *Annual Statistical Digest*.

No. 837. SECURITY PRICES: 1970 TO 1988

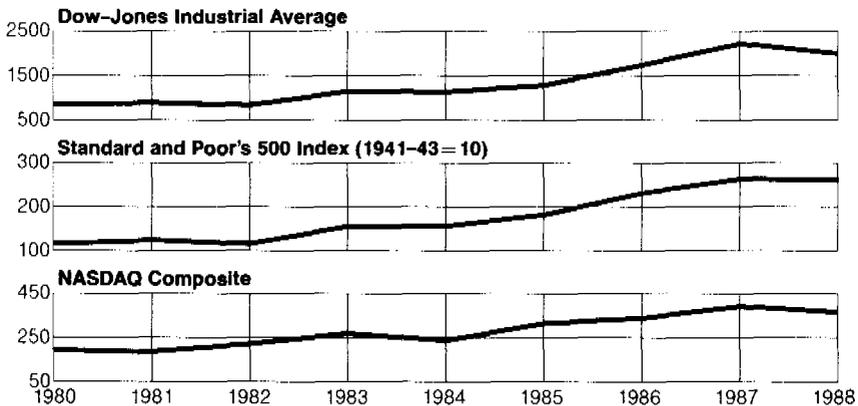
[Annual averages of monthly figures, except as noted. See also *Historical Statistics, Colonial Times to 1970*, series X 492-498]

CLASS OR ITEM	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
Bond prices (dollars per \$100 bond):										
Standard & Poor's: Municipal	72.3	57.4	43.2	41.8	51.4	48.0	53.0	65.1	62.7	62.0
Dow Jones and Co., Inc.: ³										
Yearly high	69.7	76.6	65.8	71.5	77.8	72.9	83.7	93.7	95.5	91.3
Yearly low	64.4	61.0	55.0	55.7	69.4	64.8	72.3	83.7	81.3	86.9
Stock prices:										
Standard & Poor's common index (500 stocks) (1941-43=10) ⁴	83.2	118.7	128.0	119.7	160.4	160.5	186.8	236.3	268.8	266.2
Industrial	91.3	134.5	144.2	133.6	180.5	181.3	207.8	262.2	330.5	306.5
N.Y. Stock Exchange common stock index (Dec. 31, 1965=50):										
Composite	45.7	68.1	74.0	68.9	92.6	92.5	108.1	136.0	161.7	149.9
Yearly high ⁵	52.4	81.0	79.1	82.4	99.6	98.1	121.9	145.8	186.0	159.4
Yearly low ⁶	37.7	55.3	65.0	58.3	79.8	85.1	94.8	117.8	125.9	136.7
Industrial	46.0	78.8	85.4	78.2	107.5	108.0	123.8	155.9	195.3	180.8
Transportation	32.1	60.5	72.6	60.4	89.4	85.6	104.1	119.9	140.4	134.0
Utility	37.2	37.3	38.9	39.8	47.0	46.4	56.8	71.4	74.3	72.2
Finance	54.6	64.3	73.5	72.0	85.3	89.3	114.2	147.2	146.5	127.4
American Stock Exchange Market Value Index (Aug. 31, 1973=50)	48.3	150.6	171.8	141.3	216.5	208.0	229.1	264.4	316.4	294.9
NASDAQ OTC composite ⁸	(NA)	202.3	195.9	232.4	278.6	247.4	324.9	348.8	402.9	376.5
Industrial	(NA)	261.4	229.3	273.6	323.7	260.7	330.2	349.3	422.9	381.0
Insurance	(NA)	166.8	194.3	226.4	257.6	283.1	382.1	404.1	425.5	410.7
Banks	(NA)	118.4	143.1	156.4	203.8	229.8	349.4	412.5	465.1	445.8
Dow Jones and Co., Inc., Composite (85 stocks) ¹	243.9	328.2	364.6	345.4	472.2	483.1	541.6	702.5	849.5	772.2
Industrial (30 stocks)	75.2	89.1	932.9	884.4	1,190.3	1,178.5	1,328.2	1,792.8	2,276.0	2,060.8
Transportation (20 stocks)	152.4	307.2	398.6	359.8	544.6	513.8	645.1	785.4	929.2	863.8
Utility (15 stocks)	108.8	110.4	108.6	112.0	130.0	131.8	157.6	195.2	201.7	179.7
Wilshire 5000 equity index ⁷ (Dec. 31, 1980=1404.596)	830.3	1,220.7	1,343.7	1,233.7	1,691.5	1,644.6	1,923.8	2,418.8	2,843.7	2,636.9
Standard & Poor's:										
Dividend-price ratio (percent)...	3.83	5.26	5.20	5.81	4.40	4.64	4.25	3.48	3.08	3.64
Earnings-price ratio (percent)...	6.45	12.66	11.87	11.60	8.02	10.02	8.12	6.09	5.48	8.00

NA Not available. ¹ Source: U.S. Bureau of Economic Analysis. ² Derived from average yields on basis of assumed 4 percent, 20-year bond; Wednesday closing prices. ³ Source: Dow Jones and Co., Inc., New York, NY. Effective June 30, 1976, the Dow Jones averages of 20 income railroad bonds were discontinued. With the dropping of the rail averages, which had been part of the Dow Jones 40-bond average, the 40-bond average became a 20-bond average consisting of 10 utility bonds and 10 industrial bonds. ⁴ Effective July 1976, the index includes 400 industrial stocks (formerly 425), 20 transportation (formerly 15 rail), 40 public utility (formerly 60), and 40 financial stocks, not previously covered. ⁵ Source: New York Stock Exchange, Inc., New York, NY, *Fact Book*, annual. ⁶ Source: National Association of Securities Dealers, Washington, DC, *Fact Book*, annual. OTC=over-the-counter. ⁷ Based on stocks listed on the New York Stock Exchange. ⁸ Represents return on the market value of all common equity securities for which daily pricing is available, beginning 1980, annual average of daily figures. Source: Wilshire Associates, Santa Monica, CA, releases. ⁹ Represents Dec. 31, 1970.

Source: Except as noted, Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly.

Figure 16.3
Stock Price Indexes: 1980 to 1988



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 837.

No. 838. BOND AND STOCK YIELDS: 1970 TO 1988

[Percent per year. Annual averages of monthly data, except as indicated. See also *Historical Statistics, Colonial Times to 1970, series X 474-491*]

TYPE	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
U.S. Treasury, constant maturities: 1 2											
3-year	7.29	7.49	11.55	14.44	12.92	10.45	11.89	9.64	7.06	7.68	8.26
5-year	7.38	7.77	11.48	14.24	13.01	10.80	12.24	10.13	7.31	7.94	8.47
10-year	7.35	7.99	11.46	13.91	13.00	11.11	12.44	10.62	7.68	8.39	8.85
U.S. Govt., long-term bonds 2 3	6.58	6.98	10.81	12.87	12.23	10.84	11.98	10.75	8.14	8.64	8.98
State and local govt. bonds, Aaa 4	6.12	6.42	7.86	10.42	10.86	8.80	9.61	8.60	6.95	7.12	7.35
State and local govt. bonds, Baa 4	6.75	7.62	9.02	11.76	12.46	10.17	10.38	9.58	7.75	8.17	7.84
High-graded municipal bonds (Standard & Poor's) 5	6.51	6.89	8.51	11.23	11.57	9.47	10.15	9.18	7.38	7.73	7.76
Municipal (Bond Buyer, 20 bonds) 6	6.35	7.05	8.59	11.33	11.86	9.51	10.10	9.11	7.32	7.64	7.68
Corporate Aaa seasoned 4	8.04	8.83	11.94	14.17	13.79	12.04	12.71	11.37	9.02	9.38	9.71
Corporate Baa seasoned 4	9.11	10.61	13.67	16.04	16.11	13.55	14.19	12.72	10.39	10.58	10.83
Corporate, by years to maturity: 4											
AA Industrial, 10 years	(NA)	8.28	12.05	14.61	13.98	11.60	12.91	11.11	8.35	8.91	9.70
AAA Utilities, 30 years	8.72	9.17	12.57	15.61	14.95	12.21	13.46	11.79	9.15	9.40	9.46
A Utilities, 30 years	9.17	10.33	13.68	16.68	15.84	12.82	13.87	12.20	9.63	9.99	10.18
Corporate (Moody's) 4	8.51	9.57	12.75	15.06	14.94	12.78	13.49	12.05	9.71	9.91	10.18
Industrials (37 bonds) 8	8.26	9.25	12.35	14.50	14.54	12.25	13.21	11.80	9.96	9.83	9.91
Railroads (13 bonds) 9	8.77	9.39	11.48	13.22	13.68	12.08	13.07	11.84	9.85	9.63	10.03
Public utilities (40 bonds) 9	8.68	9.88	13.15	15.62	15.33	13.31	14.03	12.29	9.46	9.98	10.45
Stocks (Standard & Poor's): 9											
Preferred (10 stocks) 10	7.22	8.36	10.60	12.36	12.53	11.02	11.59	10.49	8.76	8.37	9.23
Common: Composite (500 stocks) 10	3.83	4.31	5.28	5.20	5.81	4.40	4.64	4.25	3.48	3.08	3.64
Industrials (400 stocks) 10	3.62	3.96	4.95	4.90	5.48	4.04	4.05	3.76	3.09	2.62	3.14

NA Not available. 1 Yields on the more actively traded issues adjusted to constant maturities by the U.S. Treasury. 2 Yields are based on closing bid prices quoted by at least five dealers. 3 Averages (to maturity or call) for all outstanding bonds neither due nor callable in less than 10 years, including several very low yielding "flower" bonds. 4 Source: Moody's Investors Service, New York, NY. 5 Source: Standard & Poor's Corp., New York, NY, *Standard & Poor's Outlook*, weekly. 6 Based on first trading day of each month, deferred call, new issue estimate. Source: Salomon Brothers, Inc., New York, NY, *An Analytical Record of Yields and Yield Spreads*. 7 The Aaa public utility average was suspended on Jan. 17, 1984 because of a lack of appropriate issues. The average corporate does not include Aaa utilities from Jan. 17 to Oct. 12. The Aaa utility average was reinstated on Oct. 12. Thirty public utility bonds were used during the period Jan. 17-Oct. 12, 1984. 8 Covers 40 bonds for period 1970-1983 and 38 bonds for 1984-1986. 9 Covers 23 bonds for period 1970-1981, 15 bonds for 1982, and 17 bonds for 1983. 10 Yields based on 10 stocks, 4 yields. Issues converted to a price equivalent to \$100 par and a 7 percent annual dividend before averaging.

Source: Except as noted, Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly.

No. 839. SALES OF STOCKS AND OPTIONS ON REGISTERED EXCHANGES: 1970 TO 1988

[Excludes over-the-counter trading. See also *Historical Statistics, Colonial Times to 1970, series X 517-530*]

EXCHANGE	Unit	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
Market value of all sales, all exchanges 1 2	Bil. dol.	136	522	532	657	1,023	1,004	1,260	1,868	2,492	1,699
New York	Bil. dol.	108	398	416	515	816	815	1,024	1,453	1,987	1,380
American	Bil. dol.	15	47	40	34	48	32	38	63	102	59
Midwest	Bil. dol.	5	21	25	35	60	62	79	102	122	87
Chicago	Bil. dol.	-	28	22	32	39	35	38	56	124	64
Pacific	Bil. dol.	5	13	13	21	31	31	40	55	71	46
Philadelphia	Bil. dol.	3	11	11	14	20	19	23	35	48	34
STOCKS 3											
Shares sold, all exchanges 2	Million	4,539	15,488	15,910	22,414	30,146	30,458	37,046	48,338	63,771	52,474
New York	Million	3,213	12,390	12,843	18,211	24,253	25,150	30,222	39,258	53,038	44,018
American	Million	879	1,659	1,472	1,550	2,209	1,584	2,115	2,999	3,496	2,576
Midwest	Million	149	598	735	1,144	1,662	1,843	2,274	2,784	3,329	2,771
Pacific	Million	165	435	457	810	1,070	1,006	1,352	1,750	2,034	1,522
Market value, all exchanges 2	Bil. dol.	131	476	491	603	957	951	1,200	1,705	2,284	1,584
New York	Bil. dol.	103	398	416	514	815	814	1,023	1,450	1,983	1,378
American	Bil. dol.	14	35	26	20	31	21	26	43	53	31
Midwest	Bil. dol.	5	21	25	35	60	62	79	102	122	87
Pacific	Bil. dol.	5	11	11	18	27	28	37	51	57	39
OPTIONS 4											
Contracts traded, all exchanges 2	Million	(NA)	97	109	137	149	197	233	289	305	196
Chicago	Million	(NA)	53	58	76	82	123	149	180	182	112
American	Million	(NA)	29	35	39	39	40	49	65	71	45
Market value of contracts traded, all exchanges 2	Bil. dol.	(NA)	45.8	41.7	53.7	64.2	53.0	69.1	87.9	118.9	62.6
Chicago	Bil. dol.	(NA)	27.9	22.4	32.3	39.4	34.9	38.4	55.8	76.9	39.7
American	Bil. dol.	(NA)	12.5	13.8	14.3	15.8	10.5	11.6	19.0	25.7	12.4
Options exercised:											
Number of contracts	Million	(NA)	4.9	7.4	9.2	13.6	11.9	10.5	14.5	17.0	11.4
Value	Bil. dol.	(NA)	20.4	34.8	37.1	65.1	55.6	49.2	72.8	85.9	51.5

- Represents zero. NA Not available. 1 Includes market value of rights and warrants and, for 1970, bond sales. Excludes the value of options exercised. 2 Includes other registered exchanges, not shown separately. 3 Includes voting trust certificates, American Depository Receipts, and certificate of deposit for stocks. 4 Includes non-equity options as of October 1982.

Source: U.S. Securities and Exchange Commission, *SEC Monthly Statistical Review* (discontinued Feb. 1989) and unpublished data.

NO. 840. FOREIGN PURCHASES AND SALES OF U.S. SECURITIES, BY TYPE OF SECURITY, 1980 TO 1988, AND BY SELECTED COUNTRY, 1987 AND 1988

[In billions of dollars. Covers transactions in all types of long-term domestic and foreign securities by foreigners as reported by banks, brokers, and other entities in the United States (except non-marketable U.S. Treasury notes, foreign series; and nonmarketable U.S. Treasury bonds and notes, foreign currency series). Data cover new issues of securities, transactions in outstanding issues, and redemptions of securities. Includes transactions executed in the U.S. for the account of foreigners, and transactions executed abroad for the account of reporting institutions and their domestic customers. Data by country show the country of domicile of the foreign buyers and sellers of the securities; in the case of outstanding issues, this may differ from the country of the original issuer. The term "foreigner" covers all institutions and individuals domiciled outside the U.S., including U.S. citizens domiciled abroad, and the foreign branches, subsidiaries and other affiliates abroad of U.S. banks and businesses; the central governments, central banks, and other official institutions of foreign countries; and international and regional organizations. "Foreigner" also includes persons in the U.S. to the extent that they are known by reporting institutions to be acting on behalf of foreigners. Minus sign (-) indicates net sales by foreigners or a net outflow of capital from the U.S.]

YEAR AND COUNTRY	NET PURCHASES					TOTAL TRANSACTIONS ⁴				
	Total	Treas- ury bonds and notes ¹	U.S. Govt. corpora- tions ² bonds	Corpo- rate bonds ³	Corpo- rate stocks	Total	Treas- ury bonds and notes ¹	U.S. Govt. corpora- tions ² bonds	Corpo- rate bonds ³	Corpo- rate stocks
1980.....	15.8	4.9	2.6	2.9	5.4	198.0	97.4	16.9	8.5	75.2
1983.....	11.7	5.4	(-2)	.9	5.4	435.2	253.9	28.1	19.0	134.1
1984.....	31.4	21.5	1.2	11.7	-3.0	639.5	451.2	32.5	33.2	122.6
1985.....	75.3	29.2	4.3	39.8	4.9	1,256.1	968.0	45.6	83.5	159.0
1986.....	88.8	19.4	7.0	43.7	18.7	2,622.5	2,149.3	67.2	128.5	277.5
1987, total ⁵	69.4	25.8	5.0	22.5	16.3	3,315.4	2,649.3	80.6	103.6	482.0
United Kingdom.....	24.4	4.0	1.5	18.3	.6	782.0	604.8	17.5	55.7	103.9
Japan.....	13.9	.9	1.1	.5	11.4	1,196.7	1,050.9	30.8	12.4	102.6
Canada.....	6.9	4.5	.3	1.0	1.0	182.3	127.8	1.5	3.1	49.9
West Germany.....	13.3	13.3	.2	-.2	-.1	112.1	89.7	1.4	4.9	16.2
Switzerland.....	2.4	1.9	(-2)	1.6	-1.1	94.8	28.3	.6	6.4	59.5
France.....	1.4	.3	(-2)	.2	.9	42.6	19.8	.6	2.2	20.1
1988, total ⁵	74.8	48.8	6.7	21.3	-2.0	3,579.3	3,070.6	56.1	88.6	364.1
United Kingdom.....	21.8	9.7	1.2	11.9	-.1	924.8	799.2	16.3	36.0	73.4
Japan.....	31.4	21.8	2.8	4.9	1.9	1,372.8	1,223.6	29.5	21.2	104.6
Canada.....	5.6	3.8	.3	.4	1.1	149.4	110.3	1.1	4.0	33.9
West Germany.....	-3.8	-3.3	.4	1.0	.2	96.2	79.7	1.5	4.1	11.0
Switzerland.....	-2.8	-1.1	.2	.3	-2.2	63.8	24.8	.4	3.7	34.9
France.....	1.8	1.9	.1	.1	-.3	47.2	32.4	.5	2.3	12.0

² Less than \$50 million. ¹ Marketable bonds and notes. ² Includes federally sponsored agencies. ³ Includes transactions in directly placed issues abroad by U.S. corporations and issues of States and municipalities. ⁴ Total purchases plus total sales. ⁵ Includes other countries, not shown separately.

NO. 841. UNITED STATES PURCHASES AND SALES OF FOREIGN STOCKS AND BONDS, 1980 TO 1988, AND BY SELECTED COUNTRY, 1987 AND 1988

[In billions of dollars. See headnote, table 840. Minus sign (-) indicates net sales by U.S. investors or a net inflow of capital into the United States]

YEAR AND COUNTRY	NET PURCHASES			TOTAL TRANSACTIONS ¹			PURCHASES		SALES	
	Total	Bonds	Stocks	Total	Bonds	Stocks	Bonds	Stocks	Bonds	Stocks
1980.....	3.1	1.0	2.1	53.1	35.2	17.9	18.1	10.0	17.1	7.9
1983.....	7.0	3.2	3.8	108.2	75.9	30.3	39.6	17.0	36.3	13.3
1984.....	5.0	3.9	1.1	146.7	116.0	30.7	59.9	15.9	56.0	14.8
1985.....	7.9	4.0	3.9	212.1	166.4	45.7	85.2	24.8	81.2	20.9
1986.....	5.5	3.7	1.9	437.8	337.7	100.2	170.7	51.0	167.0	49.1
1987, total ²	6.9	7.9	-1.1	596.0	406.1	189.8	207.0	94.4	199.1	95.5
United Kingdom.....	12.5	9.2	3.3	231.9	164.1	67.9	86.6	35.6	77.4	32.3
Japan.....	-5.6	.9	-6.5	143.4	95.6	47.8	48.2	20.8	47.3	27.1
Canada.....	4.1	1.7	2.4	40.7	21.8	18.9	11.8	10.6	10.1	8.3
West Germany.....	-1.7	-1.3	-.4	49.0	34.3	8.7	16.5	4.1	17.8	4.5
Switzerland.....	1.0	1.3	.7	12.4	6.1	6.3	3.2	3.5	2.9	2.8
France.....	1.1	.3	-.2	18.0	11.9	6.1	6.6	3.0	5.3	3.2
1988, total ²	12.0	10.2	1.9	594.5	443.1	151.4	226.6	76.6	216.5	74.8
United Kingdom.....	6.5	6.1	.4	227.1	175.8	51.3	91.0	25.8	84.9	25.4
Japan.....	.1	-.6	.7	119.8	69.5	50.4	34.5	25.5	35.0	24.8
Canada.....	3.8	4.3	-.5	46.8	37.2	9.6	20.7	4.6	16.5	5.1
West Germany.....	-1.2	-1.5	.3	34.8	30.2	4.6	14.4	2.4	15.8	2.2
Switzerland.....	-.5	-1.0	.5	16.3	11.0	5.3	5.0	2.9	6.0	2.4
France.....	.8	.4	.4	25.9	21.8	4.0	11.1	2.2	10.7	1.8

¹ Total purchases plus total sales. ² Includes other countries, not shown separately.

Source of tables 840 and 841: U.S. Dept. of Treasury, *Treasury Bulletin*, quarterly.

NO. 842. NEW SECURITY ISSUES OF CORPORATIONS, BY TYPE OF OFFERING AND INDUSTRY GROUP: 1983 TO 1988

[In billions of dollars. Represents gross proceeds of issues maturing in more than one year. Figures are the principal amount or the number of units multiplied by the offering price. Excludes secondary offerings, employee stock plans, investment companies other than closed-end, intracorporate transactions, equities sold abroad, and Yankee bonds. Stock data include ownership securities issued by limited partnerships]

TYPE OF OFFERING AND INDUSTRY GROUP	1983	1984	1985	1986	1987	1988	TYPE OF OFFERING AND INDUSTRY GROUP	1983	1984	1985	1986	1987	1988
Total	128.3	155.7	239.0	423.7	392.2	408.8	Stocks, total.....	51.6	22.6	35.5	68.4	66.5	57.8
Bonds, total.....	76.7	133.1	203.5	355.3	325.6	351.0	Public, preferred.....	7.2	4.1	8.5	11.5	10.1	6.5
Public, domestic.....	47.2	74.2	119.6	231.9	209.3	200.1	Common.....	44.4	18.5	29.0	50.3	43.2	35.9
Private placement, domestic.....	21.1	36.2	46.2	80.8	92.1	127.7	Private placement.....	(NA)	(NA)	(NA)	6.6	13.2	15.4
Sold abroad.....	8.3	22.6	37.8	42.6	24.3	23.2	Manufacturing.....	14.1	4.1	5.7	15.0	13.9	7.6
Manufacturing.....	19.5	32.8	64.0	91.5	61.7	69.7	Commercial and miscellaneous.....	13.1	6.3	9.1	10.6	12.9	8.4
Commercial.....	8.6	14.8	17.1	40.1	49.3	61.8	Transportation.....	2.7	.6	1.5	2.4	2.4	1.5
Miscellaneous.....	3.9	4.8	6.0	10.0	12.0	10.0	Public utility.....	5.0	1.6	2.0	4.0	4.3	1.9
Transportation.....	9.4	11.0	13.6	31.4	23.0	19.3	Communication.....	1.8	.4	1.0	1.8	1.5	.5
Public utility.....	3.9	3.4	10.8	16.7	7.3	5.9	Real estate and financial.....	14.8	9.7	16.2	34.5	31.5	37.8
Communication.....	31.5	66.3	92.0	165.6	172.3	184.3							
Real estate and financial.....													

NA Not available.

Source: Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly, and *Annual Statistical Digest*.

NO. 843. VOLUME OF TRADING ON NEW YORK STOCK EXCHANGE: 1970 TO 1988

[Round lot: A unit of trading or a multiple thereof. On the NYSE the unit of trading is generally 100 shares in stocks. For some inactive stocks, the unit of trading is 10 shares. Odd lot: An amount of stock less than the established 100-share unit or 10-share unit of trading]

ITEM	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
Shares traded	Million	3,124	4,839	11,562	12,049	16,669	21,846	23,309	27,774	36,009	48,143	41,118
Round lots.....	Million.....	2,937	4,693	11,352	11,854	16,458	21,590	23,071	27,511	35,680	47,801	40,850
Average daily shares.....	Million.....	11.6	18.6	44.9	46.9	65.1	85.3	91.2	109.2	141.0	189.0	161.5
High day.....	Million.....	21.3	35.2	84.3	92.9	149.4	129.4	236.6	181.0	244.3	608.1	343.9
Low day.....	Million.....	6.7	8.7	16.1	23.9	36.8	53.0	46.4	62.1	48.9	86.7	72.1
By size: ¹												
At 100-900 shares ²	Percent.....	(NA)	42.1	24.7	21.1	16.2	14.6	11.3	10.6	10.8	13.6	12.6
At 1,000-4,900 shares ³	Percent.....	(NA)	31.4	32.2	31.0	28.5	26.7	25.1	24.1	25.7	21.1	19.8
At 5,000-9,900 shares.....	Percent.....	(NA)	8.7	11.4	12.1	12.8	12.7	13.8	13.8	13.9	14.1	67.6
At 10,000 or more shares ⁴	Percent.....	(NA)	17.9	31.7	35.8	42.5	46.0	49.8	51.5	49.6	51.2	
Odd lots.....	Million.....	186	146	209	196	211	256	238	263	329	342	268
Value of shares traded	Bil. dol.	102.5	131.7	382.4	396.1	495.1	775.3	773.4	980.8	1,388.8	1,888.7	1,365.9
Round lots.....	Bil. dol.....	95.3	126.7	374.9	389.2	488.4	765.3	764.7	970.5	1,374.3	1,873.6	1,356.0
Odd lots.....	Bil. dol.....	7.2	5.0	7.5	6.9	6.7	10.1	8.7	10.3	14.5	15.1	9.8
Bond volume ⁵	Mill. dol.	4,495	5,178	5,190	5,733	7,155	7,572	6,982	9,046	10,464	9,727	7,702
Daily average.....	Mill. dol.....	17.7	20.5	20.5	22.7	28.3	29.9	27.6	35.9	41.4	38.4	30.4

NA Not available. ¹ Share volume of reported trades by size (percent of total) on New York Stock Exchange.

² For 1988, at 100-1,000 shares. ³ For 1988, at 1,000-4,900 shares. ⁴ Includes bunched orders at the opening and re-opening of trading. ⁵ Par value.

Source: New York Stock Exchange, Inc., New York, NY, *Fact Book*, annual.

NO. 844. NASDAQ—SECURITIES LISTED AND VOLUME OF TRADING: 1975 TO 1988

ITEM	Unit	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
Companies listed.....	Number.....	2,467	2,894	3,353	3,264	3,901	4,097	4,136	4,417	4,706	4,451
Issues.....	Number.....	2,579	3,050	3,687	3,664	4,467	4,723	4,784	5,189	5,537	5,144
Shares traded.....	Million.....	1,390	6,692	7,823	8,432	15,909	15,159	20,699	28,737	37,890	31,070
Average daily volume.....	Million.....	5.5	26.5	30.9	33.3	62.8	59.9	82.1	113.6	149.8	122.8
Value of shares traded.....	Bil. dol.....	21.2	68.7	71.1	84.2	188.3	153.5	233.5	378.2	499.9	347.1

Source: National Association of Securities Dealers, Washington, DC, *Fact Book*, annual.

NO. 845. SECURITIES LISTED ON N.Y. STOCK EXCHANGE: 1970 TO 1988

[As of December 31, except cash dividends are for calendar year]

ITEM	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
Bonds:												
Number of issuers	Number	843	1,066	1,045	1,049	1,031	1,034	1,024	1,010	951	885	846
Number of issues	Number	1,729	2,632	3,057	3,110	3,233	3,600	3,751	3,856	3,611	3,346	3,106
Face value	Bil. dol.	135	334	602	681	793	965	1,084	1,327	1,380	1,651	1,610
Market value	Bil. dol.	113	315	508	574	766	898	1,022	1,339	1,458	1,621	1,610
Average price	Percent	83.60	91.89	84.41	84.24	96.67	93.04	94.29	100.90	105.66	98.20	96.94
Stocks:												
Companies	Number	1,351	1,557	1,570	1,565	1,526	1,550	1,543	1,541	1,575	1,647	1,681
Number of issues	Number	1,840	2,111	2,228	2,220	2,225	2,307	2,319	2,298	2,257	2,244	2,234
Shares listed	Billion	16.1	22.5	33.7	38.3	39.5	45.1	49.1	52.4	59.6	72.0	76.1
Market value	Bil. dol.	636	685	1,243	1,144	1,305	1,584	1,586	1,950	2,199	2,216	2,457
Average price	Dollars	39.61	30.48	36.87	29.67	33.03	35.11	32.31	37.20	36.89	30.87	32.30
Cash dividends on common stock	Bil. dol.	19.8	26.9	53.1	60.6	62.2	67.1	68.2	74.2	76.2	84.4	102.2

Source: New York Stock Exchange, Inc., New York, NY, *Fact Book*, annual.

NO. 846. COMMODITY FUTURES TRADING ON U.S. EXCHANGES—VOLUME OF TRADING: 1970 TO 1988

[In millions. 1970 for year ending June 30; thereafter, for years ending Sept. 30]

COMMODITY	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
Number of contracts traded	12.4	62.7	101.1	107.5	136.1	148.8	152.6	183.1	213.5	241.8
Grain	2.2	18.3	19.8	14.9	17.8	15.9	10.7	10.3	10.9	15.9
Oilseeds/products	3.7	15.7	23.8	15.8	19.8	23.5	14.9	13.8	14.2	22.5
Livestock/products	3.4	11.8	9.8	11.0	11.1	9.4	7.9	8.8	8.8	9.6
Other agriculturals	2.0	7.8	4.6	4.9	6.3	6.0	5.1	6.7	5.7	9.8
Energy products	-	1.1	3.3	2.3	3.2	4.9	7.0	11.5	20.3	26.3
Metals	1.1	14.1	17.9	19.3	26.3	22.4	18.4	16.2	19.4	18.9
Financial instruments	-	10.2	20.1	31.3	40.1	51.0	72.1	96.9	114.3	117.6
Currencies	-	3.7	5.4	8.3	11.4	16.7	16.4	19.1	19.9	21.2

- Represents zero.

Source: U.S. Commodity Futures Trading Commission, *Annual Report*.

NO. 847. MUTUAL FUNDS—SUMMARY: 1970 TO 1988

[See also *Historical Statistics, Colonial Times to 1970, series X 536-539*]

TYPE OF FUND	Unit	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
Number of funds, total											
Money market funds	Number	361	564	665	857	1,026	1,246	1,531	1,843	2,323	2,718
Equity funds	Number	(x)	96	159	281	307	329	348	360	389	432
Income and bond funds	Number	294	267	266	320	374	466	574	700	847	1,015
Municipal bond funds	Number	(x)	67	149	154	189	201	240	323	409	565
Short-term municipal bond funds ¹	Number	(x)	10	20	37	66	97	112	127	154	175
Shareholder accounts, total											
Equity, bond, and income funds	Millions	(NA)	12.1	17.5	21.4	24.6	28.2	35.0	46.1	54.7	54.7
Money market funds and short-term municipal bond funds ¹	Millions	(NA)	7.3	7.2	8.2	12.1	14.4	20.0	29.8	37.0	36.0
Assets, total											
Money market funds	Bil. dol.	47.6	134.7	241.4	296.8	292.9	370.7	495.5	718.3	769.9	810.2
Equity funds	Bil. dol.	(x)	74.4	181.9	206.6	162.5	209.7	207.5	226.3	254.7	272.3
Income and bond funds	Bil. dol.	45.1	44.4	41.2	53.9	77.0	83.1	116.9	161.5	180.6	194.8
Municipal bond funds	Bil. dol.	2.5	11.1	11.0	15.8	22.0	33.3	95.4	187.0	196.2	190.8
Short-term municipal bond funds ¹	Bil. dol.	(x)	2.9	3.1	7.4	14.8	20.8	39.4	75.7	77.0	86.7
	Bil. dol.	(x)	1.9	4.2	13.2	16.8	23.8	36.3	63.8	61.4	65.6
Sales, total											
Money market funds	Bil. dol.	4.5	247.5	472.2	627.0	547.8	680.1	963.8	1,205.7	1,251.6	1,177.0
Equity funds	Bil. dol.	(x)	232.2	451.9	581.8	463.0	572.0	730.1	792.3	869.1	903.4
Income and bond funds	Bil. dol.	4.2	5.6	6.0	8.3	22.4	20.3	30.1	57.7	72.1	31.0
Municipal bond funds	Bil. dol.	4	2.6	2.3	4.0	8.8	15.7	64.8	118.3	89.7	43.5
Short-term municipal bond funds ¹	Bil. dol.	(x)	1.8	1.5	3.5	9.1	9.8	19.4	39.9	28.9	20.8
	Bil. dol.	(x)	5.3	10.5	29.4	44.5	62.3	109.4	197.5	191.8	176.3
Redemptions, total											
Money market funds	Bil. dol.	3.0	216.5	362.8	588.4	565.8	607.0	864.9	1,015.6	1,178.8	1,166.9
Equity funds	Bil. dol.	(x)	204.5	346.7	559.6	508.7	531.0	732.3	776.3	865.7	899.4
Income and bond funds	Bil. dol.	2.8	5.7	5.1	5.2	8.3	10.9	18.2	27.2	40.2	34.8
Municipal bond funds	Bil. dol.	2	1.5	1.6	1.7	3.1	5.1	11.1	30.7	58.6	45.0
Short-term municipal bond funds ¹	Bil. dol.	(x)	1.0	8	7	2.3	4.1	4.3	9.1	17.4	12.7
	Bil. dol.	(x)	3.8	8.3	21.2	42.4	55.9	98.8	172.3	196.9	175.0

NA Not available. X Not applicable. ¹The average maturity of the portfolio is generally less than two years.

Source: Investment Company Institute, Washington, DC, *Mutual Fund Fact Book*, annual. (Copyright.)

NO. 848. SECURITIES INDUSTRY—REVENUES AND EXPENSES: 1980 TO 1988

[In millions of dollars. Data provided by U.S. Securities and Exchange Commission cover all securities firms]

TYPE	ALL SECURITIES FIRMS								MEMBERS OF NY STOCK EXCHANGE ¹	
	1980	1981	1982	1983	1984	1985	1986	1987	1987	1988
Revenues, total	19,984	24,372	28,801	38,904	39,607	49,844	64,424	66,343	50,811	51,825
Commissions	6,800	6,589	7,370	10,382	9,270	10,955	13,877	16,560	12,846	8,784
Trading/investment gains	5,116	6,036	8,535	9,842	10,761	14,549	18,145	14,429	10,041	12,685
Underwriting profits	1,594	1,860	2,688	4,090	3,249	4,987	6,743	5,719	5,157	5,158
Margin interest	2,157	3,020	2,070	2,233	2,971	2,746	3,022	3,496	3,352	3,029
Mutual fund sales	278	342	629	1,493	1,452	2,754	4,540	4,068	2,209	1,414
Other	4,039	6,525	7,509	8,853	11,905	13,854	17,998	22,072	17,408	20,756
Expenses, total	16,931	21,583	24,728	31,697	36,751	43,342	56,123	63,199	49,639	49,335
Interest expense	3,893	6,506	6,452	6,847	10,893	11,470	14,233	16,728	14,271	16,311
Compensation	7,809	8,831	10,535	14,555	14,431	18,112	23,936	26,632	20,554	18,730
Commissions/clearance paid	1,079	1,104	1,299	1,787	1,907	2,314	2,995	3,543	2,188	1,754
Other	4,150	5,142	6,442	8,508	9,720	11,446	14,959	17,296	12,625	12,539
Net income, pre-tax	3,053	2,789	4,073	5,207	2,857	6,502	8,301	3,144	1,172	2,490

¹ Covers all members of New York Stock Exchange doing public business. These firms represent 77% of the total revenues of all securities firms. Source: Securities Industry Association, New York, NY, *Securities Industry Trends*, periodic.

Source: Except as noted, U.S. Securities and Exchange Commission, *Annual Report*.

NO. 849. U.S. LIFE INSURANCE COMPANIES—SUMMARY: 1970 TO 1988

[As of December 31 or calendar year, as applicable. Covers domestic and foreign business of U.S. companies. See also *Historical Statistics, Colonial Times to 1970*, series X 879 and X 890-917]

ITEM	Unit	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
U.S. companies	Number	1,780	1,958	1,991	2,060	2,117	2,193	2,261	2,254	2,337	2,395
Sales ¹	Bil. dol.	207	655	1,139	920	1,279	1,390	1,530	1,578	1,656	1,716
Ordinary	Bil. dol.	135	462	700	661	972	1,074	1,187	1,178	1,267	1,287
Group ²	Bil. dol.	65	190	436	257	306	315	342	400	386	428
Industrial	Bil. dol.	7	4	3	2	2	2	1	(z)	(z)	(z)
Income	Bil. dol.	49.1	130.9	151.9	170.0	176.0	206.1	234.0	282.3	314.3	338.1
Life insurance premiums	Bil. dol.	21.7	40.8	46.3	50.8	50.3	51.3	60.1	66.2	76.7	73.5
Percent of total	Percent	44.2	31.2	30.5	29.9	28.6	24.9	25.7	23.5	24.4	21.7
Annuity considerations	Bil. dol.	3.7	22.4	27.6	34.6	30.5	42.8	53.9	83.7	86.7	103.3
Health insurance premiums	Bil. dol.	11.4	29.4	31.8	35.0	38.2	40.7	41.8	44.2	47.6	52.3
Investment and other	Bil. dol.	12.3	38.3	46.2	49.6	57.0	71.3	78.2	88.2	101.3	109.0
Disbursements	Bil. dol.	39.0	88.2	101.8	113.3	123.5	138.5	151.8	186.5	202.3	221.4
Payments to policyholders ²	Bil. dol.	25.6	59.0	65.1	71.2	80.9	89.8	95.7	131.4	144.4	156.8
Percent of total	Percent	65.6	66.9	63.9	62.8	65.5	64.8	63.0	70.5	71.4	70.8
Death payments	Bil. dol.	7.2	12.9	13.4	14.5	16.8	17.6	18.5	19.6	20.7	22.4
Matured endowments	Bil. dol.	1.0	8	7	6	6	7	8	8	8	8
Annuity payments	Bil. dol.	1.7	7.4	9.6	10.3	12.7	16.0	19.7	17.8	20.3	21.9
Policy dividends	Bil. dol.	3.8	8.1	9.3	9.6	10.8	11.4	12.4	12.4	13.0	13.8
Surrender values ³	Bil. dol.	2.9	6.4	7.1	9.8	12.5	14.5	15.9	49.6	53.7	58.1
Disability benefits	Bil. dol.	2	5	6	5	5	4	5	5	5	4
Commissions, expenses, etc. ³	Bil. dol.	12.9	27.8	35.1	40.3	40.7	46.0	53.1	51.4	54.7	61.3
Dividends to stockholders	Bil. dol.	5	1.4	1.6	1.8	1.9	2.7	3.0	3.7	3.3	3.4
BALANCE SHEET											
Assets	Bil. dol.	207.3	479.2	525.8	588.2	654.9	723.0	825.9	937.6	1,044.5	1,186.9
Government securities	Bil. dol.	11.1	33.0	39.5	55.5	76.8	99.8	124.6	144.6	151.4	159.8
Corporate securities	Bil. dol.	89.5	227.0	241.5	268.5	297.0	322.5	374.2	432.9	502.2	584.7
Percent of total assets	Percent	42.7	47.4	45.9	45.7	45.3	44.6	45.3	46.2	48.1	50.1
Bonds	Bil. dol.	73.1	179.8	193.8	212.8	232.1	259.1	296.8	342.0	405.7	480.3
Stocks	Bil. dol.	15.4	47.4	47.7	55.7	64.9	63.4	77.5	90.9	96.5	104.4
Mortgages	Bil. dol.	74.4	131.1	137.7	142.0	151.0	156.7	171.8	193.8	213.5	232.9
Real estate	Bil. dol.	6.3	15.0	18.3	20.6	22.2	25.7	28.8	31.6	34.2	37.4
Policy loans	Bil. dol.	16.1	41.4	48.7	53.0	54.1	54.5	54.4	54.1	53.6	54.2
Other	Bil. dol.	10.9	31.7	40.1	48.6	54.0	63.8	72.0	80.6	89.6	97.9
Interest earned on assets ⁴	Percent	5.30	8.02	8.57	8.91	8.96	9.45	9.63	9.95	9.10	9.03
Liabilities ⁵	Bil. dol.	199.9	444.8	488.4	546.7	608.5	672.6	769.1	873.4	977.1	1,091.9
Policy reserves ⁶	Bil. dol.	167.8	390.4	428.0	479.4	532.4	584.2	665.3	761.9	862.1	969.0
Annuities	Bil. dol.	48.9	181.5	209.1	252.4	296.5	341.7	410.6	486.6	561.7	642.2
Group	Bil. dol.	34.0	140.4	161.0	191.9	221.7	254.6	303.0	355.8	392.5	433.9
Individual ⁶	Bil. dol.	14.9	41.0	48.1	60.5	74.8	87.1	107.6	132.8	169.2	208.3
Life insurance	Bil. dol.	115.4	197.9	207.0	213.8	221.0	225.9	235.9	252.0	276.4	299.9
Health insurance	Bil. dol.	3.5	11.0	11.9	13.2	15.0	16.6	18.8	21.3	24.0	26.9
Capital and surplus ⁷	Bil. dol.	17.3	34.4	37.4	41.5	46.4	50.4	56.8	64.1	67.4	75.0

² Less than \$500 million. ³ Includes Servicemen's Group Life Insurance: \$16.8 billion in 1970, \$44.5 billion in 1981, and \$50.8 billion in 1986; as well as Federal Employees' Group Life Insurance: \$81.5 billion in 1981 and \$10.8 billion in 1986.

⁴ Includes operations of accident and health departments of life insurance companies. ⁵ Beginning in 1986, data not comparable to prior years due to change in accounting method. ⁶ Net rate. ⁷ Includes other obligations not shown separately. ⁸ Includes reserves for supplementary contracts with and without life contingencies.

Source: American Council of Life Insurance, Washington, DC, *Life Insurance Fact Book*, biennial, and unpublished data.

No. 850. U.S. LIFE INSURANCE COMPANIES—NEW LONG-TERM INVESTMENTS: 1970 TO 1988

[In billions of dollars, except percent. Long-term investments are investments of over 1 year in length. Minus sign (–) indicates decrease]

ITEM	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total	23.9	42.5	68.8	72.6	77.9	83.7	110.5	169.9	202.5	295.3	421.9	456.7	434.7
Annual percent change ¹	–3	19.7	3.2	5.6	7.3	7.4	32.1	53.7	19.2	45.8	42.9	8.3	–4.8
Government securities .....	.8	3.7	6.5	6.9	7.0	10.6	24.3	49.1	62.9	99.9	154.3	155.7	134.8
Corporate securities	10.9	22.5	36.0	33.5	36.4	42.5	56.8	86.9	104.0	144.6	205.4	239.5	235.1
Bonds	6.8	16.6	28.0	23.1	22.3	23.0	33.0	50.8	68.7	98.3	137.5	165.1	180.6
Stocks	4.1	5.9	8.0	10.4	14.1	19.5	25.8	36.1	35.3	46.3	67.9	74.4	54.5
Mortgages	7.2	9.8	17.8	20.7	19.7	13.5	11.5	20.1	20.1	35.1	45.4	44.2	45.7
Real estate .....	.9	2.1	2.2	2.8	3.3	4.5	4.5	4.3	6.0	6.0	7.1	7.1	8.4
Policy loans	4.1	4.6	6.3	8.7	11.5	12.6	11.4	9.5	9.5	9.7	9.7	10.2	10.7

¹ Change from immediate prior year.

No. 851. LIFE INSURANCE IN FORCE IN THE U.S.—SUMMARY: 1970 TO 1988

[As of December 31 or calendar year, as applicable. Covers life insurance with life insurance companies only. Represents all life insurance in force on lives of U.S. residents whether issued by U.S. or foreign companies. For definition of household, see text, section 1. See also *Historical Statistics, Colonial Times to 1970*, series X 879–889]

YEAR	LIFE INSURANCE IN FORCE					AVERAGE SIZE POLICY IN FORCE (dollars)				AVERAGE AMOUNT (\$1,000)		Dispos-able personal income per household (\$1,000)	
	Num-ber of poli-cies, total (mil.)	Value (bil. dol.)				Ordinary	Group	Indus-trial	Cred-it ¹	Per house-hold	Per in-sured house-hold		
		Total	Ordinary	Group	Indus-trial								Cred-it ¹
1970.....	955	1,402	731	545	38.6	87.9	6,110	6,910	500	1,000	22.1	26.6	11.3
1975.....	390	2,140	1,083	905	39.4	112.0	8,090	9,360	570	1,410	30.1	36.2	16.1
1980.....	402	3,541	1,781	1,579	36.0	165.2	11,920	13,410	620	2,110	43.8	53.5	25.7
1981.....	400	4,064	1,978	1,889	34.5	182.4	13,310	15,400	630	2,220	49.3	60.2	25.8
1982.....	390	4,477	2,217	2,066	32.8	161.1	15,140	18,830	630	2,410	53.6	66.2	27.1
1983.....	397	4,966	2,544	2,220	31.4	170.7	17,380	17,530	630	2,650	59.2	73.1	28.9
1984.....	385	5,500	2,888	2,392	30.1	190.0	19,970	18,780	630	2,880	64.5	79.6	31.3
1985.....	386	6,053	3,247	2,562	28.2	216.0	22,780	19,720	640	3,100	69.7	86.1	32.7
1986.....	391	6,720	3,658	2,801	27.2	233.9	25,540	20,720	650	3,310	76.0	93.8	34.1
1987.....	395	7,452	4,139	3,043	26.6	243.0	28,510	22,380	650	3,330	82.8	102.2	35.6
1988.....	391	8,020	4,512	3,232	25.5	251.0	31,390	23,410	660	3,570	87.6	108.2	38.0

¹ Insures borrower to cover consumer loan in case of death.

Source of tables 850 and 851: American Council of Life Insurance, Washington, DC, *Life Insurance Fact Book*, biennial.

No. 852. LIFE INSURANCE PURCHASES IN THE U.S.—NUMBER AND AMOUNT: 1970 TO 1988

[Excludes revivals, increases, dividend additions, and reinsurance acquired. Except for 1970, includes long-term credit insurance (life insurance on loans of more than 10 years' duration). See also headnote, table 851]

YEAR	NUMBER OF POLICIES PURCHASED (1,000)					AMOUNT PURCHASED (bil. dol.)						
	Total	Ordinary		Group	Indus-trial	Total ³	Ordinary		Group ²	Indus-trial		
		Total	Percent—				Total	Percent—				
			Whole life ¹					Term ²			Whole life ¹	Term ²
1970.....	23,769	10,968	90	10	5,219	7,582	193.1	122.8	59	41	63.7	6.6
1975.....	27,092	12,549	85	15	9,146	6,397	289.9	188.0	55	45	95.2	6.7
1980.....	29,007	14,750	78	22	11,379	2,878	572.8	385.6	43	57	183.4	3.8
1981.....	29,552	15,838	77	23	11,923	1,791	831.1	481.9	41	59	346.7	2.5
1982.....	28,894	15,614	76	24	11,930	1,350	837.9	585.4	40	60	250.5	1.9
1983.....	32,021	17,737	77	23	13,450	834	1,026.4	753.4	47	53	271.6	1.4
1984.....	33,012	17,695	77	23	14,605	712	1,114.8	820.3	55	45	293.5	.9
1985.....	33,880	17,104	78	22	16,243	533	1,231.2	910.9	62	38	319.5	.7
1986.....	34,623	16,811	77	23	17,507	305	1,308.8	933.6	61	39	374.7	.4
1987.....	33,153	16,225	75	25	16,698	230	1,352.5	986.7	57	43	365.5	.3
1988.....	31,589	15,579	81	19	15,793	217	1,406.9	995.7	61	39	410.8	.3

¹ Life insurance payable to a beneficiary at the death of the insured whenever that occurs. Premiums may be payable for a specified number of years or for life. Includes a small number of endowment and retirement income policies. ² Life insurance payable to a beneficiary only when an insured dies within a specified period. ³ Includes Servicemen's Group Life Insurance: \$17.1 billion in 1970; \$1.7 billion in 1975; \$45.6 billion in 1981, and \$51.0 billion in 1986; as well as Federal Employees' Group Life Insurance: \$84.4 billion in 1981 and \$10.8 billion in 1986.

Source: American Council of Life Insurance, Washington, DC, *Life Insurance Fact Book*, biennial.

NO. 853. LIFE INSURANCE—INSURANCE IN FORCE AND BENEFIT PAYMENTS BY STATE: 1988

[Applies to policyholders and payments in the U.S. For composition of regions, see fig. 1, inside front cover]

REGION, DIVISION, AND STATE	INSURANCE IN FORCE			Benefit pay- ments ¹ (mil. dol.)	DIVISION AND STATE	INSURANCE IN FORCE			Benefit pay- ments ¹ (mil. dol.)
	Policies (1,000)	Value (bil. dol.)	Avg. per house- hold (dol.)			Policies (1,000)	Value (bil. dol.)	Avg. per house- hold (dol.)	
U.S.	390,984	8,020	87,600	74,091					
Region:					South Atlantic—				
Northeast.....	80,507	1,841	96,800	20,244	Con.				
Midwest.....	97,907	1,972	87,700	19,940	Maryland.....	8,443	169	99,700	1,510
South.....	153,419	2,692	85,700	21,530	District of Columbia.....	2,306	51	207,600	332
West.....	59,257	1,515	81,200	12,977	Virginia.....	14,123	223	100,100	1,520
New England.....	20,406	484	99,400	4,950	West Virginia.....	3,082	43	60,400	443
Maine.....	1,760	31	66,300	289	North Carolina.....	12,911	205	83,900	1,539
New Hampshire.....	1,620	37	93,100	300	South Carolina.....	7,603	103	83,900	712
Vermont.....	877	17	79,500	168	Georgia.....	12,681	226	97,800	1,588
Massachusetts.....	8,552	216	97,100	2,356	Florida.....	17,712	351	71,300	3,640
Rhode Island.....	1,801	33	87,700	320	East South				
Connecticut.....	5,796	150	124,500	1,517	Central.....	32,267	440	77,800	3,567
Middle Atlantic.....	60,101	1,357	96,000	15,294	Kentucky.....	5,946	93	67,500	761
New York.....	26,532	632	93,000	7,432	Tennessee.....	9,900	154	83,200	1,436
New Jersey.....	11,777	317	111,300	3,585	Alabama.....	12,362	128	84,800	962
Pennsylvania.....	21,792	408	90,700	4,277	Mississippi.....	4,049	65	70,700	408
East North					West South				
Central.....	70,050	1,383	88,000	13,925	Central.....	40,662	849	87,400	6,428
Ohio.....	18,251	355	86,500	3,494	Arkansas.....	2,965	53	58,400	436
Indiana.....	9,641	171	82,300	1,693	Louisiana.....	8,219	132	85,200	1,048
Illinois.....	20,301	415	95,900	4,256	Oklahoma.....	4,026	89	72,000	899
Michigan.....	14,058	302	89,200	2,974	Texas.....	25,552	575	95,600	4,055
Wisconsin.....	7,801	140	76,900	1,508	Mountain.....	18,787	394	80,900	3,499
West North					Montana.....	1,132	21	68,900	187
Central.....	27,757	589	87,000	5,415	Idaho.....	1,300	26	73,000	216
Minnesota.....	6,366	147	90,700	1,273	Wyoming.....	597	15	82,400	123
Iowa.....	4,564	93	85,500	1,015	Colorado.....	5,053	118	93,300	1,036
Missouri.....	8,355	167	84,900	1,515	New Mexico.....	1,985	39	72,500	339
North Dakota.....	989	21	84,900	155	Arizona.....	5,043	101	78,600	954
South Dakota.....	934	22	80,700	184	Utah.....	2,274	46	86,900	386
Nebraska.....	2,513	56	90,500	552	Nevada.....	1,403	28	68,200	258
Kansas.....	4,056	83	87,300	721	Pacific.....	40,470	1,121	81,400	9,478
South Atlantic					Washington.....	5,208	133	73,300	1,230
Delaware.....	1,633	32	129,800	241	Oregon.....	3,283	73	65,900	724
					California.....	29,504	857	83,000	7,064
					Alaska.....	596	15	91,200	131
					Hawaii.....	1,879	42	120,000	329

¹ Comprises death payments, matured endowments, disability and annuity payments, surrender values, and policy dividends.Source: American Council of Life Insurance, Washington, DC, *Life Insurance Fact Book*, biennial.

NO. 854. PRIVATE HEALTH INSURANCE ORGANIZATIONS—INCOME AND EXPENSES: 1970 TO 1987

[In millions of dollars, except percent. Minus sign (–) indicates loss. Expenses are on incurred basis. See also *Historical Statistics, Colonial Times to 1970*, series X 957–962]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
All organizations:										
Total premium income.....	16,871	33,178	72,595	84,419	98,679	109,684	121,882	129,133	142,435	157,784
Claims expense.....	15,320	31,223	67,504	78,400	89,929	97,990	105,280	111,994	124,622	139,090
Percent of premium income.....	90.8	94.1	93.0	92.9	91.1	89.3	86.4	86.7	87.5	88.1
Operating expense.....	2,269	3,969	7,938	9,378	11,242	12,808	14,323	15,974	16,185	20,521
Net underwriting gain.....	–718	–2,014	–2,848	–3,359	–2,492	–1,114	2,279	1,166	–372	–1,817
Blue Cross-Blue Shield:										
Premium income.....	7,371	14,446	26,334	30,447	34,338	37,611	39,954	41,508	44,349	46,345
Claims expense.....	7,080	14,192	25,467	29,209	32,144	34,398	35,522	37,290	41,258	44,525
Operating expense.....	534	1,063	1,951	2,250	2,476	2,710	3,159	3,728	4,376	4,536
Net underwriting gain.....	–224	–809	–1,083	–1,012	–282	503	1,273	491	–1,285	–2,716
Insurance companies:¹										
Premium income.....	8,304	14,075	28,913	33,966	41,434	46,872	51,139	52,487	56,568	63,710
Claims expense.....	7,104	12,826	25,774	30,271	36,424	40,105	41,547	42,680	45,810	54,549
Net underwriting gain.....	–447	–1,374	–1,848	–2,256	–2,397	–1,689	417	–109	–281	–551
Other plans:										
Premium income.....	1,196	4,657	17,347	20,006	22,907	25,201	30,789	35,138	41,518	47,739

¹ Excludes administrative service agreements and hospital indemnity. Hospital indemnity is a form of health insurance which provides a stipulated daily, weekly, or monthly indemnity during hospital confinement. Indemnity is payable on an unallocated basis without regard to actual expense of hospital confinement.Source: U.S. Health Care Financing Administration, *Health Care Financing Review*, Winter 1988, and unpublished data.

NO. 855. HEALTH INSURANCE—PREMIUM INCOME AND BENEFIT PAYMENTS OF INSURANCE COMPANIES: 1970 TO 1987

[In billions of dollars. Beginning 1975, includes Puerto Rico and other U.S. outlying areas. Represents premium income of and benefits paid by insurance companies only. Excludes Blue Cross-Blue Shield plans, medical-society sponsored plans, and all other independent plans]

ITEM	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Premiums ¹	11.5	20.8	32.7	37.9	43.7	49.0	58.3	63.2	70.4	75.2	75.5	80.4
Group policies ²	8.1	15.9	26.9	31.7	38.8	42.5	50.0	54.9	60.8	64.4	65.9	70.3
Individual and family policies.....	3.4	4.9	5.8	6.2	6.9	6.5	8.3	8.3	9.6	10.8	9.6	10.1
Benefit payments	9.1	16.5	26.4	31.7	37.0	41.8	49.2	51.7	56.0	60.0	64.3	66.1
Group policies ²	7.5	14.2	22.9	27.9	33.0	37.7	44.2	46.9	50.3	53.7	58.9	63.2
Individual and family policies.....	1.6	2.3	3.5	3.8	4.0	3.9	4.9	4.8	5.7	6.3	5.4	5.9
Type of coverage:												
Loss of income.....	1.8	2.7	3.4	4.7	5.3	5.2	5.5	4.9	5.2	5.6	5.6	6.3
Medical expense.....	7.1	13.2	21.2	24.8	28.9	33.0	39.6	42.4	45.9	49.0	53.4	57.4
Dental.....	.1	.6	1.8	2.2	2.8	3.5	4.0	4.4	4.9	5.3	5.3	5.5

¹ 1970 refers to written premiums; thereafter, refers to earned premiums. ² Beginning 1975, insurance company group premiums and benefit payments include administrative service agreements and minimum premium plans. Amounts for 1970 contain only a portion of these data.

Source: Health Insurance Association of America, Washington, DC, *Source Book of Health Insurance Data*, annual.

NO. 856. PROPERTY AND CASUALTY INSURANCE—SUMMARY: 1970 TO 1988

[In billions of dollars. Minus sign (-) indicates loss. Premiums earned and losses incurred differ from table 857 because of reporting differences]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
Premiums earned.....	30.2	47.2	92.8	95.4	100.4	104.9	113.2	130.3	161.9	182.5	193.3
Losses and loss expenses incurred.....	21.5	37.5	68.9	73.3	79.8	85.3	98.8	115.1	131.5	141.7	151.0
Percent of premiums earned.....	71.0	79.2	74.4	76.9	79.4	81.3	87.4	88.3	81.3	77.6	78.1
Underwriting expenses incurred.....	8.8	13.5	25.2	26.9	29.0	30.6	32.6	36.6	43.2	46.8	49.9
Net underwriting gain/loss.....	.1	-3.8	-1.5	-4.9	-8.1	-10.8	-18.2	-21.4	-12.8	-5.9	-7.6
Percent of premiums earned.....	.2	-7.6	-1.6	-5.1	-8.1	-10.3	-16.1	-16.4	-7.8	-3.3	-3.9
Net investment income earned.....	2.1	4.5	12.6	14.6	15.9	16.5	18.1	19.8	21.8	24.0	26.1
Dividends to policyholders.....	.5	.7	1.8	2.0	2.2	2.4	2.3	2.4	2.3	2.9	2.9
Net income after taxes.....	1.6	.6	8.4	7.6	6.3	6.3	2.2	3.0	13.5	14.9	11.7
Assets.....	62.4	100.0	222.5	238.9	246.0	282.0	298.5	346.8	407.9	459.3	513.6
Surplus to policyholders.....	19.4	24.8	64.7	67.0	74.2	80.3	78.7	92.7	112.8	124.2	141.1

Source: The National Underwriter Co., Cincinnati, OH, *Argus F. C. & S. Chart*, annual (copyright).

NO. 857. PROPERTY AND CASUALTY INSURANCE—PREMIUMS AND LOSSES, BY LINE OF INSURANCE: 1980 TO 1988

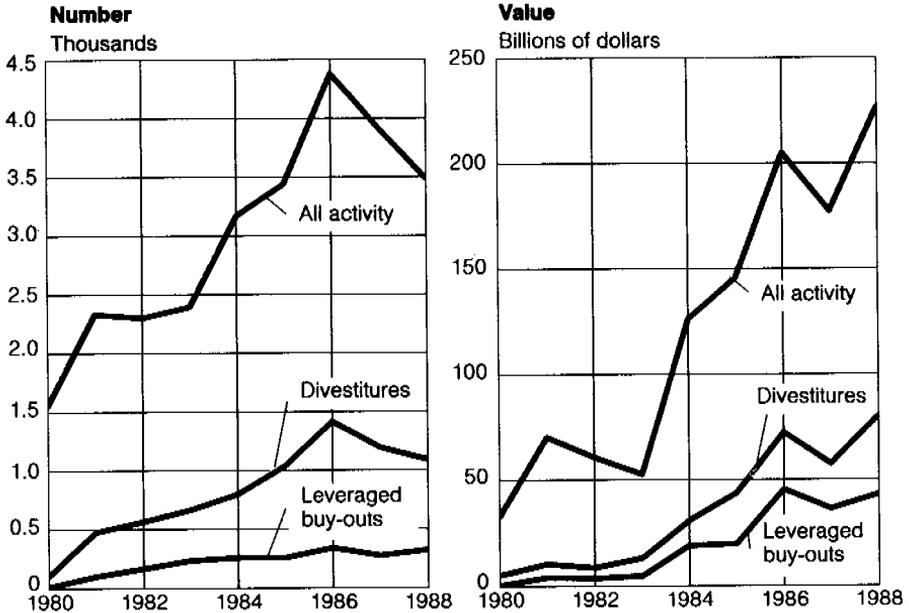
[In millions of dollars]

LINE OF INSURANCE	PREMIUMS EARNED					LOSSES INCURRED				
	1980	1985	1986	1987	1988	1980	1985	1986	1987	1988
Total	86,612	131,115	166,637	162,962	194,188	61,813	114,376	133,041	141,512	146,487
Auto liability.....	19,324	33,546	42,116	46,431	50,000	14,647	31,870	37,929	41,525	43,313
Auto, physical damage.....	12,765	23,515	26,182	29,849	31,913	8,904	17,286	19,019	18,962	20,383
Workers compensation.....	14,067	17,168	19,870	23,674	25,863	10,097	15,448	18,893	21,758	23,845
Liability, other than auto.....	6,532	9,115	16,163	19,272	19,103	4,516	10,455	14,910	16,703	15,670
Commercial multiple peril.....	6,958	10,148	14,336	16,159	17,018	3,822	8,738	8,840	8,919	9,689
Homeowners multiple peril.....	9,175	13,413	15,164	15,721	16,526	6,634	10,637	10,702	10,132	10,857
Fire and allied lines.....	4,981	5,109	6,892	7,195	6,559	3,193	3,904	3,784	3,562	3,422
Removal.....	3,089	4,798	6,828	6,530	7,026	2,461	3,318	5,649	5,531	5,345
Inland marine.....	2,180	3,315	3,758	3,986	4,069	1,439	2,058	1,791	1,859	2,009
Health.....	2,845	3,082	2,713	3,732	4,263	2,538	2,824	2,640	4,609	3,629
Surety and fidelity.....	1,170	1,771	2,038	2,238	2,390	614	1,414	1,224	1,377	950
Malpractice.....	1,009	1,913	2,512	2,876	3,000	1,022	3,020	2,969	2,909	2,634
Ocean marine.....	1,035	1,115	1,123	1,235	1,237	857	830	763	831	869
Farmowners.....	518	727	1,108	837	784	409	576	862	532	510
Aircraft.....	162	472	659	768	710	126	381	456	595	514
Boiler and machinery.....	372	497	597	648	637	145	204	245	237	324
Product liability.....	-	362	1,002	424	890	-	320	190	276	646
Financial guaranty.....	-	-	272	268	409	-	-	284	211	442
Earthquake.....	46	131	190	228	286	3	13	22	73	35
Burglary and theft.....	135	117	123	121	114	60	40	36	34	28
Glass.....	34	29	30	26	29	20	8	10	8	11
Other.....	515	782	1,001	764	1,368	306	632	1,131	869	1,382

- Represents zero.

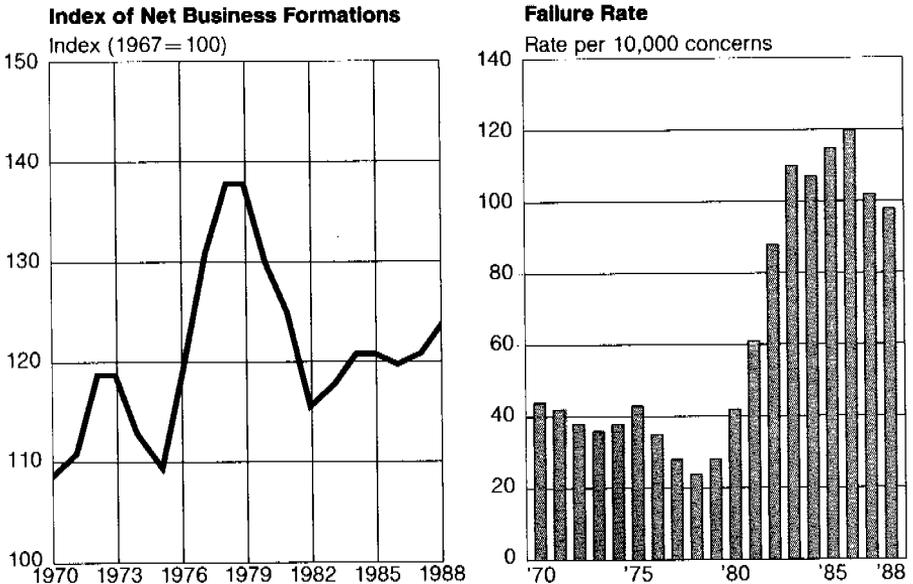
Source: The National Underwriter Co., Cincinnati, OH, *Argus F. C. & S. Chart*, annual (copyright).

Figure 17.1
Mergers and Acquisitions: 1980 to 1988



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 883.

Figure 17.2
Index of Net Business Formations and Business Failure Rates: 1970 to 1988



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 876.

nitions and methods of compilation. A reconciliation of the two can be found in table 8.13 of *National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business* (normally the July issue), published by BEA. The IRS publishes financial data for all business enterprises. These data appear in *Statistics of Income—Corporation Income Tax Returns* and the *Statistics of Income Bulletin* (partnerships and sole proprietorships). Data on international income and taxes reported by U.S. corporations are also included in the *Statistics of Income Bulletin* and in the periodic *Compendium of Studies of International Income and Taxes*.

Corporate data issued by BEA are a part of its national income and product accounts (see text, section 14). The primary sources for BEA estimates of profits, taxes, dividends, and undistributed profits are the original corporate tax returns submitted to IRS. Various adjustments of IRS data are required by the national income treatment—particularly with respect to profits which would be disclosed if all tax returns were audited; depletion; capital gain or loss; treatment of bad debts; measurement of income received from abroad; and intercorporate dividends—to make the figures comparable with other entries in the national income accounts. For a discussion of two types of adjustments (inventory valuation and capital consumption), see text, section 14. The BEA's corporate profits data also include net earnings of Federal Reserve banks, credit unions, private noninsured pension funds, and several quasi-government credit agencies not included in IRS data.

Sources and uses of corporate funds.—These data (table 864) show capital requirements of corporations and the manner in which they are financed. Sources of funds should be equal to their uses. Certain discrepancies, however, interfere with this equality due to omission of (1) money accruing to corporations from an excess of sales over purchases of used plant and equipment, (2) transactions in securities held as permanent investments except public offerings, and (3) net purchases of land. Also, the balance sheet data upon which many of the financial flow estimates are based are not fully comparable with the tax-return based estimates of internal sources, or the establishment series underlying the figures on inventory change.

Plant and equipment expenditures.—Estimates of actual and planned expenditures for new plant and equipment in the United States by most private nonagricultural business firms are based on quarterly sample surveys which were conducted by the Bureau of Economic Analysis until October 1, 1988 when the Bureau of the Census assumed responsibility for conducting the Plant and Equipment Expenditures survey. For a discussion of coverage, concepts, and methodology, see the February 1985 issue of the *Survey of Current Business*.

Sales and inventories.—Sales are estimated aggregate values, and inventories are book values at the end of the period. Sales signifies sales or shipments for retail and wholesale trade and billings or shipments for manufacturing. Trade inventories are valued at cost of merchandise on hand, while manufacturers' inventories are valued at approximate current costs or at book values, as reported by the manufacturer. Inventories (see table 897) are based on data from censuses (conducted every five years, for years ending in "2" and "7") and annual surveys. Monthly data for manufacturing appear in the Bureau of the Census Current Industrial Reports, *Manufacturers' Shipments, Inventories, and Orders*, series M3-1; for data on retail and wholesale trade, see section 28.

Sales, assets, net income, stockholder's equity, and total returns to investors.—Sales include service and rental revenues but exclude dividends, interest, and other non-operating revenues. All companies must have derived more than 50 percent of their sales from manufacturing and/or mining. Sales of subsidiaries are included when they are consolidated. **Assets** are those shown at the company's year-end. **Net income** is shown after taxes and after extraordinary credits or charges when any are shown on the income statement. **Stockholder's equity** is the sum of capital stock, surplus and retained earnings at the company's year-end. Redeemable preferred stock is excluded when its redemption is either mandatory or outside the control of the company, except in the case of cooperatives. **Total returns to investors** include both price appreciation and dividend yield. Returns are adjusted for stock splits, stock dividends, recapitalizations, and corporate reorganizations as they occur. For further discussion, see Time, Inc., New York, NY, *The Fortune Directory*, May and June issues.

Economic censuses.—The economic censuses constitute comprehensive and periodic canvasses of the Nation's industrial and business activities. The first economic census of the United States was conducted as part of the 1810 decennial census, when inquiries on manufacturing were included with the census of population. Minerals data were collected in 1840. The first censuses of construction and business were taken for 1929. An integrated economic census program was begun for 1954. In that year, the censuses covered the retail and wholesale trades, selected service industries, manufactures, and mineral industries. The economic censuses are taken at 5-year intervals covering years ending in "2" and "7".

Statistical reliability.—For a discussion of statistical collection and estimation, sampling procedures, and measures of statistical reliability applicable to Census Bureau data, see Appendix III.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

NO. 858. NUMBER OF RETURNS AND BUSINESS RECEIPTS, BY SIZE OF RECEIPTS AND TYPE OF BUSINESS: 1970 TO 1986

[Covers active enterprises only. Figures are estimates based on sample of unaudited tax returns; see Appendix III. The industrial distribution is based on data collected from companies; see text, section 17. See also *Historical Statistics, Colonial Times to 1970*, series V 1-12]

SIZE-CLASS OF RECEIPTS	RETURNS (1,000)					BUSINESS RECEIPTS ¹ (bil. dol.)				
	1970	1980	1984	1985	1986	1970	1980	1984	1985	1986
Corporate returns	1,865	2,711	3,171	3,277	3,429	1,706	6,172	7,550	8,050	8,282
Under \$25,000 ²	452	557	686	711	765	3	4	4	5	5
\$25,000-\$49,999.....	171	208	213	237	244	6	8	8	9	10
\$50,000-\$99,999.....	220	323	339	330	345	16	22	25	24	25
\$100,000-\$499,999.....	517	926	1,084	1,110	1,141	123	224	269	278	289
\$500,000-\$999,999.....	141	280	345	352	370	99	197	243	249	262
\$1,000,000 or more.....	165	418	505	538	562	1,459	5,717	7,001	7,484	7,692
Partnership returns	936	1,380	1,644	1,714	1,703	92	286	358	349	379
Under \$25,000 ²	502	638	1,000	1,036	1,057	4	5	4	4	4
\$25,000-\$49,999.....	125	182	160	154	145	5	7	8	8	5
\$50,000-\$99,999.....	120	184	153	152	154	9	13	11	11	11
\$100,000-\$499,999.....	162	290	246	281	261	33	64	55	61	58
\$500,000-\$999,999.....	17	48	45	48	48	12	33	31	34	34
\$1,000,000 or more.....	10	37	40	42	44	30	164	250	234	267
Non-farm proprietorship returns³	6,494	9,730	11,262	11,929	12,394	199	411	516	540	559
Under \$25,000 ²	4,738	6,918	7,832	8,250	8,515	30	44	52	54	(NA)
\$25,000-\$49,999.....	746	1,079	1,261	1,394	1,467	27	39	45	50	(NA)
\$50,000-\$99,999.....	562	936	1,061	1,084	1,138	40	59	74	77	(NA)
\$100,000-\$499,999.....	420	796	984	1,060	1,141	76	159	203	213	(NA)
\$500,000-\$999,999.....	21	74	86	89	95	14	50	61	61	(NA)
\$1,000,000 or more.....	7	29	37	41	38	12	60	81	85	(NA)

NA Not available. ¹ Excludes investment income except for partnerships and corporations in finance, insurance, and real estate. ² Includes firms with no receipts. ³ Number of businesses for 1970 and 1980. Number of non-farm sole proprietorship returns is not available prior to 1981. However, the number of returns and the number of businesses are very closely related. Since 1970, the ratio of number of returns to the number of businesses has remained approximately 1 to 1.1.

Source: U.S. Internal Revenue Service, *Statistics of Income, Statistics of Income Bulletin*, and unpublished data.

NO. 859. NUMBER OF RETURNS, RECEIPTS, AND NET INCOME, BY TYPE OF BUSINESS, 1970 TO 1986, AND BY INDUSTRY, 1986

[Covers active enterprises only. Figures are based on sample of unaudited tax returns; see Appendix III. See also *Historical Statistics, Colonial Times to 1970*, series V 1-12 and V 42-53. Minus sign (-) indicates net loss]

YEAR AND INDUSTRY	NUMBER OF RETURNS (1,000)			BUSINESS RECEIPTS ² (bil. dol.)			NET INCOME (less loss) ³ (bil. dol.)		
	Nonfarm proprietorships ¹	Partnerships	Corporations	Nonfarm proprietorships ¹	Partnerships	Corporations	Nonfarm proprietorships ¹	Partnerships	Corporations
1970.....	5,770	936	1,665	198.6	91.8	1,706.1	30.5	9.8	65.9
1975.....	7,221	1,073	2,024	274.0	146.0	3,120.4	39.6	7.7	142.6
1980.....	8,932	1,380	2,711	411.2	286.0	6,172.2	54.9	8.2	239.0
1984.....	11,262	1,644	3,171	516.0	357.8	7,550.5	70.8	-3.5	232.9
1985.....	11,929	1,714	3,277	540.0	349.2	8,049.6	78.8	-8.9	240.1
1986⁴	12,394	1,703	3,429	559.4	378.7	8,281.9	90.4	-17.4	269.6
Agriculture, forestry, and fishing ⁵	324	148	107	11.6	6.1	71.8	1.2	-0.9	1.1
Mining.....	160	53	40	7.2	14.7	86.9	-6	-3.5	-3.1
Construction.....	1,577	61	342	87.5	26.8	399.4	12.8	2.5	5.8
Manufacturing.....	329	26	285	19.6	22.2	2,614.5	1.5	-0.5	101.8
Transportation, public utilities.....	576	21	138	27.4	12.6	717.9	3.4	-3.0	21.8
Wholesale and retail trade ⁶	2,190	174	939	192.5	68.5	2,472.5	10.0	2.3	34.9
Wholesale.....	304	23	314	28.3	24.3	1,170.0	2.7	-6	16.8
Retail.....	1,886	151	621	160.4	44.2	1,298.4	6.6	1.7	18.1
Finance, insurance, real estate.....	1,129	853	537	36.2	112.6	1,365.1	11.6	-3.0	99.8
Services.....	5,758	325	1,012	169.0	111.7	550.6	48.8	18.6	7.4

¹ Through 1980, includes both individually owned businesses and farms; thereafter, includes only nonfarm businesses. ² Excludes investment income except for partnerships and corporations in finance, insurance, and real estate. ³ Net income (less loss) is defined differently by form of organization, basically as follows: (a) Proprietorships: Total taxable receipts less total deductions, including cost of sales and operations (except charitable contributions and owners salary), investment and other income are excluded; (b) Partnerships: Total taxable receipts less total deductions, including cost of sales and operations (except foreign taxes and oil depletion), investment and other income (except capital gains); (c) Corporations: Total taxable receipts less total deductions, including cost of sales and operations; investment and other income, such as capital gains and income from foreign corporations considered received for tax purposes only; net income is before income tax. ⁴ Includes business not specifically allocated to industries below. ⁵ Represents agricultural services only. ⁶ Includes trade business not identified as wholesale or retail.

Source: U.S. Internal Revenue Service, *Statistics of Income*, various publications.

NO. 860. NUMBER OF RETURNS, BUSINESS RECEIPTS, AND NET INCOME, BY INDUSTRY, TYPE OF BUSINESS, AND SIZE OF BUSINESS RECEIPTS: 1986

[Number in thousands; receipts and net income in millions of dollars. Covers active enterprises only. Figures are estimates based on a sample of unaudited tax returns; see Appendix III. The industrial distribution is based on data collected from establishments; see text, section 17. See *Historical Statistics, Colonial Times to 1970*, series V 42-53, for number of active corporations. Minus sign (-) indicates net loss]

INDUSTRY	Non-farm proprietorships, total	PARTNERSHIPS ¹			CORPORATIONS				
		Under \$100,000 ²	\$100,000-\$499,999	\$500,000 or more	Under \$1,000,000 ²	\$1,000,000-\$4,999,999	\$5,000,000-\$9,999,999	\$10,000,000-\$49,999,999	\$50,000,000 or more
All industrial divisions:³									
Number	12,394	1,350	261	92	2,866	427	68	55	12
Business receipts ⁴	559,384	20,539	57,617	300,546	589,693	903,023	467,321	1,101,752	5,220,142
Net income (less loss)	90,424	-49,018	6,405	25,243	-2,260	13,255	8,774	29,877	219,914
Agriculture, forestry, fishing:⁵									
Number	324	139	7	1	96	8	1	1	(z)
Business receipts ⁴	11,617	612	1,584	3,888	15,715	17,233	6,052	17,291	15,497
Mining:									
Number	160	46	5	2	35	4	1	1	(z)
Business receipts ⁴	7,210	604	1,116	13,029	5,239	7,922	4,724	9,784	59,204
Construction:									
Number	1,577	30	24	6	274	55	8	4	(z)
Business receipts ⁴	87,540	1,081	5,912	19,830	67,997	116,008	53,381	81,114	80,936
Manufacturing:									
Number	329	21	5	2	189	66	14	12	4
Business receipts ⁴	19,638	610	1,174	20,442	49,501	145,870	93,940	249,312	2,075,904
Transportation, public utilities:									
Number	576	16	3	2	113	20	3	2	1
Business receipts ⁴	27,416	416	554	11,629	22,164	42,378	19,099	36,804	597,484
Wholesale and retail trade:									
Number	2,190	93	59	21	704	176	30	26	4
Business receipts ⁴	192,495	3,293	13,882	51,320	195,216	380,173	206,652	514,472	1,175,983
Finance, insurance, real estate:									
Number	56	757	72	24	495	28	6	6	2
Business receipts ⁴	36,211	9,060	15,110	88,424	56,900	61,815	40,331	126,433	1,079,617
Services:									
Number	1,238	214	81	31	932	69	6	3	1
Business receipts ⁴	168,993	4,483	17,255	89,963	174,727	131,150	43,080	66,115	135,519

^z Less than 500 returns. ¹ Size of receipts excludes investment income. ² Includes businesses without receipts. ³ Includes businesses not allocable to individual industries. ⁴ Excludes investment income except for partnerships and corporations in finance, insurance and real estate. ⁵ Represents agricultural services only.

Source: U.S. Internal Revenue Service, *Statistics of Income*, various publications and unpublished data.

NO. 861. NONFARM SOLE PROPRIETORSHIP RETURNS—SELECTED INCOME AND DEDUCTION ITEMS: 1970 TO 1987

[In millions of dollars, except as indicated. All figures are estimates based on sample. Tax law changes have affected the comparability of the data over time. See *Statistics of Income* reports for a description of appropriate years tax law changes; see Appendix III. See also *Historical Statistics, Colonial Times to 1970*, series V 4-6]

ITEM	1970	1975	1980	1983	1984	1985	1986	1987
Number of returns, total (1,000).....	5,770	7,221	8,932	10,704	11,262	11,929	12,393	13,091
Businesses with net income (1,000).....	(NA)	(NA)	(NA)	7,390	8,003	8,641	9,248	9,984
Inventory, end of year	11,061	15,578	21,996	(NA)	23,233	24,970	24,477	26,333
Business receipts, total²	198,582	273,955	411,206	465,169	516,037	540,045	559,384	610,823
Income from sales and operations	(NA)	272,343	407,189	455,382	507,234	528,675	548,273	598,315
Business deductions, total²	168,045	234,318	358,258	404,809	445,270	461,273	466,960	505,362
Cost of goods sold/operations	109,149	146,261	209,890	212,631	229,906	232,294	232,135	255,045
Purchases	88,586	117,722	168,302	(NA)	(NA)	(NA)	(NA)	173,400
Labor costs	7,704	8,791	10,922	9,871	13,009	14,504	17,318	41,143
Materials and supplies	6,216	9,091	12,909	(NA)	(NA)	(NA)	(NA)	23,842
Commissions	1,274	2,226	3,333	(NA)	(NA)	(NA)	(NA)	5,461
Salaries and wages (net)	15,107	20,228	26,561	31,666	34,686	38,266	38,691	42,330
Car and truck expenses	(NA)	(NA)	13,378	14,758	17,524	17,044	16,381	(NA)
Rent paid	4,637	6,676	9,636	11,831	14,278	15,259	15,654	16,358
Repairs	2,445	3,044	5,032	(NA)	(NA)	(NA)	(NA)	(NA)
Taxes paid	3,776	5,424	7,672	(NA)	(NA)	(NA)	(NA)	7,438
Utilities	(NA)	(NA)	4,780	(NA)	(NA)	(NA)	(NA)	(NA)
Insurance	2,310	3,504	6,003	(NA)	(NA)	(NA)	10,783	(NA)
Interest paid	1,784	3,391	7,190	9,926	11,025	11,914	11,504	11,616
Depreciation	5,452	7,958	13,953	22,070	23,900	26,291	26,418	25,557
Pension and profit sharing plans	73	125	141	123	258	311	638	548
Net income (less loss)	30,537	39,637	54,947	60,359	70,767	78,773	90,423	105,461
Businesses with net income	33,736	45,625	68,010	78,618	89,849	98,776	110,497	123,783

NA Not available. ¹ Includes breakeven businesses. ² Includes other amounts not shown separately.

Source: U.S. Internal Revenue Service, *Statistics of Income Bulletin*.

NO. 862. PARTNERSHIPS—SELECTED ITEMS BY INDUSTRY: 1980 TO 1987

[In millions of dollars, except partners and partnerships in thousands. Covers active partnerships only. Includes partnerships not allocable by nature of business. Figures are estimates based on samples. See Appendix III]

INDUSTRY AND YEAR	NUMBER OF PARTNERSHIPS			Number of partners	Total assets	Business receipts ^{1,2}	Total deductions ²	Net income less loss ³	Net income	Net loss
	Total	With net income	With net loss							
All Industries:										
1980.....	1,380	774	605	8,420	597,504	285,967	283,749	8,249	45,062	36,813
1983.....	1,542	784	758	10,589	886,993	278,347	293,929	-2,610	60,308	62,918
1984.....	1,644	845	799	12,427	1,030,849	357,803	378,693	-3,500	69,697	73,197
1985.....	1,714	876	838	13,245	1,269,434	349,169	376,001	-8,884	77,045	85,928
1986.....	1,703	851	851	15,229	1,403,750	378,703	414,673	-17,371	80,215	97,586
1987.....	1,650	890	760	17,201	1,418,567	428,630	423,505	-2,877	90,196	93,073
Agriculture, forestry, and fishing:										
1980.....	126	72	54	381	24,595	21,611	22,859	472	2,539	2,067
1983.....	137	73	63	466	24,717	5,949	8,772	-145	2,626	2,771
1984.....	139	73	66	494	26,739	5,866	9,242	-749	2,478	3,227
1985.....	136	76	60	585	27,027	6,529	10,495	-1,049	2,797	3,846
1986.....	148	78	69	642	24,749	6,085	9,825	-938	2,746	3,684
1987.....	148	97	52	592	26,448	6,756	9,146	2,015	4,488	2,472
Mining:										
1980.....	35	15	20	722	24,742	13,201	18,248	-4,208	3,920	8,128
1983.....	60	24	36	2,083	49,775	17,077	23,586	-4,110	6,369	10,479
1984.....	57	31	26	2,007	52,415	16,638	21,985	69	7,857	7,788
1985.....	62	33	30	2,207	66,930	19,922	21,920	1,462	7,894	6,402
1986.....	53	23	30	2,351	66,969	14,749	21,290	-3,458	5,214	8,572
1987.....	60	24	35	2,742	71,648	15,332	19,424	-1,080	5,968	7,058
Oil and gas extraction:										
1980.....	31	14	17	686	18,881	9,252	13,659	-3,694	3,577	7,271
1983.....	56	23	33	1,988	41,067	13,226	19,048	-3,546	5,917	9,463
1984.....	51	27	24	1,833	41,266	14,177	16,674	787	7,349	6,561
1985.....	56	31	25	2,130	55,760	15,577	16,479	2,272	7,280	5,008
1986.....	49	22	27	2,270	55,987	10,995	16,382	-2,657	4,660	7,317
1987.....	54	22	32	2,661	62,961	11,247	15,061	-1,295	5,109	6,403
Construction:										
1980.....	67	51	16	180	9,811	18,407	17,202	1,560	2,119	559
1983.....	64	46	18	149	14,965	21,623	20,758	2,168	3,087	919
1984.....	65	47	18	173	13,783	23,198	21,655	2,193	2,966	773
1985.....	57	41	16	134	15,008	21,476	20,080	2,207	2,743	536
1986.....	61	41	20	137	16,556	26,823	25,123	2,498	3,206	708
1987.....	62	48	14	153	17,080	26,295	24,293	2,766	3,350	584
Transportation and public utilities:										
1980.....	20	11	10	73	9,291	5,868	5,821	248	1,092	844
1983.....	20	9	11	103	19,809	7,155	8,194	-703	1,128	1,831
1984.....	21	14	7	142	21,109	10,733	13,332	-2,007	1,280	3,288
1985.....	25	15	10	186	26,468	14,253	14,814	-3,066	4,426	4,426
1986.....	21	7	14	223	33,567	12,599	16,276	-3,029	1,682	4,712
1987.....	30	13	17	429	42,015	19,795	24,228	-3,781	2,028	5,809
Manufacturing:										
1980.....	30	20	10	92	11,252	15,327	16,142	-472	1,199	1,671
1983.....	26	12	14	91	13,966	14,179	15,291	-744	890	1,634
1984.....	30	15	15	94	19,574	18,326	20,046	-1,101	1,165	2,266
1985.....	30	12	18	105	24,838	22,588	24,225	-1,085	1,228	2,314
1986.....	28	17	11	108	25,299	22,227	23,187	-458	1,512	1,970
1987.....	35	18	17	178	31,011	32,356	32,576	806	2,504	1,698
Wholesale and retail trade:										
1980.....	200	123	77	487	17,727	65,793	63,988	2,475	3,374	900
1983.....	194	102	92	479	19,804	59,880	59,140	1,540	3,012	1,472
1984.....	185	98	87	444	21,222	72,335	71,707	1,666	3,298	1,572
1985.....	201	113	88	493	20,568	69,079	68,119	1,977	3,467	1,490
1986.....	174	105	69	409	23,007	68,495	67,216	2,272	3,717	1,445
1987.....	185	101	83	478	25,378	70,560	69,277	2,697	4,215	1,518
Finance, insurance, and real estate:										
1980.....	637	313	325	5,566	454,531	87,133	91,382	-4,249	15,169	19,418
1983.....	730	327	403	5,927	670,225	76,784	89,889	-13,105	22,542	35,647
1984.....	781	350	441	7,408	770,457	84,356	113,606	-19,244	25,646	44,890
1985.....	844	369	475	7,755	979,787	92,309	118,237	-25,929	30,360	56,311
1986.....	853	350	503	9,459	1,068,220	112,594	145,574	-32,980	32,477	65,457
1987.....	830	388	442	10,566	1,078,833	123,239	139,486	-24,235	38,603	62,838
Services:										
1980.....	263	169	94	938	45,510	58,627	48,106	12,424	15,649	3,224
1983.....	306	188	118	1,275	73,186	75,069	67,639	12,457	20,570	8,113
1984.....	331	204	127	1,578	87,984	90,244	82,239	15,583	24,800	9,217
1985.....	341	207	134	1,713	106,597	104,197	96,202	16,541	26,942	10,400
1986.....	325	208	117	1,744	123,461	111,701	102,362	18,563	29,021	10,458
1987.....	291	195	97	2,042	124,703	116,379	104,296	18,092	29,118	11,025

¹ Business plus investment receipts for partnerships in finance, insurance, and real estate, and business receipts for all other industries. ² Beginning 1983, the agriculture, forestry, and fishing industries are based on revised collection procedure. See source for detail.

Source: U.S. Internal Revenue Service, *Statistics of Income, Partnership Returns—1978-1982*, and *Statistics of Income Bulletin*.

**NO. 863. PARTNERSHIP RETURNS—SELECTED INCOME STATEMENT AND BALANCE SHEET ITEMS:
1970 TO 1987**

[In millions of dollars, except as indicated. Covers active partnerships only. All figures are estimates based on samples. See headnote, table B61. See also Appendix III and *Historical Statistics, Colonial Times to 1970*, series V 7-9.]

ITEM	1970	1975	1980	1982	1983	1984	1985	1986	1987
Partnerships, number (1,000)	936	1,073	1,380	1,514	1,542	1,644	1,714	1,703	1,650
Number with net income (1,000).....	640	661	774	791	784	845	876	851	890
Number with balance sheets (1,000).....	556	783	1,194	1,223	1,191	1,215	1,227	1,203	1,131
Number of partners (1,000)	3,698	4,951	8,420	9,765	10,589	12,427	13,245	15,229	17,201
Assets, total ^{1, 2}	116,753	235,488	597,504	845,281	886,993	1,030,849	1,269,434	1,403,750	1,418,587
Depreciable assets (net).....	(NA)	113,125	239,140	310,846	345,897	581,643	695,879	779,936	568,994
Inventories, end of year.....	(NA)	11,985	33,218	100,729	77,059	61,756	27,279	47,368	45,055
Land.....	(NA)	36,732	70,241	87,820	98,427	122,037	152,179	179,142	178,008
Liabilities, total ¹	(NA)	193,876	488,734	701,630	745,153	855,373	1,269,434	1,175,727	1,415,568
Accounts, payable.....	(NA)	12,302	33,899	37,255	34,725	32,780	46,872	43,622	41,468
Short-term debt ³	(NA)	22,709	48,002	73,278	67,295	68,626	102,760	92,457	81,674
Long-term debt ⁴	(NA)	5,136,297	178,044	236,218	268,268	322,327	381,961	429,196	429,992
Nonrecourse loans.....	(NA)	(6)	118,910	154,509	194,829	260,167	327,558	385,044	388,537
Partner's capital accounts.....	(NA)	41,593	108,770	143,651	141,840	175,476	200,213	228,203	258,685
Total receipts ¹	93,348	148,418	291,998	296,690	291,919	376,193	367,117	397,302	443,338
Business receipts.....	90,209	142,506	271,109	251,609	243,248	318,342	302,733	327,429	411,457
Interest received ⁵	942	2,447	10,869	15,260	15,006	18,651	20,559	21,716	16,268
Deductions, total ¹	83,558	140,680	283,749	304,005	293,929	378,693	376,001	411,673	423,505
Cost of goods sold/ operations.....	46,041	64,673	113,886	144,595	125,331	180,858	146,315	164,168	237,157
Salaries and wages.....	8,129	12,489	22,336	23,205	24,734	28,523	33,684	36,305	40,676
Taxes paid.....	3,159	5,771	9,553	5,289	5,910	6,673	7,746	7,866	6,867
Interest paid.....	4,470	12,097	28,362	21,517	22,364	25,438	28,683	29,452	19,954
Depreciation.....	4,579	10,109	21,576	32,362	37,340	19,782	22,576	23,446	19,307
Net income (less loss)	9,790	7,738	8,249	7,315	-2,610	-3,500	-8,884	-17,371	-2,877
Businesses with net income.....	14,419	22,432	45,062	53,557	60,308	69,697	77,045	80,215	90,196

NA Not available. ¹ Includes other amounts not shown separately. ² Total assets, total liabilities, and partner's capital accounts are somewhat understated because not all partnership returns filed contained a complete balance sheet. ³ Represents mortgages, notes, and bonds payable in less than one year. ⁴ Represents mortgages, notes, and bonds payable in one year or more. ⁵ Tax year 1975 long term debt included nonrecourse loans. ⁶ Receipts and deductions from trade or business only. Excludes income and expenses related to certain investment activities. See source for detail. ⁷ Beginning 1982, includes both interest and dividends.

Source: U.S. Internal Revenue Service, *Statistics of Income Bulletin*, various publications.

NO. 864. CORPORATE FUNDS—SOURCES AND USES: 1970 TO 1988

[In billions of dollars, except percent. Covers nonfarm nonfinancial corporate business. See text, section 17.]

SOURCE AND USE	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988
Sources, total	101.8	155.3	324.8	298.5	420.3	492.6	459.2	519.7	482.9	467.5
Internal.....	62.8	124.8	200.1	242.3	285.7	336.3	352.3	357.5	352.8	366.8
Domestic undistributed profits.....	7.6	36.4	53.7	11.6	22.2	41.8	16.7	6.3	16.0	27.4
IVA and CCA ¹	-1.6	-17.9	-59.2	-18.7	5.1	25.1	53.5	56.7	25.7	11.7
Capital consumption allowances.....	49.9	91.9	171.3	221.4	228.2	238.4	251.0	262.6	274.7	290.6
Foreign earnings ²	6.9	14.4	34.4	28.1	30.2	30.9	31.1	31.9	36.4	37.1
External ³	39.0	30.5	124.7	56.2	134.6	156.3	106.9	162.3	130.1	100.7
Percent of total.....	38.3	19.6	38.4	18.8	32.0	31.7	23.3	31.2	26.9	21.5
Credit market funds.....	34.1	23.1	70.7	49.8	77.9	95.8	50.9	121.3	68.5	63.8
Securities and mortgages.....	26.3	39.4	34.5	10.3	52.6	5.1	5.0	59.0	39.3	18.2
Equity issues.....	5.7	9.9	12.9	6.4	23.5	-74.5	-81.5	-80.8	-76.6	-130.5
Bonds and mortgages ⁴	20.6	29.5	21.3	3.9	29.1	69.4	86.5	139.8	114.8	112.3
Loans and short-term paper.....	7.8	18.3	36.2	39.5	25.3	100.9	46.0	62.3	30.3	82.0
Other.....	4.9	7.4	54.0	6.4	56.8	60.5	55.9	41.0	61.5	36.9
Profit taxes payable.....	-3.7	-1.3	7	-12.7	8.0	1.9	1.4	2.5	1.4	6
Trade debt.....	7.1	6.2	38.0	5.4	37.3	33.0	34.0	3.1	18.0	-4.0
Foreign direct investments in U.S.....	1.5	2.6	15.3	13.8	11.5	25.6	20.5	35.4	42.2	41.6
Uses, total	97.9	153.4	342.1	303.5	385.8	502.7	435.3	456.8	437.3	448.3
Capital expenditures.....	79.2	112.3	243.7	256.5	275.7	370.6	342.3	333.9	361.7	395.7
Increase in financial assets.....	18.7	41.1	98.4	47.0	11.1	132.1	93.0	122.8	75.6	52.6
Discrepancy (sources less uses).....	3.8	1.9	-17.3	-4.9	34.5	-10.1	23.9	63.0	45.5	19.1

¹ Inventory valuation and capital consumption adjustment. ² Foreign branch profits, dividends, and subsidiaries earnings retained abroad. ³ Net increases in liability. ⁴ Includes industrial pollution control revenue bonds, issued by State and local governments.

Source: Board of Governors of the Federal Reserve System. Data derived from *Flow of Funds Accounts*, annual.

NO. 865. NONFINANCIAL CORPORATE BUSINESS-SECTOR BALANCE SHEET: 1970 TO 1988

[In billions of dollars. Represents year-end outstandings]

ITEM	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Total assets	1,305	2,210	3,529	4,004	4,479	4,650	4,861	5,224	5,474	5,747	6,085	6,410
Tangible assets (current cost).....	935	1,652	2,618	2,988	3,363	3,508	3,611	3,850	4,000	4,137	4,359	4,662
Reproducible.....	823	1,487	2,352	2,671	2,993	3,107	3,186	3,386	3,505	3,610	3,807	4,085
Land.....	112	164	267	318	370	401	425	464	495	527	552	577
Financial assets.....	370	559	910	1,015	1,116	1,142	1,250	1,375	1,475	1,609	1,706	1,748
Liquid assets.....	69	125	171	197	220	267	307	349	394	481	495	496
Checkable deposits and currency.....	44	54	50	57	47	53	60	67	80	99	98	95
Time deposits.....	5	22	33	38	48	59	74	87	100	113	117	121
Consumer credit.....	11	16	25	25	25	25	29	31	32	32	35	38
Mutual fund shares.....	1	1	1	2	3	3	5	7	13	16	12	16
Trade credit.....	195	256	434	482	507	493	529	577	604	607	657	673
Miscellaneous assets.....	94	160	279	310	361	354	380	411	432	472	509	524
Total liabilities	540	767	1,165	1,284	1,429	1,476	1,589	1,825	2,013	2,260	2,483	2,709
Credit market instruments.....	354	545	774	828	925	968	1,023	1,197	1,333	1,530	1,697	1,885
Profit taxes payable.....	11	14	27	25	19	4	11	11	9	10	10	8
Trade debt.....	162	180	310	348	376	382	419	452	486	489	514	514
Foreign direct investment in U.S.....	13	28	54	83	109	125	137	165	185	220	262	302
Net worth	765	1,443	2,364	2,719	3,050	3,173	3,272	3,400	3,461	3,487	3,582	3,701

Source: Board of Governors of the Federal Reserve System, *Balance Sheets for the U.S. Economy*.

NO. 866. CORPORATION INCOME TAX RETURNS—SELECTED FINANCIAL ITEMS: 1970 TO 1986

[In billions of dollars, except number of returns. Covers active corporations only. All corporations are required to file returns except those specifically exempt. See source for changes in law affecting comparability of historical data. Based on samples; see Appendix III. See also *Historical Statistics, Colonial Times to 1970*, series Y 381-392]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	
Number of returns, total (1,000)	1,665	2,024	2,711	2,812	2,926	2,999	3,171	3,277	3,429	
Number with net income (1,000).....	1,008	1,226	1,597	1,597	1,608	1,676	1,778	1,820	1,908	
S Corporation returns ¹ (1,000).....	257	358	545	541	564	648	701	725	826	
BALANCE SHEET										
Assets, total ²	2,835	4,287	7,617	8,547	9,358	10,201	11,107	12,773	14,183	
Cash.....	177	290	529	533	541	590	596	583	763	
Notes and accounts receivable.....	615	1,052	1,985	2,240	2,420	2,677	2,897	3,318	3,594	
Inventories.....	190	318	535	588	581	589	664	715	733	
Investments in Government obligations.....	197	316	472	515	608	685	726	917	1,059	
Mortgage and real estate.....	328	548	894	934	942	982	1,127	1,259	1,377	
Other investments.....	401	626	1,214	1,388	1,605	1,798	1,973	2,414	2,848	
Depreciable assets.....	869	1,277	2,107	2,353	2,583	2,730	2,913	3,174	3,383	
Depletable assets.....	19	39	72	84	95	108	115	112	116	
Land.....	47	67	93	102	110	119	128	141	150	
Liabilities ²	2,635	4,287	7,617	8,547	9,358	10,201	11,107	12,773	14,183	
Accounts payable.....	149	283	542	620	679	671	741	892	909	
Mortgages, notes, and bonds, short-term ³	171	272	505	586	667	760	867	1,001	1,084	
Mortgages, notes, and bonds, long-term ⁴	363	587	987	1,058	1,224	1,323	1,494	1,699	1,958	
Capital stock.....	201	252	417	533	658	787	839	920	1,191	
Paid-in or capital surplus.....	197	299	532	671	782	874	1,066	1,421	1,726	
Retained earnings ⁵	366	568	1,070	1,170	1,228	1,274	1,308	1,366	1,394	
Net worth	752	1,087	1,944	2,244	2,470	2,645	2,884	3,304	3,698	
INCOME STATEMENT										
Receipts, total ⁶	1,751	3,199	6,361	7,026	7,024	7,135	7,861	8,398	8,669	
Business receipts.....	1,621	2,982	5,732	6,245	6,157	6,335	6,946	7,370	7,535	
Interest ⁶	72	143	367	494	530	511	580	635	662	
Rents and royalties.....	17	27	54	68	83	83	90	105	110	
Deductions, total ⁷	1,683	3,053	6,125	6,814	6,889	6,945	7,629	8,158	8,395	
Cost of sales and operations.....	1,146	2,130	4,205	4,509	4,271	4,308	4,693	4,894	4,923	
Compensation of officers.....	33	58	109	120	129	141	157	171	185	
Rent paid on business property.....	24	41	72	82	95	105	119	135	145	
Taxes paid.....	50	82	163	170	166	173	192	201	203	
Interest paid.....	62	129	345	477	515	475	536	569	573	
Depreciation.....	53	86	157	165	213	241	265	304	313	
Advertising.....	18	27	52	60	65	72	82	92	99	
Net income (less loss), total	66	143	239	214	154	188	233	240	270	
Net income.....	84	169	297	301	274	297	349	364	409	
Deficit.....	18	26	58	87	120	109	116	124	139	
TAX ITEMS										
Income subject to tax.....	72	147	247	240	205	219	257	266	276	
Income tax before credits ⁷	33	66	104	101	85	90	106	109	109	
Tax credits, total ⁸	5	26	42	44	40	40	44	48	37	
Foreign tax credit.....	5	20	25	22	19	20	21	24	21	
Income tax after credits ⁷	28	39	62	57	45	51	62	61	72	

¹ Represents corporations with no more than 35 shareholders (10 prior to 1983), most of which are individuals, electing to be taxed at the shareholder level. ² Includes items not shown separately. ³ Payable in less than one year. ⁴ Payable in one year or more. ⁵ Appropriated and unappropriated. ⁶ Includes tax-exempt interest on Government obligations issued by U.S. State and local governments. ⁷ Consists of regular and alternative tax; excludes minimum tax and adjustments for certain prior year credits. Tax year 1970 includes surcharge of \$764 million.

Source: U.S. Internal Revenue Service, *Statistics of Income, Corporation Income Tax Returns*, annual.

No. 867. CORPORATION INCOME TAX RETURNS—FINANCIAL SUMMARY, BY INDUSTRY: 1970 TO 1986

[In billions of dollars, except as indicated. Covers active corporations only. Industrial distribution based on data collected from companies; see text, section 17. Excludes corporations not allocable by nature of business]

ITEM	1970	1980	1981	1982	1983	1984	1985	1986
Agriculture, forestry, and fishing:								
Returns (1,000).....	37	81	85	91	92	98	103	107
Assets.....	11.9	40.7	46.1	50.4	50.3	50.7	52.7	53.5
Liabilities ¹	7.9	29.3	32.5	36.3	36.7	36.4	37.2	36.4
Receipts.....	14.3	52.1	65.1	65.4	59.2	66.6	70.5	77.5
Deductions.....	14.2	51.4	64.7	65.4	59.4	66.4	70.6	76.3
Net income (less loss).....	.1	.7	.3	(-2)	-.2	.2	-.1	1.1
Mining:								
Returns (1,000).....	14	26	33	37	37	41	41	40
Assets.....	24.0	126.9	168.9	192.4	194.4	209.0	240.8	206.1
Liabilities ¹	10.6	72.9	98.4	112.5	108.8	114.7	136.0	107.5
Receipts.....	17.7	176.7	200.2	203.1	132.4	123.5	142.0	98.6
Deductions.....	15.9	169.1	195.0	203.0	134.3	124.6	145.4	102.1
Net income (less loss).....	1.8	7.8	5.6	.5	-1.6	-.4	-2.5	-3.1
Construction:								
Returns (1,000).....	139	272	276	282	284	307	318	342
Assets.....	42.7	132.9	150.8	153.1	161.4	195.3	215.3	218.9
Liabilities ¹	30.9	100.1	113.7	114.2	119.8	144.9	160.6	166.1
Receipts.....	90.6	267.2	280.2	281.7	290.8	338.6	387.2	412.5
Deductions.....	89.1	262.1	276.7	279.6	288.6	335.7	382.8	406.7
Net income (less loss).....	1.5	5.3	3.5	2.3	2.3	2.9	4.4	5.8
Manufacturing:								
Returns (1,000).....	198	243	251	259	262	272	277	285
Assets.....	612.9	1,709.5	1,933.7	2,060.7	2,233.0	2,417.6	2,644.4	2,931.6
Liabilities ¹	304.0	960.3	1,085.5	1,163.8	1,279.9	1,392.6	1,544.7	1,807.2
Receipts.....	723.0	2,404.3	2,613.5	2,488.3	2,552.8	2,768.2	2,831.1	2,810.7
Deductions.....	692.5	2,290.6	2,509.1	2,423.3	2,489.3	2,661.2	2,733.1	2,723.7
Net income (less loss).....	31.8	125.7	116.8	75.8	95.3	121.2	113.8	101.8
Transportation and public utilities:								
Returns (1,000).....	67	111	109	115	123	128	138	138
Assets.....	287.7	758.4	837.3	919.9	996.9	1,084.9	1,246.4	1,310.2
Liabilities ¹	166.5	467.7	516.4	567.0	604.6	660.9	755.9	807.7
Receipts.....	135.5	523.8	598.5	632.3	657.4	725.6	772.4	762.2
Deductions.....	127.9	504.0	579.2	614.4	638.2	697.2	747.8	740.7
Net income (less loss).....	7.5	20.0	19.6	18.3	19.5	28.9	25.1	21.8
Wholesale and retail trade:								
Returns (1,000).....	518	900	817	840	852	897	917	939
Assets.....	192.2	648.9	708.1	753.4	804.2	899.0	1,010.0	1,073.5
Liabilities ¹	115.2	424.6	472.3	501.9	539.0	609.7	723.7	773.4
Receipts.....	522.5	1,955.5	2,039.6	2,017.7	2,119.4	2,307.6	2,473.9	2,547.4
Deductions.....	512.9	1,919.5	2,006.9	1,989.7	2,084.5	2,265.8	2,440.4	2,512.1
Net income (less loss).....	9.7	35.8	33.3	28.4	35.3	42.0	33.1	34.9
Finance, insurance, and real estate:								
Returns (1,000).....	406	493	470	462	480	497	518	537
Assets.....	1,401.2	4,022.2	4,486.2	4,987.5	5,487.2	5,939.0	7,029.5	7,985.6
Liabilities ¹	1,204.7	3,491.7	3,830.0	4,220.5	4,670.4	5,037.3	5,867.5	6,483.4
Receipts.....	177.3	697.5	877.8	949.9	902.6	1,033.1	1,182.0	1,365.1
Deductions.....	161.6	652.6	838.8	915.2	856.7	985.7	1,104.6	1,245.5
Net income (less loss).....	12.2	33.1	26.3	21.8	31.7	32.7	60.7	99.8
Services:								
Returns (1,000).....	281	671	753	820	848	899	939	1,012
Assets.....	61.9	178.2	213.7	237.9	269.8	307.9	331.0	361.6
Liabilities ¹	42.3	125.3	152.7	170.1	198.1	223.1	241.1	261.4
Receipts.....	89.6	279.9	346.8	380.8	416.5	490.3	534.6	591.9
Deductions.....	68.4	271.8	338.8	373.7	410.5	485.0	528.7	584.3
Net income (less loss).....	1.2	8.2	8.2	7.2	6.0	5.5	5.9	7.4
ANNUAL PERCENT CHANGE ²								
Receipts:								
Agriculture, forestry, and fishing.....	17.7	-2.4	24.9	.5	-9.4	12.6	5.9	9.9
Mining.....	9.3	33.3	13.3	1.5	-34.8	-6.7	15.0	-30.6
Construction.....	8.0	5.7	4.9	.6	3.2	16.4	14.4	6.5
Manufacturing.....	1.8	11.7	8.7	-4.8	2.6	8.4	2.3	-.7
Transportation and public utilities.....	8.2	17.5	14.3	5.6	4.0	10.3	6.4	-1.3
Wholesale and retail trade.....	2.8	11.6	4.3	-1.1	5.0	8.9	7.2	3.0
Finance, insurance, and real estate.....	7.9	24.3	25.9	8.2	-.5	14.4	14.4	15.5
Services.....	15.9	14.2	23.9	9.8	9.4	17.7	9.0	10.7

Z Less than half the measure. ¹ Liabilities does not include net worth. ² Change from preceding year.

Source: U.S. Internal Revenue Service, *Statistics of Income, Corporation Income Tax Returns*, annual.

NO. 868. CORPORATION INCOME TAX RETURNS, BY ASSET SIZE-CLASS AND INDUSTRY: 1986

[In millions of dollars, except returns. Covers active corporations only. Excludes corporations not allocable by nature of business. The industrial distribution is based on data collected from companies; see text, section 17. Detail may not add to total because of rounding and the exclusion of data to prevent disclosure of individual taxpayer's identity. See table 866. See also *Historical Statistics, Colonial Times to 1970*, series V 167-183 and V 193-196]

INDUSTRY AND ITEM	Total	ASSET SIZE-CLASS					
		Under 10 mil. dol. ¹	10-24.9 mil. dol.	25-49.9 mil. dol.	50-99.9 mil. dol.	100-249.9 mil. dol.	250 mil. dol. and over
Agriculture, forestry, and fishing: Returns...	106,634	106,304	203	87	39	16	6
Assets.....	53,478	39,586	3,172	2,320	2,770	2,710	2,941
Receipts.....	77,502	57,868	4,005	2,830	5,111	3,572	4,316
Deductions.....	76,331	57,099	3,962	2,580	5,137	3,495	4,057
Net income (less loss).....	1,149	746	43	50	-27	77	260
Mining: Returns.....	40,354	39,400	486	197	113	89	69
Assets.....	206,122	17,495	7,379	6,871	7,936	23,108	143,333
Receipts.....	98,577	21,519	5,230	4,830	4,223	12,744	50,032
Deductions.....	102,094	22,449	5,492	5,000	4,507	12,949	51,697
Net income (less loss).....	-3,123	-958	266	-167	-285	-187	-1,261
Construction: Returns.....	341,816	339,861	1,319	369	158	69	40
Assets.....	218,881	114,874	19,509	12,567	10,976	11,674	49,280
Receipts.....	412,477	299,459	29,157	19,618	13,049	16,368	34,826
Deductions.....	406,664	294,985	28,580	19,193	12,784	16,346	34,796
Net income (less loss).....	5,782	4,415	583	420	254	22	88
Manufacturing: Returns.....	285,119	275,888	4,920	1,750	993	743	823
Assets.....	2,931,610	181,872	78,016	60,724	71,168	126,261	2,415,566
Receipts.....	2,810,714	440,960	130,592	94,538	97,901	156,914	1,889,809
Deductions.....	2,723,699	433,610	126,619	91,234	93,399	150,707	1,828,130
Net income (less loss).....	101,827	7,368	3,953	3,298	4,550	6,331	76,329
Transportation and public utilities:							
Returns.....	138,428	136,590	878	312	176	144	328
Assets.....	1,310,227	47,441	13,692	11,245	12,378	22,485	1,202,966
Receipts.....	762,231	110,877	18,186	11,182	11,776	17,066	593,145
Deductions.....	740,718	113,102	17,811	10,808	11,617	16,609	570,771
Net income (less loss).....	21,804	-2,248	371	372	153	460	22,696
Wholesale and retail trade: Returns.....	939,159	932,093	4,538	1,257	607	368	295
Assets.....	1,073,524	364,400	67,426	43,527	43,523	59,052	495,595
Receipts.....	2,547,441	1,287,923	188,303	111,294	106,198	142,054	711,689
Deductions.....	2,512,082	1,277,276	185,657	109,411	104,490	139,792	695,457
Net income (less loss).....	34,920	10,548	2,601	1,882	1,702	2,250	15,936
Finance, insurance, and real estate:							
Returns.....	537,384	514,645	7,211	5,370	4,187	3,185	2,784
Assets.....	7,985,642	192,634	116,705	192,960	293,934	493,683	6,895,726
Receipts.....	1,365,095	160,430	30,699	35,325	51,916	78,288	1,008,437
Deductions.....	1,245,473	154,040	28,958	33,620	48,285	69,822	910,749
Net income (less loss).....	99,809	5,814	1,404	1,054	2,536	6,781	82,221
Services: Returns.....	1,012,178	1,009,443	1,535	557	317	201	126
Assets.....	381,608	150,846	23,993	19,473	21,771	31,021	134,505
Receipts.....	591,850	406,897	30,046	21,329	23,064	25,581	84,915
Deductions.....	584,296	402,147	29,753	21,118	22,748	24,794	83,736
Net income (less loss).....	7,448	4,662	271	204	297	785	1,228

¹ Includes returns with zero assets.

Source: U.S. Internal Revenue Service, *Statistics of Income, Corporation Income Tax Returns*, annual.

NO. 869. WORKING CAPITAL OF NONFINANCIAL CORPORATIONS: 1975 TO 1985

[In billions of dollars, except ratios. As of December 31. Covers all nonfinancial U.S. corporations]

ITEM	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Current assets.....	756.3	823.1	900.9	1,028.1	1,200.9	1,281.6	1,374.5	1,425.4	1,557.3	1,703.0	1,778.5
Cash on hand and in banks ¹	80.0	86.8	94.3	103.7	116.1	121.0	126.6	144.1	165.8	173.6	188.0
U.S. Government securities.....	19.6	26.0	18.7	17.8	15.6	17.3	19.2	22.4	30.6	36.2	32.3
Receivables, total ²	272.1	292.4	325.0	381.9	456.8	491.2	528.0	511.0	577.8	633.1	671.2
Inventories.....	314.7	341.4	375.6	428.3	501.7	525.4	560.2	575.2	599.3	656.9	663.9
Other current assets.....	69.9	76.4	87.3	96.3	110.7	126.7	140.5	172.7	183.7	203.2	223.2
Current liabilities.....	446.9	487.5	546.8	661.9	809.1	877.2	923.2	977.8	1,043.0	1,163.6	1,232.7
Payables.....	261.2	273.2	313.7	375.1	456.3	498.3	520.4	552.8	577.9	647.8	683.1
Other current liabilities.....	185.7	214.2	233.1	286.8	352.8	378.9	402.9	425.0	465.1	515.8	549.7
Net working capital.....	309.5	335.8	354.1	366.2	391.8	404.4	451.3	447.6	514.3	539.5	545.7
Liquidity ratio ³.....	.379	.368	.366	.329	.300	.302	.310	.347	.365	.355	.360
Current ratio ⁴	1.693	1.688	1.648	1.553	1.484	1.461	1.489	1.458	1.493	1.464	1.443

¹ Includes time certificates of deposits. ² Includes U.S. Government receivables. ³ Cash plus U.S. Government securities plus "other current assets," divided by "current liabilities." ⁴ "Current assets" divided by "current liabilities."

Source: Through 1981, U.S. Federal Trade Commission, thereafter, U.S. Bureau of the Census. Published quarterly in Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, series now discontinued.

NO. 870. EMPLOYEES AND PAYROLL, BY EMPLOYMENT-SIZE CLASS: 1975 TO 1986

[See headnote, table 872]

EMPLOYMENT-SIZE CLASS	Unit	1975	1979	1980	1981	1982	1983	1984	1985	1986
Employees, total ¹	1,000	60,519	75,411	74,844	74,848	74,287	72,974	78,021	81,111	83,380
Under 20 employees	1,000	16,393	19,406	19,423	19,515	19,898	20,156	21,171	21,810	22,396
20 to 99 employees	1,000	16,272	20,922	21,166	21,161	21,143	20,908	22,449	23,539	24,311
100 to 499 employees	1,000	13,713	17,527	17,840	17,977	17,444	16,794	18,348	19,410	20,260
500 to 999 employees	1,000	4,872	5,780	5,689	5,497	5,436	5,186	5,614	5,716	5,780
1,000 or more employees	1,000	9,315	10,976	10,716	10,630	10,376	10,050	10,413	10,645	10,734
Annual payroll ¹	Bil. dol.	596	952	1,035	1,076	1,198	1,269	1,339	1,514	1,609
Under 20 employees	Bil. dol.	138	210	231	254	272	298	325	352	375
20 to 99 employees	Bil. dol.	147	239	261	288	303	319	358	388	414
100 to 499 employees	Bil. dol.	135	224	249	279	286	297	334	362	391
500 to 999 employees	Bil. dol.	53	84	91	99	104	107	120	126	132
1,000 or more employees	Bil. dol.	123	196	208	229	234	248	269	286	298

¹ Prior to 1986, totals for employees and annual payroll have been revised. Detail may not add to totals because revisions for size class are not available.

Source: U.S. Bureau of the Census, *County Business Patterns*, annual.

NO. 871. ESTABLISHMENTS, EMPLOYEES, AND PAYROLL, BY INDUSTRY: 1975 TO 1986

[See headnote, table 872]

INDUSTRY	ESTABLISHMENTS (1,000)				EMPLOYEES (1,000)				PAYROLL (bil. dol.)			
	1975	1980	1985	1986	1975	1980	1985	1986	1975	1980	1985	1986
All industries ¹	4,114	4,543	5,701	5,807	60,519	74,844	81,111	83,380	596	1,035	1,514	1,609
Agricultural services ²	40	46	64	68	195	290	380	412	2	3	5	6
Mining	24	30	37	35	720	994	943	847	10	22	28	24
Contract construction	364	418	476	492	3,322	4,473	4,480	4,659	44	75	98	104
Manufacturing	306	319	358	355	18,372	21,165	19,429	19,142	213	355	458	468
Transportation ³	147	168	203	210	3,908	4,623	4,809	4,884	51	88	123	128
Wholesale trade	350	385	438	440	4,332	5,211	5,624	5,725	52	89	130	138
Retail trade	1,190	1,223	1,407	1,441	12,271	15,047	16,852	17,550	76	124	179	193
Finance and insurance ⁴	372	421	488	504	4,247	5,295	6,004	6,371	42	77	132	151
Services	1,118	1,278	1,712	1,811	12,655	17,186	21,549	22,878	102	197	346	381

¹ Includes nonclassifiable establishments, not shown separately. ² Includes forestry and fisheries. ³ Includes other public utilities. ⁴ Includes real estate.

Source: U.S. Bureau of the Census, *County Business Patterns*, annual.

NO. 872. ESTABLISHMENTS, EMPLOYEES, AND PAYROLL, BY EMPLOYMENT-SIZE CLASS AND INDUSTRY: 1986

[Excludes government employees, railroad employees, self-employed persons, etc. See "General Explanation" in source for definitions and statement on reliability of data. An establishment is a single physical location where business is conducted or where services or industrial operations are performed]

EMPLOYMENT SIZE-CLASS	Unit	All industries ¹	Agricultural serv-ices ²	Mining	Contract construction	Manufacturing	Transportation ³	Wholesale trade	Retail trade	Finance and insurance ⁴	Services
Establishments, total	1,000	5,807	68	35	492	355	210	440	1,441	504	1,811
Under 20 employees	1,000	5,082	65	28	445	290	170	374	1,237	450	1,839
20 to 99 employees	1,000	605	3	6	42	88	32	59	184	45	139
100 to 499 employees	1,000	107	(z)	1	5	32	7	6	19	7	29
500 to 999 employees	1,000	8	(z)	(z)	(z)	4	1	(z)	1	1	3
1,000 or more employees	1,000	5	(z)	(z)	(z)	2	(z)	(z)	(z)	(z)	2
Employees, total	1,000	83,380	412	847	4,859	19,142	4,884	5,725	17,550	6,371	22,878
Under 20 employees	1,000	22,296	235	141	1,877	1,420	823	2,048	6,418	1,836	6,746
20 to 99 employees	1,000	24,311	110	240	1,607	3,900	1,312	2,231	7,321	1,807	5,621
100 to 499 employees	1,000	20,260	52	278	737	6,525	1,352	1,108	3,250	1,418	5,499
500 to 999 employees	1,000	5,780	10	103	142	2,409	418	190	346	427	1,735
1,000 or more employees	1,000	10,734	4	85	236	4,888	980	147	235	882	3,277
Annual payroll	Bil. dol.	1,609	5.8	24.5	104.5	467.8	127.7	138.2	193.0	151.0	381.4
Under 20 employees	Bil. dol.	375	3.4	3.3	37.0	27.8	16.3	45.5	68.0	38.5	121.8
20 to 99 employees	Bil. dol.	414	1.5	6.1	37.3	79.4	30.1	53.0	76.4	42.0	86.8
100 to 499 employees	Bil. dol.	391	.7	8.7	20.3	142.3	35.8	29.3	38.4	34.5	80.7
500 to 999 employees	Bil. dol.	132	(z)	3.6	3.7	59.9	13.0	5.8	5.6	11.0	29.5
1,000 or more employees	Bil. dol.	298	(z)	2.8	6.2	158.5	32.4	4.7	5.0	25.3	62.6

Z Less than 500 establishments or \$500 million. ¹ Includes nonclassifiable establishments not shown separately.

² Includes forestry and fisheries. ³ Includes other public utilities. ⁴ Includes real estate.

Source: U.S. Bureau of the Census, *County Business Patterns*, annual.

NO. 873. PERCENT DISTRIBUTION OF ENTERPRISES BY EMPLOYMENT SIZE AND SALES: 1986

[In percent, except number of enterprises. Covers enterprises, see text, section 14 for definition. Excludes government employment. Covers approximately 93 percent of full-time business activity, generally firms with at least one paid employee, with a Dun and Bradstreet credit rating, or using insurance markets. Based on the Small Business Data Base, USELM file, version B, 1986, a longitudinally weighted 50 percent sample of SBA's universe U.S. Establishment and Enterprise Microdata (USEEM) files]

SALES CLASS	Total	EMPLOYMENT SIZE-CLASS						
		1-4	5-9	10-19	20-49	50-99	100-499	500 and over
Number of enterprises, total.....	3,805,982	1,967,806	881,468	469,320	301,471	99,672	71,607	14,638
Under \$25,000.....	3.7	6.7	.5	.2	.1	.1	.1	.4
\$25,000-\$49,999.....	6.9	12.4	1.3	.4	.2	.1	.1	.1
\$50,000-\$99,999.....	14.9	25.0	6.2	1.6	.6	.3	.2	.2
\$100,000-\$499,999.....	44.4	47.8	59.9	35.1	15.1	3.8	1.8	.9
\$500,000-\$999,999.....	12.4	5.2	18.9	28.3	20.4	10.2	2.5	.6
\$1,000,000-\$1,999,999.....	8.1	1.9	8.9	20.0	25.5	20.2	7.4	1.0
\$2,000,000-\$4,999,999.....	5.7	.7	3.4	11.5	25.5	31.9	22.9	2.4
\$5,000,000-\$9,999,999.....	2.0	.1	.6	2.2	8.8	18.0	24.1	4.2
\$10,000,000-\$24,999,999.....	1.3	.1	.2	.7	3.2	12.9	26.9	15.9
\$25,000,000 and over.....	.7	-	.1	.2	.6	2.5	14.2	74.3

- Represents zero.

Source: U.S. Small Business Administration, Office of Advocacy, unpublished data.

NO. 874. DRUG TESTING AND EMPLOYEE ASSISTANCE PROGRAMS BY SIZE OF ESTABLISHMENT AND INDUSTRY: 1988

[As of summer. Based on a sample of 7,502 private nonagricultural establishments with one or more employees. Subject to sampling variability; see source for details]

SIZE OF ESTABLISHMENT AND INDUSTRY	ESTABLISHMENTS					EMPLOYEES				
	Total (1,000)	With a drug testing program ¹		With an employee assistance program ²		Total (1,000)	In establishments			
		Number (1,000)	Percent	Number (1,000)	Percent		With a drug testing program ¹		With an employee assistance program ²	
							Number (1,000)	Percent	Number (1,000)	Percent
Total.....	4,542.8	145.3	3.2	296.5	6.5	84,965.7	16,636.2	19.6	26,323.0	31.0
Size of establishment:										
Under 50 employees.....	4,224.6	94.4	2.2	221.2	5.2	31,284.3	1,622.7	5.2	2,754.5	8.8
50 to 99 employees.....	195.6	24.2	12.4	30.8	15.7	12,254.5	1,502.6	12.3	2,037.1	16.6
100 to 499 employees.....	107.5	21.4	19.9	35.3	32.8	21,529.5	4,787.1	22.1	7,796.9	36.2
500 to 999 employees.....	9.5	2.9	30.6	5.1	53.7	6,469.2	1,966.3	30.4	3,507.7	54.2
1,000 or more employees.....	5.6	2.5	44.6	4.1	73.2	13,428.0	6,777.5	50.5	10,226.8	76.2
Industry:										
Mining.....	31.6	6.8	21.6	5.9	18.8	712.0	342.7	48.1	340.8	47.9
Construction.....	458.1	10.5	2.3	12.8	2.8	5,011.9	449.1	9.0	533.2	10.6
Manufacturing.....	335.1	31.9	9.5	38.3	11.4	18,926.1	7,969.9	42.1	9,745.2	51.5
Durable goods.....	193.9	19.1	9.9	20.2	10.4	11,159.0	5,076.0	45.5	6,225.4	55.8
Nondurable goods.....	141.2	12.8	9.1	18.1	12.8	7,767.1	2,893.9	37.3	3,519.8	45.3
Transportation.....	153.5	22.9	14.9	16.7	10.9	3,149.1	1,531.5	48.6	1,134.6	36.0
Communication and public utilities.....	37.5	6.6	17.6	11.6	30.9	2,209.0	1,221.1	55.3	1,680.2	76.1
Wholesale trade.....	467.9	24.7	5.3	36.5	7.8	5,835.0	1,280.6	21.9	1,027.5	17.6
Retail trade.....	1,101.8	7.4	.7	51.6	4.7	18,413.0	927.0	5.0	3,133.6	17.0
Finance, insurance, and real estate.....	403.9	12.9	3.2	37.2	9.2	6,539.0	821.2	12.6	2,647.9	40.5
Services.....	1,553.4	21.5	1.4	65.8	5.5	24,170.6	2,093.1	8.7	6,080.0	25.2

¹ A drug test is a test designed to detect the presence of metabolites of drugs in urine or blood specimens. Drugs include those classified as Schedule I or II under Controlled Substances Act—opiates, cocaine, marijuana, hallucinogens, and their derivatives. Excluded are prescription drugs, steroids, and alcohol. ² Employee assistance programs include programs run internally by organization personnel or through an outside contractor. Programs are not necessarily restricted to drug problems.

Source: U.S. Bureau of Labor Statistics, Report 760, *Survey of Employer Anti-drug Programs*, January 1989.

NO. 875. CONSUMER AND FARMER COOPERATIVES, BY TYPE OF ASSOCIATION: 1985 TO 1987

[Members in thousands; business in millions of dollars. Business refers to loans outstanding]

TYPE OF ASSOCIATION	1985			1986			1987		
	Associa-tions	Mem-bers	Busi-ness	Associa-tions	Mem-bers	Busi-ness	Associa-tions	Mem-bers	Busi-ness
Credit unions ¹	15,045	45,265	74,409	14,693	48,408	86,139	14,335	50,065	99,541
Electric power cooperatives ²	868	10,032	11,032	862	10,251	11,408	846	10,113	11,401
Rural telephone cooperatives ³	250	1,047	607	250	1,062	639	249	1,079	676
Farmer cooperatives selling producer and consumer goods ⁴	4,288	(NA)	16,641	4,151	(NA)	15,095	3,063	(NA)	13,997

NA Not available. ¹ Covers federally insured credit unions. Source: National Credit Union Administration, *Annual Report of the National Credit Union Administration, 1988*. ² Source: U.S. Rural Electrification Administration, *Statistical Report—Rural Electric Borrowers*. ³ Source: U.S. Rural Electrification Administration, *Statistical Report—Rural Telephone Borrowers*. ⁴ Data for fiscal years ending June 30 or earlier in years shown. Source: Except as noted, U.S. Dept. of Agriculture, Agricultural Cooperative Service, unpublished data.

NO. 876. NEW BUSINESS INCORPORATIONS AND BUSINESS FAILURES—NUMBER AND LIABILITIES: 1970 TO 1988

[Excludes Hawaii prior to 1975, Alaska prior to 1976. Total concerns and failure data prior to 1984 exclude agriculture, forestry and fishing, finance, insurance and real estate, and services; therefore are not directly comparable with data for 1984 and later. See also *Historical Statistics, Colonial Times to 1970*, series V 20-30]

YEAR	Total concerns in business ¹ (1,000)	Index of net business formations (1967 = 100)	New incorporations (1,000)	FAILURES ²			YEAR	Total concerns in business ¹ (1,000)	Index of net business formations (1967 = 100)	New incorporations (1,000)	FAILURES ²		
				Number	Rate per 10,000 concerns	Current liabilities ³ (mil. dol.)					Number	Rate per 10,000 concerns	Current liabilities ³ (mil. dol.)
1970.....	2,442	108.8	264	10,748	44	1,888	1983.....	2,851	117.5	602	31,334	110	16,073
1975.....	2,679	109.9	326	11,432	43	4,380	1984.....	2,885	121.3	635	32,073	107	29,269
1980.....	2,780	129.9	532	11,742	42	4,635	1985.....	4,990	120.9	663	57,078	115	36,937
1981.....	2,745	124.8	581	16,784	61	6,955	1986.....	5,119	120.4	702	61,616	120	44,724
1982.....	2,606	116.4	566	24,908	86	15,611	1987.....	6,004	121.2	685	61,111	102	34,724
							1988, prel.....	5,804	124.1	682	57,098	98	36,013

¹ Data through 1983 represent number of names listed in July issue of *Dun & Bradstreet Reference Book*. Data for 1984-88 represent the number of establishments listed in the Dun's Census of American Business. The base has been changed due to expanded business failure coverage. ² Includes concerns discontinued following assignment, voluntary or involuntary petition in bankruptcy, attachment, execution, foreclosure, etc.; voluntary withdrawals from business with known loss to creditors; also enterprises involved in court action, such as receivership and reorganization or arrangement which may or may not lead to discontinuance; and businesses making voluntary compromise with creditors out of court. ³ Liabilities exclude long-term publicly held obligations; offsetting assets are not taken into account. Source: Dun & Bradstreet Corporation, New York, NY, *The Failure Record Through 1988 and Monthly Failure Report*.

NO. 877. NEW BUSINESS INCORPORATIONS AND NUMBER OF FAILURES, BY STATE: 1987 AND 1988

[1988 preliminary. Business incorporations in thousands. See headnote, table 876]

DIVISION AND STATE	NEW BUSINESS INCORPORATIONS		NUMBER OF FAILURES		DIVISION AND STATE	NEW BUSINESS INCORPORATIONS		NUMBER OF FAILURES		DIVISION AND STATE	NEW BUSINESS INCORPORATIONS		NUMBER OF FAILURES	
	1987	1988	1987	1988		1987	1988	1987	1988		1987	1988	1987	1988
U.S.....	685.6	684.9	61,111	57,098	W.N.C.-Con.									
N.E.....	42.0	40.3	1,021	1,051	MO.....	10.3	10.3	1,562	1,381	W.S.C.....	57.9	53.0	12,763	10,542
ME.....	3.2	3.1	60	84	ND.....	1.0	0.9	103	159	AR.....	5.7	4.3	438	363
NH.....	3.7	3.4	134	165	SD.....	1.0	1.0	276	148	LA.....	10.1	9.1	1,803	1,438
VT.....	2.0	2.0	48	53	NE.....	2.6	2.7	678	269	OK.....	7.8	7.2	2,158	868
MA.....	17.2	16.4	633	556	KS.....	4.3	4.4	994	846	TX.....	34.6	32.5	8,364	7,873
RI.....	3.7	3.4	35	42	SA.....	186.1	183.6	6,969	7,255	Mt.....	46.4	49.7	5,912	5,756
CT.....	12.1	11.9	111	151	DE.....	31.4	31.5	31	64	MT.....	1.4	1.3	325	241
M.A.....	129.6	132.2	3,985	4,619	MD.....	16.4	16.7	481	424	ID.....	1.7	1.9	444	363
NY.....	76.3	77.7	1,709	2,360	DC.....	2.3	2.3	63	53	WY.....	.8	.8	274	205
NJ.....	31.9	32.7	747	860	VA.....	17.2	17.7	857	928	CO.....	14.5	16.2	2,835	2,233
PA.....	21.4	21.8	1,529	1,399	WV.....	2.8	2.7	237	215	NM.....	2.4	2.5	224	344
E.N.C.....	84.3	88.8	9,591	9,067	NC.....	12.3	12.7	590	672	AZ.....	11.9	12.4	827	1,441
OH.....	18.4	19.0	1,933	1,936	SC.....	6.3	6.2	274	385	UT.....	3.8	3.8	598	599
IL.....	11.0	13.0	1,309	923	GA.....	18.1	18.7	1,235	1,379	NV.....	9.9	10.7	2,865	329
IN.....	26.8	28.7	3,292	3,301	FL.....	79.4	75.0	3,201	3,135	Pac.....	80.7	78.0	12,461	11,811
MI.....	21.8	22.6	1,814	1,799	E.S.C.....	26.3	25.9	3,195	2,998	WA.....	9.4	10.1	1,302	1,658
WI.....	6.2	6.3	1,243	1,108	KY.....	6.7	7.0	968	701	OR.....	6.9	7.2	708	509
W.N.C.....	32.3	32.6	5,214	4,000	TN.....	9.1	8.5	1,134	1,169	CA.....	59.7	56.4	9,957	9,178
MN.....	9.4	9.5	684	536	AL.....	6.7	6.6	494	635	AK.....	1.5	1.4	318	287
IA.....	3.8	3.8	911	611	MS.....	3.8	3.8	599	493	HI.....	3.2	3.0	176	179

Source: Dun & Bradstreet Corporation, New York, NY, *New Business Incorporations, monthly and Business Failure Record*, annual.

NO. 878. BUSINESS STARTS AND FAILURES—NUMBER AND RATE BY INDUSTRY: 1985 TO 1988

(1988 business starts not available. Minus sign (-) indicates decrease)

SIC ¹ code	INDUSTRY	BUSINESS STARTS				BUSINESS FAILURES				Rate per 10,000 firms 1988
		Number			Percent change, 1986-1987	Number			Percent change, 1987-1988	
		1985	1986	1987		1985	1987	1988		
A	Agriculture, forestry, fishing	3,558	3,818	3,736	-2.1	2,699	3,766	1,823	-51.6	93
B	Mining	2,289	1,739	1,540	-11.4	796	627	494	-21.2	127
10	Metal mining	65	54	72	33.3	36	23	14	-39.1	110
11	Anthracite mining	7	11	13	18.2	5	3	4	33.3	194
121	Bituminous coal and lignite	258	271	201	-25.8	161	104	83	-20.2	251
138	Oil and gas extraction	1,862	1,295	1,169	-9.7	565	469	374	-20.3	122
14	Nonmetallic minerals	97	108	85	-21.3	29	28	19	-32.1	54
C	Construction	34,417	33,079	31,246	-5.5	7,005	6,735	6,791	.8	94
15	General building contractors	13,324	13,039	12,557	-3.7	2,759	2,505	2,548	1.7	97
16	Construction, other than bldg	1,822	1,555	1,330	-14.5	419	398	350	-12.1	83
17	Special trade contractors	19,271	18,485	17,359	-6.1	3,827	3,832	3,893	1.8	92
D	Manufacturing ²	21,054	20,309	19,236	-5.3	4,869	4,273	4,204	-1.6	98
20	Food and kindred products	904	962	969	.7	261	191	232	21.5	109
22	Textile mill products	572	583	558	-4.3	110	73	92	26.0	100
23	Apparel, other textile products	1,674	1,413	1,271	-9.9	338	285	303	14.3	121
24	Lumber and wood products	1,366	1,365	1,192	-12.7	415	374	346	-7.5	102
25	Furniture and fixtures	883	880	760	-13.6	236	200	225	12.5	156
26	Paper and allied products	269	283	294	3.9	55	60	59	-1.7	105
27	Printing and publishing	3,625	3,245	3,292	1.4	659	633	618	-2.4	79
28	Chemicals and allied products	697	717	674	-6.0	172	116	128	8.6	89
29	Petroleum refining	136	111	104	-6.9	26	21	21	-	111
30	Rubber and misc. products	770	751	700	-6.8	157	145	119	-17.9	88
31	Leather and leather products	155	145	138	-4.8	47	34	22	-35.3	68
32	Stone, clay, and glass products	615	612	617	.8	159	164	145	-11.6	90
33	Primary metal products	355	401	378	-5.7	122	107	102	-4.7	128
34	Fabricated metal products	1,711	1,554	1,449	-6.8	484	461	448	-2.8	114
35	Machinery, exc. electric	2,965	2,839	2,540	-10.5	721	639	556	-13.0	82
36	Electric and electronic equipment	1,528	1,415	1,280	-9.5	329	282	242	-7.8	114
37	Transportation equipment	803	709	676	-4.7	197	175	178	1.7	138
38	Instruments and related products	781	821	750	-8.6	110	112	116	3.6	79
39	Miscellaneous	1,343	1,445	1,447	.1	271	241	253	5.0	86
E	Transportation, public utilities	8,672	8,496	8,060	-5.1	2,536	2,236	2,090	-6.5	103
40	Railroad transportation	13	32	34	6.3	9	6	2	-66.7	24
41	Local passenger transit ³	654	546	577	5.7	148	120	133	10.8	85
42	Trucking and warehousing	3,954	3,598	3,358	-6.7	1,617	1,411	1,290	-8.6	130
44	Water transportation	378	440	374	-15.0	105	100	51	-49.0	59
45	Air transportation	458	418	394	-5.7	104	96	71	-28.0	79
46	Pipelines, except natural gas	10	7	13	85.7	-	3	2	-33.3	91
47	Transportation services	1,950	2,123	1,952	-8.1	322	318	369	16.8	107
48	Communications	929	967	896	-7.3	173	136	124	-8.8	71
49	Electric, gas, sanitary services	326	363	459	26.4	58	48	48	-	28
F	Wholesale trade	28,707	26,749	24,136	-9.8	4,836	4,336	4,455	2.7	88
G	Retail trade	72,578	72,509	65,381	-9.8	13,494	12,240	11,488	-6.1	79
H	Finance, insurance, real estate ²	15,710	17,146	16,160	-5.8	2,676	2,550	2,577	1.1	57
60	Banking	524	474	407	-14.1	139	206	216	4.9	112
61	Credit agencies, except banks	1,411	1,560	1,405	-9.9	193	205	196	-4.4	69
62	Security, commodity brokers	1,103	1,176	1,149	-2.3	177	139	157	12.9	89
63	Insurance agents, brokers, and services	1,304	1,327	1,535	15.7	259	290	282	-9.7	28
65	Real estate	10,050	11,185	10,459	-6.5	1,638	1,526	1,537	.7	60
I	Services ²	57,702	59,424	54,788	-10.8	16,649	23,802	22,686	-4.7	126
70	Hotels and other lodgings	1,535	1,731	1,786	3.2	304	334	307	-8.1	56
72	Personal services	6,607	7,165	6,146	-14.2	1,030	969	960	-4.0	40
73	Business services ³	22,733	24,582	23,701	-3.6	6,132	10,564	11,386	7.8	379
731	Advertising	1,500	1,539	1,417	-7.9	230	253	274	8.3	117
735	Personnel supply services	760	801	756	-5.6	99	97	101	4.1	65
737	Computer and data processing services	3,225	3,020	2,773	-8.2	373	310	326	5.2	91
75	Auto repair, services, and garages	5,997	5,550	5,193	-6.4	1,335	1,202	1,210	.7	68
78,79	Motion pictures, amusement, and recreation	4,554	4,364	3,434	-21.3	654	692	643	-7.1	68
80	Health services	4,026	4,656	4,298	-7.7	577	695	676	-2.7	25
81	Legal services	1,296	1,337	1,292	-3.4	191	173	194	12.1	19
82	Educational services	674	638	587	-10.8	100	125	96	-23.2	10
83	Social services	951	928	783	-15.6	200	212	148	-30.6	20
84	Museums, art galleries, gardens	42	49	54	10.2	5	2	6	200.0	19
86	Membership organizations	989	1,281	1,193	-6.9	69	53	66	24.5	6

² Represents zero. ¹ Standard Industrial Classification; see text, section 13. ³ Includes industries not shown separately. ⁴ Includes interurban.

Source: The Dun and Bradstreet Corporation, New York, NY, *Business Starts Record*, annual and *Business Failure Record*, annual.

NO. 879. BANKRUPTCY PETITIONS FILED AND PENDING, BY TYPE AND CHAPTER: 1981 TO 1988

[For years ending June 30. Covers only bankruptcy cases filed under the Bankruptcy Reform Act of 1978. Bankruptcy: legal recognition that a company or individual is insolvent and must restructure or liquidate. Petitions "filed" means the commencement of a proceeding through the presentation of a petition to the clerk of the court; "pending" is a proceeding in which the administration has not been completed]

ITEM	1981	1982	1983	1984	1985	1986	1987	1988
Total, filed	360,329	367,866	374,734	344,275	364,536	477,856	561,278	594,567
Business ¹	47,415	56,423	69,818	62,170	66,651	76,281	88,278	68,501
Non-business ²	312,914	311,443	304,916	282,105	297,885	401,575	473,000	526,066
Voluntary.....	358,997	366,331	373,064	342,828	362,939	476,214	559,658	593,158
Involuntary.....	1,332	1,535	1,670	1,447	1,597	1,642	1,620	1,409
Chapter 7 ³	265,721	255,098	251,322	232,994	244,650	332,679	397,551	423,796
Chapter 9 ⁴	1	4	3	4	3	7	10	3
Chapter 11 ⁵	7,828	14,059	21,207	19,913	21,425	24,443	22,566	18,891
Chapter 12 ⁶	(x)	(x)	(x)	(x)	(x)	(x)	4,824	3,099
Chapter 13 ⁷	86,778	98,705	102,201	91,358	98,452	120,726	136,300	148,771
Section 304 ⁸	1	-	1	6	6	1	27	7
Total, pending	361,664	461,287	537,306	577,567	608,945	728,577	808,504	816,497

- Represents zero. X Not applicable. ¹ Business bankruptcies include those filed under chapters 7, 9, 11, or 12. ² Bankruptcies include those filed under chapters 7, 11, or 13. ³ Chapter 7, liquidation of non-exempt assets of businesses or individuals. ⁴ Chapter 9, adjustment of debts of a municipality. ⁵ Chapter 11, individual or business reorganization. ⁶ Chapter 12, adjustment of debts of a family farmer with regular annual income, effective November 26, 1986. ⁷ Chapter 13, adjustment of debts of an individual with regular income. ⁸ 11 U.S.C., Section 304, cases ancillary to foreign proceedings.

Source: Administrative Office of the U.S. Courts, *Annual Report of the Director*.

NO. 880. SMALL BUSINESS ADMINISTRATION LOANS TO ALL SMALL BUSINESSES: 1978 TO 1988

[For fiscal year ending in year shown; see text, section 9. A small business must be independently owned and operated, must not be dominant in its particular industry, and must meet standards set by the Small Business Administration as to its annual receipts or number of employees. Loans include both direct and guaranteed loans to small business establishments. Does not include Disaster Assistance Loans]

LOANS APPROVED	Unit	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Loans, all businesses.....	1,000.....	31.7	30.2	31.7	28.7	15.4	19.2	21.3	19.3	16.8	17.1	17.1
Loans, minority-owned businesses.....	1,000.....	6.1	5.5	6.0	5.2	2.5	2.7	3.1	2.8	2.0	2.1	2.2
Percent of all business loans.....	Percent.....	19	18	19	18	16	14	15	15	12	12	13
Value of total loans ¹	Mil. dol.....	3,314	3,407	3,858	3,668	2,038	3,007	3,450	3,217	3,013	3,232	3,434
Value of loans to minority-operated businesses ²	Mil. dol.....	402	428	470	454	238	295	383	324	265	299	343

¹ Includes both SBA and bank portions of loans. ² SBA direct loans and guaranteed portion of bank loans only.

Source: U.S. Small Business Administration, unpublished data.

NO. 881. SMALL BUSINESS BIRTH, DEATH, AND NET GROWTH RATES: 1980 TO 1986

[Represents any concern which is independently owned and operated and has fewer than 500 employees. Minus sign (-) indicates decrease]

ITEM	Birth rate ¹	Death rate ²	Net growth ³	ITEM	Birth rate ¹	Death rate ²	Net growth ³
All industries: 1980-1982	9.5	9.1	.4	Wholesale trade: 1980-1982	9.1	7.5	1.6
1982-1984.....	10.2	8.9	1.3	1982-1984.....	9.9	7.5	2.4
1984-1986.....	9.0	9.9	-.9	1984-1986.....	8.2	8.8	-.4
Construction: 1980-1982	8.9	9.6	-.7	Retail trade: 1980-1982	8.5	9.6	-.1
1982-1984.....	10.8	10.5	.3	1982-1984.....	8.9	9.5	-.6
1984-1986.....	9.9	10.8	-.9	1984-1986.....	8.1	10.4	-2.3
Manufacturing: 1980-1982	8.1	7.3	.8	Services: 1980-1982	11.4	9.3	2.1
1982-1984.....	8.8	7.1	1.7	1982-1984.....	11.8	8.7	3.1
1984-1986.....	7.5	8.0	-.5	1984-1986.....	10.2	10.0	.2

¹ Business births represent the number of establishments formed during a specified period relative to the number in the initial year. ² Business deaths represent the disappearance of an establishment or enterprise from the SBDB for financial or nonfinancial reasons relative to the initial year. ³ Net growth rate is the birth rate less the death rate.

Source: U.S. Small Business Administration, Office of Advocacy USELM file, version 9, December 1987. The USELM is a longitudinally weighted 50 percent sample of SBA's universe U.S. Establishment and Enterprise Microdata (USEEM) file.

**No. 882. FEDERAL CONTRACT ACTIONS—SMALL AND MINORITY-OWNED SMALL BUSINESSES SHARE,
BY STATE OF PRINCIPAL PLACE OF PERFORMANCE: 1987 AND 1988**

[In millions of dollars, except percent. For fiscal year. Excludes Guam, Puerto Rico, and Virgin Islands. Represents contract awards of \$25,000 or more awarded to establishments. A contract may consist of more than one action. Minus sign (-) indicates decrease. For composition of regions, see fig. 1, inside front cover]

REGION, DIVISION, AND STATE	TOTAL CONTRACT ACTIONS			SMALL BUSINESS SHARE				SMALL MINORITY-OWNED SHARE			
	1987	1988	Per- cent change 1987- 1988	1987	1988		Per- cent change 1987- 1988	1987	1988		Per- cent change 1987- 1988
					Amount	Per- cent of total			Amount	Per- cent of total	
U.S.	171,269	161,898	-5.5	27,575	25,221	15.6	-8.5	4,688	5,012	3.1	6.9
Region:											
Northeast.....	36,700	31,833	-13.3	4,552	4,164	13.1	-8.5	413	493	1.6	19.6
Midwest.....	26,936	24,280	-9.9	3,976	3,577	14.7	-10.1	597	589	2.4	-1.3
South.....	56,700	56,903	.4	12,206	10,651	18.7	-12.7	2,396	2,647	4.7	10.5
West.....	50,933	48,882	-4.0	6,842	6,829	14.0	-0.2	1,282	1,283	2.6	.1
New England	16,829	14,675	-12.8	1,591	1,418	9.7	-11.0	138	144	1.0	4.3
Maine.....	920	623	-32.3	83	82	13.2	-1.2	4	2	.3	-50.0
New Hampshire.....	485	505	2.0	93	98	13.7	-25.8	4	2	.4	-50.0
Vermont.....	139	145	4.3	20	15	10.3	-25.0	-	-	(X)	(X)
Massachusetts.....	9,309	7,773	-16.5	790	744	9.6	-5.8	91	85	1.1	-6.6
Rhode Island.....	535	451	-15.7	179	159	35.3	-11.2	7	19	4.2	171.4
Connecticut.....	5,431	5,178	-4.7	426	347	6.7	-18.5	32	36	.7	12.5
Middle Atlantic	19,871	17,158	-13.7	2,961	2,748	16.0	-7.2	275	349	2.0	26.9
New York.....	10,986	8,973	-18.3	1,253	1,147	12.8	-8.5	82	95	1.1	15.9
New Jersey.....	3,887	3,791	-2.5	790	703	18.5	-11.0	118	80	2.1	-32.2
Pennsylvania.....	4,998	4,394	-12.1	918	898	20.4	-2.2	75	174	4.0	132.0
East North Central	14,346	13,158	-8.3	2,681	2,337	17.8	-12.8	390	410	3.1	5.1
Ohio.....	5,716	6,319	10.6	805	786	12.4	-2.4	159	218	3.5	37.1
Indiana.....	2,321	1,624	-30.0	248	189	11.6	-23.8	26	21	1.3	-19.2
Illinois.....	2,917	2,545	-14.0	756	650	25.9	-14.0	169	123	4.9	-27.2
Michigan.....	2,135	1,519	-28.9	559	396	26.1	-29.2	26	25	1.7	-3.9
Wisconsin.....	1,257	1,187	-5.5	313	316	26.6	1.0	10	23	1.9	130.0
West North Central	12,590	11,122	-11.7	1,295	1,240	11.1	-4.2	207	179	1.6	-13.5
Minnesota.....	2,634	2,260	-14.2	179	196	8.7	9.5	10	18	.8	80.0
Iowa.....	768	703	-8.5	79	102	14.5	29.1	18	14	2.0	-22.2
Missouri.....	6,941	6,382	-8.1	446	428	6.7	-4.0	65	58	.9	-9.8
North Dakota.....	228	160	-29.8	160	108	67.5	-32.5	54	35	21.9	-35.2
South Dakota.....	147	120	-18.4	70	61	50.8	-12.9	20	20	16.7	-.0
Nebraska.....	383	400	4.4	170	151	37.8	-11.2	13	7	1.8	-46.2
Kansas.....	1,489	1,097	-26.3	191	194	17.7	1.6	27	27	2.5	-.0
South Atlantic	33,606	33,911	.9	7,221	6,658	19.6	-7.8	1,527	1,804	5.3	18.1
Delaware.....	223	302	35.4	43	42	13.9	-2.3	2	2	.7	-.0
Maryland.....	6,839	6,307	-7.8	1,279	1,236	19.6	-3.4	398	525	8.3	31.9
District of Columbia.....	2,509	2,879	14.8	799	778	27.0	-2.6	322	385	13.4	19.6
Virginia.....	9,509	12,078	27.0	2,299	2,216	18.3	-3.6	555	626	5.2	12.8
West Virginia.....	268	333	24.3	106	89	26.7	-16.0	14	8	2.4	-42.9
North Carolina.....	1,599	1,609	.6	572	506	31.5	-11.5	41	54	3.4	31.7
South Carolina.....	1,844	1,882	2.1	365	294	15.8	-19.5	47	29	1.5	-38.3
Georgia.....	3,838	1,902	-50.4	487	498	26.2	2.3	30	68	3.6	126.7
Florida.....	6,977	6,619	-5.1	1,271	999	15.1	-21.4	118	107	1.6	-9.3
East South Central	8,812	8,597	-2.4	2,327	1,673	19.5	-28.1	415	366	4.3	-11.8
Kentucky.....	849	683	-28.0	429	282	38.4	-39.9	155	44	6.4	-71.8
Tennessee.....	3,616	2,827	-21.8	920	450	15.9	-51.1	36	79	2.8	119.4
Alabama.....	2,498	2,520	.9	721	733	29.1	1.7	196	199	2.9	1.5
Mississippi.....	1,749	2,567	46.8	257	228	8.9	-11.3	28	44	1.7	57.1
West South Central	14,282	14,395	.8	2,657	2,320	16.1	-12.7	454	477	3.3	5.1
Arkansas.....	839	846	.8	267	206	24.4	-22.9	15	33	3.9	120.0
Louisiana.....	2,319	2,073	-10.6	550	338	16.3	-38.6	52	54	2.6	3.9
Oklahoma.....	757	859	13.5	360	378	44.0	5.0	99	129	15.0	30.3
Texas.....	10,367	10,617	2.4	1,480	1,398	13.2	-5.5	288	261	2.5	-9.4
Mountain	13,923	13,436	-3.5	1,827	1,917	14.3	4.9	477	456	3.4	-4.4
Montana.....	176	148	-15.9	138	110	74.3	-20.3	39	26	17.6	-33.3
Idaho.....	566	641	13.3	81	144	23.5	77.8	15	15	2.3	-.0
Wyoming.....	139	174	25.2	96	80	46.0	-16.7	7	3	1.7	-57.1
Colorado.....	3,710	3,812	2.8	418	389	10.2	-6.5	87	101	2.7	16.1
New Mexico.....	3,026	3,185	5.3	322	270	8.5	-16.1	165	116	3.6	-29.7
Arizona.....	3,750	3,020	-19.5	387	353	11.7	-8.8	91	116	3.8	28.5
Utah.....	1,608	1,592	-1.0	256	452	28.4	76.6	50	57	3.6	14.0
Nevada.....	948	864	-8.9	131	119	13.8	-9.2	23	22	2.6	-4.4
Pacific	37,010	35,446	-4.2	5,015	4,912	13.9	-2.1	805	827	2.3	2.7
Washington.....	4,534	3,757	-17.1	519	410	10.9	-21.0	75	65	1.7	-13.3
Oregon.....	547	1,206	120.5	228	828	68.7	263.2	13	48	4.0	299.2
California.....	30,651	29,353	-4.2	3,668	3,164	10.8	-13.7	535	595	1.8	4.4
Alaska.....	751	564	-24.9	329	237	42.0	-28.0	45	29	5.1	-35.6
Hawaii.....	527	566	7.4	271	273	48.2	.7	139	150	26.5	7.9

- Represents zero. X Not applicable.

Source: U.S. Small Business Administration, *The State of Small Business: A Report of the President*, annual. Data from Federal Procurement Data Center, "Special Report F00312," June 1, 1989.

NO. 883. MERGERS AND ACQUISITIONS—SUMMARY: 1980 TO 1988

[Covers transactions valued at \$1 million or more. Values based on transactions for which price data revealed. All activity includes mergers, acquisitions, acquisitions of controlling interest, divestitures, and leveraged transactions that result in a change in ownership. Divestiture: sale of a business, division, or subsidiary by corporate owner to another party. Leveraged buyout: acquisition of a business in which buyers use mostly borrowed money to finance purchase price and incorporate debt into capital structure of business after change in ownership]

ITEM	Unit	1980	1981	1982	1983	1984	1985	1986	1987	1988
All activity: Number.....	Number..	1,560	2,329	2,298	2,391	3,164	3,437	4,381	3,920	3,487
Value.....	Mil. dol.	32,883	70,064	60,698	52,691	126,074	145,464	204,895	177,203	226,643
Divestitures: Number.....	Number..	104	476	562	661	792	1,037	1,413	1,192	1,090
Value.....	Mil. dol.	5,090	10,171	8,362	12,949	30,556	43,524	72,320	57,519	80,103
Leveraged buyouts: Number.....	Number..	11	100	184	231	253	254	335	270	318
Value.....	Mil. dol.	236	3,870	3,452	4,519	18,697	19,634	45,160	36,069	42,914
Form of payment: All cash.....	Percent..	(NA)	42	55	53	37	40	44	54	59
All stock.....	Percent..	(NA)	22	14	16	12	10	11	11	7
Combination cash, stock debt, other.....	Percent..	(NA)	19	20	25	26	24	20	17	19
Undisclosed ¹	Percent..	(NA)	17	11	6	26	26	25	18	15
Ownership status of acquisition targets:										
Public acquired company:										
Number.....	Number..	398	668	687	553	832	817	853	995	874
Value.....	Mil. dol.	11,948	49,675	46,701	31,891	85,724	91,513	108,894	102,829	125,195
Private acquired company:										
Number.....	Number..	1,059	1,198	1,064	1,192	1,550	1,588	2,123	1,683	1,477
Value.....	Mil. dol.	15,911	11,215	6,400	8,335	10,007	10,376	24,059	14,853	19,867

NA Not available. ¹ Price was given but form of payment was not.

NO. 884. MERGERS AND ACQUISITIONS—NUMBER AND VALUE OF TRANSACTIONS, BY INDUSTRY: 1988

[See headnote table 883]

SIC code	INDUSTRY	TOTAL		U.S. COMPANY ACQUIRING U.S. COMPANY		FOREIGN COMPANY ACQUIRING U.S. COMPANY		U.S. COMPANY ACQUIRING FOREIGN COMPANY	
		Number	Value (mil. dol.)	Number	Value (mil. dol.)	Number	Value (mil. dol.)	Number	Value (mil. dol.)
	Total activity²	3,487	226,643	2,882	159,326	447	60,818	158	6,500
(A)	Agriculture, forestry, fishing.....	16	580	12	579	4	(³)	—	1
(B)	Mining.....	141	10,460	112	7,942	17	1,744	12	774
(C)	Construction.....	33	2,257	30	587	3	1,670	—	(²)
(D)	Manufacturing:								
20	Food and kindred products.....	136	22,991	100	17,849	24	4,884	12	258
22	Textile mill products.....	26	2,736	18	2,186	7	501	1	49
23	Apparel, other textile products.....	34	1,307	28	1,288	3	19	3	(²)
24	Lumber and wood products.....	28	4,630	24	4,692	1	8	3	(²)
26	Paper and allied products.....	39	5,438	34	5,329	1	57	4	53
27	Printing and publishing.....	133	9,625	98	1,523	32	8,102	3	(²)
28	Chemicals and allied products.....	133	12,318	87	10,849	31	1,245	15	224
30	Rubber and plastic products.....	53	7,749	43	1,040	5	2,934	5	3,774
32	Stone, clay, glass, and concrete.....	42	3,545	26	2,379	12	1,143	4	23
33	Primary metals industries.....	43	3,248	33	3,109	7	118	3	21
34	Fabricated metal products.....	95	4,666	85	3,500	8	1,165	2	1
35	Industrial machinery, computer equipment.....	197	11,724	148	8,090	39	3,631	10	3
36	Electrical and electronic equipment.....	149	9,665	117	5,877	22	3,572	10	217
37	Transportation equipment.....	56	1,896	44	1,270	7	421	5	204
38	Instruments and related products ⁴	189	5,038	139	3,417	42	1,587	8	33
(E)	Transportation and public utilities.....	300	16,128	276	15,350	17	753	7	26
(F)	Wholesale trade.....	206	2,896	162	2,529	31	358	13	9
(G)	Retail trade.....	210	29,481	191	21,308	13	8,097	6	76
(H)	Finance, insurance, real estate.....	658	32,535	596	21,635	53	10,766	9	134
(I)	Services.....	516	17,360	436	12,821	59	4,416	21	123

- Represents zero. ¹ Standard Industrial Classification; see text, section 13. ² Includes other industries, not shown separately. ³ Transaction price data not revealed. ⁴ Data have been revised since publication release.

Source of tables 883 and 884: MLR Publishing Company, *Mergers and Acquisitions*, 1988 (copyright). Publication contains extract from database, M&A Database.

NO. 885. EMPLOYEE STOCK OWNERSHIP PLANS—NUMBER OF PLANS AND PARTICIPANTS: 1975 TO 1988

[As of end of year]

YEAR	Number of plans	Number of employees (1,000)	YEAR	Number of plans	Number of employees (1,000)	YEAR	Number of plans	Number of employees (1,000)
1975.....	1,601	248	1980.....	5,009	4,048	1985.....	7,402	7,353
1976.....	2,393	509	1981.....	5,680	4,537	1986.....	8,046	7,860
1977.....	3,137	1,658	1982.....	6,082	4,745	1987.....	8,777	8,860
1978.....	4,028	2,800	1983.....	6,456	5,397	1988.....	9,700	9,700
1979.....	4,551	3,039	1984.....	6,904	6,576			

Source: National Center for Employee Ownership, Inc., Oakland, CA, unpublished data.

NO. 886. PATENTS AND TRADEMARKS: 1980 TO 1988

[In thousands. Calendar year data. Covers patents issued to citizens of the United States and residents of foreign countries. For information on copyright data, see table 931. See also *Historical Statistics, Colonial Times to 1970*, series W 98-108]

ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	TOP COUNTRIES	Patents issued, 1988
Patent applications filed	113.0	114.5	116.4	112.4	120.6	127.1	133.0	139.8	151.9	Foreign country residents ^{1, 4}	39.7
Inventions.....	104.3	106.4	109.6	103.7	111.3	117.0	122.4	127.9	139.8	Japan.....	17.0
Designs.....	7.8	7.4	8.2	6.1	8.7	9.6	9.9	11.2	11.3	West Germany.....	7.5
Botanical plants.....	.2	.2	.2	.3	.3	.2	.3	.4	.4	France.....	2.8
Reissues.....	.6	.5	.4	.3	.3	.3	.3	.4	.4	United Kingdom.....	2.8
Patents issued	66.2	71.0	63.3	62.0	72.7	77.2	76.9	89.4	84.3	Canada.....	1.6
Inventions.....	61.8	65.8	57.9	56.9	67.2	71.7	70.9	83.0	77.9	Switzerland.....	1.3
Designs.....	13.3	14.1	11.9	10.5	12.3	12.9	13.3	15.3	14.3	Italy.....	1.2
Corporations: U.S.	29.4	29.5	25.8	25.7	30.1	31.3	29.6	33.8	31.4	Netherlands.....	.9
Foreign ¹	18.2	21.0	19.2	19.6	23.6	26.4	27.0	32.9	31.4	Sweden.....	.9
U.S. Government.....	1.0	1.1	1.0	1.0	1.2	1.1	1.0	1.0	.7	China: Taiwan.....	.5
Designs.....	3.9	4.7	4.9	4.6	4.9	5.1	5.5	6.0	5.7		
Botanical plants.....	.1	.2	.2	.2	.2	.2	.2	.2	.4		
Reissues.....	.3	.4	.3	.4	.3	.3	.3	.2	.2		
Foreign country residents.....	25.4	27.9	25.6	25.4	30.5	33.9	34.9	41.7	39.7	Australia.....	.5
Percent of total.....	38.4	39.2	40.5	41.0	42.0	43.9	45.4	46.6	47.1	Austria.....	.4
Other published documents ³	(z)	.1	(z)	(z)	(z)	(z)	.2	.2	.2	Belgium.....	.3

Z Less than 50. ¹ Includes patents to foreign governments. ² Includes patents for inventions, designs, botanical plants, and reissues. ³ Includes Defensive Publications, a practice which began in November 1968 and ended in July 1986; and Statutory Invention Registrations, the current practice, which began May 1985. These documents are patent applications, which are published to provide the defensive properties of a patent, but do not have the enforceable rights of a patent. ⁴ Includes other countries not shown separately.

Source: U.S. Patent and Trademark Office. Fiscal-year figures are published in the *Commissioner of Patents and Trademarks Annual Report*.

NO. 887. PATENTS, BY STATE: 1988

[Includes only U.S. patents granted to residents of the United States and territories]

STATE	Total	Inven-tions	De-signs	Botani-cal plants	Re-issu-e	STATE	Total	Inven-tions	De-signs	Botani-cal plants	Re-issu-e
U.S.	44,570	40,497	3,646	260	167	MT.....	52	46	6	-	-
AL.....	267	239	26	1	1	NE.....	139	127	11	1	-
AK.....	20	18	2	-	-	NV.....	85	79	5	-	1
AZ.....	681	641	35	3	2	NH.....	236	225	11	-	-
AR.....	99	81	16	1	1	NJ.....	2,777	2,619	150	1	7
CA.....	6,875	6,071	668	116	20	NM.....	170	157	13	-	-
CO.....	675	616	56	1	2	NY.....	3,646	3,315	310	2	19
CT.....	1,492	1,346	135	4	7	NC.....	740	644	90	-	6
DE.....	340	303	6	-	-	ND.....	39	32	7	-	-
DC.....	44	42	2	-	-	OH.....	2,376	2,142	195	27	12
FL.....	1,508	1,334	150	22	2	OK.....	566	522	42	2	-
GA.....	501	443	58	2	2	OR.....	611	495	87	28	1
HI.....	62	55	6	1	-	PA.....	2,561	2,425	117	12	7
ID.....	91	83	8	-	-	RI.....	146	125	21	-	-
						SC.....	332	301	30	1	-
IL.....	2,612	2,369	218	8	17	SD.....	37	34	3	-	-
IN.....	995	907	84	3	1	TN.....	497	434	61	2	-
IA.....	355	324	28	1	2	TX.....	2,540	2,388	141	3	8
KS.....	252	224	26	-	2	UT.....	265	237	27	-	1
KY.....	273	252	20	1	-	VT.....	98	89	9	-	2
LA.....	367	346	18	-	3	VA.....	536	476	58	-	-
ME.....	89	85	4	-	-	WA.....	721	655	57	6	3
MD.....	670	632	32	2	4	WV.....	125	117	4	1	3
MA.....	1,786	1,622	157	2	5	WI.....	1,019	887	127	2	3
MI.....	2,312	2,196	99	2	15	WY.....	28	22	6	-	-
MN.....	1,198	1,075	119	-	4	PR.....	13	13	-	-	-
MS.....	110	96	12	-	2	VI.....	3	3	-	-	-
MO.....	538	458	75	2	3						

- Represents zero.

Source: U.S. Patent and Trademark Office, *Technology Assessment and Forecast Reports—All Technologies and Country/State*.

NO. 888. PATENTS, BY INDUSTRY: 1970 TO 1988

[Includes all patents for inventions granted to residents of the United States, its territories, and foreign citizens. Number of patents by industry may not add to total since a patent may be recorded in more than one industry category. Except for total, data for all years have been revised to reflect the U.S. Patent Classification System as of 1988]

SIC ¹ code	INDUSTRY	1970	1980	1985	1986	1987	1988
(x)	Total	64,429	61,819	71,661	70,860	82,952	77,924
(x)	Durable goods:						
32	Stone, clay, glass and concrete products.....	2,112	2,077	2,269	2,185	2,458	2,425
33, 3462-3	Primary metals.....	793	767	786	827	801	881
34	Fabricated metal products ²	7,647	7,435	8,331	8,358	9,766	8,817
35	Machinery, except electrical.....	18,362	17,062	20,231	19,599	21,951	20,734
36, 3825	Electrical and electronic equipment, and supplies.....	14,399	11,621	15,316	15,372	20,090	18,021
37, 348	Transportation and other public utilities.....	4,092	4,039	4,961	4,922	6,062	5,447
38	Professional and scientific instruments ³	8,045	8,454	10,134	10,534	12,503	11,815
(x)	Nondurable goods:						
20	Food and kindred products.....	510	516	582	465	504	573
22	Textile mill products.....	717	643	811	794	893	849
28	Chemicals and allied products.....	9,616	10,746	11,296	10,144	11,297	11,098
13, 29	Petroleum, oil and gas extraction.....	860	793	1,031	867	961	839
30	Rubber and miscellaneous plastics products.....	4,728	4,904	5,865	5,550	6,210	6,233
	All other SIC ¹ groups.....	6,283	6,322	6,707	7,215	8,147	8,167

X Not applicable. ¹ Standard Industrial Classification. ² Excludes SIC groups 3462, 3463, 348. ³ Excludes SIC group 3825.

Source: U.S. Patent and Trademark Office, *Patenting Trends in the United States, State Country Report, 1963-1988*.

NO. 889. CONSUMER PACKAGED GOODS—NEW PRODUCT INTRODUCTIONS: 1980 TO 1988

[Consumer packaged goods: consumable products packaged by the manufacturer for retail sale primarily through grocery and drug stores. New product: a product not previously offered for sale by a particular manufacturer including new varieties, formats, sizes, and packaging for existing products]

ITEM	Food	Bever-ages	Health and beauty	House-hold products	Pet products	Miscel-laneous products
Domestic and imports:						
1980.....	1,193	255	834	332	87	197
1981.....	1,352	261	867	315	74	237
1982.....	1,783	332	919	390	103	113
1983.....	3,014	589	1,355	473	138	105
1984.....	2,678	569	1,096	302	108	226
1985.....	2,327	585	1,222	463	139	294
1986.....	2,765	655	1,332	362	107	193
1987.....	2,895	633	1,527	362	152	292
1988, total	2,782	597	1,469	310	151	222
Percent:						
New brands ¹	25.1	28.0	23.6	26.0	35.1	43.8
Brand extensions ²	2.7	2.0	2.7	2.2	3.9	3.5
Line extensions ³	72.2	70.0	73.7	71.8	61.0	52.7
Types of new product innovation (percent):⁴						
Formulation ⁵	38.7	45.6	43.8	35.6	50.0	31.0
New market ⁶.....	.8	1.1	.4	—	—	—
Packaging ⁷	24.9	21.1	17.4	30.1	21.9	31.0
Positioning ⁸	31.3	30.0	32.9	34.4	28.1	31.0
Technology ⁹	4.3	2.2	5.5	—	—	7.0
CUMULATIVE						
Domestic, except imports, 1980-1988.....	19,822	4,076	10,552	3,296	1,047	1,855
Imports, 1980-1988 ¹⁰	947	400	69	13	12	24
International, 1985-1988 ¹¹	6,414	1,861	5,664	1,386	282	563

- Represents or rounds to zero. ¹ Product introduced under completely or partly new brand name. ² Product introduced in a category with an existing brand name which has not been used in the category before. ³ Introduction of a new variety, format, size or package of an existing product/brand name. ⁴ Product which offers consumers something significantly different from existing products. ⁵ Added or new ingredient which offers a benefit not previously provided by existing products in its category. ⁶ Special category for new products which do not compete with any existing category of products. ⁷ New product packaged in a way that makes it easier to store, handle, prepare, or dispense than others in its category. ⁸ New product presented for new users or uses compared to existing products in its category. ⁹ New product with added consumer benefits resulting from use of a new technology. ¹⁰ New products introduced in the U.S. by foreign companies. ¹¹ New products introduced by U.S. and foreign companies outside the U.S.

Source: Marketing Intelligence Service Ltd., Naples, New York, *Product Alert*®, weekly. Publication contains extract from database, *Productscan*®.

NO. 890. GROSS STOCK OF FIXED PRIVATE CAPITAL, NONRESIDENTIAL AND RESIDENTIAL, BY INDUSTRY: 1980 TO 1988

[In billions of dollars. Estimates as of Dec. 31]

INDUSTRY	CURRENT DOLLARS				CONSTANT (1982) DOLLARS			
	1980	1985	1987	1988	1980	1985	1987	1988
Fixed private capital	8,942.8	12,105.0	13,700.0	14,412.2	9,813.2	11,254.4	11,937.9	12,303.3
Nonresidential	4,844.4	6,706.4	7,452.8	7,883.3	5,420.0	6,348.3	6,730.9	6,948.6
Agriculture, forestry and fisheries	319.2	383.6	386.5	380.8	357.4	343.7	324.5	315.3
Farms.....	295.2	350.1	350.0	342.4	330.6	312.8	292.8	283.2
Agr. serv., forestry and fisheries.....	24.0	33.5	36.5	38.4	26.7	30.9	31.7	32.0
Mining	358.0	448.4	450.9	449.2	441.2	548.9	524.4	505.7
Metal mining.....	26.4	35.3	36.1	36.4	30.0	32.0	31.0	30.3
Coal mining.....	31.7	46.9	47.9	48.6	36.5	43.7	42.4	41.5
Oil and gas extraction.....	282.5	344.0	345.0	342.4	354.8	452.9	432.5	415.8
Nonmetallic minerals, exc. fuels.....	17.4	22.3	21.8	21.8	19.9	23.3	18.6	18.1
Construction	100.3	109.4	113.8	115.5	113.1	100.6	96.6	94.8
Manufacturing	1,108.1	1,497.2	1,850.2	1,727.8	1,236.4	1,393.5	1,434.2	1,457.4
Durable goods.....	604.9	821.7	909.3	953.0	674.1	773.3	804.7	821.0
Lumber and wood products.....	28.8	34.1	36.0	36.7	32.2	30.7	29.7	29.3
Furniture and fixtures.....	8.9	11.9	13.4	14.2	9.9	10.9	11.5	11.9
Stone, clay, glass products.....	47.4	55.6	57.8	58.7	52.7	52.5	51.5	51.0
Primary metal industries.....	141.8	176.2	184.6	189.2	159.1	162.3	157.7	155.9
Fabricated metal products.....	68.6	91.7	103.2	108.6	76.3	84.9	86.5	90.3
Machinery, exc. electrical.....	94.9	135.3	149.5	157.1	105.0	134.9	143.8	148.4
Elec. and elec. equipment.....	70.2	119.5	140.4	153.2	78.8	112.3	125.6	133.8
Motor vehicles and equipment.....	72.5	91.8	102.3	105.0	80.5	86.0	86.7	86.3
Other transp. equipment.....	40.3	60.0	70.3	74.9	44.9	55.9	61.8	64.3
Instruments, related products.....	19.9	30.9	35.9	38.8	22.0	29.3	32.3	34.2
Misc. mfg. industries.....	11.6	14.7	15.9	16.5	12.9	13.5	13.5	13.6
Nondurable goods.....	503.2	675.6	740.9	774.8	562.3	620.1	629.4	636.4
Food and kindred products.....	100.4	134.2	149.6	156.8	112.0	122.1	124.8	126.7
Tobacco manufacturers.....	5.2	9.5	11.3	12.5	5.9	8.8	9.7	10.4
Textile mill products.....	33.9	41.4	44.6	45.4	38.0	37.1	36.0	35.5
Apparel; other textile products.....	11.1	13.4	14.1	14.3	12.4	12.3	12.0	11.8
Paper and allied products.....	68.5	94.9	107.2	115.0	77.2	87.4	91.4	94.3
Printing and publishing.....	35.7	51.7	60.8	65.6	39.7	48.2	52.6	55.3
Chemicals, allied products.....	141.9	183.5	195.8	203.0	158.6	170.0	169.3	169.3
Petroleum and coal products.....	68.6	98.3	103.9	107.0	76.3	89.6	88.5	88.0
Rubber, misc. plastic products.....	35.2	45.4	50.1	51.9	39.2	41.8	42.3	42.3
Leather and leather products.....	2.7	3.2	3.4	3.4	3.0	3.0	2.9	2.8
Transportation and public utilities	1,464.5	1,947.5	2,112.8	2,225.2	1,621.9	1,795.5	1,869.2	1,899.3
Transportation.....	501.2	586.2	589.6	611.5	551.1	541.2	529.7	525.4
Railroad transportation.....	237.6	255.6	246.1	253.0	258.3	232.2	220.6	215.4
Local, interurban pass. transit.....	9.3	9.6	9.7	10.1	10.2	8.8	8.5	8.5
Trucking and warehousing.....	75.7	105.0	113.0	120.0	84.7	93.3	95.9	97.3
Water transportation.....	50.9	65.8	69.2	71.7	57.3	63.9	63.5	62.8
Transportation by air.....	60.4	74.5	74.3	76.5	69.1	71.6	69.7	69.2
Pipelines, exc. natural gas.....	34.8	39.1	40.8	41.6	36.8	36.8	36.8	36.7
Transportation services.....	32.4	36.6	36.5	38.7	34.9	34.5	34.7	35.4
Communications and telegraph.....	346.4	552.9	635.5	676.4	392.2	498.0	539.4	555.9
Telephone and telegraph.....	327.2	522.1	600.2	636.0	370.3	470.6	509.7	525.3
Radio and TV broadcasting.....	19.2	30.8	35.3	37.4	21.8	27.4	29.7	30.6
Elec. gas, and sanitary services.....	616.8	808.4	887.8	940.3	678.6	756.3	800.1	818.0
Electric services.....	467.9	631.9	697.7	738.3	521.0	590.2	628.3	640.2
Gas services.....	132.2	154.8	165.4	174.7	140.5	145.7	148.4	152.8
Sanitary services.....	16.7	21.7	24.7	27.3	17.2	20.4	23.4	25.1
Wholesale trade	162.3	247.7	297.8	329.2	167.5	243.2	291.4	320.6
Retail trade	258.1	401.7	478.1	523.5	285.1	360.0	403.9	423.3
Finance, insurance, real estate	718.1	1,104.7	1,296.4	1,404.9	789.2	1,034.1	1,191.8	1,290.1
Banking.....	78.3	131.6	166.3	193.7	86.3	138.4	184.6	220.9
Credit agencies other than banks.....	59.9	93.7	112.3	123.6	65.5	95.5	115.0	127.8
Security and commodity brokers and services.....	2.9	5.3	7.3	8.1	3.2	6.2	9.8	11.3
Insurance carriers.....	18.9	31.5	50.2	61.6	18.3	37.9	69.8	89.5
Insurance agents, brokers, and services.....	4.3	5.1	5.4	5.5	4.6	5.6	5.8	6.0
Real estate.....	54.6	823.3	935.6	990.7	603.3	734.3	781.3	805.8
Holding, other investment companies.....	7.3	14.2	19.4	21.5	7.9	16.3	25.2	28.8
Services	367.8	566.3	666.3	727.4	408.2	528.9	595.2	636.0
Hotels, other lodging places.....	63.2	102.1	122.0	131.4	69.8	90.9	102.3	107.6
Personal services.....	21.3	26.5	28.3	29.4	23.5	24.1	24.4	24.7
Business services.....	82.7	134.3	162.0	180.2	92.3	134.5	158.4	174.2
Auto repair; serv., garages.....	61.5	96.6	117.0	131.4	68.7	90.6	101.8	109.7
Misc. repair services.....	9.8	13.8	15.6	16.7	11.0	12.7	13.4	13.9
Motion pictures.....	8.7	11.1	12.5	13.2	9.3	10.8	11.7	12.1
Amusement, recreation services.....	30.1	41.1	45.8	49.0	33.6	37.8	40.0	41.4
Other services.....	90.4	138.8	163.1	176.2	100.0	127.5	143.2	152.1
Health services.....	49.6	85.8	103.6	113.6	55.1	78.4	89.6	96.2
Legal services.....	6.5	10.0	12.6	14.1	7.1	9.4	11.8	13.1
Educational services.....	2.3	2.6	2.9	3.0	2.5	3.0	3.7	4.0
Other ¹	32.1	40.5	43.9	45.4	35.3	36.7	38.1	38.8
Residential	4,098.4	5,398.5	6,247.2	6,528.9	4,393.1	4,906.1	5,207.0	5,354.7
Farms.....	127.4	145.2	152.6	152.5	137.3	131.7	127.8	125.5
Real estate.....	3,971.0	5,253.3	6,094.6	6,376.4	4,255.8	4,774.4	5,079.2	5,229.3

¹ Consists of social services, membership organizations, and miscellaneous professional services.

Source: U.S. Bureau of Economic Analysis, *Fixed Reproducible Tangible Wealth in the United States, 1925-85*, and *Survey of Current Business*, August 1987 and 1989.

NO. 891. FIXED NONRESIDENTIAL PRIVATE CAPITAL VALUED IN CURRENT AND CONSTANT (1982) DOLLARS: 1970 TO 1988

[In billions of dollars. Stocks as of Dec. 31; depreciation over entire calendar year. Data refer to privately owned assets and are based on the fixed capital formation components of the gross national product. Excludes residential capital and government enterprises; includes nonprofit institutions. Gross stocks allow for retirement; net stocks allow for retirement and depreciation. Net stock and depreciation estimates are based on the straight-line depreciation formula. For manufacturing industry, see table 1301]

ITEM	CURRENT DOLLARS						CONSTANT (1982) DOLLARS					
	1970	1975	1980	1985	1987	1988	1970	1975	1980	1985	1987	1988
All Industries:												
Gross stocks.....	1,453.4	2,661.7	4,844.4	6,706.4	7,452.8	7,883.3	3,737.8	4,513.3	5,420.0	6,348.3	6,730.9	6,948.6
Equipment.....	679.3	1,252.2	2,353.3	3,286.6	3,680.2	3,935.9	1,820.0	2,084.4	2,651.1	3,153.6	3,417.9	3,586.9
Structures.....	774.1	1,409.5	2,491.1	3,419.8	3,772.6	3,947.3	2,117.8	2,428.8	2,768.9	3,194.7	3,313.0	3,361.7
Net stocks.....	865.1	1,571.0	2,807.4	3,771.7	4,142.8	4,364.8	2,212.2	2,654.6	3,137.7	3,576.5	3,751.3	3,860.3
Equipment.....	395.0	718.7	1,396.8	1,796.5	1,996.9	2,137.7	939.8	1,192.7	1,505.5	1,737.5	1,879.8	1,976.6
Structures.....	470.2	852.3	1,470.6	1,975.1	2,145.8	2,227.0	1,272.4	1,461.9	1,632.2	1,839.0	1,871.5	1,883.7
Depreciation.....	68.4	125.4	233.9	340.8	378.8	399.0	174.7	220.4	277.8	337.4	367.4	384.0
Equipment.....	46.7	84.7	159.4	233.4	262.0	277.4	109.7	145.5	188.8	229.8	256.0	271.9
Structures.....	21.7	40.7	74.5	107.4	116.8	121.7	65.1	74.9	89.0	107.6	111.4	112.1

Source: U.S. Bureau of Economic Analysis, *Fixed Reproducible Tangible Wealth in the United States, 1925-85*, and *Survey of Current Business*, August 1987 and 1989.

NO. 892. BUSINESS EXPENDITURES FOR NEW PLANT AND EQUIPMENT: 1980 TO 1989

[In billions of dollars. Based on sample and subject to sampling variability; see text, section 17. Represents expenditures for new facilities and for expansion or replacement of existing facilities that are chargeable to fixed asset accounts and for which depreciation or amortization accounts are ordinarily maintained. Excludes expenditures for land and mineral rights; maintenance and repair; used plant and equipment, including that purchased or acquired through mergers or acquisitions; assets located in foreign countries; residential structures; etc. They also differ from the nonresidential fixed investment data in type of detail, data sources, coverage, and timing. For further information, see the February 1985 *Survey of Current Business*]

INDUSTRY	CURRENT DOLLARS					CONSTANT (1982) DOLLARS ²				
	1980	1985	1987	1988	1989 ¹	1980	1985	1987	1988	1989 ¹
All Industries ³	282.8	387.1	389.7	429.7	468.8	332.7	391.6	384.9	423.8	450.4
Manufacturing.....	112.3	153.5	145.9	165.7	178.7	133.0	158.9	145.9	164.7	171.4
Durable goods ⁴	55.4	73.3	71.0	78.1	82.7	64.0	74.5	71.2	78.8	81.2
Primary metals.....	6.8	7.8	8.7	11.0	11.9	7.9	7.6	8.3	10.4	(NA)
Electrical machinery.....	9.8	15.5	15.3	18.3	19.2	1.3	15.9	15.6	18.9	(NA)
Machinery, except electrical.....	11.4	16.0	13.9	15.2	15.6	13.1	17.0	15.0	16.9	(NA)
Transportation equipment.....	15.0	19.5	18.6	15.4	16.7	17.4	19.6	16.3	15.1	(NA)
Nondurable goods ⁴	57.0	80.2	74.9	87.6	96.0	69.0	84.3	74.7	85.9	90.3
Food and beverage.....	8.2	10.3	11.0	12.8	13.7	9.5	9.9	10.0	11.4	(NA)
Paper.....	6.5	8.6	9.0	11.2	15.2	7.6	8.6	8.8	10.8	(NA)
Chemicals.....	11.8	16.4	16.4	19.3	21.3	13.6	16.7	16.2	18.8	(NA)
Petroleum.....	19.6	26.7	17.1	19.9	19.3	25.4	30.7	18.6	21.1	(NA)
Mining.....	16.0	15.9	11.4	12.7	11.8	21.4	19.0	12.7	13.4	11.9
Public utilities.....	37.7	48.8	44.9	46.5	49.6	43.8	46.2	41.1	41.5	42.8
Transportation.....	16.6	18.0	18.9	21.4	25.2	19.3	16.7	16.8	18.6	21.1
Wholesale and retail trade.....	28.4	50.8	58.2	64.4	(NA)	32.4	50.2	56.5	63.0	(NA)
Finance and insurance.....	21.2	39.4	48.2	53.6	(NA)	23.6	43.8	56.5	65.1	(NA)
Personal and business services ⁵	25.6	28.7	30.0	33.4	(NA)	29.7	27.8	28.0	30.9	(NA)
Communication.....	24.9	32.0	32.2	32.0	(NA)	29.8	29.0	27.5	26.7	(NA)

NA Not available. ¹ Estimates based on planned capital expenditures as reported by business in January through March 1989. ² Procedures for preparing constant-dollar estimates are described in the February 1985 *Survey of Current Business*. To estimate real spending plans, Census adjusts the survey results for assumed price changes. ³ Surveyed quarterly. ⁴ Includes industries not shown separately. ⁵ Includes construction.

Source: U.S. Bureau of the Census, *Plant and Equipment Expenditures and Plans*, quarterly.

NO. 893. GROSS PRIVATE DOMESTIC INVESTMENT: 1970 TO 1988

[In billions of dollars]

YEAR	CURRENT DOLLARS					CONSTANT (1982) DOLLARS						
	Gross private domestic investment				Less: Capital consumption allowances ²	Equals: Net private domestic investment	Gross private domestic investment				Less: Capital consumption allowances ²	Equals: Net private domestic investment
	Total ¹	Fixed investment	Nonresidential	Residential			Total ¹	Fixed investment	Nonresidential	Residential		
1970.....	148.8	145.7	105.2	40.5	88.8	60.0	381.5	373.3	264.0	109.3	229.8	151.8
1975.....	219.6	225.2	162.9	62.3	161.8	57.8	383.3	396.1	281.2	114.9	287.0	96.3
1980.....	437.0	445.3	322.8	122.5	303.8	133.1	509.3	516.2	379.2	137.0	356.1	153.2
1985.....	643.1	631.8	442.9	188.8	437.2	205.9	637.0	627.9	453.5	174.4	428.7	210.3
1986.....	659.4	652.5	435.2	217.3	480.1	199.3	639.6	634.1	438.4	195.7	443.4	196.2
1987.....	699.9	670.6	444.3	226.4	486.7	213.2	674.0	650.3	455.5	194.8	460.8	213.1
1988.....	750.3	719.6	487.2	232.4	513.6	236.7	715.8	687.9	493.8	194.1	480.2	235.6

¹ Includes change in inventories, not shown separately. ² With capital consumption adjustment.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

NO. 894. COMPOSITE INDEXES OF ECONOMIC CYCLICAL INDICATORS: 1979 TO 1988

[1988 figures are preliminary. See source for discussion of composite indexes. Minus sign (–) indicates decrease. **Leading Indicators** are economic time series that tend to reach their cyclical high and low points earlier than the corresponding peaks and troughs in the overall economy. **Coincident indicators** are economic time series that tend to reach their cyclical high and low points about the same time as the corresponding peaks and troughs in the overall economy. **Lagging indicators** are economic time series that tend to reach their cyclical high and low points later than the corresponding peaks and troughs in the overall economy]

ITEM	Unit	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
LEADING INDICATORS											
Composite Index	1982=100 ..	103.6	99.2	101.2	100.0	116.2	121.8	124.0	132.1	139.6	142.5
Building permits ¹	1967=100..	123.6	96.7	80.0	80.7	131.1	134.8	138.1	141.2	122.9	116.0
Common stock prices, index ²	1941-43=10.....	103.0	118.8	126.0	119.7	160.4	160.5	186.8	236.3	266.8	265.8
Initial claims, unemployment insurance.....	1,000.....	379	480	446	578	426	366	363	373	320	305
Change in sensitive materials prices ^{3, 4}	Percent.....	1.3	4	–1	–9	1.1	.2	–8	.3	1.1	.4
Vendor performance, slower deliveries.....	Percent.....	58	41	46	43	57	57	48	51	57	58
Average workweek, manufacturing ⁵	Hours.....	40.2	39.7	39.8	38.9	40.1	40.7	40.5	40.7	41.0	41.1
Plant and equipment contracts and orders (1982 dol.).....	Bil. dol.....	407	361	352	310	317	380	410	407	464	537
New orders, manufacturing, consumer goods and materials (1982 dol.).....	Bil. dol.....	1,004	891	888	810	901	965	955	968	1,015	1,046
Money supply (M2) ⁶ (1982 dol.).....	Bil. dol.....	1,929	1,835	1,819	1,874	2,043	2,113	2,224	2,363	2,430	2,454
Consumer expectations index ⁷	1966=100..	52.8	56.8	65.0	62.7	84.7	92.7	86.5	85.8	81.2	85.2
Change in manufacturers' unfilled orders, durable goods (1982 dol.) ⁸	Bil. dol.....	33	–13	–13	–28	14	28	–	–1	16	22
COINCIDENT INDICATORS											
Composite Index	1982=100 ..	110.8	107.2	107.3	100.0	101.9	112.2	116.0	118.8	122.7	126.6
Industrial production index.....	1977=100..	110.7	108.6	111.0	103.1	109.2	121.4	123.7	125.1	129.8	137.2
Employees, nonagricultural payrolls.....	Million.....	89.8	90.4	91.2	89.6	90.2	94.5	97.5	99.5	102.2	105.6
Personal income less transfer payments (1982 dol.).....	Bil. dol.....	2,253	2,233	2,275	2,261	2,301	2,454	2,540	2,632	2,704	2,792
Sales, mfg. and trade (1982 dol.).....	Bil. dol.....	4,456	4,341	4,358	4,183	4,360	4,721	4,863	5,033	5,235	5,427
LAGGING INDICATORS											
Composite Index	1982=100 ..	102.8	105.5	102.8	100.0	91.4	100.7	107.7	111.7	111.6	115.9
Change in labor cost per unit of output, manufacturing ⁴	Percent.....	9.2	10.5	6.4	7.0	–5.9	.6	2.0	1.1	–1.2	1.0
Ratio, consumer installment credit to personal income.....	Percent.....	13.9	13.3	12.1	11.9	12.1	13.2	14.5	15.6	15.6	15.7
Average prime rate charged by banks.....	Percent.....	12.7	15.3	18.9	14.9	10.8	12.0	9.9	8.3	8.2	9.3
Average duration of unemployment.....	Weeks.....	10.8	11.9	13.8	15.6	19.9	18.1	15.6	15.1	14.5	13.5
Ratio inventories to sales, mfg. and trade (1982 dol.).....	Ratio.....	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.5	1.5	1.5
Commercial and industrial loans outstanding (1982 dol.) ⁹	Bil. dol.....	219	225	233	268	261	296	329	349	354	365
Change in CPI for services ⁹	Bil. percent.....	12.1	15.2	14.0	6.8	3.1	5.6	5.0	4.7	4.2	4.7

– Represents zero. ¹ New private housing units authorized. ² Standard and Poor's 500 stocks. ³ Producer prices of selected crude and intermediate materials and spot market prices of selected raw industrial materials. ⁴ Smoothed by an autoregressive-moving-average filter developed by Statistics Canada. ⁵ Production workers. ⁶ See table 832. ⁷ Copyrighted by the University of Michigan's Survey Research Center. ⁸ Includes commercial paper issued by nonfinancial companies. ⁹ Consumer price index.

Source: U.S. Bureau of Economic Analysis, *Business Conditions Digest*, monthly.

NO. 895. BUSINESS CYCLE EXPANSIONS AND CONTRACTIONS—MONTHS OF DURATION: 1919 TO 1989

[The lower turning point of a cycle is considered a trough, the upper turning point a peak. Business cycle reference dates are determined by the National Bureau of Economic Research, Inc.]

Trough	BUSINESS CYCLE REFERENCE DATE	Peak	Contraction (trough from previous peak)	Expansion (trough to peak)	LENGTH OF CYCLE	
					Trough from previous trough	Peak from previous peak
March 1919.....	January 1920.....		7	10	51	17
July 1921.....	May 1923.....		18	22	28	40
July 1924.....	October 1926.....		14	27	36	41
November 1927.....	August 1929.....		13	21	40	34
March 1933.....	May 1937.....		43	50	64	93
June 1938.....	February 1945.....		13	80	63	93
October 1945.....	November 1948.....		8	37	88	45
October 1949.....	July 1953.....		11	45	48	56
May 1954.....	August 1957.....		10	39	55	49
April 1958.....	April 1960.....		8	24	47	32
February 1961.....	December 1969.....		10	106	34	116
November 1970.....	November 1973.....		11	36	117	47
March 1975.....	January 1980.....		16	58	52	74
July 1980.....	July 1981.....		8	12	64	18
November 1982.....	(x).....		16	(x)	28	(x)
Average, all cycles:						
1919–1945 (6 cycles).....			18	35	53	53
1945–1982 (8 cycles).....			11	45	56	55
Average, peacetime cycles:						
1919–1945 (5 cycles).....			20	26	46	45
1945–1982 (6 cycles).....			11	34	46	44

X Not applicable.

Source: U.S. Bureau of Economic Analysis, *Business Conditions Digest*, July 1989.

**NO. 896. INTERNATIONAL ECONOMIC COMPOSITE INDEXES—AVERAGE ANNUAL PERCENT CHANGE:
1977 TO 1989**

[The coincident index changes are for calendar years and the leading index changes are for years ending June 30 because they lead the coincident indexes by about six months, on average. The G-7 countries are United States, Canada, France, West Germany, Italy, United Kingdom and Japan. Average annual percent changes derived from indexes with base 1980 = 100. Minus sign (-) indicates decrease]

COUNTRIES	1977-1978	1978-1979	1979-1980	1980-1981	1981-1982	1982-1983	1983-1984	1984-1985	1985-1986	1986-1987	1987-1988	1988-1989
LEADING INDEX												
Total, 11 countries	3.0	5.7	1.7	-1.2	-1.0	1.0	10.1	2.7	2.5	5.6	9.3	6.4
10 countries, excluding U.S.	.9	6.7	5.9	-2.5	.7	.2	6.2	4.5	2.6	6.6	11.3	8.7
G-7 countries	2.9	5.6	1.6	-1.3	-1.0	.9	10.1	2.6	2.3	5.5	9.4	6.3
North America	5.5	4.7	-3.3	.8	-3.7	1.9	15.6	.8	2.3	3.8	6.4	2.6
United States	5.8	4.3	-4.0	.8	-3.4	2.0	16.0	.4	2.3	4.0	6.5	2.8
Canada	2.9	8.6	3.1	1.0	-6.5	.8	11.8	4.6	3.0	2.5	5.2	4.2
4 European countries	.4	4.0	2.9	-1.7	1.1	1.1	4.2	2.4	2.5	3.2	3.2	4.2
France	-1.9	4.6	3.7	-6.2	2.0	.1	3.9	2.7	2.7	4.9	4.3	6.3
West Germany	2.1	5.6	3.0	-3.2	-9	2.3	6.3	2.3	2.5	1.3	4.2	5.0
Italy	-1.8	3.5	4.3	4.5	-1	-1.4	2.1	2.3	5.2	3.7	7	2.6
United Kingdom	2.0	1.9	.6	-4.4	3.7	2.1	3.3	2.3	.5	3.1	2.6	1.7
5 Pacific region countries	1.6	11.4	11.8	-4.5	1.5	-1.1	8.4	7.8	2.8	12.8	23.5	15.1
Australia	-1.3	9.8	6.3	2.0	-4.8	-3.7	9.9	7.2	2.8	3.4	7.1	4.0
China: Taiwan	11.1	11.9	4.8	5.7	5.0	8.1	11.8	6.4	8.2	13.6	14.5	12.2
Japan	1.3	12.1	13.5	-6.0	1.8	-1.7	8.1	8.2	2.2	13.9	26.9	16.8
South Korea	11.4	8.8	-2.4	5.0	6.8	8.0	9.2	4.7	9.7	16.7	12.8	9.0
New Zealand	-2.6	3.5	2.3	1.1	3.3	-1.2	5.9	4.8	-2.1	3.1	-1.4	.9
COINCIDENT INDEX												
Total, 11 countries	5.5	4.4	.3	.4	-2.1	1.8	6.1	3.8	3.2	4.0	6.0	(NA)
10 countries, excluding U.S.	4.0	4.9	2.5	.5	.5	1.4	3.8	3.9	3.5	4.3	6.5	(NA)
G-7 countries	5.5	4.4	.1	.3	-2.4	1.9	6.0	3.7	3.0	3.9	5.9	(NA)
North America	7.4	3.5	-2.4	.7	-6.2	2.6	9.6	3.7	2.7	3.9	5.4	(NA)
United States	7.7	3.5	-2.9	.4	-6.3	2.7	9.9	3.6	2.5	3.9	5.2	(NA)
Canada	3.9	5.3	2.0	3.8	-4.9	2.0	6.4	5.2	3.5	5.3	5.8	(NA)
4 European countries	3.4	4.2	1.6	-1.8	-3	1.6	2.1	2.9	3.4	3.9	5.8	(NA)
France	1.6	2.5	1.4	.3	3.0	1.9	.6	1.4	3.6	5.0	7.6	(NA)
West Germany	3.4	4.7	2.6	-.9	-2.5	-.5	2.7	3.4	4.4	3.1	3.6	(NA)
Italy	2.9	5.3	5.3	-1.4	-.3	-1.0	3.5	2.5	1.6	1.4	5.2	(NA)
United Kingdom	5.9	5.2	-2.0	-5.7	-1.1	1.7	2.2	4.2	3.2	5.2	7.1	(NA)
5 Pacific region countries	4.9	6.2	4.0	3.6	2.8	2.3	5.8	5.2	3.6	4.6	7.5	(NA)
Australia	1.8	3.9	5.0	5.8	-2.4	-7.0	9.2	7.5	5.0	3.6	7.6	(NA)
China: Taiwan	13.7	9.9	7.4	5.5	2.7	6.8	12.1	4.1	10.4	11.7	6.4	(NA)
Japan	4.6	6.5	4.2	3.1	3.4	2.7	5.1	5.0	2.8	4.0	7.4	(NA)
South Korea	14.5	3.5	-5.4	6.7	6.2	11.2	9.0	5.6	11.7	13.5	10.7	(NA)
New Zealand	-2.9	4.8	1.8	2.6	.9	.1	4.4	2.0	1.8	.4	-1.8	(NA)

NA Not available.

Source: Center for International Business Cycle Research, Columbia Business School, New York, NY, *International Economic Indicators*, monthly.

**NO. 897. MANUFACTURING AND TRADE—SALES AND INVENTORIES IN CURRENT AND CONSTANT (1982)
DOLLARS: 1970 TO 1988**

[In billions of dollars, except ratios]

ITEM	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
CURRENT DOLLARS												
Sales, average monthly	107	182	298	328	357	349	369	409	419	425	450	486
Manufacturing	53	87	144	154	168	163	171	188	190	189	199	218
Retail trade	31	49	75	80	87	89	96	107	115	120	127	136
Merchant wholesalers	24	47	79	93	102	96	100	113	115	116	124	132
Inventories ¹	178	289	451	494	528	582	574	620	645	657	701	754
Manufacturing	102	160	241	264	283	317	307	326	331	318	331	354
Retail trade	44	72	111	116	127	133	139	157	172	186	207	221
Merchant wholesalers	32	57	99	113	118	130	127	136	143	153	163	178
Inventory-sales ratio ²	1.62	1.52	1.44	1.41	1.52	1.87	1.56	1.52	1.54	1.55	1.50	1.49
Manufacturing	1.91	1.77	1.61	1.61	1.74	1.94	1.80	1.73	1.74	1.68	1.61	1.57
Retail trade	1.39	1.38	1.42	1.40	1.46	1.49	1.42	1.47	1.50	1.55	1.55	1.55
Merchant wholesalers	1.30	1.19	1.16	1.10	1.20	1.35	1.27	1.20	1.24	1.32	1.26	1.30
CONSTANT (1982) DOLLARS												
Sales, average monthly ³	260	306	373	372	357	346	383	403	414	432	444	464
Manufacturing	131	149	179	175	167	159	178	186	189	192	202	212
Retail trade	70	83	96	93	91	94	102	108	112	120	121	127
Merchant wholesalers	60	74	98	104	99	93	102	109	113	120	121	124
Inventories	428	496	589	591	602	582	584	631	638	642	665	688
Manufacturing	248	282	325	327	330	315	309	330	321	315	319	327
Retail trade	97	116	137	130	136	133	142	158	169	171	186	194
Merchant wholesalers	83	99	126	134	136	134	133	143	149	155	160	167
Inventory-sales ratios ⁴	1.64	1.62	1.58	1.59	1.68	1.68	1.53	1.56	1.54	1.49	1.50	1.48
Manufacturing	1.90	1.90	1.81	1.87	1.98	1.99	1.74	1.77	1.70	1.64	1.58	1.54
Retail trade	1.39	1.39	1.42	1.40	1.48	1.41	1.39	1.46	1.51	1.43	1.54	1.53
Merchant wholesalers	1.39	1.34	1.30	1.29	1.37	1.44	1.30	1.31	1.32	1.29	1.32	1.34

¹ Book value; seasonally adjusted end-of-year data. See text, section 17. ² Average inventories to average sales. Average inventories based on weighted averages of end-of-month figures. ³ Average monthly sales for fourth quarter. ⁴ End of fourth quarter inventories to average monthly sales for fourth quarter.

Source: Current dollars from U.S. Bureau of the Census, *Current Business Reports*, "Manufacturing and Trade Inventories and Sales" April 1988 and unpublished data; constant dollars from U.S. Bureau of Economic Analysis, *Survey of Current Business*, February and September issues, and unpublished data.

NO. 898. MANUFACTURING CORPORATIONS, ASSETS, AND PROFITS, BY ASSET SIZE: 1970 TO 1988

[Corporations and assets as of end of 4th quarter; profit for entire year. Through 1979, corporations under \$10 million based on sample, \$10 million and over based on complete canvass. The asset value for complete canvass was raised in 1980 to \$25 million and again in 1988 to \$50 million. Asset sizes less than these values continue to be sampled, except as noted. For details regarding methodology, see source for first quarter, 1988]

YEAR AND ITEM	Unit	Total	ASSET-SIZE CLASS						
			Under ¹ \$10 mil.	\$10- \$25 mil.	\$25- \$50 mil.	\$50- \$100 mil.	\$100- \$250 mil.	\$250 mil.-\$1 bil.	\$1 bil. and over
Corporations:									
1970 ²	Number	197,807	³ 195,000	1,202	533	366	289	218	102
1975	Number	(NA)	(NA)	1,750	705	450	392	276	151
1978	Number	(NA)	(NA)	1,780	802	518	408	320	181
1979	Number	(NA)	(NA)	1,918	879	571	470	341	225
1980	Number	(NA)	(NA)	1,777	941	590	491	369	244
1981	Number	(NA)	(NA)	845	603	520	376	259	159
1982	Number	(NA)	(NA)	820	642	510	378	275	159
1983	Number	(NA)	(NA)	872	863	683	559	403	275
1984	Number	(NA)	(NA)	799	872	703	601	420	287
1985	Number	(NA)	(NA)	863	896	744	608	428	281
1986	Number	(NA)	(NA)	914	962	741	628	445	291
1987	Number	(NA)	(NA)	889	1,007	811	676	481	318
1988	Number	(NA)	(NA)	972	494	783	729	550	334
Assets:									
1970	Mil. dol.	578,234	69,101	20,471	20,138	25,946	47,783	112,475	282,320
1975	Mil. dol.	810,910	98,147	31,307	24,720	31,395	62,524	139,113	423,705
1978	Mil. dol.	1,086,433	114,006	38,358	30,813	37,429	66,907	164,958	633,963
1979	Mil. dol.	1,242,985	124,853	42,007	34,082	40,396	73,172	169,599	768,937
1980	Mil. dol.	1,384,474	126,639	43,569	34,930	41,963	75,284	179,599	862,129
1981	Mil. dol.	1,560,353	136,915	57,453	39,756	43,924	82,284	188,913	1,011,105
1982	Mil. dol.	1,614,018	141,363	55,327	38,333	48,013	78,766	180,047	1,072,189
1983	Mil. dol.	1,704,951	149,791	54,506	41,766	52,673	87,391	194,212	1,124,612
1984	Mil. dol.	1,853,457	156,671	59,549	49,419	53,517	94,315	206,698	1,233,288
1985	Mil. dol.	1,932,766	153,883	64,324	52,669	58,019	96,748	208,403	1,298,720
1986	Mil. dol.	1,994,120	140,864	67,663	55,974	58,233	97,908	217,941	1,356,137
1987	Mil. dol.	2,135,266	147,919	65,623	50,171	60,874	109,458	235,368	1,465,853
1988	Mil. dol.	2,397,942	149,750	78,942	53,536	63,344	114,017	267,013	1,671,340
Net profit: ⁴									
1970	Mil. dol.	28,572	2,812	811	836	1,101	2,315	5,862	14,832
1975	Mil. dol.	49,135	6,212	1,831	1,327	1,676	3,553	8,165	26,370
1978	Mil. dol.	81,185	9,417	2,487	2,264	2,602	4,712	12,311	47,391
1979	Mil. dol.	98,698	10,119	2,720	2,347	2,898	5,347	13,412	61,854
1980	Mil. dol.	92,443	7,770	2,235	1,904	2,479	4,532	11,485	62,041
1981	Mil. dol.	101,302	8,863	3,077	1,944	2,415	4,560	10,087	70,354
1982	Mil. dol.	71,028	5,193	2,078	1,196	1,421	2,643	6,892	51,405
1983	Mil. dol.	85,834	7,438	2,893	2,149	2,466	3,861	6,134	60,893
1984	Mil. dol.	107,648	10,037	3,417	2,527	2,877	4,864	9,278	74,648
1985	Mil. dol.	87,647	8,601	2,551	2,305	2,819	3,628	7,312	60,431
1986	Mil. dol.	83,122	6,659	2,988	2,129	2,514	3,884	7,572	57,376
1987	Mil. dol.	115,600	7,273	3,849	2,753	3,338	5,237	9,636	83,514
1988	Mil. dol.	154,902	11,364	4,488	3,199	3,978	5,479	14,000	112,394

NA Not available. ¹ Beginning 1986, excludes estimates for corporations with less than \$250,000 in assets at time of sample selection. Prior periods include estimates for corporations in this size category. ² Source: U.S. Securities and Exchange Commission. ³ Data derived from U.S. Internal Revenue Service, *Statistics of Income*, annual. ⁴ After taxes.

Source: Except as noted, through 1981, U.S. Federal Trade Commission; thereafter, U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations*.

NO. 899. LARGEST INDUSTRIAL CORPORATIONS—SALES, ASSETS, PROFITS, AND STOCKHOLDER'S EQUITY, BY SALES GROUP RANK: 1987 AND 1988

[In billions of dollars, except percent. Excludes large privately owned companies that do not publish sales. Includes service and rental revenues, but companies must derive more than 50 percent of revenues from manufacturing or mining for years ending not later than Dec. 31 of year stated, sales exclude excise taxes collected by manufacturer and include discontinued operations. Minus sign (-) indicates decrease]

RANK BY SALES GROUP	SALES			ASSETS ¹			PROFITS ²			STOCKHOLDER'S EQUITY		
	1987	1988	Percent change, 1987-1988	1987	1988	Percent change, 1987-1988	1987	1988	Percent change, 1987-1988	1987	1988	Percent change, 1987-1988
500 largest	1,879.5	2,023.1	7.6	1,705.7	2,078.8	21.9	90.6	115.0	26.9	685.1	698.0	1.9
Top 100.....	1,306.9	1,409.9	7.9	1,217.2	1,541.1	26.6	65.7	81.3	23.7	486.8	488.3	.3
101-200.....	286.6	306.0	6.8	240.4	276.0	14.8	14.3	16.2	13.3	96.5	104.0	7.8
201-300.....	142.1	155.3	9.3	123.1	133.3	8.3	5.3	10.9	105.7	50.6	59.5	17.6
301-400.....	88.2	92.5	4.9	72.8	73.0	.3	2.3	4.5	95.7	29.5	27.4	-7.1
401-500.....	55.7	59.4	6.6	52.2	55.4	6.1	2.9	2.5	-13.8	21.7	18.8	-13.4
Percent of total:												
Top 100.....	69.5	69.7	(x)	71.4	74.1	(x)	72.5	70.7	(x)	71.1	70.0	(x)
101-200.....	15.2	15.1	(x)	14.1	13.3	(x)	15.8	14.1	(x)	14.1	14.9	(x)
201-300.....	7.6	7.7	(x)	7.2	6.4	(x)	5.8	9.5	(x)	7.4	8.5	(x)
301-400.....	4.7	4.6	(x)	4.3	3.5	(x)	2.5	3.9	(x)	4.3	3.9	(x)
401-500.....	3.0	2.9	(x)	3.1	2.7	(x)	3.2	2.2	(x)	3.2	2.7	(x)

X Not applicable. ¹ Total assets employed in business at end of fiscal year, less depreciation and depletion. ² After taxes, special charges, and credits.

Source: Time, Inc., New York, NY, *The Fortune Directories*. (Copyright.)

NO. 900. 500 LARGEST INDUSTRIAL CORPORATIONS—SELECTED FINANCIAL ITEMS: 1970 TO 1988

ITEM	Unit	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
Sales per employee.....	\$1,000.....	29.5	71.1	75.9	91.0	92.2	100.6	106.0	110.7	124.4	137.9
Changes in profits.....	Percent.....	(NA)	(NA)	(NA)	(NA)	12.0	24.9	-19.1	-7.9	41.3	26.9
Sales per dollar of stockholder's equity.....	Dollar.....	2.4	3.12	2.97	2.74	2.66	2.78	2.80	2.79	2.77	2.93
Return on stockholder's equity.....	Percent.....	9.5	14.1	13.6	10.9	10.7	13.6	11.6	11.6	14.4	16.2
Return on sales.....	Percent.....	3.9	4.5	4.3	3.6	3.8	4.5	3.9	4.1	5.1	5.5
Total return to investors ¹	Percent.....	6.5	21.6	1.4	21.2	30.2	-8	26.3	16.1	6.6	14.5

NA Not available. ¹ Includes both price appreciation and dividend yield, i.e., to an investor in the company's stock.

Source: Time, Inc., New York, NY, *The Fortune Directories*. (Copyright.)

NO. 901. 500 LARGEST INDUSTRIAL CORPORATIONS—SELECTED FINANCIAL ITEMS, BY INDUSTRY: 1987 AND 1988

[Data are medians and are ranked based on sales per employee for latest year: shown. See headline, table 899. Minus sign (-) indicates decrease. For definition of median, see Guide to Tabular Presentation]

INDUSTRY	SALES PER EMPLOYEE (\$1,000)		CHANGES IN PROFITS (percent)		SALES PER DOLLAR OF STOCKHOLDER'S EQUITY (dol.)		RETURN ON STOCKHOLDER'S EQUITY (percent)		RETURN ON SALES (percent)		TOTAL RETURN TO INVESTORS ¹ (percent)	
	1987	1988	1987	1988	1987	1988	1987	1988	1987	1988	1987	1988
Total.....	124.4	137.9	41.3	26.9	2.77	2.93	14.4	16.2	5.1	5.5	6.6	14.1
Petroleum refining.....	416.5	469.4	.1	62.7	3.05	3.07	10.2	15.3	3.4	4.7	6.8	22.9
Mining, crude-oil production.....	248.7	290.2	14.2	13.8	1.86	1.66	7.0	2.4	3.3	3.3	24.5	9.2
Soaps, cosmetics.....	181.1	222.0	13.6	26.4	3.64	3.45	16.2	18.5	4.9	5.3	6.0	15.1
Chemicals.....	173.1	204.8	29.4	35.0	2.41	2.46	14.2	16.8	6.0	6.9	8.5	11.0
Beverages.....	160.6	203.0	11.2	16.5	2.06	2.35	14.0	22.8	7.0	8.0	.2	21.2
Food.....	178.3	197.9	19.5	14.6	5.32	5.33	16.1	15.7	3.5	2.8	3.4	24.9
Metals.....	157.1	172.2	53.6	110.4	2.73	3.06	11.1	18.4	4.3	6.2	50.5	16.0
Forest products.....	145.6	168.7	58.7	45.0	2.22	2.38	14.7	19.8	6.5	8.7	9.1	12.0
Building materials.....	140.8	158.9	17.2	17.7	2.14	2.17	13.4	-3.3	6.8	4.5	25.2	24.9
Tobacco.....	150.3	153.2	24.6	17.4	2.63	3.07	20.0	22.5	8.3	7.8	19.2	36.9
Pharmaceuticals.....	123.5	132.1	15.1	16.8	1.97	1.91	22.7	23.6	13.2	13.5	11.7	14.7
Rubber products.....	107.2	124.0	51.9	15.5	3.48	3.42	13.1	15.8	5.6	4.4	15.7	31.3
Metal products.....	105.1	120.8	35.3	17.8	2.93	2.83	14.3	12.7	5.4	4.6	12.0	9.9
Publishing, printing.....	103.3	117.0	15.6	12.6	2.13	2.11	18.9	17.7	8.4	7.1	8.7	8.6
Aerospace.....	98.9	112.2	3.9	11.6	4.21	3.64	11.3	11.4	3.7	3.6	-24.5	19.5
Motor vehicles and parts.....	101.9	111.2	20.6	13.7	3.48	3.96	11.6	14.5	3.5	3.5	-7.7	22.2
Transportation equipment ²	125.9	110.7	(NA)	21.4	5.51	2.96	23.1	13.4	3.1	3.1	-1.1	39.2
Scientific, photographic equipment.....	94.5	109.2	21.9	17.2	1.92	2.14	16.3	12.1	8.3	5.0	.5	1.6
Computers (incl. office equip.).....	105.0	109.0	26.9	12.6	2.17	2.38	14.6	14.7	8.2	6.2	6.3	-11.5
Industrial and farm equipment.....	97.7	102.4	42.4	25.2	2.98	2.92	11.2	12.7	3.3	4.3	10.0	20.3
Electronics.....	95.1	95.1	17.1	18.9	2.46	2.60	14.1	16.8	5.0	5.1	1.4	4.8
Furniture.....	75.4	90.3	8.0	32.9	2.61	2.67	15.2	15.9	5.2	5.6	-7.0	15.0
Textiles.....	71.3	78.8	24.3	13.9	3.26	3.37	12.8	10.8	4.1	3.5	-6.3	18.4
Apparel.....	52.2	56.4	29.0	3.4	3.14	3.90	14.1	17.5	3.9	4.3	-18.9	24.1

NA Not available. ¹ Includes both price appreciation and dividend yield, i.e., to an investor in the company's stock.

² Excludes motor vehicles and aircraft.

Source: Time, Inc., New York, NY, *The Fortune Directories*. (Copyright.)

NO. 902. CORPORATE PROFITS, TAXES, AND DIVIDENDS: 1970 TO 1988

[In billions of dollars. Covers corporations organized for profit. Represents profits to U.S. residents, without deduction of depletion charges and exclusive of capital gains and losses; intercorporate dividends from profits of domestic corporations are eliminated; net receipts of dividends, reinvested earnings of incorporated foreign affiliates, and earnings of unincorporated foreign affiliates are added]

ITEM	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Profits before taxes.....	76.0	134.8	257.2	237.1	226.5	169.6	207.6	240.0	224.3	221.6	266.7	306.8
Less: Income tax liability ¹	34.4	50.9	88.0	84.8	81.1	63.1	77.2	93.9	96.4	106.3	124.7	137.9
Equals: Profits after taxes.....	41.7	83.9	169.2	152.3	145.4	106.5	130.4	146.1	127.8	115.3	142.0	168.9
Less: Net dividends ²	22.5	29.6	50.1	54.7	63.6	66.9	71.5	79.0	83.3	91.3	98.7	110.4
Equals: Undistributed profits.....	19.2	54.3	119.1	97.6	81.8	39.6	58.9	67.0	44.6	24.0	43.3	58.5
Capital consumption allowances ³	57.2	90.2	144.3	164.7	196.3	225.8	259.7	287.2	328.3	339.7	353.9	368.5
Profits after tax plus capital consumption allowances ³	98.9	174.1	313.5	317.0	341.7	332.3	390.1	433.3	456.1	455.0	495.9	537.4

¹ Federal, State and local. ² Disbursements to U.S. residents, measured after eliminations of intercorporate dividends.

³ Without capital consumption adjustment. Includes depreciation and accidental damages.

Source: U.S. Bureau of Economic Analysis, *The National Income and Products Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

NO. 903. CORPORATE PROFITS, BY INDUSTRY: 1980 TO 1988

[In billions of dollars. Profits are without inventory valuation and capital consumption adjustments. Minus sign (-) indicates loss. See headnote, table 902]

INDUSTRY	BEFORE TAXES						AFTER TAXES					
	1980	1984	1985	1986	1987	1988	1980	1984	1985	1986	1987	1988
Total	237.1	240.0	224.3	221.6	266.7	306.6	152.3	146.1	127.8	115.3	142.0	168.9
Domestic industries	202.7	209.0	193.1	188.5	227.6	263.2	117.9	115.1	96.7	82.1	102.9	125.3
Agriculture ¹.....	.6	.1	-.1	1.5	1.2	1.3	.2	-.2	-.4	1.1	.6	.6
Mining.....	6.5	-1.6	-5.0	-3.9	-.9	.8	4.7	-2.4	-5.2	-4.2	-1.7	-1.1
Construction.....	6.5	4.3	5.7	8.2	9.0	9.6	4.4	3.0	3.9	5.8	6.2	6.0
Manufacturing.....	96.3	92.1	81.2	57.0	83.5	107.3	57.1	53.7	48.6	25.2	42.1	60.3
Transportation.....	3.7	6.7	2.6	3.1	3.9	6.4	2.1	4.8	1.0	1.5	1.7	3.9
Communications.....	7.5	11.7	13.1	15.9	19.3	19.1	5.8	8.1	9.2	9.8	12.6	11.6
Public utilities.....	9.7	20.1	16.1	13.7	12.8	14.3	7.1	14.6	10.8	7.6	5.9	6.2
Wholesale and retail trade.....	39.0	52.7	45.1	44.3	48.9	51.6	26.8	37.3	28.2	25.7	25.9	28.0
Finance, insurance ²	22.9	11.4	20.7	30.6	30.4	30.2	3.1	-11.4	-8.9	-4.3	-5.8	-7.8
Services.....	9.9	11.3	13.4	18.2	19.5	22.2	6.9	7.7	9.5	14.0	14.4	16.7
Rest of world³	34.4	30.9	31.2	33.1	39.1	43.7	34.4	30.9	31.2	33.1	39.1	43.7

¹ Includes forestry and fisheries. ² Includes real estate. ³ Consists of receipts by all U.S. residents, including both corporations and persons, of earnings of unincorporated foreign affiliates, dividends from their incorporated foreign affiliates, and their share of reinvested earnings of their incorporated foreign affiliates, net of corresponding outflows.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

NO. 904. CORPORATE PROFITS WITH INVENTORY VALUATION AND CAPITAL CONSUMPTION ADJUSTMENTS—FINANCIAL AND NONFINANCIAL INDUSTRIES: 1970 TO 1988

[In billions of dollars. Minus sign (-) indicates loss. See headnote, table 902]

ITEM	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Corporate profits with IVA¹ and CCA²	74.7	117.6	200.1	177.2	188.0	150.0	213.7	266.9	282.3	282.1	298.7	328.6
Domestic industries.....	67.8	103.2	166.4	142.8	159.4	121.9	183.6	236.0	251.2	249.0	259.6	285.0
Financial.....	12.3	11.6	27.3	19.7	15.2	10.1	18.0	13.6	25.9	35.0	35.0	35.7
Nonfinancial.....	55.4	91.6	139.1	123.1	144.2	111.9	165.6	222.4	225.3	214.0	224.6	249.3
Rest of the world.....	6.9	14.4	33.7	34.4	28.5	28.0	30.2	30.9	31.2	33.1	39.1	43.7
Corporate profits with IVA¹	69.5	123.9	214.1	194.0	202.3	159.2	196.7	234.2	222.6	228.3	247.8	281.8
Domestic industries.....	62.6	109.5	180.4	159.6	173.8	131.2	166.6	203.3	191.4	195.2	208.7	236.2
Financial.....	12.2	11.2	27.8	21.0	16.5	11.8	18.1	13.0	22.8	32.0	30.5	29.8
Federal Reserve banks.....	3.6	5.7	9.6	11.9	14.5	15.4	14.8	16.7	16.8	16.0	16.0	18.1
Other.....	8.6	5.5	18.2	9.0	1.9	-3.6	3.3	-3.7	6.1	16.0	14.5	11.7
Nonfinancial.....	50.4	98.3	152.6	138.6	157.3	119.4	148.5	190.3	168.6	163.2	178.2	208.4
Manufacturing.....	26.7	53.6	87.5	77.1	88.5	56.0	70.1	88.8	79.7	59.5	76.6	99.4
Durable goods ³	10.2	19.8	37.3	21.3	21.0	2.1	17.2	38.1	28.5	30.8	34.4	38.1
Primary metal industries.....	8	2.7	3.6	2.5	3.1	-4.9	-4.9	-.6	-1.4	2.6	3.6	6.4
Fabricated metal products.....	1.1	3.1	5.2	4.3	4.4	2.4	3.0	4.7	4.6	4.8	5.0	6.1
Machinery, except electrical.....	3.0	4.8	9.1	7.7	8.6	4.1	3.1	6.2	3.2	3.0	3.4	4.8
Electrical and electronic equipment.....	1.2	2.4	5.2	4.7	4.1	1.7	3.7	5.5	3.6	2.9	3.4	4.6
Motor vehicles and equipment.....	1.2	2.0	4.7	-2.5	.1	-.8	5.1	9.0	7.2	4.1	3.3	2.4
Nondurable goods ³	16.5	33.8	50.2	55.8	67.5	55.9	53.0	50.7	51.2	28.7	42.2	60.3
Food and kindred products.....	3.2	8.8	5.8	6.1	8.7	7.0	7.2	6.7	8.3	7.8	12.2	15.7
Chemicals and allied products.....	3.9	6.4	7.2	5.4	8.2	5.2	6.7	8.0	6.2	7.6	10.5	17.4
Petroleum and coal products.....	3.5	9.5	22.5	31.4	36.5	29.1	21.4	17.2	17.5	-7.6	-1.9	3.7
Transportation and public utilities.....	8.2	10.3	15.2	17.6	19.5	19.3	28.5	38.5	33.0	36.3	34.6	39.3
Wholesale and retail trade.....	9.6	22.2	28.7	21.6	32.5	34.6	38.9	51.2	44.1	44.1	41.1	40.1
Other.....	5.9	12.2	21.1	22.4	16.8	7.5	10.9	11.8	11.8	23.4	25.9	30.6

¹ Inventory valuation adjustment. ² Capital consumption adjustment. ³ Includes other industries not shown separately.

Source: U.S. Bureau of Economic Analysis, *The National Income and Product Accounts of the United States, 1929-82*, and *Survey of Current Business*, July issues.

NO. 905. CORPORATE PHILANTHROPY AS A PERCENT OF PRETAX NET INCOME: 1985 TO 1988

[Data are based on a sample greater than 1,200 corporations. Medians by industry]

INDUSTRY CLASS	1985	1986	1987	1988	INDUSTRY CLASS	1985	1986	1987	1988
All firms, median	1.2	1.2	1.1	.9	Manufacturing firms, median—				
Manufacturing firms, median	1.4	1.5	1.4	1.1	Con.				
Chemicals.....	1.4	2.0	1.4	1.5	Pharmaceuticals.....	1.3	1.3	1.7	2.3
Electrical machinery and equipment.....	3.0	2.0	1.7	.9	Primary metal industries.....	1.1	1.4	(1)	(3)
Fabricated metal products.....	.9	1.1	1.7	(NA)	Printing and publishing.....	1.6	1.4	.9	(1)
Food, beverage and tobacco.....	1.5	1.8	2.1	2.7	Stone, clay and glass products.....	2.3	.8	(1)	(4)
Machinery, nonelectrical.....	1.3	1.3	1.4	1.4	Textiles.....	(NA)	.8	(1)	(5)
Paper and like products.....	1.1	.9	.5	.7	Transportation equipment ⁶	1.2	1.7	1.2	1.6
Petroleum and gas ⁵	1.5	2.6	1.3	.7	Nonmanufacturing firms, median.....	.9	.9	.7	.7

NA Not available. ¹ Primary metals and stone, clay, and glass firms included with fabricated metal firms. ² Mining firms included with petroleum firms. ³ Industry category not responding. ⁴ Only worldwide income reported. ⁵ Fewer than 5 companies reporting. ⁶ Rubber and miscellaneous plastic firms included with transportation firms.

Source: Duffy, Maureen Nevin, *Annual Survey of Corporate Contributions*, The Conference Board, New York, NY. (Copyright.)

NO. 906. SELECTED CORPORATE PROFITS AND STOCKHOLDERS' EQUITY RATIOS—BY INDUSTRY: 1980 TO 1988

[Averages of quarterly figures at annual rates. Beginning 1987, data exclude estimates for corporations with less than \$250,000 in assets at time of sample selection. Data are not necessarily comparable from year to year due to changes in accounting procedures, industry classifications, sampling procedures, etc.; for detail, see source. Based on sample; see source for discussion of methodology. Minus sign (-) indicates loss]

INDUSTRY GROUP	RATIO OF PROFITS TO STOCKHOLDERS' EQUITY (percent)				PROFITS PER DOLLAR OF SALES (cents)				RATIO OF STOCKHOLDERS' EQUITY TO DEBT			
	1980	1985	1987	1988	1980	1985	1987	1988	1980	1985	1987	1988
All manufacturing corporations¹	13.9	10.1	12.8	16.2	4.9	3.8	4.9	6.0	2.3	1.9	1.6	1.5
Durable goods industries	11.2	9.2	11.9	14.3	4.0	3.4	4.5	5.2	2.2	2.2	1.9	1.8
Stone, clay, and glass products	10.8	7.9	15.4	13.1	4.2	3.1	5.3	4.4	1.9	1.7	1.1	.9
Primary metal industries	11.7	-7.9	9.3	18.8	4.1	-2.6	2.6	4.8	1.7	1.2	1.1	1.0
Iron and steel	9.0	-11.0	15.7	9.5	2.9	2.6	2.7	1.8	1.7	.8	7.6	6
Nonferrous metals	15.6	-5.7	6.1	21.4	5.8	-2.5	2.5	7.6	1.8	1.6	1.5	1.5
Fabricated metal products	13.9	9.2	11.7	13.2	4.2	2.8	3.6	3.9	2.1	1.6	1.5	1.4
Machinery, exc. electrical	15.0	9.3	9.2	11.7	6.5	4.7	4.9	5.9	2.2	2.6	2.3	2.2
Electrical and electronic equipment	15.1	8.3	10.8	13.5	5.0	3.4	4.6	5.3	2.6	2.7	2.3	2.1
Transportation equipment .....	.6	15.4	15.5	16.5	-.3	4.1	4.8	5.1	2.7	2.9	2.1	2.2
Motor vehicles and equipment	-9.3	18.2	16.3	17.4	-3.4	4.9	5.3	5.6	3.4	4.2	2.3	2.4
Aircraft, guided missiles and parts	16.0	11.1	14.6	14.9	4.3	3.1	4.2	4.4	2.8	2.6	2.3	2.2
Instruments and related products	17.5	10.1	11.4	16.1	9.3	5.7	6.2	8.6	4.3	3.5	2.5	1.7
Nondurable goods industries	16.4	11.0	13.7	17.8	5.6	4.1	5.2	6.7	2.3	1.7	1.4	1.4
Food and kindred products ²	14.7	15.3	17.4	21.0	3.4	4.1	4.6	5.5	1.9	1.4	1.1	1.1
Tobacco manufactures	19.8	(²)	(²)	(²)	11.7	(²)	(²)	(²)	1.8	(²)	(²)	(²)
Textile mill products	8.5	8.6	15.0	12.0	2.2	2.4	3.9	3.1	2.0	1.5	1.2	1.0
Paper and allied products	12.1	9.7	14.7	19.2	5.1	4.0	5.8	7.5	2.0	1.7	1.5	1.6
Printing and publishing	16.4	19.2	17.6	16.6	5.5	6.5	6.1	6.0	2.1	1.7	1.4	1.3
Chemicals and allied products	15.4	9.4	15.6	20.3	7.1	4.7	7.4	9.1	2.2	2.1	1.7	1.6
Industrial	11.9	4.2	16.3	20.2	5.4	2.2	7.6	8.8	1.9	1.8	1.4	1.5
Drugs	18.9	15.2	17.6	30.4	13.2	9.8	10.4	16.0	3.0	3.2	2.3	2.0
Petroleum and coal products	20.0	8.5	7.7	15.1	7.7	4.0	4.5	8.4	3.4	1.6	1.6	1.6
Rubber and misc. plastics products	6.7	9.5	21.5	16.5	2.0	2.6	5.2	4.1	1.6	1.6	1.0	1.0
Mining corporations, total³	19.2	-4.0	-3.8	2.3	11.3	-3.2	2.8	1.7	1.3	1.0	1.0	1.1
Retail trade corporations, total³	13.2	12.5	12.5	12.5	1.7	2.2	2.1	2.0	1.2	1.4	1.1	.8
Wholesale trade corporations, total³	17.3	8.7	8.4	10.3	1.8	1.0	1.0	1.2	1.2	1.0	1.0	1.0

¹ Includes other industries not shown separately. ² Beginning 1985, tobacco included in food and kindred products. ³ From 1985 through 1987, represents results of companies with assets over \$25 million; thereafter, asset cut-off raised to \$50 million.

Source: 1980, U.S. Federal Trade Commission, thereafter, U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations*. In U.S. Council of Economic Advisers, *Economic Report of the President*, annual.

NO. 907. MANUFACTURING CORPORATIONS—SALES, PROFITS, STOCKHOLDERS' EQUITY, AND DEBT: 1960 TO 1988

[In billions of dollars. Prior to 1970, excludes newspapers. Data are not necessarily comparable from year to year due to changes in accounting procedures, industry classifications, sampling procedures, etc.; for detail, see source. See also *Historical Statistics, Colonial Times to 1970*, series P 93-106]

YEAR	ALL MANUFACTURING CORPS.					DURABLE GOODS INDUSTRIES					NONDURABLE GOODS INDUSTRIES				
	Sales (net)	Be-fore taxes	After taxes	Stock-holders' equity ¹	Debt ¹	Sales (net)	Be-fore taxes	After taxes	Stock-holders' equity ¹	Debt ¹	Sales (net)	Be-fore taxes	After taxes	Stock-holders' equity ¹	Debt ¹
1960	346	28	15	165	41	174	14	7	82	21	172	14	8	83	20
1970	709	48	29	307	134	363	23	13	155	71	346	25	16	152	63
1972	850	63	37	343	149	436	34	18	171	77	414	30	18	172	72
1973	1,017	81	48	374	164	527	44	25	189	86	490	38	23	185	78
1974	1,061	92	59	395	167	529	41	25	196	87	532	51	34	199	80
1975	1,065	80	49	423	183	521	35	21	208	94	544	45	28	215	89
1976	1,203	105	69	463	188	590	51	31	224	91	614	54	34	238	97
1977	1,328	115	70	497	200	657	58	35	240	95	671	57	36	257	106
1978	1,496	133	81	541	222	761	70	42	263	106	736	63	39	278	117
1979	1,742	154	99	600	252	866	72	45	292	123	876	82	54	308	129
1980	1,897	145	92	665	292	883	57	36	316	143	1,014	88	57	349	149
1981	2,145	159	101	743	335	979	67	42	350	159	1,165	91	60	393	176
1982	2,039	108	71	770	371	913	35	22	356	177	1,126	74	49	415	193
1983	2,114	133	86	813	368	973	49	30	372	168	1,141	84	56	440	200
1984	2,335	166	108	864	405	1,108	76	49	396	166	1,228	90	59	469	239
1985	2,331	137	88	856	454	1,143	61	39	421	187	1,169	76	49	445	267
1986	2,221	129	83	875	501	1,126	52	33	436	203	1,096	78	51	468	298
1987	2,378	173	116	901	553	1,178	78	53	444	229	1,200	95	63	457	324
1988 ²	2,601	217	155	958	621	1,284	92	67	469	265	1,316	125	88	489	356

¹ Annual data are average equity or debt for the year (using four end-of-quarter figures). ² Data excludes estimates for corporations with less than \$250,000 in assets at time of sample selection. Prior periods include estimates for corporations in this size category.

Source: Through 1981, U.S. Federal Trade Commission, thereafter U.S. Bureau of Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations*. In U.S. Council of Economic Advisers, *Economic Report of the President*, annual.

**NO. 908. U.S. MULTINATIONAL COMPANIES—ASSETS, SALES, EMPLOYMENT, EMPLOYEE
COMPENSATION, U.S. EXPORTS AND IMPORTS: 1987**

[In billions of dollars, except as indicated. Consists of non-bank U.S. parent companies and their foreign affiliates. U.S. parent is a U.S. person that owns or controls directly or indirectly, 10 percent or more of the voting securities of an incorporated foreign business enterprise, or an equivalent interest in an unincorporated foreign business enterprise. A U.S. person can be an incorporated business enterprise. A foreign affiliate is a foreign business enterprise owned or controlled by a U.S. parent company]

INDUSTRY ¹	U.S. PARENTS				FOREIGN AFFILIATES				U.S. exports shipped from foreign affiliates	U.S. imports shipped from foreign affiliates
	Total as-sets	Sales	Employment (1,000)	Employee compensation	Total as-sets	Sales	Employment (1,000)	Employee compensation		
All industries	4,184	2,680	17,863	579	1,098	1,052	6,235	135	79	75
Petroleum.....	394	281	684	27	197	214	292	10	2	10
Manufacturing.....	1,540	1,335	10,175	362	426	522	4,080	88	56	57
Food and kindred products.....	153	172	1,156	29	35	50	407	6	1	1
Chemical and allied products.....	233	197	1,257	46	89	94	578	13	7	3
Primary and fabricated metals.....	86	86	676	23	26	25	262	5	1	2
Machinery (except electrical).....	159	124	1,126	45	71	84	523	17	8	7
Electric and electronic equipment.....	174	129	1,161	40	43	50	684	12	8	9
Transportation equipment.....	444	355	2,332	102	85	131	777	18	28	30
Other.....	291	272	2,467	77	76	88	650	17	6	6
Wholesale trade.....	76	175	315	9	100	173	494	14	19	6
Finance (except banking), insurance, real estate.....	1,519	376	1,058	40	285	44	154	5	(2)	(2)
Services.....	110	88	1,391	29	32	30	350	8	(2)	(2)
Other industries.....	545	425	4,239	112	59	69	865	10	1	2

Z Less than \$500 million. ¹ Represents industry of U.S. parent or industry of foreign affiliate.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, June 1989.

**NO. 909. U.S. LARGEST PUBLIC COMPANIES—RETURN ON EQUITY, DEBT EQUITY RATIO, SALES
GROWTH, AND EARNINGS PER SHARE—BY INDUSTRY: 1984 TO 1988**

[In percent, except ranks. For fiscal years ending in the 12 month period ending September 30. Included in the Forbes Universe of 1,116 companies is every firm with revenue of over \$475 million in 1989. Represents industry medians; calculated by listing companies in rank order and selecting the midpoint. Where there is an even number of companies, an arithmetic average of the two middle companies is substituted]

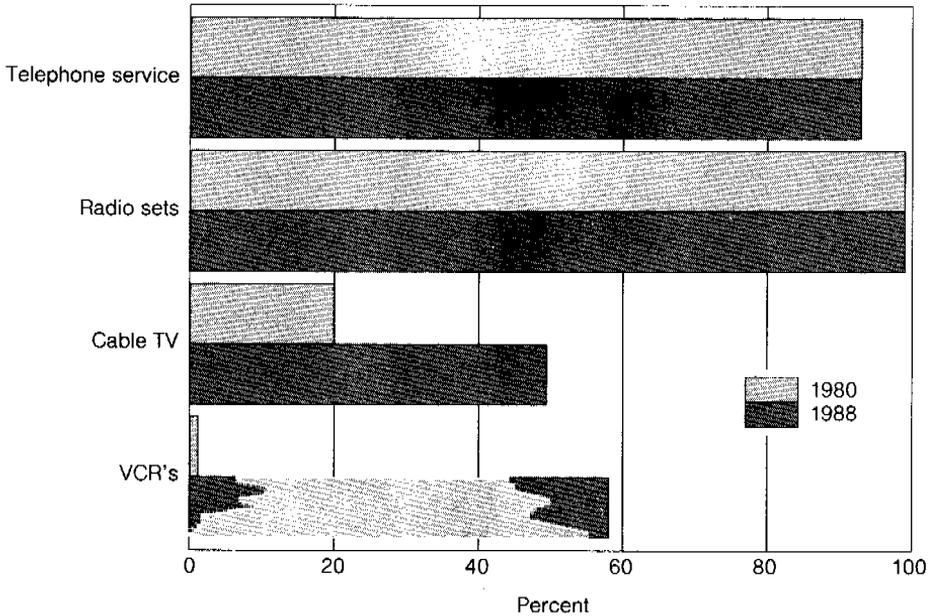
INDUSTRY	PROFITABILITY					GROWTH					
	Return on equity ¹			1988		Sales ⁴			Earnings per share		
	5-year rank	5-year average 1984-88	Latest 12 months 1988	Debt as percent of equity ²	Net profit margin ³	5-year rank	5-year average 1984-88	Latest 12 months 1988	5-year rank	5-year average 1984-88	Latest 12 months 1988
All-Industry medians	(x)	13.9	14.1	45.7	4.9	(x)	9.5	11.6	(x)	3.9	18.4
Beverage and tobacco.....	1	19.6	19.7	44.9	8.0	10	11.3	10.3	6	12.3	20.2
Communications media.....	2	19.4	17.6	48.2	6.4	9	11.6	14.2	7	12.1	18.4
Industrial, office services.....	3	18.6	14.8	31.5	4.2	4	14.4	13.8	3	16.3	19.3
Food processors.....	4	18.2	17.8	57.4	4.2	20	8.4	8.0	8	11.6	19.1
Electrical equipment.....	5	17.7	16.5	16.3	7.0	15	9.6	10.5	9	11.0	15.5
Health.....	6	16.9	16.2	33.8	5.8	6	13.3	11.8	5	12.9	16.3
Food distributors.....	7	16.1	15.7	75.4	1.4	16	9.5	8.7	10	8.8	20.8
Financial services.....	8	15.9	9.8	132.6	3.4	3	15.1	11.6	21	3	-8.8
Consumer products.....	9	15.8	16.1	36.7	4.9	8	12.0	11.6	13	7.8	19.8
Retailing.....	10	15.8	13.8	45.7	2.6	5	13.3	12.6	14	7.2	7.5
Aerospace and defense.....	11	14.5	14.1	32.8	3.9	22	8.3	6.0	11	8.5	20.3
Automotive.....	12	14.3	14.4	44.3	3.7	21	8.4	11.7	12	8.1	20.1
Apparel, shoes and textiles.....	13	14.0	14.3	44.1	4.3	11	11.2	10.0	29	-2.1	8.2
Insurance.....	14	14.0	13.3	26.0	5.7	2	15.4	7.9	4	14.1	-6.7
Electric utilities.....	15	13.9	13.4	100.2	11.1	26	4.1	3.4	17	2.6	-3
Banks and thrifts.....	16	13.9	12.5	41.3	6.8	7	12.1	12.2	20	1.2	15.0
Telecommunications.....	17	13.7	14.0	63.0	7.8	24	6.3	5.8	19	1.6	8.4
Packaging.....	18	13.2	16.3	58.7	5.3	13	10.8	13.4	2	17.0	28.4
Conglomerates.....	19	12.7	18.0	42.0	5.2	23	6.9	5.0	15	4.9	34.2
Natural gas.....	20	12.7	12.3	91.6	6.7	30	-.7	1.8	24	-5.1	6.0
Paper.....	21	11.8	21.8	53.9	7.9	18	8.8	14.5	1	18.0	50.8
Chemicals.....	22	11.7	16.0	36.5	6.6	28	3.7	16.1	16	3.9	37.8
Computers and electronics.....	23	11.6	14.0	29.5	4.7	12	10.9	18.1	22	-1.2	28.8
Leisure and recreation.....	24	10.3	13.7	124.9	4.4	14	10.5	17.1	19	1.3	8.6
Construction.....	25	9.9	12.8	49.4	3.4	19	8.4	6.9	25	-5.4	14.0
Air transport.....	26	7.7	8.5	76.0	3.2	1	15.7	20.0	26	(NS)	-14.3
Surface transportation.....	27	7.5	10.2	73.1	3.4	17	9.0	7.4	26	(NS)	17.2
Oil.....	28	6.8	10.9	64.8	2.8	31	6.1	10.5	26	(NS)	25.3
Heavy equipment.....	29	5.0	12.8	38.7	4.2	27	3.9	14.0	26	(NS)	19.9
Metals.....	30	(*)	14.2	39.9	4.9	25	4.7	26.4	26	(NS)	148.3
Coal.....	31	(*)	13.0	68.0	7.4	29	3.2	14.5	26	(NS)	16.8

NS Not significant. X Not applicable. ¹ Represents primary earnings per share before extraordinary item divided by common shareholders' equity per share. Common shareholders' equity is total shareholders' equity including the stated value of all preferred stock at the beginning of each year minus the involuntary liquidating value of non-convertible preferred shares.

² Long-term debt, including capitalized leases, divided by total equity, including preferred equity. ³ Net income divided by net sales, including other operating income. ⁴ Net sales plus other operating revenue. ⁵ Deficit.

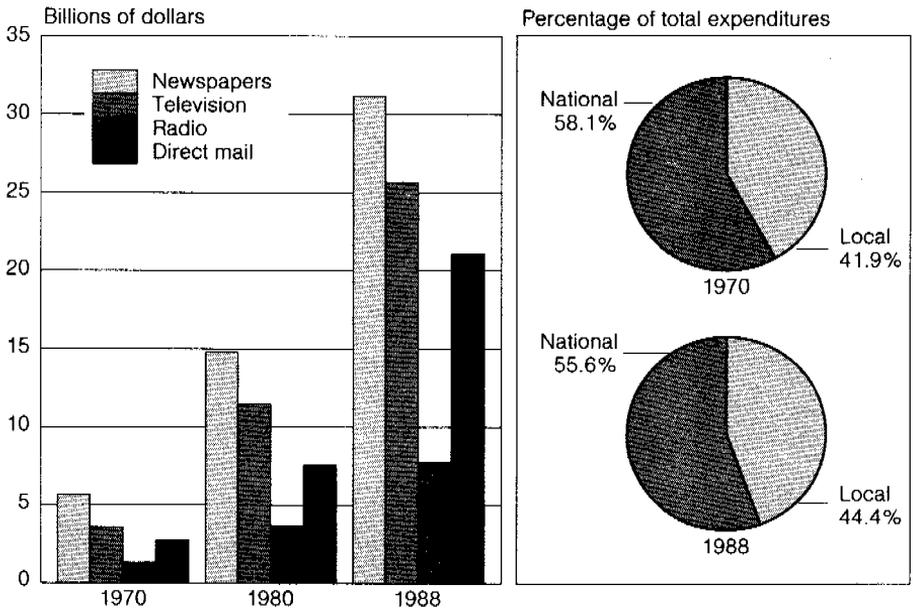
Source: Forbes, Inc., New York, NY, *Forbes Annual Report on American Industry*. (Copyright.)

Figure 18.1
Households With Selected Media: 1980 and 1988

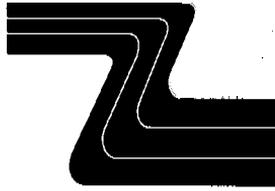


Source: Chart prepared by U.S. Bureau of the Census. For data, see table 914.

Figure 18.2
Advertising Expenditures, by Selected Media: 1970 to 1988



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 934.



Section 18

Communications

This section presents statistics on the usage, finances, and operations of the Postal Service and of the various communications media: Telephone, telegraph, radio, television, newspapers and periodicals. Expenditures data for advertising in the media are also included.

Postal Service.—The Postal Service provides mail processing and delivery services within the United States. The Postal Reorganization Act of 1970 created the Postal Service, effective July 1971, as an independent establishment of the Federal Executive Branch.

"Revenue and cost analysis" describes the Postal Service's system of attributing revenues and costs to classes of mail and service. This system draws primarily upon probability sampling techniques to develop estimates of revenues, volumes, and weights, as well as costs by class of mail and special service. The costs attributed to classes of mail and special services are primarily incremental costs which vary in response to changes in volume; they account for roughly 60 percent of the total costs of the Postal Service. The balance represents "institutional costs". Statistics on revenues, volume of mail, and distribution of expenditures are presented in the Postal Service's annual report, *Cost and Revenue Analysis*, and its *Annual Report of the Postmaster General*.

Communication media.—The Federal Communications Commission (FCC), established in 1934, regulates wire and radio communications and licenses radio and television stations. Only the largest carriers and controlling companies file annual or monthly financial reports. Jurisdiction of the FCC applies to domestic and overseas telegraph carriers and to the Communications Satellite Corporation (Comsat), but not to a large number of telephone carriers that are engaged in intrastate service. The gross operating revenues of the telephone carriers reporting annually to the FCC, however, are estimated to cover about 90 percent of the revenues of all U.S. telephone companies.

Reports filed by the broadcasting industry cover substantially all radio and television stations operating in the United States and its outlying areas. The private radio services represent the largest and most diverse group of licensees regulated by the FCC. These services provide voice, data communications, point-to-point and point-to-multipoint communications for land mobile and microwave communicators. Major users of these services are: small business; the aviation industry; the maritime trades; the land transportation industry; manufacturing industries; state and local public safety and governmental authorities; emergency medical service providers; amateur radio operators and personal radio operations (CB and the General Mobile Radio Service). The FCC also licenses entities as "private carriers". Private carriers provide land mobile communications service and paging service on a for-profit basis. Principal sources of wire, radio, and television data are the FCC's *Annual Report*, and its annual *Statistics of Communications Common Carriers*.

Statistics on the printed media are available from the U.S. Bureau of the Census, as well as from various private agencies. The censuses of manufactures (conducted by the Census Bureau every five years, for the years ending in "2" and "7") provide statistics on the number and circulation of newspapers and periodicals and on sales of books and pamphlets. Editor & Publisher Co., New York, presents annual data on the number and circulation of daily and Sunday newspapers in its *International Year Book*. Monthly data on new books and new editions appear in *Publishers Weekly*, issued by R. R. Bowker Company, New York. (See table 385 for annual data.)

Advertising.—Data on advertising expenditures are compiled primarily by McCann-Erickson, Inc., which compiles certain of the data shown (see tables 932-934). Monthly index figures of advertising in certain media are also published periodically by McCann-Erickson in *Advertising Age*.

The Broadcast Advertisers Reports distinguishes between spot and local advertising primarily on the basis of the type of advertiser to whom the time is sold, rather than how and by whom it is sold. In general, time purchased on behalf of retail or service establishments in the market is considered local, even though the establishments may be part of a national or regional chain. That is, spot advertising promotes a product, while local advertising promotes a given establishment. Network advertising, mutually exclusive of spot and local, is broadcast through the network system.

Statistical reliability.—For a discussion of statistical collection and estimation, sampling procedures, and measures of statistical reliability applicable to Census Bureau data, see Appendix III.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

NO. 910. U.S. POSTAL SERVICE—SUMMARY: 1975 TO 1988

[Employees in thousands; revenue and expenditures in millions of dollars, except as indicated. For fiscal years; see text, section 9. Includes Puerto Rico and all outlying areas except Canal Zone. See text, section 18. See also *Historical Statistics, Colonial Times to 1970*, series R 163-171]

ITEM	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
Number of post offices.....	30,754	30,326	30,242	30,155	29,990	29,750	29,557	29,344	29,319	29,203
Pieces of mail handled (est.) (bil.).....	89.3	106.3	110.1	114.0	119.4	131.5	140.1	147.4	153.9	160.5
First-class, number (bil.) ¹	51.4	60.3	61.5	62.3	64.3	68.4	72.4	76.2	78.9	82.3
Percent.....	57.6	56.7	55.8	54.5	53.8	52.0	51.7	51.7	51.3	51.3
Second class (bil.).....	9.1	8.4	10.0	9.5	9.2	9.5	10.4	10.6	10.3	10.4
Employees, total	702	687	670	675	679	702	744	785	791	824
Regular.....	559	536	544	547	547	561	586	606	751	764
Postmasters.....	30	29	29	29	28	28	28	27	28	28
Office supervisors and tech. personnel.....	37	36	37	38	39	45	46	49	55	55
Office clerks and mail handlers ²	239	229	232	232	229	235	249	260	345	347
City carriers and vehicle drivers.....	167	160	164	165	166	171	179	187	237	243
Rural carriers.....	31	33	33	34	34	35	35	36	37	39
Other.....	55	49	49	49	51	47	48	47	49	52
Substitute (part-time).....	143	130	126	128	132	141	159	179	40	60
Compensation and employee benefits (mil. dol.).....	10,805	16,541	18,018	19,094	20,070	22,157	24,349	25,576	27,229	30,479
Avg. salary per employee (dol.) ³	15,392	24,799	26,893	28,283	29,565	31,562	32,727	32,581	34,424	36,989
Pieces of mail per employee, avg.....	127	159	164	169	176	187	188	188	195	195
Total revenue ⁴	11,590	19,106	20,781	23,828	24,699	28,474	28,956	31,021	32,297	35,939
Operating postal revenue.....	10,015	17,143	19,133	22,600	23,582	25,314	27,736	30,102	31,528	35,036
Stamps, postal cards, etc.....	2,819	4,287	4,625	5,559	5,709	6,023	6,520	6,969	7,246	7,784
Second-class postage paid in money (pound rates) ⁵	284	881	911	996	991	1,056	1,339	1,271	1,326	1,455
Other postage paid under permit and meter.....	6,241	10,828	11,891	13,984	14,755	16,067	17,747	19,294	20,280	22,676
Box rents.....	67	160	168	168	202	188	230	259	273	296
Miscellaneous.....	556	892	1,427	1,771	1,801	1,847	1,774	2,174	2,255	2,683
Money-order revenues.....	53	95	111	122	124	132	126	135	148	142
Government appropriations.....	1,533	1,610	1,275	707	789	879	970	716	650	517
Percent of total revenue.....	13.2	8.4	6.1	3.0	3.2	3.3	3.3	2.3	2.0	1.4
Investment income, net.....	37	353	373	321	328	282	250	203	119	-30
Mail and service:										
First-class mail ¹	5,798	10,146	11,457	13,747	14,255	15,216	16,740	18,035	18,786	20,739
Priority mail ⁶	411	612	758	823	849	928	960	1,011	1,086	1,220
Second-class publishers' mail ⁷	277	864	885	961	958	1,025	1,093	1,222	1,280	1,393
Third-class mail ⁸	1,348	2,412	2,643	3,303	3,677	4,241	4,887	5,606	6,148	7,131
Bulk rate.....	1,167	2,168	2,405	3,092	3,482	4,039	4,687	5,414	5,947	6,916
Single piece rate and fees.....	181	244	238	211	195	202	190	193	200	215
Fourth-class mail ⁹	718	805	786	788	753	774	763	814	823	873
Zone rate mail (parcels, catalogs, etc.).....	577	500	499	507	500	519	524	550	563	591
Special fourth-class rate.....	130	272	251	237	206	210	199	213	203	223
Library rate and fees.....	11	33	36	44	47	45	40	51	57	59
Government mail ¹⁰	484	745	751	918	913	901	934	992	907	1,079
International mail ¹¹	390	596	735	882	874	859	882	934	957	972
Special services.....	251	518	823	823	866	868	918	979	1,030	1,113
Express mail.....	(x)	184	270	339	422	490	544	491	499	505
Mailgrams.....	(x)	15	16	16	14	13	15	17	13	12
Other ¹²	1,913	2,205	1,647	1,028	1,118	1,159	1,220	919	769	903
Expenditures ¹³	12,578	19,412	21,369	22,826	24,083	26,357	29,207	30,716	32,520	36,119

X Not applicable. ¹ Items mailed at 1st-class rates and weighing 12 ounces or less. ² Includes mobile unit employees. ³ Includes fringe benefits. ⁴ Net revenues after refunds of postage. Includes operating reimbursements, embossed envelope purchases, indemnity claims, and miscellaneous revenue and expenditure offsets. Shown in year which gave rise to the earnings. ⁵ Includes controlled circulation publications. ⁶ Items otherwise qualified as 1st-class or airmail that exceeds 12 ounces and 8 ounces, respectively. ⁷ Includes other not shown separately. Includes mail paid at other than bulk rates. Publishers' mail includes printed publications periodically issued and mailed at a known post office to paid subscribers, such as regular rate newspapers and magazines, and classroom and nonprofit rate publications. See source for further detail. ⁸ Items less than 16 ounces in weight not mailed at either 1st- or 2d-class rates. ⁹ Items not mailed at 1st-, 2d-, or 3d-class rates, except government and international mail. May include parcel post, catalogs weighing 16 ounces or more, books, films, and records. ¹⁰ Penalty and franked. ¹¹ Mail from U.S. to foreign countries paid at international mail rates. ¹² Consists of unassignable revenues; 1975 includes domestic airmail. ¹³ Shown in year in which obligation was incurred.

Source: U.S. Postal Service, *Annual Report of the Postmaster General*.

NO. 911. U.S. POSTAL SERVICE—VOLUME OF MAIL, BY CLASS: 1970 TO 1988

(In millions, except per capita. For fiscal years; see text section 9. Includes Puerto Rico and all outlying areas except Canal Zone. For definition of classes of mail, see footnotes, table 910. See also *Historical Statistics, Colonial Times to 1970*, series R 172-186)

CLASS OF MAIL	PIECES OF MAIL					WEIGHT OF MAIL (lb.)				
	1970	1980	1985	1987	1988	1970	1980	1985	1987	1988
Total	84,882	106,311	140,098	153,931	160,491	13,281	12,958	16,783	17,881	18,578
Domestic.....	83,986	105,348	139,289	153,153	159,771	13,055	12,742	16,564	17,665	18,358
1st class and airmail ¹	50,174	60,332	72,517	78,933	82,381	1,636	2,213	2,807	3,047	3,155
Priority mail.....	185	248	308	354	405	371	591	672	763	818
2d class ²	9,914	10,221	10,390	10,324	10,448	3,641	3,478	3,966	4,012	4,108
3d class.....	19,974	30,381	52,170	59,734	61,870	2,932	3,240	6,453	7,156	7,579
4th class.....	977	633	576	615	649	4,786	2,661	2,156	2,179	2,205
Penalty.....	2,544	2,992	2,608	2,645	3,081	540	503	470	453	445
Franked and free for blind.....	218	540	710	548	837	49	56	40	56	51
International.....	896	963	829	778	720	226	216	219	216	220
Per capita: ³										
Total, all domestic mail ⁴	411	464	585	632	655	64	56	70	73	75
1st class and airmail.....	245	266	304	326	336	8	10	12	13	13
2d class ²	49	45	44	43	43	18	15	17	17	17
3d class.....	98	134	219	247	252	10	14	27	30	31
4th class.....	5	3	2	3	3	23	12	9	9	9

¹ Beginning 1980, includes express mail established as a class of mail on October 9, 1977, and mailgrams. ² See footnote 8, table 910. ³ 1970 and 1980, based on April 1 population, including Armed Forces abroad; otherwise, based on estimated total population as of Jan. 1, including Armed Forces abroad. ⁴ Includes types of mail not shown separately.
Source: U.S. Postal Service, *Annual Report of the Postmaster General*.

NO. 912. U.S. POSTAL SERVICE RATES FOR LETTERS AND POST CARDS: 1958 TO 1989

[See also *Historical Statistics, Colonial Times to 1970*, series R 188-191]

DATE OF RATE CHANGE	SURFACE MAIL				DATE OF RATE CHANGE	SURFACE MAIL				Express mail ²		
	Letters			Postal and post cards		Domestic airmail letters ¹	Letters				Postal and post cards	Domestic airmail letters
	Each ounce	First ounce	Each added ounce				Each ounce	First ounce	Each added ounce			
1958 (Aug. 1).....	4¢	(x)	(x)	3¢	7¢	1975 (Dec. 31).....	³ (x)	³ 13¢	³ 11¢	³ 9¢	(⁴)	(x)
1963 (Jan. 7).....	5¢	(x)	(x)	4¢	8¢	1978 (May 29).....	(x)	15¢	13¢	10¢	(⁵)	(x)
1968 (Jan. 7).....	6¢	(x)	(x)	5¢	10¢	1981 (Mar. 22).....	(x)	18¢	17¢	12¢	(⁶)	(x)
1971 (May 16).....	8¢	(x)	(x)	6¢	11¢	1981 (Nov. 1).....	(x)	20¢	17¢	13¢	(⁶)	\$9.35
1974 (Mar. 2).....	10¢	(x)	(x)	8¢	13¢	1985 (Feb. 17).....	(x)	22¢	17¢	14¢	(⁷)	\$10.75
1975 (Sept. 14).....	(x)	10¢	9¢	7¢	(x)	1988 (Apr. 3).....	(x)	25¢	20¢	15¢	(⁸)	\$8.75
						In effect, August 1989.....	(x)	25¢	20¢	15¢	(⁸)	\$12.00

x Not applicable. ¹ Each ounce, except as noted. ² Post Office to addressee rates. Rates shown are for weights up to 2 pounds, all zones. Beginning Feb. 17, 1985, for weights between 2 and 5 lbs, \$12.85 is charged. Prior to Nov. 1, 1981, rate varied by weight and distances. Over 5 pounds still varies by distance. ³ As of October 11, 1975, surface mail service upgraded to level of airmail. ⁴ 17¢ for first ounce; 15¢ for each added ounce. ⁵ As of May 1, 1977, domestic airmail service, as a separate class of mail, was discontinued. ⁶ Letter rate up to eight ounces. ⁷ Over eight ounces and up to two pounds.
Source: U.S. Postal Service, "United States Domestic Postage Rates: Recent History," and unpublished data.

NO. 913. INTERNATIONAL AIR MAIL RATES FROM THE U.S.: 1961 TO 1989

[Excludes Canada and Mexico]

DATE OF RATE CHANGE	ZONE 1 ¹		ZONE 2 ²		ZONE 3 ³		Postal and post cards	Aero-grammes
	Each ½ ounce up to two ounces	Each added ½ ounce	Each ½ ounce up to two ounces	Each added ½ ounce	Each ½ ounce up to two ounces	Each added ½ ounce		
July 1, 1961.....	.13	.13	.15	.15	.25	.25	.11	.11
May 1, 1967.....	.15	.15	.20	.20	.25	.25	.13	.13
July 1, 1971.....	.17	.17	.21	.21	.21	.21	.13	.13
Mar. 2, 1974.....	.21	.17	.26	.21	.26	.21	.18	.18
Jan. 3, 1978.....	.25	.21	.31	.26	.31	.26	.21	.22
Jan. 1, 1981.....	.35	⁴ .30	.44	⁴ .35	.44	⁴ .35	.28	.30
Feb. 17, 1985.....	.39	⁴ .33	.44	⁴ .39	.44	⁴ .39	.33	.36
Apr. 17, 1988 ⁵.....	.45	.42	.45	.42	.45	.42	.36	.39
In effect, August 1989.....	.45	.42	.45	.42	.45	.42	.36	.39

¹ Caribbean, Central and South America. The airmail letter rate to South America, 1961 to 1967, was the same as that to Europe. Beginning January 3, 1976, the airmail letter rate to all South American countries except Colombia and Venezuela is the same as Europe; Colombia and Venezuela are included in the first zone. ² Europe and Mediterranean Africa. ³ Rest of world. ⁴ Up to 32 oz.; 30 cents per additional ounce over 32. ⁵ Up to 32 oz.; 35 cents per additional ounce over 32. ⁶ Up to 32 oz.; 33 cents per additional ounce over 32. ⁷ Up to 32 oz.; 39 cents per additional ounce over 32. ⁸ Air letters collapsed to a single schedule except for Canada and Mexico.
Source: U.S. Postal Service, unpublished data.

NO. 914. UTILIZATION OF SELECTED MEDIA: 1970 TO 1989

ITEM	Unit	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989
Households with—												
Telephone service ¹	Percent	87.0	(NA)	93.0	(NA)	(NA)	91.8	91.8	92.2	92.5	92.9	93.0
Radio sets ²	Percent	98.6	98.6	99.0	99.0	99.0	99.0	99.0	99.0	99.0	99.0	(NA)
Average number of sets	Number	5.1	5.6	5.5	5.5	5.5	5.5	5.5	5.4	5.4	5.6	(NA)
Television sets ³	Millions	59	69	76	82	83	84	85	86	87	89	90
Percent of total households	Percent	95.3	97.1	97.9	98.1	98.1	98.1	98.1	98.1	98.1	98.1	98.2
Television sets in homes	Millions	81	105	128	142	149	149	155	158	163	168	176
Average number of sets	Number	1.4	1.5	1.7	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.9
Color set households	Millions	21	47	63	71	74	76	78	80	83	85	87
Cable television ⁴	Millions	4	9	15	24	28	33	36	39	42	44	48
Percent of TV households	Percent	6.7	12.6	19.9	29.8	34.0	39.3	42.8	45.6	47.7	49.4	52.8
VCR's ⁵	Millions	(NA)	(NA)	1	3	5	9	16	31	43	51	58
Percent of TV households	Percent	(NA)	(NA)	1.1	3.1	5.5	10.6	20.8	36.0	46.7	58.0	64.6
Commercial radio stations: ²												
AM	Number	4,323	4,463	4,589	4,668	4,733	4,754	*4,718	4,863	4,902	4,932	(NA)
FM	Number	2,196	2,767	3,282	3,380	3,527	3,716	*3,875	3,944	4,041	4,155	(NA)
Television stations: ⁶ Total	Number	862	953	1,011	1,065	1,106	1,138	1,182	1,235	1,290	1,362	(NA)
Commercial	Number	677	706	734	777	813	841	883	919	968	1,028	1,064
VHF ³	Number	501	514	516	517	519	523	520	522	524	539	545
UHF ³	Number	176	192	218	260	294	318	363	397	444	489	519
Cable television: ⁶												
Systems	Number	2,490	3,506	4,225	4,825	5,600	6,200	6,844	7,600	7,900	8,500	(NA)
Subscribers served	Millions	4.5	9.8	15.5	21.0	25.0	30.0	31.3	37.5	41.0	43.8	47.8
Daily newspaper circulation: ⁷												
Number	Millions	62	61	62	63	63	63	63	63	63	63	(NA)
Per capita ⁸	Number	.305	.282	.275	.269	.267	.267	.263	.260	.258	.277	(NA)

NA Not available. ¹ For occupied housing units, 1970 through 1980, as of April 1; thereafter, as of March. Source: U.S. Bureau of the Census, *Census of Housing: 1970 and 1980*, vol. 1, and unpublished data. ² As of Dec. 31, except as noted. Source: Radio Advertising Bureau, New York, NY, *Radio Facts*, annual (copyright). Number of stations on the air compiled from Federal Communications Commission reports. ³ 1970-1975, as of Sept. of prior year; all other years as of Jan. of year shown. Excludes Alaska and Hawaii. Source: Television Bureau of Advertising, Inc., *Trends in Television*, annual (copyright). ⁴ As of February. Excludes Alaska and Hawaii. Source: See footnote 3. ⁵ As of February 1986. ⁶ As of Jan. 1 of year shown. Number of television stations on the air. Source: See footnote 3. ⁷ As of Sept. 30. Source: Editor & Publisher, Co., New York, NY, *Editor & Publisher International Year Book*, annual (copyright). ⁸ Per capita based on total resident population enumerated as of April 1, 1970 and 1980, and estimated as of July 1 for other years. Source: See footnote 3.

Source: Compiled from sources mentioned in footnotes.

NO. 915. MULTIMEDIA AUDIENCES—SUMMARY: 1989

[In percent, except as indicated. As of spring. For persons 18 years old and over. Based on sample and subject to sampling error; see source for details]

ITEM	Total population (1,000)	Television viewing and coverage	Television prime time viewing and coverage	Cable viewing and coverage	Radio listening and coverage	Newspaper reading and coverage
Total	178,281	91.7	76.5	47.9	85.3	85.1
18-24 years old	26,460	89.0	67.9	49.7	95.4	81.8
25-34 years old	43,285	91.9	77.4	49.7	92.3	84.7
35-44 years old	34,153	90.7	76.5	54.0	89.7	88.2
45-54 years old	23,496	90.4	76.3	49.2	85.0	87.9
55-64 years old	22,626	93.9	81.2	46.4	78.1	87.2
65 years old and over	28,262	94.3	79.3	36.1	65.5	81.0
Male	85,035	91.8	75.1	50.7	87.1	85.7
Female	93,246	91.6	77.7	45.3	83.6	84.6
White	154,028	91.2	75.9	50.2	85.4	86.5
Black	19,599	95.5	80.3	32.7	84.5	78.8
Other	4,653	93.2	79.7	34.6	85.0	66.3
Spanish speaking	10,301	91.0	74.7	38.9	90.8	76.7
Not high school graduate	45,389	91.8	75.9	36.7	75.2	71.9
High school graduate	69,392	91.8	77.8	49.7	86.7	86.8
Attended college	32,228	91.5	74.5	54.8	90.5	91.6
College graduate	31,271	91.4	76.3	53.0	91.3	94.2
Employed: Full-time	101,895	90.8	75.8	51.8	91.1	87.7
Part-time	11,502	89.9	72.6	50.4	90.3	88.1
Not employed	64,984	93.4	78.2	41.3	75.2	80.5
Household income:						
Less than \$10,000	19,644	91.6	74.4	27.4	70.9	66.6
\$10,000 to \$19,999	31,564	94.2	79.4	38.0	80.5	79.3
\$20,000 to \$29,999	32,361	91.7	77.0	47.5	84.2	84.8
\$30,000 to \$34,999	16,105	93.3	78.6	49.1	89.1	87.1
\$35,000 to \$39,999	14,391	91.5	77.5	55.7	89.9	89.4
\$40,000 to \$49,999	24,001	90.6	75.2	54.4	90.8	90.8
\$50,000 or more	40,215	89.8	74.2	58.8	90.7	93.1

Source: Mediarmark Research Inc., New York, NY, *Multimedia Audiences*, Spring 1989. (Copyright.)

Equipment—Telephone and Telegraph Systems

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No. 916. COMMUNICATIONS EQUIPMENT—FACTORY SHIPMENTS: 1983 TO 1988

[In millions of dollars, except percent change. Minus sign (—) indicates decrease. N.e.c.=Not elsewhere classified]

ITEM	1983	1984	1985	1986	1987	1988	PERCENT CHANGE				
							1983-84	1984-85	1985-86	1986-87	1987-88
Shipments, total.....	30,676	35,288	41,032	44,329	44,713	48,485	15.0	16.3	8.0	.9	8.4
Search, detection, navigation and guidance systems and equip. ¹	19,982	22,823	27,057	29,921	29,849	32,850	14.2	18.6	10.6	—2	10.1
Radar systems and equipment.....	3,344	3,699	4,321	4,625	3,585	3,725	10.6	18.8	7.0	—22.5	3.9
Missile-borne and space-vehicle-borne equipment.....	1,856	2,205	2,732	3,410	3,810	4,400	18.8	23.9	24.8	11.7	15.5
Navigation systems and equip. ²	2,712	2,744	2,971	3,479	3,401	3,750	1.2	8.3	17.1	—2.2	10.3
Counter measures equipment.....	1,596	2,037	2,682	3,090	2,703	2,800	27.6	31.7	15.2	—12.5	3.6
Tracking radar.....	2,088	1,821	2,208	2,452	2,851	3,100	—12.8	21.3	11.1	—16.3	8.7
Search, detection, identification, and tracking system n.e.c.....	1,189	1,510	1,961	1,953	1,930	2,000	27.0	29.9	—4	—1.2	3.6
Sonar search, detection and tracking systems and equipment.....	1,374	1,620	1,885	1,934	2,095	2,325	17.9	16.4	2.6	8.3	11.0
Specialized electronic and comm-intelligence equipment.....	1,349	1,370	1,810	1,895	2,014	2,300	1.6	32.1	4.7	6.3	14.2
Commercial, industrial, and military communications equipment ¹	7,694	9,258	10,671	11,184	11,323	11,900	20.3	15.3	4.8	1.2	5.1
Space satellite communications systems.....	1,760	2,277	2,281	2,392	2,060	2,200	29.4	.2	4.9	—13.9	6.8
Receivers, radio communications.....	1,391	1,678	1,953	2,001	1,927	1,925	20.6	16.4	2.5	—3.7	—1
Intercommunications systems ³	1,537	1,732	1,743	1,670	1,706	1,720	12.7	.6	—4.2	2.2	.8
Broadcast studio and related electronic equipment ⁴	1,464	1,476	1,562	1,554	1,835	2,015	.8	5.8	—5	18.1	9.8

¹ Includes shipments not shown separately. ² For aircraft, ship, and ground navigation. Represents autopilots, beacons, collision warning devices, direction finders equipment, etc. ³ Includes alarm systems and traffic control shipment. ⁴ Includes video, cable TV, and audio equipment.

Source: Electronic Industries Association, Washington, DC, *Electronic Market Data Book*, annual.

No. 917. TELEPHONE AND TELEGRAPH SYSTEMS: 1970 TO 1987

[Covers principal carriers filing annual reports with Federal Communications Commission. Minus sign (—) indicates loss. See *Historical Statistics, Colonial Times to 1970*, series R 46-70 and R 75-88, for data on telegraph systems]

ITEM	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Domestic telephone: ¹											
Carriers ²	Number.....	56	62	59	60	61	62	61	39	39	37
Telephones ³	Million.....	105	130	157	158	151	(NA)	(NA)	(NA)	(NA)	(NA)
Access lines.....	Million.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	100	103	106	111
Miles of wire.....	Million.....	628	872	1,131	1,188	1,223	1,260	1,290	1,313	1,338	1,371
Gross book cost of plant.....	Bil. dol.....	59.5	95.5	147.4	161.5	174.0	184.2	183.0	195.1	207.4	222.0
Depreciation reserves ⁴	Bil. dol.....	13.2	18.8	26.5	30.0	34.0	39.7	42.9	50.0	58.7	69.8
Ratio to book cost.....	Percent.....	22.1	19.7	18.0	18.6	19.6	21.5	23.5	25.6	28.3	31.4
Capital stock and premium.....	Bil. dol.....	16.4	21.6	31.3	34.5	38.8	43.4	46.9	48.1	41.5	42.8
Operating revenues.....	Bil. dol.....	18.2	31.3	55.6	63.7	70.7	75.0	98.9	104.8	106.4	106.3
Operating expenses ⁵	Bil. dol.....	11.7	20.2	37.3	42.8	49.1	50.9	74.7	78.6	79.0	79.8
Net operating income ⁶	Bil. dol.....	3.1	5.6	10.0	11.4	11.4	12.4	12.4	13.4	13.9	14.5
Net income.....	Bil. dol.....	2.3	3.6	6.6	7.5	7.3	7.6	8.5	9.5	10.4	11.1
Employees.....	1,000.....	839	840	938	945	909	858	742	(NA)	(NA)	(NA)
Compensation of employees.....	Bil. dol.....	7.0	11.7	20.2	22.2	24.8	25.1	22.7	(NA)	(NA)	(NA)
Overseas telephone:											
Number of overseas calls.....	Million.....	23.4	62.2	199.6	265.5	310.8	369.5	427.6	411.7	477.6	579.6
Revenue from overseas calls.....	Mill. dol.....	252	562	1,535	1,654	1,461	1,697	1,772	1,799	1,841	2,127
Ocean cable systems.....	Number.....	17	21	24	24	24	26	26	26	26	26
Communications satellites ⁷	Number.....	4	5	5	5	6	6	6	6	11	11
Domestic telegraph:											
Carriers.....	Number.....	1	1	1	1	1	1	1	1	1	1
Revenue messages transmitted.....	Million.....	70	42	55	56	50	42	39	35	23	20
Message revenues ⁸	Mill. dol.....	234	197	296	320	320	316	321	304	293	296
Total operating revenues.....	Mill. dol.....	402	505	697	779	809	722	736	715	573	456
Operating revenue deductions.....	Mill. dol.....	368	435	603	699	725	654	712	654	601	518
Operating income ⁹	Mill. dol.....	34	70	94	110	84	68	26	61	—28	—62
Teletypewriter messages.....	Million.....	46	54	68	63	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Overseas telegraph: ¹⁰											
Carriers.....	Number.....	6	6	7	7	7	6	6	6	6	6
Revenue messages transmitted.....	Million.....	32	26	20	18	15	11	9	7	6	5
Message revenues ⁸	Mill. dol.....	124	217	380	405	411	395	411	404	385	358
Total operating revenues.....	Mill. dol.....	194	316	535	578	613	616	644	652	633	620
Operating revenue deductions.....	Mill. dol.....	156	245	405	468	532	560	611	638	642	607
Operating income ⁹	Mill. dol.....	26	48	79	70	58	47	22	41	—9	—14
Return on investment: ¹¹											
Telephone.....	Percent.....	7.1	7.6	8.7	9.0	8.4	8.7	9.2	9.4	9.4	9.6
Domestic telegraph.....	Percent.....	5.0	6.1	6.6	7.4	5.2	3.9	1.5	3.5	—2.1	—7.4
Overseas telegraph.....	Percent.....	10.6	12.0	15.9	12.5	9.1	6.8	3.3	6.7	—1.5	—2.5

NA Not available. ¹ Includes Puerto Rico and Virgin Islands. Excludes intercompany duplications. Gross operating revenues of carriers reporting estimated at 90 percent of all carriers. ² Beginning 1985, number of carriers changed due to change in dollar requirement of reporting carriers from \$1,000,000 to \$100,000,000. ³ Includes company, service, and private. ⁴ Includes amortization reserves. ⁵ Excludes taxes. ⁶ After tax deductions. ⁷ Excludes contingency and retired satellites. ⁸ Includes telex service; for domestic telegraph, excludes TWX. ⁹ After Federal income taxes. ¹⁰ Excludes South American and most Caribbean operations of All America Cables and Radio, Inc. ¹¹ Ratio of net operating income (after taxes) to average net book cost of communications plant.

Source: U.S. Federal Communications Commission, *Statistics of Communications Common Carriers*, annual, and unpublished data.

NO. 918. TELEPHONE COMPANIES—SUMMARY: 1980 TO 1988

[As of Dec. 31 or calendar year, as applicable. January 1, 1988 marked the beginning of significant rules changes in the way that local exchange carriers account for assets, liabilities, revenues, expenses, and income. Any comparisons with earlier data would not be meaningful. See also *Historical Statistics, Colonial Times to 1970*, series R 31-45]

ITEM	Unit	INDEPENDENT COMPANIES ¹					ALL TELEPHONE COMPANIES				
		1980	1984	1985	1986	1987	1984	1985	1986	1987	1988
All companies	Number.	1,483	1,416	1,402	1,380	1,360	1,440	1,426	1,404	1,384	1,371
Access lines.....	Millions	20.8	23.0	24.3	25.2	26.0	114.5	118.3	122.2	126.7	130.0
Total telephone plant.....	Mil. dol.	35,300	45,850	49,069	50,692	52,890	193,779	207,289	218,701	230,816	242,300
Operating revenues.....	Mil. dol.	10,475	16,000	17,245	18,469	19,920	73,868	78,425	82,366	84,900	89,873
Average daily conversations, total ²	Millions	192	210	223	243	301	1,199	1,264	1,327	1,662	1,700
Local calls.....	Millions	177	190	203	210	251	1,111	1,162	1,206	1,500	(NA)
Toll calls.....	Millions	15	20	20	33	50	88	102	121	162	(NA)
Reporting companies ³	Number.	765	691	653	630	604	655	677	654	628	607
Access lines.....	Millions	19.4	22.1	23.4	24.2	24.7	113.6	117.4	121.2	124.9	129.7
Telephone plant in service ⁴	Mil. dol.	32,491	42,093	45,501	47,732	48,335	186,151	199,978	212,366	222,260	238,329
Depreciation reserves ⁵	Mil. dol.	7,820	12,864	14,310	15,615	15,945	45,748	52,872	61,053	69,616	80,038
Operating revenues.....	Mil. dol.	10,177	15,403	16,684	17,555	17,266	73,270	77,864	81,452	82,246	85,913
Operating expenses ⁶	Mil. dol.	7,279	12,305	13,323	12,548	12,532	59,798	63,679	59,292	61,431	61,201
Net income.....	Mil. dol.	1,268	2,199	2,434	2,617	2,663	9,313	10,063	10,964	11,192	11,846
Stockholders' equity.....	Mil. dol.	9,623	12,781	13,940	14,033	15,083	63,147	66,510	66,603	69,413	75,800
Net income to stockholders' equity.....	Percent	13.2	17.2	17.5	18.7	18.0	14.7	15.1	16.5	16.1	15.6
Employees.....	1,000	189	168	170	165	152	724	695	672	653	639
Wages and salaries.....	Mil. dol.	3,373	4,429	4,558	4,736	4,643	22,112	21,443	22,127	22,125	(NA)

NA Not available. ¹ Companies independent of the Bell System, prior to divestiture of January 1984. ² Average business day conversations beginning 1988. ³ Comprises only companies submitting operating information to source cited below. ⁴ Total property plant and equipment beginning 1988. ⁵ Total accumulated depreciation and amortization beginning 1988. ⁶ Excludes Federal income tax.

Source: United States Telephone Association, Washington, DC, *Statistics of the Telephone Industry*, annual. (Copyright.)

NO. 919. REA AND RURAL TELEPHONE BANK PROGRAM—SUMMARY: 1970 TO 1988

ITEM	Unit	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988
Loans and guarantees approved, Dec. 31: ¹											
Borrowers.....	Number.	862	990	1,010	1,029	1,037	1,035	1,034	1,037	1,037	1,018
REA amount.....	Mil. dol.	1,816	3,845	4,076	4,327	4,540	4,742	4,937	5,119	5,342	5,517
Guaranteed amount.....	Mil. dol.	-	418	553	626	672	701	679	679	673	644
Rural Telephone Bank amount.....	Mil. dol.	-	1,388	1,529	1,726	1,872	2,000	2,131	2,249	2,403	2,397
Route miles of line, ² Dec. 31.....	1,000	547	798	805	831	847	868	872	869	877	896
Subscribers, Dec. 31.....	1,000	2,335	4,262	4,375	4,546	4,629	4,747	4,792	4,833	5,005	5,097
Telephones in service.....	1,000	2,989	6,770	6,953	7,147	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Total operating revenues.....	Mil. dol.	363	1,758	2,042	2,389	2,843	2,910	3,108	3,181	3,339	3,598
Total telephone plant.....	Mil. dol.	2,085	7,388	8,034	8,897	9,532	10,195	10,671	10,917	11,621	12,071
Employees.....	1,000	15.4	28.4	28.7	28.8	28.9	28.7	28.3	27.8	28.0	27.5

- Represents zero. NA Not available. ¹ Cumulative net loans (cancellations deducted). ² Line in service.

Source: U.S. Rural Electrification Administration, *Statistical Report—Rural Telephone Borrowers*, annual.

NO. 920. PRIVATE RADIO STATIONS AUTHORIZED, BY CLASS: 1980 TO 1988

[In thousands. As of Sept. 30. Includes Puerto Rico and Virgin Islands. See also *Historical Statistics, Colonial Times to 1970*, series R 140-148]

CLASS	1980	1985	1987	1988	CLASS	1980	1985	1987	1988
Private radio services ¹	16,357.3	2,419.5	2,657.1	2,748.0	Land transportation.....	28.0	37.7	40.0	40.1
Personal.....	14,560.2	(X)	4,70.4	4,75.3	Railroad.....	10.0	13.8	15.1	15.4
Citizens Band.....	14,308.4	(X)	-	-	Taxicab.....	4.8	6.1	6.0	5.9
General mobile.....	20.2	33.6	37.8	36.2	Interurban property.....	3.1	4.4	5.3	5.4
Radio control.....	231.7	(X)	-	-	Other.....	9.9	13.4	13.6	13.4
Amateur and disaster.....	389.9	415.4	432.6	439.1	Marine.....	398.3	525.3	573.7	605.4
Aviation.....	231.6	245.7	247.7	248.5	Ship.....	386.6	510.4	558.6	589.4
Aircraft.....	196.8	207.3	208.2	207.9	Alaskan.....	2.6	2.7	2.6	2.7
Aeronautical and fixed.....	9.5	10.9	11.2	11.7	Coastal and other.....	9.1	12.2	12.5	13.3
Civil air patrol.....	21.6	23.0	23.6	23.9	Public safety.....	137.1	194.5	212.6	221.4
Other.....	9.7	4.5	4.7	5.0	Police.....	42.3	42.3	46.1	47.8
Industrial.....	504.9	811.3	871.1	875.6	Fire.....	20.6	36.6	39.9	41.3
Power.....	23.1	34.4	40.5	42.8	Forestry conservation.....	7.6	9.6	10.3	10.7
Business.....	370.4	593.5	640.5	641.7	Highway maintenance.....	9.7	12.7	13.8	14.3
Petroleum.....	17.9	25.2	26.6	26.8	Special emergency.....	22.4	37.4	39.6	40.5
Forest products.....	6.4	9.8	10.9	11.3	Other.....	34.2	55.9	62.9	66.8
Special industrial.....	72.1	115.0	117.5	117.0	Operational fixed services ²	18.0	23.1	27.9	29.2
Other.....	14.7	33.4	35.1	36.0					

- Represents zero. X Not applicable. ¹ Includes items not shown separately. Each license, construction permit, or combination construction permit and license is counted as one station; therefore, a station might include a transmitter and many mobile units. ² Includes microwave operations.

Source: U.S. Federal Communications Commission, *Annual Report*, and unpublished data.

NO. 921. PUBLIC TELEVISION STATIONS: 1974 TO 1986

[Calendar year data for 1974 and 1976; fiscal year data thereafter. General programing is directed at the general community. Instructional programing is directed at students in the classroom or otherwise in the general context of formal education]

ITEM	1974	1976	1978	1980	1982	1984	1986
Stations broadcasting.....	238	253	272	281	291	303	305
Number of broadcasters.....	151	152	156	160	164	169	178
Average annual hours per broadcaster.....	3,872	4,542	4,894	5,128	5,421	5,542	5,650
BROADCAST HOURS, PERCENT DISTRIBUTION							
Program content ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0
General ¹	61.6	66.5	70.7	71.3	72.0	73.2	74.5
News and public affairs.....	12.6	11.9	11.0	12.2	12.4	14.1	16.4
Information and skills.....	15.9	19.9	23.6	22.8	24.5	25.5	29.5
Cultural.....	17.9	20.9	22.1	21.9	22.8	20.1	20.5
General children's and youth's.....	10.7	10.0	8.7	8.9	7.5	7.9	6.5
Instructional.....	17.1	16.6	14.9	14.7	14.3	13.0	14.5
The Electric Co., Villa Alegre ²	(NA)	1.8	1.6	1.5	1.1	1.0	.4
Other children's and youth's.....	15.2	15.4	12.1	12.2	11.8	11.4	14.1
Adult educational.....	1.9	1.4	1.2	1.0	1.4	.6	
Sesame Street and The Electric Co. ²	21.2	17.8	16.1	15.5	14.8	14.8	11.4
Producer ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Local.....	11.4	10.1	7.7	7.0	6.7	5.7	5.2
Major public television production center, and other.....	45.4	48.2	52.2	46.2	45.6	44.4	37.6
Consortium.....	2.5	1.7	1.8	2.7	2.6	3.3	3.1
Children's television workshop.....	22.0	18.8	16.8	17.1	15.8	16.4	
Independent producer.....	5.9	6.1	5.3	7.9	11.3	9.2	29.1
Commercial producer.....	1.9	2.8	2.7	3.2	3.9	2.8	(NA)
Foreign producer, international coproduction.....	5.8	7.6	9.1	12.5	10.1	13.2	15.1
Distributor ¹	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Local distribution only.....	11.3	10.0	7.4	6.8	6.2	5.6	4.9
Public broadcasting service.....	62.1	69.3	71.6	69.6	67.1	65.3	63.9
Regional public television network.....	9.6	6.2	5.4	7.6	10.8	13.0	14.0

NA Not available. ¹ Includes other items not shown separately. ² Broadcasts of *The Electric Company* during school hours when school is in session are counted, except in 1974, in two categories: "Instructional" and "Sesame Street and The Electric Company."

Source: Corporation for Public Broadcasting, Washington, DC, *PTV Programming Survey*.

NO. 922. PUBLIC BROADCASTING SYSTEMS—INCOME, BY SOURCE: 1980 TO 1988

[In millions of dollars, except as indicated. Stations as of Dec. 31; fiscal year data for income. Includes nonbroadcast income]

NUMBER OF STATIONS AND INCOME SOURCE	1980	1983	1984	1985	1986	1987	1988, prel.	PERCENT DISTRIBUTION			
								1980	1985	1987	1988, prel.
Number of CPB-qualified public radio stations.....	217	266	275	298	295	299	308	(x)	(x)	(x)	(x)
Public television stations.....	290	300	304	317	322	323	324	(x)	(x)	(x)	(x)
Total Income.....	704.9	899.2	974.2	1,096.3	1,134.0	1,294.5	1,367.4	100.0	100.0	100.0	100.0
Federal government.....	192.5	163.7	167.0	179.2	185.7	243.0	247.5	27.3	16.3	18.7	18.1
State and local government ¹	271.6	318.3	334.5	358.4	378.8	389.2	415.8	38.5	32.7	30.1	30.4
Subscribers and auction/marathon.....	102.3	196.4	215.2	247.7	268.5	297.5	317.4	14.5	22.6	23.0	23.2
Business and industry.....	72.4	119.8	144.7	170.8	170.8	195.6	212.9	10.3	15.6	15.1	15.6
Foundation.....	23.5	24.9	27.8	43.0	38.3	48.0	53.5	3.3	3.9	3.7	3.9
Other.....	42.6	76.0	85.0	97.2	91.9	121.2	120.3	6.0	8.9	9.4	8.8

X Not applicable. ¹ Includes income received from State colleges and universities.

Source: Corporation for Public Broadcasting (CPB), Washington, DC, *Public Broadcasting Income, Fiscal Year, 1988*, and unpublished data.

NO. 923. CABLE TELEVISION—SYSTEMS AND SUBSCRIBERS: 1952 TO 1989

[Subscribers in thousands, except percent. Estimated]

YEAR (As of Jan. 1)	Sys-tems	Sub-scribers	YEAR (As of Jan. 1)	Sys-tems	Sub-scribers	SUBSCRIBER SIZE-GROUP	Number of— ¹		Percent of— ¹		
							Sys-tems	Sub-scribers	Sys-tems	Sub-scribers	
1952.....	70	14	1977.....	3,832	11,900	1989, total²	8,497	45,609	100.00	100.00	
1955.....	400	150	1978.....	3,875	13,000		168	15,771	1.98	34.65	
1960.....	640	650	1979.....	4,150	14,100		20,000–49,999.....	379	11,722	4.46	25.75
1965.....	1,325	1,275	1980.....	4,225	16,000		10,000–19,999.....	495	6,951	5.83	15.27
1969.....	2,260	3,600	1981.....	4,375	18,300		5,000–9,999.....	662	4,650	7.79	10.22
1970.....	2,490	4,500	1982.....	4,825	21,000		3,500–4,999.....	387	1,608	4.55	3.53
1971.....	2,639	5,300	1983.....	5,600	25,000		1,000–3,499.....	1,644	3,135	19.35	6.89
1972.....	2,841	6,000	1984.....	6,200	30,000		500–999.....	1,272	909	14.97	2.00
1973.....	2,991	7,300	1985.....	6,800	32,000		250–499.....	1,285	456	14.89	1.00
1974.....	3,158	8,700	1986.....	7,600	37,500		Less than 250.....	2,225	305	26.19	.69
1975.....	3,508	9,800	1987.....	7,900	41,100						
1976.....	3,681	10,800	1988.....	8,500	44,000						
			1989.....	9,050	47,500						

¹ As of April 1, 1989. ² Excludes 513 systems not available by subscriber size-group.

Source: Warren Publishing, Inc., Washington, DC, *Television & Cable Factbook*, annual. (Copyright.)

No. 924. CABLE AND PAY TV—SUMMARY, 1955 TO 1986, AND PROJECTIONS, 1990 AND 1995

[Cable TV for calendar year. Pay TV, as of Dec. 31 of year shown]

YEAR	CABLE TV				PAY TV						
	Avg. basic subscribers (1,000)	Avg. monthly basic rate (dol.)	Revenue ¹ (mil. dol.)		Units ² (1,000)		Monthly rate (dol.)		Pay cable units per 1,000		
			Total	Basic	Total pay ³	Pay cable	Total pay ³	Pay-cable	Home passed	Basic cable subscribers	
1955.....	250	5.00	20	20	(x)	(x)	(x)	(x)	(x)	(x)	(x)
1960.....	750	5.00	50	50	(x)	(x)	(x)	(x)	(x)	(x)	(x)
1965.....	1,500	5.00	95	95	(x)	(x)	(x)	(x)	(x)	(x)	(x)
1970.....	5,100	5.50	345	345	(x)	(x)	(x)	(x)	(x)	(x)	(x)
1975.....	9,800	6.50	804	774	469	469	(x)	7.85	111	236	
1976.....	11,000	6.75	972	901	1,021	978	(NA)	7.87	106	223	
1977.....	12,200	7.00	1,163	1,034	1,733	1,642	8.12	7.92	122	253	
1978.....	13,400	7.25	1,424	1,176	3,580	3,289	8.62	8.09	179	350	
1979.....	15,000	7.50	1,814	1,362	6,409	5,732	9.37	8.44	273	413	
1980.....	17,500	7.85	2,436	1,647	10,389	9,144	9.78	8.80	279	506	
1981.....	21,500	8.14	3,460	2,091	17,521	15,450	10.13	9.02	376	688	
1982.....	25,400	8.46	4,705	2,564	23,179	20,791	10.36	9.57	462	840	
1983.....	29,450	8.76	6,160	3,096	28,115	26,418	10.25	9.84	473	843	
1984.....	32,860	9.20	7,422	3,627	31,027	29,966	10.32	10.08	495	875	
1985.....	35,430	10.24	8,666	4,353	31,056	30,596	10.53	10.42	473	835	
1986.....	38,740	11.09	9,714	5,156	31,724	31,300	10.40	10.31	462	808	
1990, proj.....	50,210	16.94	15,299	10,204	(NA)	40,100	(NA)	9.50	485	797	
1995, proj.....	59,410	24.88	23,434	17,742	(NA)	49,100	(NA)	8.72	555	826	

NA Not available. X Not applicable. ¹Includes installation revenue. ²Individual program services sold to subscribers. ³Includes multipoint distribution service (MDS) and satellite TV (STV).

Source: Paul Kagan Associates, Inc., Carmel, CA, *The Cable TV Financial Databook*, annual. (Copyright.)

No. 925. RADIO AND TELEVISION STATIONS OWNED BY NEWSPAPERS AND/OR MAGAZINES: 1961 TO 1988

DATE	AM radio	FM radio	TV	DATE	AM radio	FM radio	TV	DATE	AM radio	FM radio	TV
1961, Sept. 1.....	412	147	161	1974, Dec. 1.....	321	236	193	1981, Dec. 1.....	311	277	246
1965, Oct. 31.....	391	170	174	1975, Dec. 1.....	320	238	197	1982, Dec. 1.....	300	263	251
1968, Dec. 4.....	381	191	183	1976, Dec. 1.....	322	236	209	1983, Dec. 1.....	288	257	248
1969, Dec. 1.....	394	245	189	1977, Dec. 1.....	314	238	211	1984, Dec. 1.....	268	256	255
1971, Feb. 1.....	402	248	191	1978, Dec. 1.....	319	252	221	1985, Dec. 1.....	264	255	253
1971, Dec. 1.....	318	209	176	1979, Dec. 1.....	318	257	228	1986, Dec. 1.....	232	226	271
1972, Dec. 1.....	325	171	178	1980, Dec. 1.....	315	264	230	1987, Dec. 1.....	195	188	280
1973, Dec. 1.....	304	211	179					1988, Dec. 1.....	193	193	266

Source: Broadcasting Publications Inc., Washington, DC, *Broadcasting Cable Yearbook*. (Copyright.)

No. 926. PUBLISHING INDUSTRY—SUMMARY: 1977 TO 1987

[In millions of dollars, except as noted. Number in parentheses represents Standard Industrial Classification code; see text, section 13. Based on the censuses of manufacturers and the Annual Survey of Manufacturers; for details, see source and Appendix III]

ITEM	NEWSPAPERS (271)				PERIODICALS (272)				BOOKS (273)			
	1977	1982	1986	1987	1977	1982	1986	1987	1977	1982	1986	1987
Establishments.....	8,867	8,846	(NA)	8,970	2,994	3,328	(NA)	3,913	1,745	2,130	(NA)	2,264
With 20 or more employees.....	2,147	2,554	(NA)	2,601	525	690	(NA)	867	346	419	(NA)	415
Employees ¹ (1,000).....	350	402	420	434	70	94	98	111	60	67	72	70
Payroll.....	4,306	6,555	8,381	9,025	1,020	1,886	2,711	3,149	830	1,327	1,776	1,815
Value of receipts.....	13,056	21,276	29,206	31,787	6,057	11,478	15,719	17,559	4,794	7,740	10,732	11,642
Cost of materials.....	3,539	6,006	7,024	7,514	2,289	4,568	5,558	5,784	1,544	2,420	3,100	3,502
Value added ²	9,519	15,275	22,189	24,268	3,763	6,911	10,196	11,767	3,262	5,292	7,756	8,278
New capital exp.....	478	1,029	1,295	1,526	79	195	274	253	90	174	203	230
Fixed assets, gross value.....	5,028	8,701	(NA)	(NA)	725	1,370	(NA)	(NA)	680	1,109	(NA)	(NA)
Inventories, Dec. 31.....	382	755	784	857	350	724	784	896	992	1,380	1,982	1,991

NA Not available. ¹Represents the average number of production workers plus the number of other employees in mid-March. ²By manufacture, derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments. This result is then adjusted by the addition of value added by merchandising operations, plus the net change in finished goods and work-in-process inventories between the beginning and the end of the year.

Source: U.S. Bureau of the Census, *Census of Manufactures, 1987*, Industry Reports, series MC87-1-27A, and *1986 Annual Survey of Manufactures*, MB6(AS)-1.

NO. 927. NEWSPAPERS AND PERIODICALS—NUMBER, BY TYPE: 1970 TO 1989

[Data refer to year of compilation of the Directory cited as the source, i.e., generally to year preceding year shown. See also *Historical Statistics, Colonial Times to 1970*, series R 232-243]

TYPE	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989
Newspapers ¹	11,383	11,400	9,620	9,183	9,205	9,151	9,134	9,144	9,031	10,088	10,457
Semiweekly.....	423	506	537	498	508	525	517	495	510	555	567
Weekly.....	8,903	8,824	7,159	6,806	6,855	6,798	6,811	6,857	6,750	7,438	7,622
Daily.....	1,838	1,819	1,744	1,740	1,735	1,711	1,701	1,651	1,646	1,745	1,773
Periodicals ¹	9,573	9,657	10,236	10,688	10,952	10,809	11,090	11,328	11,593	11,229	11,556
Weekly.....	1,856	1,918	1,716	1,672	1,626	1,376	1,367	1,383	1,400	880	828
Semi-monthly ²	589	537	645	689	724	658	801	789	858	619	622
Monthly.....	4,314	4,087	3,985	4,079	4,108	4,096	4,088	4,066	4,031	4,192	4,445
Bi-monthly.....	957	1,009	1,114	1,237	1,307	1,348	1,361	1,367	1,402	1,558	1,880
Quarterly.....	1,108	1,093	1,444	1,554	1,627	1,711	1,759	1,895	1,984	2,245	2,513

¹ Includes other not shown separately. ² Includes fortnightly (every two weeks).

Source: Gale Research Inc., Ft. Lauderdale, FL, *Gale Directory of Publications, 1989*. (Copyright.)

NO. 928. NUMBER AND CIRCULATION OF DAILY AND SUNDAY NEWSPAPERS: 1970 TO 1988

[Number of newspapers as of Feb. 1 of the following year. Circulation figures as of Sept. 30. For English language newspapers only. See also *Historical Statistics, Colonial Times to 1970*, series R 224-231]

TYPE	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
NUMBER OF NEWSPAPERS													
Daily: Total ¹	1,748	1,756	1,756	1,763	1,745	1,730	1,711	1,701	1,688	1,676	1,657	1,645	1,642
Morning.....	334	339	355	382	387	408	434	446	458	482	499	511	529
Evening.....	1,429	1,436	1,419	1,405	1,388	1,352	1,310	1,284	1,257	1,220	1,188	1,166	1,141
Sunday.....	586	639	696	720	736	755	768	772	783	798	802	820	840
CIRCULATION (mil.)													
Daily: Total ¹	62.1	60.7	62.0	62.2	62.2	61.4	62.5	62.6	63.1	62.8	62.5	62.8	62.7
Morning.....	25.9	25.5	27.7	28.6	29.4	30.6	33.2	33.8	35.4	36.4	37.4	39.1	40.4
Evening.....	36.2	35.2	34.3	33.6	32.8	30.9	29.3	28.8	27.7	26.4	25.1	23.7	22.2
Sunday.....	49.2	51.1	54.0	54.4	54.7	55.2	56.3	56.7	57.5	58.8	58.9	60.1	61.5

¹ All-day newspapers are counted in both morning and evening columns but only once in total. Circulation is divided equally between morning and evening.

Source: Editor & Publisher Co., New York, NY, *Editor & Publisher International Year Book*, annual. (Copyright.)

NO. 929. NUMBER AND CIRCULATION OF DAILY NEWSPAPERS, BY POPULATION-SIZE CLASS OF CITY: 1975 TO 1988

[Number of newspapers as of Feb. 1 of the following year. Circulation as of Sept. 30. For English language newspapers only. See table 39 for number of cities by population size]

TYPE OF DAILY AND POPULATION-SIZE CLASS	NUMBER ¹						NET PAID CIRCULATION ¹ (1,000)					
	1975	1980	1985	1986	1987	1988	1975	1980	1985	1986	1987	1988
Morning dailies, total	339	387	482	499	511	529	25,491	29,413	36,361	37,441	39,123	40,452
In cities of—												
1,000,001 or more.....	14	20	22	23	28	25	7,159	8,795	9,367	10,167	12,169	10,910
500,001 to 1,000,000.....	25	27	24	27	25	25	5,561	5,705	6,897	7,331	5,915	5,948
100,001 to 500,000.....	89	99	121	124	123	124	7,836	8,996	12,197	12,087	12,542	14,517
50,001 to 100,000.....	69	75	87	88	92	96	2,619	2,973	3,653	3,701	3,946	3,988
25,001 to 50,000.....	67	64	83	86	89	96	1,422	1,701	2,145	2,257	2,411	2,879
Less than 25,000.....	75	102	145	151	157	163	874	1,243	2,099	1,897	2,141	2,207
Evening dailies, total	1,436	1,388	1,220	1,188	1,166	1,141	35,166	32,788	26,407	25,061	23,702	22,242
In cities of—												
1,000,001 or more.....	12	11	8	9	9	8	4,156	2,984	2,169	1,977	1,662	1,315
500,001 to 1,000,000.....	24	23	14	14	14	13	4,573	4,101	1,628	1,628	1,636	1,563
100,001 to 500,000.....	127	123	102	98	87	80	8,918	8,178	6,987	6,428	5,570	5,165
50,001 to 100,000.....	175	156	127	122	112	109	5,379	4,896	3,942	3,767	3,499	3,398
25,001 to 50,000.....	248	246	229	225	221	214	4,898	5,106	4,606	4,542	4,438	4,124
Less than 25,000.....	850	829	740	720	722	717	7,242	7,523	7,075	6,719	6,890	6,677

¹ All-day newspapers are counted in both morning and evening columns; circulation is divided equally between morning and evening.

Source: Editor & Publisher Co., New York, NY, *Editor & Publisher International Year Book*, annual. (Copyright.)

NO. 930. DAILY AND SUNDAY NEWSPAPERS—NUMBER AND CIRCULATION, BY STATE: 1988

[Number of newspapers as of Feb. 1 of the following year. Circulation figures as of Sept. 30. For English language newspapers only. New York, Massachusetts, and Virginia Sunday newspapers include national circulation]

STATE	DAILY			SUNDAY		STATE	DAILY			SUNDAY	
	Number	Circulation ¹		Number	Net paid circulation (1,000)		Number	Circulation ¹		Number	Net paid circulation (1,000)
		Net paid (1,000)	Per capita ²					Net paid (1,000)	Per capita ²		
Total	1,642	62,695	.26	840	61,474	Missouri.....	46	1,273	.25	19	1,299
Alabama.....	27	755	.18	20	750	Montana.....	11	186	.23	7	187
Alaska.....	8	126	.24	4	138	Nebraska.....	19	469	.29	7	434
Arizona.....	19	736	.21	11	791	Nevada.....	8	272	.26	4	294
Arkansas.....	32	542	.23	16	617	New Hampshire.....	9	220	.20	4	147
California.....	120	6,574	.23	66	6,523	New Jersey.....	23	1,680	.22	18	1,891
Colorado.....	26	961	.29	11	1,133	New Mexico.....	19	311	.21	13	278
Connecticut.....	23	865	.27	11	820	New York.....	71	7,668	.43	35	5,834
Delaware.....	3	142	.22	2	164	North Carolina.....	55	1,453	.22	30	1,367
District of Columbia.....	2	866	1.40	1	1,112	North Dakota.....	10	187	.28	7	182
Florida.....	46	3,030	.25	36	3,658	Ohio.....	87	2,765	.25	39	2,849
Georgia.....	37	1,143	.18	17	1,241	Oklahoma.....	50	739	.23	42	871
Hawaii.....	6	244	.22	5	259	Oregon.....	20	658	.24	10	661
Idaho.....	12	204	.20	9	243	Pennsylvania.....	93	3,303	.26	28	3,096
Illinois.....	71	2,639	.23	6	2,734	Rhode Island.....	7	294	.30	3	301
Indiana.....	73	1,541	.28	20	1,321	South Carolina.....	17	647	.19	13	684
Iowa.....	37	732	.26	11	746	South Dakota.....	12	172	.24	4	137
Kansas.....	46	540	.22	17	494	Tennessee.....	28	968	.20	16	1,061
Kentucky.....	24	659	.18	13	671	Texas.....	106	3,575	.21	97	4,505
Louisiana.....	28	792	.18	21	903	Utah.....	6	281	.17	6	320
Maine.....	9	291	.24	2	185	Vermont.....	8	129	.23	3	98
Maryland.....	14	702	.15	7	644	Virginia.....	35	2,528	.42	15	949
Massachusetts.....	44	2,102	.36	12	1,724	Washington.....	26	1,163	.25	16	1,656
Michigan.....	52	2,532	.27	16	2,455	West Virginia.....	23	438	.23	10	389
Minnesota.....	25	940	.22	13	1,116	Wisconsin.....	36	1,151	.24	15	1,100
Mississippi.....	23	404	.15	14	369	Wyoming.....	10	95	.20	4	72

¹ Circulation figures based on the principal community served by a newspaper which is not necessarily the same location as the publisher's office. ² Per capita based on total resident population estimated as of July 1, 1988.

Source: Editor & Publisher Co., New York, NY, *Editor & Publisher International Year Book*, annual (copyright).

NO. 931. COPYRIGHT REGISTRATION, BY SUBJECT MATTER: 1985 TO 1988

[In thousands. For years ending Sept. 30. Comprises claims to copyright registered for both U.S. and foreign works. See also *Historical Statistics, Colonial Times to 1970*, series W 82-95]

SUBJECT MATTER OF COPYRIGHT	1985	1987	1988	SUBJECT MATTER OF COPYRIGHT	1985	1987	1988
Total	539.8	582.2	565.3	Sound recordings.....	22.7	31.9	28.6
Monographs ¹	154.5	153.9	158.1	Renewals.....	43.8	45.5	43.8
Semiconductor chip products.....	.9	1.0	.9	Musical works ²	147.9	161.6	159.5
Serials.....	120.0	131.0	114.0	Works of the visual arts ³	50.0	57.1	60.4

¹ Includes computer software and machine readable works. ² Includes dramatic works, accompanying music, choreography, pantomimes, motion pictures and filmstrips. ³ Two-dimensional works of fine and graphic art, including prints and art reproductions; sculptural works; technical drawings and models; photographs; commercial prints and labels; works of applied arts, cartographic works and multimedia works.

Source: The Library of Congress, *Annual Report*.

NO. 932. ADVERTISING—ESTIMATED EXPENDITURES: 1950 TO 1988

[In millions of dollars. National advertising is defined as advertising done for companies whose products are distributed nationally and for which national media rates are paid. Local advertising is defined as advertising done for companies which market products locally and which may pay special "local" media rates. See also *Historical Statistics, Colonial Times to 1970*, series T 444-446]

YEAR	Total	National	Local	YEAR	Total	National	Local	YEAR	Total	National	Local
1950.....	5,700	3,260	2,440	1974.....	26,620	14,700	11,920	1982.....	66,580	37,785	28,795
1955.....	9,150	5,380	3,770	1975.....	27,900	15,200	12,700	1983.....	75,850	42,525	33,325
1960.....	11,960	7,305	4,655	1976.....	33,300	18,355	14,945	1984.....	87,820	49,690	38,130
1965.....	15,250	9,340	5,910	1977.....	37,440	20,595	16,845	1985.....	94,750	53,355	41,395
1970.....	19,550	11,350	8,200	1978.....	43,330	23,720	19,610	1986.....	102,140	56,850	45,290
1971.....	20,700	11,755	8,945	1979.....	48,780	26,695	22,085	1987.....	109,650	60,625	49,025
1972.....	23,210	12,980	10,230	1980.....	53,550	29,815	23,735	1988.....	118,050	65,610	52,440
1973.....	24,980	13,700	11,280	1981.....	60,430	33,890	26,540				

Source: McCann-Erickson, Inc., New York, NY. Compiled for Crain Communications, Inc. In *Advertising Age* (copyright).

NO. 933. ADVERTISING—INDEXES OF NATIONAL ADVERTISING EXPENDITURES, BY MEDIUM: 1970 TO 1988

[1982-84=100. Based on the average monthly expenditure for those major media which give national coverage. See also *Historical Statistics, Colonial Times to 1970, series T 472-484*]

MEDIUM	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
General Index	26	34	64	71	79	87	98	114	118	124	128	136
Network television.....	23	32	64	72	78	86	97	116	113	117	119	128
Spot television.....	25	33	59	67	77	89	99	112	123	134	140	146
Magazines.....	30	34	68	73	82	86	99	115	120	124	131	142
Newspapers.....	32	40	64	71	82	89	99	112	122	123	127	130

Source: McCann-Erickson, Inc., New York, NY. Compiled for Crain Communications, Inc. In *Advertising Age* (copyright).

NO. 934. ADVERTISING—ESTIMATED EXPENDITURES, BY MEDIUM: 1970 TO 1988

[In millions of dollars, except percent. See text, section 18 for a discussion of types of advertising. See also *Historical Statistics, Colonial Times to 1970, series R 106-109, R 123-126, and T 444-471*]

MEDIUM	EXPENDITURES								PERCENT			
	1970	1980	1983	1984	1985	1986	1987	1988	1970	1980	1985	1988
Total	19,550	53,550	75,850	87,820	94,750	102,140	109,850	118,050	100.0	100.0	100.0	100.0
National.....	11,350	29,815	42,525	49,690	53,355	56,850	60,625	65,610	58.1	55.7	56.3	55.6
Local.....	8,200	23,735	33,325	38,130	41,395	45,290	49,025	52,440	41.9	44.3	43.7	44.4
Newspapers.....	5,704	14,794	20,582	23,522	25,170	26,990	29,412	31,197	29.2	27.6	26.5	26.4
National.....	891	1,963	2,734	3,081	3,352	3,376	3,494	3,586	4.6	3.7	3.5	3.0
Local.....	4,813	12,831	17,848	20,441	21,818	23,614	25,918	27,611	24.6	24.0	23.0	23.4
Magazines.....	1,292	3,149	4,233	4,932	5,155	5,317	5,607	6,072	6.6	5.9	5.4	5.1
Weeklies.....	617	1,418	1,917	2,224	2,297	2,327	2,445	2,646	3.2	2.6	2.4	2.2
Women's.....	301	782	1,056	1,209	1,294	1,376	1,417	1,504	1.5	1.5	1.4	1.3
Monthlies.....	374	949	1,260	1,499	1,584	1,614	1,745	1,922	1.9	1.8	1.6	1.5
Farm publications.....	62	130	163	181	186	192	198	196	.3	.2	.2	.2
Television.....	3,586	11,469	16,759	19,848	21,022	22,881	23,904	25,686	18.4	21.4	22.2	21.8
Three networks.....	1,658	5,130	6,955	8,318	8,060	8,342	8,500	9,172	8.5	9.6	8.5	7.8
Cable networks.....	(NA)	45	282	458	594	676	760	942	(NA)	.1	.6	.8
Syndication (national).....	(NA)	50	300	420	520	600	762	901	(NA)	.1	.5	.8
Spot (national).....	1,234	3,269	4,827	5,488	6,004	6,570	6,846	7,147	6.3	6.1	6.3	6.0
Spot (local).....	704	2,967	4,345	5,084	5,714	6,514	6,833	7,270	3.6	5.5	6.0	6.2
Cable (non-network).....	(NA)	6	50	80	130	179	203	254	(NA)	(2)	.1	.2
Radio.....	1,308	3,702	5,210	5,917	6,490	6,949	7,206	7,798	6.7	6.9	6.9	6.6
Network.....	56	183	286	320	365	423	413	425	.3	.3	.4	.4
Spot.....	371	779	1,038	1,197	1,335	1,348	1,930	1,418	1.9	1.5	1.4	1.2
Local.....	881	2,740	3,876	4,300	4,790	5,178	5,463	5,955	4.5	5.1	5.1	5.0
Yellow Pages.....	(NA)	2,900	4,400	4,900	5,800	6,500	7,300	7,781	(NA)	5.4	6.1	6.7
National.....	(NA)	330	489	580	695	759	830	944	(NA)	.6	.7	.8
Local.....	(NA)	2,570	3,911	4,320	5,105	5,741	6,470	6,837	(NA)	4.8	5.4	5.9
Direct mail.....	2,766	7,596	11,795	13,800	15,500	17,145	19,111	21,115	14.1	14.2	16.4	17.9
Business papers.....	740	1,674	1,990	2,270	2,375	2,382	2,458	2,610	3.8	3.1	2.5	2.2
Outdoor.....	234	578	794	872	945	985	1,025	1,064	1.2	1.1	1.0	.9
Miscellaneous.....	3,848	7,558	9,924	11,678	12,107	12,799	13,431	14,531	19.7	14.1	12.8	12.3

NA Not available. Z Less than .05.

Source: McCann-Erickson, Inc., New York, NY. Compiled for Crain Communications, Inc. In *Advertising Age* (copyright). Percentages derived by U.S. Bureau of the Census.

NO. 935. MAGAZINE ADVERTISING—EXPENDITURES, BY PRODUCT TYPE: 1970 TO 1988

[In millions of dollars, except percent. Space cost based on one-time rate; special rates used where applicable. Year-to-year data not strictly comparable, as a few minor publications are added or deleted]

TYPE OF PRODUCT	1970	1980	1983	1984	1985	1986	1987	1988	PERCENT DISTRIBUTION		
									1970	1980	1988
Expenditures	1,193	2,846	3,939	4,668	4,961	5,120	5,390	5,943	100.0	100.0	100.0
Apparel, footwear, and accessories.....	51	112	206	240	251	291	323	363	4.3	3.9	6.1
Automotive ¹	97	230	405	473	549	597	678	801	8.1	8.0	13.5
Beer, wine, and liquor.....	98	239	243	230	240	225	208	213	8.2	8.4	3.6
Computers, office equipment, stationery.....	32	79	194	321	250	219	247	252	2.7	2.8	4.2
Consumer services ²	74	190	329	411	463	484	491	466	6.2	6.7	7.8
Drugs and remedies.....	38	79	105	129	135	148	142	145	3.2	2.8	2.4
Food and food products.....	86	199	263	289	342	389	377	377	7.2	7.0	8.3
Household equipment and supplies.....	34	65	81	98	100	93	97	102	2.8	2.3	1.7
Household furnishings.....	38	73	94	94	87	103	111	116	3.2	2.0	2.0
Jewelry, optical goods, camera.....	30	79	95	107	101	113	121	142	2.5	2.8	2.4
Mail orders.....	(NA)	(NA)	(NA)	292	328	363	407	467	(NA)	(NA)	7.9
Publishing and media.....	38	146	182	159	188	176	186	192	3.2	5.1	3.2
Retail.....	53	(NA)	(NA)	128	121	143	138	176	4.4	(NA)	3.0
Smoking materials.....	65	290	398	423	383	322	334	352	5.4	10.2	5.9
Toiletries and toilet goods.....	119	206	279	334	385	390	455	554	10.0	7.2	9.3
Travel, hotels, and resorts.....	54	123	174	212	245	249	273	311	4.5	4.3	5.2
All other.....	289	736	891	728	793	815	802	914	24.2	25.9	15.4

NA Not available. ¹ Includes accessories and equipment. ² Includes business services.

Source: Publishers Information Bureau, Inc., New York, NY, as compiled by Leading National Advertisers.

NO. 936. TELEVISION—EXPENDITURES FOR NETWORK ADVERTISING: 1980 TO 1988

[In millions of dollars. See text, section 18 for a definition of network advertising]

TYPE OF PRODUCT	1980	1985	1987	1988	TYPE OF PRODUCT	1980	1985	1987	1988
Expenditures	5,147	8,313	8,814	9,580	Household equipment, supplies, and furnishings.....	225	275	330	339
Apparel, footwear, and accessories.....	131	161	197	230	Insurance.....	74	99	159	169
Automotive.....	529	848	1,029	1,307	Financial planning services.....	20	60	81	64
Beer and wine.....	242	428	514	480	Jewelry and cameras.....	119	129	148	129
Building material, equipment, fixtures.....	59	97	90	100	Laundry soaps, cleansers, and polishes.....	306	397	322	321
Computers, office equipment, and stationery.....	57	249	160	187	Movies.....	103	138	146	183
Confectionery, soft drinks.....	281	388	384	432	Pet products.....	144	175	161	126
Consumer services.....	178	303	392	473	Proprietary medicines.....	430	700	773	794
Dept. and discount stores.....	94	161	97	135	Publishing and media.....	34	50	39	43
Food and food products.....	844	1,502	1,615	1,639	Restaurants and drive-ins.....	132	416	498	514
Freight and industrial development.....	7	40	26	68	Tobacco products and supplies.....	8	6	1	1
Gas, lubricants, etc.....	71	49	52	55	Toiletries and toilet goods.....	765	955	868	869
Home electronics equipment.....	50	36	47	68	Toys and sporting goods.....	93	152	126	117
Horticulture.....	15	30	40	40	Travel, hotels, and resorts.....	72	102	125	169
					All other.....	64	367	394	528

¹ Includes optical goods.

Source: Television Bureau of Advertising, Inc., New York, NY. Data compiled by Broadcast Advertisers Reports, Inc., New York, NY.

NO. 937. TELEVISION—ESTIMATED TIME CHARGES FOR SPOT ADVERTISING: 1980 TO 1988

[In millions of dollars. Data represent activity in the top 75 markets monitored by Broadcast Advertisers Reports, Inc. (BAR), currently covering approximately 351 stations. See text, section 18 for a definition of types of advertising]

TYPE OF PRODUCT	1980	1985	1987 ¹	1988 ¹	TYPE OF PRODUCT	1980	1985	1987 ¹	1988 ¹
Estimated time charges	2,496	4,504	5,131	5,271	Home electronics equipment.....	73	67	87	113
Agriculture and farming.....	15	17	23	22	Horticulture.....	95	37	50	47
Apparel, footwear, and accessories.....	105	95	61	67	Household equipment, supplies, and furnishings.....	133	217	197	167
Automotive.....	228	683	1,152	1,264	Insurance.....	34	88	118	94
Beer and wine.....	156	218	237	255	Jewelry, optical goods, and cameras.....	55	68	49	44
Building material, equipment, and fixtures.....	47	58	76	73	Laundry soaps, polishes.....	111	175	136	132
Computers, office equipment, and stationery.....	15	25	32	27	Pet products.....	33	60	51	43
Confectionery, soft drinks.....	212	355	373	325	Proprietary medicines.....	93	148	184	184
Consumer services.....	83	262	264	311	Publishing and media.....	78	147	169	154
Food and food products.....	507	927	987	967	Tobacco products, suppliers.....	8	14	6	8
Freight and industrial development.....	5	36	21	37	Toiletries and toilet goods.....	223	267	255	277
Gasoline, lubricants, etc.....	50	102	124	124	Toys and sporting goods.....	104	211	221	202
					Travel, hotels, and resorts.....	76	187	205	229
					All other.....	17	40	43	105

¹ Excludes National Syndicated activity; therefore, not completely comparable to prior years.

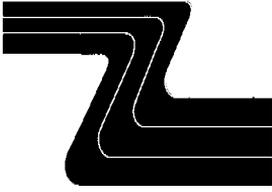
Source: Television Bureau of Advertising, Inc., New York, NY. Data compiled by Broadcast Advertisers Reports, Inc., New York, NY in the top 75 markets.

NO. 938. TELEVISION—EXPENDITURES FOR RETAIL/LOCAL ADVERTISING: 1980 TO 1988

[In millions of dollars. See headnote, table 937]

TYPE OF PRODUCT	1980	1985	1987	1988	TYPE OF PRODUCT	1980	1985	1987	1988
Expenditures	1,983	3,899	4,677	4,848	Hotels, resorts, U.S.....	18	62	71	78
Amusements, entertainment.....	68	121	121	128	Financial planning services.....	7	29	36	30
Appliance stores, repair.....	38	122	144	139	Jewelry stores.....	19	25	23	23
Auto repair, service stations.....	28	73	87	93	Legal services.....	5	38	59	64
Auto supply, accessory stores.....	12	41	45	38	Leisure time stores and services.....	42	107	124	129
Auto, truck dealers.....	99	311	371	380	Loan, mortgage companies.....	12	25	23	23
Banks, S&L associations.....	141	195	202	191	Mail order, catalog showrooms.....	13	23	16	11
Builders and home improvement contractors.....	20	32	31	26	Medical, dental services.....	13	87	130	130
Carpet, floor covering stores.....	24	40	52	52	Movies.....	102	103	177	186
Clothing stores.....	46	82	116	121	Newspapers.....	15	32	38	34
Department stores.....	131	186	168	150	Optical services, supplies.....	14	28	74	80
Discount department stores.....	74	115	123	115	Political.....	70	22	25	146
Drug stores.....	26	67	79	78	Radio, cable TV.....	69	134	153	160
Education services.....	17	70	99	112	Realtors and real estate development.....	18	31	32	31
Food stores, supermarkets.....	149	259	346	339	Rental services (non-auto).....	15	38	39	36
Furniture stores.....	111	187	219	238	Restaurants, drive-ins.....	288	672	800	804
Gas, electric, water companies.....	16	38	46	46	Shoe stores.....	27	37	47	44
Health clubs, reducing salons.....	21	39	52	62	Shopping centers, ass'ns.....	13	20	22	24
Home centers and hardware stores.....	42	89	97	98	Sport, hobby, toy stores.....	23	41	43	47
					All other.....	137	278	346	362

Source: Television Bureau of Advertising, Inc., New York, NY. Data compiled by Broadcast Advertisers Reports, Inc., New York, NY in the top 75 markets.



Section 19 Energy

This section presents statistics on fuel resources, energy production and consumption, electric energy, hydroelectric power, nuclear power, solar energy, wood energy and the electric and gas utility industries. The principal sources are the U.S. Department of Energy's Energy Information Administration (EIA), the Edison Electric Institute, Washington, DC, and the American Gas Association, Arlington, VA. The Department of Energy was created in October 1977 and assumed and centralized the responsibilities of all or part of several agencies including the Federal Power Commission (FPC), the U.S. Bureau of Mines, the Federal Energy Administration, and the U.S. Energy Research and Development Administration. For additional data on transportation, see section 21; on fuels, see section 25; and on energy-related housing characteristics, see section 26.

The EIA, in its *Annual Energy Review*, provides statistics and trend data on energy supply, demand, and prices. Information is included on petroleum and natural gas, coal, electricity, hydroelectric power, nuclear power, solar, wood, and geothermal energy. Among its annual reports are *Annual Energy Review*, *Electric Power Annual*, *Natural Gas Annual*, *Petroleum Supply Annual*, *State Energy Data Report*, *State Energy Price and Expenditure Report*, *Financial Statistics of Selected Electric Utilities*, *Residential Energy Consumption Survey*, *Performance Profiles of Major Energy Producers*, *Typical Electric Bills*, *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants*, *Annual Energy Outlook*, and *International Energy Annual*. These various publications contain State, national, and international data on production of electricity, net summer capability of generating plants, fuels used in energy production, energy sales and consumption, hydroelectric power, construction costs and production expenses of power plants, and depreciation practices. The EIA also issues the *Monthly Energy Review*, which presents current supply, disposition, and price data, and monthly publications on petroleum, coal, natural gas, and electric power. Data on residential energy consumption, expenditures, and conservation activities are available from EIA's Residential Energy Consumption Survey and are published triennially in *Residential Energy Consumption Survey: Consumption and Expenditures*, and *Residential Energy Consumption Survey: Housing Characteristics*, and several other reports.

The Edison Electric Institute's monthly bulletin and annual *Statistical Year Book of the Electric Utility Industry for the Year* contain data on the distribution of electric energy by public utilities; information on the electric power supply, expansion of electric generating facilities, and the manufacture of heavy electric power equipment is presented in the annual *Year End Summary of the Electric Power Situation in the United States*. The American Gas Association, in its monthly and quarterly bulletins and its yearbook, *Gas Facts*, presents data on gas utilities, including sales, revenues, customers, prices, and other financial and operating statistics. A wide range of petroleum statistics are provided in the American Petroleum Institute publication *Basic Petroleum Data Book*.

Btu conversion factors.—Various energy sources are converted from original units (e.g., short tons, cubic feet, barrels, kilowatthours) to the thermal equivalent using British thermal units (Btu). A Btu is the amount of energy required to raise the temperature of 1 pound of water 1 degree Fahrenheit (F) at or near 39.2 degrees F. Factors are calculated annually from the latest final annual data available; some are revised as a result. The following list provides conversion factors used in 1987 for production and consumption, in that order, for various fuels: Petroleum, 5,800 and 5,403 mil. Btu per barrel; total coal, 21,922 and 21,517 mil. Btu per short ton; and natural gas (dry), 1,031 Btu per cubic foot for both. The factors for the production of nuclear power and geothermal power were 10,776 and 21,263 Btu per kilowatthour, respectively. The fossil fuel steam-electric power plant generation factor of 10,253 Btu per kilowatthour was used for hydroelectric power generation and for wood and waste, wind, photovoltaic, and solar thermal energy consumed at electric utilities.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

NO. 939. TOTAL HORSEPOWER OF ALL PRIME MOVERS: 1950 TO 1987

[In millions, except percent. As of January, except as noted. Prior to 1960, excludes Alaska and Hawaii, except as noted. Prime movers are mechanical engines and turbines, and work animals, which originally convert fuels or force (as wind or falling water) into work and power. Electric motors, which obtain their power from prime movers, are excluded to avoid duplication. See also *Historical Statistics, Colonial Times to 1970*, series S 1-14]

YEAR	Total horsepower	AUTOMOTIVE ^{1 2}		NONAUTOMOTIVE							
		Total	Percent of total	Total	Factories ³	Mines ³	Railroads ⁴	Merchant ships and sailing vessels	Farms	Electric central stations ²	Aircraft ^{4 5}
1950	4,868	4,404	90.5	464	33	22	111	⁶ 23	165	88	⁵ 22
1955	7,158	6,632	92.7	526	36	31	60	⁶ 24	212	138	⁵ 26
1960	11,008	10,367	94.2	641	42	35	47	24	240	217	37
1965	15,096	14,306	94.8	790	48	40	44	24	272	307	55
1970	20,408	19,325	94.7	1,083	54	45	54	22	290	435	183
1973	24,262	23,029	94.9	1,233	58	46	57	20	308	562	182
1974	24,516	23,224	94.7	1,292	59	46	61	21	315	605	185
1975	25,100	23,752	94.6	1,348	60	47	62	22	318	654	185
1976	25,732	24,339	94.6	1,393	61	47	64	22	324	692	184
1977	26,469	25,025	94.5	1,444	62	47	62	23	328	726	194
1978	27,379	25,892	94.6	1,487	63	48	64	25	⁷ 335	754	198
1979	28,162	25,617	94.5	1,545	63	48	62	26	342	803	201
1980	28,922	27,362	94.6	1,564	64	48	63	28	345	806	210
1981	29,507	27,909	94.6	1,598	64	48	65	29	345	835	212
1982	30,495	28,852	94.6	1,643	64	48	64	29	352	854	232
1983	31,337	29,662	94.7	1,675	64	47	62	29	356	877	240
1984	31,819	30,117	94.7	1,702	65	47	61	30	359	886	254
1985	32,529	30,792	94.7	1,737	65	47	58	29	358	912	268
1986	32,660	30,893	94.6	1,767	65	47	56	29	358	942	270
1987	33,266	31,488	94.7	1,778	65	47	53	29	357	958	269

¹ Includes passenger cars, trucks, buses, and motorcycles. ² As of July 1. ³ Beginning 1965, data are estimates. ⁴ Beginning 1965, not strictly comparable with earlier years. ⁵ Includes private planes and commercial airlines. ⁶ Includes Alaska and Hawaii. ⁷ Includes estimates of about 3.0 million hp in work animals and 30,000 in windmills.

Source: 1950 and 1955, *The Twentieth Century Fund*, New York, NY, J.F. Dewhurst and Associates, *America's Needs and Resources, A New Survey*, and John A. Waring, *Transactions of Canadian Sectional Meeting, World Power Conference, 1958*. Beginning 1960, John A. Waring, Arlington, VA, unpublished estimates.

NO. 940. ENERGY PRODUCTION AND CONSUMPTION, BY MAJOR SOURCE: 1960 TO 1988

[Btu=British thermal unit. For Btu conversion factors, see text, section 19. See also *Historical Statistics, Colonial Times to 1970*, series M 76-92]

YEAR	Total production (quad. Btu)	PERCENT OF PRODUCTION				Total consumption (quad. Btu)	PERCENT OF CONSUMPTION				Consumption/production ratio
		Coal	Petroleum ¹	Natural gas ²	Other ³		Coal	Petroleum ¹	Natural gas ²	Other ³	
1960	41.5	26.1	36.0	34.0	3.9	43.8	22.5	45.5	28.3	3.8	1.06
1961	42.0	24.9	36.2	34.9	4.0	44.5	21.6	45.5	29.1	3.8	1.06
1962	43.6	25.0	35.6	35.1	4.2	46.5	21.3	45.2	29.5	4.0	1.07
1963	45.9	25.8	34.8	35.4	4.0	48.3	21.5	44.9	29.8	3.7	1.05
1964	47.7	26.2	33.9	35.8	4.0	50.5	21.7	44.2	30.3	3.8	1.06
1965	49.3	26.5	33.5	35.8	4.3	52.7	22.0	44.1	29.9	4.0	1.07
1966	52.2	25.8	33.7	36.4	4.1	55.7	21.8	43.8	30.5	3.8	1.07
1967	55.0	25.1	33.9	36.5	4.4	57.6	20.7	43.9	31.2	4.2	1.05
1968	56.8	24.0	34.0	37.7	4.4	61.0	20.2	44.2	31.5	4.1	1.07
1969	59.1	23.5	33.1	38.7	4.8	64.2	19.3	44.1	32.2	4.4	1.09
1970	62.1	23.5	32.9	38.9	4.7	66.4	18.5	44.4	32.8	4.3	1.07
1971	61.3	21.5	32.7	40.5	5.3	67.9	17.1	45.0	33.1	4.8	1.11
1972	62.4	22.6	32.1	39.7	5.6	71.3	16.9	46.2	31.9	5.0	1.14
1973	62.1	22.5	31.4	39.9	6.2	74.3	17.5	46.9	30.3	5.3	1.20
1974	60.8	23.1	30.5	38.9	7.4	72.5	17.5	46.1	30.0	6.5	1.19
1975	59.9	25.0	29.6	38.8	8.6	70.5	17.9	46.4	28.3	7.4	1.18
1976	59.9	26.1	28.8	36.4	8.6	74.4	18.3	47.3	27.4	7.1	1.24
1977	60.2	26.2	29.0	36.4	8.5	76.3	18.2	48.7	26.1	7.0	1.27
1978	61.1	24.4	30.2	35.6	9.9	78.1	17.6	48.6	25.8	8.1	1.28
1979	63.8	27.5	28.4	35.0	9.1	78.9	19.1	47.1	26.2	7.7	1.24
1980	64.8	28.7	28.2	34.2	8.9	76.0	20.3	45.0	26.9	7.8	1.17
1981	64.4	28.5	28.2	34.2	9.1	74.0	21.5	43.2	26.9	8.4	1.15
1982	63.9	29.2	28.7	32.0	10.2	70.8	21.6	42.7	26.1	9.6	1.11
1983	61.2	28.2	30.0	30.6	11.2	70.5	22.5	42.6	24.6	10.2	1.15
1984	65.8	29.9	28.6	30.7	10.7	74.1	23.0	41.9	25.0	10.1	1.13
1985	64.8	29.8	29.3	29.6	11.3	74.0	23.6	41.8	24.1	10.4	1.14
1986	64.2	30.4	28.6	29.0	12.0	74.2	23.3	43.4	22.5	10.9	1.16
1987	64.8	31.1	27.3	29.7	11.9	76.8	23.5	42.8	23.0	10.7	1.18
1988	* 65.9	31.8	26.2	29.5	12.5	* 79.9	23.5	42.5	23.3	10.7	1.21

¹ Production includes crude oil and lease condensate. Consumption includes domestically produced crude oil, natural gas liquids, and lease condensate, plus imported crude oil and products. ² Production includes natural gas liquids; consumption excludes natural gas liquids. ³ Comprised of hydropower, nuclear power, geothermal energy and other. ⁴ Represents peak year for U.S. energy production. ⁵ Represents peak year for U.S. energy consumption.

Source: U.S. Energy Information Administration, *Annual Energy Review*, and unpublished data.

NO. 941. ENERGY SUPPLY AND DISPOSITION, BY TYPE OF FUEL: 1960 TO 1988

[In quadrillion British thermal units (Btu). For Btu conversion factors, see text, section 19]

TYPE OF FUEL	1960	1970	1973	1975	1979	1980	1982	1983	1984	1985	1986	1987	1988, prel.
Production	41.5	62.1	62.1	59.9	63.8	64.8	63.9	61.2	65.8	64.8	64.2	64.8	65.9
Crude oil ²	14.9	20.4	19.5	17.7	18.1	18.2	18.3	18.4	18.9	19.0	18.4	17.7	17.3
Natural gas liquids	1.5	2.5	2.6	2.4	2.3	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.3
Natural gas ³	12.7	21.7	22.2	19.6	20.1	19.9	18.3	16.5	17.9	16.9	16.5	17.0	17.2
Coal	10.8	14.6	14.0	15.0	17.5	18.6	18.6	17.3	19.7	19.3	19.5	20.1	20.9
Nuclear power	(z)	.2	.9	1.9	2.9	2.7	3.1	3.2	3.6	4.2	4.5	4.9	5.7
Hydropower	1.6	2.6	2.9	3.2	2.9	2.9	3.3	3.5	3.3	2.9	3.0	2.6	2.3
Geothermal and other	(z)	(z)	(z)	.1	.1	.1	.1	.1	.2	.2	.2	.2	.2
Net trade ⁴	-2.7	-5.7	-12.7	-11.8	-16.4	-12.2	-7.5	-8.3	-9.0	-7.9	-10.4	-11.9	-12.6
Exports	1.5	2.7	2.1	2.4	2.9	3.7	4.6	3.7	3.8	4.2	4.1	3.9	4.4
Coal	1.0	1.9	1.4	1.8	1.8	2.4	2.8	2.0	2.2	2.4	2.3	2.1	2.5
Imports	4.2	8.4	14.7	14.1	19.6	16.0	12.1	12.0	12.8	12.1	14.4	15.8	17.0
Crude oil	2.2	2.8	6.9	8.7	13.8	11.2	7.4	7.1	7.3	6.8	9.0	10.1	10.8
Consumption	43.8	66.4	74.3	70.6	78.9	76.0	70.8	70.5	74.1	73.9	74.2	76.8	79.9
Petroleum products	19.9	29.5	34.8	32.7	37.1	34.2	30.2	30.1	31.1	30.9	32.2	32.9	34.0
Natural gas ³	12.4	21.8	22.5	19.9	20.7	20.4	18.5	17.4	18.5	17.8	16.7	17.7	18.6
Coal	9.8	12.3	13.0	12.7	15.0	15.4	15.3	15.9	17.1	17.5	17.3	18.0	18.8
Nuclear power	(z)	.2	.9	1.9	2.8	2.7	3.1	3.2	3.6	4.1	4.5	4.9	5.7
Hydropower ⁵	1.7	2.7	3.0	3.2	3.1	3.1	3.6	3.9	3.7	3.4	3.4	3.1	2.6
Geothermal and other	(z)	(z)	(z)	.1	.1	.1	.1	.1	.2	.2	.2	.3	.3

Z Less than 50 trillion. ¹ Represents peak year for U.S. energy production. ² Includes lease condensate. ³ Dry marketed gas. ⁴ Exports minus imports. ⁵ Represents peak year for U.S. energy consumption. ⁶ Includes industrial generation of hydropower and net electricity imports.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

NO. 942. SELECTED ENERGY INDICATORS—SUMMARY: 1960 TO 1988

[Btu—British thermal unit. For Btu conversion factors, see text, section 19]

YEAR	ANNUAL AVERAGE PERCENT CHANGE ¹							PER CAPITA ⁶ (mil. Btu)		Consumption per dollar GNP ⁴ (1,000 Btu)		
	Energy production				Energy consumption			GNP ⁴	Energy production		Energy consumption	
	Total ²	Crude oil ³	Natural gas	Coal	Total ²	Petroleum products	Natural gas (dry)					Coal
1960	1.4	.7	6.3	-2.6	2.4	2.9	6.6	-2.5	2.2	231	243	26.3
1965	3.5	2.0	4.5	3.8	3.8	3.1	4.9	3.3	4.6	255	272	25.2
1970	4.7	4.3	6.6	2.3	4.7	4.9	6.7	1.2	3.0	304	326	27.5
1971	-1.3	-1.8	2.8	-9.7	2.2	3.5	3.1	-5.4	2.8	296	328	27.3
1972	1.8	(z)	-3	6.9	5.0	7.8	1.0	4.1	5.0	298	340	27.9
1973	-6	2.7	-1	-7	4.2	5.7	-8	7.4	5.2	294	351	27.1
1974	-2.0	-4.7	-4.4	.6	-2.3	-4.0	-3.5	-2.4	-5	285	340	26.6
1975	-1.6	-4.5	-7.4	6.5	-2.8	-2.2	-8.2	(z)	-1.3	278	327	26.2
1976 .....	.1	-2.7	-8	4.4	5.4	7.5	2.0	7.3	4.9	275	342	26.3
1977 .....	.5	1.1	.5	.6	2.6	5.5	-2.1	2.5	4.7	274	347	25.8
1978	1.5	5.6	-4	-5.4	2.4	2.3	.4	-1.1	5.3	275	352	25.1
1979	4.4	-1.8	3.0	17.6	1.0	-2.2	3.3	9.3	2.5	284	351	24.7
1980	1.5	.8	-9	6.0	-3.7	-7.9	-1.3	2.5	-2	285	335	23.8
1981	-5	-6	-1.1	-1.2	-2.6	-6.6	-2.3	3.1	1.9	281	322	22.8
1982	-8	.9	-7.4	1.4	4.3	-5.3	-7.1	-3.7	2.5	275	305	22.4
1983	-4.2	.5	-9.4	-7.5	-5	-6	-6.2	3.8	3.6	261	301	21.5
1984	7.6	2.5	8.5	14.3	5.1	3.3	6.6	7.4	6.8	278	313	21.2
1985	-1.6	.7	-5.7	-2.0	-2	-4	-3.7	2.4	3.4	271	310	20.5
1986	-8	-3.2	-2.6	.9	.4	4.1	-6.3	-1.3	2.8	266	308	20.0
1987 .....	.9	-3.9	3.5	3.2	3.4	2.1	5.8	4.3	3.4	266	315	20.0
1988	1.6	-2.3	.8	4.0	4.1	3.3	5.3	4.4	3.9	268	325	20.0

Z Less than .05 percent. ¹ Represents annual average for period of intervals shown; for 1960, change from 1955. Percent change derived from Btu values. Minus sign (-) indicates decrease. For explanation of average annual percent change, see Guide to Tabular Presentation. ² Includes types of fuel or power, not shown separately. ³ Includes lease condensate. ⁴ Gross national product in constant (1982) dollars, see table 690. ⁵ Based on resident population estimated as of July 1.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

NO. 943. ENERGY CONSUMPTION—END-USE SECTOR AND SELECTED SOURCE, BY STATE: 1987

[In trillions of Btu, except as indicated. For Btu conversion factors, see text, section 19. For composition of regions, see fig. 1, inside front cover]

REGION, DIVISION, AND STATE	Total ¹	Per capita ² (mil. Btu)	Percent change, 1986- 1987	END-USE SECTOR				SOURCE				
				Residential	Commercial	Industrial	Transportation	Petroleum	Natural gas (dry)	Coal	Hydro-power	Nuclear power
U.S.	76,777	315	3.4	15,577	12,153	27,666	21,380	32,864	17,674	17,952	3,087	4,947
Region:												
Northeast.....	12,112	241	3.7	3,138	2,461	3,099	3,414	6,171	2,245	1,944	639	1,193
New York.....	18,796	316	1.6	4,291	2,979	6,881	4,645	6,763	4,160	6,398	198	1,290
Midwest.....	31,703	378	4.0	5,550	4,287	13,477	8,393	13,511	8,001	7,622	409	1,877
South.....	14,159	285	4.4	2,599	2,430	4,198	4,927	6,420	3,267	1,991	1,840	585
New England	2,953	230	4.1	852	612	594	894	1,841	385	178	184	317
Maine.....	329	27	1.1	80	45	108	217	3	7	3	7	65
New Hampshire.....	243	230	2.2	71	38	58	75	157	12	32	22	34
Vermont.....	125	228	8.2	35	24	23	42	71	5	—	—	38
Massachusetts.....	1,319	225	3.2	386	297	237	400	829	233	118	53	12
Rhode Island.....	208	210	6.5	62	44	41	61	115	37	—	—	—
Connecticut.....	729	227	3.5	218	164	138	208	452	95	21	9	223
Middle Atlantic	9,159	245	3.5	2,286	1,849	2,505	2,520	4,330	1,860	1,766	455	876
New York.....	3,476	195	2.3	981	940	659	897	1,767	779	294	446	249
New Jersey.....	2,252	293	3.3	497	423	528	804	1,266	432	91	1	247
Pennsylvania.....	3,431	287	4.9	808	486	1,318	819	1,297	649	1,381	12	380
East North Central	13,256	316	2.0	3,029	2,085	5,082	3,078	4,513	3,003	4,610	37	906
Ohio.....	3,646	338	2.7	812	551	1,480	803	1,142	747	1,433	2	82
Indiana.....	2,373	429	6.8	416	261	1,123	572	825	416	1,192	5	—
Illinois.....	3,359	290	—	806	608	1,222	723	1,183	887	758	1	545
Michigan.....	2,582	281	—	662	460	798	662	907	671	840	13	156
Wisconsin.....	1,296	269	1.0	333	205	439	318	456	282	387	16	123
West North Central	5,540	314	.8	1,262	894	1,819	1,567	2,250	1,157	1,788	161	384
Minnesota.....	1,206	284	-1.0	285	169	421	332	489	232	256	29	126
Iowa.....	877	311	-1.8	204	127	323	224	324	202	287	10	27
Missouri.....	1,445	293	1.0	373	267	348	457	612	234	528	15	68
North Dakota.....	308	458	4	49	34	52	158	67	117	26	319	35
South Dakota.....	198	279	—	53	31	52	62	104	21	15	56	—
Nebraska.....	496	311	1.6	120	107	122	147	203	101	116	16	93
Kansas.....	1,010	408	3.9	178	159	395	278	401	341	267	—	70
South Atlantic	11,729	281	4.4	2,702	2,033	3,356	3,640	5,012	1,401	3,665	147	1,414
Delaware.....	222	342	3.6	44	30	85	62	126	37	70	—	—
Maryland.....	1,205	266	5.8	306	172	393	334	492	174	289	17	109
District of Columbia.....	172	278	5	36	76	31	29	42	31	2	—	—
Virginia.....	1,755	297	5.1	411	358	428	558	762	148	338	9	197
West Virginia.....	734	387	2.0	127	78	366	144	259	124	872	10	—
North Carolina.....	1,856	295	5.0	428	294	573	542	734	153	501	53	311
South Carolina.....	1,122	228	3.9	229	150	471	272	366	109	295	23	427
Georgia.....	1,923	309	5.2	403	284	598	659	792	311	711	33	166
Florida.....	2,760	230	3.5	718	591	411	1,040	1,439	314	587	2	204
East South Central	5,449	356	2.9	1,086	766	2,093	1,505	2,025	812	2,129	185	205
Kentucky.....	1,330	357	2.3	265	174	540	351	468	178	747	30	—
Tennessee.....	1,693	349	2.2	367	277	568	482	594	207	599	78	1
Alabama.....	1,557	381	7.1	291	200	693	373	562	215	661	77	122
Mississippi.....	869	331	-1.6	163	115	292	299	381	212	122	—	84
West South Central	14,525	206	4.0	1,762	1,488	8,028	3,248	6,474	5,788	1,828	77	258
Arkansas.....	710	297	-5.4	157	98	238	216	299	172	211	25	124
Louisiana.....	3,410	767	5.6	291	243	2,218	658	1,436	1,561	172	—	134
Oklahoma.....	1,254	385	3.9	230	171	523	331	413	618	241	30	—
Texas.....	9,151	545	4.3	1,084	976	5,049	2,043	4,326	3,437	1,204	22	—
Mountain	4,082	310	3.7	789	773	1,234	1,284	1,636	801	1,840	345	148
Montana.....	921	397	1.8	58	46	134	82	137	40	133	92	—
Idaho.....	358	336	2.9	70	64	122	82	109	38	9	84	—
Wyoming.....	374	764	8.1	36	35	225	78	131	86	428	8	—
Colorado.....	883	268	1.8	200	221	181	281	338	210	297	19	2
New Mexico.....	501	335	7.1	73	84	167	177	216	165	261	2	—
Arizona.....	851	250	1.4	189	193	157	312	343	113	283	105	146
Utah.....	477	284	—	94	83	154	146	206	107	274	9	—
Nevada.....	337	355	14.3	69	47	94	126	156	42	155	26	—
Pacific	10,077	276	4.7	1,810	1,657	2,984	3,643	4,784	2,466	151	1,495	437
Washington.....	1,709	376	3.3	343	280	592	584	689	136	86	732	60
Oregon.....	954	318	6.7	168	149	252	284	335	82	4	420	47
California.....	6,807	246	5.2	1,219	1,134	1,842	2,611	3,324	1,993	45	393	330
Alaska.....	472	901	-3	40	65	231	136	207	252	4	9	—
Hawaii.....	235	217	1.6	22	22	57	126	229	3	2	1	—

— Represents zero. ¹ Sources of energy includes geothermal, wood and waste, and net interstate sales of electricity, including losses, not shown separately. ² Based on estimated resident population as of July 1. ³ Includes 8.6 trillion Btu of net imports of coal coke not allocated by State. ⁴ Minus sign (—) indicates when amount of energy expended exceeds amount of energy consumed.

Source: U.S. Energy Information Administration, *State Energy Data Report, 1960-1987*.

NO. 944. PRIMARY ENERGY CONSUMPTION, BY END-USE SECTOR: 1960 TO 1988

[Btu=British thermal unit. For residential and commercial, industrial, and transportation, represents consumption of fossil fuels only. For Btu conversion factors, see text, section 19. For residential and commercial, industrial, and transportation sectors, data represent only fossil fuels consumed directly]

YEAR	Total consumption (quad. Btu)	Residential and commercial (quad. Btu)	Industrial and miscellaneous (quad. Btu)	Transportation (quad. Btu)	Electricity generation (quad. Btu)	PERCENT OF TOTAL			
						Residential and commercial	Industrial and miscellaneous	Transportation	Electricity generation
1960	43.8	8.8	16.3	10.6	8.2	20.0	37.1	24.1	18.7
1970	66.4	12.1	21.9	16.0	16.3	18.3	33.0	24.2	24.5
1973	74.3	12.3	23.6	18.5	19.9	16.5	31.7	25.0	26.7
1975	70.6	11.6	20.4	18.2	20.3	16.4	28.9	25.8	28.8
1979	78.9	11.5	22.8	20.4	24.1	14.6	28.9	25.9	30.6
1980	76.0	10.7	21.0	19.7	24.5	14.1	27.7	25.9	32.3
1981	74.0	10.0	19.7	19.5	24.8	13.6	26.6	26.3	33.5
1982	70.8	10.1	17.4	19.0	24.3	14.2	24.6	26.9	34.2
1983	70.5	9.7	16.7	19.1	24.9	13.8	23.7	27.1	35.4
1984	74.1	10.1	18.2	19.8	25.9	13.6	24.5	26.8	35.0
1985	74.0	9.8	17.5	20.1	26.5	13.3	23.7	27.2	35.8
1986	74.2	9.6	17.3	20.7	26.6	12.9	23.3	27.9	35.9
1987	76.8	9.7	18.1	21.3	27.6	12.6	23.6	27.7	35.9
1988, prel.	79.9	10.4	19.1	21.8	28.6	13.0	23.9	27.3	35.8

Source: U.S. Energy Information Administration, *Annual Energy Review*.

NO. 945. ENERGY CONSUMPTION, BY SECTOR AND PRIMARY SOURCE: 1988

[In trillions of Btu. For definition of Btu, see text, section 19]

SECTOR	Total ¹	Coal ²	Natural gas, dry	Petroleum ³	Hydroelectric ⁴	Nuclear power	Other ⁵	Electricity distributed ⁶	Electric energy loss ⁷
End-use sectors	79,948	2,974	15,879	32,398	32	(x)	40	6,755	19,872
Residential and commercial	29,149	177	7,540	2,700	(x)	(x)	-	5,727	12,989
Industrial	28,952	2,797	7,778	8,443	32	(x)	40	3,016	6,846
Transportation	21,856	-	561	21,255	(x)	(x)	(x)	12	28
Electric utilities	28,628	15,850	2,719	1,561	2,583	5,678	236	(x)	(x)

- Represents zero. X Not applicable. ¹Total may not equal sum of components due to independent rounding of the components. ²Represents anthracite, bituminous coal, and lignite. ³Includes petroleum products, still gas, liquefied refinery gas, and natural gas liquids. ⁴Industrial sector is hydroelectricity produced by the industrial sector. Electric utilities sector includes net imports of electricity. ⁵Industrial sector includes net imports of coal coke. Electric utilities sector includes electricity produced from geothermal, wood, waste, wind, solar thermal, and photovoltaic sources. ⁶Electrical energy used by railroads, and for street and highway lighting, is included in transportation sector. ⁷Losses allocated by final end-use sector in proportion to their direct kilowatt hour usage.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, February 1989.

NO. 946. ENERGY EXPENDITURES AND AVERAGE FUEL PRICES, BY SOURCE AND SECTOR: 1970 TO 1987

[For definition of Btu, see text, section 19. End-use sector and electric utilities exclude expenditures and prices on energy sources such as hydropower, solar, wind, and geothermal. Also excludes expenditures for reported amounts of energy consumed by the energy industry for production, transportation, and processing operations]

SOURCE AND SECTOR	1970	1973	1975	1980	1981	1982	1983	1984	1985	1986	1987
EXPENDITURES (mil. dol.)											
Total ¹	82,707	111,730	171,989	374,201	426,706	425,259	416,036	439,292	441,220	380,097	383,005
Natural gas	10,891	13,933	20,061	51,081	60,543	68,291	71,999	77,142	72,920	59,679	57,740
Petroleum products ²	48,217	65,418	104,065	238,710	265,344	242,822	221,756	226,184	223,684	174,985	186,505
Motor gasoline	31,596	39,667	59,490	124,418	138,124	130,463	115,816	114,438	118,044	91,510	99,809
Distillate fuel oil	6,254	9,524	15,681	40,800	48,202	44,118	41,841	44,864	43,611	34,954	37,240
Jet fuel	1,440	2,000	4,192	13,923	15,607	14,974	13,940	15,064	14,747	10,505	11,448
Residual fuel	2,047	4,667	10,378	21,573	22,668	17,632	14,099	14,382	11,462	7,468	7,960
Coal	4,593	6,229	13,047	22,648	26,231	26,427	27,051	29,050	29,719	27,914	27,590
Electricity sales	23,351	33,780	50,680	98,098	116,453	127,394	134,746	147,895	154,529	150,200	154,322
Residential sector	20,082	27,075	36,845	68,827	77,928	86,834	92,352	99,015	101,674	96,440	97,454
Commercial sector	10,669	15,105	22,835	46,863	55,368	61,245	64,843	70,151	71,745	68,236	69,719
Industrial sector	16,457	23,529	41,173	94,505	108,006	102,990	101,430	110,850	106,087	88,811	88,439
Transportation sector ³	35,499	46,021	71,136	163,996	185,403	174,190	157,311	159,275	161,714	126,610	137,394
Motor gasoline	30,525	38,598	58,036	121,819	135,380	128,105	113,843	112,044	115,201	89,988	97,527
Electric utilities	4,316	7,817	16,396	37,435	43,275	41,311	41,336	43,352	42,540	35,769	36,659
AVERAGE FUEL PRICES (dol. per mil. Btu)											
All sectors	1.65	2.02	3.34	6.91	8.10	8.53	8.47	8.48	8.54	7.34	7.38
Residential sector	2.12	2.73	3.83	7.55	8.93	9.92	10.85	11.19	11.46	10.96	10.90
Commercial sector	1.97	2.56	4.09	7.88	9.55	10.44	11.05	11.46	11.95	11.34	11.17
Industrial sector	.83	1.08	2.20	4.71	5.58	6.14	6.30	6.31	6.16	5.32	5.12
Transportation sector	2.32	2.58	4.04	8.62	9.85	9.45	8.46	8.25	8.27	6.25	6.60
Electric utilities	.32	.46	.96	1.75	2.00	2.01	1.98	1.97	1.85	1.55	1.51

¹ Includes electricity sales; excludes electricity generation. ² Includes sources or fuel types, not shown separately.

Source: U.S. Energy Information Administration, *State Energy Price and Expenditure Report*, annual.

No. 947. ENERGY EXPENDITURES—SOURCE AND END-USE SECTOR, BY STATE: 1987

(In millions of dollars, except per capita and percents. End-use sector and electric utilities exclude expenditures on energy sources such as hydropower, solar, wind, and geothermal. Also excludes expenditures for reported amounts of energy consumed by the energy industry for production, transportation, and processing operations)

DIVISION AND STATE	Total ¹	Per capita ² (dol.)	Percent change, 1986-1987	SOURCE					END-USE SECTOR			
				Petroleum products		Natural gas	Coal	Electricity sales	Residential	Commercial	Industrial	Transportation
				Total	Gasoline							
U.S.	393,005	1,615	3.4	186,505	99,809	57,740	27,590	154,322	97,454	69,719	88,439	137,394
N. Eng.	19,597	1,526	5.6	10,672	5,315	2,088	327	7,667	6,059	3,995	2,979	6,564
ME.....	1,940	1,636	3.7	1,293	570	18	17	693	531	263	345	802
NH.....	1,639	1,552	16.5	940	472	71	61	685	520	252	317	550
VT.....	850	1,554	9.1	492	259	25	1	333	245	165	120	319
MA.....	8,703	1,486	5.2	4,706	2,285	1,216	195	3,357	2,672	1,932	1,265	2,834
RI.....	1,393	1,413	7.2	739	381	202	-	478	439	278	216	460
CT.....	5,071	1,579	2.7	2,702	1,348	557	52	2,119	1,652	1,104	717	1,599
Mid. Atl.	55,353	1,478	1.3	24,515	12,253	8,978	2,684	23,117	16,813	12,653	9,713	16,175
NY.....	23,042	1,292	1.0	10,012	5,235	3,920	474	10,400	7,576	6,803	2,539	6,124
NJ.....	13,849	1,804	2	7,011	3,091	2,149	159	4,988	3,729	2,870	2,431	4,819
PA.....	18,461	1,546	2.6	7,492	3,927	2,909	2,051	7,729	5,507	2,980	4,743	5,231
E. No. Cent.	70,381	1,679	2.0	28,452	16,524	13,362	7,627	27,054	18,769	11,975	18,425	21,213
OH.....	18,569	1,721	1.8	7,336	4,478	3,383	2,240	7,392	4,946	3,108	4,919	5,596
IN.....	10,865	1,965	5.2	4,624	2,290	1,639	1,861	3,935	2,462	1,383	3,414	3,607
IL.....	19,303	1,666	1.8	7,356	4,186	3,771	1,459	8,048	5,418	3,683	5,053	5,149
MI.....	14,567	1,582	6	6,010	3,706	3,190	1,475	5,186	3,936	2,733	3,369	4,529
WI.....	7,078	1,472	1.1	3,127	1,865	1,379	591	2,493	2,007	1,069	1,671	2,332
W. No. Cent.	28,885	1,639	.6	14,124	7,872	3,885	2,346	10,511	7,185	4,486	6,625	10,579
MN.....	6,217	1,464	-3.1	3,145	1,899	836	324	2,211	1,573	793	1,456	2,394
IA.....	4,684	1,659	4.5	2,153	1,223	707	375	1,755	1,221	681	1,200	1,581
MO.....	8,013	1,569	5.4	3,753	2,274	994	741	3,223	2,203	1,417	1,406	2,988
ND.....	1,430	2,131	1	695	349	89	431	398	268	168	518	475
SD.....	1,098	1,548	.6	645	339	90	21	356	297	152	214	435
NE.....	2,612	1,639	2.4	1,358	710	365	114	886	599	492	476	1,045
KS.....	4,831	1,952	2.0	2,376	1,077	803	341	1,682	1,023	794	1,354	1,660
So. Atl.	64,668	1,551	5.5	30,555	18,322	5,905	6,102	28,792	17,283	11,254	11,975	24,156
DE.....	1,159	1,789	3.9	627	315	144	125	450	312	172	260	416
MD.....	6,778	1,494	2.2	3,195	1,970	914	451	2,681	1,907	974	1,452	2,444
DC.....	1,044	1,681	-2.6	286	186	189	3	577	229	432	153	230
VA.....	9,383	1,586	7.9	4,792	2,782	647	539	3,834	2,438	1,797	1,345	3,803
WV.....	3,123	1,646	4.2	1,486	744	444	1,242	1,044	689	391	1,087	956
NC.....	10,327	1,611	6.5	4,733	2,948	677	894	4,812	2,766	1,608	2,207	3,746
SC.....	5,760	1,681	6.5	2,290	1,449	488	513	2,871	1,457	823	1,646	1,834
GA.....	10,244	1,645	7.9	4,699	2,797	1,436	1,268	4,033	2,475	1,652	2,135	3,982
FL.....	16,849	1,401	3.9	8,447	5,132	965	1,067	8,489	5,009	3,405	1,689	6,746
E. So.	26,669	1,745	5.7	12,202	7,099	2,571	3,291	11,408	5,940	3,818	7,041	9,770
KY.....	6,394	1,717	5.2	3,000	1,659	587	993	2,846	1,345	893	2,061	2,295
TN.....	8,737	1,799	6.2	3,875	2,460	689	826	4,029	1,857	1,488	2,078	3,314
AL.....	7,326	1,794	6.8	3,237	1,849	764	1,234	3,071	1,755	1,065	2,006	2,501
MS.....	4,213	1,605	3.8	2,090	1,071	530	238	1,662	983	672	896	1,661
W. So.	55,507	2,065	2.9	29,894	12,065	10,378	2,848	18,332	10,339	7,475	18,909	18,784
AR.....	3,790	1,587	.5	1,861	1,090	487	331	1,479	981	531	798	1,480
LA.....	11,085	2,492	5.1	6,050	1,804	2,096	287	3,337	1,787	1,315	4,605	3,378
OK.....	5,246	1,610	3.2	2,421	1,436	1,293	380	2,022	1,283	851	1,082	2,029
TX.....	35,386	2,108	3.4	19,563	7,735	6,503	1,851	11,494	6,288	4,778	12,424	11,896
Mt.	20,733	1,574	4.6	10,042	6,009	2,459	2,085	8,261	4,656	4,055	3,540	8,482
MT.....	1,394	1,723	4.8	775	407	140	91	473	271	196	334	593
ID.....	1,521	1,521	6.3	708	408	200	17	596	306	251	410	555
WY.....	1,295	2,644	3.1	670	263	125	389	456	187	159	469	481
CO.....	4,625	1,404	3.0	2,146	1,439	793	337	1,881	1,091	1,075	554	1,905
NM.....	2,448	1,636	6.8	1,307	740	281	315	905	481	502	411	1,054
AZ.....	5,382	1,583	5.5	2,365	1,599	397	376	2,664	1,403	1,195	650	2,135
UT.....	2,384	1,419	1.3	1,162	687	348	342	862	543	447	405	988
NV.....	1,683	1,673	7.0	908	465	174	217	624	374	230	308	771
Pac.	51,205	1,402	4.7	25,848	14,410	8,115	280	19,181	10,410	9,898	9,225	21,671
WA.....	6,583	1,449	4.2	3,605	1,978	476	165	2,486	1,368	1,025	1,100	3,090
OR.....	4,065	1,492	6.2	2,050	1,144	337	9	1,869	855	687	835	1,687
CA.....	37,694	1,363	5.6	18,048	10,666	7,110	94	14,179	7,765	7,638	6,924	15,367
AK.....	1,383	2,639	-12.5	989	215	158	9	290	221	312	130	720
HI.....	1,480	1,368	1.8	1,156	406	33	3	558	201	235	237	807

- Represents or rounds to zero. ¹ Includes sources not shown separately. Total expenditures are the sum of purchases for each source (including electricity sales) less electric utility purchases of fuel. ² Based on estimated resident population as of July 1. ³ Includes net imports of coal coke not shown separately by State.

Source: U.S. Energy Information Administration, *State Energy Price and Expenditure Report*, annual.

NO. 948. RESIDENTIAL ENERGY CONSUMPTION, EXPENDITURES, AND AVERAGE PRICES, 1980 TO 1987, AND BY REGION, 1987

[For period April to March for 1980-1985; January to December for 1987. Excludes Alaska and Hawaii in 1980. Covers occupied units only. Excludes household usage of gasoline for transportation and the use of wood or coal. Based on Residential Energy Consumption Survey; see Appendix III. For composition of regions, see fig. 1, inside front cover. Btu=British thermal unit; see text, section 19]

TYPE OF FUEL	Unit	1980	1981	1982	1983	1985	1987				
							Total	North-east	Mid-west	South	West
CONSUMPTION											
Total	Quad. Btu	9.74	9.32	9.51	8.62	9.04	9.13	2.37	2.73	2.61	1.42
Avg. per household.....	Mil. Btu.....	126	114	114	103	105	101	124	123	84	78
Natural gas.....	Quad. Btu.....	5.31	4.94	5.39	4.77	4.98	4.83	1.03	1.83	1.09	.88
Electricity.....	Quad. Btu.....	2.42	2.46	2.48	2.42	2.48	2.76	.44	.61	1.22	.48
Fuel oil, kerosene.....	Quad. Btu.....	1.71	1.55	1.33	1.14	1.26	1.22	.87	.16	.17	.02
Liquid petroleum gas.....	Quad. Btu.....	.31	.36	.31	.29	.31	.32	.02	.13	.12	.05
EXPENDITURES											
Total	Bil. dol.	63.2	74.8	85.0	87.8	97.0	97.7	24.3	25.0	33.4	15.0
Avg. per household.....	Dollars.....	815	917	1,022	1,048	1,123	1,080	1,276	1,124	1,081	819
Natural gas.....	Bil. dol.	17.8	19.3	24.5	27.1	29.8	26.1	6.7	9.0	6.1	4.4
Electricity.....	Bil. dol.	32.6	40.1	45.9	48.4	54.5	61.6	12.3	14.1	25.1	10.0
Fuel oil, kerosene.....	Bil. dol.	10.7	12.5	11.8	9.6	9.6	7.2	5.1	1.0	1.1	.1
Liquid petroleum gas.....	Bil. dol.	2.1	2.9	2.7	2.7	3.1	2.8	.2	1.0	1.1	.4
AVERAGE PRICE (per million Btu)											
Total	Dollars	6.49	8.03	8.93	10.18	10.73	10.71	10.26	9.18	12.82	10.53
Natural gas.....	Dollars.....	3.36	3.90	4.55	5.67	5.97	5.41	6.45	4.93	5.53	5.05
Electricity.....	Dollars.....	13.46	16.32	18.51	19.98	21.94	22.34	27.78	23.99	20.61	20.76
Fuel oil, kerosene.....	Dollars.....	6.29	8.04	8.89	8.42	7.84	5.89	5.79	5.97	6.29	6.11
Liquid petroleum gas.....	Dollars.....	6.71	7.92	8.74	9.42	9.91	8.91	13.24	7.58	9.56	9.30

Source: U.S. Energy Information Administration, *Residential Energy Consumption Survey: Consumption and Expenditures*, annual through 1983; beginning 1985, triennial. Beginning 1987, *Household Energy Consumption and Expenditures, 1987*.

NO. 949. RESIDENTIAL ENERGY CONSUMPTION AND EXPENDITURES, BY TYPE OF FUEL AND SELECTED HOUSEHOLD CHARACTERISTIC: 1987

[For period January through December 1987. Quad.=quadrillion. See headnote, table 948]

CHARACTERISTIC	CONSUMPTION (Btu's)					EXPENDITURES				
	Total ¹ (quad.)	Avg. per household ¹ (mil.)	Natural gas (quad.)	Electricity (quad.)	Fuel oil ² (quad.)	Total ¹ (bil. dol.)	Avg. per household ¹ (dol.)	Natural gas (bil. dol.)	Electricity (bil. dol.)	Fuel oil ² (bil. dol.)
Total households	9.13	101	4.83	2.76	1.22	97.7	1,080	28.1	61.6	7.2
Single family detached.....	6.32	115	3.30	1.97	.80	67.6	1,226	17.5	43.1	4.8
Single family attached.....	.53	99	.29	.16	.07	6.0	1,135	1.7	3.8	.5
2-4 unit building.....	.94	93	.61	.20	.13	9.1	905	3.4	4.9	.8
5 or more unit building.....	.96	64	.51	.28	.17	10.1	681	2.8	6.5	.8
Mobile home.....	.39	76	.12	.16	.05	4.8	948	.6	3.3	.3
Year house built:										
1939 or earlier.....	2.59	120	1.53	.48	.51	23.7	1,105	8.4	11.7	3.0
1940-1949.....	.85	104	.48	.22	.13	8.6	1,042	2.7	4.9	.7
1950-1959.....	1.43	110	.79	.38	.22	14.6	1,121	4.2	8.7	1.3
1960-1969.....	1.63	100	.92	.50	.18	17.4	1,060	5.1	11.0	1.0
1970-1974.....	.92	95	.49	.31	.07	10.2	1,062	2.5	6.8	.4
1975-1979.....	.90	86	.34	.44	.08	11.9	1,131	1.7	9.3	.5
1980-1984.....	.53	71	.20	.28	.02	7.3	984	1.1	5.8	.1
1985 or later.....	.27	71	.10	.15	.01	4.0	1,049	.5	3.3	(b)
Heating and cooling degree day zones:³										
Less than 2,000 CDD and—										
More than 7,000 HDD.....	.94	110	.42	.23	.21	8.8	1,030	2.1	4.8	1.2
5,500-7,000 HDD.....	3.26	126	2.09	.69	.44	34.0	1,156	10.6	16.3	2.6
4,000-5,499 HDD.....	2.34	107	1.09	.67	.51	24.9	1,138	6.6	14.9	2.9
Less than 4,000 HDD.....	1.38	77	.73	.53	.05	16.6	931	4.1	11.5	.4
More than 2,000 CDD and less than 4,000 HDD.....	1.20	74	.51	.64	.01	17.4	1,068	2.8	14.2	.1
1987 family income:										
Less than \$5,000.....	.51	83	.30	.13	.05	5.1	818	1.6	2.8	.3
\$5,000-\$9,999.....	1.03	90	.57	.26	.16	10.1	881	3.0	5.8	.9
\$10,000-\$14,999.....	1.15	91	.62	.31	.16	11.7	927	3.3	6.9	.9
\$15,000-\$19,999.....	.83	92	.45	.24	.11	8.7	867	2.4	5.3	.7
\$20,000-\$24,999.....	.84	96	.42	.27	.12	9.1	1,038	2.2	5.0	.7
\$25,000-\$34,999.....	1.60	99	.81	.52	.22	17.7	1,091	4.4	11.5	1.3
\$35,000-\$49,999.....	1.50	112	.77	.51	.19	16.8	1,257	4.2	11.2	1.1
\$50,000 or more.....	1.67	129	.90	.52	.22	18.6	1,440	4.9	12.1	1.3

B Base figure too small to meet statistical standards for reliability of derived figure. ¹ Includes liquid petroleum gas, not shown separately. ² Includes kerosene. ³ CDD = Cooling degree day; HDD = Heating degree day.

Source: U.S. Energy Information Administration, *Household Energy Consumption and Expenditures, 1987*.

NO. 950. AVERAGE RESIDENTIAL ENERGY CONSUMPTION AND EXPENDITURES OF ALL FUELS USED, BY MAIN HEATING FUEL TYPE AND HOUSEHOLD CHARACTERISTIC: 1987

[For period January through December 1987. Fuels used include electricity, natural gas, liquefied petroleum gas, fuel oil, and kerosene. See headnote, table 948]

HOUSEHOLD CHARACTERISTIC	CONSUMPTION PER HOUSEHOLD (mil. Btu)					EXPENDITURES PER HOUSEHOLD (dollars)				
	All households ¹	Households using as main heating fuel—				All households ¹	Households using as main heating fuel—			
		Natural gas	Electricity		Fuel oil ²		Natural gas	Electricity		Fuel oil ²
		With air-conditioning	Without air-conditioning			With air-conditioning	Without air-conditioning			
Total households	101	118	56	46	126	1,080	1,073	1,103	772	1,260
Region:										
Northeast.....	124	139	53	54	135	1,276	1,313	1,188	1,200	1,294
Midwest.....	123	132	69	75	123	1,124	1,096	1,257	1,273	1,271
South.....	84	111	57	39	104	1,081	1,110	1,108	720	1,185
West.....	78	92	51	41	92	819	834	913	605	892
Type:										
Single-family detached.....	115	132	71	63	139	1,226	1,213	1,374	1,068	1,425
Single-family attached.....	99	113	54	38	142	1,135	1,112	1,096	708	1,424
2-4 unit building.....	93	102	44	41	121	905	896	898	694	1,159
5 or more unit building.....	64	78	36	30	97	681	685	709	482	793
Mobile home.....	76	96	57	43	88	948	885	1,101	788	1,031
Year house built:										
1939 or earlier.....	120	132	53	48	137	1,105	1,093	1,017	802	1,312
1940 to 1949.....	104	113	54	46	122	1,042	1,037	1,098	865	1,166
1950 to 1959.....	110	118	58	47	129	1,121	1,100	1,089	805	1,301
1960 to 1969.....	100	110	59	39	114	1,060	1,069	1,075	660	1,163
1970 to 1974.....	95	117	59	43	106	1,062	1,068	1,126	618	1,194
1975 to 1979.....	86	116	59	49	126	1,131	1,142	1,138	841	1,402
1980 to 1984.....	71	97	53	49	89	984	941	1,082	828	1,028
1985 or later.....	71	109	52	40	108	1,049	965	1,110	886	1,052
1987 family income:										
Less than \$5,000.....	89	105	41	32	97	818	862	753	552	904
\$5,000-\$9,999.....	90	103	49	35	110	881	871	912	622	1,016
\$10,000-\$14,999.....	91	106	45	41	114	927	930	843	661	1,126
\$15,000-\$19,999.....	92	107	43	46	124	967	938	872	833	1,235
\$20,000-\$24,999.....	96	111	59	52	112	1,038	1,004	1,075	852	1,158
\$25,000-\$34,999.....	99	117	54	45	121	1,091	1,084	1,094	770	1,218
\$35,000-\$49,999.....	112	131	63	57	147	1,257	1,239	1,285	985	1,488
\$50,000 or more.....	129	145	75	59	172	1,440	1,417	1,463	923	1,759

¹ Includes households using liquid petroleum gas, not shown separately. ² Includes kerosene.

 Source: U.S. Energy Information Administration, *Household Energy: Consumption and Expenditures, 1987*.

NO. 951. RESIDENTIAL ENERGY EXPENDITURES, BY TYPE OF END USE AND HOUSEHOLD CHARACTERISTIC: 1987

[For period January through December 1987. See headnote, table 948]

CHARACTERISTIC	EXPENDITURES (bil. dol.)					EXPENDITURES PER HOUSEHOLD (dollars)				
	All end uses	End use				All end uses	End use			
		Space heating ¹	Air-conditioning ²	Water heating ¹	Other ³		Space heating ¹	Air-conditioning ²	Water heating ¹	Other ³
Total households	97.7	31.7	9.8	13.9	42.3	1,080	350	109	154	467
Type:										
Single-family detached.....	67.6	21.5	7.0	9.2	29.9	1,228	391	127	167	542
Single-family attached.....	6.0	2.1	.6	.8	2.5	1,135	404	111	148	472
2 to 4 unit building.....	9.1	3.4	.6	1.3	3.8	905	338	60	131	376
5 or more unit building.....	10.1	3.1	1.3	1.7	4.1	681	206	85	114	276
Mobile home.....	4.8	1.5	.4	.9	2.0	948	297	74	180	397
Year house built:										
1939 or earlier.....	23.7	9.7	1.2	3.3	9.6	1,105	452	55	152	446
1940 to 1949.....	8.6	2.9	.7	1.3	3.7	1,042	357	82	152	450
1950 to 1959.....	14.6	4.7	1.4	2.0	6.5	1,121	360	111	152	498
1960 to 1969.....	17.4	5.3	2.2	2.4	7.5	1,060	324	133	154	459
1970 to 1974.....	10.2	3.1	1.2	1.5	4.5	1,062	320	120	154	468
1975 to 1979.....	11.9	3.3	1.7	1.7	5.2	1,131	310	163	158	500
1980 to 1984.....	7.3	1.7	1.0	1.2	3.4	984	230	120	162	463
1985 or later.....	4.0	1.0	.5	.7	1.8	1,049	258	137	183	472
1987 family income:										
Less than \$5,000.....	5.1	1.9	.7	.8	2.0	818	312	55	135	316
\$5,000-\$9,999.....	10.1	3.7	1.6	4.1	881	324	63	139	139	354
\$10,000-\$14,999.....	11.7	4.0	.9	1.8	4.9	927	319	75	145	388
\$15,000-\$19,999.....	8.7	2.9	.7	1.3	3.7	967	323	83	148	414
\$20,000-\$24,999.....	9.1	2.9	.9	1.3	4.0	1,038	330	105	152	452
\$25,000-\$34,999.....	17.7	5.5	2.0	2.5	7.7	1,091	341	121	153	475
\$35,000-\$49,999.....	18.8	5.0	1.9	2.3	7.6	1,257	374	142	171	570
\$50,000 or more.....	18.6	5.7	2.3	2.2	8.4	1,440	440	179	171	650

¹ Heating from the primary and secondary heating equipment. ² Cooling by refrigeration; does not include dehumidifiers, evaporative coolers, or fans not connected to air-conditioning equipment. ³ Appliance usage; includes fans in central, forced-air furnaces.

 Source: U.S. Energy Information Administration, *Household Energy: Consumption and Expenditures, 1987*.

**NO. 952. COMMERCIAL BUILDINGS—ENERGY CONSUMPTION AND EXPENDITURES, BY MAJOR FUEL
TYPE USED: 1986**

[Covers buildings using one or more major fuel. Excludes industrial buildings predominantly residential buildings, and buildings of less than 1,000 sq. ft. Based on a sample survey of building representatives and energy suppliers therefore subject to sampling variability. For characteristics of commercial buildings, see also tables 1291-1293. Tril. = trillion]

ITEM	Unit	All major fuels	Elec- tricity	Natu- ral gas	Fuel oil	Pro- pane	District Heat
Number of buildings using the fuel.....	1,000.....	3,992	3,965	2,214	534	344	77
Square footage of floorspace.....	Million.....	56,825	56,508	37,263	11,005	3,213	4,625
Square footage per building.....	1,000.....	14.2	14.3	16.8	20.6	9.3	59.7
Energy consumed, total.....	Tril. Btu.....	5,040	2,390	1,723	442	63	422
Energy consumed per building.....	Mil. Btu.....	1,262	603	778	827	184	5,446
Energy consumed per square foot of floorspace.....	1,000 Btu.....	89	42	46	40	20	91
Energy consumed per employee.....	Mil. Btu.....	69	33	35	28	18	52
Expenditures, total.....	Mil. dol.....	60,762	47,186	8,355	2,059	543	2,620
Expenditures per building.....	\$1,000.....	15.2	11.9	3.8	3.9	1.6	33.8
Expenditures per square foot of floorspace.....	Dollars.....	1.07	.84	.22	.19	.17	.57
Expenditures per million Btu of energy consumed.....	Dollars.....	12.06	19.74	4.85	4.66	8.59	6.21

Source: U.S. Energy Information Administration, *Nonresidential Buildings Energy Consumption Survey: Commercial Buildings Consumption and Expenditure, 1986*.

NO. 953. COMMERCIAL BUILDINGS—ENERGY CONSUMPTION AND EXPENDITURES: 1986

[Covers buildings using one or more major fuel. Excludes industrial buildings, predominantly residential buildings, and buildings of less than 1,000 sq. ft. Based on a sample survey of building representatives and energy suppliers therefore subject to sampling variability. For characteristics of commercial buildings, see tables 1291-1293. For composition of regions, see fig. 1, inside front cover]

BUILDING CHARACTERISTIC	ALL BUILDINGS USING ANY MAJOR FUEL		CONSUMPTION (tril. Btu)			EXPENDITURES (mil. dol.)		
	Num- ber (1,000)	Square feet (mil.)	Major fuel, total ¹	Elec- tricity	Natural gas	Major fuel, total ¹	Elec- tricity	Natural gas
All buildings.....	3,992	56,825	5,040	2,390	1,723	60,762	47,186	8,355
Year constructed:								
1900 or before.....	179	2,294	129	42	54	1,376	891	278
1901 to 1920.....	237	3,520	274	96	109	3,559	2,597	521
1921 to 1945.....	596	8,077	668	201	254	6,698	4,233	1,324
1946 to 1960.....	843	9,410	754	302	308	8,717	6,428	1,495
1961 to 1970.....	715	11,352	1,252	615	435	14,741	11,574	2,038
1971 to 1973.....	238	4,290	474	226	158	5,418	4,175	755
1974 to 1979.....	557	8,186	739	438	196	9,837	8,326	912
1980 to 1985.....	342	5,179	398	254	102	5,632	4,862	520
1984 to 1986.....	286	4,517	354	216	106	4,783	4,100	510
Principal activity within building:								
Assembley.....	572	7,305	401	164	157	5,009	3,707	911
Education.....	241	7,292	635	179	254	5,782	3,606	1,189
Food sales/services.....	303	1,993	411	319	159	5,417	4,374	805
Health care.....	52	2,107	457	132	205	3,824	2,287	884
Lodging.....	137	2,785	311	120	105	3,330	2,251	523
Mercantile/services.....	1,280	12,781	1,002	536	332	13,231	10,781	1,706
Office.....	610	9,532	1,010	641	258	14,777	12,884	1,178
Public order and safety.....	53	678	86	30	25	720	475	133
Warehouse.....	491	8,558	486	252	143	5,620	4,537	722
Other.....	94	1,704	169	83	46	2,013	1,568	204
Vacant.....	160	2,090	92	35	38	1,040	715	200
Region:								
Northeast.....	639	11,506	1,046	430	244	14,362	10,866	1,472
Midwest.....	1,036	15,728	1,603	584	742	15,848	10,869	3,400
South.....	1,517	18,882	1,485	867	426	17,945	14,856	1,958
West.....	800	10,708	906	510	311	12,607	10,575	1,524
Square footage:								
1,001 to 5,000.....	2,113	5,943	719	376	248	10,133	8,175	1,316
5,001 to 10,000.....	801	6,698	598	278	236	7,647	5,962	1,206
10,001 to 25,000.....	541	8,873	724	312	305	9,374	6,265	1,519
25,001 to 50,000.....	239	8,551	662	312	191	7,856	6,060	967
50,001 to 100,000.....	118	8,217	640	303	220	7,445	5,720	1,057
100,001 to 200,000.....	51	7,128	577	249	180	6,153	4,514	848
Over 200,000.....	29	11,475	1,120	560	343	13,154	10,489	1,441

¹ Includes fuel oil, propane, and purchased steam, not shown separately.

Source: U.S. Energy Information Administration, *Nonresidential Buildings Energy Consumption Survey: Commercial Buildings, Consumption and Expenditure, 1986*.

NO. 954. MANUFACTURING ENERGY CONSUMPTION REQUIRED TO PRODUCE HEAT, POWER, AND ELECTRICITY BY TYPE OF FUEL AND INDUSTRY GROUP: 1985

[Based on the Manufacturing Energy Consumption Survey; therefore, subject to sampling variability]

SIC ¹ code	INDUSTRY	TOTAL FUEL CONSUMPTION (tril. Btu)					CONSUMPTION PER—		
		Total	Net electricity ²	Fuel oil ³	Natural gas	Coal and coke	Other	Employee (mil. Btu)	Dollar of value added (1,000 Btu)
(x)	Total.....	13,615	2,173	690	4,856	1,693	4,198	821.5	13.7
20	Food and kindred.....	946	152	66	477	126	125	667.5	7.9
21	Tobacco products.....	19	4	2	3	9	(z)	403.4	1.6
22	Textile mill products.....	248	87	23	92	36	10	396.9	12.3
23	Apparel and other textile products.....	30	14	3	11	2	(z)	35.8	1.0
24	Lumber and wood products.....	333	47	(b)	25	(D)	(z)	559.3	16.0
25	Furniture and fixtures.....	48	14	3	19	2	10	106.5	3.1
26	Paper and allied products.....	2,198	177	(D)	399	308	(D)	3,440.2	48.9
27	Printing and publishing.....	76	38	(D)	32	1	(D)	62.8	1.2
28	Chemicals and allied products.....	2,407	408	88	1,190	(D)	(D)	3,202.7	29.1
29	Petroleum and coal products.....	2,631	113	123	718	7	1,666	21,943.2	158.9
30	Rubber and misc. plastic products.....	212	88	(D)	97	(D)	5	304.0	6.0
31	Leather and leather products.....	13	4	3	4	1	(z)	91.0	3.3
32	Stone, clay, and glass products.....	896	105	42	384	324	41	1,712.7	29.8
33	Primary metal industries.....	2,391	479	52	687	658	513	3,270.4	63.1
34	Fabricated metal products.....	298	91	15	174	8	9	223.2	4.6
35	Machinery, except electrical.....	239	98	15	104	17	5	127.1	2.1
36	Electric and electronic equipment.....	209	105	(D)	83	(D)	3	111.8	2.1
37	Transportation equipment.....	317	112	26	125	42	13	193.0	2.6
38	Instruments and related products.....	73	26	(D)	21	(D)	(D)	112.6	1.7
39	Miscellaneous manufacturing.....	31	11	3	14	1	2	102.1	2.6

D Figure withheld to avoid disclosure. X Not applicable. Z Less than .5 trillion Btu. ¹ Standard Industrial Classification; see text, section 13. ² Net electricity is obtained by aggregating purchases, transfers in, and generation from noncombustible renewable resources minus quantities sold and transferred out. ³ Includes distillate and residual.

Source: U.S. Energy Information Administration, *Manufacturing Energy Consumption Survey: Consumption of Energy, 1985*.

NO. 955. FOSSIL FUEL PRICES IN CURRENT AND CONSTANT (1982) DOLLARS: 1960 TO 1988

[In cents per million British thermal units (Btu), except as indicated. All fuel prices taken as close to the point of production as possible. See text, section 19, for explanation of Btu conversions from mineral fuels. Minus sign (-) indicates decrease]

YEAR OR PERIOD	CURRENT DOLLARS					CONSTANT (1982) DOLLARS					GNP ³ price deflators (1982=100)
	Composite ¹	Crude oil	Natural gas	Bituminous coal ²	Anthracite coal	Composite ¹	Crude oil	Natural gas	Bituminous coal ²	Anthracite coal	
1960.....	28.3	49.7	12.6	18.8	33.8	91.6	160.8	40.8	60.8	109.4	30.9
1965.....	27.7	49.3	14.5	17.9	36.3	82.0	145.9	42.9	53.0	107.4	33.8
1970.....	31.7	54.8	15.4	26.2	48.8	75.5	130.5	36.7	62.4	116.2	42.0
1973.....	39.8	67.1	20.1	36.5	61.7	80.4	135.6	40.6	73.7	124.6	49.5
1975.....	82.5	132.2	41.1	83.9	149.5	139.1	222.9	69.3	141.5	252.1	59.3
1976.....	90.2	141.2	53.1	85.0	153.9	142.9	223.8	84.2	134.7	243.9	63.1
1977.....	100.8	147.8	72.3	87.7	153.8	149.8	219.6	107.4	130.3	228.5	67.3
1978.....	111.6	155.2	83.6	97.9	152.7	154.6	215.0	115.8	135.6	211.5	72.2
1979.....	141.7	217.9	108.1	105.3	177.2	180.3	277.2	137.5	134.0	225.4	78.6
1980.....	204.2	372.2	144.8	109.4	185.9	238.3	434.3	169.0	127.7	216.9	85.7
1981.....	274.5	547.8	178.5	117.9	190.1	292.0	582.8	191.0	125.4	202.2	94.0
1982.....	275.8	491.7	222.2	122.1	214.0	275.6	491.7	222.9	122.1	214.0	100.0
1983.....	270.1	451.6	232.3	117.2	230.0	260.0	434.6	223.6	112.8	221.4	103.9
1984.....	264.6	446.2	239.9	115.9	208.7	245.7	414.3	222.7	107.6	193.8	107.7
1985.....	251.2	415.3	225.7	114.8	204.2	225.9	373.5	203.0	103.2	183.6	110.9
1986.....	165.3	215.7	174.8	108.2	191.1	145.1	189.4	153.5	95.0	167.8	113.9
1987.....	170.0	265.5	150.2	104.9	188.9	144.4	225.6	127.6	89.1	165.0	117.7
1988, prel.....	153.5	216.7	153.8	100.8	181.8	126.1	178.1	126.4	82.8	149.4	121.7
Percent change:											
1960-70.....	12.0	10.3	22.2	39.4	44.4	-17.6	-18.8	-10.0	2.6	6.2	35.9
1970-73.....	25.6	22.4	30.5	39.3	26.4	8.5	9.9	10.6	18.1	7.2	17.9
1973-75.....	107.3	97.0	104.5	129.9	142.3	73.0	64.4	70.7	92.0	102.3	19.8
1975-79.....	71.8	64.8	163.0	25.5	18.5	29.6	24.4	98.4	-5.3	-10.6	32.5
1979-80.....	44.1	70.8	34.0	9.9	4.9	32.2	56.7	22.9	-4.7	-3.8	9.0
1980-81.....	34.4	47.2	24.0	7.8	2.3	22.5	34.2	13.0	-1.8	-6.8	9.7
1981-82.....	5	-10.2	23.8	3.6	12.6	-5.5	-15.6	16.3	-2.6	5.8	6.4
1982-83.....	-2.1	-8.2	4.5	-4.0	7.5	-5.7	-11.6	.6	-7.6	3.5	3.8
1983-84.....	-2.0	-1.2	3.3	-1.1	-9.3	-5.5	-4.7	-.4	-4.6	-12.5	3.7
1984-85.....	-5.1	-6.9	5.9	-1.0	-2.2	-8.1	-9.8	-8.8	-4.1	-5.3	3.0
1985-86.....	-34.2	-48.1	-22.6	-5.7	-6.4	-35.8	-49.3	-24.4	-7.9	-8.6	2.7
1986-87.....	2.6	23.1	-14.1	-3.0	-1.2	-5	19.1	-16.9	-6.2	-4.4	3.3
1987-88.....	-9.7	-18.4	2.4	-3.9	-3.8	-12.7	-21.1	-9	-7.1	-6.9	3.4

¹ Weighted by relative importance of individual fuels in total fuels production. ² Includes lignite. ³ GNP=Gross national product; see text, section 15.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

World Energy Consumption and Production—Flow of Crude Oil 569

NO. 956. WORLD ENERGY CONSUMPTION, BY REGION AND ENERGY SOURCE: 1960 TO 1987

[In tons of coal equivalent. Metric ton=1.1023 short tons. Kilogram=2.205 pounds. See text, section 31 for general comments about the data]

REGION AND ENERGY SOURCE	CONSUMPTION (mil. metric tons)					PER CAPITA (kilograms)				PERCENT DISTRIBUTION			
	1960	1970	1980	1986	1987	1960	1970	1980	1987	1960	1970	1980	1987
World total	3,924	6,440	8,544	9,364	9,654	1,302	1,748	1,919	1,921	100.0	100.0	100.0	100.0
North America ¹	1,599	2,502	2,796	2,709	2,767	5,951	7,825	7,480	6,723	40.7	38.9	32.7	28.7
United States.....	1,454	2,217	2,364	2,278	2,323	8,047	10,811	10,386	9,542	37.1	34.4	27.7	24.1
South America.....	79	143	251	275	284	535	749	1,046	1,016	2.0	2.2	2.9	2.9
Europe.....	1,039	1,720	2,145	2,167	2,196	2,443	3,745	4,433	4,440	26.5	26.7	25.1	22.7
Asia.....	514	903	1,579	2,066	2,162	276	386	607	731	13.1	14.0	18.5	22.4
Japan.....	96	333	435	453	456	1,025	3,246	3,726	3,741	2.4	5.2	5.1	4.7
Soviet Union.....	595	999	1,473	1,788	1,867	2,597	4,132	5,549	6,634	15.2	15.5	17.2	19.3
Oceania.....	41	71	105	122	127	2,597	3,675	4,572	5,013	1.0	1.1	1.2	1.3
Energy sources:													
Solid fuels.....	1,940	2,159	2,632	3,075	3,127	644	586	591	622	49.4	33.5	30.8	32.4
Liquid fuels.....	1,306	2,835	3,778	3,717	3,784	433	770	848	753	33.3	44.0	44.2	39.2
Natural gas.....	593	1,292	1,834	2,127	2,278	197	351	412	453	15.1	20.1	21.5	23.6
Electricity.....	84	154	301	444	464	28	42	68	92	2.1	2.4	3.5	4.8

¹ Includes Central America.

Source: Statistical Office of the United Nations, New York, NY, *Energy Statistics Yearbook*, annual. (Copyright.)

NO. 957. WORLD PRIMARY ENERGY PRODUCTION, BY REGION AND TYPE: 1973 TO 1987

[In quadrillion Btu. Btu=British thermal units. For Btu conversion factors, see source]

REGION AND TYPE	1973	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987, prel.
World total	244.8	245.0	273.0	287.3	285.4	280.6	278.5	280.7	292.9	303.8	314.1	321.3
North America.....	73.3	71.1	74.0	78.2	80.6	81.0	81.4	79.2	84.6	84.1	83.2	83.9
United States.....	62.0	59.8	61.0	63.7	64.7	64.3	63.8	61.1	65.6	64.6	64.1	64.3
Central and South America.....	12.9	10.6	11.2	12.2	12.1	12.0	11.9	12.0	12.7	13.4	14.1	14.1
Western Europe.....	19.6	21.4	24.8	27.4	28.7	29.9	30.8	32.1	32.6	35.0	35.6	36.7
Eastern Europe and Soviet Union.....	51.4	55.9	64.0	66.1	67.7	68.2	70.4	72.3	74.0	78.5	81.7	83.8
Middle East.....	46.6	43.5	47.2	48.5	41.8	36.6	29.5	27.2	27.1	25.7	30.8	31.5
Africa.....	14.8	13.3	16.5	18.1	17.2	14.9	15.0	15.8	16.6	18.1	17.8	18.3
Far East and Oceania.....	26.2	29.3	35.3	36.7	37.3	38.1	39.4	42.1	45.2	49.0	51.0	53.0
Crude oil.....	117.8	111.6	126.3	131.6	125.5	117.5	111.7	111.3	114.1	112.8	119.2	119.9
Natural gas.....	43.2	43.9	48.2	51.6	52.9	54.3	53.7	53.9	57.7	61.5	62.6	65.9
Natural gas liquids.....	4.2	4.4	4.8	5.2	5.5	5.9	5.9	6.0	6.5	6.2	6.9	6.7
Coal.....	63.8	66.3	70.4	74.6	75.8	76.0	78.9	79.1	82.1	86.0	88.2	90.2
Hydroelectric power.....	13.5	15.0	16.7	17.6	18.2	18.4	18.9	19.8	20.2	20.6	20.7	21.2
Nuclear.....	2.2	3.9	6.5	6.7	7.5	8.6	9.4	10.6	12.3	15.2	16.4	17.5

Source: U.S. Energy Information Administration, *International Energy Annual*.

NO. 958. DAILY INTERNATIONAL FLOW OF CRUDE OIL, BY AREA: 1986

[In thousands of barrels per day]

EXPORTING AREA	Total	IMPORTING AREA							
		North America		Central and South America	Western Europe	Eastern Europe	Middle East and Africa	Japan	Other Far East and Oceania
		U.S.	Canada						
World total	24,123	4,178	352	1,539	8,943	1,979	1,150	3,268	2,714
United States.....	154	(x)	16	110	-	-	-	-	28
North America, except U.S.....	1,862	1,191	18	98	318	-	39	184	14
Central and South America.....	1,396	645	40	414	197	-	18	9	73
Western Europe.....	2,541	379	179	22	1,910	12	28	11	-
Eastern Europe and Soviet Union.....	2,466	-	-	136	727	1,416	143	2	42
Middle East.....	9,612	804	55	510	3,166	375	735	2,226	1,741
Africa.....	3,988	741	44	155	2,597	175	170	20	86
Far East and Oceania.....	2,104	418	-	94	28	1	17	816	730

- Represents zero. X Not applicable. ¹ Includes shipments to Puerto Rico and Virgin Islands.

Source: U.S. Energy Information Administration, *International Energy Annual*.

NO. 959. U.S. FOREIGN TRADE IN SELECTED MINERAL FUELS: 1970 TO 1988

[Btu=British thermal units. For Btu conversion factors, see text, section 19. Minus sign (-) indicates an excess of imports over exports. See also *Historical Statistics, Colonial Times to 1970*, series M 100, 101, 127, 128, 140, 141, 178, and 181]

YEAR	NATURAL GAS						CRUDE OIL					
	Imports		Exports		Net trade		Imports ¹		Exports		Net trade	
	Bil. cu. ft.	Tril. Btu	Bil. cu. ft.	Tril. Btu	Bil. cu. ft.	Tril. Btu	Mil. bbl.	Tril. Btu	Mil. bbl.	Tril. Btu	Mil. bbl.	Tril. Btu
1970	820.8	846	69.8	72	-751.0	-774	483	2,814	5	29	-478	-2,785
1973	1,032.9	1,060	77.2	79	-955.7	-981	1,184	6,897	1	4	-1,183	-6,883
1975	953.0	978	72.7	74	-880.3	-904	1,498	8,721	2	12	-1,496	-8,709
1976	963.8	988	64.7	66	-899.1	-922	1,935	11,239	3	17	-1,932	-11,221
1977	1,011.0	1,037	55.8	56	-955.4	-981	2,414	14,027	18	106	-2,396	-13,921
1978	965.5	995	52.5	53	-913.0	-941	2,320	13,450	58	335	-2,262	-13,125
1979	1,253.4	1,300	55.7	56	-1,197.7	-1,243	2,360	13,625	86	497	-2,294	-13,328
1980	984.8	1,006	48.7	49	-936.0	-957	1,926	11,195	105	609	-1,821	-10,586
1981	903.9	917	59.4	60	-844.6	-857	1,605	9,396	83	482	-1,522	-8,854
1982	933.3	950	51.7	52	-881.6	-898	1,273	7,418	86	500	-1,187	-6,918
1983	919.8	942	54.6	55	-865.1	-887	1,215	7,079	60	348	-1,155	-6,731
1984	843.1	847	54.8	55	-788.3	-792	1,254	7,302	66	384	-1,188	-6,918
1985	949.4	951	57.1	58	-892.3	-894	1,168	6,814	75	432	-1,093	-6,382
1986	750.1	748	61.3	62	-688.9	-686	1,525	8,892	56	326	-1,469	-8,566
1987	892.1	891	54.0	55	-838.1	-836	1,706	10,067	55	319	-1,651	-9,748
1988	1,283.0	1,282	58.0	59	-1,225.0	-1,223	1,869	10,959	58	337	-1,811	-10,622
YEAR	COAL						PETROLEUM PRODUCTS					
	Imports		Exports		Net trade		Imports		Exports		Net trade	
	1,000 sh. tons	Tril. Btu	1,000 sh. tons	Tril. Btu	1,000 sh. tons	Tril. Btu	Mil. bbl.	Tril. Btu	Mil. bbl.	Tril. Btu	Mil. bbl.	Tril. Btu
1970	36	1	71,733	1,936	71,697	1,935	765	4,656	89	520	-676	-4,136
1973	127	3	53,587	1,425	53,460	1,422	1,099	6,578	84	482	-1,015	-6,097
1975	940	24	66,309	1,761	65,369	1,738	712	4,227	74	427	-638	-3,800
1976	1,203	30	80,021	1,597	58,818	1,567	741	4,434	79	452	-662	-3,982
1977	1,647	41	54,312	1,442	52,665	1,401	800	4,728	70	408	-730	-4,321
1978	2,953	74	40,714	1,078	37,761	1,004	733	4,364	74	432	-658	-3,932
1979	2,058	51	66,042	1,753	63,989	1,702	707	4,108	86	505	-621	-3,603
1980	1,194	30	91,742	2,421	90,548	2,391	603	3,463	94	551	-509	-2,912
1981	1,043	26	112,541	2,944	111,498	2,918	584	3,303	134	781	-450	-2,522
1982	742	19	106,277	2,875	105,535	2,768	593	3,358	211	1,224	-382	-2,135
1983	1,271	32	77,772	2,045	76,501	2,013	629	3,568	210	1,217	-419	-2,351
1984	1,286	32	81,482	2,151	80,196	2,119	796	4,131	198	1,161	-538	-2,970
1985	1,952	49	92,680	2,438	90,728	2,389	681	3,796	211	1,225	-470	-2,571
1986	2,212	55	85,518	2,248	83,306	2,193	747	4,199	230	1,344	-516	-2,855
1987	1,747	44	79,607	2,093	77,860	2,049	731	4,095	224	1,311	-507	-2,784
1988	2,134	53	95,023	2,500	92,889	2,446	778	4,356	242	1,412	-536	-2,944

¹ Beginning 1977, includes strategic petroleum reserve imports.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

NO. 960. CRUDE OIL IMPORTS INTO U.S., BY COUNTRY OF ORIGIN: 1970 TO 1988

COUNTRY OF ORIGIN	IMPORTS (mil. 42-gal. bbls.)													PERCENT DISTRIBUTION			
	1970	1973	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1970	1980	1988	
Total	483	1,184	1,498	2,360	1,926	1,605	1,273	1,215	1,254	1,168	1,525	1,706	1,869	100.0	100.0	100.0	
Canada	245	365	219	99	73	60	78	100	125	171	208	222	249	50.7	3.8	13.3	
Mexico	-	(2)	26	160	186	171	235	280	241	261	227	230	227	-	9.6	12.1	
Norway	-	(2)	22	42	45	42	37	34	30	32	36	34	29	-	2.7	1.2	
Trinidad-Tobago	-	-	-	-	72	63	135	161	133	138	102	116	111	93	(2)	2.2	1.4
United Kingdom	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.3	5.0	
OPEC	222	787	1,171	1,666	1,414	1,067	633	640	553	479	771	876	987	46.0	73.4	52.8	
Algeria	2	44	96	222	167	95	33	64	71	31	28	42	21	4	8.7	1.1	
Ecuador	-	17	21	11	6	14	12	21	17	20	23	8	12	-	.3	.6	
Gabon	-	-	10	15	9	13	14	21	21	19	9	13	6	-	.5	.3	
Indonesia	26	73	138	139	115	116	82	115	111	107	108	96	68	5.4	6.0	3.6	
Iran	12	79	102	108	8	-	13	18	4	10	7	36	68	2.5	2.2	-	
Iraq	-	2	(2)	32	10	-	1	4	5	17	29	36	126	-	5	6.7	
Kuwait	12	15	1	2	10	-	1	3	9	-	-	-	29	2.5	.5	1.8	
Libya	17	49	81	234	200	116	8	-	-	-	-	-	-	3.5	10.4	-	
Nigeria	17	164	272	390	308	223	186	110	76	102	160	193	222	3.5	16.0	11.9	
Qatar	-	3	7	11	8	3	3	-	1	-	4	-	-	-	.4	-	
Saudi Arabia	15	169	256	492	458	406	194	117	113	48	226	234	330	3.1	23.8	17.7	
United Arab Emirates	23	26	43	103	63	26	30	7	33	13	14	21	8	4.8	3.3	.4	
Venezuela	98	126	144	107	57	54	56	60	93	112	152	178	181	20.3	3.0	8.6	
Other	16	30	35	110	95	93	95	108	124	109	150	225	264	3.3	4.9	14.1	

- Represents zero. Z Less than 500,000 or less than .05 percent.

Source: 1970-1975, U.S. Bureau of Mines, *Minerals Yearbook* and *Mineral Industry Surveys*; 1979-1980, U.S. Energy Information Administration, *Petroleum Statement*, annual; thereafter, U.S. Energy Information Administration, *Petroleum Supply Annual*.

NO. 961. CRUDE OIL AND REFINED PRODUCTS—SUMMARY: 1973 TO 1989

[Barrels of 42 gallons. Data are averages]

YEAR AND MONTH	CRUDE OIL (1,000 bbl. per day)					REFINED OIL PRODUCTS (1,000 bbl. per day)				Total oil imports ² (1,000 bbl. per day)	CRUDE OIL STOCKS ³ (mil. bbl.)	
	Input to refiner- ies	Do- mestic pro- duction	Imports		Ex- ports	Do- mestic de- mand	Im- ports	Ex- ports	Total		Strate- gic re- serve	
			Total ¹	Strate- gic re- serve								
1973	12,431	9,208	3,244	(x)	2	17,308	3,012	229	6,256	242	(x)	
1974	12,133	8,774	3,477	(x)	3	16,653	2,635	218	6,112	265	(x)	
1975	12,442	8,375	4,105	(x)	6	16,322	1,951	204	6,056	271	(x)	
1976	13,416	8,132	5,287	(x)	8	17,461	2,026	215	7,313	285	(x)	
1977	14,602	8,245	6,615	21	50	18,431	2,193	193	8,607	348	7	
1978	14,739	8,707	6,356	162	158	18,847	2,008	204	8,363	376	67	
1979	14,648	8,552	6,519	67	235	18,513	1,937	236	8,456	430	91	
1980	13,481	8,597	5,263	44	287	17,056	1,646	258	6,909	466	108	
1981	12,470	8,572	4,396	256	228	16,058	1,599	367	5,996	594	230	
1982	11,774	8,649	3,488	165	236	15,296	1,625	579	5,113	644	294	
1983	11,685	8,688	3,329	234	164	15,231	1,722	575	5,051	723	379	
1984	12,044	8,879	3,426	197	181	15,726	2,011	541	5,437	796	451	
1985	12,002	8,971	3,201	118	204	15,726	1,866	577	5,067	814	493	
1986	12,716	8,680	4,178	48	154	16,281	2,045	631	6,224	843	512	
1987	12,854	8,349	4,674	73	151	16,665	2,004	613	6,678	890	541	
1988	13,246	8,140	5,107	51	155	17,283	2,295	661	7,402	890	560	
1st qtr.	13,016	8,374	4,668	23	213	17,612	2,076	622	6,944	899	545	
2d qtr.	13,487	8,170	5,322	70	138	17,059	1,917	800	7,239	909	550	
3d qtr.	13,261	7,895	5,212	84	119	17,072	2,294	554	7,506	883	555	
4th qtr.	13,381	7,942	5,230	27	129	18,365	2,497	879	7,727	890	560	
1989 ⁴	13,227	7,772	5,521	68	153	17,124	2,288	670	7,809	908	572	
1st qtr.	12,963	7,610	4,993	75	156	17,907	2,400	704	7,392	893	566	
2d qtr.	13,917	7,726	5,934	50	151	16,848	1,866	695	7,800	908	572	

X Not applicable. ¹ Includes Strategic Petroleum Reserve. ² Crude oil (including Strategic Petroleum Reserve imports) plus refined products. ³ End of year or quarter. ⁴ Preliminary.

Source: U.S. Energy Information Administration, *Monthly Energy Review*, April 1989.

NO. 962. ENERGY PRODUCING COMPANIES—SELECTED FINANCIAL AND INVESTMENT INDICATORS: 1978 TO 1987

[Based on data from major publicly-owned domestic crude oil producing companies which either had at least one percent of domestic production or reserves of oil, natural gas, coal, or uranium, or at least one percent of refining capacity or petroleum product sales. There were 26 companies during 1978 through 1982; 25 in 1983; and 22 during 1984 through 1987]

ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
INCOME STATEMENT (bil. dol.)										
Operating revenues	294.8	392.6	518.6	575.7	549.7	511.0	517.4	492.5	378.5	417.4
Operating expenses	265.0	345.8	455.9	520.8	504.2	462.8	467.3	444.2	354.4	383.7
Operating income	29.8	46.8	62.7	54.8	45.5	48.2	50.1	48.3	24.0	33.7
Pretax income	30.2	48.6	66.9	60.0	45.2	47.4	47.6	43.6	20.6	25.0
Net income	13.9	23.5	31.0	30.0	21.8	21.9	21.3	17.4	9.2	11.3
Funds from operations ¹	31.2	45.4	59.0	61.6	60.4	60.7	63.6	63.5	53.1	51.6
BALANCE SHEET (bil. dol.)										
Net property, plant, and equipment	138.1	159.3	188.9	224.9	265.5	278.4	292.4	297.7	291.1	297.6
Net investment in place ²	148.1	169.9	202.6	240.8	282.5	296.3	309.1	315.4	310.0	316.4
Total assets	237.1	282.8	333.0	372.5	411.9	421.8	442.9	438.4	427.0	443.6
RATIOS (percent)										
Net income to operating revenues	4.7	6.0	6.0	5.2	4.0	4.3	4.1	3.5	2.4	2.7
Net income to total assets	5.9	8.3	9.3	8.0	5.3	5.2	5.0	4.0	2.2	2.5
Net income to stockholders' equity	12.8	18.8	21.1	18.1	11.9	11.4	12.1	10.5	5.6	6.8
Long-term debt to stockholders' equity ³	35.6	33.7	31.5	32.2	37.1	34.8	49.5	54.3	56.0	57.6
Long-term debt to total assets ³	16.3	14.9	13.9	14.3	16.6	15.9	20.6	20.5	21.6	21.5

¹ The sum of net income, depreciation, depletion and amortization, deferred taxes, dry hole expenses, etc. ² Composed of net property, plant and equipment plus investment and advances to unconsolidated subsidiaries. ³ Long-term debt includes amounts applicable to capitalized leases.

Source: U.S. Energy Information Administration, *Performance Profiles of Major Energy Producers*, annual.

NO. 963. PETROLEUM AND COAL PRODUCTS CORPORATIONS—SALES, NET PROFIT, AND PROFIT PER DOLLAR OF SALES: 1975 TO 1988

[Represents SIC group 29. Profit rates are averages of quarterly figures at annual rates. Beginning 1986, excludes estimates for corporations with less than \$250,000 in assets]

ITEM	Unit	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Sales	Bil. dol.....	121.8	180.3	242.7	333.2	376.1	357.1	312.7	338.4	320.9	226.5	246.3	256.1
Net profit:													
Before income taxes.....	Bil. dol.....	13.3	19.2	32.2	39.1	35.3	27.8	27.1	24.5	17.7	9.8	14.2	27.4
After income taxes.....	Bil. dol.....	9.3	12.8	21.9	25.5	23.7	19.7	19.3	17.2	12.7	8.8	10.9	21.4
Depreciation ¹	Bil. dol.....	5.6	7.7	9.5	11.6	13.7	16.3	17.5	20.7	22.1	21.9	20.3	19.9
Profits per dollar of sales:													
Before income taxes.....	Cents.....	10.9	10.6	13.3	11.7	9.4	7.8	8.7	7.2	5.5	4.1	5.8	10.7
After income taxes.....	Cents.....	7.6	7.1	9.0	7.7	6.3	5.5	6.2	5.1	4.0	3.8	4.5	8.4
Profits on stockholders' equity:													
Before income taxes.....	Percent.....	17.9	19.8	30.0	30.7	25.6	18.7	17.8	14.3	11.7	6.8	10.1	19.3
After income taxes.....	Percent.....	12.5	13.3	20.4	20.0	17.2	13.2	12.7	10.0	8.5	6.1	7.7	15.1

¹ Includes depletion and accelerated amortization of emergency facilities.

Source: Through 1981, U.S. Federal Trade Commission and, beginning 1982, U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations*.

NO. 964. MAJOR PETROLEUM COMPANIES—FINANCIAL DATA SUMMARY: 1973 TO 1988

[Data represent a composite of approximately 42 major worldwide petroleum companies aggregated on a consolidated, total company basis]

ITEM	1973	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
FINANCIAL DATA (bil. dol.)												
Net income	11.8	11.6	32.8	32.9	29.2	21.1	20.6	22.7	19.4	10.8	15.0	24.7
Depreciation, depletion, etc.....	10.5	11.3	24.9	32.5	34.9	37.2	37.4	45.3	53.0	43.7	45.0	36.2
Cash flow ¹	22.3	22.8	57.7	65.4	64.1	58.3	58.1	68.0	72.4	54.5	60.0	62.9
Dividends paid.....	4.0	4.7	8.0	9.3	10.6	10.6	10.5	11.6	12.0	12.1	12.4	14.1
Net internal funds available for investment or debt repayment ²	18.3	18.1	49.7	56.1	53.5	47.7	47.6	56.4	60.4	42.4	47.6	48.8
Capital and exploratory expenditures.....	16.3	26.9	51.1	62.1	79.2	67.8	50.7	57.5	58.3	38.3	50.1	63.2
Long-term capitalization.....	102.9	121.1	196.9	211.4	248.1	243.8	240.0	285.7	272.1	279.9	282.2	290.0
Long-term debt.....	22.5	28.9	48.1	49.8	59.2	62.6	61.0	95.8	93.5	95.5	88.4	90.6
Preferred stock.....	.4	.4	.9	2.0	2.0	3.5	3.5	5.2	3.3	3.7	4.1	3.7
Common stock and retained earnings ³	80.0	91.9	147.9	159.6	186.9	177.7	175.5	184.7	175.3	180.7	189.7	195.7
Excess of expenditures over cash income ⁴	-2.0	8.9	1.4	6.0	25.7	20.1	3.1	1.1	2.1	3.0	-2.5	-14.4
RATIOS ⁵ (percent)												
Long-term debt to long-term capitalization.....	22.0	23.8	24.4	23.6	23.8	25.7	25.4	33.5	34.4	34.1	31.3	31.2
Net income to total average capital.....	12.0	10.0	17.8	17.0	10.4	8.6	8.8	8.6	7.0	4.0	4.6	8.6
Net income to average common equity.....	15.6	13.1	24.0	22.5	17.7	11.5	12.0	12.5	10.8	6.2	7.3	12.8

¹ Generally represents internally-generated funds from operations. Sum of net income and noncash charges such as depreciation, depletion, and amortization. ² Cash flow minus dividends paid. ³ Includes common stock, capital surplus, and earned surplus accounts after adjustments. ⁴ Capital and exploratory expenditures plus dividends paid minus cash flow.

⁵ Represents approximate year-to-year comparisons because of changes in the makeup of the group due to mergers and other corporate changes.

Source: Carl H. Pforzheimer & Co., New York, NY, *Comparative Oil Company Statements, 1988-1987*, and earlier reports.

NO. 965. ELECTRIC UTILITY SALES AND AVERAGE PRICES, BY END-USE SECTOR: 1970 TO 1988

[Prior to 1980, covers Class A and B privately-owned electric utilities; thereafter, Class A utilities whose electric operating revenues were \$100 million or more during the previous year]

YEAR	SALES (bil. kWh)				AVERAGE PRICE OF ELECTRICITY SOLD (cents per kWh)							
	Total ¹	Residential	Commercial	Industrial	Current dollars				Constant (1982) dollars ²			
					Total ¹	Residential	Commercial	Industrial	Total ¹	Residential	Commercial	Industrial
1970.....	1,392	466	307	571	1.67	2.22	2.08	1.02	3.98	5.29	4.95	2.43
1972.....	1,595	539	359	641	1.86	2.42	2.29	1.16	4.00	5.20	4.92	2.49
1973.....	1,713	579	388	686	1.96	2.54	2.41	1.25	3.96	5.13	4.87	2.53
1974.....	1,706	578	385	685	2.49	3.10	3.04	1.69	4.61	5.74	5.63	3.13
1975.....	1,747	588	403	688	2.92	3.51	3.45	2.07	4.92	5.92	5.82	3.49
1976.....	1,855	606	425	754	3.09	3.73	3.69	2.21	4.90	5.91	5.85	3.50
1977.....	1,948	645	447	786	3.42	4.05	4.09	2.50	5.08	6.02	6.08	3.71
1978.....	2,018	674	461	809	3.69	4.31	4.36	2.79	5.11	5.97	6.04	3.86
1979.....	2,071	683	473	842	3.99	4.64	4.68	3.05	5.08	5.90	5.95	3.88
1980.....	2,094	717	488	815	4.73	5.36	5.48	3.69	5.52	6.25	6.39	4.31
1981.....	2,147	722	514	828	5.46	6.20	6.29	4.29	5.61	6.60	6.69	4.56
1982.....	2,086	730	526	745	6.13	6.86	6.86	4.95	6.13	6.86	6.86	4.95
1983.....	2,151	751	544	776	6.30	7.18	7.02	4.96	6.06	6.91	6.76	4.77
1984.....	2,285	780	577	839	6.52	7.54	7.33	5.04	6.05	7.00	6.81	4.68
1985.....	2,326	794	605	835	6.71	7.79	7.47	5.16	6.05	7.02	6.74	4.65
1986.....	2,351	818	641	808	6.70	7.79	7.41	5.10	5.88	6.84	6.51	4.48
1987.....	2,457	850	660	858	6.57	7.78	7.25	4.86	5.58	6.61	6.16	4.13
1988.....	2,578	893	699	896	6.52	7.79	7.15	4.80	5.36	6.40	5.88	3.94

¹ Includes other sectors not shown separately. ² Based on the GNP implicit price deflator; see table 775.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

NO. 966. ELECTRIC UTILITY INDUSTRY—ELECTRIC ENERGY NET GENERATION, AND NET SUMMER CAPABILITY BY TYPE OF PRIME MOVER, AND CONSUMPTION OF FUELS: 1970 TO 1988

[Net Generation for calendar years; other data as of December 31. See also *Historical Statistics, Colonial Times to 1970*, series S 32-52, S 76-82, and S 86-107]

ITEM	Unit	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988
NET GENERATION											
Total	Bil. kWh	1,532	1,918	2,286	2,241	2,310	2,416	2,470	2,487	2,572	2,702
Average annual change ¹	Percent.....	7.3	4.6	3.6	2.3	3.1	4.6	2.2	.7	3.4	5.0
Net generation, kWh per kW of net summer capability ²	Rate.....	4,554	3,903	3,952	3,652	3,720	3,805	3,771	3,734	3,809	
Investor owned.....	Bil. kWh.....	1,183	1,487	1,783	1,712	1,764	1,849	1,918	1,928	2,022	
Percent of total utilities.....	Percent.....	77.2	77.5	78.0	76.4	76.4	76.5	77.7	77.5	78.6	(NA)
Publicly owned.....	Bil. kWh.....	349	431	503	530	546	567	552	559	550	
Municipal.....	Bil. kWh.....	71	82	87	77	73	75	74	79	86	
Federal.....	Bil. kWh.....	186	221	235	241	258	254	233	225	205	
Cooperatives and other.....	Bil. kWh.....	91	128	182	212	215	239	245	255	258	
Source of energy:											
Coal ³	Percent.....	46.0	44.6	51.0	53.4	54.8	55.9	57.2	56.2	57.4	56.9
Nuclear.....	Percent.....	1.4	9.0	11.0	12.6	12.7	13.6	15.5	16.6	17.7	19.5
Oil.....	Percent.....	12.0	15.1	10.8	6.5	6.3	5.0	4.1	5.5	4.6	5.5
Gas.....	Percent.....	24.3	15.6	15.1	13.6	11.9	12.3	11.8	10.0	10.6	9.4
Hydro.....	Percent.....	16.2	15.6	12.1	13.8	14.4	13.3	11.4	11.7	9.7	8.3
Type of prime mover: ⁴											
Hydro.....	Bil. kWh.....	248	300	276	309	332	321	281	291	250	
Steam conventional ⁵	Bil. kWh.....	1,240	1,414	1,726	1,628	1,661	1,742	1,778	1,756	1,837	
Gas turbine.....	Bil. kWh.....	16	22	24	14	14	15	14	14	16	
Steam nuclear.....	Bil. kWh.....	22	173	251	283	294	328	384	414	455	
Internal combustion.....	Bil. kWh.....	6	6	4	2	2	2	2	2	2	
NET SUMMER CAPABILITY											
Total ⁶	Mil. kW	396	491	579	614	621	635	655	665	675	
Average annual change ¹	Percent.....	7.2	7.9	3.4	2.6	1.2	2.3	3.2	1.5	1.6	
Hydro.....	Mil. kW.....	64	78	82	83	84	85	89	89	90	
Steam conventional ⁷	Mil. kW.....	248	333	397	421	425	431	437	441	442	
Gas turbine.....	Mil. kW.....	13	37	43	44	43	44	44	43	43	
Steam nuclear.....	Mil. kW.....	7	37	52	60	63	70	79	85	94	
Internal combustion.....	Mil. kW.....	4	5	5	5	5	5	5	5	5	
NUMBER OF PRIME MOVERS											
Prime movers, total ⁸	Number	9,717		11,084					10,611	10,406	(NA)
Hydro.....	Number.....	3,108		3,275					3,489	3,488	
Steam conventional.....	Number.....	2,813		2,862					2,536	2,437	
Gas turbine.....	Number.....	658	(NA)	1,447	(NA)	(NA)	(NA)	(NA)	1,439	1,408	
Steam nuclear.....	Number.....	16		74					99	109	
Internal combustion.....	Number.....	3,118		3,410					2,998	2,917	
CONSUMPTION OF FUELS											
Net generation by fuel ⁹	Bil. kWh.....	1,284	1,618	2,010	1,932	1,978	2,095	2,189	2,196	2,322	
Average annual change ¹	Percent.....	7.7	3.3	2.2	-5.0	2.4	5.9	4.5	4	5.7	
Coal.....	Bil. kWh.....	704	853	1,162	1,192	1,259	1,342	1,402	1,386	1,464	
Percent of total.....	Percent.....	54.9	52.7	57.8	61.7	63.7	64.0	64.1	63.1	63.0	
Petroleum.....	Bil. kWh.....	184	289	246	147	144	120	100	137	118	
Gas.....	Bil. kWh.....	373	300	346	305	274	297	292	249	273	
Nuclear.....	Bil. kWh.....	22	173	251	283	294	328	384	414	455	
Fuel consumed:											
Total energy equivalent.....	Quad. Btu.....	13.40	15.19	18.57	17.49	17.75	18.53	18.79	18.59	19.39	
Coal.....	Mil. sh. tons.....	320	406	569	594	625	664	694	685	718	758
Oil.....	Mil. bbl.....	359	506	421	251	247	206	174	232	199	248
Gas.....	Bil cu. ft.....	3,932	3,158	3,682	3,226	2,911	3,111	3,044	2,602	2,844	2,635

NA Not available. ¹ Change from immediate prior year except for 1970, change from 1960. For explanation of average annual percent change, see Guide to Tabular Presentation. ² Net summer capability is the steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power as demonstrated by test at the time of summer peak demand. ³ Includes small percentage (5%) from wood and waste, geothermal, and petroleum coke. ⁴ A prime mover is the engine, turbine, water wheel, or similar machine which drives an electric generator. ⁵ Fossil fuels only. ⁶ Includes wind, solar thermal, and photovoltaic, not shown separately. ⁷ Includes fossil steam, wood, and waste. ⁸ Each prime mover type in combination plants counted separately. Includes geothermal, wind, and solar, not shown separately. ⁹ Includes small amounts of wood, waste, wind, geothermal, solar thermal, and photovoltaic.

Source: 1970, U.S. Federal Power Commission, *Electric Power Statistics*, and press releases; thereafter, U.S. Energy Information Administration, 1975 and 1980, *Power Production, Fuel Consumption, and Installed Capacity Data—Annual*, and unpublished data; thereafter, *Electric Power Annual, Annual Energy Review*, and unpublished data.

**No. 967. ELECTRIC UTILITY INDUSTRY—CAPABILITY, PEAK LOAD, AND CAPACITY MARGIN:
1970 TO 1988**

[Excludes Alaska and Hawaii. Capability represents the maximum kilowatt output with all power sources available and with hydraulic equipment under actual water conditions, allowing for maintenance, emergency outages, and system operating requirements. Capacity margin is the difference between capability and peak load]

YEAR	CAPABILITY AT THE TIME OF—				NON-COINCIDENT PEAK LOAD		CAPACITY MARGIN			
	Summer peak load ¹ (1,000 kW)		Winter peak load ¹ (1,000 kW)		Summer	Winter ¹	Summer		Winter	
	Amount	Change from prior year	Amount	Change from prior year			Amount (1,000 kW)	Percent of capability	Amount (1,000 kW)	Percent of capability
1970	326,900	26,600	339,050	27,600	274,650	248,550	52,250	16.0	90,500	26.7
1971	353,250	26,350	366,700	27,650	292,100	261,650	61,150	17.3	105,050	28.6
1972	381,700	28,450	394,050	27,350	319,150	290,950	62,550	16.4	103,100	26.2
1973	415,500	33,800	433,150	39,100	343,900	295,100	71,600	17.2	138,050	31.8
1974	444,400	28,900	467,400	34,250	349,250	302,500	95,150	21.4	164,900	35.3
1975	479,300	34,900	492,450	25,050	356,800	331,100	122,500	25.6	161,350	32.9
1976	498,750	19,450	511,000	18,550	370,900	349,850	127,850	25.6	161,150	31.5
1977	516,000	17,250	537,600	26,600	396,350	360,200	119,650	23.2	177,400	33.0
1978	545,700	29,700	581,550	23,950	408,050	383,100	135,650	24.9	178,450	31.8
1979 ²	544,506	-1,194	554,525	-7,025	398,424	368,676	146,082	26.8	185,849	33.5
1980	558,237	13,731	572,195	17,670	427,058	384,567	131,179	23.5	187,628	32.8
1981	572,219	13,982	586,569	14,374	428,295	391,106	143,924	25.2	188,769	32.2
1982	586,142	13,923	598,066	11,497	414,909	373,316	171,233	29.2	224,081	37.5
1983	596,449	10,307	612,453	14,387	447,526	410,779	148,923	25.0	201,874	32.9
1984	604,240	7,791	622,125	9,673	451,150	436,374	153,090	25.3	185,751	33.9
1985	621,587	17,357	636,475	14,350	460,503	423,660	161,084	25.9	212,815	29.4
1986	633,291	11,694	646,721	10,246	476,993	422,857	156,298	24.7	223,964	34.4
1987	648,118	14,827	662,977	16,256	496,185	448,277	151,933	23.4	214,700	32.6
1988	661,580	13,462	(NA)	(NA)	529,460	466,533	132,120	20.0	(NA)	(NA)

NA Not available. ¹ Prior to 1973, data was for the month of December. ² Change from 1969. ³ Beginning 1979, data are not entirely comparable with prior years due to change in data source.

Source: Edison Electric Institute, Washington, DC, *Statistical Yearbook of the Electric Utility Industry*, annual.

**No. 968. ELECTRIC ENERGY—NET GENERATION AND INSTALLED GENERATING CAPACITY, BY STATE:
1980 TO 1988**

[Capacity as of Dec. 31. Covers utilities for public use]

DIVISION AND STATE	NET GENERATION (bil. kWh)				INSTALLED CAPACITY (mil. kW)		DIVISION AND STATE	NET GENERATION (bil. kWh)				INSTALLED CAPACITY (mil. kW)	
	1980	1987	1988		1980	1988		1980	1987	1988		1980	1988
			Total	Percent from coal						Total	Percent from coal		
U.S.	2,286.4	2,572.1	2,704.3	57.0	613.5	723.9	S.A.—Con.						
N.E.	78.2	87.8	93.4	18.2	21.1	22.6	VA	34.3	42.7	45.2	47.4	11.7	13.6
ME	7.9	8.3	9.5	(NA)	2.4	2.4	WV	70.8	78.4	81.3	99.3	15.2	15.2
NH	6.0	6.0	7.0	45.7	1.6	1.4	NC	72.1	78.8	78.4	58.8	15.6	20.9
VT	3.8	4.6	5.0	(NA)	.9	1.1	SC	41.9	64.4	65.2	36.0	11.7	16.3
MA	34.8	34.7	34.7	33.7	9.6	10.0	GA	63.3	65.8	92.4	78.7	16.3	21.7
RI	1.0	.8	.8	.3	.3	.3	FL	95.9	110.8	124.1	48.4	29.0	36.0
CT	24.7	33.2	36.4	5.8	6.3	7.4	E.S.C	214.1	217.5	228.9	81.2	53.3	61.9
M.A.	260.5	302.3	317.8	42.8	78.4	83.7	KY	57.1	67.5	76.4	96.6	13.6	16.6
NY	108.6	117.6	124.7	18.3	31.4	33.2	TN	60.2	58.3	60.0	85.4	15.9	18.2
NJ	29.4	39.3	40.2	17.8	12.6	14.6	AL	78.3	69.3	67.5	72.3	18.2	19.9
PA	122.5	145.4	152.9	69.5	34.4	35.9	MS	18.5	22.4	25.1	48.0	5.5	7.2
E.N.C	397.0	439.2	465.2	75.4	107.9	121.4	W.S.C	313.1	343.0	355.8	49.3	84.7	104.5
OH	110.2	119.7	124.0	92.4	27.4	27.6	AR	19.7	36.3	33.8	58.9	7.2	9.8
IN	70.6	78.6	84.0	98.6	17.1	21.5	LA	45.7	51.3	59.8	32.5	12.9	18.2
IL	103.4	109.9	123.3	43.0	29.9	36.9	OK	44.6	42.7	44.0	55.1	11.3	13.6
MI	74.8	87.0	88.9	77.2	22.7	24.2	TX	203.0	212.6	221.2	51.0	53.3	62.9
WI	37.8	44.0	45.0	70.8	10.7	11.2	Mt.	158.8	216.1	239.5	75.5	35.8	51.9
W.N.C	168.2	195.2	215.0	75.6	49.0	58.2	MT	15.5	20.9	24.8	66.3	3.2	4.9
MN	31.5	34.4	40.3	66.4	8.8	9.4	ID	9.5	8.1	6.7	(NA)	2.0	2.1
IA	21.8	25.5	27.7	84.2	7.3	8.5	WY	22.4	37.4	39.1	97.8	4.1	5.9
MO	48.9	55.1	59.7	82.1	13.8	16.6	CO	23.6	28.8	30.9	90.0	6.1	7.3
ND	15.8	22.6	27.4	93.0	3.4	4.7	NM	24.7	25.6	26.4	91.9	5.0	5.6
SD	8.6	6.3	7.9	33.0	2.2	2.6	AZ	36.9	51.6	61.6	46.1	9.4	15.9
NE	16.3	20.5	20.6	59.2	5.1	5.7	UT	12.1	26.3	25.6	97.2	2.1	5.2
KS	25.1	30.8	31.4	73.6	8.3	10.7	NV	14.1	17.4	20.3	82.6	3.9	5.0
S.A.	417.8	505.9	526.3	61.4	111.5	136.9	Pac.	278.8	265.2	262.4	3.4	71.9	82.8
DE	6.7	8.5	9.0	64.6	1.6	1.9	WA	92.3	83.8	83.6	10.4	23.0	23.3
MD	32.2	36.3	40.4	57.7	9.2	10.4	OR	36.6	39.7	41.0	-7	8.5	10.4
DC	.7	.2	.5	(NA)	1.2	.9	CA	140.3	130.3	126.0	(NA)	37.8	45.9
							AK	3.1	4.1	4.2	7.5	1.1	1.7
							HI	6.5	7.2	7.6	(NA)	1.4	1.5

- Represents or rounds to zero. NA Not available.

Source: U.S. Energy Information Administration, 1980, *Power Production, Fuel Consumption, and Installed Capacity Data*, annual; thereafter, *Electric Power Annual and Inventory of Power Plants in the United States*, annual.

NO. 969. ELECTRIC UTILITY GENERATING UNITS AND NAMEPLATE CAPACITY, BY PRIME MOVER: 1970 TO 1987

[Capacity as of Dec. 31. Several generating units of one or more prime movers may be located at a generating plant. For definition of prime mover, see table 966, footnote 4]

TYPE AND SIZE OF PRIME MOVER	INVESTOR OWNED						PUBLICLY OWNED					
	Number of units			Nameplate capacity (mil. kW)			Number of units			Nameplate capacity (mil. kW)		
	1970	1980	1987	1970	1980	1987	1970	1980	1987	1970	1980	1987
Total	5,398	6,145	5,677	257.3	481.6	552.8	4,319	4,939	4,729	79.1	140.3	165.3
Steam, conventional.....	1,943	1,987	1,669	216.8	364.8	389.3	870	875	768	37.8	64.6	81.9
Under 100,000 kW.....	1,209	990	659	45.6	40.6	32.0	753	684	539	12.2	13.5	13.3
100,000-500,000 kW.....	664	758	793	128.0	162.4	166.4	110	164	193	20.4	34.6	43.8
Over 500,000 kW.....	70	239	277	43.2	161.8	190.9	7	27	36	5.2	16.4	25.0
Steam, nuclear.....	15	64	97	5.8	47.1	89.5	1	10	12	1.3	8.6	12.2
Over 500,000 kW.....	7	56	91	4.4	45.4	88.0	1	9	12	1.3	8.5	12.2
Hydro.....	2,036	2,068	2,155	19.1	24.8	29.2	1,072	1,207	1,333	36.1	53.7	56.8
Gas turbine.....	587	1,171	1,122	14.0	42.1	41.8	71	276	286	1.0	9.7	10.6
Over 25,000 kW.....	115	519	511	5.7	30.0	30.4	-	127	138	1.0	7.1	8.0
Internal combustion.....	813	839	602	1.5	1.7	1.4	2,305	2,571	2,315	2.9	3.8	3.7
Under 5,000 kW.....	797	812	576	1.3	1.4	1.1	2,279	2,484	2,207	2.7	3.1	2.9
Over 5,000 kW.....	16	27	26	.2	.4	.3	26	87	108	.3	.7	.8
Other ¹	4	16	32	.1	1.0	1.6	-	-	15	-	-	.1

- Represents zero. ¹ Includes geothermal, wind, and solar.

Source: U.S. Energy Information Administration, unpublished data.

NO. 970. ELECTRIC ENERGY SALES, BY CLASS OF SERVICE, 1970 TO 1988, AND BY STATE, 1988

[In billions of kilowatthours]

YEAR, DIVISION, AND STATE	Total ¹	Residential	Commercial	Industrial	DIVISION AND STATE	Total ¹	Residential	Commercial	Industrial
1970.....	1,392.3	466.3	306.7	570.9	South Atlantic	499.9	199.2	139.5	145.4
1973.....	1,712.9	579.2	368.3	586.1	Delaware.....	7.5	2.5	2.1	2.9
1975.....	1,747.1	586.1	403.9	587.7	Maryland.....	56.7	19.9	15.8	20.3
1980.....	2,094.4	717.5	488.2	815.1	Virginia.....	70.1	28.2	18.8	15.7
1981.....	2,147.1	722.3	514.3	825.7	West Virginia.....	22.4	7.5	4.8	9.9
1982.....	2,086.4	729.5	526.4	744.9	North Carolina.....	85.5	32.2	21.5	30.2
1983.....	2,151.0	750.9	543.8	776.0	South Carolina.....	52.8	17.2	10.8	24.1
1984.....	2,278.4	777.7	578.3	840.6	Georgia.....	74.3	27.6	19.9	26.0
1985.....	2,309.5	791.0	609.0	824.5	Florida.....	130.2	64.0	45.9	16.4
1986.....	2,350.8	817.7	641.5	808.3	East South Central	211.7	75.8	33.5	97.8
1987.....	2,457.3	850.4	660.4	858.2	Kentucky.....	54.1	16.8	8.4	26.4
1988, total	2,578.1	892.9	699.1	896.5	Tennessee.....	72.9	28.0	9.5	34.4
New England	102.4	37.1	36.2	27.2	Alabama.....	56.6	19.6	9.6	26.8
Maine.....	11.3	3.9	2.6	4.6	Mississippi.....	28.1	11.4	5.9	10.1
New Hampshire.....	8.8	3.5	1.9	3.3	West South Central	347.0	121.8	88.2	124.8
Vermont.....	4.4	1.6	1.5	1.3	Arkansas.....	25.3	9.9	5.8	8.9
Massachusetts.....	44.7	15.5	17.9	10.2	Louisiana.....	60.0	20.1	13.1	23.6
Rhode Island.....	6.2	2.3	2.4	1.4	Oklahoma.....	37.3	14.5	10.1	10.7
Connecticut.....	26.9	10.3	10.0	6.3	Texas.....	224.3	77.3	59.2	81.6
Middle Atlantic	300.6	95.9	99.0	92.3	Mountain	150.3	47.3	46.3	49.8
New York.....	125.6	37.5	46.6	30.2	Montana.....	12.9	3.3	2.6	6.4
New Jersey.....	62.1	20.7	25.1	15.8	Idaho.....	17.2	5.4	4.6	6.8
Pennsylvania.....	112.9	37.8	27.3	46.3	Wyoming.....	11.0	1.8	2.1	7.0
East North Central	446.4	136.9	106.3	188.5	Colorado.....	29.3	9.6	12.7	6.3
Ohio.....	134.3	38.7	29.0	62.2	New Mexico.....	12.8	3.4	4.3	4.0
Indiana.....	71.7	22.5	15.1	33.5	Arizona.....	38.9	14.7	12.3	9.3
Illinois.....	110.0	34.0	30.6	37.9	Utah.....	14.5	4.2	5.3	5.3
Michigan.....	82.5	25.3	19.5	36.3	Nevada.....	13.7	5.0	3.5	4.7
Wisconsin.....	47.9	16.4	12.1	18.6	Pacific	336.6	109.9	102.0	109.6
West North Central	183.2	68.9	48.1	61.2	Washington.....	84.8	27.2	16.9	36.9
Minnesota.....	45.7	15.0	7.8	22.1	Oregon.....	39.3	14.3	10.6	13.6
Iowa.....	28.8	10.7	6.3	11.0	California.....	200.6	64.6	70.7	55.0
Missouri.....	52.2	21.3	17.5	12.6	Alaska.....	4.1	1.6	1.8	.5
North Dakota.....	7.1	3.1	1.5	2.1	Hawaii.....	7.7	2.2	2.0	3.5
South Dakota.....	6.2	2.9	1.4	1.8					
Nebraska.....	17.3	6.8	5.0	4.1					
Kansas.....	25.8	9.1	8.6	7.7					

¹ Includes other service, not shown separately. ² Includes District of Columbia.

Source: U.S. Energy Information Administration, *Electric Power Annual, 1988*.

No. 971. ELECTRIC UTILITIES—GENERATION, SALES, REVENUE, AND CUSTOMERS: 1970 TO 1988

(Sales and revenue are to and from ultimate customers)

CLASS	Unit	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987, prel.	1988, prel.
Generation ¹	Bil. kWh	1,532	1,918	2,247	2,286	2,295	2,241	2,310	2,416	2,470	2,487	2,572	2,702
Sales ²	Bil. kWh	1,391	1,733	2,084	2,126	2,151	2,100	2,160	2,281	2,306	2,355	2,443	2,549
Residential or domestic	Bil. kWh	448	586	696	734	730	733	750	783	793	820	850	885
Percent of total	Percent	32.2	33.8	33.4	34.5	34.0	34.9	34.7	34.3	34.3	34.8	34.8	34.7
Commercial ³	Bil. kWh	313	418	495	524	522	517	546	578	606	629	659	696
Industrial ⁴	Bil. kWh	573	662	818	794	820	770	783	835	820	819	847	878
Revenue ⁵	Bil. dol	22.1	46.9	79.6	95.5	110.6	121.6	129.8	143.1	149.2	152.5	155.9	162.5
Residential or domestic	Bil. dol	9.4	18.8	30.8	37.6	42.4	47.2	51.2	56.1	58.6	60.9	63.2	66.3
Percent of total	Percent	42.7	40.1	38.7	39.4	38.3	38.8	39.5	39.2	39.3	39.9	40.5	40.8
Commercial ³	Bil. dol	6.3	13.5	22.3	27.4	31.3	34.2	37.1	41.3	44.1	45.4	46.8	49.1
Industrial ⁴	Bil. dol	5.4	12.7	23.8	27.3	33.0	35.9	36.6	40.8	41.4	40.9	40.6	41.8
Ultimate customers, Dec. 31 ²	Million	72.5	81.8	89.8	92.7	94.0	95.3	97.0	99.4	101.6	103.0	105.8	106.6
Residential or domestic	Million	64.0	72.6	79.6	82.2	83.3	84.4	85.8	87.9	89.8	91.0	93.2	93.0
Commercial ³	Million	7.9	8.6	9.4	9.7	9.8	10.0	10.3	10.6	10.9	11.1	11.5	11.6
Industrial ⁴	Million	.4	.4	.5	.5	.5	.5	.5	.5	.5	.5	.5	.5
Avg. kWh used per customer	1,000	19.4	21.4	23.5	23.2	23.0	22.2	22.5	23.2	22.9	23.1	23.3	24.0
Residential	1,000	7.1	8.2	8.8	9.0	8.8	8.7	8.8	9.0	8.9	9.1	9.2	9.5
Commercial ³	1,000	40.0	49.0	53.2	54.5	53.4	52.3	53.8	55.2	56.1	57.2	58.0	60.1
Avg. annual bill per customer	Dollar	307	579	897	1,040	1,184	1,285	1,349	1,453	1,482	1,494	1,489	1,532
Residential	Dollar	149	262	391	462	512	563	602	644	658	675	683	708
Commercial ³	Dollar	804	1,580	2,394	2,848	3,207	3,452	3,660	3,940	4,080	4,127	4,124	4,239
Avg. revenue per kWh sold	Cents	1.59	2.70	3.82	4.49	5.14	5.79	6.00	6.27	6.47	6.47	6.38	6.37
Residential	Cents	2.10	3.21	4.43	5.12	5.80	6.44	6.83	7.17	7.39	7.43	7.43	7.49
Commercial ³	Cents	2.01	3.23	4.50	5.22	6.00	6.61	6.80	7.14	7.27	7.22	7.11	7.05
Industrial ⁴	Cents	.95	1.92	2.91	3.44	4.03	4.66	4.68	4.88	5.04	4.99	4.79	4.76

¹ Source: 1970-1975, U.S. Federal Power Commission; thereafter, U.S. Energy Information Administration, *Monthly Energy Review*, January 1988. ² Includes other types not shown separately. ³ Small light and power. ⁴ Large light and power.

Source: Except as noted, Edison Electric Institute, Washington, DC, *Statistical Yearbook*.

No. 972. ELECTRIC UTILITIES—BALANCE SHEET AND INCOME ACCOUNT OF PRIVATELY OWNED COMPANIES: 1970 TO 1987

[In billions of dollars. As of Dec. 31. See also *Historical Statistics, Colonial Times to 1970*, series S 133-146 and V 197-212]

ITEM	CLASS A AND B INVESTOR-OWNED ELECTRIC UTILITIES ¹					MAJOR INVESTOR-OWNED ELECTRIC UTILITIES ²							
	1970	1975	1979	1980	1981	1981	1982	1983	1984	1985	1986	1987	
COMPOSITE BALANCE SHEET													
Assets and other debits	87.4	157.1	234.8	260.0	286.0	285.1	315.0	342.4	375.6	404.7	426.1	446.3	
Electric utility plant ³	93.3	160.7	242.3	266.9	292.7	291.6	321.2	347.9	377.2	396.9	419.5	434.6	
Depreciation and amortization	20.3	37.9	49.7	55.5	61.5	61.1	67.6	74.3	81.9	85.1	93.9	103.2	
Net electric utility plant	73.1	128.8	192.6	211.5	231.2	230.5	253.6	273.6	295.3	311.8	325.6	331.4	
Other utility plant	9.0	11.7	13.9	14.8	15.7	15.7	16.7	17.5	18.3	19.9	21.2	23.1	
Depreciation and amortization	2.1	3.1	4.2	4.5	4.9	4.9	5.3	5.6	6.1	6.5	7.2	7.8	
Net other utility plant	6.9	8.6	9.7	10.3	10.8	10.8	11.4	11.8	12.2	13.4	14.0	15.2	
Total utility plant	102.3	172.4	256.2	281.7	308.4	307.3	337.9	365.5	395.5	431.1	455.9	475.7	
Depreciation and amortization	22.3	35.0	53.9	60.0	66.4	66.0	72.9	80.1	88.0	97.4	107.7	118.7	
Net total utility plant	79.9	137.4	202.3	221.7	242.0	241.3	265.0	285.4	307.5	333.8	348.2	357.0	
Other property and investments	1.7	4.5	6.0	6.5	7.9	7.9	9.1	10.3	10.9	12.1	13.5	15.6	
Current and accrued assets	5.3	13.5	22.4	26.2	28.7	28.6	31.7	33.3	37.9	39.4	38.4	40.9	
Deferred debits	.4	1.7	4.1	5.5	7.3	7.3	9.3	13.4	19.3	19.4	26.1	32.9	
Liabilities and other credits ⁴	87.4	157.1	234.8	260.0	286.0	285.1	315.0	342.4	375.6	404.7	426.1	446.3	
Capital stock	20.8	37.8	53.8	59.3	63.9	63.7	70.3	75.9	79.0	82.8	81.6	79.9	
Other paid-in capital	4.4	11.5	19.4	21.5	24.0	23.9	27.7	31.0	33.3	35.5	37.6	40.3	
Retained earnings	9.4	14.7	21.0	22.7	25.0	24.8	27.9	31.9	37.1	41.1	46.0	48.0	
Subsidiary earnings ⁵	(x)	.6	1.0	1.7	1.3	1.3	1.6	1.7	2.0	2.2	2.3	2.6	
Long-term debt	41.9	70.8	95.7	105.3	115.5	115.2	124.0	131.6	140.7	152.7	157.2	158.4	
Current and accrued liabilities	7.3	13.7	23.4	26.3	28.4	26.1	28.6	29.5	32.0	32.0	34.0	39.3	
Deferred credits and operating reserves	.9	2.7	6.7	9.8	11.5	11.0	15.1	16.6	19.0	20.9	22.4	25.6	
Deferred income taxes ⁶	2.2	5.4	11.9	14.1	16.7	16.6	19.4	23.6	28.1	32.7	39.6	45.9	
COMPOSITE INCOME ACCOUNTS													
Electric operating revenues	19.8	44.6	72.9	87.1	102.3	101.7	109.3	116.7	128.3	135.3	136.3	138.5	
Electric operating expenses	15.3	36.1	61.0	73.4	86.0	85.5	91.1	96.2	105.5	111.1	110.2	111.6	
Net electric operating revenues	4.5	8.5	11.8	13.6	16.3	16.2	18.1	20.5	22.8	24.1	26.1	27.0	
Other utility operating income	.4	.5	.7	.7	.9	.7	.9	.9	1.1	1.2	1.1	1.1	
Total utility operating income	4.9	9.0	12.5	14.4	17.0	17.0	19.1	21.4	24.0	25.3	27.2	28.1	
Other income	.8	2.2	3.1	3.6	4.4	4.4	5.3	6.5	6.8	7.4	7.2	6.6	
Total income	5.7	11.3	15.6	18.0	21.4	21.3	24.4	28.0	30.8	32.7	34.4	34.6	
Income deductions	2.3	5.1	6.1	7.3	8.7	8.7	9.4	10.1	11.1	12.0	14.0	15.6	
Net income ⁷	3.4	6.1	9.5	10.7	12.7	12.7	15.0	17.9	19.7	18.7	20.4	19.0	

X Not applicable. ¹ There were 197 utilities of this type in 1983. ² There were 181 utilities of this type in 1987. ³ Includes construction work in progress. ⁴ Includes contributions in aid of construction through 1970. ⁵ Unappropriated undistributed. ⁶ Cumulative. ⁷ Beginning 1975, includes net extraordinary income.

Source: 1970-1975, U.S. Federal Power Commission and 1979-1981, U.S. Energy Information Administration, *Statistics of Privately Owned Electric Utilities in the United States*, annual; thereafter, U.S. Energy Information Administration, *Financial Statistics of Selected Electric Utilities*, annual.

NO. 973. NUCLEAR POWER PLANTS—NUMBER, CAPACITY, AND GENERATION: 1965 TO 1988

ITEM	1965	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988, prel.
Operable generating units ¹	6	18	54	70	74	77	80	86	95	100	107	108
Net summer capacity ² ³ (mil. kW).....	8	7.0	37.2	51.7	55.9	59.9	63.0	69.7	79.4	85.2	93.6	95.1
Electricity generated (bil. kWh).....	4	22	173	251	273	283	294	328	384	414	455	527
Percent of total electric utility generation.....	.4	1.4	9.0	11.0	11.9	12.6	12.7	13.6	15.5	16.6	17.7	19.5
Capacity factor ³	(NA)	(NA)	56.0	56.4	58.4	56.7	54.4	56.3	57.9	56.9	57.5	63.5

NA Not available. ¹ As of yearend. ² Net summer capacity is the peak steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary and other powerplant, as demonstrated by test at the time of summer peak demand. ³ Weighted average of monthly capacity factors. Monthly factors are derived by dividing actual monthly generation by the maximum possible generation for the month (hours in month times net maximum dependable capacity).

Source: U.S. Energy Information Administration, *Annual Energy Review*.

NO. 974. COMMERCIAL NUCLEAR POWER GENERATION, BY COUNTRY: 1970 TO 1987

[Generation for calendar years; other data as of December. Excludes Communist countries]

COUNTRY	REACTORS				ELECTRICITY GENERATED ¹ (bil. kWh)				GROSS CAPACITY (1,000 kW)			
	1970	1980	1985	1987	1970	1980	1985	1987	1970	1980	1985	1987
Total	64	208	295	339	73.9	617.8	1,259.6	1,491.7	15,186	128,847	223,486	271,145
U.S.....	15	74	89	108	23.2	265.2	399.1	480.9	5,211	56,529	80,327	99,702
Argentina.....	-	1	2	2	-	2.3	4.8	6.5	-	357	1,005	1,005
Belgium.....	1	3	7	7	.3	12.5	34.5	42.0	11	1,744	5,709	5,718
Brazil.....	-	-	1	1	-	-	3.4	.1	-	-	657	657
Canada.....	1	9	15	18	.9	40.4	62.9	80.6	220	5,588	10,332	12,864
China; Taiwan.....	-	2	6	6	-	8.2	28.7	33.1	-	1,272	5,146	5,146
Great Britain.....	27	33	37	38	26.5	37.2	59.6	56.2	4,783	9,012	12,280	12,940
Finland.....	-	4	4	4	-	7.0	18.8	19.4	-	2,296	2,400	2,400
France.....	4	22	44	53	5.7	61.2	224.0	265.5	1,606	15,412	38,595	52,095
India.....	2	4	5	6	2.2	2.9	4.4	5.5	400	860	1,095	1,330
Italy.....	3	4	3	3	3.3	2.2	7.0	2	631	1,490	1,930	1,330
Japan.....	3	22	33	36	3.3	81.0	152.0	186.2	828	15,117	24,686	28,046
Netherlands.....	1	2	2	2	.4	4.2	3.9	3.6	55	529	540	540
Pakistan.....	-	1	1	1	-	.1	.3	.3	-	137	137	137
South Africa.....	-	-	2	2	-	-	5.7	6.6	-	-	1,930	1,930
South Korea.....	-	1	4	7	-	3.5	16.5	37.8	-	587	2,866	5,808
Spain.....	1	3	8	8	.9	5.2	28.0	41.2	160	1,117	5,812	5,812
Sweden.....	1	8	12	12	(2)	26.7	58.6	67.2	12	5,770	9,915	10,095
Switzerland.....	1	4	5	5	1.9	14.3	22.4	23.0	364	2,034	3,079	3,079
West Germany.....	4	11	16	19	5.3	43.7	125.7	130.6	907	8,996	16,912	19,848
Yugoslavia.....	-	-	1	1	-	-	4.1	4.5	-	-	664	664

- Represents zero. Z Less than 50 million kWh. ¹ Gross.

Source: McGraw-Hill, Inc., New York, NY, *Nuclear News Week*, January issues (Copyright)

NO. 975. URANIUM SUPPLY, ENRICHMENT, AND DISCHARGED COMMERCIAL REACTOR FUEL: 1970 TO 1988

[Years ending Dec. 31, except as noted. For explanation of kilogram, see weights and measures]

ITEM	Unit	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988
URANIUM (U₃O₈)											
Production.....	Mil. lb.....	25.81	23.20	43.70	26.87	21.16	14.88	11.31	13.51	12.99	13.03
Exports.....	Mil. lb.....	4.20	1.00	5.80	6.20	3.30	2.20	5.30	1.60	1.00	3.30
Imports.....	Mil. lb.....	-	1.40	3.60	17.10	8.20	12.50	11.70	13.50	15.10	15.80
Delivered price.....	Dol./lb.....	(NA)	10.50	26.00	38.37	38.21	32.65	31.43	30.01	27.37	25.65
ENRICHMENT											
Enriched product ¹	Mil. Swu ²	5.10	9.92	10.69	12.36	³ 8.46	⁴ 11.2	⁴ 10.2	⁴ 8.6	⁴ 8.1	⁴ 9.9
For domestic customers.....	Mil. Swu ²	3.74	4.36	6.89	6.69	³ 4.69	⁴ 5.8	⁴ 6.0	⁴ 4.9	⁴ 3.4	⁴ 6.3
For foreign customers.....	Mil. Swu ²	1.36	5.56	3.80	5.67	³ 3.77	⁴ 5.4	⁴ 4.2	⁴ 3.7	⁴ 4.7	⁴ 3.6
Sales.....	Mil. dol.....	(NA)	376	1,379	2,185	2,329	⁴ 1,457	⁴ 1,403	⁴ 1,085	⁴ 921	⁴ 1,097
DISCHARGED COMMERCIAL REACTOR FUEL ⁵											
Annual discharge.....	Metric tons.....	82	499	1,193	1,014	1,224	1,257	1,330	1,431	1,615	(NA)
Inventory, yearend ⁶	Metric tons.....	118	1,538	6,434	8,525	9,749	11,006	12,481	13,881	(NA)	(NA)
On-site storage.....	Metric tons.....	(NA)	(NA)	(NA)	8,046	9,300	10,642	11,953	13,267	(NA)	(NA)
Off-site storage.....	Metric tons.....	(NA)	(NA)	(NA)	479	449	364	528	614	(NA)	(NA)

- Represents zero. NA Not available. ¹ Based on sales. ² Separative work units. The standard measure of enrichment services is based on operating tails assay in effect at the time the enriched product was placed in inventory. ³ Jan.-Sept. only. ⁴ Fiscal years. ⁵ Uranium content. Source: Nuclear Assurance Corporation, Atlanta, GA. ⁶ Reprocessed fuel not included as inventory.

Source: Except as noted, U.S. Energy Information Administration, *Annual Energy Review*, *Uranium Industry Annual* and unpublished data.

NO. 976. NUCLEAR POWER PLANTS—NUMBER OF UNITS, NET SUMMER CAPABILITY, AND NET GENERATION, BY STATE: 1988

DIVISION AND STATE	Number of units	NET SUMMER CAPABILITY		NET GENERATION		DIVISION AND STATE	Number of units	NET SUMMER CAPABILITY		NET GENERATION	
		Nu-clear, total (mil. kW)	Per-cent of total ¹	Nu-clear, total (mil. kWh)	Per-cent of total ¹			Nu-clear, total (mil. kW)	Per-cent of total ¹	Nu-clear, total (mil. kWh)	Per-cent of total ¹
U.S.	108	94.7	14.0	526,973	19.5	So. Atl.—Con.					
N. Eng.	8	5.4	24.4	32,499	34.8	NC.....	5	4.7	23.5	29,146	37.2
ME.....	1	.8	35.8	5,017	52.6	SC.....	7	6.3	42.8	40,746	62.5
NH.....	—	—	—	—	—	GA.....	3	2.6	13.4	15,149	6.3
VT.....	1	.5	45.0	4,114	81.5	FL.....	5	3.7	11.4	26,198	21.1
MA.....	2	.8	8.5	1,117	3.2	E. So. Cent.	8	8.3	14.3	26,504	11.6
RI.....	—	—	—	—	—	KY.....	—	—	—	—	—
CT.....	4	3.2	45.1	22,251	61.2	TN.....	2	2.3	13.5	3,940	6.6
Mid. Atl.	18	16.3	21.2	65,928	27.0	AL.....	5	4.6	25.7	12,981	18.2
NY.....	6	4.8	15.4	24,175	19.4	MS.....	1	1.1	16.4	9,582	38.2
NJ.....	4	3.9	28.6	23,890	59.5	W. So. Cent.	5	5.0	5.0	26,473	7.4
PA.....	8	7.7	23.8	37,862	24.8	AR.....	2	1.7	17.7	8,895	26.3
E. No. Cent.	23	20.1	18.2	106,893	23.0	LA.....	2	2.0	11.9	13,785	24.3
OH.....	2	2.0	7.9	8,455	6.8	OK.....	—	—	—	—	—
IN.....	—	—	—	—	—	TX.....	1	1.3	2.1	3,792	1.7
IL.....	13	12.6	38.7	69,166	56.1	Mt.	4	3.9	7.9	23,600	9.9
Mi.....	5	4.0	17.8	17,308	20.0	MT.....	—	—	—	—	—
WI.....	3	1.5	14.0	11,464	25.5	ID.....	—	—	—	—	—
W. No. Cent.	8	5.5	10.4	37,885	17.6	CO.....	1	.2	3.1	660	2.1
MN.....	3	1.5	17.7	12,288	30.5	NM.....	—	—	—	—	—
IA.....	1	.5	6.4	3,163	11.4	AZ.....	3	3.7	25.4	22,940	37.3
MO.....	1	1.1	7.5	8,935	15.0	UT.....	—	—	—	—	—
ND.....	—	—	—	—	—	NV.....	—	—	—	—	—
SD.....	—	—	—	—	—	Pac.	8	7.8	9.4	43,202	16.5
NE.....	2	1.3	23.1	8,828	33.1	WA.....	1	1.1	4.6	6,000	7.2
KS.....	1	1.1	11.9	8,650	21.2	OR.....	1	1.1	9.8	6,339	15.4
So. Atl.	26	22.4	17.7	144,010	27.4	CA.....	6	5.6	12.6	30,863	24.5
DE.....	—	—	—	—	—	AK.....	—	—	—	—	—
MD.....	2	1.7	17.2	11,734	29.1	HI.....	—	—	—	—	—
DC.....	—	—	—	—	—						
VA.....	4	3.4	26.5	21,037	46.6						

— Represents zero. ¹ For total capability and generation, see table 968.

Source: U.S. Energy Information Administration, *Electric Power Annual*, and *Inventory of Power Plants in the United States 1988*.

NO. 977. PRIVATELY OWNED GAS UTILITY INDUSTRY—BALANCE SHEET AND INCOME ACCOUNT: 1970 TO 1987

[In millions of dollars. The gas utility industry consists of pipeline and distribution companies. Excludes operations of companies distributing gas in bottles or tanks. See also *Historical Statistics, Colonial Times to 1970*, series S 205–218]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
COMPOSITE BALANCE SHEET										
Assets, total¹	34,929	50,286	75,851	86,894	95,003	100,499	98,933	104,478	104,008	110,025
Total utility plant.....	38,541	49,384	67,071	72,917	78,479	82,038	83,118	88,121	91,806	95,293
Depreciation and amortization.....	10,696	16,779	26,162	28,908	31,388	34,208	35,542	36,377	36,776	40,996
Utility plant (net).....	27,845	32,605	40,909	44,009	47,091	47,380	47,576	51,744	54,830	54,297
Investment and fund accounts ¹	3,024	9,198	15,530	19,368	20,750	21,531	21,872	23,871	21,850	26,039
Current and accrued assets.....	3,674	7,543	17,243	20,563	23,576	27,571	25,367	24,771	21,477	21,064
Deferred debits ²	386	940	2,169	2,954	3,586	3,567	4,118	4,092	5,851	8,625
Liabilities, total¹	34,929	50,286	75,851	86,894	95,003	100,499	98,933	104,478	104,008	110,025
Capitalization, total.....	28,646	39,044	51,382	57,512	62,390	65,040	64,458	65,799	66,660	67,009
Capital stock.....	12,965	19,500	29,315	33,041	36,161	38,488	38,959	39,517	39,902	38,637
Long-term debts.....	15,681	19,544	22,067	24,471	26,229	26,552	25,499	26,282	26,758	28,372
Current and accrued liabilities.....	4,832	8,158	18,119	22,134	23,809	25,150	23,043	26,125	23,855	26,744
Deferred income taxes ³	788	2,052	4,149	4,972	5,743	6,537	7,000	7,769	8,363	9,882
Other liabilities and credits.....	663	1,032	2,201	2,276	3,331	3,772	4,432	4,785	5,130	6,410
COMPOSITE INCOME ACCOUNT										
Operating revenues, total	16,380	30,550	85,918	101,593	115,673	116,096	115,491	103,945	80,978	69,637
Operating expenses ⁴	14,308	27,480	81,789	96,917	110,259	110,142	109,165	98,320	75,470	64,439
Operation and maintenance.....	11,636	22,957	74,508	89,108	101,548	100,495	98,953	88,572	66,032	56,042
Federal, State, and local taxes.....	1,569	2,763	4,847	5,056	5,694	6,508	7,146	6,590	6,133	5,226
Operating income.....	2,074	3,070	4,129	4,676	5,414	5,954	6,326	5,625	5,508	5,198
Utility operating income.....	2,159	3,221	4,471	5,087	5,818	6,303	6,647	6,030	5,943	5,496
Income before interest charges ¹	2,457	4,137	6,929	8,369	8,742	8,717	9,068	7,636	7,085	6,916
Net income ¹	1,427	2,502	4,194	5,145	5,072	5,158	5,619	3,785	3,390	3,007
Dividends.....	1,006	1,509	2,564	3,064	3,297	3,838	4,471	4,060	3,882	3,464

¹ Beginning 1975, not comparable with 1970 due to Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries. ² Includes capital stock discount and expense and reacquired securities. ³ Includes reserves for deferred income taxes. ⁴ Includes expenses not shown separately.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual. (Copyright.)

NO. 97B. GAS UTILITY INDUSTRY—SUMMARY: 1970 TO 1987

[Covers natural, manufactured, mixed, and liquid petroleum gas. Based on questionnaire mailed to all privately and municipally owned gas utilities in U.S., except those with annual revenues less than \$25,000. See also *Historical Statistics, Colonial Times to 1970, series S 190-204*]

ITEM	Unit	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	
Customers ¹		1,000	41,482	44,555	47,223	47,947	48,415	48,799	49,325	49,971	50,704	51,576
Residential	1,000	38,087	40,950	43,488	44,149	44,552	44,894	45,367	45,929	46,583	47,362	
Commercial	1,000	3,131	3,367	3,498	3,564	3,631	3,676	3,730	3,816	3,892	3,960	
Industrial and other	1,000	254	237	236	234	232	229	228	226	223	234	
Sales ²	Tril. Btu ³	16,044	14,883	15,413	15,375	14,183	12,858	13,162	12,618	11,125	10,543	
Residential	Tril. Btu	4,923	4,991	4,826	4,610	4,770	4,450	4,628	4,513	4,381	4,385	
Percent of total	Percent	30.7	33.6	31.3	30.0	33.6	34.6	35.2	35.8	39.4	41.6	
Commercial	Tril. Btu	2,007	2,387	2,453	2,376	2,471	2,298	2,396	2,338	2,239	2,156	
Industrial	Tril. Btu	8,439	6,837	7,957	8,239	6,795	5,970	5,991	5,635	4,338	3,648	
Other	Tril. Btu	674	648	177	150	147	140	147	130	167	155	
Revenues ²	Mil. dol.	10,283	19,101	48,303	56,110	63,200	65,837	67,496	63,293	51,201	45,482	
Residential	Mil. dol.	5,207	8,445	17,432	19,180	23,700	26,173	27,485	26,864	24,759	23,622	
Percent of total	Percent	50.6	44.2	36.1	34.2	37.5	39.8	40.7	42.4	48.1	51.9	
Commercial	Mil. dol.	1,620	3,302	8,183	9,266	11,868	12,659	13,205	12,722	11,274	10,271	
Industrial	Mil. dol.	3,181	6,745	22,215	27,124	27,200	26,315	26,094	23,056	14,495	11,069	
Other	Mil. dol.	274	608	473	520	634	690	712	621	673	530	
Prices per mil. Btu ³	Dollars	.54	1.29	3.13	3.65	4.46	5.12	5.13	5.02	4.60	4.32	
Residential	Dollars	1.06	1.69	3.61	4.16	4.97	5.88	5.94	5.95	5.65	5.39	
Commercial	Dollars	.81	1.38	3.34	3.91	4.72	5.51	5.51	5.44	5.04	4.77	
Industrial	Dollars	.38	.99	2.79	3.29	4.00	4.41	4.36	4.10	3.34	2.88	
Gas mains mileage ³	1,000	913	980	1,052	1,070	1,083	1,095	1,102	1,119	1,134	1,151	
Field and gathering	1,000	66	68	84	86	90	92	94	94	94	95	
Transmission	1,000	252	263	266	270	272	273	272	271	271	272	
Distribution	1,000	595	649	720	714	721	730	736	754	769	784	
Construction expenditures ⁴	1,000	595	649	720	714	721	730	736	754	769	784	
Transmission	1,000	595	649	720	714	721	730	736	754	769	784	
Distribution	1,000	1,019	590	5,350	5,389	5,839	4,078	4,645	5,671	5,342	5,328	
Production and storage	1,000	913	910	1,869	1,995	1,881	1,845	2,266	2,577	2,920	3,055	
Production and storage	1,000	370	831	1,546	1,672	1,690	746	543	965	983	358	

¹ Annual average. ² Excludes sales for resale. ³ For definition, see text, section 19. ⁴ Includes general.
Source: American Gas Association, Arlington, VA, *Gas Facts*, annual. (Copyright.)

NO. 979. GAS UTILITY INDUSTRY—CUSTOMERS, SALES, AND REVENUES, BY STATE: 1987

[See headnote, table 97B]

DIVISION AND STATE	CUSTOMERS ¹ (1,000)		SALES ³ (tril. Btu ⁴)		REVENUES ³ (mil. dol.)		DIVISION AND STATE	CUSTOMERS ¹ (1,000)		SALES ³ (tril. Btu ⁴)		REVENUES ³ (mil. dol.)	
	Total ²	Residential	Total ²	Residential	Total ²	Residential		Total ²	Residential	Total ²	Residential	Total ²	Residential
U.S.	51,576	47,362	10,543	4,365	45,492	23,622	So. Atl.—						
N. Eng.	1,923	1,753	370	163	2,042	1,116	Con.						
ME	16	12	3	1	18	4	VA	604	543	124	50	610	297
NH	68	59	12	6	72	37	WV	383	351	76	39	356	219
VT	21	18	5	2	27	12	NC	489	432	134	37	636	239
MA	1,172	1,078	231	100	1,200	645	SC	333	298	101	20	447	131
RI	194	176	32	17	186	114	GA	1,297	1,199	232	99	1,178	622
CT	452	410	87	38	540	303	FL	470	428	256	15	869	108
Mid. Atl.	8,558	7,897	1,393	769	7,783	4,888	E. So. Cent.	2,352	2,113	478	179	2,027	941
NY	4,081	3,795	568	340	3,385	2,272	KY	655	593	112	61	473	272
NJ	2,059	1,854	352	173	1,918	1,109	TN	592	512	153	44	587	202
PA	2,418	2,248	473	256	2,479	1,508	AL	700	644	129	48	607	310
							MS	406	365	84	27	360	157
E. No. Cent.	11,442	10,526	2,164	1,318	10,239	6,636	W. So. Cent.	5,853	5,340	1,951	388	5,756	1,912
OH	2,859	2,641	521	338	2,560	1,734	AR	541	479	91	41	369	185
IN	1,362	1,243	267	139	1,192	693	LA	983	917	257	61	802	331
IL	3,429	3,143	696	416	3,043	1,923	OK	887	799	152	68	543	306
MI	2,638	2,449	476	321	2,385	1,666	TX	3,443	3,145	1,452	219	4,042	1,089
WI	1,153	1,051	204	104	1,059	620	Mt.	3,141	2,842	488	239	2,116	1,153
W. No. Cent.	4,513	4,067	896	403	3,500	1,819	MT	190	168	35	17	136	68
MN	983	889	218	92	818	416	ID	122	104	22	7	94	40
IA	768	685	160	67	608	311	WY	124	110	23	11	101	51
MO	1,276	1,178	222	119	943	552	CO	1,050	940	165	86	718	403
ND	36	84	18	8	89	44	NM	382	344	59	29	237	137
SD	113	100	20	9	82	44	AZ	600	553	73	29	344	172
NE	473	411	91	40	346	172	UT	447	415	81	45	341	208
KS	805	720	169	69	614	281	NV	226	208	31	14	145	74
So. Atl.	4,827	4,218	1,102	347	5,089	2,175	Pac.	9,167	8,606	1,703	578	6,940	2,981
DE	89	83	21	7	100	45	WA	432	379	125	31	478	163
MD	816	754	126	67	703	424	OR	321	279	69	19	318	122
DC	145	131	31	13	190	91	CA	8,302	7,851	1,466	515	6,006	2,649
							AK	78	67	40	12	100	39
							HI	34	30	3	1	39	9

Z Less than 500. ¹ Averages for the year. ² Includes other service, not shown separately. ³ Excludes sales for resale. ⁴ For definition, see headnote, table 940.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual. (Copyright.)

NO. 980. WOOD ENERGY CONSUMPTION, BY REGION AND SECTOR: 1980 TO 1984

[In trillions of Btu, except percent. For composition of regions, see fig. 1, Inside front cover]

YEAR	Total	Percent of total energy consumption	REGION				SECTOR			
			North-east	Mid-west	South	West	Resi-dential	Indus-trial	Commer-cial	Elec-tric utilities
1980	2,483	3.2	386	329	1,380	388	859	1,600	21	4
1981	2,412	3.2	369	331	1,291	402	869	1,519	21	3
1982	2,395	3.3	351	339	1,334	372	937	1,434	22	2
1983	2,556	3.5	369	318	1,471	396	925	1,606	22	3
1984	2,633	3.4	349	341	1,482	461	923	1,679	22	9

NO. 981. HOUSEHOLDS THAT BURN WOOD: 1980 TO 1987

[Based on Residential Energy Consumption Survey; see Appendix III]

ITEM	Unit	HOUSEHOLDS THAT BURN WOOD					HOUSEHOLDS THAT BURN WOOD AS MAIN HEATING FUEL				
		1980	1981	1982	1984	1987	1980	1981	1982	1984	1987
Number of households.....	Millions.....	21.6	22.8	21.4	22.9	22.5	4.7	5.3	5.6	6.4	5.0
Percent of all households.....	Percent.....	26.4	27.4	25.6	26.6	24.8	5.8	6.4	6.7	7.5	5.6
Number of cords burned.....	Millions.....	42.7	44.0	48.6	49.0	42.6	22.4	24.7	28.7	29.4	23.5
Average number per household.....	Number.....	2.0	1.9	2.3	2.1	1.9	4.7	4.6	5.1	4.6	4.7
Median number per household.....	Number.....	1.7	1.0	1.0	1.0	1.7	3.3	3.0	4.0	4.0	4.0
Wood energy consumption.....	Tril. Btu.....	854	881	971	981	853	448	493	574	589	470

Source of tables 980 and 981: U.S. Energy Information Administration, *Annual Energy Review*.

NO. 982. WATER POWER—DEVELOPED AND UNDEVELOPED CAPACITY, BY DIVISION: 1950 TO 1988

[In millions of kilowatts. As of Dec. 31. Excludes Alaska and Hawaii for 1950 and all capacity of reversible equipment at pumped storage projects. Also excludes capacity precluded from development due to wild and scenic river legislation. For composition of division, see fig. 1, inside front cover. See also *Historical Statistics, Colonial Times to 1970*, series S 160-175]

DIVISION	DEVELOPED INSTALLED CAPACITY							ESTIMATED UNDEVELOPED CAPACITY						
	1950	1960	1970	1980	1985	1987	1988	1950	1960	1970	1980	1985	1987	1988
U.S.....	18.7	33.2	52.0	64.4	68.8	70.8	71.3	87.6	114.2	128.0	129.9	76.4	76.1	75.8
New England.....	1.2	1.5	1.5	1.5	1.7	1.8	1.9	3.3	2.9	3.3	4.7	4.4	4.3	4.5
Middle Atlantic.....	1.7	2.5	4.3	4.3	4.5	4.7	4.8	6.6	7.6	4.5	5.1	5.4	5.8	5.8
E. No. Central.....	.9	.9	.9	.9	1.1	1.1	1.1	2.3	3.0	1.6	2.0	1.8	1.8	1.7
W. No. Central.....	.6	1.6	2.7	2.8	2.9	3.0	3.1	5.8	6.4	4.4	3.4	3.1	3.1	3.1
South Atlantic.....	2.8	3.8	5.3	5.9	6.5	6.7	6.6	8.2	8.4	9.6	9.6	7.4	7.2	7.2
E. So. Central.....	2.7	3.8	5.2	5.8	5.9	5.9	5.9	4.7	4.6	3.8	3.3	2.7	2.4	2.4
W. So. Central.....	.5	.9	1.9	2.3	2.3	2.3	2.4	3.6	3.9	3.3	4.7	5.4	5.2	4.9
Mountain.....	2.3	4.6	6.2	7.4	8.1	8.3	8.5	23.4	23.6	26.7	34.2	19.4	20.0	19.4
Pacific.....	6.0	13.6	23.9	33.7	35.8	36.8	37.1	29.8	53.8	70.9	62.9	26.8	26.3	26.9

Source: U.S. Federal Energy Regulatory Commission (formerly U.S. Federal Power Commission), *Hydroelectric Power Resources of the United States, Developed and Undeveloped*, January 1, 1988; and unpublished data.

NO. 983. SOLAR COLLECTOR SHIPMENTS, BY TYPE, END-USE, AND MARKET SECTOR: 1974 TO 1987

[In thousands of square feet, except number of manufacturers. Solar collector is a device for intercepting sunlight, converting the sunlight to heat, and carrying the heat to where it will be either used or stored. 1985 data are not available]

YEAR	Number of manu-facturers	Total ship-ments ¹	COLLECTOR TYPE		END USE			MARKET SECTOR		
			Low tem-perature	Medium tem-perature, special, other	Pool heating	Hot water	Space heating	Resi-dential	Commer-cial	Indus-trial
1974	45	1,274	1,137	137	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1975	131	3,743	3,026	717	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1976	186	5,801	3,876	1,925	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
1977	321	10,312	4,743	5,569	6,334	1,713	1,699	7,978	1,680	105
1978	340	10,860	5,872	4,988	5,970	2,513	1,736	8,095	1,848	263
1979	349	14,251	8,395	5,857	6,551	2,958	1,722	11,387	2,015	314
1980	233	19,398	12,233	7,165	12,029	4,790	1,888	16,077	2,417	488
1981	203	20,133	8,677	11,456	9,781	7,204	2,017	15,773	2,561	1,518
1982	265	18,621	7,476	11,145	7,035	7,444	2,367	13,729	3,789	560
1983	203	16,828	4,853	11,975	4,839	9,323	2,082	11,780	3,039	1,665
1984	224	16,419	4,479	11,939	4,427	8,930	2,370	13,980	2,091	289
1986 ²	97	4,862	3,751	1,111	3,494	1,181	127	4,131	703	13
1987 ²	58	4,114	3,157	957	3,111	964	23	3,775	305	11

NA Not available. ¹ Includes other end uses and market sectors not shown separately. ² Declines between 1984 and 1987 are primarily due to the expiration of the Federal energy tax credit and industry consolidation.

Source: U.S. Energy Information Administration, *Solar Collector Manufacturing Activity*, annual.



Section 20

Science and Technology

This section presents statistics on scientific, engineering, and technological resources, with emphases on patterns of research and development (R&D) funding and on scientific, engineering, and technical personnel, education, and employment. Also included are statistics on space program outlays and accomplishments. Principal sources of these data are the National Science Foundation (NSF) and the National Aeronautics and Space Administration (NASA).

NSF gathers data chiefly through recurring surveys. Current NSF publications containing data on funds for research and development and on scientific and engineering personnel include the *Science Resources Studies Highlights* summaries series; Detailed Statistical Tables; and annual, biennial, triennial, and special reports. Titles or the areas of coverage of these reports include the following: *Science and Engineering Indicators*; *National Patterns of R&D Resources*; *Science and Engineering Personnel—A National Overview*; *Women and Minorities in Science and Engineering*; science and technology data presented in chart and tabular form in a pocket-size publication; *International Science and Technology Data Update*; profiles on human resources and funding in individual fields of science and engineering; *Federal Funds for Research and Development*; *Federal R&D Funding by Budget Function*; *Federal Support to Universities, Colleges, and Selected Nonprofit Institutions*; *Scientific and Engineering Facilities at Universities and Colleges*; *Geographic Distribution of Industrial R&D Expenditures*; *Research and Development in Industry*; R&D funds and graduate enrollment and support in academic science and engineering; characteristics of doctoral scientists and engineers and of recent graduates in the United States; *U.S. Scientists and Engineers*; and scientists, engineers, and technicians in manufacturing, nonmanufacturing, and trade and regulated industries. Statistical surveys in these areas pose particularly difficult problems of concept and definition and the data should, therefore, be regarded as broad estimates rather than precise quantitative statements. Detailed discussions of the scope and limitations of the data appear in the publications.

The National Science Board's biennial *Science and Engineering Indicators* publication contains data and analyses of international and domestic science and technology, including measures of inputs and outputs. *The Budget of the United States Government*, published by the U.S. Office of Management and Budget, contains summary financial data on Federal R&D programs.

Research and development outlays.—NSF defines research as a "systematic and intensive study directed toward a fuller knowledge of the subject studied" and development as "the systematic use of scientific knowledge directed toward the production of useful materials, devices, systems, methods, or processes." National coverage of R&D expenditures is developed primarily from periodic surveys in four principal economic sectors: (1) *Government*, made up primarily of Federal executive agencies; (2) *industry*, consisting of manufacturing and nonmanufacturing firms and the federally funded research and development centers (FFRDCs) they administer; (3) *universities and colleges*, composed of universities, colleges, and their affiliated institutions, agricultural experiment stations, and associated schools of agriculture, and FFRDCs administered by educational institutions; and (4) *other nonprofit institutions*, consisting of such organizations as private philanthropic foundations, nonprofit research institutes, voluntary health agencies, and FFRDCs administered by nonprofit organizations. The R&D funds reported consist of current operating costs, including planning and administration costs, except as otherwise noted. They exclude funds for routine testing, mapping and surveying, collection of general-purpose data, dissemination of scientific information, and training of scientific personnel.

Scientists, engineers, and technicians.—Scientists and engineers are defined as persons engaged in scientific and engineering work at a level requiring a knowledge of sciences equivalent at least to that acquired through completion of a 4-year college course. Technicians are defined as persons engaged in technical work at a level requiring knowledge acquired through a technical institute, junior college, or other type of training less extensive than 4-year college training. Craftsmen and skilled workers are excluded.

Historical statistics.—Tabular headnotes provide cross-references, where applicable, to *Historical Statistics of the United States, Colonial Times to 1970*. See Appendix IV.

NO. 984. RESEARCH AND DEVELOPMENT (R&D)—OUTLAYS: 1955 TO 1988

[Includes basic research, applied research, and development. Defense-related outlays comprise all research and development spending by Dept. of Defense, including space activities, and a portion of Department of Energy funds. Space-related outlays are those of the National Aeronautics and Space Administration; they exclude space activities of other Federal agencies, estimated at less than 5 percent of all space research and development spending. Minus sign (—) indicates decrease]

YEAR OR PERIOD	CURRENT DOLLARS (bil. dol.)			CONSTANT (1982) DOLLARS ¹		ANNUAL PERCENT CHANGE ³		PERCENT OF TOTAL R&D OUTLAYS					
	Total	De- fense space relat- ed	Other	Total (bil. dol.)	Per- cent of GNP ²	Cur- rent dollars	Con- stant dollars	Federally funded defense/space- related			Other outlays		
								Total	De- fense	Space	Total	Non- Fed- eral	Fed- eral
1955	6.2	3.0	3.1	22.8	1.5	9.4	6.1	49	48	1	51	43	8
1960	13.5	7.4	6.1	43.6	2.6	16.8	13.8	55	52	3	45	35	9
1962	15.4	8.5	6.9	48.2	2.7	6.8	5.1	55	48	7	45	36	9
1963	17.1	9.4	7.7	52.6	2.8	10.8	9.2	55	41	14	45	34	11
1964	18.9	10.6	8.3	57.2	2.9	10.5	8.9	56	37	19	44	34	9
1965	20.0	10.8	9.2	59.5	2.8	6.3	3.8	54	33	21	46	35	11
1966	21.8	11.4	10.5	62.6	2.8	9.0	5.5	52	33	19	48	36	12
1967	23.1	11.3	11.8	64.4	2.8	6.0	2.9	49	35	14	51	38	13
1968	24.6	11.8	12.8	65.5	2.8	6.3	1.8	48	35	13	52	39	13
1969	25.6	11.5	14.1	64.7	2.7	4.2	-1.2	45	34	11	55	42	13
1970	26.1	11.2	14.9	62.4	2.6	2.0	-3.5	43	33	10	57	43	14
1971	26.7	10.9	15.7	60.4	2.4	2.1	-3.2	41	32	9	59	44	15
1972	28.5	11.7	16.8	61.4	2.4	6.8	1.7	41	32	9	59	44	15
1973	30.7	11.7	19.0	62.4	2.3	7.9	1.6	38	30	8	62	47	15
1974	32.9	11.5	21.4	61.5	2.2	7.0	-1.5	35	27	8	65	49	16
1975	35.2	12.0	23.2	59.9	2.2	7.1	-2.8	34	25	8	66	49	17
1976	39.0	13.3	25.7	62.1	2.2	10.8	9.8	34	26	8	66	49	17
1977	42.8	14.1	28.7	63.7	2.2	9.6	2.4	33	26	7	67	50	17
1978	48.1	14.9	33.2	66.8	2.1	12.5	4.9	31	25	6	69	50	19
1979	54.9	15.9	39.0	70.1	2.2	14.1	5.0	29	23	6	70	51	19
1980	62.6	17.5	45.1	73.2	2.3	13.9	4.5	28	22	6	72	53	19
1981	71.9	20.9	51.0	76.6	2.4	14.8	3.9	29	24	5	71	54	17
1982	79.4	23.8	55.6	79.4	2.5	10.4	3.6	30	26	4	70	54	16
1983	87.3	27.9	59.4	84.0	2.6	10.0	5.8	32	28	4	68	53	15
1984	97.8	32.3	65.5	90.7	2.6	12.0	8.0	33	30	3	67	54	13
1985	107.8	37.7	70.1	97.0	2.7	10.2	7.0	35	32	3	64	52	13
1986	112.5	40.5	72.0	98.8	2.7	4.4	1.7	36	33	3	64	52	12
1987	118.8	44.0	74.8	100.8	2.6	5.6	2.3	37	34	3	64	52	12
1988, est.	126.1	45.4	80.7	103.9	2.6	6.2	3.1	36	33	3	64	53	12

¹ Based on GNP implicit price deflator. ² GNP=Gross national product. ³ Change from prior year shown; 1955 change from 1954.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1989*, and unpublished data.

NO. 985. RESEARCH AND DEVELOPMENT (R&D)—SOURCE OF FUNDS AND PERFORMANCE SECTOR: 1970 TO 1988

[In millions of dollars. See headnote, table 986]

YEAR	Total	SOURCE OF FUNDS				PERFORMANCE SECTOR				
		Fed- eral Govt.	Indus- try	Univ., col- leges	Other ¹	Fed- eral Govt.	Indus- try	Univ., col- leges	Associ- ated FFRDC's ²	Other ¹
Current dollars:										
1970	26,134	14,892	10,444	461	337	4,079	18,067	2,335	737	916
1975	35,213	18,109	15,820	749	535	5,954	24,187	3,409	987	1,276
1980	52,594	28,453	30,814	1,326	901	7,932	44,505	6,061	2,246	2,150
1981	71,866	33,404	35,946	1,555	961	8,425	51,810	6,845	2,486	2,300
1982	79,364	36,512	40,101	1,735	1,016	9,141	57,995	7,324	2,479	2,425
1983	87,280	40,691	43,524	1,936	1,129	10,582	63,403	7,883	2,737	2,675
1984	97,793	45,377	49,107	2,107	1,202	11,572	71,470	8,623	3,118	3,010
1985	107,757	51,668	52,358	2,377	1,354	12,945	78,269	9,694	3,529	3,320
1986	112,497	54,331	53,950	2,789	1,427	13,535	80,631	10,926	3,900	3,505
1987	118,782	57,291	56,722	3,145	1,624	13,413	85,500	12,082	4,202	3,585
1988, est.	126,115	60,500	60,430	3,470	1,715	14,500	90,600	13,000	4,400	3,615
Constant (1982) dollars:³										
1970	62,405	35,636	24,851	1,111	807	9,834	42,986	5,829	1,777	2,179
1975	59,893	30,988	26,679	1,302	916	9,308	40,781	5,927	1,716	2,151
1980	73,237	34,548	36,067	1,565	1,057	9,006	51,919	7,152	2,650	2,508
1981	76,638	35,684	38,259	1,668	1,027	9,039	55,140	7,344	2,667	2,448
1982	79,364	36,512	40,101	1,735	1,016	9,141	57,995	7,324	2,479	2,425
1983	83,964	39,116	41,905	1,857	1,085	10,153	61,047	7,563	2,626	2,576
1984	90,684	42,042	45,582	1,947	1,113	10,696	66,342	7,970	2,882	2,794
1985	96,999	46,463	47,188	2,131	1,217	11,607	70,544	8,692	3,164	2,992
1986	98,601	47,568	47,350	2,434	1,249	11,813	70,772	9,536	3,404	3,076
1987	100,823	48,586	48,201	2,680	1,377	11,344	72,661	10,218	3,554	3,047
1988, est.	103,941	49,822	49,657	2,851	1,412	11,912	74,752	10,679	3,615	2,983

¹ Nonprofit institutions. ² University associated federally-funded R&D centers. ³ Based on gross national product implicit price deflator.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1989*.

NO. 986. RESEARCH AND DEVELOPMENT (R&D) FUNDS, BY PERFORMANCE SECTOR AND SOURCE:
1970 TO 1988

[In millions of dollars, except percent. Data primarily on calendar year basis—calendar year data for industry and other nonprofit institutions combined with Federal and university fiscal year data. Data refer, in general, to natural sciences including engineering, and to social sciences in all but industry sector. Excludes capital expenditures data. Expenditures at associated federally funded research and development centers administered by industry and other nonprofit institutions included in totals of respective sectors. See also *Historical Statistics, Colonial Times to 1970*, series W 109-125]

PERFORMANCE SECTOR AND SOURCE OF FUNDS	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988, est.
Total R&D ¹	26,134	62,594	71,856	79,364	87,280	97,793	107,757	112,497	118,782	126,115
In 1982 dollars ²	62,405	73,237	76,638	79,364	83,964	90,684	96,999	98,601	100,823	103,941
Percent Federal as source	57.1	47.2	46.6	46.0	46.6	46.4	47.9	48.3	48.2	48.0
Percent of gross national product	2.6	2.3	2.4	2.5	2.6	2.6	2.7	2.7	2.6	2.6
Federal Government	4,079	7,692	8,425	9,141	10,582	11,572	12,945	13,535	13,413	14,500
Industry	18,087	44,505	51,810	57,995	63,403	71,470	78,269	80,631	85,500	90,800
Federal funds	7,779	14,029	16,382	18,483	20,542	23,162	26,830	27,783	30,000	31,500
Industry funds	10,288	30,476	35,428	39,512	42,861	48,308	51,439	52,848	55,500	59,100
Universities and colleges	2,335	6,061	6,845	7,324	7,883	8,623	9,694	10,926	12,082	13,000
Federal funds	1,648	4,096	4,561	4,759	4,980	5,425	6,064	6,713	7,326	7,800
Industry funds	61	238	293	335	388	474	559	692	777	850
University and college funds ³	441	1,326	1,555	1,735	1,908	2,107	2,377	2,789	3,145	3,470
Other nonprofit institutions funds ³	165	401	436	491	579	617	694	732	834	880
Universities and colleges, associated federally funded R&D centers	737	2,246	2,486	2,479	2,737	3,118	3,529	3,900	4,202	4,400
Other nonprofit institutions	916	2,150	2,300	2,425	2,675	3,010	3,320	3,505	3,585	3,815
Federal funds	649	1,450	1,550	1,650	1,850	2,100	2,300	2,400	2,350	2,300
Industry funds	95	200	225	250	275	325	360	410	445	480
Other ⁴	172	500	525	525	550	585	660	695	790	835
Total research, basic and applied	9,269	22,307	26,274	28,721	31,712	34,665	38,289	38,396	40,943	43,415
In 1982 dollars ²	22,193	26,172	28,063	28,721	30,485	32,118	34,451	33,612	34,714	35,746
Percent Federal as source	60.2	55.5	53.0	52.3	52.9	52.2	53.1	51.3	51.3	50.8
Federal Government	1,904	3,666	4,034	4,194	4,710	4,764	5,056	5,160	5,438	5,620
Industry	4,029	9,775	12,313	14,055	15,657	17,503	19,537	18,179	19,000	20,150
Federal funds	1,207	2,190	2,641	3,330	4,077	4,653	5,757	4,209	4,400	4,600
Industry funds	2,822	7,585	9,672	10,725	11,580	12,850	13,780	13,970	14,600	15,550
Universities and colleges	2,223	5,719	6,457	6,901	7,440	8,135	9,108	10,211	11,315	12,180
Federal funds	1,564	3,887	4,336	4,524	4,735	5,155	5,744	6,333	6,926	7,380
Industry funds	56	222	272	314	362	442	518	637	717	785
University and college funds ³	448	1,236	1,444	1,608	1,804	1,963	2,203	2,567	2,902	3,205
Other nonprofit institutions funds ³	155	374	405	455	539	575	643	674	770	810
Universities and colleges, associated federally funded R&D centers	485	1,662	1,865	1,891	2,085	2,303	2,502	2,711	2,910	3,070
Other nonprofit institutions	628	1,485	1,605	1,680	1,820	1,980	2,085	2,135	2,280	2,395
Federal funds	409	930	1,010	1,075	1,180	1,250	1,300	1,300	1,350	1,400
Industry funds	77	160	180	200	220	260	285	320	350	380
Other ⁴	142	395	415	405	420	450	500	515	580	615
Total basic research	3,549	8,415	9,591	10,410	11,583	12,706	13,933	15,089	16,165	17,355
In 1982 dollars ²	8,527	9,902	10,269	10,410	11,124	11,758	12,510	13,188	13,687	14,272
Percent of total R&D	13.7	13.5	13.4	13.1	13.2	13.0	12.9	13.4	13.6	13.8
Percent Federal as source	70.2	70.2	69.0	68.2	67.2	66.2	65.7	65.7	65.5	65.4
Federal Government	577	1,182	1,302	1,465	1,690	1,861	1,923	2,019	2,046	2,170
Industry	602	1,325	1,614	1,880	2,152	2,475	2,622	2,568	2,600	2,850
Federal funds	158	290	301	360	460	471	482	482	500	600
Industry funds	444	1,035	1,313	1,500	1,692	2,004	2,140	2,086	2,100	2,250
Universities and colleges	1,796	4,024	4,589	4,883	5,324	5,731	6,556	7,512	8,301	8,900
Federal funds	1,296	2,852	3,251	3,403	3,565	3,826	4,348	4,900	5,354	5,700
Industry funds	40	142	172	196	235	282	340	429	481	525
University and college funds ³	350	791	911	1,001	1,173	1,255	1,446	1,728	1,949	2,135
Other nonprofit institutions funds ³	110	239	255	283	351	368	422	454	517	540
Universities and colleges, associated federally funded R&D centers	269	1,124	1,261	1,317	1,472	1,609	1,712	1,820	1,963	2,100
Other nonprofit institutions	305	760	825	865	945	1,030	1,120	1,170	1,255	1,335
Federal funds	189	450	495	535	600	660	690	700	725	778
Industry funds	44	95	105	115	125	150	165	190	210	225
Other ⁴	72	215	225	215	220	230	265	280	320	335
Total development	16,855	40,287	45,592	50,643	55,568	63,128	69,469	74,101	77,939	82,700
In 1982 dollars ²	40,206	47,064	48,569	50,643	53,479	58,566	62,568	64,900	66,108	68,195
Percent of total R&D	64.4	64.3	63.4	63.8	63.7	64.6	64.5	65.9	65.2	65.6
Percent Federal as source	55.4	42.6	42.9	42.5	43.0	43.1	45.0	46.7	46.6	46.5

¹ Basic research, applied research, and development. ² Based on gross national product implicit price deflator. ³ Includes State and local government funds received by these institutions and used for research and development. ⁴ Includes estimates for independent nonprofit hospitals and voluntary health agencies.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1989*.

NO. 987. FUNDS FOR RESEARCH AND DEVELOPMENT—PERFORMANCE SECTOR BY STATE: 1985

[In millions of dollars. See headnote, table 986. Data may differ slightly due to revisions not available on the State level. For composition of regions, see fig. 1, inside front cover]

REGION, DIVISION, AND STATE	Total	Industry	Federal government	Universities and colleges	Other non-profit ¹	DIVISION AND STATE	Total	Industry	Federal government	Universities and colleges	Other non-profit ¹
Total	107,456	78,208	12,945	13,053	3,250	So. Atl.—Con.					
Region:						District of Columbia.....	(9)	(9)		64	89
Northeast.....	28,979	23,058	1,806	3,061	1,055	Virginia.....	1,947	800	968	168	112
Midwest.....	21,478	18,001	908	2,382	187	West Virginia.....	(10)	(11)		30	29
South.....	22,105	12,020	7,020	2,707	358	North Carolina.....	1,193	797	137	245	14
West.....	31,874	23,738	2,785	4,722	628	South Carolina.....	476	389	20	66	1
New England	9,538	6,922	586	1,179	851	Georgia.....	831	515	86	226	4
Maine.....	(9)	(9)	3	21	11	Florida.....	2,404	1,832	362	203	6
New Hampshire.....	368	294	36	38	(2)	East South Central					
Vermont.....	(6)	(7)	2	28	(2)	Kentucky.....	2,258	1,209	701	309	39
Massachusetts.....	6,022	4,173	178	848	823	Tennessee.....	306	221	31	54	(2)
Rhode Island.....	493	198	227	57	11	Alabama.....	734	538	86	98	11
Connecticut.....	2,310	1,976	139	189	6	Mississippi.....	973	387	462	104	20
Middle Atlantic	19,441	16,138	1,219	1,882	204	Arkansas.....	68	15	22	30	1
New York.....	8,371	7,019	87	1,148	117	Louisiana.....	348	187	34	126	2
New Jersey.....	6,722	5,547	894	273	8	Oklahoma.....	443	304	26	96	17
Pennsylvania.....	4,348	3,570	238	460	79	Texas.....	4,372	3,492	249	591	40
East North Central	16,798	14,161	771	1,730	135	Mountain	6,387	3,496	1,425	1,359	107
Ohio.....	3,688	2,847	535	262	43	Montana.....	306	221	(9)	19	24
Indiana.....	1,643	1,433	49	159	2	Idaho.....	454	419	13	21	1
Illinois.....	4,154	3,231	86	768	69	Wyoming.....	27	3	7	16	1
Michigan.....	6,370	5,975	76	301	18	Colorado.....	1,309	917	108	208	76
Wisconsin.....	944	676	25	240	3	New Mexico.....	(13)	(14)	1,024	806	25
West North Central	4,680	3,840	136	652	51	Arizona.....	1,269	1,002	102	163	1
Minnesota.....	2,211	1,971	31	173	36	Utah.....	491	317	72	101	2
Iowa.....	488	317	20	151	(2)	Nevada.....	(15)	(16)	80	19	(2)
Missouri.....	1,424	1,208	42	161	13	Pacific	25,487	20,242	1,360	3,364	521
North Dakota.....	57	10	16	31	(2)	Washington.....	2,596	2,183	100	210	103
South Dakota.....	23	7	7	9	(2)	Oregon.....	450	285	35	114	16
Nebraska.....	116	42	12	61	1	California.....	22,293	17,760	1,177	2,957	398
Kansas.....	359	285	8	66	1	Alaska.....	(17)	(18)	30	29	(2)
South Atlantic	14,616	6,812	5,989	1,558	259	Hawaii.....	(19)	(18)	18	54	4
Delaware.....	(9)	(7)	3	24	1	Undistributed.....	3,019	1,391	426	180	1,022
Maryland.....	4,951	1,437	2,952	530	32						

Z Less than \$5 million. ¹ Includes only Federal obligations. ² Between \$58 million and \$109 million. ³ Between \$23 million and \$74 million. ⁴ Between \$237 million and \$288 million. ⁵ Between \$207 million and \$258 million. ⁶ Between \$828 million and \$945 million. ⁷ Between \$800 million and \$917 million. ⁸ Between \$1,685 million and \$1,759 million. ⁹ Under \$74 million. ¹⁰ Between \$153 million and \$301 million. ¹¹ Between \$94 million and \$242 million. ¹² Between \$43 million and \$117 million. ¹³ Between \$2,545 million and \$2,654 million. ¹⁴ Between \$690 million and \$799 million. ¹⁵ Between \$127 million and \$173 million. ¹⁶ Between \$26 million and \$74 million. ¹⁷ Between \$59 million and \$73 million. ¹⁸ Under \$14 million. ¹⁹ Between \$76 million and \$90 million.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1989*.

NO. 988. FEDERAL OBLIGATIONS FOR RESEARCH AND DEVELOPMENT, BY AGENCY: 1975 TO 1989

[In millions of dollars, except percent. For fiscal years ending in year shown; see text, section 9. See *Historical Statistics, Colonial Times to 1970*, series W 142, for total R&D expenditures. Minus sign (–) indicates decline]

AGENCY	1975	1980	1983	1984	1985	1986	1987	1988	1989, est.	PERCENT CHANGE	
										1987–88	1988–89
Obligations, total	19,039	29,830	36,712	42,225	48,360	51,412	55,255	58,512	60,323	5.9	3.1
Dept. of Defense.....	9,013	13,981	22,993	25,373	29,792	32,938	35,232	36,543	37,505	3.7	2.6
National Aeronautics and Space Administration.....	3,064	3,234	2,662	2,822	3,327	3,420	3,787	4,779	5,416	26.2	13.3
Dept. of Commerce.....	215	343	335	358	399	399	402	411	308	2.2	–25.1
Dept. of Energy.....	2,047	4,754	4,537	4,674	4,966	4,688	4,757	5,101	5,182	7.2	1.6
Dept. of Health and Human Services.....	2,281	3,780	4,353	4,831	5,451	5,658	6,609	7,112	7,043	7.6	–9
National Science Foundation.....	595	882	1,062	1,203	1,346	1,353	1,471	1,523	1,827	3.5	20.0
Dept. of Agriculture.....	420	688	848	866	943	929	948	1,020	987	7.6	–3.2
Dept. of Transportation.....	312	361	348	448	429	386	324	323	316	3	–2.2
Dept. of the Interior.....	303	411	383	411	392	385	404	420	376	4.0	–10.5
Environmental Protection Agency.....	258	345	241	261	320	317	348	350	374	–8	6.9
Nuclear Regulatory Commission.....	64	183	207	191	150	124	123	112	137	–8.9	22.3
Dept. of Veterans Affairs.....	95	133	161	190	227	186	210	216	216	2.9	–9
Agency for International Development.....	27	149	227	237	220	251	218	142	169	–3.5	19.0
Dept. of Education.....	116	139	112	116	125	121	133	157	157	19.5	–1.3
Other agencies.....	229	447	245	244	274	257	289	301	310	1.0	3.0

– Represents or rounds to zero.

Source: U.S. National Science Foundation, *Federal Funds for Research and Development*, annual.

Research and Development Expenditures

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NO. 989. FEDERAL FUNDING FOR RESEARCH AND DEVELOPMENT, BY BUDGET FUNCTION: 1980 TO 1990

[In millions of dollars. For fiscal years ending in year shown; see text, section 9. Excludes R&D plant. Represents budget authority. See *Historical Statistics, Colonial Times to 1970*, series W 126, for total obligations]

FUNCTION	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990, est.
Total ¹	29,739	33,735	36,115	38,768	44,214	49,867	53,249	57,069	59,106	61,823	67,833
National defense	14,946	18,413	22,070	24,936	29,287	33,698	36,926	39,152	40,099	40,574	44,295
Health	3,694	3,871	3,869	4,298	4,779	5,418	5,565	6,556	7,076	7,724	8,229
Space research and technology	2,738	3,111	2,584	2,134	2,300	2,725	2,894	3,398	3,683	4,589	6,146
General science	1,233	1,340	1,359	1,502	1,676	1,862	1,873	2,042	2,160	2,379	2,652
Energy	3,803	3,501	3,012	2,578	2,581	2,389	2,286	2,053	2,126	2,427	2,333
Transportation	887	869	791	876	1,040	1,030	917	908	896	1,019	1,129
Natural resources and environment	999	1,061	965	952	963	1,059	1,065	1,133	1,160	1,208	1,140
Agriculture	585	659	693	745	762	836	815	822	892	910	901
Education, training, employment ²	468	298	228	189	200	220	248	267	285	343	347
International affairs	125	160	165	177	192	210	211	223	224	141	169
Veterans benefits and services	126	143	139	157	218	193	183	215	195	212	199
Commerce and housing credit	101	106	104	107	110	114	111	110	122	134	132
Administration of justice	45	34	31	37	24	47	41	49	51	45	40
Community and regional develop	119	104	63	44	46	50	88	99	108	77	79

¹ Includes functions not shown separately. ² Includes social services.

Source: U.S. National Science Foundation, *Federal R&D Funding by Budget Function*, annual.

NO. 990. NATIONAL RESEARCH AND DEVELOPMENT (R&D) EXPENDITURES AS A PERCENT OF GROSS NATIONAL PRODUCT, BY COUNTRY: 1975 TO 1988

YEAR	TOTAL R&D						NON DEFENSE R&D ¹				
	United States	France	West Germany	Japan	United Kingdom	Soviet Union ¹	United States	France	West Germany	Japan	United Kingdom
1975	2.2	1.8	2.2	2.0	2.1	3.8	1.6	1.5	2.1	2.0	1.5
1979	2.2	1.8	2.4	2.1	(NA)	3.6	1.7	1.4	2.3	2.1	(NA)
1980	2.3	1.8	2.4	2.2	(NA)	3.8	1.8	1.4	2.3	2.2	(NA)
1981	2.4	2.0	2.5	2.3	2.4	3.8	1.8	1.5	2.4	2.3	1.7
1982	2.5	2.1	2.6	2.4	(NA)	3.7	1.9	1.6	2.5	2.4	(NA)
1983	2.6	2.1	2.6	2.6	2.2	3.8	1.8	1.7	2.5	2.5	1.6
1984	2.6	2.2	2.6	2.6	(NA)	4.0	1.9	1.7	2.5	2.6	(NA)
1985	2.7	2.3	2.8	2.8	2.3	3.7	1.8	1.8	2.6	2.8	1.6
1986	2.7	2.3	2.7	2.8	2.4	3.8	1.8	1.8	2.6	2.8	1.8
1987	2.6	2.3	2.8	2.9	(NA)	(NA)	1.7	1.8	2.6	2.8	(NA)
1988	2.6	(NA)	(NA)	(NA)	(NA)	(NA)	1.7	(NA)	(NA)	(NA)	(NA)

NA Not available. ¹ Estimated.

Source: U.S. National Science Foundation, *Science Indicators*, biennial; *National Patterns of R&D Resources: 1989*; and *International Science and Technology Data Update*, annual.

NO. 991. RESEARCH AND DEVELOPMENT (R&D) EXPENDITURES IN SCIENCE AND ENGINEERING AT UNIVERSITIES AND COLLEGES: 1980 TO 1987

[In millions of dollars. Estimates for nonrespondents account for less than 8 percent of the total]

CHARACTERISTIC	1980	1984	1985	1986	1987	CHARACTERISTIC	1980	1984	1985	1986	1987
Total	6,062	8,623	9,695	10,925	12,082	Fields—Con.					
In 1982 dollars ¹	7,154	7,970	8,693	9,535	10,218	Environmental sciences—Con.					
Basic research	4,024	5,731	6,556	7,512	8,301	Other environmental	82	80	89	103	118
Applied R&D	2,037	2,892	3,138	3,414	3,780	Mathematical sciences	79	125	130	153	180
Source of funds:						Computer sciences	114	224	281	318	370
All governments	4,588	6,109	6,809	7,624	8,345	Life sciences	3,218	4,716	5,278	5,895	6,478
Institutions' own funds	835	1,424	1,632	1,877	2,126	Agricultural sciences	679	955	1,055	1,144	1,169
Industry	238	474	559	692	777	Biological sciences	1,030	1,572	1,721	1,869	2,057
Other	401	617	694	732	834	Medical sciences	1,416	2,037	2,322	2,658	3,012
Fields:						Other life sciences	92	150	180	223	240
Physical sciences	678	996	1,148	1,282	1,379	Psychology	111	145	158	170	188
Astronomy	59	80	95	100	110	Social sciences	342	366	387	458	497
Chemistry	245	370	422	468	508	Economics	91	110	118	133	144
Physics	322	471	550	628	659	Political sciences	55	37	60	69	81
Other physical sciences	52	74	80	85	103	Sociology	88	74	78	88	88
Environmental sciences	509	651	708	780	832	Other social sciences	108	126	131	169	184
Atmospheric	67	105	110	124	132	Other sciences	146	178	185	227	268
Earth sciences	188	228	253	275	286	Engineering	866	1,223	1,419	1,642	1,889
Oceanography	172	239	257	278	296						

¹ Based on the gross national product implicit price deflator; see text, section 14.

Source: U.S. National Science Foundation, *Survey of Scientific and Engineering Expenditures at Universities and Colleges*, annual.

No. 992. FEDERAL OBLIGATIONS TO UNIVERSITIES AND COLLEGES: 1970 TO 1988

[In millions of dollars, except percent. For fiscal years ending in year shown; see text, section 9. Total and nonscience/engineering activities for 1981-1983 are estimates based on revised student aid data from the Dept. of Education. Minus sign (-) indicates decrease]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
Federal obligations, total	3,237	4,547	8,299	8,641	8,777	9,345	10,039	10,972	11,619	13,433	14,073
Annual percent change ¹	-6.5	1.5	9.1	4.1	1.6	6.5	7.4	9.3	5.9	15.6	4.8
Academic science/engineering obligations.....	2,188	2,806	4,791	5,063	5,180	5,681	6,308	7,258	7,431	8,564	9,132
Percent of total.....	67.6	61.7	57.7	58.6	59.0	60.8	62.8	66.2	64.0	63.8	64.9
Research and development.....	1,447	2,246	4,161	4,411	4,554	5,024	5,449	6,246	6,457	7,239	7,717
Research and development plant.....	45	45	38	28	31	38	50	114	106	230	203
Other science/engineering activities.....	696	515	593	624	594	619	809	898	868	1,095	1,212
Nonscience/engineering activities.....	1,049	1,741	3,508	3,578	3,597	3,664	3,731	3,714	4,188	4,870	4,941

¹ Percent change from prior year.

Source: U.S. National Science Foundation, *Survey of Federal Support to Universities, Colleges, and Selected Nonprofit Institutions*, annual.

No. 993. FEDERAL R&D OBLIGATIONS TO SELECTED UNIVERSITIES AND COLLEGES: 1975 TO 1987

[For fiscal years ending in year shown; see text, section 9. For the top 50 institutions receiving Federal R&D funds in 1987. Awards to the administrative offices of university systems are excluded from totals for individual institutions because that allocation of funds is unknown, but those awards are included in "total all institutions"]

MAJOR INSTITUTION RANKED BY TOTAL 1987 FEDERAL R&D OBLIGATIONS	OBLIGATIONS (\$1,000)				RANK			
	1975	1980	1985	1987	1975	1980	1985	1987
Total of all institutions ¹	2,246,088	4,160,543	6,246,181	7,239,490	(x)	(x)	(x)	(x)
50 institutions, percent of total.....	64.1	64.3	64.9	65.3	(x)	(x)	(x)	(x)
Johns Hopkins University.....	41,261	240,096	297,374	374,656	10	3	3	2
Stanford University.....	58,665	104,610	174,961	201,049	3	3	3	2
Massachusetts Institute of Technology.....	68,715	142,094	189,558	188,430	1	2	2	3
University of Washington.....	60,235	100,577	146,179	164,882	2	4	4	4
University of California-San Diego.....	48,550	91,427	103,633	151,768	8	5	13	5
University of California-Los Angeles.....	54,203	87,284	128,211	147,795	4	6	5	6
University of Michigan.....	38,403	71,935	108,035	134,933	14	12	11	7
University of Wisconsin-Madison.....	49,358	80,828	124,604	134,021	5	9	7	8
Yale University.....	38,672	68,937	109,227	132,909	16	14	10	9
Columbia University—Main Division.....	48,665	81,511	127,331	130,724	7	8	6	10
Cornell University.....	39,601	75,166	110,966	128,695	13	11	8	11
University of California-San Francisco.....	33,689	62,771	98,536	124,811	18	15	16	12
Harvard University.....	48,836	84,554	109,414	123,301	6	7	9	13
University of Minnesota.....	39,695	76,068	103,272	119,746	12	10	14	14
University of Pennsylvania.....	43,538	71,084	103,119	109,531	9	13	15	15
University of Southern California.....	28,678	48,343	89,706	104,295	20	21	17	16
University of Illinois-Urbana.....	34,100	50,800	83,122	96,769	17	17	18	17
University of California-Berkeley.....	40,797	50,426	106,710	96,748	11	19	12	18
Pennsylvania State University.....	20,256	48,463	76,726	94,572	31	20	19	19
Washington University.....	30,719	52,529	71,978	89,055	19	16	22	20
University of Colorado.....	22,338	44,823	71,424	87,999	27	22	23	21
University of Rochester.....	25,408	41,324	70,379	85,674	22	25	25	22
Duke University.....	24,550	42,685	69,169	84,622	24	23	26	23
University of Chicago.....	38,300	50,592	71,194	82,769	15	18	24	24
University of North Carolina-Chapel Hill.....	19,187	35,795	63,105	81,473	34	31	27	25
University of Texas-Austin.....	23,307	40,434	72,379	76,495	25	26	21	26
New York University.....	28,029	39,494	74,577	75,966	21	28	20	27
University of Pittsburgh.....	18,586	33,246	58,620	72,236	38	35	28	28
Carnegie-Mellon University.....	10,014	22,081	48,872	69,454	64	57	38	29
Yeshiva University.....	24,782	40,275	56,988	65,028	23	27	29	30
Ohio State University.....	20,913	37,312	56,065	64,550	30	29	30	31
University of Arizona.....	16,138	33,887	49,740	64,351	42	34	37	32
University of Iowa.....	16,645	34,677	55,117	63,479	40	33	31	33
University of Alabama-Birmingham.....	15,507	26,995	44,093	62,240	46	44	46	34
University of Massachusetts.....	9,387	19,981	46,046	57,926	71	62	44	35
California Institute of Technology.....	21,002	35,552	55,083	57,122	29	32	32	36
Case Western Reserve University.....	18,975	31,420	47,994	56,774	35	39	40	37
University of Utah.....	19,736	31,966	50,938	56,590	33	37	36	38
Baylor College of Medicine.....	18,615	31,784	45,837	56,255	37	38	45	39
Vanderbilt University.....	13,770	25,978	39,909	54,553	50	48	48	40
Boston University.....	13,325	24,943	46,152	53,381	52	50	43	41
Northwestern University.....	18,721	31,982	48,260	53,061	36	36	39	42
University of Florida.....	16,257	25,467	47,716	52,888	41	49	41	43
University of California-Davis.....	19,837	42,245	43,156	50,289	32	24	47	44
Indiana University.....	13,132	26,770	39,118	50,005	53	46	49	45
University of Miami.....	22,896	27,986	33,709	49,547	26	42	59	46
Michigan State University.....	18,003	28,836	46,945	48,797	39	41	42	47
University of Maryland-College Park.....	19,772	26,463	51,073	48,728	48	47	35	48
Emory University.....	12,067	18,028	27,005	47,294	58	78	70	46
Purdue University.....	21,460	36,724	51,544	46,227	28	30	34	50

X Not applicable. ¹ Includes other institutions, not shown separately.

Source: U.S. National Science Foundation, *Federal Support to Universities and Colleges and Selected Non-Profit Institutions*, annual.

NO. 994. FUNDS FOR PERFORMANCE OF INDUSTRIAL RESEARCH AND DEVELOPMENT (R&D), BY SOURCE OF FUNDS AND SELECTED INDUSTRIES, 1970 TO 1986

[In millions of dollars. Covers basic research, applied research, and development. See also *Historical Statistics, Colonial Times to 1970*, series W 144-160]

SIC ¹ code	INDUSTRY	1970	1975	1980	1981	1982	1983	1984	1985	1986
	Total funds	18,067	24,187	44,505	51,810	57,996	63,403	71,460	78,268	80,629
372,376	Aircraft and missiles	5,219	5,713	9,199	11,968	13,658	13,853	16,033	17,918	16,240
36	Electrical equipment	4,220	5,105	9,175	10,329	11,642	13,950	15,694	17,055	18,036
35	Machinery	1,729	3,196	5,901	6,818	7,835	8,398	9,667	10,853	10,896
28	Chemicals and allied products	1,773	2,727	4,636	5,625	6,659	7,293	8,028	8,690	9,021
371	Motor vehicles	1,591	2,340	4,955	4,806	4,807	5,337	6,090	7,035	(d)
38	Professional and scientific instruments	744	1,173	3,029	3,614	4,019	4,444	4,840	5,303	5,421
29	Petroleum refining	515	693	1,552	(d)	(d)	(d)	(d)	(d)	(d)
(x)	All other manufacturing and nonmanufacturing industries	2,276	3,240	6,059	(d)	(d)	(d)	(d)	(d)	(d)
	Company funds	10,288	15,582	30,476	35,428	39,512	42,861	48,298	51,439	52,847
372,376	Aircraft and missiles	1,213	1,285	2,570	3,440	3,882	3,448	3,804	4,192	4,141
36	Electrical equipment	2,008	2,798	5,431	6,409	7,048	8,864	9,738	10,023	10,460
35	Machinery	1,469	2,687	5,254	6,124	6,977	7,254	8,452	9,319	9,239
28	Chemicals and allied products	1,593	2,490	4,264	5,205	6,226	6,845	7,797	8,391	8,773
371	Motor vehicles	1,278	2,022	4,300	4,219	4,329	4,771	5,413	6,208	7,253
38	Professional and scientific instruments	550	1,001	2,456	2,978	3,396	3,805	4,140	4,516	4,578
29	Petroleum refining	493	(d)	1,401	1,780	1,981	2,030	2,173	2,101	1,867
(x)	All other manufacturing and nonmanufacturing industries	1,684	(d)	4,800	5,273	5,673	6,044	6,741	6,689	6,538
	Federal funds	7,779	8,605	14,029	16,382	18,483	20,542	23,162	26,830	27,782
372,376	Aircraft and missiles	4,005	4,428	6,628	8,528	9,776	10,405	12,228	13,726	12,089
36	Electrical equipment	2,211	2,307	3,744	3,920	4,593	5,286	5,956	7,032	7,569
35	Machinery	262	509	647	694	857	1,131	1,216	1,536	1,456
28	Chemicals and allied products	180	236	372	421	434	448	532	299	248
371	Motor vehicles	314	318	655	587	477	566	677	826	(d)
38	Professional and scientific instruments	194	172	573	637	623	639	660	787	844
29	Petroleum refining	22	(d)	151	(d)	(d)	(d)	(d)	(d)	(d)
(x)	All other manufacturing and nonmanufacturing industries	591	(d)	1,259	(d)	(d)	(d)	(d)	(d)	(d)

D Indicates that data were suppressed because of Census Bureau restrictions on publications of data that may reveal operations of individual companies. X Not applicable. ¹ Standard Industrial Classification. See text, section 13.

Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

NO. 995. R&D FUNDS AS A PERCENT OF NET SALES IN R&D-PERFORMING MANUFACTURING COMPANIES, BY INDUSTRY: 1970 TO 1986

SIC ¹ code	INDUSTRY GROUP	TOTAL R&D FUNDS AS A PERCENT OF NET SALES						COMPANY R&D FUNDS AS A PERCENT OF NET SALES					
		1970	1975	1980	1984	1985	1986	1970	1975	1980	1984	1985	1986
	Total ²	3.7	3.1	3.0	3.9	4.4	4.7	3.2	2.0	2.1	2.6	2.9	3.2
372,376	Aircraft and missiles	16.2	12.7	13.7	16.9	16.9	15.7	2.8	2.8	3.8	4.0	3.9	4.0
36	Electrical equipment	7.3	6.5	6.6	7.6	8.6	9.1	3.4	3.6	3.9	4.7	5.0	5.3
35	Machinery	4.0	4.8	5.0	6.0	6.9	7.4	3.4	4.0	4.5	5.3	6.0	6.4
28	Chemicals and allied products	3.9	3.7	3.6	4.6	4.9	5.1	3.5	3.1	3.3	4.5	4.7	4.9
371	Motor vehicles	3.5	3.5	4.9	3.6	3.8	(d)	2.8	3.0	4.2	3.2	3.3	3.6
38	Professional and scientific instruments	5.7	5.9	7.5	9.3	10.3	10.5	4.2	5.1	6.1	8.0	8.8	8.8
29	Petroleum refining	1.0	.7	.6	(d)	(d)	(d)	.9	(d)	.5	.7	.8	1.0
33	Primary metals .....	.8	.8	.7	(d)	(d)	(d)	.8	.7	.5	.8	.8	.9
30	Rubber products	2.3	2.5	2.2	(d)	(d)	2.9	1.7	(d)	(d)	2.3	2.2	2.1
34	Fabricated metal products	1.2	1.2	1.4	1.6	1.5	1.4	1.1	1.1	1.2	1.4	1.4	1.3
20	Food and kindred products ³ .....	.5	.4	.4	(d)	(d)	(d)	.5	(d)	(d)	.4	.5	.5
26	Paper and allied products .....	.9	.9	1.0	(d)	(d)	(d)	(d)	(d)	1.0	1.2	1.3	1.3
32	Stone, clay, and glass products	1.8	1.2	1.4	(d)	(d)	(d)	1.7	(d)	1.3	1.3	1.4	1.3

D Figure withheld to avoid disclosure of information pertaining to a specific organization or individual. ¹ Standard Industrial Classification. See text, section 13. ² Includes all manufacturing industries. ³ Includes tobacco products (SIC 21) for 1984-86.

Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

NO. 996. FEDERAL OBLIGATIONS FOR RESEARCH, BY FIELD OF SCIENCE: 1980 TO 1989

[In millions of dollars. For fiscal years ending in year shown; see text, section 9. See headnote, table 989. N.e.c.=Not elsewhere classified]

FIELD	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989, est.
Research, total.....	11,597	12,213	13,022	14,254	14,979	16,133	16,502	17,943	18,854	19,712
Basic.....	4,674	5,041	5,482	6,260	7,067	7,819	8,153	8,944	9,623	10,299
Applied.....	6,923	7,172	7,541	7,993	7,911	8,315	8,349	8,999	9,241	9,413
Life sciences.....	4,192	4,436	4,745	5,178	5,636	6,362	6,464	7,344	7,809	7,954
Biological (excluding environmental).....	1,831	1,997	2,079	2,306	2,563	2,886	2,993	3,502	3,759	3,848
Environmental biology.....	230	220	184	194	250	260	264	290	298	328
Agricultural.....	447	495	549	565	512	609	604	567	597	600
Medical.....	1,537	1,610	1,773	1,927	2,113	2,368	2,360	2,667	2,825	2,821
Life sciences, n.e.c.....	148	114	161	186	198	239	243	318	329	358
Psychology.....	199	209	218	241	267	327	334	370	378	398
Biological aspects.....	60	58	60	63	81	91	90	101	107	115
Social aspects.....	95	93	98	105	108	143	144	156	150	159
Psychological sciences, n.e.c.....	44	58	61	73	78	93	100	112	121	123
Physical sciences.....	2,001	2,221	2,500	2,891	2,969	3,046	3,069	3,253	3,387	3,707
Astronomy.....	286	281	276	357	382	415	468	522	599	676
Chemistry.....	455	487	481	520	606	650	662	680	677	705
Physics.....	1,183	1,346	1,611	1,855	1,836	1,816	1,806	1,854	1,940	2,112
Physical sciences, n.e.c.....	78	107	133	159	144	165	133	197	171	215
Environmental sciences.....	1,261	1,121	1,148	1,251	1,276	1,404	1,482	1,512	1,631	1,691
Atmospheric.....	410	373	426	481	434	486	521	553	584	648
Geological.....	402	396	358	334	359	429	444	442	482	512
Oceanography.....	262	282	261	344	363	399	430	427	462	421
Environmental sciences, n.e.c.....	188	90	104	113	119	90	87	90	103	112
Mathematics and computer sciences.....	241	279	350	419	440	575	615	641	682	787
Mathematics.....	91	118	128	134	151	184	185	205	212	230
Computer sciences.....	129	122	171	215	215	280	302	298	315	364
Mathematics and computer sciences, n.e.c.....	21	40	51	71	75	111	128	138	155	193
Engineering.....	2,830	3,071	3,387	3,517	3,624	3,618	3,739	3,906	4,082	4,252
Aeronautical.....	708	710	741	821	860	738	776	810	895	1,038
Astronautical.....	302	304	291	321	397	425	527	625	670	796
Chemical.....	96	148	95	145	144	254	246	216	245	187
Civil.....	159	159	202	188	203	217	203	204	244	222
Electrical.....	517	557	612	615	630	627	674	786	692	733
Mechanical.....	208	205	201	266	190	267	236	234	237	237
Metallurgy and materials.....	236	256	309	333	341	439	445	382	461	416
Engineering, n.e.c.....	603	734	935	828	858	651	632	669	639	624
Social sciences.....	524	497	398	435	436	460	418	480	486	495
Anthropology.....	17	15	15	13	19	18	14	15	15	16
Economics.....	193	207	157	166	147	160	131	149	158	152
Political science.....	12	11	8	11	11	15	12	11	13	12
Sociology.....	71	65	52	68	70	66	67	74	73	74
Social sciences, n.e.c.....	290	200	155	178	189	201	192	231	227	241
Other sciences, n.e.c.....	350	379	267	320	331	342	383	438	409	428

Source: U.S. National Science Foundation, *Federal Funds for Research and Development*, annual.

NO. 997. SCIENTISTS AND ENGINEERS EMPLOYED IN RESEARCH AND DEVELOPMENT: 1970 TO 1987

[In thousands of full-time equivalent employees. Data are estimates. Yearly averages for industry sector only. Excludes those employed by State and local government agencies. DOD=Dept. of Defense. FFRDC's=federally funded R&D centers]

SECTOR	1970	1980	1981	1982	1983	1984	1985	1986	1987
Total.....	543.8	651.2	683.3	702.5	722.5	745.9	772.7	791.1	806.2
Industry (excl. social scientists) ¹	375.6	469.2	498.8	516.0	533.3	552.4	571.7	583.8	594.8
Universities and colleges, total ¹	79.5	95.9	98.3	99.5	100.4	103.4	108.6	113.5	119.1
Scientists and engineers.....	61.3	72.7	73.9	74.5	75.5	77.3	81.1	84.7	87.9
Graduate students.....	18.2	23.2	24.4	25.0	24.9	26.1	27.5	28.8	31.2
Federal Government (incl. DOD).....	67.5	58.6	59.2	60.0	61.3	62.1	62.9	63.3	62.3
Other nonprofit institutions ¹	21.2	27.5	27.0	27.0	27.5	28.0	29.5	30.5	30.0

¹ Includes professional R&D personnel employed at FFRDC's administered by organizations in their respective sectors.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1989*.

NO. 998. RESEARCH AND DEVELOPMENT SCIENTISTS AND ENGINEERS—AVERAGE FULL-TIME-EQUIVALENT EMPLOYMENT AND COST, BY INDUSTRY: 1970 TO 1986

[Data are estimates; on average full-time-equivalent (FTE) basis. See *Historical Statistics, Colonial Times to 1970*, series W 167, for total cost per scientist or engineer]

SIC ¹ code	INDUSTRY	1970	1975	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
	Average FTE of scientists and engineers (1,000)^{2,3}	375.6	383.9	393.6	414.2	437.3	469.2	498.8	516.0	533.3	552.4	571.7	583.8
(x) 28	Chemicals ⁴	41.4	44.8	47.4	49.2	50.7	53.1	58.2	63.8	66.6	67.1	66.5	68.1
35	Machinery	42.5	54.3	56.6	59.0	61.2	65.7	72.6	78.2	75.7	76.2	79.6	79.9
36	Electrical equipment ⁵	96.2	81.5	84.3	84.7	89.8	100.7	108.4	110.1	113.2	115.7	117.4	124.5
371	Motor vehicles ⁶	(NA)	25.7	30.1	33.6	36.7	36.7	32.6	29.5	28.6	28.7	31.3	42.3
372,376	Aircraft and missiles	85.2	67.2	77.0	84.3	86.2	90.6	93.2	93.3	96.0	100.2	105.5	100.3
	Cost per scientist or engineer (\$1,000)^{7,8}	48.1	66.5	75.8	80.4	87.4	94.9	103.9	112.4	118.9	129.8	137.0	138.1
(x) 28	Chemicals ⁴	42.6	60.9	67.8	72.6	79.6	87.4	96.6	104.4	109.6	119.2	126.9	132.5
35	Machinery	58.9	67.6	72.6	78.9	89.9	99.9	102.9	110.9	110.9	126.4	136.5	139.9
36	Electrical equipment ⁵	43.9	62.7	69.9	76.8	87.2	91.1	95.3	105.8	123.2	134.9	145.3	144.9
371	Motor vehicles ⁶	(NA)	91.1	111.7	115.6	122.9	135.2	147.4	162.9	185.3	211.6	224.7	(D)
372,376	Aircraft and missiles	61.3	85.1	91.3	89.4	93.3	101.6	128.4	146.4	144.3	158.5	169.8	162.0

D Withheld to avoid disclosure. NA Not available. X Not applicable. ¹ Standard Industrial Classification; see text, section 13. ² The mean number of FTE R&D scientists and engineers employed in January of the year shown and the following January. ³ Includes industries not shown separately. ⁴ Includes allied products. ⁵ Includes communication. ⁶ Includes other transportation equipment. ⁷ Represents the arithmetic mean of the numbers of R&D scientists and engineers reported in each industry for January in two consecutive years divided into total R&D expenditures in each industry.

Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

NO. 999. ESTIMATED CHARACTERISTICS OF EMPLOYED SCIENTISTS AND ENGINEERS: 1986

[Percent distribution, except as indicated. Represents total science and engineering employment in the United States]

CHARACTERISTIC	Total	Engi-neers	Life sci-en-tists	Comput-er special-ists	Physi-cal sci-en-tists	SOCIAL SCIENTISTS					Environ-mental sci-en-tists	Mathe-matical sci-en-tists
						Total	Econ-omists	Other social sci-en-tists	Psy-chol-ogists	Environ-mental sci-en-tists		
Total (1,000)	4,627	2,440	412	563	288	428	164	264	254	111	131	
Male	84.9	95.9	75.0	71.1	86.4	68.7	80.5	61.4	54.6	88.4	74.1	
Female	15.1	4.1	25.0	28.9	13.6	31.3	19.5	38.6	45.4	11.6	25.9	
Highest degree:												
Doctorate	13.3	4.3	29.5	3.4	39.6	23.0	21.8	23.7	38.5	18.4	30.7	
Master's	23.6	23.0	21.4	25.2	20.3	22.1	21.7	22.3	26.6	31.1	33.7	
Bachelor's	55.1	59.9	44.6	69.9	38.0	51.7	53.0	50.9	32.4	48.2	34.1	
Other	8.0	12.8	4.5	1.5	2.1	3.2	3.5	3.0	2.6	2.2	1.6	
Type of employer:												
Industry	67.8	79.5	37.2	78.2	56.8	50.4	62.5	42.9	40.2	58.5	41.8	
Educational institutions	13.6	4.1	35.9	6.7	24.7	26.4	20.5	30.1	31.3	16.4	44.8	
Nonprofit organizations	3.6	1.5	7.0	2.5	3.3	6.4	2.2	8.9	17.9	1.2	2.1	
Federal Government	7.7	7.6	10.3	6.8	10.3	5.1	7.8	3.4	2.7	15.8	8.5	
Military	.6	.8	.4	.5	.3	.3	.1	.4	.3	1.3	.4	
State, local, and other government	5.0	4.9	7.7	3.7	2.9	9.9	5.3	12.7	5.8	5.3	1.7	
Other	1.6	1.7	1.5	1.6	1.7	1.5	1.6	1.5	1.8	1.5	.8	

Source: U.S. National Science Foundation, *U.S. Scientists and Engineers: 1986*.

NO. 1000. PROFESSIONAL SCIENTIFIC, ENGINEERING, AND TECHNICAL PERSONNEL IN THE FEDERAL GOVERNMENT, BY OCCUPATIONAL GROUP: 1970 TO 1987

[In thousands, except percent. As of October. Excludes health professional personnel]

OCCUPATIONAL GROUP	1970	1980	1983 ^{1,2}	1985 ²	1986 ²	1987 ^{2,3}	PERCENT FEMALE					
							1970	1980	1983 ^{1,2}	1985 ²	1986 ²	1987 ^{2,3}
Total	180.3	206.9	218.9	238.0	239.2	240.0	6.7	9.5	11.8	13.8	14.6	15.4
Scientific personnel	77.2	88.0	89.5	91.4	89.5	89.1	8.0	12.7	14.1	15.6	16.3	22.7
Physical sciences	29.8	27.6	27.1	27.6	27.3	27.1	6.4	9.5	10.9	12.5	13.1	13.9
Mathematics ⁴	8.6	11.1	10.7	11.0	10.6	10.4	17.4	19.8	20.9	22.8	23.3	23.7
Social sciences ⁵	26.9	30.5	33.5	33.5	32.5	33.1	4.1	8.7	11.3	12.1	13.0	14.2
Other	6.6	10.5	9.3	10.1	10.1	10.1	16.2	23.3	22.8	25.1	25.7	26.3
Economics	4.3	6.9	5.3	5.9	5.8	5.6	11.1	17.4	18.4	20.6	21.1	21.3
Other	2.3	4.6	4.0	4.2	4.3	4.5	25.1	30.8	28.7	31.5	31.9	32.6
Geography ⁶	3.3	4.9	5.5	5.7	5.6	4.9	8.5	14.8	16.6	17.0	16.9	18.0
Psychology	2.2	3.3	3.3	3.4	3.4	3.5	13.7	16.8	18.8	21.4	22.4	23.6
Engineering personnel	83.0	89.6	94.3	105.1	106.2	109.7	.5	1.9	3.6	5.3	5.8	6.7
Computer specialists	20.1	29.3	35.2	41.5	43.5	41.2	21.1	23.3	27.9	31.4	32.8	34.8

¹ Excludes Tennessee Valley Authority (TVA). ² Excludes Post Office. ³ Excludes employees with less than a bachelor's degree. ⁴ Includes statistics. ⁵ Includes community planning. ⁶ Includes cartography and land surveying.

Source: U.S. National Science Foundation. Compiled from data supplied by the U.S. Office of Personnel Management.

NO. 1001. CIVILIAN EMPLOYMENT OF SCIENTISTS, ENGINEERS, AND TECHNICIANS, BY OCCUPATION AND MAJOR INDUSTRIAL SECTOR: 1988

[In thousands. Based on sample and subject to sampling error. For details, see source]

OCCUPATION	WAGE AND SALARY WORKERS									Self-employed
	Total ¹	Mining ²	Construction	Manufacturing	Transportation ³	Trade	FIRE ⁴	Services	Government	
Scientists and engineers.....	2,360.5	49.1	24.7	881.5	103.4	59.8	88.1	616.8	398.7	128.0
Scientists.....	949.7	23.0	1.3	166.1	24.4	32.8	72.3	310.7	213.9	96.0
Physical scientists.....	183.6	19.3	.1	58.4	2.2	2.2	.2	54.8	39.2	7.0
Life scientists.....	154.3	.2	(z)	19.1	.8	1.9	.6	59.9	55.3	8.0
Mathematical scientists.....	15.7	(z)	(z)	2.1	1.7	(z)	1.7	4.2	5.9	(z)
Social scientists.....	193.8	.4	1.2	86.5	18.2	28.7	10.0	76.1	51.4	54.0
Systems analysts, EDP.....	402.5	3.1	1.2	715.4	79.0	27.0	15.8	306.1	184.8	32.0
Engineers ⁵	1,410.8	26.1	23.4	715.4	79.0	27.0	15.8	306.1	184.8	32.0
Civil engineers.....	186.4	1.0	8.8	12.1	8.0	.4	1.1	70.9	77.9	6.0
Electrical/electronics engineers.....	439.1	1.1	4.6	232.2	38.7	14.0	.9	102.5	37.0	8.0
Mechanical engineers.....	224.5	1.8	4.6	138.6	6.4	6.5	.9	48.0	13.8	4.0
Engineering and science technicians.....	1,272.9	18.2	24.8	495.1	76.6	84.1	6.2	376.8	164.9	18.0
Electrical/electronics technicians.....	341.2	.8	5.0	153.9	28.9	63.3	1.6	60.1	26.5	1.0
Engineering technicians.....	381.2	5.4	5.4	137.4	26.4	9.9	.9	95.0	96.9	3.0
Drafters.....	318.7	4.2	14.4	112.5	18.9	7.8	1.4	130.8	13.5	13.0
Science technicians.....	231.8	7.8	(z)	91.3	2.4	3.1	2.3	90.9	28.0	1.0
Surveyors.....	99.9	2.8	2.5	(z)	3.3	(z)	.5	60.2	21.9	8.0
Computer programmers.....	518.9	3.3	2.2	100.1	24.6	46.6	.7	209.2	38.8	16.0

² Fewer than 50. ¹ Includes agriculture, forestry, and fishing not shown separately. ³ Includes oil and gas extraction. ⁴ Includes communications and public utilities. ⁵ Finance, insurance, and real estate. ⁶ Includes kinds of engineers and technicians not shown separately.

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review*, November 1989.

NO. 1002. SCIENTISTS AND ENGINEERS—EMPLOYMENT IN INSTITUTIONS OF HIGHER EDUCATION, BY FIELD: 1980 TO 1985

[In thousands. As of January. Includes full-time and part-time personnel. Excludes graduate students who receive stipends for part-time services as scientists or engineers. R&D—research and development]

FIELD	1980	1983	1984	1985	FIELD	1980	1983	1984	1985
	Total.....	339.3	373.9	385.6		396.0	Mathematical scientists.....	27.1	31.3	32.6	33.1
Universities, colleges.....	324.2	358.9	370.4	380.4	Computer scientists.....	8.9	14.3	16.3	18.0
Engineers ¹	33.7	37.7	38.7	39.9	Life scientists ¹	133.7	151.4	156.4	161.7
Aeronautical ²	1.4	1.3	1.4	1.5	Agricultural.....	15.9	16.7	17.1	17.5
Chemical.....	2.4	2.4	2.5	2.6	Biological.....	44.8	48.1	49.3	50.5
Civil.....	5.5	6.4	6.4	6.7	Medical.....	67.1	74.4	76.1	78.7
Electrical.....	8.2	9.6	10.2	10.8	Psychologists.....	23.3	23.8	23.8	23.8
Mechanical.....	6.1	6.7	7.1	7.2	Social scientists.....	54.1	55.4	56.2	56.7
Physical and environmental science ¹	43.5	44.9	46.4	47.2	Economists.....	14.7	15.6	15.7	15.8
Chemists.....	17.6	18.3	18.8	19.1	Federally funded R&D centers.....	15.1	15.1	15.2	15.6
Earth scientists.....	6.6	6.5	6.7	6.7	Engineers.....	6.5	6.5	6.0	6.2
Physicists.....	13.0	13.6	13.9	14.1	Scientists.....	8.6	8.6	9.2	9.4

¹ Includes other fields not shown separately. ² Includes astronomical. Source: U.S. National Science Foundation, *Survey of Scientific and Engineering Personnel Employed in Universities and Colleges*, periodic.

NO. 1003. GRADUATE SCIENCE/ENGINEERING STUDENTS IN DOCTORATE-GRANTING INSTITUTIONS OF HIGHER EDUCATION BY SEX, CITIZENSHIP, AND ENROLLMENT STATUS: 1975 TO 1987

[As of fall. Includes outlying areas]

FIELD OF SCIENCE/ENGINEERING	TOTAL (1,000)			PERCENT—								
				Female			Foreign			Part-time		
	1975	1980	1987	1975	1980	1987	1975	1980	1987	1975	1980	1987
Total, all fields.....	293.8	333.7	388.7	17.8	33.6	36.1	(NA)	(NA)	22.6	28.4	30.9	31.9
Engineering, total.....	64.6	70.1	98.0	2.9	8.7	12.6	(NA)	(NA)	32.8	42.6	40.2	37.6
Sciences, total.....	229.2	263.5	290.7	22.0	40.3	44.0	(NA)	(NA)	19.2	24.4	28.4	29.9
Physical sciences.....	24.5	25.4	31.0	10.9	16.6	21.2	(NA)	(NA)	32.7	13.3	12.4	10.7
Earth sciences.....	11.0	12.8	13.5	11.2	22.7	26.0	(NA)	(NA)	15.6	18.0	19.8	24.5
Mathematical sciences.....	14.4	13.6	16.2	14.7	25.4	29.3	(NA)	(NA)	35.7	30.2	31.2	23.9
Computer sciences.....	7.0	11.4	25.3	8.5	21.8	23.3	(NA)	(NA)	29.6	41.2	46.2	46.4
Agricultural sciences.....	10.1	11.6	10.3	11.2	23.5	26.5	(NA)	(NA)	26.8	15.5	17.2	16.7
Biological sciences.....	40.9	42.7	44.1	24.6	38.0	42.8	(NA)	(NA)	19.5	15.0	18.1	14.4
Health fields.....	22.6	36.4	42.2	37.9	70.8	73.8	(NA)	(NA)	7.8	27.7	38.7	47.3
Psychology.....	26.9	29.4	31.5	31.0	51.6	61.1	(NA)	(NA)	4.2	26.8	26.6	28.0
Social science.....	71.8	80.3	76.6	21.8	41.3	46.0	(NA)	(NA)	18.7	31.1	35.8	36.4

NA Not available.

Source: U.S. National Science Foundation, *Survey of Graduate Science and Engineering Students and Postdoctorates*, annual.

Doctorates Conferred—Nobel Prize Laureates—Space Program 591

NO. 1004. DOCTORATES CONFERRED, BY RECIPIENTS' CHARACTERISTICS, 1980 TO 1988, AND BY SELECTED SCIENCE AND ENGINEERING FIELDS, 1988

CHARACTERISTIC	ALL FIELDS				1988								
	1980	1985	1987	All fields ¹	Engineering	Physical sciences ²	Earth sciences	Mathematics	Computer sciences	Biological sciences ³	Agricultural	Social sciences ⁴	Psychology
Doctorates conferred	31,020	31,291	32,367	33,456	4,190	3,320	726	749	514	4,106	1,015	2,579	3,058
Percent distribution	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Male	69.7	65.7	64.7	63.6	93.2	83.2	80.2	83.8	89.1	63.4	81.7	66.9	45.2
Female	30.3	34.3	35.3	36.4	6.8	16.8	19.8	16.2	10.9	36.6	18.3	33.1	54.8
White ⁵	84.8	84.2	86.0	86.2	77.0	86.1	92.2	86.2	81.3	89.2	84.9	84.5	89.7
Black ⁶	4.2	4.2	3.7	3.8	1.4	1.5	.6	.8	.6	1.5	3.3	3.9	3.7
Asian or Pacific Islander ⁶	4.2	4.3	4.7	5.0	15.5	6.1	2.3	8.6	13.5	5.1	4.9	5.3	1.7
American Indian or Alaskan native ⁶	.3	.4	.5	.4	.2	.3	.4	.5	.3	(z)	1.0	.5	.3
Hispanic ⁶	1.8	2.6	2.9	2.8	2.9	2.8	1.5	1.0	.6	2.4	3.4	3.4	3.4
Other/unknown ⁶	4.9	2.3	2.2	1.9	2.9	3.2	2.6	2.9	3.9	1.7	2.5	2.5	1.2
U.S. citizens	83.6	78.1	76.2	74.8	46.0	67.7	75.2	49.6	56.8	80.7	56.4	65.5	94.9
Foreign citizens	16.4	21.9	23.8	25.2	54.0	32.3	24.8	50.4	43.2	19.3	43.6	34.5	5.1
Median age at award ⁷ (yr.)	32.2	33.3	33.6	33.7	31.0	29.6	32.4	30.9	32.3	31.0	33.2	34.0	33.6

Z Rounds to less than .05 percent. ¹ Includes other fields, not shown separately. ² Astronomy, physics, and chemistry. ³ Biotechnology, botany, microbiology, physiology, zoology, and related fields. ⁴ Anthropology, sociology, political science, economics, and international relations. ⁵ Data limited to U.S. citizens and non-U.S. citizens with permanent government visas. ⁶ Non-Hispanic. ⁷ For definition of median, see Guide to Tabular Presentation.

Source: U.S. National Science Foundation, Division of Science Resources Studies, *Survey of Earned Doctorates*.

NO. 1005. NOBEL PRIZE LAUREATES IN CHEMISTRY, PHYSICS, AND PHYSIOLOGY/MEDICINE—SELECTED COUNTRIES: 1901 TO 1988

[Presented by location of award-winning research and by date of award]

COUNTRY	1901-1988				1901-1915	1916-1930	1931-1945	1946-1960	1961-1975	1976-1988
	Total	Physics	Chemistry	Physiology/Medicine						
Total	393	134	112	147	52	41	49	74	92	85
United States	150	52	33	65	3	3	14	38	41	51
United Kingdom	69	21	24	24	7	8	11	14	20	9
West Germany ¹	56	16	28	12	15	12	11	4	8	6
France	22	8	7	7	10	3	2	-	5	2
Soviet Union	10	7	1	2	2	-	-	4	3	1
Japan	4	3	1	-	-	-	-	1	2	1
Other countries	82	27	18	37	15	15	11	13	13	15

- Represents zero. ¹ Includes East Germany before 1946.

Source: U.S. National Science Foundation, unpublished data.

NO. 1006. FEDERAL SPACE PROGRAM—BUDGET AUTHORITY, BY AGENCY: 1960 TO 1989

[In millions of dollars, except percent. For fiscal years ending in year shown; see text, section 9. NASA=National Aeronautics and Space Administration]

YEAR	Total	NASA ¹		DEFENSE		Other	YEAR	Total	NASA ¹		DEFENSE		Other
		Total	Percent of total	Total	Percent of total				Total	Percent of total			
1960	1,066	462	43.3	561	52.6	43	1977	5,983	3,440	57.5	2,412	40.3	131
1965	6,956	5,138	73.9	1,574	22.6	244	1978	6,518	3,623	55.6	2,738	42.0	157
1966	6,970	5,065	72.7	1,689	24.2	217	1979	7,244	4,030	55.6	3,036	41.9	178
1967	6,710	4,830	72.0	1,664	24.8	216	1980	8,689	4,680	53.9	3,848	44.3	160
1968	6,529	4,430	67.9	1,922	29.4	177	1981	9,978	4,992	50.0	4,828	48.4	158
1969	5,976	3,822	64.0	2,013	33.7	141	1982	12,441	5,528	44.4	6,679	53.7	234
1970	5,341	3,547	66.4	1,678	31.4	115	1983	15,589	6,328	40.6	9,019	57.9	242
1971	4,741	3,101	65.4	1,512	31.9	127	1984	17,136	6,648	38.8	10,195	59.5	293
1972	4,575	3,071	67.1	1,407	30.8	97	1985	20,167	6,925	34.3	12,768	63.3	474
1973	4,825	3,093	64.1	1,623	33.6	109	1986	21,659	7,165	33.1	14,126	65.2	368
1974	4,640	2,759	59.4	1,766	38.1	116	1987	26,448	9,809	37.1	16,287	61.6	352
1975	4,914	2,915	59.3	1,892	38.5	107	1988 ²	26,373	8,302	31.5	17,679	67.0	392
1976 ³	6,660	4,075	61.2	2,444	36.7	142	1989 ⁴	30,196	10,616	35.2	19,100	63.3	480

¹ Includes budget authority for the space transportation system of \$3.1 billion in 1982; \$4.1 billion in 1983; and \$4.0 billion in 1984. ² Includes transition quarter, July 1 to Sept. 30, 1976. ³ Includes \$2.1 billion for replacement of shuttle orbiter Challenger. ⁴ Estimated.

Source: U.S. National Aeronautics and Space Administration, *Aeronautics and Space Report of the President*, annual. Data from U.S. Office of Management and Budget.

No. 1007. SPACE VEHICLE SYSTEMS—NET SALES AND BACKLOG ORDERS: 1965 TO 1988

[In millions of dollars. Backlog orders as of Dec. 31. Based on data from major companies engaged in manufacture of aerospace products. Includes parts but excludes engines and propulsion units]

YEAR	NET SALES			BACKLOG ORDERS			YEAR	NET SALES			BACKLOG ORDERS		
	Total	Military	Non-military	Total	Military	Non-military		Total	Military	Non-military	Total	Military	Non-military
1965.....	2,449	602	1,847	2,203	503	1,700	1983.....	4,940	2,420	2,520	4,865	2,733	2,132
1970.....	1,956	1,025	931	1,184	786	398	1984.....	5,225	3,019	2,206	4,624	3,099	1,525
1975.....	2,119	1,096	1,023	1,304	1,019	285	1985.....	6,300	4,241	2,059	6,707	4,941	1,766
1980.....	3,483	1,461	2,022	1,814	951	863	1986.....	6,304	4,579	1,725	8,063	6,028	2,035
1981.....	3,856	1,736	2,120	3,174	2,164	1,010	1987.....	8,051	5,248	2,803	12,393	9,460	2,933
1982.....	4,749	2,606	2,143	4,337	2,403	1,934	1988.....	8,622	6,190	2,432	10,838	7,880	2,958

¹ Includes data for non-military missile systems and parts.

Source: U.S. Bureau of the Census, *Current Industrial Reports, MA-37D, Aerospace Industry (Orders, Sales, and Backlog)*.

No. 1008. NATIONAL AERONAUTICS AND SPACE ADMINISTRATION—BUDGET SUMMARY: 1987 TO 1989

[In millions of dollars]

ITEM	1987	1988	1989	ITEM	1987	1988	1989
Appropriations, total	10,576	9,027	10,898	Space flight, control and data communication programs	5,815	3,811	4,464
Research and development	3,128	3,295	4,267	Space Shuttle production and operational capability.....	3,105	1,088	1,128
Space Science and applications.....	1,553	1,576	1,830	Orbiter.....	373	329	282
Physics and astronomy.....	553	611	734	Propulsion systems.....	464	595	582
Life sciences.....	72	70	78	Launch and mission support.....	148	165	264
Planetary exploration.....	358	329	417	Orbiter replacement.....	2,100	-	-
Space applications.....	569	566	601	Changes and systems upgrade.....	20	-	-
Environmental observations.....	321	314	414	Space transportation operations.....	1,847	1,810	2,305
Safety, reliability, and quality assurance.....	9	14	22	Flight hardware.....	936	777	1,113
Commercial programs.....	41	74	45	Flight operations.....	558	584	686
Space transportation capability development ¹	496	610	681	Launch and landing operations.....	353	450	507
Upper stages.....	161	155	139	Expendable launch vehicles.....	-	28	86
Engineering and technical base.....	133	134	155	Space and ground network, communications and data systems.....	863	884	945
Space lab.....	74	67	89	Space network.....	407	436	484
Aeronautics and space technology.....	592	612	769	Ground network.....	250	232	228
Aeronautical research and technology.....	376	335	404	Communications and data systems.....	206	217	233
Space research and technology.....	171	224	296	Research and program management	1,467	1,743	1,892
Transatmospheric research and technology.....	45	53	69	Construction of facilities	166	178	275
Space station.....	420	392	900				
Tracking and data advanced systems.....	17	16	19				

- Represents or rounds to zero. ¹ Includes other items not shown separately.

Source: U.S. National Aeronautics and Space Administration, *NASA News*.

No. 1009. NASA—OUTLAYS FOR OPERATIONAL ACTIVITIES AND FOR RESEARCH AND DEVELOPMENT: 1965 TO 1988

[In millions of dollars, except percent. For fiscal year ending in year shown; see text, section 9. Minus sign (-) indicates decrease]

YEAR	AGENCY TOTAL		PERFORMANCE (operations)			PERFORMANCE (R&D)				FACILITIES (R&D)			
	Total outlays	Percent change ¹	Total operations	Space flight	Other	Total	Space flight	Space science, applications ²	Air transport and other	Total R&D	Space flight	Space science, applications ²	Air transport and other
1965.....	5,093	22.1	(³)	(³)	(³)	³ 4,562	³ 3,138	³ 1,126	³ 298	531	401	78	52
1970.....	3,753	-11.7	(³)	(³)	(³)	³ 3,699	³ 2,195	³ 963	³ 541	54	14	21	19
1975.....	3,266	.3	(³)	(³)	(³)	³ 3,181	³ 1,500	³ 1,076	³ 606	85	35	9	42
1980.....	4,850	15.8	1,245	914	331	3,465	1,642	1,341	482	140	38	5	97
1983.....	6,664	10.4	4,018	3,431	587	2,538	596	1,486	456	108	26	-	82
1984.....	7,048	5.8	3,317	2,854	463	3,539	1,183	1,667	689	192	44	20	128
1985.....	7,251	2.9	4,034	3,310	724	2,970	542	1,834	594	247	70	23	154
1986.....	7,404	2.1	3,673	2,947	726	3,432	740	2,101	591	299	107	26	166
1987.....	7,591	2.5	4,027	3,250	777	3,250	768	1,583	899	314	119	25	170
1988.....	9,092	19.8	4,861	3,845	1,016	3,832	1,037	1,777	1,018	399	130	48	221

- Represents zero. ¹ Change from immediate prior year. ² Includes technology. ³ Performance (operations) included in performance (R&D). ⁴ Excludes intragovernmental funds, Federal Financing Bank, direct loan principle repayments—\$67 million in 1985.

Source: U.S. Office of Management and Budget, *Budget of the United States Government*, annual.

No. 1010. NASA—PERMANENT PERSONNEL DISTRIBUTION SUMMARY: 1975 TO 1988

CODE AND INSTALLATION	1975	1980	1984	1985	1986	1987	1988		
							Total	Per-cent male	Per-cent Black ¹
Total	24,333	22,618	21,415	21,423	21,228	21,031	21,991	72.6	8.9
Professional.....	15,169	14,748	14,419	14,819	14,803	15,482	15,747	80.3	5.7
Scientists and engineers, aerospace technicians.....	11,438	10,779	10,605	10,884	10,925	11,450	11,644	88.7	4.0
Administrators.....	3,504	3,539	3,526	3,675	3,658	3,803	3,881	54.9	10.8
Scientists and engineers, non aerospace technicians.....	180	377	226	209	171	178	169	88.8	7.1
Life sciences.....	47	54	53	51	51	51	53	77.4	5.7
Non-professional.....	9,164	7,864	7,005	6,604	6,425	6,349	6,244	53.3	14.8
INSTALLATION									
Headquarters.....	1,562	1,516	1,408	1,383	1,362	1,532	1,653	56.6	19.6
Ames Research Center, CA ²	2,161	2,116	2,093	2,052	2,072	2,079	2,101	76.5	4.5
Lewis Research Center, Cleveland, OH.....	3,042	2,822	2,650	2,715	2,598	2,663	2,649	81.6	6.2
Langley Research Center, Hampton, VA.....	3,315	2,966	2,873	2,827	2,814	2,851	2,840	77.4	9.5
Goddard Space Flight Center, MD ³	4,185	3,818	3,581	3,629	3,679	3,648	3,626	72.7	9.4
Marshall Space Flight Center, AL.....	4,100	3,563	3,264	3,284	3,260	3,384	3,340	70.6	7.2
Stennis Space Center, MS ⁴	69	103	112	122	123	137	147	67.3	9.5
Johnson, Houston, TX.....	3,660	3,508	3,316	3,330	3,269	3,349	3,399	69.6	7.5
Kennedy, FL.....	2,259	2,201	2,118	2,081	2,051	2,188	2,236	72.4	5.4

¹ Excludes Hispanic Blacks. ² Includes Flight Research Center, California. ³ Includes Wallops Flight Research Center, Virginia. ⁴ Prior to 1988, National Space Technology Laboratories.

Source: U.S. National Aeronautics and Space Administration, 1975-1985, *Personnel Management Information System (PMIS)*, annual; beginning 1986, *The Civil Service Work Force*, annual.

No. 1011. SPACE SHUTTLE SYSTEM EXPENDITURES BY NASA IN CONSTANT (1982) DOLLARS: 1973 TO 1988

[In millions of dollars. For year ending Sept. 30. These data cannot be used alone to estimate the total shuttle cost. Only operating expenditures correspond to an annual cost in the economic sense, and even those estimates require adjustment for the three-year period over which the cost of a shuttle flight is incurred and reimbursements are received. For details, see source]

YEAR	Total	D.D.T. and E. ¹	Construction	Production	Operations	YEAR	Total	D.D.T. and E. ¹	Construction	Production	Operations
1973.....	58	-	58	-	-	1981.....	2,724	1,041	13	1,093	578
1974.....	325	216	109	-	-	1982.....	2,932	894	20	1,283	735
1975.....	1,543	1,407	136	-	-	1983.....	3,014	-	26	1,635	1,354
1976.....	2,619	2,541	79	-	-	1984.....	3,127	-	73	890	2,364
1977.....	2,258	2,089	60	109	-	1985.....	2,636	-	42	1,376	1,218
1978.....	2,062	1,898	103	61	-	1986.....	2,606	-	-	1,184	1,422
1979.....	2,251	1,713	42	496	-	1987.....	4,165	-	-	2,611	1,553
1980.....	2,751	1,339	42	907	463	1988.....	2,378	-	-	888	1,490

- Represents zero. ¹ Design, development, testing, and evaluation.

Source: U.S. Congress, Congressional Budget Office, unpublished data.

No. 1012. WORLD-WIDE SUCCESSFUL SPACE LAUNCHES: 1957 TO 1988

[Criterion of success is attainment of Earth orbit or Earth escape. E.S.A. = European Space Agency]

YEAR	Total ¹	Soviet Union	United States	Japan	E.S.A.	India	China: Mainland	YEAR	Total ¹	Soviet Union	United States	Japan	E.S.A.	India	China: Mainland
Total	3,091	2,106	887	36	23	3	23	1975-1979..	607	461	126	10	1	-	6
1957-1959..	21	6	15	-	-	-	-	1980-1984..	605	483	93	12	8	3	6
1960-1964..	268	76	192	-	-	-	-	1985.....	120	97	17	2	3	-	1
1965-1969..	586	302	279	-	-	-	-	1986.....	103	91	6	2	2	-	2
1970-1974..	555	405	139	5	-	-	2	1987.....	110	95	8	3	2	-	2
								1988.....	116	90	12	2	7	-	4

- Represents zero. ¹ Includes launches in other countries not shown separately.

Source: Library of Congress, Congressional Research Service, Science Policy Research Division, *Space Activities of the United States, Soviet Union and Other Launching Countries/Organization: 1957-1988*, March 1989.