

## 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*; and *Producer Price Indexes*. The Bureau of Economic Analysis of the Department of Commerce is the source for gross national product implicit price deflators; see table 779.

**Producer price index (PPI).**—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 regions, 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 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 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 Gross national product (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. All of the above GNP measures are published by the Bureau of Economic Analysis of the Department of Commerce.

**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 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 implicit price deflator*. The GNP implicit price deflator is issued quarterly by the U.S. Bureau of Economic Analysis of the Department of Commerce. 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 implicit price deflator usually closely parallels the movement of the CPI but is rarely identical to it. The GNP implicit price 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 implicit price deflator.

*Other measures of inflation include* the index of industrial materials prices, 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.

## No. 764. Purchasing Power of the Dollar: 1950 to 1990

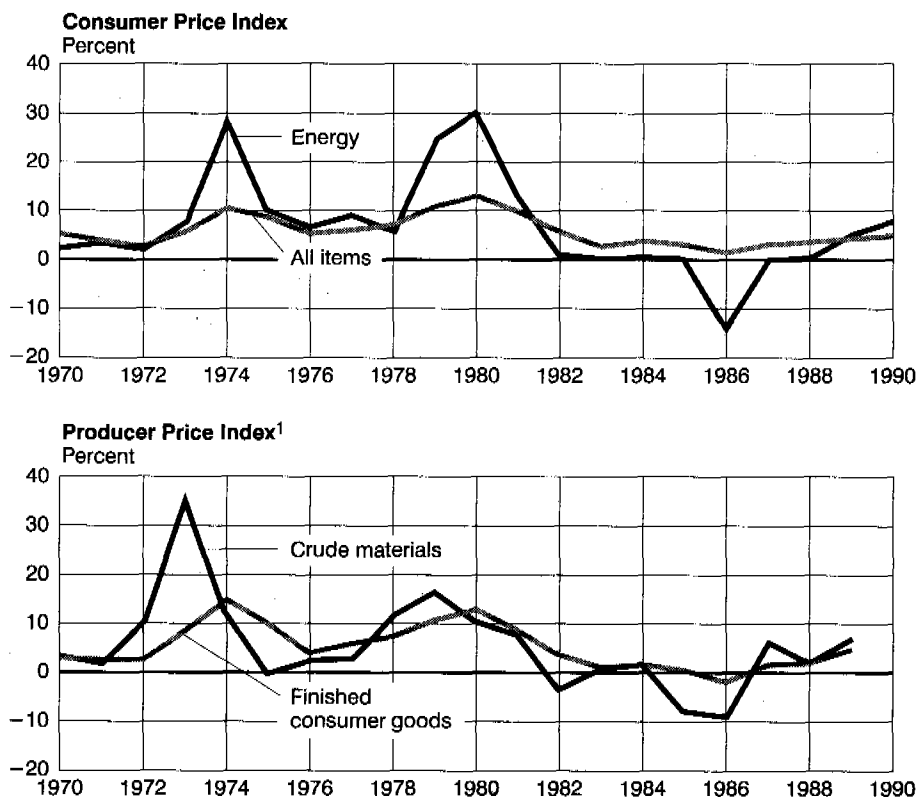
[Indexes: PPI, 1982=\$1.00; CPI, 1982-84=\$1.00. Producer prices prior to 1961, and consumer prices prior to 1964, exclude Alaska and Hawaii. Producer prices based on finished goods index. Obtained by dividing the average price index for the 1982-100, PPI; 1982-84=100, CPI base periods (100.0) by the 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	1964	2.985	3.220	1978	1.433	1.532
1951	3.247	3.846	1965	2.933	3.166	1979	1.289	1.380
1952	3.268	3.765	1966	2.841	3.080	1980	1.136	1.215
1953	3.300	3.735	1967	2.809	2.993	1981	1.041	1.098
1954	3.289	3.717	1968	2.732	2.873	1982	1.000	1.035
1955	3.279	3.732	1969	2.632	2.726	1983	0.984	1.003
1956	3.195	3.678	1970	2.545	2.574	1984	0.964	0.961
1957	3.077	3.549	1971	2.469	2.466	1985	0.955	0.928
1958	3.012	3.457	1972	2.392	2.391	1986	0.969	0.913
1959	3.021	3.427	1973	2.193	2.251	1987	0.949	0.880
1960	2.994	3.373	1974	1.901	2.029	1988	0.926	0.846
1961	2.994	3.340	1975	1.718	1.859	1989	0.880	0.807
1962	2.985	3.304	1976	1.645	1.757	1990	0.839	0.766
1963	2.994	3.265	1977	1.546	1.649			

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

Figure 15.1

## Annual Percent Change in Consumer and Producer Price Indexes: 1970 to 1990



<sup>1</sup>Producer price index by stage of processing.

Source: Chart prepared by U.S. Bureau of the Census. For data, see tables 765 and 766.

**No. 765. Consumer Price Indexes—Percent Change in Major Groups: 1960 to 1990**

(In percent. See table 770)

YEAR	All items	Energy	Food	Shelter	Apparel and upkeep	Transportation	Medical care	Fuel oil	Electricity	Utility (piped) gas	Telephone services	All commodities
1960	1.7	2.3	1.0	2.0	1.6	-	-1.5	3.7	1.4	6.7	1.6	0.9
1961	1.0	0.4	1.3	0.8	0.9	1.0	3.7	2.7	-	1.7	0.3	0.6
1962	1.0	0.4	0.7	1.6	0.4	2.3	-	2.6	-	-	-	0.9
1963	1.3	-	1.6	1.2	1.3	0.3	2.1	2.6	-	-	0.2	0.9
1964	1.3	-0.4	1.3	1.5	0.9	1.6	-2.1	2.1	-0.3	-	-	1.2
1965	1.6	1.8	2.2	1.9	1.1	1.6	2.1	2.4	-0.3	0.6	-1.5	1.1
1966	2.9	1.7	5.0	3.0	2.5	1.3	2.8	4.4	-	0.6	2.1	2.6
1967	3.1	2.1	0.9	3.6	4.1	3.1	2.7	7.2	0.7	-	1.4	1.9
1968	4.2	1.7	3.5	4.5	5.3	3.0	3.3	6.0	1.0	0.6	-	3.5
1969	5.5	2.5	5.1	8.3	5.8	4.1	1.9	6.7	2.0	2.2	1.2	4.7
1970	5.7	2.8	5.7	8.9	4.2	5.0	3.8	6.6	3.2	5.4	1.2	4.5
1971	4.4	3.9	3.1	4.2	3.2	5.3	6.7	6.2	6.6	7.1	4.9	3.6
1972	3.2	2.6	4.2	4.6	2.0	1.0	-	3.3	5.0	5.2	5.5	3.0
1973	6.2	8.1	14.5	4.7	3.7	3.3	15.9	4.0	5.1	4.5	2.6	7.4
1974	11.0	29.6	14.3	9.6	7.4	11.2	57.8	9.3	17.9	12.6	4.2	11.9
1975	9.1	10.5	8.5	9.9	4.5	9.4	8.4	12.0	13.4	19.6	3.2	8.8
1976	5.8	7.1	3.0	5.5	3.7	10.0	7.2	9.5	6.2	16.7	3.6	4.3
1977	6.5	9.5	6.3	6.6	4.5	7.1	13.4	9.6	6.6	19.0	1.2	5.8
1978	7.6	6.3	9.9	10.2	3.6	4.6	5.9	8.4	7.6	10.0	1.1	7.2
1979	11.3	25.1	11.0	13.9	4.3	14.3	40.5	9.2	7.7	16.0	0.3	11.3
1980	13.5	30.9	8.6	17.6	7.1	17.9	39.0	11.0	15.5	19.2	2.5	12.3
1981	10.3	13.6	7.8	11.7	4.8	12.2	22.3	10.7	15.0	14.0	8.9	8.4
1982	6.2	1.5	4.1	7.1	2.6	4.1	-2.1	11.6	9.9	19.9	10.2	4.1
1983	3.2	0.7	2.1	2.3	2.5	2.4	8.1	8.8	3.2	16.6	6.4	2.9
1984	4.3	1.0	3.8	4.9	1.9	4.4	2.1	6.2	6.5	0.8	8.4	3.4
1985	3.6	0.7	2.3	5.6	2.8	2.6	-4.0	6.3	3.4	-0.7	3.9	2.1
1986	1.9	-13.2	3.2	5.5	0.9	-3.9	-21.7	7.5	1.4	-4.9	4.9	-0.9
1987	3.6	0.5	4.1	4.7	4.4	3.0	2.3	6.6	-0.4	-4.6	0.6	3.2
1988	4.1	0.8	4.1	4.8	4.3	3.1	-	6.5	1.4	-0.6	-0.4	3.5
1989	4.8	5.6	5.8	4.5	2.8	5.0	5.9	7.7	2.9	2.8	1.0	4.7
1990	5.4	8.3	5.8	5.4	4.6	5.6	22.8	9.0	2.4	0.2	0.4	5.2

- Represents zero.

**No. 766. Stage of Processing Producer Prices—Annual Percent Change: 1960 to 1989**

[1982 = 100. Yearly averages. See table 776]

YEAR	FINISHED GOODS			Finished consumer goods except foods	Intermediate materials, supplies and components	Intermediate materials, less food and feed-stuffs	CRUDE MATERIALS			
	Total	Consumer goods	Capital equipment				Total	Crude food-stuffs and feed-stuffs	Crude nonfood materials excluding fuel	Crude fuel
1960	0.9	0.9	0.3	0.6	-	0.7	-2.3	-1.0	-4.3	1.0
1961	-	-	0.3	-0.3	-0.6	1.3	-0.7	-1.3	1.1	-
1962	0.3	0.3	0.3	-	-	-0.3	1.0	1.8	-0.4	-1.0
1963	-0.3	-0.6	0.3	-	0.3	0.3	-2.0	2.8	-1.5	1.0
1964	0.3	0.3	0.9	-0.3	0.3	0.7	1.0	-2.4	1.9	-
1965	1.8	1.8	1.2	0.9	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	0.6	3.5	1.8	0.6	1.3	-5.4	5.6	-6.4	3.7
1968	2.8	2.5	3.4	2.3	2.5	2.5	6.6	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	0.3	1.3	-8.3	23.4
1976	4.5	3.8	6.7	6.2	5.0	6.0	2.9	-0.8	9.8	12.7
1977	6.4	6.5	6.4	7.3	6.6	6.8	3.3	0.9	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	12.8	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	-0.7	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	0.6	0.5	1.3	1.8	1.2	5.1
1984	1.1	2.0	2.3	1.0	2.5	2.5	2.2	2.8	2.2	-
1985	1.0	0.5	2.2	1.1	-0.4	-	-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
1989	5.2	5.6	3.9	5.6	4.6	4.7	7.4	4.8	3.7	3.9

- Represents zero.

Source of tables 765 and 766: U.S. Bureau of Labor Statistics, *Monthly Labor Review*.

**No. 767. Implicit Price Deflators for Gross National Product—Annual Percent Change: 1960 to 1989**

[Minus sign (-) indicates decrease. See table 779]

YEAR	Gross national product	Gross domestic product	Gross domestic business product	Gross non-farm business product	Personal consumption expenditures	FIXED INVESTMENT <sup>1</sup>			Exports	Imports	Govt. purchases of goods and services
						Total	Residential	Nonresidential			
1960	1.6	1.6	1.2	1.2	1.9	1.4	0.7	1.3	1.7	1.3	1.2
1961	1.0	1.0	0.9	0.6	1.2	-	-	-0.3	1.6	-1.3	2.0
1962	2.2	2.2	1.8	2.1	1.8	0.7	0.4	1.3	0.3	-0.9	3.5
1963	1.6	1.6	0.9	0.9	1.5	0.7	-0.4	1.3	0.3	3.1	2.3
1964	1.5	1.5	1.2	1.2	1.7	1.0	1.1	0.6	1.0	2.1	2.6
1965	2.7	2.7	2.3	2.0	1.7	2.3	1.8	1.9	3.5	2.5	3.3
1966	3.6	3.6	3.1	2.8	3.1	4.2	3.1	3.7	3.7	4.0	4.6
1967	2.6	2.6	2.5	3.0	2.5	3.1	3.3	3.3	2.4	1.9	4.7
1968	5.0	5.0	4.6	4.3	4.5	4.2	5.2	4.4	2.0	1.5	6.1
1969	5.6	5.6	4.9	4.9	4.3	6.9	9.5	5.6	4.0	3.0	6.0
1970	5.5	5.5	4.7	4.9	4.6	4.8	3.9	5.3	5.7	5.8	8.5
1971	5.7	5.7	4.9	4.9	4.7	5.6	5.4	6.3	4.4	4.1	7.6
1972	4.7	4.7	4.0	3.8	4.0	4.9	5.6	4.7	3.2	6.0	6.8
1973	6.5	6.5	6.4	4.7	6.2	5.6	8.7	3.6	12.9	10.9	7.5
1974	9.1	9.1	9.3	9.7	10.5	10.3	11.2	9.8	19.5	42.0	10.8
1975	9.8	9.8	10.0	10.7	8.0	13.1	8.8	14.7	10.3	7.3	10.5
1976	6.4	6.4	6.0	6.3	5.7	6.7	7.0	6.9	4.3	3.0	6.6
1977	6.7	6.7	6.6	6.7	6.5	8.1	11.4	6.8	4.9	7.4	7.0
1978	7.3	7.3	7.3	7.0	7.3	9.6	12.4	8.2	7.1	10.0	7.0
1979	8.9	8.9	9.0	8.8	9.2	9.7	12.1	8.8	12.1	17.2	9.1
1980	9.0	9.0	9.1	9.7	10.7	9.4	9.8	9.4	10.5	24.5	11.3
1981	9.7	9.7	9.7	9.8	9.2	9.2	8.1	9.8	8.1	5.8	9.2
1982	6.4	6.4	6.0	6.4	5.7	6.2	3.5	5.2	2.6	1.6	7.1
1983	3.9	3.9	3.5	3.6	4.1	-0.2	-1.2	1.3	-2.6	4.0	4.0
1984	3.7	3.7	3.5	3.2	3.8	0.4	3.7	-0.9	1.9	-0.3	4.4
1985	3.0	3.1	2.7	3.3	3.2	0.4	2.2	0.2	-2.1	-2.0	3.4
1986	2.6	2.5	2.4	2.5	2.4	2.3	2.6	1.6	-1.2	-1.6	2.0
1987	3.2	3.3	2.8	2.8	4.6	1.0	3.7	-0.4	-0.3	5.7	3.3
1988	3.3	3.3	3.1	2.8	3.8	1.7	3.6	1.3	3.7	3.5	4.2
1989	4.1	4.0	4.0	3.9	4.6	1.4	3.5	1.0	2.2	1.3	4.2

- Represents or rounds to zero. <sup>1</sup> 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. 768. Fixed Weighted Price Indexes for Personal Consumption Expenditures—Annual Percent Change: 1960 to 1989**

YEAR	Personal consumption expenditures <sup>1</sup>	Motor vehicles and parts	Furniture <sup>2</sup>	Food	Clothing and shoes	Gasoline and oil	Housing	Household operation	Electricity and gas	Transportation	Medical care
1960	1.4	-1.7	0.3	1.2	1.2	2.6	1.6	3.5	1.3	3.4	3.4
1961	1.1	-0.2	-1.1	0.9	0.6	-0.8	1.4	1.4	0.3	3.6	2.9
1962	0.8	0.9	-1.8	1.2	0.4	0.9	1.3	0.7	-	0.6	2.8
1963	1.1	0.2	-1.0	1.5	1.0	-	1.1	1.7	-	-1.3	2.3
1964	1.1	0.4	-0.8	1.8	0.8	-0.4	1.0	1.6	-0.6	-0.3	3.4
1965	1.3	-0.9	-1.8	2.0	0.9	3.8	1.0	1.8	-0.3	3.2	3.3
1966	2.1	-0.9	-1.5	4.5	2.8	2.4	1.3	1.6	-	3.4	4.6
1967	2.6	1.3	0.7	1.1	4.3	3.2	2.0	2.2	-0.6	1.8	6.4
1968	3.8	3.0	2.2	3.8	5.7	1.5	2.5	3.7	1.0	2.4	7.6
1969	4.4	2.1	2.2	5.2	5.7	3.4	3.4	3.5	1.9	4.9	5.9
1970	4.4	3.3	1.5	5.7	4.2	0.7	4.2	4.8	3.4	10.2	7.0
1971	4.3	4.4	1.4	2.8	3.9	1.1	4.7	7.0	6.6	11.3	5.5
1972	3.6	-	1.0	4.8	2.2	1.1	3.6	5.3	4.8	3.4	5.2
1973	5.6	1.1	1.4	13.2	3.7	9.6	4.5	6.0	5.9	1.3	4.2
1974	9.4	5.9	6.2	13.0	6.6	34.9	4.1	11.3	18.1	6.0	8.1
1975	7.7	9.6	7.6	7.4	3.2	6.8	6.8	10.2	13.2	4.1	9.8
1976	5.7	7.8	3.7	2.7	3.2	4.3	6.9	9.2	6.3	11.9	8.9
1977	6.3	6.0	2.5	4.3	3.8	5.6	8.8	7.8	6.8	12.4	9.9
1978	7.0	7.0	4.0	9.4	2.4	4.3	7.2	6.6	6.7	5.7	7.8
1979	8.9	8.1	5.2	10.2	2.8	34.8	8.4	6.8	7.7	6.7	8.5
1980	10.4	7.9	6.3	8.0	3.9	38.2	9.8	10.2	15.6	15.5	11.3
1981	9.0	8.2	5.9	8.2	3.2	11.4	10.8	12.4	15.0	10.9	11.3
1982	5.7	5.5	3.6	4.2	1.9	-5.2	7.9	11.4	9.9	7.2	9.5
1983	4.2	2.9	1.1	2.0	1.9	-3.3	5.7	6.8	3.2	4.8	7.2
1984	4.0	3.3	0.1	4.2	1.3	-1.6	5.5	5.2	6.4	3.2	7.1
1985	3.5	2.2	-0.5	2.2	3.0	0.8	5.8	3.0	3.6	1.1	5.9
1986	2.8	2.1	0.2	3.3	-0.3	-21.5	5.6	2.2	1.4	3.5	4.9
1987	4.6	4.7	1.1	4.5	4.7	4.2	5.0	0.0	-0.2	6.4	5.7
1988	4.1	0.2	1.7	4.3	4.3	1.0	4.8	1.3	0.7	5.1	6.7
1989	4.8	2.0	1.1	5.7	2.3	9.3	4.5	2.3	2.8	4.2	6.5

- Represents or rounds to zero. <sup>1</sup> Includes items not shown separately. <sup>2</sup> 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. 769. Consumer Price Indexes for Selected Items and Groups: 1970 to 1990

[1982-84=100. Annual averages of monthly figures. See headnote, table 770]

ITEM	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989	1990
All items .....	38.8	53.8	82.4	99.6	103.9	107.6	109.6	113.6	118.3	124.0	130.7
Food and beverages .....	40.1	60.2	86.7	99.5	103.2	105.6	109.1	113.5	118.2	124.9	132.1
Food .....	39.2	59.8	86.8	99.4	103.2	105.6	109.0	113.5	118.2	125.1	132.4
Food at home .....	39.9	61.8	88.4	99.1	102.8	104.3	107.3	111.9	116.6	124.2	132.3
Cereals and bakery products .....	37.1	62.9	83.9	99.6	103.9	107.9	110.9	114.8	122.1	132.4	140.0
Cereals .....	(NA)	(NA)	76.3	99.9	105.3	111.3	117.3	124.1	132.9	147.9	158.6
Bakery products .....	(NA)	(NA)	83.8	99.6	104.2	108.2	111.1	115.0	121.8	131.5	139.2
Meats, poultry, fish and eggs .....	44.6	67.0	92.0	99.2	101.3	100.1	104.5	110.5	114.3	121.3	130.0
Meats .....	43.8	66.3	92.7	99.5	99.8	98.9	102.0	109.6	112.2	116.7	126.5
Beef and veal .....	43.5	61.9	98.4	99.1	100.3	98.2	98.8	106.3	112.1	119.3	128.8
Ground beef other than canned .....	47.0	62.3	104.6	99.4	98.4	95.9	94.9	100.2	103.4	108.6	118.1
Chuck roast .....	42.8	62.6	99.8	98.7	99.6	95.6	95.0	103.8	108.1	116.8	130.3
Round steak .....	45.8	66.5	98.9	99.3	99.2	97.0	98.4	105.3	110.6	116.6	125.1
Sirloin steak .....	42.4	61.7	96.2	99.0	101.7	99.7	102.3	111.2	120.0	126.0	130.6
Pork .....	45.4	77.1	81.9	100.1	98.8	99.1	107.2	116.0	112.5	113.2	129.8
Poultry .....	53.2	79.7	93.7	97.0	107.3	106.2	114.2	112.6	120.7	132.7	132.5
Fresh and frozen chicken parts .....	(NA)	(NA)	91.7	96.6	108.4	104.6	114.6	114.4	123.3	135.7	135.9
Fish and seafood .....	31.3	53.9	87.5	99.3	102.5	107.5	117.4	129.9	137.4	143.6	146.7
Canned fish and seafood .....	(NA)	(NA)	93.7	99.9	97.6	97.8	98.6	103.9	117.0	124.3	119.5
Eggs .....	65.6	82.4	88.6	97.7	109.1	91.0	97.2	91.5	93.6	118.5	124.1
Dairy products .....	44.7	62.6	90.9	100.0	101.3	103.2	103.3	105.9	108.4	115.6	126.5
Fruits and vegetables .....	37.8	56.9	82.1	97.3	105.7	108.4	109.4	119.1	128.1	138.0	149.0
Fresh fruits .....	35.6	51.8	84.8	95.1	105.6	116.3	118.7	132.0	143.0	152.4	170.9
Apples .....	37.1	56.4	92.1	94.6	106.6	113.1	130.6	131.0	134.2	140.5	147.5
Bananas .....	39.0	57.4	91.5	108.0	97.9	99.9	105.0	104.2	119.2	131.3	138.2
Oranges, tangerines .....	30.6	41.4	72.8	83.1	112.4	119.7	108.6	135.9	144.6	147.0	160.6
Fresh vegetables .....	39.4	55.6	79.0	97.8	108.2	103.5	107.7	121.6	129.3	143.1	151.1
Potatoes .....	38.0	57.7	81.0	91.3	116.0	101.6	96.1	116.0	119.1	153.5	162.6
Lettuce .....	35.4	49.6	77.8	103.2	96.1	106.1	112.7	136.4	148.6	151.5	150.3
Tomatoes .....	46.3	63.6	81.9	100.8	105.7	103.6	111.3	116.8	123.1	136.2	160.8
Processed fruits .....	38.4	59.7	82.1	98.1	105.2	109.5	106.3	110.6	122.0	125.9	136.9
Processed vegetables .....	36.6	62.2	83.1	98.6	103.3	104.4	104.2	107.1	112.2	124.2	127.5
Coffee .....	31.7	46.4	111.6	98.8	102.7	105.5	132.7	116.2	115.0	120.4	117.5
Alcoholic beverages .....	52.1	65.9	86.4	100.4	103.0	106.4	111.1	114.1	118.6	123.5	129.3
Alcoholic beverages at home .....	(NA)	(NA)	87.3	100.6	102.4	105.2	109.3	111.5	114.2	117.9	123.0
Beer and ale .....	49.2	63.4	84.8	100.7	104.2	106.7	108.7	110.9	114.4	118.2	123.6
Distilled spirits .....	(NA)	(NA)	89.8	100.4	101.4	105.3	113.3	114.4	116.1	118.9	125.7
Wine .....	49.7	65.5	89.5	100.5	99.1	100.2	102.4	105.7	107.8	110.9	114.4
Alcoholic beverages away from home .....	(NA)	(NA)	82.9	99.8	105.1	111.1	118.5	123.4	130.6	137.4	144.4
Lunch away from home .....	(NA)	(NA)	83.6	100.0	103.8	107.8	112.0	116.6	121.5	127.8	133.9
Dinner away from home .....	(NA)	(NA)	84.2	99.7	104.4	108.8	112.7	117.0	121.6	126.9	132.3
Housing .....	36.4	50.7	81.1	99.5	103.6	107.7	110.9	114.2	118.5	123.0	128.5
Shelter .....	35.5	48.8	81.0	99.1	104.0	109.8	115.8	121.3	127.1	132.8	140.0
Renters' cost .....	(NA)	(NA)	103.0	108.6	115.4	121.9	128.1	133.6	138.9	146.7	
Rent, residential .....	46.5	58.0	80.9	100.1	105.3	111.8	118.3	123.1	127.8	132.8	138.4
Tenants' insurance .....	(NA)	(NA)	78.9	100.7	104.8	109.4	115.8	120.4	124.9	128.3	130.6
Homeowners' costs .....	(NA)	(NA)	(NA)	102.5	107.3	113.1	119.4	124.8	131.1	137.3	144.6
Owners' equivalent rent .....	(NA)	(NA)	(NA)	102.5	107.3	113.2	119.4	124.8	131.1	137.4	144.8
Household insurance .....	(NA)	(NA)	(NA)	103.2	107.5	112.4	118.2	124.0	129.0	132.6	135.3
Maintenance and repair .....	35.8	54.1	82.4	99.9	103.7	106.5	107.9	111.8	114.7	118.0	122.2
Services .....	33.1	51.3	80.0	99.7	105.7	108.7	111.2	114.8	117.0	120.6	126.4
Commodities .....	43.7	61.9	88.0	100.2	101.0	103.7	103.7	107.8	110.4	114.8	116.6
Fuels and other utilities .....	29.1	45.4	75.4	100.2	104.8	106.5	104.1	103.0	104.4	107.8	111.6
Fuels .....	23.1	39.4	74.8	100.5	104.0	104.5	99.2	97.3	98.0	100.9	104.5
Fuel oil and other .....	17.0	36.4	86.1	97.2	99.4	95.9	77.6	77.9	78.1	81.7	99.3
Fuel oil .....	16.5	34.9	87.7	96.5	98.5	94.6	74.1	75.8	75.8	80.3	98.6
Gas (piped) and electricity .....	25.4	40.1	71.4	101.5	105.4	107.1	105.7	103.8	104.6	107.5	109.3
Electricity .....	31.8	50.0	75.8	98.9	105.3	108.9	110.4	110.0	111.5	114.7	117.4
Utility (piped) gas .....	19.6	31.1	65.7	104.7	105.5	104.8	99.7	95.1	94.5	97.1	97.3
Telephone services .....	58.7	71.7	77.7	99.2	107.5	111.7	117.2	116.5	116.0	117.2	117.7
Local charges .....	(NA)	(NA)	72.8	97.9	111.6	120.4	132.7	139.3	141.3	146.5	149.3
Interstate toll charges .....	(NA)	(NA)	83.3	101.5	99.2	94.9	88.4	75.3	72.3	70.0	68.2
Intrastate toll charges .....	(NA)	(NA)	85.2	100.4	105.9	106.8	106.8	104.7	101.5	97.0	95.1
Water and sewerage maintenance .....	34.3	48.4	74.0	100.4	107.0	113.4	119.4	125.8	132.7	140.8	150.2
Cable television .....	(NA)	(NA)	(NA)	(NA)	103.9	110.6	115.5	123.1	132.9	144.0	158.4
Refuse collection .....	(NA)	(NA)	(NA)	(NA)	103.2	109.9	118.7	130.3	142.5	155.6	171.2

See footnotes at end of table.

# **No. 769. Consumer Price Indexes for Selected Items and Groups: 1970 to 1990—Continued**

[1982-84 = 100. Annual averages of monthly figures. See headnote, table 770]

ITEM	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989	1990
Household furnishings and operations . . .	46.8	63.4	86.3	100.2	101.9	103.8	105.2	107.1	109.4	111.2	113.1
Housefurnishings . . .	55.5	69.8	88.5	100.4	101.2	101.7	102.2	103.6	105.1	105.5	106.7
Appliances and electronic equipment . . .	69.3	78.8	93.5	100.7	98.8	95.2	92.8	91.4	90.2	89.1	87.8
Video and audio equipment . . .	(NA)	(NA)	100.7	100.4	96.7	91.9	88.0	86.0	83.6	82.2	80.8
Television . . .	100.0	101.8	104.6	100.5	95.5	88.7	83.2	79.7	77.6	76.1	74.6
Video products other than TV . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	96.8	91.5
Audio products . . .	(NA)	(NA)	97.7	100.3	97.7	94.4	91.8	93.0	92.7	92.8	93.2
Housekeeping supplies . . .	36.6	56.9	83.2	100.3	102.6	106.2	108.2	111.5	114.7	120.9	125.2
Housekeeping services . . .	37.9	55.9	84.3	99.8	102.5	106.1	108.5	110.6	114.3	117.3	120.1
Postage . . .	34.9	52.0	76.2	100.0	100.0	108.8	110.2	110.2	121.4	125.1	125.1
Gardening and other household services . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	103.1	106.9	112.6	115.7
Apparel and upkeep . . .	59.2	72.5	90.9	100.2	102.1	105.0	105.8	110.6	115.4	118.6	124.1
Apparel commodities . . .	63.3	76.7	92.9	100.2	101.5	104.0	104.2	108.9	113.7	116.7	122.0
Apparel commodities less footwear . . .	64.5	78.0	93.0	100.2	101.6	104.3	104.7	109.6	114.4	117.1	122.8
Men's and boy's apparel . . .	62.2	75.5	89.4	100.3	102.1	105.0	106.2	109.1	113.4	117.0	120.4
Women's and girl's apparel . . .	71.8	85.5	96.0	100.2	101.3	104.9	104.0	110.4	114.9	116.4	122.6
Infants' and toddlers' . . .	39.2	64.5	85.5	101.1	102.6	107.2	111.8	112.1	116.4	119.1	125.8
Footwear . . .	56.8	69.6	91.8	99.8	101.1	102.3	101.9	105.1	109.9	114.4	117.4
Transportation . . .	37.5	50.1	83.1	99.3	103.7	106.4	102.3	105.4	108.7	114.1	120.5
Private transportation . . .	37.5	50.6	84.2	99.3	103.6	106.2	101.2	104.2	107.6	112.9	118.8
New vehicles . . .	53.1	63.0	88.5	99.9	102.6	106.1	110.6	114.4	116.5	119.2	121.4
New cars . . .	53.0	62.9	88.4	99.9	102.8	106.1	110.6	114.6	116.9	119.2	121.0
New trucks . . .	(NA)	(NA)	(NA)	(NA)	101.3	105.5	110.2	112.2	113.5	117.0	121.6
Used cars . . .	31.2	43.8	62.3	98.7	112.5	113.7	108.8	113.1	118.0	120.4	117.6
Motor fuel . . .	27.9	45.1	97.4	99.4	97.9	98.7	77.1	80.2	80.9	88.5	101.2
Automobile maintenance and repair . . .	36.6	53.7	81.5	100.3	103.8	106.8	110.3	114.8	119.7	124.9	130.1
Automobile insurance . . .	42.0	48.4	82.0	100.4	108.2	119.2	135.0	146.2	156.6	166.6	177.9
Automobile finance charges . . .	(NA)	(NA)	86.4	92.9	97.1	94.5	86.0	84.9	91.3	100.5	99.6
Vehicle rental, registration, other . . .	(NA)	(NA)	78.3	100.2	106.3	111.7	117.2	123.0	128.1	135.0	148.1
Public transportation . . .	35.2	43.5	69.0	99.5	105.7	110.5	117.0	121.1	123.3	129.5	142.6
Airline fares . . .	28.3	38.0	68.0	99.8	105.8	112.5	117.1	122.8	124.2	131.6	148.4
Other intercity transportation . . .	(NA)	(NA)	73.1	100.0	107.9	114.7	125.5	126.7	132.6	138.5	143.3
Intracity transportation . . .	(NA)	(NA)	69.7	99.0	105.2	107.7	115.8	118.8	121.7	125.2	133.5
Medical care . . .	34.0	47.5	74.9	100.6	106.8	113.5	122.0	130.1	138.6	149.3	162.8
Medical care commodities . . .	46.5	53.3	75.4	100.2	107.5	115.2	122.8	131.0	139.9	150.8	163.4
Prescription drugs . . .	47.4	51.2	72.5	100.1	109.7	120.1	130.4	140.8	150.2	165.2	181.7
Nonprescription drugs, medical supplies . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	103.1	108.1	114.6	120.6
Medical care services . . .	32.3	46.6	74.8	100.7	106.7	113.2	121.9	130.0	138.3	148.9	162.7
Professional medical services . . .	37.0	50.8	77.9	99.8	107.0	113.5	120.8	128.8	137.5	146.4	156.1
Physicians' services . . .	34.5	48.1	76.5	100.1	107.0	113.3	121.5	130.4	139.8	150.1	160.8
Dental services . . .	39.2	53.2	78.9	99.4	107.5	114.2	120.6	128.8	137.5	146.1	155.8
Eye care . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	103.5	108.7	112.4	117.3
Hospital and related services . . .	(NA)	(NA)	69.2	100.5	109.2	116.1	123.1	131.6	143.9	160.5	178.0
Entertainment . . .	47.5	62.0	83.6	100.1	103.8	107.9	111.6	115.3	120.3	126.5	132.4
Entertainment commodities . . .	46.1	61.7	84.5	100.2	102.8	105.8	107.9	110.5	115.0	119.8	124.0
Reading materials . . .	(NA)	(NA)	77.7	101.2	104.5	110.7	115.6	119.5	124.3	129.5	136.2
Sporting goods, equipment . . .	(NA)	(NA)	88.5	99.4	102.4	104.6	104.0	104.3	108.1	111.1	114.9
Toys, hobbies, and other entertainment . . .	(NA)	(NA)	86.5	100.1	101.9	103.3	105.3	108.4	113.2	118.5	121.5
Pet supplies and expenses . . .	(NA)	(NA)	83.3	100.0	103.3	106.4	108.7	111.0	114.5	120.7	124.6
Entertainment services . . .	49.4	62.2	82.3	100.1	105.4	110.9	116.8	122.0	127.7	135.4	143.2
Tobacco and smoking products . . .	43.1	54.7	72.0	103.4	110.1	116.7	124.7	133.6	145.8	164.4	181.5
Personal care . . .	43.5	57.9	81.9	100.3	104.3	108.3	111.9	115.1	119.4	125.0	130.4
Personal care services . . .	44.2	57.7	83.7	100.0	104.4	108.9	112.5	116.2	120.7	126.8	132.8
Beauty parlor services for women . . .	42.9	56.4	83.4	100.1	104.4	108.8	112.2	116.0	120.3	126.5	133.0
Haircuts, etc. for men . . .	(NA)	(NA)	84.4	99.6	104.4	109.0	113.1	116.5	121.7	127.3	131.5
Personal and educational expenses . . .	35.5	48.7	70.9	100.0	109.7	119.1	128.6	138.5	147.9	158.1	170.2
Tuition and other school fees . . .	(NA)	(NA)	71.2	99.7	109.8	119.7	129.6	140.0	151.0	162.7	175.7
College tuition . . .	(NA)	(NA)	70.8	99.7	109.9	119.9	129.6	139.4	150.0	161.9	175.0
Elementary and high school tuition . . .	(NA)	(NA)	72.3	99.8	109.8	119.0	129.2	141.3	154.6	168.0	182.8
All commodities . . .	41.7	58.2	86.0	99.8	103.2	105.4	104.4	107.7	111.5	116.7	122.8
All commodities less food . . .	43.4	57.6	85.7	100.0	103.1	105.2	101.7	104.3	107.7	112.0	117.0
Durables . . .	44.1	57.4	83.0	99.8	105.1	106.8	106.8	108.2	110.4	112.2	113.4
Nondurables . . .	40.8	58.3	87.6	99.7	102.5	104.8	103.5	107.5	111.8	118.2	126.0
Energy . . .	25.5	42.1	86.0	99.9	100.9	101.6	88.2	88.6	89.3	94.3	102.1

NA Not available.

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

**No. 770. Consumer Price Indexes, by Major Groups: 1960 to 1990**

[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	46.9	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	29.8	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	33.8	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	64.6	41.2	38.8	20.4	37.4	23.1	66.7	47.8
1974.	49.3	38.1	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	48.8	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	74.3	60.7
1977.	60.6	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	83.2
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.	107.6	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	108.7	138.6	75.8	111.5	94.5	116.0	111.5
1989.	124.0	94.3	125.1	132.8	118.6	114.1	149.3	80.3	114.7	97.1	117.2	116.7
1990.	130.7	102.1	132.4	140.0	124.1	120.5	162.8	98.6	117.4	97.3	117.7	122.8

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

**No. 771. Consumer Price Index by Region: 1975 to 1990**

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

ITEM	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
U.S. city average, all items.	53.8	72.6	82.4	90.9	96.5	99.6	103.9	107.6	108.6	113.6	118.3	124.0	130.7
Food.	59.8	79.9	86.8	93.6	97.4	99.4	103.2	105.6	109.0	113.5	118.2	125.1	132.4
Housing.	50.7	70.1	81.1	90.4	96.9	99.5	103.6	107.7	110.9	114.2	118.5	123.0	128.5
Gas (piped) and electricity.	40.1	61.0	71.4	81.9	93.2	101.5	105.4	107.1	105.7	103.8	104.6	107.5	109.3
Northeast:													
All items.	55.8	72.8	82.2	91.0	95.8	99.8	104.5	108.4	111.1	116.0	121.8	128.6	136.3
Food.	60.4	79.3	86.5	93.4	97.3	99.4	103.3	106.2	110.1	115.8	121.1	128.7	135.9
Housing.	(NA)	70.2	80.7	90.7	95.7	99.7	104.6	109.0	112.7	117.3	124.0	130.8	138.0
Gas (piped) and electricity.	(NA)	64.0	73.8	85.4	94.4	100.9	104.7	105.9	104.6	101.2	100.2	105.4	109.6
North Central:													
All items.	53.0	72.6	82.4	90.1	96.5	99.9	103.6	106.8	108.0	111.9	116.1	121.5	127.4
Food.	60.3	81.5	88.5	94.9	98.1	99.3	102.7	104.4	107.5	111.8	116.0	122.2	129.6
Housing.	(NA)	69.2	80.0	87.7	96.3	100.3	103.5	107.0	109.4	112.4	115.9	119.9	124.1
Gas (piped) and electricity.	(NA)	62.1	70.1	79.1	90.7	103.3	106.1	108.6	107.1	104.6	104.3	105.5	104.0
South:													
All items.	53.3	72.4	81.9	90.7	96.5	99.7	103.8	107.1	108.9	112.4	116.4	121.5	127.9
Food.	59.7	79.8	86.6	93.5	97.1	99.3	103.6	105.7	108.8	113.1	117.6	124.2	131.6
Housing.	(NA)	70.2	80.8	90.4	97.5	99.6	103.0	106.3	109.0	111.0	113.9	117.2	121.8
Gas (piped) and electricity.	(NA)	61.7	70.2	82.6	94.1	100.9	105.0	106.0	105.1	104.3	106.1	108.2	110.4
West:													
All items.	52.6	72.6	83.3	91.9	97.4	99.0	103.6	108.0	110.5	114.3	119.0	124.6	131.5
Food.	57.8	78.7	85.2	92.3	96.7	99.7	103.6	106.1	109.0	112.9	117.6	124.9	132.0
Housing.	(NA)	70.8	83.3	92.6	98.4	98.2	103.3	108.8	113.0	116.5	120.7	124.8	130.9
Gas (piped) and electricity.	(NA)	53.1	72.1	80.3	94.6	99.9	105.6	108.1	105.8	105.5	108.8	112.9	115.8

NA Not available.

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



**No. 772. Consumer Price Indexes—Selected Areas: 1970 to 1990**

[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	1985	1986	1987	1988	1989	1990
All item index	38.8	53.8	82.4	107.6	109.6	113.6	118.3	124.0	130.7
Anchorage, AK MSA	41.1	57.1	85.5	105.8	107.8	108.2	108.6	111.7	118.6
Atlanta, GA MSA	38.6	53.6	80.3	108.9	112.2	116.5	120.4	126.1	131.7
Baltimore, MD MSA	39.1	55.2	83.7	108.2	110.9	114.2	119.3	124.5	130.8
Boston-Lawrence-Salem, MA-NH CMSA	40.2	55.8	82.6	109.4	112.2	117.1	124.2	131.3	138.9
Buffalo-Niagara Falls, NY CMSA	41.2	57.4	83.5	108.6	109.6	113.0	117.4	121.6	127.7
Chicago-Gary-Lake County, IL-IN-WI CMSA	38.9	52.8	82.2	107.7	110.0	114.5	119.0	125.0	131.7
Cincinnati-Hamilton, OH-KY-IN CMSA	37.4	51.8	82.1	106.6	107.6	111.9	116.1	120.9	126.5
Cleveland-Akron-Lorain, OH CMSA	37.2	50.2	78.9	107.8	109.4	112.7	116.7	122.7	129.0
Dallas-Fort Worth, TX CMSA	37.6	50.4	81.5	108.2	109.9	112.9	116.1	119.5	125.1
Denver-Boulder, CO CMSA	34.5	48.4	78.4	107.1	107.9	110.8	113.7	115.8	120.9
Detroit-Ann Arbor, MI CMSA	39.5	53.9	85.3	106.8	108.3	111.7	116.1	122.3	128.6
Honolulu, HI MSA	41.5	56.3	83.0	106.8	109.4	114.9	121.7	128.7	138.1
Houston-Galveston-Brazoria, TX CMSA	36.4	51.4	82.7	104.9	103.9	106.5	109.5	114.1	120.6
Kansas City, MO-KS CMSA	39.0	53.2	83.6	107.7	108.7	113.1	117.0	121.6	126.0
Los Angeles-Anaheim-Riverside, CA CMSA	38.7	53.3	83.7	108.4	111.9	116.7	122.1	128.3	135.9
Miami-Fort Lauderdale, FL CMSA	(NA)	(NA)	81.1	106.5	107.9	111.8	116.8	121.5	128.0
Milwaukee, WI PMSA	37.5	50.8	81.4	107.0	107.4	111.5	115.9	120.8	126.2
Minneapolis-St. Paul, MN-WI MSA	37.4	51.2	78.9	107.0	108.4	111.6	117.2	122.0	127.0
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA	41.2	57.6	82.1	108.7	112.3	118.0	123.7	130.6	138.5
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA	40.8	56.8	83.6	108.8	111.5	116.8	122.4	128.3	135.8
Pittsburgh-Beaver Valley, PA CMSA	38.1	52.4	81.0	106.9	108.2	111.4	114.9	120.1	126.2
Portland-Vancouver, OR-WA CMSA	38.7	53.5	87.2	106.7	108.2	110.9	114.7	120.4	127.4
San Diego, CA MSA	34.1	47.6	79.4	110.4	113.5	117.5	123.4	130.6	138.4
San Francisco-Oakland-San Jose, CA CMSA	37.7	51.8	80.4	108.4	111.6	115.4	120.5	126.4	132.1
Seattle-Tacoma, WA CMSA	37.4	51.1	82.7	105.6	106.7	109.2	112.8	118.1	126.8
St. Louis-East St. Louis, MO-IL CMSA	38.8	52.6	82.5	107.1	108.6	112.2	115.7	121.8	128.1
Washington, DC-MD-VA MSA	39.8	54.7	82.9	109.0	112.2	116.2	121.0	128.0	135.6

NA Not available.

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

**No. 773. CPI—Major Commodity Groups, by Selected Areas: 1990**

[1982-1984 = 100. See table 772]

AREA	All items	Food and beverages	Food	Housing	Apparel and upkeep	Transportation	Medical care	Entertainment	Fuel and other utilities
All item index	130.7	132.1	132.4	128.5	124.1	120.5	162.8	132.4	111.6
Anchorage, AK MSA	118.6	123.7	124.0	103.9	127.7	120.7	161.2	141.9	131.1
Atlanta, GA MSA	131.7	131.9	134.4	128.8	133.8	117.7	177.6	149.8	121.9
Baltimore, MD MSA	130.8	136.9	137.9	125.2	128.1	122.8	158.4	138.3	102.7
Boston-Lawrence-Salem, MA-NH CMSA	138.9	138.6	139.0	137.0	138.2	119.7	181.6	144.2	104.9
Buffalo-Niagara Falls, NY CMSA	127.7	131.5	131.4	132.0	107.6	109.1	151.7	142.8	103.1
Chicago-Gary-Lake County, IL-IN-WI CMSA	131.7	130.3	130.4	131.4	124.3	118.7	163.0	139.2	108.9
Cincinnati-Hamilton, OH-KY-IN CMSA	126.5	128.3	128.9	121.1	121.2	117.7	157.4	129.7	101.4
Cleveland-Akron-Lorain, OH CMSA	129.0	130.6	131.2	127.7	117.8	119.4	156.6	133.6	112.0
Dallas-Fort Worth, TX CMSA	125.1	131.1	131.5	114.3	137.5	117.2	161.9	137.5	109.3
Denver-Boulder, CO CMSA	120.9	124.1	124.1	109.8	91.2	126.8	173.4	129.3	106.8
Detroit-Ann Arbor, MI CMSA	128.6	126.5	126.3	126.4	127.9	124.0	159.8	128.1	112.4
Honolulu, HI MSA	138.1	137.8	138.3	141.5	107.0	131.1	154.2	128.4	98.0
Houston-Galveston-Brazoria, TX CMSA	120.6	128.7	129.2	104.8	132.5	116.0	161.2	134.9	101.9
Kansas City, MO-KS CMSA	126.0	127.5	128.1	121.8	116.5	116.2	156.8	142.0	113.7
Los Angeles-Anaheim-Riverside, CA CMSA	135.9	130.9	130.3	139.3	126.4	126.5	163.3	125.4	124.5
Miami-Fort Lauderdale, FL CMSA	128.0	134.3	135.9	120.4	135.6	121.6	151.8	121.0	109.3
Milwaukee, WI PMSA	126.2	128.1	129.8	126.0	126.0	115.2	150.8	118.7	94.4
Minneapolis-St. Paul, MN-WI MSA	127.0	134.6	134.8	118.5	130.5	118.5	161.5	140.5	102.1
New York-Northern New Jersey-Long Island, NY-NJ-CT CMSA	138.5	139.6	139.7	139.3	121.8	123.1	172.4	135.6	102.8
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA	135.8	131.2	130.8	138.7	101.4	127.7	167.4	133.5	112.9
Pittsburgh-Beaver Valley, PA CMSA	126.2	124.3	123.8	124.8	125.0	112.1	160.6	138.8	123.7
Portland-Vancouver, OR-WA CMSA	127.4	126.1	126.4	122.6	120.7	125.5	154.4	128.6	103.9
San Diego, CA MSA	138.4	134.1	132.8	139.2	131.9	131.7	173.3	142.4	102.1
San Francisco-Oakland-San Jose, CA CMSA	132.1	134.7	135.7	137.3	107.5	114.7	160.5	140.7	125.1
Seattle-Tacoma, WA CMSA	126.8	133.0	133.7	125.4	112.0	116.1	154.6	129.9	95.8
St. Louis-East St. Louis, MO-IL CMSA	128.1	134.9	135.4	129.4	120.9	117.4	159.0	124.4	113.7
Washington, DC-MD-VA MSA	135.6	133.4	132.9	136.6	139.4	120.7	162.4	135.6	110.5

NA Not available.

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

### No. 774. Cost of Living Index—Selected Metropolitan Areas: First Quarter 1990

[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 4.9 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)	Com- posite index	Grocery items	Housing	Utilities	Transpor- tation	Health care
Albany-Schenectady-Troy, NY MSA	104.9	108.3	106.8	127.4	89.1	107.5
Albuquerque, NM MSA	99.1	96.3	105.2	98.8	100.9	102.1
Augusta, GA-SC MSA	99.3	96.2	88.8	115.6	102.3	94.0
Austin, TX MSA	95.4	98.0	83.9	87.7	97.4	94.9
Bakersfield, CA MSA	110.3	103.4	94.8	126.2	95.4	161.2
Baltimore, MD MSA	111.4	106.0	114.1	108.1	112.8	111.5
Beaumont-Port Arthur, TX MSA	99.3	102.0	78.5	89.3	112.8	104.8
Buffalo, NY PMSA	110.0	103.1	117.3	127.6	107.8	100.8
Canton, OH MSA	96.2	91.9	83.3	113.9	102.6	87.3
Charleston, SC MSA	99.5	95.9	97.1	93.9	102.9	98.8
Charlotte-Gastonia-Rock Hill, NC-SC MSA	99.8	95.0	102.5	96.3	98.3	99.1
Chattanooga, TN-GA MSA	90.7	94.6	83.8	96.6	93.8	80.3
Cleveland, OH PMSA	106.2	104.6	100.4	119.7	110.4	108.7
Colorado Springs, CO MSA	91.7	94.5	88.5	74.6	93.3	102.4
Columbia, SC MSA	100.4	97.1	107.8	90.2	100.2	98.3
Columbus, OH MSA	104.0	100.2	105.8	95.3	112.1	98.1
Corpus Christi, TX MSA	94.9	97.2	83.3	95.0	106.5	95.3
Dallas, TX PMSA	103.1	105.4	98.9	108.9	110.0	106.8
Davenport-Rock Island-Moline, IA-IL MSA	97.6	99.6	105.9	93.4	94.9	93.0
Dayton-Springfield, OH MSA	105.3	98.9	117.8	101.3	105.2	95.1
Denver, CO PMSA	101.3	91.5	108.3	97.2	105.9	114.3
Des Moines, IA MSA	100.7	94.3	95.1	111.4	105.7	96.2
El Paso, TX MSA	98.6	102.9	94.6	90.9	104.2	91.4
Fresno, CA MSA	112.2	109.0	121.5	104.0	101.7	131.3
Greensboro-Winston-Salem-High Point, NC MSA	96.8	92.5	97.6	96.7	92.7	93.6
Greenville-Spartanburg, SC MSA	95.9	95.7	94.3	103.9	93.4	80.0
Harrisburg-Lebanon-Carlisle, PA MSA	104.6	96.0	93.4	125.8	117.3	102.0
Houston, TX PMSA	99.5	106.9	82.1	93.5	115.6	102.0
Huntington-Ashland, WV-KY-OH MSA	93.3	100.3	76.0	99.5	94.1	85.5
Indianapolis, IN MSA	97.7	96.0	99.7	92.1	102.7	97.4
Jacksonville, FL MSA	96.7	96.1	90.4	96.0	106.0	96.1
Kansas City, MO-KS MSA	94.8	89.8	92.4	96.3	95.6	93.6
Knoxville, TN MSA	90.9	93.2	88.0	91.7	91.6	82.3
Lakeland-Winter Haven, FL MSA	103.2	99.2	91.1	127.7	99.5	98.2
Lancaster, PA MSA	103.8	102.5	90.8	138.4	101.7	87.2
Lexington-Fayette, KY MSA	100.1	100.0	103.7	94.6	94.9	98.3
Los Angeles-Long Beach, CA PMSA	127.4	103.3	211.3	75.6	102.1	128.5
Louisville, KY-IN MSA	93.1	94.6	91.0	79.4	102.4	88.4
Memphis, TN-AR-MS MSA	94.8	99.1	86.2	91.1	101.1	85.5
Miami-Hialeah, FL PMSA	112.2	100.3	123.0	125.6	104.3	137.8
Minneapolis-St. Paul, MN-WI MSA	102.9	92.8	112.3	105.2	106.0	107.5
Mobile, AL MSA	95.5	99.9	81.1	104.9	102.8	92.2
Nashville-Davidson, TN MSA	99.9	95.8	107.7	91.6	98.1	90.9
Nassau-Suffolk, NY PMSA	159.3	118.2	237.0	219.1	128.1	137.2
New Orleans, LA MSA	96.9	104.0	83.4	122.2	98.2	87.0
Norfolk-Virginia Beach-Newport News, VA MSA	103.2	100.7	99.8	110.2	105.9	93.9
Oklahoma City, OK MSA	94.6	98.2	79.4	103.4	97.3	97.1
Omaha, NE-IA MSA	91.2	93.1	85.6	90.4	102.3	83.8
Orlando, FL MSA	103.8	109.5	104.8	110.4	101.7	102.0
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA	127.5	114.9	139.9	171.6	108.9	136.7
Phoenix, AZ MSA	101.1	95.7	98.7	96.3	104.6	115.2
Pittsburgh-Beaver Valley, PA CMSA	109.5	99.6	109.4	129.3	107.6	105.7
Portland, OR PMSA	103.0	101.5	111.1	72.7	101.6	127.0
Richmond-Petersburg, VA MSA	106.0	99.8	111.2	108.9	105.1	102.7
Salt Lake City-Ogden, UT MSA	92.9	90.0	82.3	86.4	95.2	95.0
San Antonio, TX MSA	99.3	97.6	89.9	112.6	107.7	102.8
San Diego, CA MSA	132.8	104.7	216.1	74.2	134.6	132.3
Scranton-Wilkes-Barre, PA MSA	101.4	104.6	108.5	129.2	85.6	87.8
Spokane, WA MSA	94.3	97.6	94.4	67.9	88.5	116.4
St. Louis, MO-IL MSA	98.2	94.7	97.3	111.1	98.6	97.3
Syracuse, NY MSA	102.0	100.7	104.4	112.0	104.4	101.2
Toledo, OH MSA	102.6	100.3	104.7	108.9	101.6	86.7
Tulsa, OK MSA	92.8	98.6	81.2	85.2	91.2	101.6
West Palm Beach-Boca Raton-Delray Beach, FL MSA	106.7	102.8	102.1	119.3	108.2	110.7
Wichita, KS MSA	96.7	93.7	92.6	116.3	92.7	102.2
York, PA MSA	100.2	100.8	100.0	115.6	97.5	85.8
Youngstown-Warren, OH MSA	93.7	95.8	84.6	112.1	96.0	94.0

Source: American Chamber of Commerce Researchers Association (ACCRA), Alexandria, VA, *Cost of Living Index*, First quarter 1990. (Copyright.)

### No. 775. Annual Percent Changes in Consumer Prices, United States and OECD Countries: 1970 to 1989

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

COUNTRY	1970	1975	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
United States	5.8	9.1	7.8	11.3	13.5	10.3	6.1	3.2	4.3	3.5	1.9	3.7	4.1	4.8
OECD, total	6.0	11.8	8.5	10.7	14.2	10.9	8.1	5.7	5.8	5.1	3.2	3.9	4.8	6.0
OECD, Europe	6.1	14.4	10.8	12.7	17.7	13.4	11.4	9.5	9.0	7.9	5.3	5.1	7.1	8.6
Australia	3.9	15.1	7.9	9.1	10.2	9.8	11.1	10.1	3.9	6.8	9.1	8.5	7.2	7.6
Canada	3.4	10.8	8.9	9.2	10.2	12.5	10.8	5.8	4.3	4.0	4.2	4.4	4.0	5.0
Japan	7.7	11.8	3.8	3.6	8.0	4.9	2.6	1.8	2.3	2.0	0.4	0.2	0.5	2.3
New Zealand	6.5	14.7	12.0	13.7	17.2	15.4	16.2	7.3	6.2	15.4	13.2	15.8	6.4	5.7
Austria	4.4	8.4	3.6	3.7	6.4	6.8	5.4	3.3	5.6	3.2	1.7	1.4	2.0	2.5
Belgium	3.9	12.8	4.5	4.5	6.6	7.6	8.2	7.7	6.3	4.9	1.3	1.6	1.2	3.1
Denmark	5.8	9.6	10.0	9.6	12.3	11.7	10.1	6.9	6.3	4.7	3.6	4.0	4.6	4.8
Finland	2.8	17.9	7.8	7.5	11.6	12.0	9.6	8.3	7.1	5.9	2.9	4.1	5.1	6.6
France	5.2	11.8	9.1	10.8	13.6	13.4	11.8	9.6	7.4	5.8	2.7	3.1	2.7	3.6
Greece	3.2	13.4	12.6	19.0	24.9	24.5	21.0	20.2	18.4	19.3	23.0	16.4	13.5	13.7
Ireland	8.2	20.9	7.6	13.3	18.2	20.4	17.1	10.5	8.6	5.4	3.8	3.2	2.1	4.0
Italy	5.0	17.0	12.1	14.8	21.2	17.8	16.6	14.6	10.8	9.2	5.9	4.7	5.0	6.6
Luxembourg	4.6	10.7	3.1	4.5	6.3	8.1	9.4	8.7	5.6	4.1	0.3	-0.1	1.4	3.4
Netherlands	3.6	10.2	4.1	4.2	6.5	6.7	5.3	2.7	3.3	2.7	0.1	-0.7	0.7	1.1
Norway	10.6	11.7	8.1	4.8	10.9	13.7	11.3	8.4	6.3	5.7	7.2	8.7	9.7	4.6
Portugal	6.3	20.4	22.5	23.9	16.6	20.0	22.4	25.5	28.8	19.6	11.8	9.4	9.7	12.6
Spain	5.9	16.9	19.8	15.6	15.6	14.5	14.4	12.2	11.3	8.8	8.8	5.2	4.8	6.8
Sweden	7.0	9.8	10.0	7.2	13.7	12.1	8.6	8.9	8.0	7.4	4.3	4.2	5.8	6.4
Switzerland	3.6	6.7	1.1	3.6	4.0	6.5	5.6	3.0	2.9	3.4	0.8	1.4	1.9	3.2
Turkey	29.3	19.2	45.3	58.7	110.2	36.6	29.0	31.4	48.4	45.0	34.6	38.9	75.4	63.3
United Kingdom	6.4	24.2	8.3	13.4	18.0	11.9	8.6	4.6	5.0	6.1	3.4	4.2	4.9	7.8
Germany	3.4	6.0	2.7	4.1	5.5	6.3	5.3	3.3	2.4	2.2	-0.1	0.2	1.3	2.8

<sup>1</sup> Households of wage and salary earners. <sup>2</sup> Excludes rent.

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

### No. 776. Producer Price Indexes, by Stage of Processing: 1950 to 1989

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

YEAR	Crude materials	Crude food-stuffs and feed-stuffs	Intermediate materials	Finished goods	Finished consumer goods	Capital equipment	YEAR	Crude materials	Crude food-stuffs and feed-stuffs	Intermediate materials	Finished goods	Finished consumer goods	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	37.6	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	32.1	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	97.6	94.6
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	104.7	103.1	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	36.8	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	1989	103.1	111.2	112.0	113.6	112.1	118.0

Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly and annual.

# No. 777. Producer Price Indexes for Selected Commodity Groupings, by Stage of Processing: 1960 to 1989

[1982 = 100 unless otherwise indicated]

COMMODITY	1960	1970	1980	1985	1986	1987	1988	1989
<b>Finished goods</b>	<b>33.4</b>	<b>39.3</b>	<b>88.0</b>	<b>104.7</b>	<b>103.2</b>	<b>105.4</b>	<b>108.0</b>	<b>113.6</b>
Finished consumer goods	33.6	39.1	88.6	103.8	101.4	103.6	106.2	112.1
Finished consumer foods	35.5	43.8	92.4	104.6	107.3	109.5	112.6	118.7
Fresh fruits	42.8	42.3	100.3	108.1	112.9	112.0	113.5	113.2
Fresh and dried vegetables	39.0	47.5	88.9	99.5	97.8	103.8	105.5	116.7
Eggs	68.5	71.0	95.7	95.7	99.6	87.6	88.6	119.6
Bakery products	32.3	40.0	90.0	113.9	116.7	118.5	126.4	135.4
Milled rice	51.5	52.4	131.5	105.0	86.2	82.8	118.1	104.9
Beef and veal	38.8	46.7	106.2	90.3	88.1	95.5	101.4	108.9
Pork	34.5	44.6	78.4	89.1	99.9	104.9	95.0	97.7
Processed young chickens	66.0	61.2	106.8	106.5	116.8	101.4	113.1	120.3
Processed turkeys	67.2	69.1	109.2	121.3	116.4	96.2	100.4	110.6
Fish	19.3	29.7	87.8	114.6	124.9	140.0	148.7	142.9
Dairy products	34.6	44.7	92.7	100.2	99.9	101.6	102.2	110.6
Processed fruits and vegetables	33.8	40.3	83.3	108.0	104.9	108.6	113.8	119.9
Soft drinks	25.6	37.8	81.8	107.7	109.6	111.9	114.3	117.7
Roasted coffee	28.7	37.7	110.4	107.2	137.0	113.9	113.5	115.9
Shortening and cooking oils	37.8	47.7	99.5	124.0	103.3	103.9	118.8	116.6
Finished consumer goods excl. foods	33.5	37.4	87.1	103.3	98.5	100.7	103.1	108.9
Alcoholic beverages	49.6	53.3	88.9	107.7	110.2	110.4	111.8	115.2
Women's apparel	56.9	62.8	86.9	105.4	106.8	108.4	111.3	113.5
Men's and boys' apparel	41.1	51.2	91.3	105.0	106.4	108.6	113.0	116.8
Girls', children's, and infants' apparel	47.6	58.8	87.1	103.1	103.8	106.7	107.5	110.5
Textile housefurnishings	40.3	43.4	86.8	106.6	101.1	101.4	104.4	106.6
Footwear	35.8	46.2	95.2	104.8	106.9	109.4	115.1	120.8
Natural gas	NA	7.9	63.3	102.9	89.6	79.5	77.4	82.0
Gasoline	14.5	14.4	93.3	83.3	54.7	58.8	57.3	65.1
Fuel oil No. 2	(NA)	(NA)	82.8	81.6	50.5	55.9	49.5	58.0
Pharmaceutical preps, ethical (Prescription)	52.0	80.6	132.0	143.6	156.6	168.0	184.4	184.4
Pharmaceut'l preps, propri., Over-counter	(NA)	42.3	81.3	121.6	129.1	135.5	144.4	152.1
Soaps and synthetic detergents	37.5	41.5	85.8	107.9	107.9	109.3	114.7	119.4
Cosmetics and other toilet preparations	40.9	47.8	83.8	109.0	113.1	113.8	116.3	119.3
Tires, tubes, tread, etc	38.0	42.7	92.8	93.0	91.7	91.0	94.0	97.2
Sanitary papers and health products	26.5	32.5	91.9	106.6	108.1	109.0	115.0	126.0
Household furniture	39.2	46.6	89.1	108.5	110.3	113.0	117.6	121.8
Floor coverings	59.3	54.9	90.0	105.6	108.3	110.7	114.7	117.6
Household appliances	54.0	52.9	87.5	106.7	105.7	105.6	106.0	108.7
Home electronic equipment	133.8	106.0	103.8	90.8	89.9	88.8	87.2	86.9
Household glassware	20.6	33.1	84.7	121.8	125.4	127.6	128.1	134.7
Household flatware	20.7	32.7	148.0	98.6	94.6	99.0	113.0	125.7
Lawn and garden equip., ex. tractors	39.2	46.8	87.5	110.3	111.4	112.3	114.6	119.8
Passenger cars	48.5	50.0	88.9	106.9	110.2	112.9	113.0	115.5
Toys, games, and children's vehicles	43.3	48.5	89.2	103.8	106.3	107.2	110.8	115.6
Sporting and athletic goods	45.5	52.7	90.6	99.7	100.6	102.3	105.9	109.8
Tobacco products	27.9	35.2	76.0	132.5	142.5	154.7	171.9	194.8
Mobile homes	(NA)	(NA)	(NA)	101.7	102.8	104.3	109.3	114.0
<b>Capital equipment</b>	<b>32.8</b>	<b>40.1</b>	<b>85.8</b>	<b>107.5</b>	<b>109.7</b>	<b>111.7</b>	<b>114.3</b>	<b>118.8</b>
Agricultural machinery and equipment	27.7	36.4	83.3	108.7	109.2	109.6	112.7	117.7
Construction machinery and equipment	25.0	33.7	84.2	105.4	106.7	108.9	111.8	117.2
Metal cutting machine tools	(NA)	30.8	85.1	107.3	109.6	112.6	117.4	123.4
Metal forming machine tools	(NA)	28.6	85.7	107.0	108.7	110.2	113.2	118.1
Tools, dies, jigs, fixtures, and ind. molds	(NA)	(NA)	(NA)	106.3	107.8	108.9	110.9	113.8
Pumps, compressors, and equipment	23.9	33.0	82.8	102.6	104.1	105.2	108.9	115.0
Industrial material handling equipment	30.9	39.8	88.4	102.7	103.4	104.3	107.5	111.7
Textile machinery	35.8	45.4	87.2	107.6	112.1	115.5	119.4	123.9
Paper industries machinery (June 1982 = 100)	(NA)	(NA)	(NA)	109.8	113.0	115.4	119.4	128.5
Printing trades machinery	26.9	42.5	89.7	109.0	111.9	114.5	120.1	123.0
Transformers and power regulators	49.5	44.7	82.4	105.0	105.6	107.0	108.8	117.3
Oil field and gas field machinery	20.7	27.0	76.3	96.8	94.3	93.3	97.0	99.1
Mining machinery and equipment	24.5	30.9	85.2	105.4	106.1	106.5	110.2	116.3
Office and store machines and equipment	63.0	68.3	93.1	101.6	101.9	104.5	107.0	109.5
Commercial furniture	33.4	41.6	85.7	111.9	115.3	118.6	124.2	129.0
Light motor trucks	(NA)	42.0	83.3	112.2	117.7	121.1	125.0	129.5
Heavy motor trucks	(NA)	36.3	82.3	108.8	113.4	111.8	112.4	117.2
Truck trailers	(NA)	(NA)	(NA)	106.2	104.3	103.4	106.6	110.4
Railroad equipment	(NA)	33.2	90.4	104.9	105.4	104.7	107.5	114.0
Photographic and photocopy equipment	71.4	72.0	94.9	89.5	89.9	91.3	91.8	94.1
<b>Intermed. materials, supplies, comp'n'ts</b>	<b>30.8</b>	<b>35.4</b>	<b>90.3</b>	<b>102.7</b>	<b>99.1</b>	<b>101.5</b>	<b>107.1</b>	<b>112.0</b>
Intermediate foods and feeds	(NA)	45.6	105.5	97.3	96.2	99.2	109.5	113.8
Flour	47.9	55.3	102.3	99.8	94.6	92.9	105.7	114.6
Crude vegetable oils	57.6	75.8	127.1	137.6	84.8	84.2	116.6	103.1
Prepared animal feeds	37.2	49.1	107.3	90.1	94.6	98.5	116.0	116.6

See footnotes at end of table.

**No. 777. Producer Price Indexes for Selected Commodity Groupings by Stage of Processing: 1960 to 1989—Continued**

[1982 = 100 unless otherwise indicated]

COMMODITY	1960	1970	1980	1985	1986	1987	1988	1989
<b>Intermediate materials less foods and feeds. . . .</b>	<b>30.7</b>	<b>34.8</b>	<b>89.4</b>	<b>103.0</b>	<b>99.3</b>	<b>101.7</b>	<b>106.9</b>	<b>111.9</b>
Leather . . . . .	30.1	34.6	99.8	113.4	122.9	140.9	167.5	170.4
Liquefied petroleum gas . . . . .	(NA)	(NA)	102.3	86.3	61.0	57.4	51.6	52.7
Electric power . . . . .	24.9	26.1	79.1	111.6	112.6	110.6	111.2	114.8
Jet fuels . . . . .	(NA)	(NA)	87.5	81.0	53.8	54.2	52.1	58.1
No. 2 Diesel fuel . . . . .	(NA)	(NA)	85.8	81.2	48.6	55.4	49.7	58.9
Residual fuel . . . . .	9.3	10.6	81.3	83.2	44.5	53.1	41.1	47.6
Industrial chemicals . . . . .	29.3	28.6	91.9	96.0	91.5	95.5	106.8	114.8
Prepared paint . . . . .	35.0	42.8	89.5	105.3	107.0	108.1	112.2	119.5
Paint materials . . . . .	36.7	33.3	89.9	109.5	104.4	107.3	115.7	129.1
Medicinal and botanical chemicals . . . . .	53.9	44.4	91.0	91.8	89.2	89.4	93.5	100.3
Fats and oils, inedible . . . . .	37.5	49.7	111.6	110.6	80.1	92.7	110.9	95.5
Mixed fertilizers . . . . .	35.2	35.2	90.0	96.1	93.4	95.9	104.8	105.9
Nitrogenates . . . . .	48.4	32.7	90.0	96.3	80.3	79.0	93.3	94.9
Phosphates . . . . .	28.4	27.5	93.0	91.6	90.5	94.9	103.3	105.6
Other agricultural chemicals . . . . .	(NA)	23.2	80.1	98.7	102.2	103.6	107.4	115.1
Plastic resins and materials . . . . .	38.2	32.0	98.5	107.5	104.4	110.3	132.4	133.4
Synthetic rubber . . . . .	34.8	34.0	85.3	96.8	91.5	98.0	108.9	108.5
Plastic construction products . . . . .	(NA)	65.5	103.9	108.6	106.4	108.4	121.1	120.1
Softwood lumber . . . . .	28.8	35.2	107.3	107.4	108.4	116.1	120.0	127.1
Hardwood lumber . . . . .	34.6	43.7	96.0	117.1	118.2	126.8	131.0	128.2
Millwork . . . . .	33.3	41.5	93.2	111.7	113.7	117.7	121.9	127.3
Plywood . . . . .	47.2	46.7	106.2	99.6	101.4	102.6	103.4	115.9
Woodpulp . . . . .	27.0	28.9	100.3	91.4	94.7	111.5	136.7	157.4
Paper . . . . .	32.4	38.8	89.7	106.0	107.0	111.5	123.2	129.6
Paperboard . . . . .	41.0	39.7	92.0	107.7	106.6	118.1	133.2	140.1
Paper boxes and containers . . . . .	40.3	43.3	89.4	108.8	107.8	115.4	123.5	129.8
Building paper and board . . . . .	46.1	42.2	86.1	107.4	108.8	111.2	113.3	115.6
Commercial printing (June 1982 = 100) . . . . .	(NA)	(NA)	(NA)	111.6	113.9	118.2	119.5	124.9
Foundry and forge shop products . . . . .	26.6	32.4	89.7	105.2	105.2	105.7	109.6	114.6
Steel mill products . . . . .	27.6	32.7	86.6	104.7	99.8	102.3	110.7	114.5
Primary nonferrous metals . . . . .	29.5	44.9	132.7	93.6	93.8	109.3	144.3	149.2
Aluminum mill shapes . . . . .	37.1	36.7	89.3	107.8	102.6	105.6	130.9	135.4
Copper and brass mill shapes . . . . .	39.7	63.4	112.6	106.9	106.9	121.8	162.7	182.0
Nonferrous wire and cable . . . . .	39.8	62.6	107.5	100.9	101.8	107.0	129.6	146.1
Metal containers . . . . .	27.3	34.3	90.9	109.0	110.2	109.5	110.2	111.5
Hardware . . . . .	32.2	39.8	85.8	109.1	109.5	109.6	113.7	120.4
Plumbing fixtures and brass fittings . . . . .	33.5	39.9	88.5	111.9	115.5	119.7	128.7	137.7
Heating equipment . . . . .	44.6	46.6	87.0	109.5	113.0	115.5	119.2	125.1
Fabricated structural metal products . . . . .	31.4	36.7	88.8	103.2	103.6	105.4	114.3	120.3
Mechanical power transmission equipment . . . . .	27.3	36.9	84.5	108.2	110.6	112.0	116.0	121.1
Ball and roller bearings . . . . .	34.2	33.1	80.0	105.9	107.3	107.8	114.0	124.1
Wiring devices . . . . .	(NA)	35.9	81.9	111.7	115.8	118.6	123.8	129.7
Motors, generators, motor generator sets . . . . .	34.3	37.7	86.0	113.3	113.5	115.4	121.8	129.0
Switchgear, switchboard, etc., equipment . . . . .	34.7	40.5	88.4	106.7	108.1	110.1	113.2	119.0
Electronic components and accessories . . . . .	(NA)	57.4	88.8	112.4	114.5	115.0	117.5	119.4
Internal combustion engines . . . . .	28.4	34.5	81.7	104.9	107.3	109.3	111.4	114.7
Machine shop products . . . . .	(NA)	31.1	81.0	112.8	113.5	114.6	116.8	121.3
Flat glass . . . . .	(NA)	52.2	88.7	101.7	104.5	107.2	109.7	109.7
Concrete products . . . . .	32.6	37.7	92.0	107.5	109.2	109.4	110.0	111.2
Asphalt felts and coatings . . . . .	24.4	25.8	99.6	102.6	97.9	92.4	94.7	95.8
Gypsum products . . . . .	38.7	38.9	100.1	132.3	137.0	125.2	112.9	110.0
Glass containers . . . . .	27.6	33.9	82.3	106.8	111.9	113.0	112.3	115.2
Motor vehicle parts . . . . .	(NA)	32.9	72.9	102.5	103.4	105.7	107.2	109.7
Photographic supplies . . . . .	34.7	41.0	97.2	107.4	109.1	110.6	113.1	123.0
<b>Crude materials for further processing. . . . .</b>	<b>30.4</b>	<b>35.2</b>	<b>95.3</b>	<b>95.8</b>	<b>87.7</b>	<b>93.7</b>	<b>96.0</b>	<b>103.1</b>
Crude foodstuffs and feedstuffs. . . . .	38.4	45.2	104.6	94.8	93.2	96.2	106.1	111.2
Wheat . . . . .	51.2	39.7	108.3	87.6	76.3	72.8	93.7	109.5
Corn . . . . .	46.0	54.5	119.2	105.9	83.5	67.7	97.1	102.4
Cattle . . . . .	40.0	46.9	104.9	91.2	89.3	102.8	109.5	113.8
Hogs . . . . .	32.8	45.5	74.5	80.7	97.6	97.2	81.8	80.5
Live chickens (broilers and fryers). . . . .	63.1	48.5	103.4	110.5	126.2	101.4	125.4	131.7
Live turkeys . . . . .	67.5	59.9	112.2	144.6	135.1	101.0	108.4	119.1
Fluid milk . . . . .	30.0	40.8	96.0	93.7	91.0	91.9	89.4	98.8
Soybeans . . . . .	35.0	45.3	117.0	94.2	86.4	88.3	124.8	114.3
Cane sugar, raw . . . . .	31.0	39.9	148.3	104.6	104.9	110.3	111.9	115.5
<b>Crude nonfood materials. . . . .</b>	<b>(NA)</b>	<b>23.8</b>	<b>84.6</b>	<b>96.9</b>	<b>81.8</b>	<b>87.9</b>	<b>85.5</b>	<b>93.4</b>
Raw cotton . . . . .	65.8	43.6	135.7	97.7	88.0	105.8	95.5	105.6
Leaf tobacco . . . . .	33.1	40.3	82.1	101.2	89.8	85.8	87.2	93.8
Cattle hides . . . . .	33.5	30.4	104.6	126.1	147.7	179.9	205.8	213.1
Coal . . . . .	17.9	28.1	87.4	102.2	100.8	97.1	95.4	95.5
Natural gas . . . . .	NA	7.9	63.3	102.9	89.6	79.5	77.4	82.0
Crude petroleum . . . . .	13.4	14.5	75.9	84.5	46.9	55.5	46.2	56.3
Logs, timber, etc. . . . .	(NA)	(NA)	(NA)	96.0	92.3	101.8	117.7	131.9
Wastepaper . . . . .	95.4	103.2	172.2	122.9	142.6	181.4	183.6	157.1
Iron ore . . . . .	38.7	35.9	87.8	97.5	91.5	84.2	82.8	82.8
Iron and steel scrap . . . . .	47.3	59.6	140.9	112.6	109.6	128.4	177.1	173.7
Nonferrous metal ores (Dec. 1983 = 100) . . . . .	(NA)	(NA)	(NA)	73.2	75.7	106.0	108.1	109.6
Copper base scrap . . . . .	48.8	100.9	138.9	95.4	93.6	113.0	157.9	179.8
Aluminum base scrap . . . . .	35.0	34.4	183.9	123.4	124.5	156.4	219.5	204.4
Construction sand, gravel, and crushed stone . . . . .	33.5	40.9	85.3	110.7	114.2	118.1	120.6	122.8

NA Not available.

Source: U.S. Bureau of Labor Statistics, *Producer Price Indexes*, monthly and annual.

### No. 778. Producer Price Indexes for the Net Output of Selected Industries: 1980 to 1989

[Indexes are based on selling prices reported by establishments of all sizes by probability sampling. N.e.c. = not elsewhere classified. See text section 27]

SIC code <sup>1</sup>	ITEM	Unit	1980	1984	1985	1986	1987	1988	1989
1211	Bituminous coal and lignite . . . . .	12/81	91.4	105.9	105.5	103.6	100.0	98.5	98.2
1311	Crude petroleum and natural gas . . . . .	06/84	70.1	(NA)	(NA)	67.2	67.4	61.2	69.0
1321	Natural gas liquids . . . . .	06/84	(NA)	(NA)	(NA)	79.7	71.4	68.6	72.1
1381	Drilling oil and gas wells . . . . .	12/85	(NA)	(NA)	(NA)	91.3	85.5	88.7	87.5
1389	Oil and gas field services, n.e.c. . . . .	12/85	(NA)	(NA)	(NA)	94.3	92.5	96.0	98.1
2011	Meat packing plants . . . . .	12/80	98.2	96.8	90.9	92.2	99.1	101.7	108.2
2013	Sausages and other prepared meats . . . . .	12/82	81.8	96.8	95.7	97.6	101.5	99.2	102.4
2018	Poultry dressing, poultry and egg processing . . . . .	12/81	(NA)	121.3	115.5	121.8	107.1	115.2	125.6
2022	Natural and processed cheese . . . . .	06/81	94.6	101.5	98.6	96.5	97.2	97.0	106.4
2026	Fluid milk . . . . .	12/82	(NA)	101.4	102.6	102.1	104.2	106.0	112.8
2033	Canned fruits and vegetables . . . . .	06/81	89.0	112.4	112.7	111.7	115.6	121.0	128.8
2037	Frozen fruits and vegetables . . . . .	06/81	(NA)	113.6	120.6	115.2	118.6	126.8	127.5
2038	Frozen specialties . . . . .	12/82	87.6	107.3	110.8	112.2	116.5	118.4	123.5
2048	Prepared animal feeds, n.e.c. . . . .	12/80	92.8	92.1	80.3	79.9	80.7	96.4	97.4
2051	Bread, cake, and related products . . . . .	06/80	(NA)	122.9	127.1	129.7	131.9	142.8	153.6
2052	Cookies and crackers . . . . .	06/83	(NA)	105.4	112.0	116.2	120.1	126.3	134.6
2065	Confectionery products . . . . .	06/83	(NA)	105.8	107.0	111.8	115.7	116.8	119.8
2075	Soybean oil mill products . . . . .	12/79	101.0	104.1	85.8	76.2	78.1	101.4	92.9
2082	Malt beverages . . . . .	06/82	(NA)	107.8	110.0	112.9	112.4	113.2	115.4
2086	Bottled and canned soft drinks . . . . .	06/81	(NA)	111.3	112.5	114.6	117.1	119.5	122.5
2092	Fresh or frozen packaged fish . . . . .	12/82	78.8	102.7	101.4	110.2	120.6	122.2	123.1
2095	Coffee . . . . .	06/81	112.9	110.4	111.5	141.3	118.4	117.8	120.4
2099	Food preparations, n.e.c. . . . .	12/85	(NA)	(NA)	(NA)	101.9	104.3	104.8	110.4
2111	Cigarettes . . . . .	12/82	62.5	102.3	110.7	120.9	133.5	150.8	173.1
2211	Cotton broadwoven fabric . . . . .	12/80	95.9	103.0	99.5	99.0	101.9	107.6	107.2
2221	Synthetic fiber and silk broadwoven fabric . . . . .	06/81	91.0	103.1	101.2	100.9	103.7	110.1	112.3
2272	Tufted carpets and rugs . . . . .	12/79	106.1	125.9	125.0	128.2	130.7	134.3	136.2
2281	Spun yarn . . . . .	12/82	96.2	102.5	99.0	98.7	101.6	104.1	103.0
2335	Women's, misses', and juniors' dresses . . . . .	12/80	98.6	107.2	108.0	110.1	113.0	116.7	122.0
2411	Logging camps and logging contractors . . . . .	12/81	(NA)	95.8	94.8	93.1	100.4	112.8	128.0
2421	Sawmills and planing mills . . . . .	12/80	(NA)	100.0	97.3	98.3	104.1	107.1	111.6
2431	Millwork . . . . .	06/83	(NA)	101.1	103.2	105.2	110.4	113.5	118.9
2511	Wood household furniture, except upholstered . . . . .	12/79	105.3	129.3	133.3	136.2	140.7	147.2	153.7
2621	Paper mill products except building paper . . . . .	06/81	93.5	110.0	109.5	110.3	115.5	127.4	134.6
2631	Paperboard mills . . . . .	12/82	97.3	116.3	112.0	113.0	126.2	141.6	149.9
2641	Paper coating and glazing . . . . .	12/82	(NA)	106.4	108.5	110.0	112.7	119.0	126.0
2643	Bags, except textile bags . . . . .	12/83	(NA)	107.6	108.5	112.3	120.2	135.4	148.3
2647	Sanitary paper products . . . . .	06/83	91.4	102.4	105.5	106.4	107.5	112.9	121.7
2653	Corrugated and solid fiber boxes . . . . .	03/80	(NA)	115.4	119.7	117.2	129.1	140.2	143.6
2711	Newspaper publishing . . . . .	12/79	106.8	153.8	164.0	172.3	181.7	193.9	206.9
2721	Periodical publishing . . . . .	12/79	105.5	147.8	157.9	167.0	173.8	183.8	194.0
2731	Book publishing . . . . .	12/80	(NA)	127.4	134.1	140.8	146.9	155.1	165.4
2759	Commercial printing, n.e.c. . . . .	06/82	(NA)	107.6	112.9	116.9	121.1	128.2	133.7
2752	Commercial printing, lithographic . . . . .	06/82	(NA)	106.7	111.0	112.9	115.1	118.5	124.1
2781	Manifold business forms . . . . .	12/83	(NA)	104.0	106.2	108.3	112.1	120.3	124.9
2819	Industrial inorganic chemicals, n.e.c. . . . .	12/82	(NA)	101.9	100.4	102.2	102.6	104.7	116.2
2821	Plastic materials and resins . . . . .	12/80	101.5	115.4	113.6	110.6	117.6	144.0	147.3
2824	Noncellulosic manmade fibers . . . . .	06/81	84.5	101.5	97.6	94.2	92.2	96.8	101.5
2834	Pharmaceutical preparations . . . . .	06/81	(NA)	130.7	141.3	152.5	163.9	175.6	190.2
2841	Soap and other detergents . . . . .	06/83	(NA)	101.3	104.2	103.7	105.4	110.5	115.5
2842	Specialty cleaning, polish, and sanitation preps. . . . .	06/83	(NA)	101.5	103.9	105.1	106.1	110.2	115.6
2844	Toilet preparations . . . . .	03/80	(NA)	130.7	135.4	140.7	142.1	145.6	149.8
2851	Paints and allied products . . . . .	06/83	(NA)	102.9	104.9	106.2	107.2	111.7	119.5
2865	Cyclic (coal tar) crudes & intermediates . . . . .	12/82	(NA)	96.9	96.9	96.1	98.0	105.8	112.7
2869	Industrial organic chemicals, n.e.c. . . . .	12/82	(NA)	103.7	101.3	96.1	100.2	120.0	128.7
2899	Chemicals and chemical preparations, n.e.c. . . . .	06/85	(NA)	(NA)	(NA)	97.6	97.1	104.3	111.3
2911	Petroleum refining . . . . .	06/85	104.6	102.7	98.3	64.3	68.6	65.4	73.6
3011	Tires and inner tubes . . . . .	06/81	93.9	98.2	96.8	95.6	95.1	99.5	102.9
3069	Fabricated rubber products, n.e.c. . . . .	06/83	(NA)	100.7	103.0	104.6	105.9	108.2	111.3
3079	Miscellaneous plastic products . . . . .	12/82	91.3	105.0	105.1	105.8	106.8	114.3	117.9
3221	Glass containers . . . . .	06/82	81.7	100.7	105.9	110.8	111.5	110.7	113.5
3273	Ready-mixed concrete . . . . .	06/81	92.7	105.1	108.6	109.5	109.2	109.7	111.5
3312	Blast furnaces and steel mills . . . . .	06/82	87.8	104.7	104.9	99.7	102.4	109.4	113.0
3321	Gray iron foundries . . . . .	12/80	97.2	114.1	115.6	116.0	115.8	118.3	120.9
3334	Primary aluminum . . . . .	06/80	102.6	113.2	107.1	107.1	116.1	152.2	146.5
3353	Aluminum sheet, plate, foil and welded tube prods. . . . .	06/81	89.8	114.6	109.0	103.8	106.0	129.6	134.9
3356	Rolling, drawing nonferrous exc. copper, aluminum . . . . .	06/82	(NA)	111.1	103.7	107.2	116.7	129.0	134.5
3357	Nonferrous wire drawing and insulating . . . . .	12/82	(NA)	100.8	100.5	101.5	108.1	132.7	153.5
3411	Metal cans . . . . .	06/81	95.7	109.3	110.4	111.3	110.5	111.2	113.7
3429	Hardware, n.e.c. . . . .	06/85	(NA)	(NA)	(NA)	98.7	97.1	100.7	108.5
3441	Fabricated structural metal . . . . .	06/82	(NA)	99.7	103.0	103.9	107.3	113.0	118.0
3442	Metal doors, sash and trim . . . . .	06/83	86.0	104.3	104.8	106.7	109.4	118.4	125.0
3443	Fabricated plate work . . . . .	03/80	(NA)	119.9	120.8	119.6	120.2	129.6	137.1
3444	Sheet metal work . . . . .	12/82	(NA)	106.5	107.2	106.8	109.3	121.4	128.4
3465	Automotive stampings . . . . .	12/82	94.5	105.0	110.4	107.4	106.5	108.1	109.9
3469	Metal stampings, n.e.c. . . . .	06/84	(NA)	(NA)	101.4	103.2	105.8	111.5	118.8
3494	Valves and pipe fittings . . . . .	12/82	87.7	103.3	106.3	107.9	109.2	114.4	123.1
3495	Wire springs . . . . .	12/82	(NA)	101.4	103.6	104.2	106.0	109.9	112.7
3499	Fabricated metal products, n.e.c. . . . .	06/85	(NA)	(NA)	(NA)	100.5	102.6	109.6	114.6

See footnotes at end of table.

**No. 778. Producer Price Indexes for the Net Output of Selected Industries: 1980 to 1989—Continued**

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

SIC code <sup>1</sup>	ITEM	Unit	1980	1984	1985	1986	1987	1988	1989
3523	Farm machinery and equipment . . . . .	12/82 .	80.8	104.8	105.3	105.6	106.0	108.1	113.0
3531	Construction machinery . . . . .	12/80 .	95.7	116.7	119.5	120.8	122.6	125.8	132.4
3533	Oilfield and gasfield machinery and equipment . . . . .	12/80 .	93.7	119.6	120.6	118.6	119.6	124.7	126.8
3541	Machine tools, metal cutting types . . . . .	06/83 .	83.1	102.3	105.0	107.3	109.8	114.1	120.2
3544	Special tools, dies, jigs, fixtures and indus. molds . . . . .	06/81 .	(NA)	111.3	113.5	115.3	116.2	118.2	121.1
3561	Pumps and pumping equipment . . . . .	12/83 .	(NA)	101.4	103.1	103.7	104.4	109.1	115.1
3585	Refrigeration and heating equipment . . . . .	12/82 .	88.3	102.8	104.7	105.9	106.7	110.8	115.5
3613	Switchgear and switchboard apparatus . . . . .	06/85 .	(NA)	(NA)	(NA)	101.4	103.6	106.7	113.5
3621	Electric motors and generators . . . . .	06/83 .	82.3	104.8	108.2	109.1	110.8	116.4	123.3
3651	Radio and t.v.s, phonos, and related equip . . . . .	03/80 .	100.5	94.7	93.1	94.1	92.8	90.5	89.6
3661	Telephone & telegraph apparatus . . . . .	12/85 .	(NA)	(NA)	(NA)	104.0	108.1	108.3	110.2
3662	Radio & television communication equipment . . . . .	12/85 .	(NA)	(NA)	(NA)	100.8	101.2	101.7	103.5
3674	Semiconductors and related devices . . . . .	06/81 .	100.5	107.4	106.6	108.1	108.3	108.3	107.5
3694	Electrical equip. for internal combustion engines . . . . .	12/82 .	(NA)	105.2	107.1	109.4	109.7	111.3	114.3
3711	Motor vehicles and passenger car bodies . . . . .	06/82 .	86.0	104.6	107.2	111.0	113.0	114.1	117.4
3714	Motor vehicle parts and accessories . . . . .	12/82 .	(NA)	100.1	100.6	101.4	103.7	105.3	107.4
3721	Aircraft . . . . .	12/85 .	(NA)	(NA)	(NA)	99.9	99.3	101.5	102.6
3724	Aircraft engines and engine parts . . . . .	12/85 .	(NA)	(NA)	(NA)	100.1	100.8	103.8	106.6
3731	Ship building and repairing . . . . .	12/85 .	(NA)	(NA)	(NA)	100.8	103.3	105.5	110.2
3743	Railroad equipment . . . . .	06/84 .	(NA)	(NA)	101.8	102.1	101.9	103.7	110.0
3861	Photographic equipment and supplies . . . . .	12/83 .	(NA)	100.9	101.5	102.1	104.2	105.3	109.3
3911	Jewelry, precious metal . . . . .	12/85 .	122.1	102.7	100.4	103.0	110.6	114.1	115.4
4011	Railroads, line haul operations . . . . .	12/84 .	75.9	99.3	99.9	100.7	100.1	104.8	106.4
5093	Scrap and waste materials . . . . .	12/86 .	(NA)	(NA)	(NA)	(NA)	115.8	146.7	148.6

NA Not available. <sup>1</sup> Standard Industrial Classification code.

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

**No. 779. Implicit Price Deflators and Fixed—Weighted Price Indexes: 1970 to 1989**

[1982 = 100. GNP = Gross national product]

ITEM	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989
Implicit price deflators, GNP . . . . .	42.0	59.3	85.7	103.9	107.7	110.9	113.8	117.4	121.3	126.3
Personal consumption expenditures (PCE) . . . . .	42.9	59.2	86.6	104.1	108.1	111.6	114.3	119.6	124.2	129.9
Gross private domestic fixed investment . . . . .	39.0	56.9	86.3	99.8	100.2	100.6	102.9	103.9	105.7	107.2
Government purchases of goods and services . . . . .	38.1	57.7	85.5	104.0	108.6	112.3	114.5	118.3	123.3	126.5
Fixed-weighted price indexes, PCE . . . . .	44.7	60.1	86.8	104.2	108.4	112.2	115.3	120.6	125.6	131.6
Durable goods . . . . .	55.0	68.7	89.6	102.3	104.1	105.2	106.5	110.1	111.9	114.3
Motor vehicles and parts . . . . .	50.1	61.4	87.6	102.9	106.3	108.6	110.9	116.1	118.4	118.7
Furniture and household equipment . . . . .	62.2	73.8	91.1	101.1	101.2	100.7	100.9	102.1	103.8	104.9
Nondurable goods . . . . .	45.2	63.2	89.6	102.1	105.2	107.9	107.8	112.6	117.3	123.9
Food . . . . .	43.0	63.6	86.7	102.0	106.3	108.6	112.2	117.2	122.2	129.2
Clothing and shoes . . . . .	67.4	81.1	95.1	101.9	103.2	106.3	106.0	111.0	115.8	118.5
Fuel oil and coal . . . . .	16.6	34.9	83.3	93.9	96.1	94.3	76.3	76.7	76.8	80.4
Services . . . . .	41.9	58.2	84.0	106.3	111.8	117.2	123.1	129.2	135.2	141.7
Housing . . . . .	44.7	56.4	83.7	105.7	111.5	117.7	124.3	130.5	136.8	142.9
Household operation . . . . .	36.9	54.1	79.9	106.8	112.4	115.8	118.3	118.3	119.8	122.6
Transportation . . . . .	39.9	51.3	84.1	104.8	108.2	109.4	113.2	120.5	126.6	131.9
Medical care . . . . .	38.3	52.6	82.0	107.2	114.8	121.6	127.6	134.9	144.0	153.4

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. 780. Indexes of Spot Primary Market Prices: 1970 to 1990**

[1967 = 100. Index computed weekly through 1981; daily, beginning May 27, 1981. Represents unweighted geometric average of price quotations of 23 commodities. This index is much more sensitive to changes in market conditions than is a monthly producer price index]

ITEMS AND NUMBER OF COMMODITIES	1970 (6-16)	1975 (6-24)	1980 (6-24)	1982 (5-25)	1983 (5-23)	1984 (5-22)	1985 (5-21)	1986 (5-20)	1987 (5-26)	1988 (5-27)	1989 (5-26)	1990 (5-25)
All commodities (22) . . . . .	113.6	189.9	265.1	247.6	249.8	293.9	251.4	218.0	250.0	270.3	281.3	279.2
Foodstuffs (9) . . . . .	112.2	215.3	260.9	252.8	246.1	299.9	248.1	205.5	215.2	230.1	222.5	231.5
Raw industrials (13) . . . . .	114.4	174.1	268.0	243.9	252.3	289.7	253.6	226.9	277.3	302.0	329.0	317.0
Livestock and products (5) . . . . .	123.6	240.8	250.5	312.1	278.1	364.5	284.5	231.2	303.3	316.1	285.2	306.9
Metals (5) . . . . .	125.2	166.8	257.9	218.2	225.9	253.4	220.2	191.2	239.5	276.7	347.1	313.9
Textiles and fibers (4) . . . . .	99.9	158.8	234.7	206.6	208.0	248.1	220.8	216.9	247.1	247.3	253.5	259.4
Fats and oils (4) . . . . .	128.6	213.6	229.5	255.7	225.9	363.5	273.1	168.5	201.2	230.4	208.1	193.3

Source: 1970-1980, 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. 781. Import Price Indexes—Selected Commodities: 1980 to 1990

[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	1982	1983	1984	1985 <sup>1</sup>	1986	1987	1988	1989	1990
All commodities . . . . .	(NA)	(NA)	102.8	103.9	99.2	98.7	110.0	116.8	119.8	119.0
Food . . . . .	105.1	92.1	98.6	104.2	98.9	107.3	108.3	114.0	111.3	111.7
Meat . . . . .	112.5	114.2	111.2	107.9	94.0	96.0	108.0	107.0	109.7	136.8
Meat, edible meat offals, fresh, chilled or frozen . . . . .	114.5	115.0	115.0	109.4	93.2	91.1	102.0	104.6	108.0	133.9
Meat and edible meat offals, prepared or preserved, n.e.s.; fish extracts . . . . .	108.7	114.3	102.4	105.8	95.6	106.5	120.6	111.5	113.3	143.5
Dairy products and eggs . . . . .	(NA)	104.4	102.5	100.7	98.7	108.7	122.3	125.0	120.2	133.0
Fish . . . . .	94.5	103.1	101.7	101.9	98.6	110.5	126.0	129.3	122.7	125.9
Shellfish, fresh, chilled, frozen, salted, or dried, c.i.f. . . . .	84.0	101.6	105.4	106.7	99.4	113.3	123.2	123.1	115.1	113.6
Fish in airtight containers, c.i.f. . . . .	111.8	111.5	102.3	102.3	98.1	103.6	113.7	130.2	124.9	126.0
Bakery goods <sup>2</sup> . . . . .	95.7	100.3	95.6	98.4	97.1	112.5	126.2	139.8	140.2	147.4
Fruits and vegetables . . . . .	79.2	88.5	104.4	107.4	103.0	100.0	110.1	120.3	123.2	126.2
Sugar <sup>3</sup> . . . . .	(NA)	70.0	99.2	101.8	102.3	104.6	109.6	110.0	111.8	116.7
Coffee, tea, cocoa . . . . .	114.9	84.6	89.0	105.6	96.8	117.2	87.0	93.3	85.3	66.2
Beverages and tobacco . . . . .	85.7	96.2	96.7	98.2	99.2	105.2	112.8	116.2	117.2	127.7
Beverages . . . . .	87.2	97.9	98.2	98.3	98.9	106.1	114.2	120.0	120.7	129.6
Alcoholic . . . . .	87.2	97.9	98.3	98.2	98.9	105.8	113.7	119.3	120.5	129.3
Wine of fresh grapes, c.i.f. . . . .	92.7	100.5	100.1	96.2	98.7	109.7	121.0	127.3	125.3	135.7
Beer, c.i.f. . . . .	(NA)	97.4	97.5	98.5	100.1	103.2	111.4	114.2	114.8	117.0
Spirits, c.i.f. . . . .	80.5	96.7	97.6	99.4	98.5	104.1	109.1	115.6	119.2	130.1
Crude materials . . . . .	(NA)	(NA)	(NA)	108.4	100.5	106.4	116.2	137.8	144.3	132.0
Crude rubber <sup>4</sup> . . . . .	(NA)	(NA)	(NA)	120.9	101.0	99.5	103.7	151.1	103.4	104.0
Wood . . . . .	(NA)	92.5	119.8	99.8	105.0	104.3	110.2	111.4	112.4	114.9
Lumber . . . . .	94.8	90.6	122.5	99.6	105.4	104.6	110.0	111.1	110.8	112.5
Pulp and waste paper . . . . .	(NA)	121.2	101.4	121.3	101.4	100.3	132.0	160.5	190.0	183.7
Crude minerals . . . . .	(NA)	(NA)	(NA)	96.0	100.6	99.0	99.6	101.0	104.7	97.5
Metalliferous ores and metal scrap . . . . .	(NA)	(NA)	(NA)	114.5	95.6	121.6	124.5	167.6	212.3	160.7
Ores and concentrates of base metals, n.e.s. . . . .	(NA)	(NA)	(NA)	120.4	94.5	134.0	136.4	192.9	258.1	179.7
Crude vegetable and animal materials, n.e.s. . . . .	(NA)	(NA)	(NA)	91.6	94.8	111.3	109.0	148.2	110.3	117.6
Fuels and related products . . . . .	(NA)	123.5	108.4	108.7	99.7	51.5	74.1	63.4	73.3	65.0
Crude petroleum and petroleum products . . . . .	(NA)	121.7	106.6	107.2	99.5	49.0	74.4	63.6	74.4	65.3
Crude petroleum . . . . .	120.3	125.1	108.3	107.7	100.5	45.8	68.7	57.5	67.1	57.1
Natural gas and LNG . . . . .	(NA)	150.6	134.9	131.0	102.3	79.7	67.8	58.7	61.0	60.2
Fats and oils . . . . .	(NA)	(NA)	(NA)	174.3	110.0	66.7	87.9	111.2	117.4	95.8
Chemicals and related products . . . . .	(NA)	(NA)	103.9	104.5	100.4	99.7	104.8	116.4	120.4	117.8
Intermediate manufactured products . . . . .	105.9	102.9	101.7	104.2	99.1	103.6	112.5	132.2	136.1	134.9
Leather and furskins . . . . .	103.1	98.9	97.0	105.8	97.9	106.3	116.6	137.0	133.8	142.6
Rubber manufactures . . . . .	100.4	107.9	103.5	102.2	99.5	101.2	104.6	107.0	112.2	115.6
Cork and wood manufactures . . . . .	103.7	101.1	107.0	104.4	99.2	111.0	124.3	138.2	139.8	144.4
Paper and paperboard products . . . . .	84.3	95.3	90.7	95.7	99.9	100.8	104.9	118.3	120.8	120.9
Paper and paperboard . . . . .	83.8	95.1	90.1	95.1	100.0	98.9	102.5	115.5	117.9	118.0
Newsprint, c.i.f. . . . .	83.0	94.6	88.7	94.0	100.1	99.2	105.0	119.1	119.6	120.0
Textiles . . . . .	101.5	99.5	97.8	99.4	98.9	105.4	111.8	120.6	122.1	126.3
Non-metallic mineral manufactures . . . . .	100.9	100.1	105.8	106.0	96.2	110.5	126.7	142.5	149.5	159.7
Iron and steel . . . . .	99.2	106.3	95.4	102.9	100.2	98.9	106.6	127.2	133.6	125.7
Non-ferrous metals . . . . .	(NA)	107.2	119.2	118.1	100.2	98.9	112.4	159.7	158.6	143.5
Silver platinum, other metals of platinum group, c.i.f. . . . .	(NA)	100.3	148.6	132.9	94.6	106.8	141.7	136.4	119.0	124.5
Copper . . . . .	129.7	110.0	114.6	104.6	100.6	103.9	107.8	149.0	172.1	173.7
Nickel, c.i.f. . . . .	(NA)	117.3	96.9	98.1	105.7	88.1	83.5	262.4	258.0	161.8
Zinc . . . . .	91.2	87.0	91.7	126.9	109.4	83.2	101.3	147.1	210.3	219.0
Tin, c.i.f. . . . .	148.5	114.6	116.5	108.6	103.9	49.0	60.4	62.0	83.6	59.0
Metal manufactures, n.e.s. . . . .	103.3	104.3	99.5	100.5	99.2	107.9	112.7	128.9	132.6	134.4
Machinery and transport equipment . . . . .	(NA)	99.6	100.7	100.5	98.9	110.4	119.9	127.3	128.2	130.0
Machinery specialized for particular industries . . . . .	(NA)	102.9	104.3	100.1	96.4	116.9	136.1	149.8	145.7	159.1
Metalworking machinery . . . . .	109.6	109.7	106.1	102.1	98.3	113.0	128.1	142.4	139.5	149.9
General industrial machinery, parts n.e.s. . . . .	(NA)	105.9	103.3	101.8	98.0	116.2	130.8	143.7	143.0	153.1
Office machines <sup>5</sup> . . . . .	109.9	105.0	104.3	105.8	98.5	109.1	114.0	119.5	119.3	135.9
Telecommunications <sup>6</sup> . . . . .	115.0	113.0	110.1	107.4	100.2	106.4	110.3	113.8	115.7	111.2
Electric machinery and equipment . . . . .	(NA)	115.3	115.7	107.2	100.3	106.4	115.8	124.2	129.6	127.7
Road vehicles and parts . . . . .	(NA)	93.0	94.5	97.2	98.8	110.8	120.5	127.6	129.6	129.4
Misc. manufactured articles . . . . .	100.3	101.3	101.6	102.7	99.2	106.8	117.8	125.7	126.6	131.9
Plumbing, heating and lighting fixtures . . . . .	87.8	91.8	94.2	98.3	98.6	108.6	117.0	126.9	131.5	140.8
Furniture and parts . . . . .	106.8	107.9	104.8	102.5	98.6	109.0	116.5	124.0	125.3	131.7
Footwear, c.i.f. . . . .	101.1	100.7	97.5	102.0	98.1	108.0	119.8	129.6	127.9	137.6
Professional, scientific and controlling instruments, and apparatus . . . . .	109.4	109.6	104.0	102.3	96.1	117.9	135.9	142.5	136.5	144.7
Photographic apparatus <sup>7</sup> . . . . .	111.1	104.6	100.1	101.5	98.9	113.8	126.0	129.3	127.9	137.2
Misc. manufactured articles, n.e.s. . . . .	(NA)	108.4	104.4	103.0	99.6	108.1	121.1	132.1	131.4	137.2

NA Not available. <sup>1</sup> June 1985 may not equal 100 because indexes were reweighted to an "average" trade value in 1985.

<sup>2</sup> Includes pasta products, grain and grain preparations. <sup>3</sup> Includes sugar preparations and honey. <sup>4</sup> Includes synthetic and reclaimed rubber. <sup>5</sup> Includes automatic data processing equipment. <sup>6</sup> Includes sound recording and reproducing equipment.

<sup>7</sup> Includes photographic supplies, optical goods, watches and clocks.

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



## No. 782. Export Price Indexes—Selected Commodities: 1980 to 1990

[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	1983	1984	1985 <sup>1</sup>	1986	1987	1988	1989	1990
All commodities	(NA)	(NA)	104.1	100.4	99.1	102.2	109.5	113.2	113.3
Food	(NA)	111.5	116.3	100.5	97.1	89.9	103.4	115.5	108.8
Meat	(NA)	94.4	102.1	98.8	105.2	121.2	131.0	128.2	123.3
Fish	(NA)	94.2	96.3	101.2	108.6	125.8	145.0	158.9	127.4
Grain and grain preparations	106.5	117.4	121.8	102.5	89.0	71.0	87.2	106.4	101.8
Wheat	113.7	112.2	110.2	99.8	80.7	66.8	87.8	116.1	96.9
Rice	128.3	118.4	107.2	101.6	67.9	59.1	105.7	95.7	93.1
Corn, yellow, f.o.b.	99.7	120.4	131.3	104.0	95.2	72.7	83.7	101.5	104.8
Other grain	(NA)	(NA)	(NA)	106.3	96.5	77.7	87.6	104.9	106.0
Fruits and vegetables	(NA)	85.7	102.8	100.1	108.6	112.4	104.3	113.6	115.6
Feedstuff for animals	(NA)	132.3	129.9	90.9	114.8	123.8	158.1	144.0	118.4
Miscellaneous food products	(NA)	91.8	100.5	99.9	97.0	100.6	102.8	108.0	110.1
Beverages and tobacco	(NA)	100.4	102.4	100.1	97.4	100.5	110.6	117.6	124.5
Tobacco and tobacco products	(NA)	100.7	102.5	100.1	97.1	105.0	110.7	117.9	124.9
Crude materials	(NA)	104.5	123.6	101.6	102.2	114.5	139.9	143.0	137.2
Raw hides and skins	76.4	90.3	118.1	97.4	117.1	149.6	166.8	149.9	160.9
Oilseeds and oleaginous fruit	109.3	110.8	154.1	105.5	98.1	101.6	143.0	129.8	110.4
Crude rubber, f.a.s.	(NA)	(NA)	100.3	99.8	99.9	101.0	106.1	114.6	115.2
Wood	122.9	99.6	101.3	98.7	101.2	116.2	149.6	170.7	178.9
Pulp and waste paper	(NA)	104.4	127.5	100.3	116.4	149.9	179.5	193.5	174.0
Textile fibers	108.3	106.8	120.5	103.5	98.0	112.4	109.9	115.5	124.4
Cotton	120.5	113.2	133.0	103.4	95.5	114.4	108.8	110.9	122.6
Crude minerals and fertilizers	79.2	87.2	88.9	100.4	98.4	94.0	94.2	99.2	99.7
Metal ores and scrap	(NA)	(NA)	117.2	100.9	98.0	107.0	146.0	157.2	142.7
Scrap metal (iron or steel) f.a.s.	123.4	95.7	112.1	100.2	96.1	95.8	147.7	154.3	137.1
Nonferrous base metal waste and scrap, n.e.s., f.a.s.	(NA)	117.0	118.9	98.9	101.3	126.9	185.6	197.0	174.4
Fuels and related products	(NA)	(NA)	101.5	101.8	76.8	82.8	82.1	86.0	88.8
Coal and coke	(NA)	(NA)	(NA)	100.5	94.0	88.2	92.0	94.3	97.3
Crude petroleum and petroleum products <sup>2</sup>	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	97.2	105.4	106.9
Fats and oils	(NA)	79.6	130.9	113.4	67.7	78.8	97.3	87.3	94.6
Vegetable oils	(NA)	71.3	125.8	116.8	70.6	71.9	93.7	84.4	98.4
Chemicals and related products	(NA)	99.1	102.4	100.2	98.0	106.7	121.6	121.9	115.9
Organic chemicals	(NA)	(NA)	106.8	100.6	93.1	118.4	144.6	145.0	120.9
Hydrocarbons, n.e.s. and derivatives f.a.s.	136.3	111.7	113.9	101.4	86.4	142.8	169.0	157.6	128.0
Alcohols, phenols, phenol-alcohols, and deriv. f.a.s.	117.6	106.0	107.2	99.9	96.9	102.7	143.8	186.8	122.3
Carboxylic acids, f.a.s.	101.1	96.5	104.2	100.7	99.0	103.2	127.5	120.9	112.6
Fertilizers, manufactured	(NA)	98.2	107.1	97.2	93.0	91.6	109.8	108.0	102.8
Pesticides, starches, glue, gas and oil additives, chemical materials and products, n.e.s.	(NA)	(NA)	97.1	99.9	101.8	97.7	101.7	109.4	113.8
Intermediate manufactured products	(NA)	100.6	101.6	100.2	102.5	107.9	117.7	123.1	122.9
Leather and fur skins	103.4	86.5	104.5	99.1	103.8	126.9	125.1	120.7	125.6
Rubber manufactures	82.6	96.9	98.7	100.2	100.1	102.5	108.8	112.9	114.5
Paper and paperboard products	86.0	89.5	102.0	100.5	104.7	117.0	129.0	133.7	130.0
Textiles	(NA)	(NA)	(NA)	100.2	102.9	103.7	107.9	115.4	118.4
Non-metallic mineral manufactures <sup>3</sup>	(NA)	(NA)	(NA)	(NA)	102.4	108.7	114.1	122.4	127.5
Iron and steel	(NA)	100.2	100.4	99.5	100.2	102.9	110.8	117.2	117.4
Non-ferrous metals	(NA)	123.5	111.6	102.0	103.1	113.0	143.5	145.8	132.5
Metal manufactures, n.e.s.	(NA)	95.5	98.3	99.7	100.8	101.3	107.6	113.9	116.8
Machinery and transport equipment <sup>4</sup>	79.1	94.9	97.8	100.0	100.8	101.8	104.0	107.2	110.0
Power generating machinery <sup>5</sup>	70.5	90.6	93.2	100.1	102.4	103.7	108.4	112.8	117.3
Internal combustion piston engines, parts	73.5	96.2	99.8	99.8	101.4	102.9	107.1	108.9	112.5
Electric motors, generators, other rotating plant, f.o.b., factory	84.5	95.8	95.7	101.0	103.2	107.7	117.9	124.9	131.1
Machinery specialized for particular industries	76.9	95.6	98.1	100.0	100.3	100.1	103.6	108.8	113.2
Agricultural machinery and parts <sup>6</sup>	72.6	93.6	97.6	99.7	100.4	101.2	102.1	104.9	111.5
Civil engineering and contractors, plant and equip.	77.4	97.5	99.6	100.3	98.4	96.0	98.5	105.3	109.3
Metalworking machinery	77.5	95.2	97.0	99.7	102.0	106.7	110.8	117.3	120.6
General industrial machines, parts, n.e.s.	76.6	94.6	97.2	100.0	101.6	104.5	108.1	113.3	118.1
Office machines <sup>7</sup>	101.6	104.6	102.4	99.8	99.0	96.1	95.7	94.8	94.6
Telecommunications	88.8	98.9	99.8	99.6	98.9	101.4	104.6	107.5	110.2
Electrical machinery, equipment	87.6	94.8	98.4	100.9	99.2	102.1	103.4	106.5	107.4
Road vehicles and parts	76.8	93.4	97.5	100.1	101.7	103.5	104.9	107.8	107.8
Other transport equipment	64.4	88.5	94.5	99.2	103.1	105.5	109.6	114.7	121.2

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

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

**No. 783. Selected Mineral Products—Average Prices: 1975 to 1989**

[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	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989, prel.
Aluminum <sup>1</sup>	Cents/lb.	39.8	61.0	71.6	76.0	76.0	77.8	81.0	81.0	81.0	72.3	110.1	87.8
Bituminous coal <sup>2,3</sup>	Dol./sh. ton	19.2	23.7	24.5	26.3	27.1	25.9	25.5	25.1	23.7	23.0	22.0	21.0
Cobalt <sup>4</sup>	Dol./lb.	4.0	24.6	25.0	14.6	8.6	5.8	10.4	11.4	7.5	6.6	7.1	7.6
Copper, electrolytic	Cents/lb.	64.2	93.3	101.3	84.2	72.8	76.5	66.8	67.0	66.1	82.5	120.5	130.9
Gold	Dol./fine oz.	161.0	308.0	613.0	460.0	376.0	424.0	361.0	318.0	368.0	448.0	438.0	382.6
Lead (NY)	Cents/lb.	21.5	52.6	42.5	36.5	25.5	21.7	25.6	19.1	22.1	35.9	37.1	39.4
Natural gas <sup>2,5</sup>	Dol./1,000 cu. ft.	0.5	1.2	1.6	2.0	2.5	2.6	2.7	2.5	1.9	1.7	1.7	1.7
Nickel <sup>6</sup>	Dol./lb.	2.2	3.2	3.0	2.7	2.2	2.2	2.2	2.3	1.8	2.2	6.3	6.1
Petroleum, crude <sup>2</sup>	Dol./bbl.	7.7	12.6	21.6	31.8	28.5	26.2	25.9	24.1	12.5	15.4	12.6	15.9
Platinum	Dol./troy oz.	164.0	352.0	439.0	475.0	475.0	475.0	475.0	475.0	519.0	600.0	600.0	600.0
Silver	Dol./fine oz.	4.4	11.1	20.6	10.5	8.0	11.4	8.1	6.1	5.5	7.0	6.5	5.5
Tungsten concentrate <sup>8</sup>	Dol./lb.	5.3	8.4	8.4	8.0	6.4	4.7	5.2	4.2	3.2	2.9	(NA)	(NA)
Zinc	Cents/lb.	39.0	37.3	37.4	44.6	38.5	41.4	48.6	40.4	38.0	41.9	60.2	82.1

NA Not available. <sup>1</sup> 99.5 percent primary aluminum ingot. <sup>2</sup> Average value at point of production; includes Alaska. Source: U.S. Energy Information Administration, *Annual Energy Review* and *Monthly Energy Review*. <sup>3</sup> Includes subbituminous coal and lignite. <sup>4</sup> Weighted average based on the market price quoted by a major U.S. cobalt dealer, otherwise based on range of prices. <sup>5</sup> Average value of marketed production. <sup>6</sup> 1975 and 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. <sup>7</sup> Producer prices. <sup>8</sup> Average value of shipments. <sup>9</sup> Delivered price.

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

**No. 784. Commodity Research Bureau Futures Price Index: 1975 to 1989**

[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	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
All commodities	191.0	227.6	281.5	308.5	254.9	234.0	277.6	244.2	229.2	209.1	232.5	251.8	229.9
Imported	259.4	345.0	425.3	426.0	357.0	269.0	326.0	291.7	398.2	321.2	356.1	365.2	271.7
Industrial	154.8	222.1	354.8	324.6	249.2	249.9	249.0	217.0	211.7	210.4	252.5	248.2	249.6
Grains	195.6	187.8	251.9	312.1	251.3	215.1	249.6	224.9	198.5	164.6	186.1	261.9	205.7
Oilseeds	181.6	240.6	258.1	314.6	271.0	236.9	316.6	273.5	245.4	189.8	223.6	309.6	254.2
Livestock and meats	180.8	196.4	195.0	217.4	195.3	219.9	229.7	240.8	206.9	200.2	189.9	199.1	206.5
Metals (precious)	141.0	230.4	658.0	531.4	319.7	366.0	328.5	243.3	256.6	296.6	346.4	318.7	296.9

<sup>1</sup> Prior to 1979, index for metals only.

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

**No. 785. Food Prices—Farm Value and Retail Price for Selected Items: 1980 to 1989**

[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	1987	1988	1989	1980	1985	1987	1988	1989
Beef, choice	Lb.	1.45	1.27	1.38	1.47	1.55	2.38	2.33	2.42	2.55	2.70
Pork	Lb.	0.63	0.71	0.83	0.69	0.70	1.40	1.62	1.88	1.83	1.83
Broilers	Lb.	0.39	0.42	0.40	0.48	0.51	0.71	0.76	0.78	0.85	0.93
Eggs, grade A	Doz.	0.51	0.51	0.46	0.46	0.65	0.84	0.80	0.78	0.79	1.00
Milk, sold in stores	1/2 gal.	0.56	0.56	0.56	0.54	0.59	1.05	1.13	1.14	1.16	1.27
Bread, white	Lb.	0.05	0.05	0.04	0.05	0.06	0.51	0.55	0.55	0.61	0.67
Potatoes, Northeast white round	10 lb.	0.62	0.37	0.62	0.50	0.77	1.80	1.60	2.40	2.28	3.06
Oranges, California	Lb.	0.05	0.12	0.10	0.12	0.11	0.36	0.53	0.55	0.56	0.56
Lettuce, California <sup>2</sup>	Lb.	0.05	0.08	0.11	0.10	0.10	0.46	0.53	0.60	0.60	0.61
Orange juice, frozen	12 oz.	0.36	0.62	0.42	0.52	0.56	0.88	1.32	1.11	1.37	1.39
Tomatoes, California <sup>3</sup>	Lb.	0.05	0.05	0.05	0.04	0.05	0.42	0.52	0.51	0.46	0.52
Sugar	Lb.	0.13	0.13	0.14	0.14	0.15	0.35	0.35	0.34	0.34	0.37
Flour, wheat	5 lb.	(NA)	(NA)	0.27	0.33	0.39	(NA)	(NA)	1.02	1.07	1.22
Cheese, natural cheddar	Lb.	(NA)	(NA)	1.10	1.08	1.20	(NA)	(NA)	3.06	3.16	3.20
Potatoes, frozen, french fried	Lb.	(NA)	(NA)	0.08	0.08	0.10	(NA)	(NA)	0.69	0.70	0.75
Peanut butter	Lb.	(NA)	(NA)	0.46	0.46	0.46	(NA)	(NA)	1.80	1.79	1.81
Shortening	3 lb.	(NA)	(NA)	0.44	0.66	0.61	(NA)	(NA)	2.33	2.56	2.79
Margarine	Lb.	(NA)	(NA)	0.12	0.19	0.17	(NA)	(NA)	0.69	0.73	0.82
Rice, long grain	Lb.	(NA)	(NA)	0.06	0.11	0.10	(NA)	(NA)	0.40	0.48	0.50

NA Not available. <sup>1</sup> Farm value includes value for wheat, lard, soybean oil, high fructose corn syrup, and soy-whey blend.

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

<sup>3</sup> Whole canned tomatoes.

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

**No. 786. Weekly Food Cost for Families, by Type of Family: 1975 to 1990**

[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	1983	1984	1985	1986	1987	1988	1989	1990	
										Jan.	May
Couple, 20-50 years old <sup>1</sup>	37.10	52.00	54.70	56.50	58.30	60.40	63.50	66.70	70.40	73.80	72.80
Couple, 51 years and over <sup>1</sup>	32.40	45.90	52.00	53.90	55.70	57.80	60.70	64.00	67.50	71.00	70.00
Couple <sup>2</sup> with children:											
1 child, 1-5 years old	44.90	62.90	66.90	69.20	71.30	73.90	77.50	81.60	86.40	90.50	89.50
1 child, 15-19 years old	53.50	74.80	77.80	80.50	83.00	85.80	90.10	94.80	100.60	104.90	104.00
2 children, 1-5 years old	51.80	72.60	77.80	80.50	82.90	85.80	90.00	94.90	100.60	105.20	104.20
2 children, 6-11 years old	63.00	88.10	93.50	97.10	99.80	103.30	108.30	114.10	121.00	126.20	125.40
2 children, 12-19 years old	67.20	93.80	98.00	101.60	104.60	108.20	113.50	119.40	126.60	132.30	131.20

<sup>1</sup> Prior to 1983, costs based on 1974 food plans with age groups 20-54 years old and 55 years old and over. <sup>2</sup> Couple 20-50 years old.

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

**No. 787. Food—Retail Prices of Selected Items: December 1985 to December 1989**

[In dollars per pound, except as indicated. As of December]

FOOD	1985	1988	1989	FOOD	1985	1988	1989
Bread, whole wheat	0.86	(NA)	(NA)	Ice cream (1/2 gal.)	2.29	2.54	2.67
Ground beef	1.28	1.40	1.50	Cheese, Cheddar	3.07	3.21	(NA)
Chuck, ground	1.68	1.79	1.88	Apples, red Delicious	0.68	0.71	0.57
Rib roast	3.37	4.03	4.21	Bananas	0.32	0.41	0.42
Round steak	2.83	3.01	3.17	Pears, Anjou	0.69	0.64	0.76
Sirloin steak, bone-in	2.98	3.23	3.46	Potatoes, white	0.17	0.30	0.31
T-bone steak	4.05	4.97	5.04	Lettuce, iceberg	0.71	0.77	0.52
Bacon, sliced	1.92	1.79	1.96	Tomatoes, field grown	0.95	0.81	0.90
Chops, center cut	2.39	2.65	2.85	Beans, green	0.95	1.00	(NA)
Ham, rump	1.36	(NA)	(NA)	Onions, yellow	0.27	0.37	0.32
Sausage	1.78	1.92	2.12	Peppers, sweet	0.96	0.80	0.92
Ham, canned	2.49	2.60	2.62	Tomatoes, canned	0.52	(NA)	(NA)
Chicken, fresh, whole	0.78	0.89	0.88	Margarine, stick	0.80	0.80	0.83
Chicken breast	1.74	2.06	2.01	Shortening	0.89	0.93	0.90
Turkey, frozen	1.03	0.97	0.95	Peanut butter	1.57	1.82	1.82
Tuna, canned	2.04	2.18	2.04	Sugar, white	0.35	0.38	0.41
Eggs, Grade A, large, (dozen)	0.91	0.83	1.14	Coffee, roasted	2.51	2.93	2.94
Milk, fresh, whole (1/2 gal.)	1.11	1.21	1.37				

NA Not available.

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

**No. 788. Average Price of Energy in Selected Metropolitan Areas: 1990**

[In dollars per unit shown. As of January. One therm contains approximately 100 cubic feet of natural gas. See Appen

CITY/MSA	Utility (pipel) gas (100 therms)	Elec- tricity (500 kWh)	Fuel oil No. 2 (gallon)	GASOLINE			
				All types <sup>1</sup>	Leaded regular	Unleaded regular	Unleaded premium
U.S. city average	57.48	41.66	1.26	1.09	1.01	1.04	1.23
Baltimore, MD MSA	58.07	41.18	1.28	1.15	(NA)	1.08	1.25
Boston-Lawrence-Salem, MA-NH CMSA	76.34	45.47	1.30	1.12	(NA)	1.04	1.25
Chicago-Gary-Lake County, IL-IN-WI CMSA	49.98	50.03	1.14	1.24	(NA)	1.19	1.15
Cleveland-Akron-Lorain, OH CMSA	49.78	50.88	(NA)	1.15	(NA)	1.10	1.31
Dallas-Fort Worth, TX CMSA	55.33	39.49	(NA)	0.99	(NA)	0.95	1.11
Detroit-Ann Arbor, MI CMSA	46.79	48.29	1.15	1.06	(NA)	1.05	1.19
Houston-Galveston-Brazoria, TX CMSA	47.23	40.93	(NA)	1.03	(NA)	0.97	1.17
Los Angeles-Anaheim-Riverside, CA CMSA	56.02	52.53	(NA)	0.96	0.91	0.93	1.15
Miami-Fort Lauderdale, FL CMSA	68.84	44.34	(NA)	1.07	(NA)	1.00	1.17
New York-No. N. J.-Long Island, NY-NJ-CT CMSA	70.93	61.24	1.34	1.12	(NA)	1.04	1.25
Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD CMSA	70.18	57.47	1.31	1.11	(NA)	1.00	1.24
Pittsburgh-Beaver Valley, PA CMSA	63.16	46.72	1.03	1.02	(NA)	0.99	1.18
St. Louis-East St. Louis, MO-IL CMSA	52.30	39.49	1.14	1.03	1.00	0.98	1.25
San Francisco-Oakland-San Jose, CA CMSA	56.06	54.75	(NA)	1.05	0.94	1.05	1.17
Washington, DC-MD-VA MSA	74.20	35.99	1.18	1.23	(NA)	1.15	1.42

NA Not available. <sup>1</sup> Includes types of gasoline not shown separately.

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

### No. 789. 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.
<b>RESIDENTIAL</b>					<b>INDUSTRIAL</b>				
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	<b>INDUSTRIAL</b>				
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	2,732	2,572	(NA)
<b>COMMERCIAL</b>					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	893	820	(NA)	1,000 kW, 200,000 kWh.....	5.5	8.5	8.1	(NA)

NA Not available.

### No. 790. 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	Lowest bill	Highest bill	YEAR, REGION, DIVISION, AND STATE	Lowest bill	Highest bill	YEAR, REGION, DIVISION, AND STATE	Lowest bill	Highest bill
1970.....	5.00	25.00	OH.....	22.81	52.63	KY.....	21.78	40.86
1975.....	5.10	41.14	IN.....	26.93	53.42	TN.....	25.97	32.56
1980.....	5.84	64.47	IL.....	26.56	46.35	AL.....	26.62	36.89
1985.....	9.49	77.88	MI.....	20.50	56.39	MS.....	26.27	49.32
1986.....	8.90	79.37	WI.....	21.10	35.85	W. So. Cent.:		
1987.....	8.90	64.60	W. No. Cent.:			AR.....	22.33	51.25
1988, U.S.....	8.90	62.87	IA.....	14.95	44.53	LA.....	22.72	56.39
Region:			MO.....	21.50	46.32	OK.....	25.69	46.40
Northeast.....	10.68	62.35	ND.....	18.23	50.49	TX.....	19.44	51.54
Midwest.....	14.95	57.60	SD.....	22.50	40.18	Mt.:		
South.....	18.00	56.39	NE.....	16.75	51.81	MT.....	20.50	37.86
West.....	8.90	62.87	KS.....	23.30	41.89	ID.....	20.35	29.57
N. Eng.:			WV.....	24.86	57.60	WY.....	21.50	47.69
ME.....	34.15	47.93	So. Atl.:			CO.....	17.00	44.25
NH.....	36.97	55.96	DE.....	40.99	48.35	NM.....	25.58	54.15
VT.....	27.45	56.50	MD.....	31.93	48.21	AZ.....	30.94	58.96
MA.....	25.45	61.39	DC.....	25.97	25.97	UT.....	23.80	44.79
RI.....	42.73	50.68	VA.....	27.62	40.25	NV.....	22.00	50.28
CT.....	36.22	54.76	WV.....	28.06	42.06	Pac.:		
Mid. Atl.:			NC.....	33.80	51.05	WA.....	8.90	29.80
NY.....	10.68	62.35	SC.....	29.79	47.05	OR.....	15.83	29.00
NJ.....	43.49	55.23	GA.....	16.00	46.44	CA.....	23.70	58.45
PA.....	18.00	57.54	FL.....	27.30	54.01	AK.....	36.00	56.53
E. No. Cent.:			E. So. Cent.:			HI.....	45.11	62.87

Source of tables 789 and 790: Through 1975, U.S. Federal Power Commission, *Typical Electric Bills*, annual; thereafter, U.S. Energy Information Administration, *Typical Electric Bills*, annual.

### No. 791. 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 <sup>1</sup>	1973	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Crude oil, composite <sup>2</sup> .....	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:													
Leaded regular.....	Gallon.....	0.39	0.57	0.86	1.19	1.31	1.22	1.16	1.13	1.12	0.86	0.90	0.90
Unleaded regular.....	Gallon.....	(NA)	(NA)	0.90	1.25	1.38	1.30	1.24	1.21	1.20	0.93	0.95	0.95
Unleaded premium.....	Gallon.....	(NA)	(NA)	(NA)	(NA)	1.47	1.42	1.38	1.37	1.34	1.09	1.09	1.11
No. 2 heating oil.....	Gallon.....	(NA)	(NA)	0.52	0.79	0.91	0.91	0.92	0.92	0.85	0.56	0.58	0.54
No. 2 diesel fuel.....	Gallon.....	(NA)	(NA)	0.59	0.82	1.00	0.94	0.83	0.82	0.79	0.48	0.55	0.50
Residual fuel oil.....	Gallon.....	(NA)	(NA)	0.44	0.61	0.76	0.68	0.65	0.69	0.61	0.34	0.42	0.33
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. <sup>1</sup> See headline. <sup>2</sup> Refiner acquisition cost. <sup>3</sup> Average, all service.

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

# No. 792. Refiner/Reseller Sales Price of Motor Gasoline, by Grade and State: 1988 to 1990

[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 <sup>1</sup>	AVERAGE, ALL GRADES			LEADED REGULAR			UNLEADED REGULAR			PREMIUM		
		1988	1989	1990	1988	1989	1990	1988	1989	1990	1988	1989	1990
United States . . . . .	(NA)	64.0	70.5	76.8	59.6	66.7	74.5	61.7	66.9	72.5	74.7	81.7	88.8
Alabama . . . . .	11	62.9	69.6	83.3	58.9	66.4	79.2	62.0	66.8	77.9	71.4	78.8	95.9
Alaska . . . . .	8	(NA)	94.3	101.0	(NA)	98.1	107.3	(NA)	92.5	98.1	96.0	(D)	106.5
Arizona . . . . .	17	63.2	70.4	80.4	59.9	65.6	76.8	61.5	68.8	79.2	76.8	85.5	91.2
Arkansas . . . . .	14	62.2	65.4	75.8	57.9	63.0	75.9	60.9	63.3	72.2	72.0	74.1	88.4
California . . . . .	9	65.5	73.2	77.9	60.4	67.8	72.5	63.6	71.0	75.2	77.5	84.6	90.2
Colorado . . . . .	20	60.2	69.5	69.7	57.6	65.7	68.3	59.8	68.9	67.4	69.4	78.1	79.6
Connecticut . . . . .	22	72.0	82.8	82.8	64.6	74.8	(D)	69.3	78.3	75.1	81.2	92.3	96.4
Delaware . . . . .	16	62.3	73.0	81.0	59.5	68.9	(NA)	58.6	67.1	74.4	72.0	85.1	94.9
District of Columbia . . . . .	18	(D)	(D)	(D)	(D)	(D)	(NA)	(D)	(D)	(D)	(D)	(D)	(D)
Florida . . . . .	4	65.9	73.4	81.2	61.5	67.1	79	62.5	68.2	75.8	74.9	81.8	91.1
Georgia . . . . .	8	61.2	68.5	74.6	54.3	61.7	80.2	57.7	63.4	68.9	73.5	79.4	86.2
Hawaii . . . . .	22	87.4	87.8	96.9	79.5	82.5	(NA)	84.6	83.4	90.3	99.3	100.9	109.9
Idaho . . . . .	19	64.9	68.5	72.2	64.0	67.9	71.5	64.2	67.7	71.3	77.5	77.7	81.4
Illinois . . . . .	19	64.1	69.2	73.2	61.2	68.6	77.6	61.0	65.5	69.5	75.5	79.8	83.9
Indiana . . . . .	15	61.2	66.8	75.4	60.8	69.0	84.6	59.1	63.8	71.6	66.6	77.7	85.7
Iowa . . . . .	20	62.3	67.9	75.9	61.2	68.4	77.0	61.9	66.9	74.6	69.7	77.5	84.6
Kansas . . . . .	16	63.6	66.2	73.0	62.3	66.8	73.4	63.2	64.5	71.4	71.3	74.1	82.6
Kentucky . . . . .	15	62.9	70.6	76.6	59.5	67.6	77.1	60.7	67.0	72.2	71.8	82.7	89.6
Louisiana . . . . .	20	60.6	70.0	76.2	54.8	66.0	76.4	57.4	66.7	71.34	70.9	78.8	86.0
Maine . . . . .	17	71.2	80.0	85.8	67.8	76.9	(D)	69.3	76.1	81.6	81.2	91.4	99.0
Maryland . . . . .	19	68.5	74.7	84.5	64.1	69.2	(D)	65.9	70.2	78.8	75.7	85.3	95.1
Massachusetts . . . . .	17	74.5	79.8	82.8	65.0	73.1	(D)	70.4	74.0	75.9	83.7	90.1	96.5
Michigan . . . . .	15	60.2	66.9	72.7	59.8	70.8	75.5	58.2	63.7	69.6	68.5	77.9	83.6
Minnesota . . . . .	20	64.8	69.5	77.9	63.6	69.5	79.1	64.4	67.7	76.0	70.4	78.2	87.2
Mississippi . . . . .	18	65.2	74.7	78.0	59.6	69.6	77.5	64.3	69.5	73.0	73.8	86.1	91.9
Missouri . . . . .	11	61.7	66.0	71.8	58.3	65.5	73.2	60.2	63.2	67.8	71.9	76.6	83.6
Montana . . . . .	20	64.8	69.2	79.5	64.4	68.7	78.6	64.9	68.4	78.2	66.1	73.4	85.7
Nebraska . . . . .	22	62.1	70.3	73.7	61.3	70.1	73.3	62.1	70.2	72.9	65.6	73.0	81.1
Nevada . . . . .	16	59.4	67.5	74.3	55.9	63.8	69.4	58.7	65.7	72.8	69.9	80.1	87.6
New Hampshire . . . . .	16	74.5	78.4	84.9	68.2	76.1	(D)	71.0	73.9	79.1	86.4	88.0	97.0
New Jersey . . . . .	11	71.7	79.1	80.3	63.7	69.9	(D)	66.1	71.3	72.3	82.9	90.6	90.4
New Mexico . . . . .	16	66.7	73.4	78.6	64.8	71.4	78.1	66.4	73.2	77.3	76.5	82.0	88.6
New York . . . . .	8	69.7	75.5	78.8	65.5	70.5	77.7	66.1	70.4	73.0	80.0	87.7	92.1
North Carolina . . . . .	22	63.2	69.4	76.3	56.3	63.2	70.8	60.9	65.1	70.5	73.7	80.8	88.9
North Dakota . . . . .	17	66.8	72.5	85.3	66.6	72.1	86.9	66.8	72.2	84.4	70.0	79.0	93.1
Ohio . . . . .	20	62.6	71.7	75.0	58.2	71.0	79.2	59.6	67.2	70.5	76.1	86.3	90.1
Oklahoma . . . . .	16	60.2	66.2	72.8	57.6	66.0	74.4	59.5	64.7	70.8	67.7	72.7	80.0
Oregon . . . . .	18	64.3	71.5	78.7	61.5	68.5	75.7	63.8	70.9	77.6	77.0	84.6	91.8
Pennsylvania . . . . .	12	63.5	70.7	77.3	59.4	67.7	79.8	58.3	64.3	70.7	75.7	83.6	90.2
Rhode Island . . . . .	20	69.5	77.3	81.8	62.5	74.2	(NA)	65.4	71.7	75.3	79.8	86.4	94.1
South Carolina . . . . .	16	63.6	69.1	78.7	57.3	64.4	77.7	61.7	65.5	73.0	75.4	82.4	93.9
South Dakota . . . . .	18	62.8	70.5	83.1	63.0	70.2	82.4	62.6	70.4	82.3	69.3	79.8	90.6
Tennessee . . . . .	20	60.3	68.3	73.8	54.7	63.0	70.7	58.0	63.8	67.6	72.4	80.8	87.8
Texas . . . . .	15	63.0	67.9	76.5	57.7	64.3	76.7	61.2	64.2	72.3	73.3	77.6	86.7
Utah . . . . .	19	63.9	66.7	71.1	61.9	64.2	69.5	63.5	66.0	69.4	71.7	73.2	79.1
Vermont . . . . .	15	76.4	80.6	88.8	70.9	75.1	96.3	73.5	76.5	84.2	87.4	91.1	100.4
Virginia . . . . .	18	68.1	74.5	80.4	61.3	65.6	75.0	66.0	69.3	74.3	77.3	84.7	91.6
Washington . . . . .	22	65.0	66.7	73.6	61.4	62.6	69.5	63.5	64.9	71.6	75.9	79.1	86.3
West Virginia . . . . .	16	69.9	75.1	81.0	65.6	71.4	(D)	67.3	69.9	74.5	79.8	88.1	97.0
Wisconsin . . . . .	22	60.3	67.5	73.0	59.8	68.2	79.2	58.7	65.2	69.9	68.0	75.2	84.2
Wyoming . . . . .	9	64.7	70.6	78.9	63.2	69.7	77.8	65.2	69.7	77.7	71.4	77.7	86.6

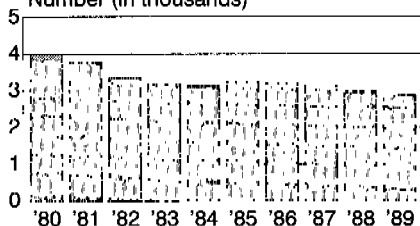
D Withheld to avoid disclosure of individual company data. NA Not available. <sup>1</sup> Source: U.S. Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism*, 1991 Edition, Vol. I, based on CCH, *State Tax Reporter*.

Source: Except as noted, U.S. Energy Information Administration, *Petroleum Marketing Monthly*, March 1990.

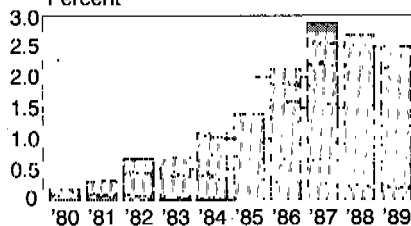
Figure 16.1

**SAIF<sup>1</sup>—Insured Savings Institutions: 1980 to 1989****Institutions**

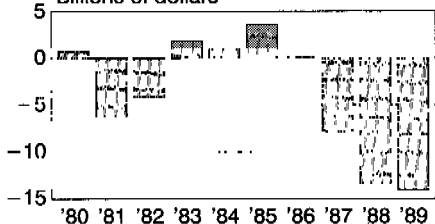
Number (in thousands)

**Mortgage Loans Foreclosed<sup>2</sup>**

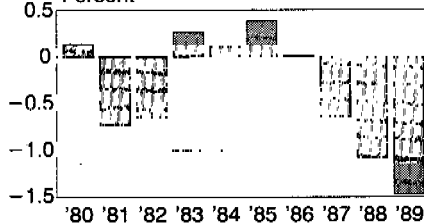
Percent

**Net Income After Taxes**

Billions of dollars

**Return on Assets<sup>3</sup>**

Percent

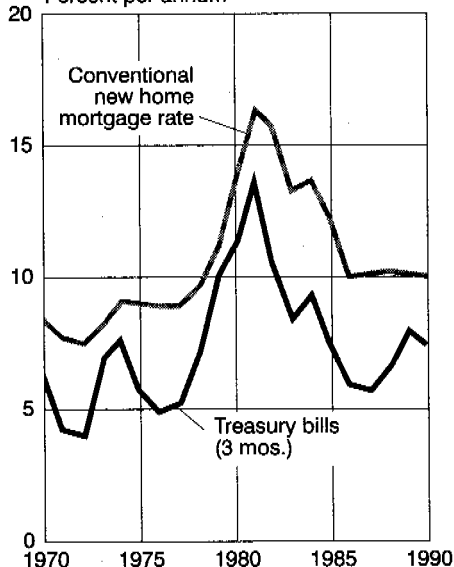
<sup>1</sup>Savings Association Insurance Fund. <sup>2</sup>Based on amount of mortgages foreclosed.<sup>3</sup>Net after-taxes income to average assets.

Source: Chart prepared by U.S. Bureau of the Census. For data, see tables 816, 819, and 820.

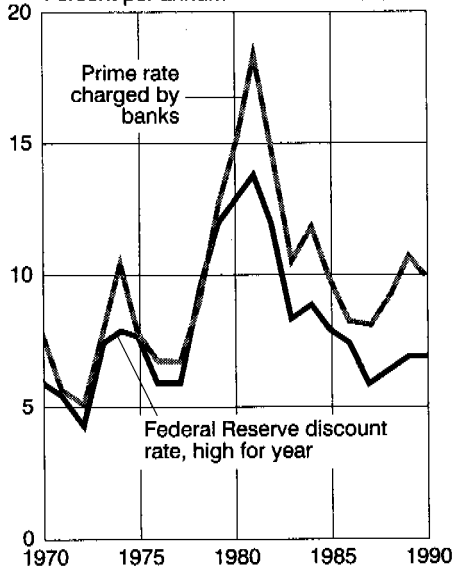
Figure 16.2

**Interest Rates: 1970 to 1990**

Percent per annum



Percent per annum



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



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## Section 16

# Banking, Finance, and Insurance

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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 796 to 800) 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 and outstandings, 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 Bank Insurance Fund. Major item balance sheets for all commercial banks are published monthly in the *Federal Reserve Bulletin*.

**Savings institutions.**—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. The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) authorized the establishment of the Resolution Trust Corporation (RTC). The RTC is responsible for the disposal of assets from failed savings institutions. Under FIRREA, the FDIC Board of Directors acts as the RTC Board. FIRREA also gave the FDIC the job of managing the federal deposit insurance fund for savings institutions (SAIF=Savings Association Insurance Fund).

**Other credit agencies.**—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. 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*.

**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. 793. Gross National Product in Finance, Insurance, and Real Estate in Current and Constant (1982) Dollars: 1980 to 1988

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

INDUSTRY	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>CURRENT DOLLARS</b>									
Finance, insurance, real estate, total . . .	400.6	449.3	475.1	536.4	572.8	639.5	696.3	764.9	830.3
Percent of gross national product . . .	14.7	14.7	15.0	15.7	15.2	15.9	16.5	16.9	17.0
Banking . . .	51.1	54.4	59.8	68.1	70.6	79.4	80.3	86.4	99.2
Credit agencies other than banks . . .	5.5	6.5	5.4	10.6	9.8	11.6	15.7	20.1	21.3
Security and commodity brokers, and services . . .	9.7	11.4	13.1	20.7	19.7	24.1	30.1	35.7	40.3
Insurance carriers . . .	37.0	34.7	29.8	36.5	34.9	40.7	49.5	61.3	68.0
Insurance agents and brokers, and services . . .	14.4	15.5	17.0	17.6	20.1	22.4	25.6	29.0	32.2
Real estate . . .	281.5	318.7	342.7	374.2	409.1	449.0	478.6	518.3	554.6
Holding and other investment companies . . .	1.3	8.1	7.2	8.7	8.5	12.3	16.4	14.1	14.7
<b>CONSTANT (1982) DOLLARS</b>									
Finance, insurance, real estate, total . . .	468.9	476.1	475.1	492.9	509.8	528.3	535.8	564.7	583.7
Percent of gross national product . . .	14.7	14.7	15.0	15.0	14.6	14.6	14.4	14.7	14.5
Banking . . .	56.7	58.8	59.8	60.1	60.6	61.5	62.5	62.8	62.4
Credit agencies other than banks . . .	5.2	5.4	5.4	6.0	6.6	7.0	7.8	8.3	8.4
Security and commodity brokers, and services . . .	11.2	12.7	13.1	18.6	17.0	18.8	23.1	29.9	33.6
Insurance carriers . . .	38.7	35.4	29.8	33.2	35.9	39.5	36.0	38.8	41.1
Insurance agents and brokers, and services . . .	15.9	16.3	17.0	18.3	17.5	18.0	17.8	18.7	18.8
Real estate . . .	335.0	340.9	342.7	351.4	364.1	374.5	378.6	395.3	408.0
Holding and other investment companies . . .	6.3	6.5	7.2	7.4	8.2	9.0	9.8	10.9	11.5

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, January 1991.



### No. 794. Persons Working in Finance, Insurance, and Real Estate Industries: 1970 to 1989

[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	1982	1983	1984	1985	1986	1987	1988	1989
<b>Finance, insurance, real estate, total . . .</b>	<b>3,749</b>	<b>5,481</b>	<b>5,725</b>	<b>5,909</b>	<b>6,143</b>	<b>6,363</b>	<b>6,666</b>	<b>6,960</b>	<b>7,082</b>	<b>7,123</b>
Average annual percent change <sup>1</sup> . . .	3.1	3.9	2.2	3.2	3.9	3.7	4.8	4.4	1.8	0.6
Banking . . . . .	1,010	1,497	1,580	1,586	1,601	1,625	1,651	1,658	1,649	1,665
Credit agencies other than banks . . . . .	350	546	564	620	686	734	809	866	870	866
Security and commodity brokers, and services . . . . .	219	259	317	360	390	409	451	516	507	492
Insurance carriers . . . . .	986	1,225	1,236	1,236	1,255	1,276	1,347	1,391	1,416	1,432
Insurance agents and brokers, and services . . . . .	355	553	623	628	655	685	719	744	780	791
Real estate . . . . .	777	1,286	1,273	1,344	1,408	1,469	1,509	1,586	1,651	1,667
Holding and other investment companies . . . . .	52	115	132	135	148	165	180	199	209	210

<sup>1</sup> 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. 795. Finance, Insurance, and Real Estate—Establishments, Employees, and Payroll: 1987 and 1988

[Covers establishments with payroll. Excludes government employees, railroad employees, self-employed persons, etc. For statement on methodology, see Appendix III]

1987 SIC code <sup>1</sup>	KIND OF BUSINESS	ESTABLISHMENTS (1,000)						Em- ploy- ees, 1988 (1,000)	Payroll, 1988 (bil. dol.)
		1987	1988						
			Total	1-4 employ- ees	5-19 employ- ees	20-99 employ- ees	100 or more employ- ees		
(H)	<b>Finance, insurance, real estate</b>	<b>535.7</b>	<b>518.2</b>	<b>313.3</b>	<b>149.5</b>	<b>46.4</b>	<b>8.9</b>	<b>6,659.6</b>	<b>177.2</b>
60	Depository institutions <sup>2</sup>	77.8	76.3	13.3	44.5	15.8	2.7	1,959.8	42.9
601	Central reserve depository	(NA)	0.1	(Z)	(Z)	(Z)	(Z)	25.6	0.7
602	Commercial banks	(NA)	49.6	5.5	29.8	12.4	1.9	1,454.6	32.1
603	Savings institutions	(NA)	20.2	4.0	12.8	2.7	0.6	383.7	7.7
606	Credit unions	(NA)	3.6	2.3	0.9	0.3	0.1	44.9	0.8
609	Functions closely related to banking	(NA)	2.6	1.4	0.9	0.2	0.1	37.9	1.0
61	Nondepository institutions <sup>2</sup>	42.6	43.6	23.6	14.9	4.4	0.7	542.2	13.8
611	Federal and Federally-sponsored credit	(NA)	2.8	0.5	1.0	1.1	0.2	88.7	2.1
614	Personal credit institutions	(NA)	25.6	15.0	8.7	1.7	0.2	212.8	4.6
615	Business credit institutions	(NA)	3.6	1.9	1.2	0.4	0.1	86.2	2.7
616	Mortgage bankers and brokers	(NA)	11.3	5.9	4.0	1.1	0.3	153.3	4.4
62	Security and commodity brokers <sup>2</sup>	22.4	21.6	12.4	5.6	3.0	0.6	426.6	27.5
621	Security brokers and dealers	(NA)	13.3	6.5	3.9	2.5	0.5	332.7	22.6
622	Commodity contracts brokers, dealers	(NA)	1.2	0.8	0.3	0.1	(Z)	15.3	0.7
623	Security and commodity exchanges	(NA)	0.1	0.1	(Z)	(Z)	(Z)	7.5	0.3
628	Security and commodity services	(NA)	6.3	4.6	1.3	0.4	0.1	69.6	3.8
63	Insurance carriers <sup>2</sup>	41.1	39.9	19.1	11.8	7.0	2.1	1,326.5	35.4
631	Life insurance	(NA)	14.4	4.2	5.7	3.9	0.6	538.3	13.7
632	Medical service and health insurance <sup>2</sup>	(NA)	2.1	0.8	0.7	0.4	0.2	173.8	4.3
6321	Accident and health insurance	(NA)	1.2	0.6	0.4	0.1	0.1	44.0	1.0
6324	Hospital and medical service plans	(NA)	0.9	0.3	0.3	0.2	0.2	128.6	3.2
633	Fire, marine, and casualty insurance	(NA)	16.2	10.5	2.9	1.7	1.1	518.1	14.9
635	Surety insurance	(NA)	0.5	0.2	0.2	0.1	(Z)	10.4	0.3
636	Title insurance	(NA)	3.0	1.0	1.3	0.6	0.1	54.2	1.4
637	Pension, health and welfare funds	(NA)	2.6	1.7	0.7	0.2	(Z)	17.3	0.4
64	Insurance agents, brokers, and service	109.3	105.1	75.5	24.4	4.6	0.6	686.0	18.0
65	Real estate <sup>2</sup>	216.6	208.0	154.3	43.0	9.3	1.4	1,286.6	25.4
651	Real estate operators and lessors	(NA)	93.7	71.0	19.0	3.4	0.4	483.8	7.8
653	Real estate agents and managers	(NA)	82.9	60.8	16.8	4.4	0.8	616.4	13.5
654	Title abstract offices	(NA)	3.1	1.7	1.2	0.2	(Z)	25.0	0.5
655	Subdividers and developers <sup>2</sup>	(NA)	18.6	13.0	4.4	1.1	0.1	124.4	2.9
6552	Subdividers and developers, n.e.c. <sup>3</sup>	(NA)	10.6	7.4	2.5	0.6	0.1	78.1	1.9
6553	Cemetery subdividers and developers	(NA)	4.6	2.7	1.4	0.4	(Z)	35.3	0.6
67	Holding and other investment offices <sup>2</sup>	23.7	21.5	14.5	4.8	1.8	0.4	239.6	8.6
671	Holding offices	(NA)	5.6	2.9	1.5	0.9	0.2	116.6	4.9
673	Trusts	(NA)	7.8	5.6	1.6	0.5	0.1	58.4	1.2
6732	Educational, religious, etc. trusts	(NA)	3.3	2.2	0.8	0.3	(Z)	30.7	0.6
679	Miscellaneous investing	(NA)	6.7	5.0	1.3	0.3	0.1	52.5	1.7
6794	Patent owners and lessors	(NA)	0.8	0.5	0.3	0.1	(Z)	15.3	0.4
	Administrative and auxiliary	2.2	2.2	0.6	0.7	0.6	0.4	192.4	5.6

NA Not available. <sup>2</sup> Less than 50. <sup>1</sup> Standard Industrial Classification; see text, section 13. <sup>2</sup> Includes industries not shown separately. <sup>3</sup> N.e.c.: Not elsewhere classified.

Source: U.S. Bureau of the Census, *County Business Patterns, 1988*.

# No. 796. Flow of Funds Accounts—Financial Assets and Liabilities of Financial and Nonfinancial Institutions, by Sector and Type of Instrument: 1989

[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.a.c." = Not elsewhere classified]

TYPE OF INSTRUMENT	ALL SECTORS, TOTAL		PRIVATE DOMESTIC NONFINANCIAL INSTITUTIONS						U.S. GOVERNMENT		FINANCIAL INSTITUTIONS											
	A	L	Total		Households <sup>2</sup>		Business		State and local govts.		A	L	Total		Monetary authority		Commercial banking		Nonbank 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	30,797	24,089	16,689	8,842	13,770	3,561	2,377	4,652	541	630	324	2,555	12,243	11,827	316	316	3,215	3,100	7,381	7,188	1,332	1,324
Gold stock and SDR's	21	9	-	-	-	-	-	-	-	-	10	-	11	-	-	-	-	-	-	-	-	-
IMF position	9	45	-	-	-	-	-	-	-	-	9	-	32	-	-	-	-	-	-	-	-	-
Official foreign exchange	45	-	-	-	-	-	-	-	-	-	13	-	-	-	-	-	-	-	-	-	-	-
Treasury currency, SDR certificates	28	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Checkable deposits, currency	856	889	731	-	499	-	212	-	20	-	26	-	77	889	28	239	3	556	71	93	3	3
Time and savings accounts	2,881	2,881	2,673	-	2,413	-	205	-	55	-	1	-	163	2,881	-	-	1,616	1,616	163	1,264	64	64
Fed. funds and security RP's	372	415	168	-	372	-	73	-	95	-	-	-	186	415	2	-	274	274	121	141	-	-
Money market fund shares	428	428	400	-	372	-	28	-	-	-	-	-	28	428	-	-	-	-	28	428	-	-
Foreign deposits	45	45	19	-	19	-	-	-	-	-	-	-	26	-	-	-	-	-	26	-	-	-
Life insurance reserves	354	354	354	-	354	-	-	-	-	-	11	-	342	-	-	-	-	-	342	-	-	-
Pension fund reserves	2,942	2,942	2,942	-	2,942	-	-	-	-	-	229	-	2,713	-	-	-	-	-	2,713	-	-	-
Interbank claims	52	28	-	-	-	-	-	-	-	-	-	-	66	29	1	64	58	-36	7	552	-	-
Mutual fund shares <sup>3</sup>	552	552	481	-	483	-	18	-	-	-	-	-	71	552	-	-	-	-	71	552	-	-
Other corporate equities <sup>4</sup>	3,831	2,140	2,140	-	2,140	-	-	-	-	-	-	-	1,434	-	-	-	-	-	1,434	-	-	-
Credit market instruments <sup>5</sup>	12,393	12,393	2,304	-	1,728	-	249	-	327	-	206	-	9,180	2,327	233	-	2,646	220	5,058	853	1,243	1,254
U.S. Treasury securities <sup>6</sup>	2,245	2,245	898	-	607	-	85	-	205	-	2,245	-	898	2,245	227	-	175	-	558	-	10	-
Federal agency securities <sup>7</sup>	1,271	330	326	-	326	-	-	-	2	-	22	-	891	1,249	6	-	227	-	651	-	6	-
Tax-exempt securities	785	785	319	-	299	-	9	-	115	-	-	-	466	-	-	-	134	-	332	-	-	-
Corporate and foreign bonds	1,570	1,570	148	-	148	-	-	-	993	-	-	-	1,298	483	-	-	87	-	1,139	-	-	-
Mortgages	3,520	3,520	356	-	356	-	58	-	1,106	-	48	-	3,115	3	-	-	757	-	1,319	-	3	-
Consumer credit	791	791	42	-	42	-	42	-	698	-	-	-	748	3	-	-	383	-	365	-	1,039	-
Bank loans, n.e.c.	816	816	791	-	791	-	80	-	53	-	-	-	816	36	-	-	816	-	36	-	-	-
Open-market paper	579	579	211	-	157	-	53	-	107	-	-	-	359	409	-	-	11	-	344	-	3	-
Security credit	134	134	53	-	54	-	-	-	-	-	-	-	81	80	-	-	38	-	43	-	-	-
Proprietors' equity	2,565	-	2,565	-	2,565	-	-	-	-	-	-	-	45	-	-	-	-	-	-	-	-	-
Trade credit	967	772	852	-	49	-	853	-	616	-	31	-	45	-	-	-	-	-	45	-	-	-
Taxes payable	46	45	43	-	43	-	-	-	31	-	4	-	3	-	-	-	-	-	1	-	2	-
Miscellaneous claims	2,265	2,134	960	-	241	-	16	-	484	-	23	-	815	1,255	8	12	471	-	314	-	23	-

- Represents zero. <sup>1</sup> Includes "rest of world", not shown separately. <sup>2</sup> Includes personal trusts and nonprofit organizations. <sup>3</sup> Nonbank finance liability is redemption value of shares of open-end investment companies. <sup>4</sup> Assets shown at market value. No specific liability attributed to issuers of stocks other than open-end investment companies for amounts outstanding. <sup>5</sup> Includes "Other loans", not shown separately. <sup>6</sup> Includes savings bonds and other nonmarketable debt held by public, issues by agencies in the budget and by sponsored credit agencies in financial sectors, issues backed by mortgage pools, and loan participation certificates. <sup>7</sup> 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. 797. Flow of Funds Accounts—Financial Assets of Financial and Nonfinancial Institutions, by Holder Sector: 1970 to 1989

[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	1982	1983	1984	1985	1986	1987	1988	1989
<b>All sectors</b>	<b>4,639</b>	<b>13,110</b>	<b>15,452</b>	<b>17,134</b>	<b>18,798</b>	<b>21,307</b>	<b>23,966</b>	<b>25,692</b>	<b>27,873</b>	<b>30,797</b>
Households	2,488	6,541	7,563	8,318	8,848	9,905	10,830	11,390	12,324	13,770
Nonfinancial business	414	1,187	1,367	1,517	1,662	1,794	1,971	2,120	2,247	2,377
Farm	11	24	28	29	29	32	35	38	41	44
Nonfarm noncorporate	33	148	198	231	279	317	360	394	423	452
Nonfinancial corporations	370	1,015	1,142	1,257	1,355	1,444	1,576	1,688	1,784	1,882
State and local government	72	233	266	294	330	437	482	510	525	541
U.S. Government	90	230	279	293	329	366	376	351	332	324
U.S. Government-sponsored credit agencies and mortgage pools	52	309	434	502	588	695	914	1,095	1,169	1,332
Monetary authorities	86	174	194	204	219	243	275	286	305	316
Commercial banking	518	1,482	1,730	1,884	2,121	2,367	2,610	2,760	2,938	3,215
Domestic commercial banks	490	1,266	1,472	1,602	1,799	1,990	2,166	2,256	2,384	2,543
Foreign banking offices in U.S.	9	101	111	113	126	147	187	231	263	357
Nonbank finance	822	2,550	3,186	3,619	4,111	4,775	5,576	6,079	6,723	7,381
Savings and loan associations <sup>1</sup>	171	614	698	819	977	1,058	1,141	1,247	1,360	1,233
Mutual savings banks <sup>2</sup>	79	172	174	194	205	219	239	263	287	287
Credit unions	18	69	83	98	113	137	166	182	196	206
Life insurance	201	464	568	633	693	791	901	998	1,126	1,264
Other insurance	50	174	203	225	241	289	342	387	436	493
Private pension funds	112	470	576	683	714	848	942	1,004	1,117	1,250
State and local govt. retirement funds	60	198	263	311	357	405	469	517	606	726
Finance companies	64	202	237	264	302	352	410	450	489	519
Real estate investment trusts	4	3	4	4	6	8	9	11	14	14
Investment companies	47	62	77	112	137	240	414	460	478	552
Money market funds	-	76	220	179	234	244	292	316	338	428
Security brokers, dealers	16	46	85	92	121	159	188	142	141	224
SCO <sup>3</sup> issuers	-	-	1	4	14	25	64	103	136	184
Rest of the world	99	405	433	503	590	727	932	1,100	1,311	1,542

- Represents zero. <sup>1</sup> Includes personal trusts and nonprofit organizations. <sup>2</sup> Includes other sectors not shown separately. <sup>3</sup> See footnote 2, table 799. <sup>4</sup> Includes Federal savings banks insured by Bank Insurance Fund and a few insured by Savings Association Insurance Fund. <sup>5</sup> Securitized credit obligations.

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

### No. 798. Flow of Funds Accounts—Assets and Liabilities of Households: 1970 to 1989

[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	1985	1986	1987	1988	1989	1970	1980	1989
<b>Total financial assets</b>	<b>2,488</b>	<b>6,541</b>	<b>9,905</b>	<b>10,830</b>	<b>11,390</b>	<b>12,324</b>	<b>13,770</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Deposit and market instrument	791	2,124	3,594	3,851	4,153	4,561	5,012	31.8	32.5	36.4
Checkable deposits and currency	118	260	379	467	487	491	499	4.7	4.0	3.6
Small time and savings deposits	411	1,141	1,830	1,946	2,005	2,138	2,228	16.5	17.4	16.2
Money market fund shares	-	65	215	248	269	287	372	-	1.0	2.7
Large time deposits	15	112	120	95	114	151	185	0.6	1.7	1.3
Credit market instruments	247	546	1,052	1,096	1,277	1,495	1,728	9.9	8.3	12.5
U.S. Government securities	101	266	581	626	716	799	933	4.1	4.1	6.8
Treasury issues	85	221	483	499	522	580	607	3.4	3.4	4.4
Savings bonds	52	73	80	93	101	110	118	2.1	1.1	0.9
Other Treasury	33	148	404	406	421	471	490	1.3	2.3	3.6
Agency issues	16	45	98	126	194	218	326	0.6	0.7	2.4
Tax-exempt obligations	47	78	219	196	238	282	299	1.9	1.2	2.2
Corporate and foreign bonds	34	53	38	78	102	94	148	1.4	0.8	1.1
Mortgages	52	107	128	114	115	177	191	2.1	1.6	1.4
Open-market paper	14	41	86	84	106	144	157	0.5	0.6	1.1
Mutual fund shares	45	52	203	357	406	416	463	1.8	0.8	3.4
Other corporate equities	683	1,111	1,685	1,849	1,719	1,809	2,140	27.4	17.0	15.5
Life insurance reserves	131	216	257	274	300	326	354	5.3	3.3	2.6
Pension fund reserves <sup>2</sup>	241	916	1,802	2,058	2,248	2,559	2,942	9.7	14.0	21.4
Equity in noncorporate business	567	2,033	2,197	2,231	2,339	2,396	2,565	22.8	31.1	18.6
Security credit	4	16	35	44	38	45	53	0.2	0.2	0.4
Miscellaneous assets	26	72	133	165	187	213	241	1.1	1.1	1.8
<b>Total liabilities</b>	<b>493</b>	<b>1,489</b>	<b>2,401</b>	<b>2,707</b>	<b>2,970</b>	<b>3,265</b>	<b>3,581</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Credit market instruments	472	1,430	2,296	2,592	2,865	3,152	3,442	95.8	96.1	96.7
Mortgages	309	974	1,484	1,713	1,956	2,189	2,411	62.7	65.4	67.7
Installment consumer credit	106	302	527	582	618	671	728	21.4	20.3	20.4
Other consumer credit	29	53	75	78	75	72	63	5.8	3.6	1.8
Tax-exempt debt	-	17	81	79	78	79	81	-	1.1	2.3
Bank loans, not elsewhere classified	8	30	44	50	45	42	60	1.6	2.0	1.7
Other loans	21	55	84	89	92	98	100	4.2	3.7	2.8
Security credit	10	29	57	66	50	54	54	2.1	1.9	1.5
Trade credit	5	17	34	36	40	44	49	1.1	1.2	1.4
Unpaid life insurance premiums <sup>3</sup>	5	13	15	14	15	16	16	1.0	0.9	0.4

- Represents zero. <sup>1</sup> Excludes corporate equities. <sup>2</sup> See also table 597. <sup>3</sup> Includes deferred premiums.

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

### No. 799. Flow of Funds Accounts—Assets and Liabilities of Private Nonbank Financial Institutions, by Type of Instrument: 1989

[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 <sup>1</sup>		SAVINGS AND LOAN ASSOCIATIONS <sup>2</sup>		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
<b>Total</b>	<b>7,361</b>	<b>7,188</b>	<b>1,233</b>	<b>1,205</b>	<b>1,264</b>	<b>1,202</b>	<b>1,250</b>	<b>1,250</b>	<b>726</b>	<b>726</b>	<b>519</b>	<b>620</b>
Checkable deposits	71	93	9	33	5	-	8	-	3	-	10	-
Time and savings accounts	163	1,264	5	913	-	-	71	-	24	-	-	-
Federal funds, security RP's	121	141	19	56	-	-	-	-	-	-	-	-
Money market fund shares	28	428	-	-	15	-	13	-	-	-	-	-
Foreign deposits	26	-	-	-	-	-	-	-	-	-	-	-
Reserves:	-	-	-	-	-	-	-	-	-	-	-	-
Life insurance	-	342	-	-	-	342	-	-	-	-	-	-
Pension fund	-	2,713	-	-	-	736	-	1,250	-	726	-	-
Interbank claims	7	-	7	-	-	-	-	-	-	-	-	-
Mutual fund shares	71	552	-	-	19	-	52	-	-	-	-	-
Other corporate equities	1,434	-	-	-	122	-	667	-	285	-	-	-
Credit market instruments	5,058	853	1,080	145	1,010	-	398	-	414	-	509	497
Securities:	-	-	-	-	-	-	-	-	-	-	-	-
U.S. Treasury	558	-	19	-	152	-	94	-	132	-	-	-
Federal agency	651	-	179	-	-	-	53	-	69	-	-	-
Tax-exempt	332	-	-	-	9	-	-	-	-	-	-	-
Corporate and foreign bonds	1,139	369	49	18	522	-	173	-	197	-	-	164
Mortgages	1,319	3	747	-	241	-	7	-	15	-	82	-
Consumer credit	365	-	50	-	-	-	-	-	-	-	166	-
Bank loans, n.e.c.	-	36	-	2	-	-	-	-	-	-	-	31
Open market paper	344	303	4	-	30	-	72	-	-	-	261	-
Other loans	350	142	32	125	57	-	-	-	-	-	-	-
Security credit	43	80	-	-	-	-	-	-	-	-	-	-
Trade credit	45	14	-	-	-	-	-	-	-	-	-	-
Taxes payable	-	2	-	-	-	1	-	-	-	-	-	-
Miscellaneous	314	706	113	58	94	123	41	-	-	-	-	123

- Represents or rounds to zero. <sup>1</sup> Includes other institutions, not shown separately. <sup>2</sup> Includes most Federal savings banks insured by Savings Association Insurance Fund. A few of them are included with mutual savings banks, not shown separately.

### No. 800. Flow of Funds Accounts—Credit Market Debt Outstanding: 1970 to 1989

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

ITEM	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989
<b>Credit market debt</b>	<b>1,597</b>	<b>4,656</b>	<b>5,631</b>	<b>6,288</b>	<b>7,196</b>	<b>8,243</b>	<b>9,431</b>	<b>10,463</b>	<b>11,415</b>	<b>12,393</b>
Government:	451	1,029	1,323	1,533	1,760	2,074	2,326	2,504	2,691	2,866
Federal	301	743	991	1,178	1,377	1,600	1,815	1,960	2,118	2,268
State and local	150	287	331	355	383	474	510	544	574	598
Non-government:	1,146	3,627	4,308	4,755	5,436	6,169	7,106	7,959	8,724	9,528
Financial:	120	563	759	860	1,010	1,213	1,564	1,886	2,084	2,327
Sponsored credit agencies <sup>2</sup>	39	163	210	212	242	264	279	308	353	378
Mortgage pools	5	114	179	245	289	369	565	718	745	876
Commercial banks <sup>3</sup>	13	91	132	150	174	185	192	199	159	145
Savings and loan associations	11	53	70	84	82	99	120	139	146	145
Finance companies	51	136	162	179	203	261	328	379	446	497
SCO trusts <sup>4</sup>	-	-	1	4	14	25	64	103	136	184
Foreign	52	196	209	226	234	235	236	243	250	259
Private domestic nonfinancial:	973	2,868	3,340	3,670	4,192	4,721	5,306	5,831	6,390	6,941
Corporations	353	828	966	1,044	1,217	1,354	1,558	1,712	1,899	2,096
Bonds	167	412	482	507	574	670	781	880	995	1,108
Mortgages	59	85	35	50	53	34	81	82	83	87
Bank loans, n.e.c.	104	230	315	335	384	415	465	469	502	534
Open-market paper	7	28	38	37	59	72	63	74	85	107
Nonbank finance loans	11	44	51	58	75	87	99	116	135	147
Individuals	621	2,039	2,374	2,626	2,975	3,367	3,750	4,119	4,490	4,844
By sector:	-	-	-	-	-	-	-	-	-	-
Households <sup>5</sup>	472	1,430	1,626	1,792	2,016	2,296	2,592	2,865	3,152	3,442
Farm	48	162	185	188	188	173	157	146	138	137
Nonfarm noncorporate	102	448	564	646	769	898	1,002	1,109	1,201	1,265
By type of instrument:	-	-	-	-	-	-	-	-	-	-
Mortgages	410	1,360	1,581	1,745	1,964	2,214	2,513	2,829	3,121	3,389
Consumer credit	134	355	389	438	519	602	660	693	744	791
Policy loan	17	43	54	55	56	56	55	55	56	60
Bank loans, n.e.c.	31	138	150	156	169	178	192	195	201	224
Other loans	30	124	151	163	184	197	211	230	249	260
Tax-exempt debt	-	17	30	41	51	81	79	78	79	81

- Represents zero. <sup>1</sup> Includes other types, not shown separately. <sup>2</sup> U.S. Government. <sup>3</sup> Includes bank affiliates. <sup>4</sup> Securitized credit obligations. <sup>5</sup> See footnote 2, table 798.

Source of tables 799 and 800: Board of Governors of the Federal Reserve System, *Annual Statistical Digest*.

**No. 801. Ownership of Public Debt Securities by Private Investors: 1970 to 1989**

[As of December. Par values. Estimated]

INVESTOR	AMOUNT (bil. dol.)							PERCENT DISTRIBUTION			
	1970	1980	1985	1986	1987	1988	1989	1970	1980	1985	1989
<b>Total privately held . . . . .</b>	<b>229.1</b>	<b>616.4</b>	<b>1,417.2</b>	<b>1,602.0</b>	<b>1,731.4</b>	<b>1,858.5</b>	<b>2,015.8</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Commercial banks <sup>1</sup>	62.7	112.1	198.2	203.5	201.5	193.8	180.6	27.4	18.2	14.0	9.0
Nonbank investors	166.4	504.3	1,219.0	1,398.5	1,529.9	1,664.7	1,835.2	72.6	81.8	86.0	91.0
Individuals <sup>2</sup>	81.2	117.1	154.8	162.7	172.4	188.8	214.2	35.4	19.0	10.9	10.6
Insurance companies	7.4	24.0	78.5	105.6	104.9	107.3	107.9	3.2	3.9	5.5	5.4
Money market funds	(NA)	3.5	25.1	28.6	14.6	11.8	14.4	(NA)	0.6	1.8	0.7
Corporations <sup>3</sup>	7.3	19.3	59.0	68.8	84.6	87.1	93.8	3.2	3.1	4.2	4.7
State and local governments <sup>4</sup>	27.8	87.9	226.7	262.8	284.6	313.6	337.1	12.1	14.3	16.0	16.7
Foreign and international <sup>5</sup>	19.8	129.7	224.8	263.4	299.7	362.2	393.4	8.6	21.0	15.9	19.5
Other investors <sup>6</sup>	23.0	122.8	450.1	506.6	569.1	593.9	674.3	10.0	19.9	31.8	33.5

NA Not available. <sup>1</sup> 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. <sup>2</sup> Includes partnerships and personal trust accounts. <sup>3</sup> Exclusive of banks and insurance companies. <sup>4</sup> Includes State and local pension funds. <sup>5</sup> Consists of the investment of foreign balances and international accounts in the United States. <sup>6</sup> Consists of savings and loan associations, credit unions, mutual savings banks, nonprofit institutions, money market funds (for 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. 802. Selected Financial Institutions—Number and Assets, by Asset Size: 1989**

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

ASSET SIZE	NUMBER OF INSTITUTIONS				ASSETS (bil. dol.)			
	B.I.F.-insured commercial banks <sup>1</sup>	S.A.I.F.-insured savings institutions <sup>1,2</sup>	B.I.F.-insured savings banks	Credit unions <sup>3</sup>	B.I.F.-insured commercial banks <sup>1,4</sup>	S.A.I.F.-insured savings institutions <sup>1,2</sup>	B.I.F.-insured savings banks	Credit unions <sup>3</sup>
<b>Total . . . . .</b>	<b>12,706</b>	<b>2,878</b>	<b>489</b>	<b>13,371</b>	<b>3,299.2</b>	<b>1,251.7</b>	<b>278.9</b>	<b>183.7</b>
Less than \$5.0 million . . . . .	153		1	8,683	0.5	(Z)	(Z)	13.0
\$5.0 million-\$9.9 million . . . . .	619	305	5	1,657	4.8	4.8	(Z)	11.7
\$10.0 million-\$24.9 million . . . . .	2,968		18	1,536	51.7		0.3	24.5
\$25.0 million-\$49.9 million . . . . .	3,238	476	47	759	117.2	17.6	1.7	26.4
\$50.0 million-\$99.9 million . . . . .	2,744	655	72	389	191.3	46.6	5.3	27.3
\$100.0 million-\$499.9 million . . . . .	2,370	1,026	228	324	463.3	219.7	53.1	60.0
\$500.0 million or more . . . . .	614	416	118	23	2,470.4	963.1	219.5	20.8
<b>PERCENT DISTRIBUTION</b>								
<b>Total . . . . .</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Less than \$5.0 million . . . . .	1.2		0.2	64.9	(Z)	(Z)	(Z)	7.1
\$5.0 million-\$9.9 million . . . . .	4.9	10.6	1.0	12.4	0.1	0.4	(Z)	6.4
\$10.0 million-\$24.9 million . . . . .	23.4		3.7	11.5	1.6		0.1	13.3
\$25.0 million-\$49.9 million . . . . .	25.5	16.5	9.6	5.7	3.6	1.4	0.6	14.3
\$50.0 million-\$99.9 million . . . . .	21.6	22.8	14.7	2.9	5.8	3.7	1.9	14.9
\$100.0 million-\$499.9 million . . . . .	18.6	35.6	46.7	2.4	14.0	17.6	19.0	32.7
\$500.0 million or more . . . . .	4.8	14.5	24.1	0.2	74.9	76.9	78.4	11.3

Z Less than \$50 million or .05 percent. <sup>1</sup> All commercial banks and some savings banks are insured by the FDIC Bank Insurance Fund (B.I.F.). Savings institutions previously insured by the Federal Savings and Loan Insurance Corporation are insured by the FDIC Savings Association Insurance Fund (S.A.I.F.), effective August 9, 1989. Represents reporting banks. <sup>2</sup> Source: U.S. League of Savings Institutions, Washington, DC, *Savings Institutions Sourcebook*, annual. <sup>3</sup> Source: National Credit Union Administration, *National Credit Union Administration Yearend Statistics 1989*. Excludes nonfederally insured State chartered credit unions and federally insured corporate credit unions. <sup>4</sup> Includes foreign branches of U.S. banks.

**No. 803. FDIC-Insured Banks—Number, Banking Offices, and Deposits, by Bank Class: 1989**

[As of June 30. Includes Puerto Rico and outlying areas. Covers all commercial banks and savings banks insured by the Federal Deposit Insurance Corporation Bank Insurance Fund. Savings institutions insured by the Savings Association Insurance Fund are excluded]

CLASS OF BANK	Banks (number)	Banking offices (number)	DEPOSITS (mil. dol.)			
			Total <sup>1</sup>	Individuals, partnerships and corporations		Government
				Total	Transaction accounts <sup>2</sup>	Non-transaction accounts
<b>Total . . . . .</b>	<b>13,442</b>	<b>64,071</b>	<b>2,364,574</b>	<b>2,173,381</b>	(NA)	(NA)
Commercial banks	12,950	60,258	2,136,760	1,948,766	541,166	1,407,600
National banks	4,288	29,291	1,244,814	1,135,600	322,878	812,722
State (Federal Reserve, member bank)	1,037	6,478	287,939	258,601	77,783	180,818
State (non-Federal Reserve member)	7,625	24,489	604,007	554,566	140,506	414,060
Savings banks	492	3,759	223,476	220,814	(NA)	(NA)
U.S. branches of foreign banks	-	54	4,338	3,800	(NA)	(NA)

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

Source of tables 802 and 803: Except as noted, U.S. Federal Deposit Insurance Corporation, *Statistics on Banking*, annual, and *Data Book, Operating Banks and Branches*, June 30, 1989.

**No. 804. Banking Offices, by Deposit Insurance Status: 1970 to 1989**

[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	1982	1983	1984	1985	1986	1987	1988	1989
<b>All banking offices . . . . .</b>	<b>37,166</b>	<b>57,232</b>	<b>57,913</b>	<b>59,050</b>	<b>60,067</b>	<b>60,890</b>	<b>61,897</b>	<b>62,914</b>	<b>63,960</b>	<b>64,936</b>
Commercial banks, total . . . . .	35,585	53,649	54,829	55,960	57,010	57,764	58,565	59,423	60,200	61,162
Member, Federal Reserve System . . . . .	21,989	29,985	30,921	31,946	32,809	33,854	34,542	35,196	35,763	36,755
National banks . . . . .	17,191	24,217	24,867	26,080	27,037	27,844	28,218	28,744	29,270	30,019
State banks . . . . .	4,798	5,768	6,054	5,866	5,772	6,010	6,324	6,452	6,493	6,736
Nonmember banks . . . . .	13,596	23,664	23,908	24,014	24,201	23,910	24,023	24,227	24,437	24,407
Insured . . . . .	13,332	23,186	23,314	23,380	23,535	23,810	24,023	24,227	24,437	24,407
Noninsured . . . . .	264	478	594	634	666	(NA)	(NA)	(NA)	(NA)	(NA)
Savings banks, total . . . . .	1,581	3,583	3,084	3,090	3,057	3,126	3,332	3,491	3,760	3,774
Insured . . . . .	1,223	3,066	2,733	2,760	2,728	3,126	3,332	3,491	3,760	3,774
Noninsured . . . . .	358	517	351	330	329	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available.

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

**No. 805. Changes in Number of Operating Banking Offices: 1970 to 1989**

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

TYPE OF CHANGE	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989
<b>Banking offices <sup>1</sup> . . . . .</b>	<b>37,166</b>	<b>57,232</b>	<b>57,913</b>	<b>59,050</b>	<b>60,067</b>	<b>60,890</b>	<b>61,897</b>	<b>62,914</b>	<b>63,960</b>	<b>64,936</b>
Number of banks . . . . .	14,199	15,330	15,412	15,440	15,489	14,809	14,681	14,207	13,629	13,201
Number of branches . . . . .	22,967	41,902	42,501	43,610	44,578	46,081	47,216	48,707	50,331	51,735
<b>Net change during year . . . . .</b>	<b>1,584</b>	<b>2,306</b>	<b>-1,435</b>	<b>1,137</b>	<b>1,017</b>	<b>1,759</b>	<b>1,007</b>	<b>1,017</b>	<b>1,046</b>	<b>976</b>
Offices opened . . . . .	1,864	2,800	2,387	2,119	2,338	2,874	2,756	3,144	3,537	3,342
Banks . . . . .	186	271	379	432	466	482	396	271	248	202
Branches . . . . .	1,678	2,529	2,008	1,687	1,852	2,392	2,360	2,873	3,289	3,140
Offices closed . . . . .	280	494	3,822	982	1,321	1,115	1,749	2,127	2,491	2,366
Banks . . . . .	165	142	322	404	427	460	524	745	826	630
Branches . . . . .	115	352	2,500	578	894	655	1,225	1,382	1,665	1,736

<sup>1</sup> See headnote, table 804. <sup>2</sup> Includes 3,000 automatic teller machines that were previously reported as branches.

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

**No. 806. 500 Largest Banks in the World—Number and Deposits, by Location of Bank: 1970 to 1989**

[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 1982, 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	1982	1983	1984	1985	1986	1987	1988	1989	PERCENT		
											1970	1980	1989
NUMBER													
U.S. banks	185	93	97	102	115	110	102	90	107	108	37.0	18.6	21.6
Foreign banks	315	407	403	398	385	390	398	410	393	392	63.0	81.4	78.4
Japan	71	78	95	95	95	96	108	111	111	108	14.2	15.6	21.6
United Kingdom	27	34	30	26	22	22	20	18	18	20	5.4	6.8	4.0
West Germany	37	38	35	40	39	39	38	42	38	37	7.4	7.6	7.4
France	19	28	23	21	19	20	23	23	20	20	4.0	5.6	4.0
Italy	25	27	23	29	26	29	31	32	29	28	5.0	5.4	5.6
DEPOSITS													
Total	890	4,994	5,230	5,683	5,854	7,022	9,220	12,090	12,837	13,565	100.0	100.0	100.0
U.S. banks	296	754	794	882	961	1,014	1,084	1,108	1,347	1,352	33.3	15.1	10.0
Foreign banks	594	4,240	4,436	4,801	4,893	6,008	8,136	10,982	11,489	12,214	66.7	84.9	90.0
Japan	151	1,131	1,282	1,587	1,750	2,179	3,350	4,936	5,333	5,236	17.0	23.8	38.6
United Kingdom	60	349	380	375	343	403	458	588	646	673	6.7	7.0	5.0
West Germany	80	603	557	550	500	684	912	1,208	1,151	1,309	9.0	12.1	9.7
France	40	483	447	436	440	502	650	836	822	970	4.5	9.7	7.2
Italy	62	290	257	309	296	395	527	647	606	708	7.0	5.8	5.2

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

**No. 807. Insured Commercial Banks—Assets and Liabilities: 1980 to 1990**

[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	1983	1984	1985	1986	1987	1988	1989	1990 <sup>1</sup>
Number of banks	14,434	14,465	14,481	14,404	14,200	13,701	13,139	12,713	12,338
<b>Assets, total</b>	<b>1,855.7</b>	<b>2,342.1</b>	<b>2,508.6</b>	<b>2,731.0</b>	<b>2,941.1</b>	<b>2,999.8</b>	<b>3,130.9</b>	<b>3,299.0</b>	<b>3,388.9</b>
Net loans and leases	1,006.4	1,301.3	1,489.7	1,607.8	1,727.8	1,779.2	1,885.7	2,003.6	2,054.0
Real estate loans	269.1	336.8	385.6	438.4	515.3	600.1	676.6	761.5	829.0
Commercial and industrial loans	391.0	524.9	565.2	577.7	600.9	589.3	598.8	618.6	615.5
Loans to individuals	187.4	224.6	266.8	308.9	335.7	351.2	377.8	400.6	402.9
Farm loans	32.3	39.8	40.4	36.1	31.7	29.4	30.2	31.1	33.3
Other loans and leases	136.8	190.6	250.4	269.9	273.1	259.1	248.9	245.5	228.7
Less: Reserve for losses	10.1	15.4	18.7	23.2	28.9	49.9	46.7	53.7	55.3
Temporary investments			410.3	451.9	463.5	451.2	465.8	481.8	451.5
Securities over 1 year in length			252.0	297.8	357.6	396.5	382.8	402.2	450.4
Other			356.6	373.5	392.1	372.8	396.5	411.4	433.0
Domestic office assets	1,533.0	2,027.6	2,108.5	2,325.5	2,532.9	2,574.7	2,726.1	2,896.9	3,081.3
Foreign office assets	322.7	314.5	400.1	405.5	408.2	425.1	404.6	402.1	307.6
<b>Liabilities and capital, total</b>	<b>1,855.7</b>	<b>2,342.1</b>	<b>2,508.6</b>	<b>2,731.0</b>	<b>2,941.1</b>	<b>2,999.8</b>	<b>3,130.9</b>	<b>3,299.0</b>	<b>3,388.9</b>
Noninterest-bearing deposits	432.3	389.7	431.6	471.3	532.3	477.6	479.4	483.4	489.0
Interest-bearing deposits	1,048.9	1,452.6	1,531.2	1,646.4	1,751.1	1,857.6	1,952.1	2,065.1	2,161.0
Subordinated debt	6.5	7.1	10.2	14.7	17.0	17.6	17.3	19.5	23.8
Other liabilities	260.4	352.2	381.3	429.4	458.4	466.4	485.1	526.2	496.0
Equity capital	107.6	140.5	154.3	169.2	182.2	180.5	196.7	204.8	219.1
Domestic office deposits	1,187.2	1,533.9	1,645.2	1,795.9	1,969.7	1,993.6	2,116.5	2,236.8	2,356.6
Foreign office deposits	294.0	308.4	317.6	321.8	313.8	341.6	315.1	311.8	293.4

<sup>1</sup> Preliminary. <sup>2</sup> Prior to 1984, demand deposits. <sup>3</sup> 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. 808. Insured Commercial Banks—Number, Assets, and Deposits, States and Other Areas: 1989**

[Excludes foreign branches of U.S. banks]

STATE	ALL BANKS <sup>1</sup>			BANKS CLOSED OR ASSISTED		STATE	ALL BANKS <sup>1</sup>			BANKS CLOSED OR ASSISTED	
	Num-ber	Assets (bil. dol.)	Deposits (bil. dol.)	Num-ber	Deposits (mil. dol.)		Num-ber	Assets (bil. dol.)	Deposits (bil. dol.)	Num-ber	Deposits (mil. dol.)
<b>Total U.S.</b>	<b>12,713</b>	<b>2,897.8</b>	<b>2,236.7</b>	<b>207</b>	<b>24,097</b>	WV	186	16.7	14.2	1	4
<b>Northeast</b>	<b>893</b>	<b>828.0</b>	<b>600.4</b>	<b>5</b>	<b>1,179</b>	NC	78	73.3	50.9	-	-
<b>N.E.</b>	<b>276</b>	<b>182.6</b>	<b>134.0</b>	<b>2</b>	<b>727</b>	SC	82	23.7	17.5	-	-
ME	20	8.2	7.0	-	-	GA	392	64.3	49.3	-	-
NH	48	10.4	8.6	-	-	FL	429	131.4	110.0	5	1,070
VT	27	5.8	5.2	-	-	<b>E.S.C.</b>	<b>947</b>	<b>140.3</b>	<b>115.5</b>	-	-
MA	99	101.4	71.2	1	679	KY	335	39.3	31.4	-	-
RI	13	16.3	10.8	-	-	TN	268	44.8	37.8	-	-
CT	69	40.4	31.4	1	48	AL	221	36.2	29.1	-	-
<b>M.A.</b>	<b>617</b>	<b>645.4</b>	<b>466.4</b>	<b>3</b>	<b>452</b>	MS	123	20.1	17.2	-	-
NY	193	392.1	269.6	3	452	<b>W.S.C.</b>	<b>2,237</b>	<b>252.8</b>	<b>212.7</b>	<b>167</b>	<b>20,459</b>
NJ	126	93.1	74.6	-	-	AR	257	19.5	17.2	-	-
PA	298	160.2	122.1	-	-	LA	232	36.3	31.7	21	1,116
<b>Midwest</b>	<b>5,518</b>	<b>680.4</b>	<b>539.3</b>	<b>10</b>	<b>106</b>	OK	430	26.3	23.0	12	449
<b>E.N.C.</b>	<b>2,502</b>	<b>466.9</b>	<b>368.0</b>	-	-	TX	1,318	170.8	140.7	134	18,894
OH	293	107.2	84.3	-	-	<b>West</b>	<b>1,570</b>	<b>468.3</b>	<b>382.6</b>	<b>18</b>	<b>1,265</b>
IN	312	56.1	45.9	-	-	<b>Mt.</b>	<b>922</b>	<b>111.9</b>	<b>87.3</b>	<b>15</b>	<b>345</b>
IL	1,119	171.3	128.0	-	-	MT	167	7.0	6.1	2	45
MI	268	87.4	72.3	-	-	ID	23	8.3	6.5	-	-
WI	510	44.8	37.5	-	-	WY	71	4.4	3.8	-	-
<b>W.N.C.</b>	<b>3,016</b>	<b>213.5</b>	<b>171.3</b>	<b>10</b>	<b>106</b>	CO	451	26.0	21.5	7	90
MN	637	50.9	40.4	1	13	NM	93	10.7	9.0	-	-
IA	576	32.2	27.4	-	-	AZ	43	26.4	23.1	6	210
MO	551	58.1	48.3	1	5	UT	57	12.0	9.3	-	-
ND	158	7.0	6.2	2	41	NV	17	17.0	7.8	-	-
SD	129	20.1	9.5	-	-	<b>Pac.</b>	<b>648</b>	<b>356.4</b>	<b>295.3</b>	<b>3</b>	<b>920</b>
NE	392	18.6	16.1	1	5	WA	92	38.1	31.0	-	-
KS	573	26.7	23.4	5	42	OR	49	22.0	16.8	-	-
<b>South</b>	<b>4,714</b>	<b>905.6</b>	<b>701.4</b>	<b>174</b>	<b>21,547</b>	CA	479	277.7	231.3	1	27
<b>S.A.</b>	<b>1,530</b>	<b>512.4</b>	<b>373.2</b>	<b>7</b>	<b>1,088</b>	AK	7	4.3	3.4	2	893
DE	48	66.4	28.1	-	-	HI	21	14.3	12.8	-	-
MD	106	52.0	39.0	-	-	AM	1	(Z)	(Z)	-	-
DC	25	17.5	13.2	-	-	PR	15	15.1	12.7	-	-
VA	182	67.1	51.0	1	14	GU	1	0.4	0.4	-	-
						Pac. Is-lands	1	(Z)	(Z)	-	-

- Represents zero. Z Less than \$50 million. <sup>1</sup> As of December 31.

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

### No. 809. Insured Commercial Banks—Income and Selected Measures of Financial Condition: 1980 to 1990

[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	1983	1984	1985	1986	1987	1988	1989	1990 <sup>1</sup>
Interest income	177.4	217.3	264.2	248.2	237.8	244.8	272.3	317.3	320.4
Interest expense	120.1	143.9	181.2	157.3	142.8	144.9	165.0	205.1	204.9
Net interest income	57.3	73.4	83.0	90.9	95.0	99.9	107.3	112.2	115.5
Provisions for loan losses	4.5	10.7	13.7	17.7	22.1	37.5	17.0	31.0	31.7
Noninterest income	13.3	23.3	27.7	31.0	35.9	41.5	44.9	51.1	55.1
Noninterest expense	46.7	66.9	76.4	82.3	90.2	97.3	101.3	108.1	115.5
Income taxes	5.0	4.1	4.9	5.6	5.3	5.4	10.0	9.7	7.9
Net operating income	14.5	15.0	15.7	16.3	13.3	1.1	23.9	14.5	15.5
Securities gain/loss, net	-0.5	-	-0.1	1.6	4.0	1.4	0.3	0.8	0.5
Extraordinary gains, net	-	0.1	0.2	0.2	0.3	0.2	0.8	0.3	0.7
Net income	14.0	15.1	15.8	18.1	17.5	2.8	25.1	15.6	16.6
RATIOS OF CONDITION									
Return on assets <sup>2</sup> (percent)	0.80	0.66	0.65	0.70	0.63	0.12	0.82	0.49	0.50
Return on equity <sup>3</sup> (percent)	13.66	10.70	10.73	11.31	9.94	2.00	13.30	7.78	7.84
Equity capital to assets (percent)	5.80	6.00	6.15	6.20	6.20	6.04	6.28	6.21	6.47
Nonperforming assets	(NA)	46.0	49.5	51.0	57.7	73.8	67.1	75.4	(NA)
Nonperforming assets to assets (percent)	(NA)	1.97	1.97	1.87	1.94	2.46	2.14	2.28	2.92
Net charge-offs <sup>4</sup>	3.6	8.5	10.8	13.6	16.5	18.4	18.5	22.9	29.0
Net charge-offs to loans and leases (percent)	0.36	0.67	0.76	0.84	0.98	0.92	1.00	1.16	1.40
Net interest margin <sup>5</sup> (percent)	3.66	3.81	3.95	4.09	3.98	3.89	4.06	4.05	3.99
Percentage of banks losing money	3.7	10.6	13.1	17.1	19.8	17.7	14.7	12.5	12.6

<sup>1</sup> Represents or rounds to zero. NA Not available. <sup>2</sup> Preliminary. <sup>3</sup> Net income (including securities transactions and nonrecurring items) as a percentage of average total assets. <sup>4</sup> Net income as a percentage of average total equity capital. <sup>5</sup> Total loans and leases charged off (removed from balance sheet because of uncollectibility), less amounts recovered on loans and leases previously charged off. <sup>6</sup> 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. 810. Insured Commercial Banks—Selected Measures of Financial Condition, by Asset Size and Region: 1990

[In percent. Preliminary. See headnote, table 809]

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	0.50	7.84	6.47	2.92	1.40	12.6
Less than \$100 million	0.74	8.11	9.02	1.69	0.68	13.3
\$100 million to \$1 billion	0.80	10.26	7.71	1.92	0.82	8.9
\$1 billion to \$10 billion	0.38	5.91	6.34	2.81	1.37	20.6
\$10 billion or more	0.40	7.83	5.26	3.82	1.86	24.5
Northeast <sup>1</sup>	0.04	0.77	5.67	4.35	1.99	27.1
Southeast <sup>2</sup>	0.64	8.93	7.04	2.03	0.90	16.2
Central <sup>3</sup>	0.84	11.94	7.05	1.57	0.90	5.4
Midwest <sup>4</sup>	1.03	13.21	7.70	1.43	0.99	5.4
Southwest <sup>5</sup>	0.49	7.50	6.52	2.69	1.38	17.3
West <sup>6</sup>	0.95	14.70	6.68	2.43	1.15	17.8

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

### No. 811. FDIC-Insured Banks Closed or Assisted Due to Financial Difficulties and Problem Banks: 1971 to 1990

[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	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Total banks closed or assisted	Number	84	10	42	48	80	120	145	203	221	207	169
Agricultural banks <sup>1</sup>	Number	(NA)	1	7	7	31	62	59	57	29	13	(NA)
Deposits, closed and assisted banks	Mil. dol	10,851	3,826	9,908	5,442	29,883	8,059	6,597	8,568	37,215	24,097	(NA)
Agricultural banks <sup>1</sup>	Mil. dol	(NA)	7	112	114	421	866	1,408	906	492	173	(NA)
Problem banks <sup>2</sup>	Number	(X)	223	369	642	848	1,140	1,484	1,575	1,406	1,109	1,046

NA Not available. X Not applicable. <sup>1</sup> Banks with at least 25 percent of their portfolios devoted to farm loans. <sup>2</sup> FDIC-insured commercial and savings banks considered to be problem banks by the supervisory authorities, end-of-period.

Source of tables 809-811: U.S. Federal Deposit Insurance Corporation, *Annual Report, The FDIC Quarterly Banking Profile: Statistics on Banking*, annual; and unpublished data.



**No. 812. U.S. Banking Offices of Foreign Banks—Summary: 1975 to 1989**

[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	1989, total <sup>2</sup>	281	697	695.6	178.9	370.4
1980	200.6	121.4	59.6	80.4	Japan	39	120	372.5	100.3	195.6
1985	440.8	247.4	108.8	236.7	Italy	13	27	45.1	10.5	13.0
1986	524.3	276.9	126.8	278.2	Canada	6	50	42.4	11.2	19.3
1987	592.6	310.9	147.9	316.1	United Kingdom	12	45	40.2	13.4	26.7
1988	650.6	338.8	167.3	335.1	France	15	39	30.3	5.1	16.5
1989	735.7	369.6	184.3	376.1	Hong Kong	10	30	26.4	6.6	19.3
Share: <sup>1</sup> 1975	5.3	5.7	10.4	2.9	Switzerland	7	18	20.5	4.9	10.6
1980	11.9	13.4	18.2	6.6	Israel	4	27	12.2	3.2	10.7
1985	16.1	15.4	22.5	12.1	Netherlands	4	22	11.6	3.3	6.0
1989	20.6	17.2	29.4	14.9	Spain	9	28	11.2	2.8	7.9

<sup>1</sup> Percent of "domestically owned" commercial banks plus U.S. offices of foreign banks. <sup>2</sup> 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. 813. Foreign Branches of U.S. Federal Reserve Member Banks—Number and Assets: 1970 to 1989**

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

ITEM	Unit	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989
Member banks operating foreign branches	Number	79	159	162	166	163	162	151	146	132	126
Foreign branches	Number	532	787	900	892	905	916	899	868	849	819
Assets of foreign branches <sup>1,2</sup>	Bil. dol.	50	311	341	333	291	290	285	342	275	264
Percent of total assets of all insured commercial banks <sup>3</sup>	Percent	7.3	16.3	14.2	11.9	10.3	8.9	8.0	8.3	7.5	6.7
Assets of branches in United Kingdom <sup>1</sup>	Bil. dol.	24	107	111	132	87	94	82	110	84	72
Assets of branches in The Bahamas and Cayman Islands <sup>1</sup>	Bil. dol.	4	93	101	117	86	77	82	95	87	81

<sup>1</sup> Data exclude claims on other foreign branches of the same bank. <sup>2</sup> Includes assets of foreign branches in countries in addition to those shown separately. <sup>3</sup> Percentages reflect adjustments to exclude foreign branch claims on the affiliates and other branches of the parent banks.

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

**No. 814. Foreign Lending by Large U.S. Banks, by Maturity, Type of Borrower, and Country: 1989**

[In millions of dollars, except percent. As of December. Covers 173 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 \$1.9 billion or more]

COUNTRY	CLAIMS		Bank borrowers	Public borrowers	COUNTRY	CLAIMS		Bank borrowers	Public borrowers
	Total <sup>1</sup>	Percent short-term <sup>2</sup>				Total <sup>1</sup>	Percent short-term <sup>2</sup>		
<b>Total <sup>3</sup></b>	<b>216,269</b>	<b>66</b>	<b>100,676</b>	<b>60,172</b>	Italy	4,747	75	3,014	1,257
Argentina	4,500	25	497	3,067	Japan	21,799	87	17,208	231
Australia	2,504	67	441	334	Mexico	16,060	24	1,932	12,572
Bahamas, The	3,276	92	3,078	13	Netherlands	3,063	74	1,495	324
Belgium-Luxembourg	6,524	83	4,190	1,048	Philippines	3,233	43	317	2,140
Brazil	16,284	40	2,382	12,200	Singapore	4,778	95	3,990	121
British West Indies	9,701	95	9,028	9	South Africa	2,297	42	1,435	550
Canada	7,802	60	2,418	869	South Korea	3,972	84	1,890	303
Chile	3,945	51	467	2,456	Spain	2,388	55	933	789
China:					Sweden	1,960	92	1,297	196
Taiwan	2,991	95	1,102	288	Switzerland	3,749	93	1,869	45
Colombia	1,921	37	272	1,323	United Kingdom	31,525	82	17,762	463
France	8,711	85	6,812	1,221	Venezuela	7,149	21	983	5,052
Hong Kong	6,531	91	4,545	35	West Germany	4,650	49	1,729	1,684

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

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

**No. 815. Federal and State-Chartered Credit Unions—Summary: 1970 to 1989**

[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 864-878]

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	4,845	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	49,097
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
1989	8,821	4,550	35,612	18,858	120,666	63,022	79,629	42,038	109,653	57,518

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

**No. 816. Savings Institutions—Financial Summary, by Type: 1970 to 1989**

[In **billions of dollars**, except number of institutions. As of **December 31**. Includes Puerto Rico, Guam, and Virgin Islands. SAIF = Savings Association Insurance Fund. BIF = Bank Insurance Fund. See also *Historical Statistics, Colonial Times to 1970*, series X 834-844]

TYPE OF INSTITUTION	1970	1980	1983	1984	1985	1986	1987	1988	1989
<b>NUMBER OF INSTITUTIONS</b>									
<b>Savings institutions, total</b>	<b>6,162</b>	<b>5,076</b>	<b>4,036</b>	<b>3,978</b>	<b>3,939</b>	<b>3,959</b>	<b>3,869</b>	<b>3,667</b>	<b>3,500</b>
Savings and loan associations	5,669	4,613	3,502	3,362	3,233	3,084	2,886	2,554	2,241
SAIF-insured	4,365	4,002	3,040	2,907	2,944	2,817	2,648	2,328	2,108
State insured and non-insured	1,304	611	462	455	289	267	238	226	133
Savings banks	493	463	534	616	706	875	983	1,113	1,259
SAIF-insured	(X)	3	143	229	302	403	499	621	770
BIF-insured	328	323	294	291	392	472	484	492	489
Federally chartered	(X)	(X)	18	24	28	26	22	21	(NA)
State chartered	328	323	276	267	364	446	462	471	(NA)
State insured and non-insured	165	137	97	96	12	-	-	-	-
SAIF-insured institutions	4,365	4,005	3,183	3,136	3,246	3,220	3,147	2,949	2,878
BIF-insured institutions	328	323	294	291	392	472	484	492	489
State insured and non-insured	1,469	748	559	551	301	267	238	226	133
<b>ASSETS</b>									
<b>Savings institutions, total</b>	<b>255.3</b>	<b>796.6</b>	<b>1,034.0</b>	<b>1,206.6</b>	<b>1,315.1</b>	<b>1,422.2</b>	<b>1,520.5</b>	<b>1,643.6</b>	<b>1,533.5</b>
Savings and loan associations	176.1	629.8	773.4	902.0	948.2	961.8	974.3	933.4	755.7
SAIF-insured	170.6	618.5	754.2	879.0	938.1	953.6	966.6	924.5	751.1
State insured and non-insured	5.5	11.2	19.2	23.0	10.1	8.2	7.7	8.9	4.6
Savings banks	79.2	166.8	260.6	304.6	366.9	460.4	546.2	710.2	777.8
SAIF-insured	(X)	2.2	65.0	98.4	131.9	210.3	284.3	426.0	497.9
BIF-insured	68.7	152.6	170.7	179.1	205.4	250.1	261.9	284.2	279.9
Federally chartered	(X)	(X)	36.7	43.5	48.0	52.4	44.8	46.1	(NA)
State chartered	68.7	152.6	134.0	135.6	157.4	197.7	217.1	238.1	(NA)
State insured and non-insured	10.5	12.0	24.9	27.1	29.6	-	-	-	-
SAIF-insured institutions	170.6	620.6	819.2	977.5	1,070.0	1,163.9	1,250.9	1,350.5	1,249.0
BIF-insured institutions	68.7	152.6	170.7	179.1	205.4	250.1	261.9	284.2	279.9
State insured and non-insured	16.0	23.2	44.1	50.1	39.7	8.2	7.7	8.9	4.6
<b>DEPOSITS</b>									
<b>Savings institutions, total</b>	<b>218.8</b>	<b>673.5</b>	<b>863.7</b>	<b>988.3</b>	<b>1,057.4</b>	<b>1,096.5</b>	<b>1,143.7</b>	<b>1,192.8</b>	<b>(NA)</b>
Savings and loan associations	146.7	511.0	634.5	725.0	749.2	740.0	736.0	673.7	(NA)
SAIF-insured	141.7	501.2	617.8	704.9	740.5	732.9	729.4	673.5	597.0
State insured and non-insured	5.0	9.8	16.6	19.9	8.7	7.1	6.6	0.2	(NA)
Savings banks	72.1	162.5	229.3	263.5	308.2	356.5	407.7	519.1	572.4
SAIF-insured	(X)	1.9	53.2	79.6	103.5	157.7	203.2	298.2	348.6
BIF-insured	62.7	149.9	153.8	159.8	178.6	198.8	204.5	220.9	223.8
Federally chartered	(X)	(X)	33.0	38.3	39.8	39.3	30.7	31.7	(NA)
State chartered	62.7	149.9	120.8	121.5	138.9	159.5	173.8	189.2	(NA)
State insured and non-insured	9.4	10.7	22.3	24.1	26.1	-	-	-	-
SAIF-insured institutions	141.7	503.2	671.1	784.5	843.9	890.7	932.6	971.7	945.7
BIF-insured institutions	62.7	149.9	153.8	159.8	178.6	198.8	204.5	220.9	223.8
State insured and non-insured	14.4	21.1	38.9	44.0	34.8	7.1	6.6	0.2	(NA)

- Represents zero. NA Not available. X Not applicable. <sup>1</sup> Source: U.S. Federal Deposit Insurance Corporation, *Annual Report* (for 1970 and 1980), *Statistics on Banking*, annual, and *The FDIC Quarterly Banking Profile*, (for 1989).

Source: Except as noted, U.S. Office of Thrift Supervision, *Savings and Home Financing Source Book*, annual.

### No. 817. Savings Institutions (SAIF-Insured) Approved for Merger, by Type of Merger: 1980 to 1989

[Covers all institutions approved for merger by the U.S. Office of Thrift Supervision except for holding company acquisitions. See headnote, table 819]

YEAR	NUMBER					ASSETS (bil. dol.)				
	Total	Voluntary	Supervisory	SAIF-assisted	Transfers to RTC <sup>1</sup>	Total	Voluntary	Supervisory	SAIF-assisted	Transfers to RTC <sup>1</sup>
1980	120	88	21	11	(NA)	10.1	7.2	1.4	1.5	(NA)
1981	315	234	54	27	(NA)	33.9	18.9	3.4	11.6	(NA)
1982	483	229	189	65	(NA)	61.7	24.2	21.4	16.1	(NA)
1983	157	90	35	32	(NA)	28.9	21.9	2.6	4.4	(NA)
1984	60	33	14	13	(NA)	9.9	5.4	1.0	3.5	(NA)
1985	77	49	6	22	(NA)	23.7	17.4	2.8	3.5	(NA)
1986	75	45	5	25	(NA)	33.7	16.8	7.0	6.2	(NA)
1987	107	74	4	29	(NA)	34.1	27.2	0.4	6.5	(NA)
1988	222	34	9	179	(NA)	109.2	10.5	1.0	97.7	(NA)
1989	354	36	(NA)	(NA)	318	143.4	8.2	(NA)	(NA)	135.1

NA Not available. <sup>1</sup> RTC—Resolution Trust Corporation. This government agency is charged with disposal of failed thrifts. More often than not, the RTC sold the deposit base of the failed institution to a commercial bank.

### No. 818. Savings Institutions (SAIF-Insured)—Sources and Uses of Funds: 1980 to 1989

[In billions of dollars. See headnote, table 819]

ITEM	1980	1983	1984	1985	1986	1987	1988	1989
<b>Uses of funds, total</b>	<b>52.0</b>	<b>119.3</b>	<b>155.9</b>	<b>84.7</b>	<b>97.7</b>	<b>91.7</b>	<b>104.8</b>	<b>-91.9</b>
Net increase in mortgage loans and mortgage pool securities	35.7	72.3	93.1	49.9	57.5	72.9	62.6	-57.1
Loans closed	85.2	151.1	181.3	196.8	265.5	253.4	240.3	189.5
Net loans purchased	-2.9	-9.6	0.3	-35.3	-100.7	-58.9	-51.1	-64.7
Minus: Cash repayments of principal	43.3	71.3	81.5	108.5	162.2	148.3	127.1	117.8
Net increase in mortgage pool securities	7.2	28.0	16.7	2.1	43.5	44.4	12.1	-43.8
Miscellaneous	-10.4	-25.9	-23.8	-5.1	11.4	-17.7	11.5	-20.2
Net increase in nonmortgage loans	3.3	7.9	17.2	15.3	11.4	5.7	15.6	-5.0
Consumer loans	3.1	5.9	9.0	10.8	6.5	6.5	4.4	2.9
Commercial loans	(Z)	2.7	8.3	5.3	6.2	0.2	10.9	-1.5
Miscellaneous	0.1	-0.6	-0.1	0.8	-1.3	-0.5	0.3	-0.7
Net increase in cash and investment securities	10.8	25.2	25.1	5.7	20.9	4.4	18.5	-20.1
Net increase in other assets	2.2	13.8	20.3	13.8	7.9	8.7	8.1	-9.6
<b>Sources of funds, total</b>	<b>52.0</b>	<b>119.3</b>	<b>155.9</b>	<b>84.7</b>	<b>97.7</b>	<b>91.7</b>	<b>104.8</b>	<b>-91.9</b>
Net new deposit receipts	10.7	63.2	57.2	-4.6	3.3	-1.8	-8.4	-73.6
Net increase in borrowings	9.6	0.6	39.2	20.2	40.1	54.3	51.5	-44.8
Net increase in other liabilities <sup>1</sup>	31.0	48.3	55.7	60.4	55.7	46.2	54.8	61.0
Net increase in equity capital	0.7	7.2	3.8	8.7	5.3	-7.0	6.8	-34.5

Z Less than \$50 million. <sup>1</sup> Primarily interest credited.

### No. 819. Savings Institutions (SAIF-Insured)—Selected Financial Items and Ratios of Condition: 1970 to 1989

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

ITEM	Unit	1970	1980	1983	1984	1985	1986	1987	1988	1989
<b>Assets<sup>1</sup></b>	<b>Bil. dol.</b>	<b>170.6</b>	<b>620.6</b>	<b>819.2</b>	<b>977.5</b>	<b>1,070.0</b>	<b>1,163.9</b>	<b>1,250.9</b>	<b>1,350.5</b>	<b>1,249.0</b>
Mortgage assets <sup>2</sup>	Bil. dol.	146.0	494.9	521.3	593.0	645.5	655.7	679.2	726.6	708.9
Mortgage-backed securities	Bil. dol.	(NA)	27.3	90.9	112.7	115.5	158.2	201.8	214.6	170.5
Cash and securities	Bil. dol.	15.8	57.0	109.9	136.7	143.5	164.8	169.7	187.0	166.0
<b>Liabilities<sup>1</sup></b>	<b>Bil. dol.</b>	<b>158.8</b>	<b>588.0</b>	<b>786.2</b>	<b>940.3</b>	<b>1,023.4</b>	<b>1,111.6</b>	<b>1,204.5</b>	<b>1,295.3</b>	<b>1,225.4</b>
Deposit accounts	Bil. dol.	141.7	503.2	671.1	784.5	843.9	890.7	932.6	971.7	945.7
FHLB advances	Bil. dol.	10.5	47.0	57.3	71.7	84.4	100.0	116.4	134.2	124.6
Other borrowed money	Bil. dol.	0.3	17.2	41.3	66.2	73.3	95.9	133.5	165.2	131.4
<b>Net worth</b>	<b>Bil. dol.</b>	<b>11.8</b>	<b>32.6</b>	<b>33.0</b>	<b>37.2</b>	<b>46.7</b>	<b>52.3</b>	<b>46.4</b>	<b>55.2</b>	<b>23.6</b>
<b>Net worth to total assets ratio</b>	<b>Ratio</b>	<b>6.9</b>	<b>5.2</b>	<b>4.0</b>	<b>3.8</b>	<b>4.4</b>	<b>4.5</b>	<b>3.7</b>	<b>4.1</b>	<b>1.9</b>
Operating income	Bil. dol.	10.7	56.1	81.7	101.2	110.6	110.8	107.5	113.6	(NA)
Operating expenses	Bil. dol.	1.9	7.8	12.4	15.3	19.2	22.6	24.1	23.8	(NA)
Interest expense	Bil. dol.	7.7	47.5	69.3	85.0	87.7	83.5	80.5	89.3	97.5
Net income before taxes	Bil. dol.	1.2	1.2	2.5	1.8	5.8	3.3	-5.1	-11.6	-13.4
Net income after taxes	Bil. dol.	0.9	0.8	1.9	1.0	3.7	0.1	-7.8	-13.4	-14.1
Average cost of funds	Percent.	5.30	8.94	9.83	10.03	9.19	8.06	7.20	7.49	8.26
Average effective dividend rate paid	Percent.	5.14	8.78	9.71	9.92	9.02	7.84	6.92	7.20	7.91
Average interest return on mortgages	Percent.	6.56	9.34	11.17	11.65	11.52	10.65	9.70	9.62	10.32
<b>Return on assets<sup>3</sup></b>	<b>Percent</b>	<b>0.57</b>	<b>0.14</b>	<b>0.27</b>	<b>0.12</b>	<b>0.39</b>	<b>0.02</b>	<b>-0.64</b>	<b>-1.08</b>	<b>-1.47</b>

NA Not available. <sup>1</sup> Includes other items, not shown separately. <sup>2</sup> Beginning 1983, reflects deductions from asset accounts. <sup>3</sup> Net income after taxes as a percent of average assets.

Source of tables 817-819: U.S. Office of Thrift Supervision, *Savings and Home Financing Source Book*, annual.

**No. 820. Savings Institutions (SAIF-Insured)—Deposit Accounts and Mortgage Activity: 1970 to 1989**

[See headnote, table 819]

ITEM	Unit	1970	1980	1983	1984	1985	1986	1987	1988	1989
<b>DEPOSIT ACCOUNTS</b>										
Number of accounts	Millions	46.5	92.2	103.2	111.9	111.5	110.1	110.6	110.1	108.3
Average balance	Dollars	3,045	5,410	6,466	7,008	7,572	8,087	8,433	8,825	8,733
Net deposit gain <sup>1</sup>	Bil. dol.	10.8	41.0	110.2	113.9	53.0	55.1	46.4	44.0	-16.2
Net new deposits received <sup>2</sup>	Bil. dol.	5.3	10.7	63.2	57.2	-4.6	-3.3	-1.8	-8.4	-73.6
<b>MORTGAGE LOANS</b>										
Number of borrowers	Millions	10.6	15.7	15.3	15.8	15.0	14.1	13.8	13.7	12.5
Average balance	Dollars	13,728	31,311	33,764	37,510	43,168	46,359	49,967	52,999	56,556
Mortgage loans closed	Bil. dol.	20.8	85.5	151.1	161.3	196.8	265.5	253.4	240.3	189.5
Purchase of 1- to 4-family homes	Bil. dol.	12.3	60.2	83.8	95.7	107.8	175.7	173.1	159.1	133.3
Refinancing loans	Bil. dol.	1.7	10.6	31.8	31.7	(NA)	(NA)	71.6	42.4	31.0
Delinquent mortgage loans:										
Amount	Bil. dol.	(NA)	7.3	11.0	12.6	21.7	32.6	37.7	33.3	36.1
Percent of mortgage holdings	Percent	(NA)	1.48	2.11	2.12	3.36	4.97	5.56	4.58	4.92
Mortgage loans foreclosed:										
Number	1,000	(NA)	20.3	62.5	57.0	75.2	90.9	100.0	100.8	74.9
Percent of mortgages held	Percent	(NA)	0.13	0.41	0.37	0.33	0.63	0.73	0.76	0.59
Amount	Bil. dol.	0.3	0.9	4.2	6.2	8.7	13.9	19.1	18.9	18.2
Percent of mortgages held	Percent	0.22	0.19	0.71	1.11	1.41	2.15	2.90	2.70	2.50

NA Not available. <sup>1</sup> Net new deposits received plus interest credited. <sup>2</sup> New deposits received less deposits withdrawn.  
<sup>3</sup> Reported on a gross basis including refinancing and combination construction-purchase loan. <sup>4</sup> Prior to 1987, covers all mortgage loans 60 or more days delinquent. Beginning 1987, covers construction and land loans past due, permanent loans secured by 1-4 dwelling unit properties 60 or more days delinquent, and all other permanent loans past due. <sup>5</sup> Foreclosures are reported as of judgment date, even if subject to a redemption period.

**No. 821. Savings Institutions (SAIF-Insured)—Selected Financial Items, States and Other Areas: 1989**

[See headnote, table 819]

DIVISION AND STATE	Mortgage loans foreclosed, percent of avg. mortgage balances <sup>1</sup>	Net income after taxes (mil. dol.)	Return on assets <sup>2</sup> (percent)	DIVISION AND STATE	Mortgage loans foreclosed, percent of avg. mortgage balances <sup>1</sup>	Net income after taxes (mil. dol.)	Return on assets <sup>2</sup> (percent)
<b>Total</b>	<b>2.50</b>	<b>-14,080</b>	<b>-1.47</b>				
<b>U.S.</b>	<b>(NA)</b>	<b>-14,083</b>	<b>(NA)</b>	<b>WV</b>	<b>1.39</b>	<b>10</b>	<b>0.48</b>
<b>N.E.</b>	<b>(NA)</b>	<b>-203</b>	<b>(NA)</b>	<b>NC</b>	<b>1.09</b>	<b>-28</b>	<b>-0.20</b>
ME	0.50	4	0.51	<b>SC</b>	<b>1.09</b>	<b>7</b>	<b>0.01</b>
NH	0.70	7	0.37	<b>GA</b>	<b>1.73</b>	<b>-26</b>	<b>-0.70</b>
VT	0.18	1	0.13	<b>FL</b>	<b>2.07</b>	<b>-823</b>	<b>-1.11</b>
MA	1.78	181	-1.80	<b>E.S.C.</b>	<b>(NA)</b>	<b>-209</b>	<b>(NA)</b>
RI	2.14	-37	-1.00	KY	0.34	47	0.62
CT	0.17	3	0.01	TN	2.97	-17	-0.14
<b>M.A.</b>	<b>(NA)</b>	<b>-2,679</b>	<b>(NA)</b>	<b>AL</b>	<b>2.46</b>	<b>-100</b>	<b>-1.04</b>
NY	0.78	-1,068	-1.85	<b>MS</b>	<b>3.39</b>	<b>-139</b>	<b>-4.09</b>
NJ	1.45	-940	-0.57	<b>W.S.C.</b>	<b>(NA)</b>	<b>-4,805</b>	<b>(NA)</b>
PA	0.60	-670	-2.69	AR	28.71	-333	-7.37
<b>E.N.C.</b>	<b>(NA)</b>	<b>270</b>	<b>(NA)</b>	LA	3.44	-339	-3.07
OH	0.75	105	0.17	OK	6.85	-59	-2.63
IN	0.44	66	0.46	TX	14.99	-4,074	-6.27
IL	0.69	-23	-0.02	<b>Mt.</b>	<b>(NA)</b>	<b>-3,265</b>	<b>(NA)</b>
MI	0.51	60	0.10	MT	1.54	7	0.65
WI	0.86	62	0.36	ID	0.82	2	0.22
<b>W.N.C.</b>	<b>(NA)</b>	<b>-971</b>	<b>(NA)</b>	WY	2.87	-7	-0.55
MN	2.79	-131	-2.00	CO	12.47	-474	-4.10
IA	2.42	-14	-0.31	NM	8.11	-248	-6.97
MO	1.85	-429	1.80	AZ	19.61	-2,332	-11.11
ND	2.75	-7	-0.16	UT	3.60	-232	-3.67
SD	0.86	-11	-0.73	NV	1.91	19	0.37
NE	2.78	-77	1.24	<b>Pac.</b>	<b>(NA)</b>	<b>-1,448</b>	<b>(NA)</b>
KS	8.29	-302	-1.94	WA	0.74	85	0.42
<b>S.A.</b>	<b>(NA)</b>	<b>-773</b>	<b>(NA)</b>	OR	1.58	376	3.46
DE	-	-1	-0.26	CA	1.03	-1,168	-0.66
MD	0.99	37	0.16	AK	14.74	-19	-13.37
DC	0.47	25	0.76	HI	0.96	30	0.44
VA	1.17	26	0.03	PR	0.75	-	0.01
				GU	-	3	2.33

- Represents or rounds to zero. NA Not available. <sup>1</sup> See footnote 5, table 820. <sup>2</sup> Net income after taxes as a percent of average assets.

Source of tables 820 and 821: U.S. Office of Thrift Supervision, *Savings and Home Financing Source Book*, annual.

**No. 822. Mortgage Debt Outstanding, by Type of Property and Holder: 1970 to 1989**[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	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Mortgage debt, total</b>	<b>474</b>	<b>1,460</b>	<b>1,567</b>	<b>1,638</b>	<b>1,825</b>	<b>2,051</b>	<b>2,303</b>	<b>2,618</b>	<b>2,977</b>	<b>3,242</b>	<b>3,520</b>
Residential nonfarm	358	1,107	1,182	1,226	1,359	1,520	1,716	1,968	2,234	2,456	2,691
1- to 4-family homes	297	965	1,040	1,080	1,199	1,334	1,501	1,720	1,960	2,169	2,389
Savings institutions	167	487	501	458	482	529	554	559	602	658	658
Mortgage pools or trusts	3	125	147	201	271	322	407	553	702	789	921
Government National Mortgage Assoc	(Z)	92	103	116	156	176	207	257	310	331	363
Federal Home Loan Mortgage Corp		15	20	43	57	70	100	167	206	220	266
Commercial banks	42	160	170	174	183	196	213	236	276	314	359
Individuals and others	36	99	119	134	140	151	176	198	202	215	244
Federal and related agencies	22	61	68	78	87	98	110	127	124	134	144
Federal National Mortgage Assoc.	15	52	56	67	73	82	92	91	90	96	103
Finance companies	1	14	17	19	21	24	29	34	40	44	49
Life insurance companies	27	18	17	17	15	14	12	13	13	16	14
5 or more units	60	142	142	146	161	185	214	248	274	287	302
Commercial	86	255	278	301	352	419	482	555	655	700	742
Farm	30	97	107	111	114	112	106	96	89	87	86
<b>TYPE OF HOLDER</b>											
Savings institutions	208	603	619	578	627	710	760	778	860	904	894
Commercial banks	73	263	284	301	331	379	429	503	591	669	757
Life insurance companies	74	131	138	142	151	157	172	194	212	233	241
Finance companies	1	14	17	19	21	24	29	34	40	44	49
Individuals and others	79	189	215	235	251	272	307	341	362	382	419
Mortgage pools or trusts	5	146	168	224	297	351	439	585	718	811	949
Government National Mortgage Assoc	(Z)	94	106	119	160	180	212	263	318	341	375
Federal Home Loan Mortgage Corp		17	20	43	58	71	100	171	213	226	273
Federal National Mortgage Association											
Farmers Home Administration	4	32	37	40	42	36	55	97	140	178	228
Federal and related agencies	34	115	126	139	148	159	167	204	193	201	212
Federal National Mortgage Association	16	57	61	72	78	88	98	98	97	103	111
Farmers Home Administration	2	3	2	2	1	1	1	48	43	42	42
Federal Land Banks	7	38	47	51	52	52	47	40	34	32	31
Federal Home Loan Mortgage Corp	(Z)	5	5	5	5	10	14	12	13	17	22
Federal Housing and Veterans Admin	4	6	6	5	5	5	5	5	6	6	6
Government National Mortgage Assoc	5	5	5	4	3	2	1	1	(Z)	(Z)	(Z)

- Represents zero. Z Less than \$500 million. <sup>1</sup> Outstanding principal balances of mortgage pools backing securities insured or guaranteed by the agency indicated. Includes private pools not shown separately. <sup>2</sup> Includes mortgage companies, real estate investment trusts, state and local retirement funds, noninsured pension funds, credit unions, and other U.S. agencies. <sup>3</sup> 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. 823. Holdings of Construction, Long-Term Mortgage, and Land Loans, by Type of Loan, 1970 to 1989, and by Lender, 1989**[In billions of dollars. As of end of year. See also *Historical Statistics, Colonial Times to 1970*, series N 266, X 836, and X 911]

TYPE OF LOAN	1970	1980	1984	1985	1986	1987	1988	1989					
								Total <sup>1</sup>	Lender				
									Savings and loan assn.	Commercial banks	Life insurance companies	Federal credit agencies	Mortgage pools
<b>Mortgage credits, total</b>	<b>422</b>	<b>1,318</b>	<b>1,887</b>	<b>2,059</b>	<b>2,373</b>	<b>2,693</b>	<b>2,933</b>	<b>3,170</b>	<b>741</b>	<b>739</b>	<b>238</b>	<b>176</b>	<b>889</b>
Construction loans	18	63	146	152	173	196	203	200	43	136	1	1	-
1-4 unit family homes	5	26	39	34	36	39	43	42	18	22	-	-	-
Multifamily residential	6	14	26	28	37	42	38	38	14	18	(Z)	1	-
Nonresidential	7	22	81	90	100	115	122	120	12	96	1	-	-
Farm properties	(Z)	-	-	-	-	-	-	-	-	-	-	-	-
Long-term mortgage loans	400	1,242	1,711	1,872	2,160	2,444	2,674	2,921	677	578	237	175	889
1-4 unit family homes	267	857	1,183	1,294	1,507	1,712	1,903	2,110	512	336	12	128	858
FHA insured	62	105	155	176	221	246	268	295	5	6	2	9	247
VA guaranteed	37	91	120	127	135	139	142	145	8	3	1	3	121
Conventional	168	661	908	991	1,151	1,327	1,493	1,670	496	327	10	116	490
Multifamily	46	114	146	161	190	207	223	231	76	19	22	31	23
Nonresidential	66	205	299	338	393	466	497	534	89	206	193	5	(Z)
Farm properties	20	66	84	79	70	58	51	46	17	10	11	-	8
Land loans	4	13	29	36	40	54	56	49	21	25	1	-	-

- Represents zero. Z Less than \$500 million. <sup>1</sup> 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. 824. Volume of Long-Term Mortgage Loans Originated, by Type of Property, 1970 to 1989, and by Lender, 1989

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

TYPE OF PROPERTY	1970	1980	1983	1984	1985	1986	1987	1988	1989, BY LENDER				
									Total <sup>1</sup>	Savings and loan	Commercial banks	Mortgage companies	Mutual savings
<b>Loans, total . . . .</b>	<b>59.8</b>	<b>197.2</b>	<b>295.6</b>	<b>319.2</b>	<b>383.3</b>	<b>662.1</b>	<b>671.6</b>	<b>610.9</b>	<b>541.4</b>	<b>155.5</b>	<b>243.3</b>	<b>71.7</b>	<b>30.1</b>
1-4 unit family home . . . .	35.6	133.7	201.9	203.7	243.0	455.1	449.5	383.6	352.0	134.5	123.2	65.6	23.2
New units . . . . .	12.6	49.1	47.4	53.7	53.6	82.8	89.5	87.2	80.8	23.4	34.1	17.5	4.3
Existing units . . . . .	23.0	84.6	154.5	150.0	189.4	372.2	360.0	296.4	271.2	111.1	89.1	48.1	18.9
Multifamily residential . . . .	8.8	12.5	21.4	27.6	31.9	49.9	45.0	38.2	31.1	11.4	7.7	4.4	2.1
New units . . . . .	7.0	8.6	8.8	11.1	10.6	15.3	14.1	9.0	8.3	1.1	2.5	0.5	0.3
Existing units . . . . .	1.8	3.9	12.6	16.5	21.3	34.6	30.9	29.2	22.8	10.3	5.2	3.9	1.8
Non-residential . . . . .	12.5	35.9	62.4	77.3	99.4	147.4	168.7	181.6	150.0	9.6	106.4	1.7	4.9
Farm properties . . . . .	3.0	15.0	9.9	10.5	9.0	9.8	8.4	7.6	8.3	-	6.0	-	(Z)

- Represents zero. Z Less than \$500 million. <sup>1</sup> 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. Characteristics of Conventional First Mortgage Loans for Purchase of Single-Family Homes: 1970 to 1990

[In percent, except as indicated. Annual averages, except as indicated. Refers to loans originated directly by Savings Association Insurance Fund (formerly the Federal Savings and Loan Insurance Corporation)-insured savings institutions, mortgage bankers, commercial banks, and Federal Deposit Insurance Corporation-insured savings banks. Excludes interim construction loans, refinancing loans, junior liens, and federally underwritten loans]

LOAN CHARACTERISTICS	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990, June
<b>NEW HOMES</b>												
Contract interest rate, <sup>1</sup> all loans	8.3	12.3	14.1	14.5	12.1	11.9	11.1	9.7	8.9	8.8	9.8	9.8
Fixed-rate loans . . . . .	(NA)	(NA)	(NA)	14.4	12.3	12.5	11.9	10.0	9.5	10.0	10.2	10.2
Adjustable-rate loans <sup>2</sup> . . . .	(NA)	(NA)	(NA)	14.7	11.8	11.5	10.4	9.0	8.2	8.1	9.0	9.2
Initial fees, charges . . . . .	1.03	2.09	2.66	2.96	2.39	2.66	2.52	2.48	2.26	2.19	2.08	1.96
Effective interest rate, <sup>4</sup> all loans	8.5	12.7	14.7	15.1	12.6	12.4	11.6	10.2	9.3	9.2	10.1	10.1
Fixed-rate loans . . . . .	(NA)	(NA)	(NA)	14.9	12.7	13.0	12.4	10.5	9.9	10.4	10.6	10.6
Adjustable-rate loans . . . . .	(NA)	(NA)	(NA)	15.4	12.3	12.0	10.8	9.4	8.5	8.5	9.3	9.5
Term to maturity (years) . . . . .	25.1	28.1	27.7	27.5	26.7	27.8	27.0	26.8	27.8	28.0	28.1	26.9
Purchase price (\$1,000) . . . . .	35.5	83.2	90.3	94.1	93.9	96.8	105.0	119.8	137.2	150.5	160.1	149.8
Loan to price ratio . . . . .	71.7	73.2	74.8	76.6	77.3	78.6	77.1	75.3	75.2	75.6	74.6	76.4
Percent of number of loans with adjustable rates . . . . .	(NA)	(NA)	(NA)	41	37	59	51	27	41	62	35	42
<b>EXISTING HOMES</b>												
Contract interest rate, <sup>1</sup> all loans	8.2	12.5	14.5	14.8	12.3	12.0	11.2	9.8	8.9	9.0	9.8	9.9
Fixed-rate loans . . . . .	(NA)	(NA)	(NA)	14.8	12.6	12.7	11.9	10.1	9.5	10.1	10.2	10.2
Adjustable-rate loans <sup>2</sup> . . . .	(NA)	(NA)	(NA)	14.7	11.9	11.6	10.5	9.1	8.2	8.2	9.2	9.0
Initial fees, charges . . . . .	0.92	1.91	2.27	2.55	2.40	2.54	2.50	2.13	2.02	1.88	1.79	1.82
Effective interest rate, <sup>4</sup> all loans	8.4	12.9	15.0	15.3	12.8	12.5	11.6	10.2	9.3	9.3	10.1	10.2
Fixed-rate loans . . . . .	(NA)	(NA)	(NA)	15.4	13.0	13.2	12.4	10.5	9.9	10.4	10.5	10.6
Adjustable-rate loans . . . . .	(NA)	(NA)	(NA)	15.3	12.3	12.1	10.9	9.4	8.5	8.5	9.4	9.3
Term to maturity (years) . . . . .	22.8	26.9	25.9	24.9	25.9	26.5	25.5	25.4	26.6	27.7	27.7	27.5
Purchase price (\$1,000) . . . . .	30.0	68.3	68.5	70.7	79.3	82.2	92.7	108.5	117.7	126.6	138.4	140.2
Loan to price ratio . . . . .	71.1	73.5	72.9	71.9	74.3	76.8	75.7	73.9	75.4	76.4	75.2	75.1
Percent of number of loans with adjustable rates . . . . .	(NA)	(NA)	(NA)	39	41	64	50	31	44	57	37	30

NA Not available. <sup>1</sup> Initial interest rate paid by the borrower as specified in the loan contract. <sup>2</sup> Loans with a contractual provision for periodic adjustments in the contract interest rate. <sup>3</sup> Includes all fees, commissions, discounts and "points" paid by the borrower, or seller, in order to obtain the loan. Excludes those charges for mortgage, credit, life or property insurance; for property transfer, and for title search and insurance. <sup>4</sup> Contract interest rate plus fees and charges amortized over a ten-year period.

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

### No. 826. Purchases and Sales of Mortgage Loans, by Lender: 1970 to 1989

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

LENDER	PURCHASES						SALES					
	1970	1980	1985	1987	1988	1989	1970	1980	1985	1987	1988	1989
<b>Total . . . . .</b>	<b>16.4</b>	<b>78.1</b>	<b>257.7</b>	<b>428.3</b>	<b>338.5</b>	<b>391.0</b>	<b>18.9</b>	<b>77.1</b>	<b>224.3</b>	<b>366.2</b>	<b>294.8</b>	<b>299.5</b>
Savings associations <sup>1</sup> . . . . .	3.7	13.2	65.0	64.6	55.5	41.6	1.0	16.1	103.2	123.6	107.0	107.3
Savings banks . . . . .	1.8	1.2	2.9	3.5	4.4	2.4	0.3	0.8	6.0	12.9	11.2	18.8
Commercial banks . . . . .	0.8	4.9	12.0	23.2	26.8	36.8	2.0	8.4	19.2	52.8	41.6	51.6
Mortgage companies . . . . .	0.1	3.4	20.9	50.1	36.3	53.7	12.5	37.0	78.0	166.5	123.1	114.8
Federal credit agencies . . . . .	5.7	16.3	33.0	25.2	31.3	31.0	2.6	10.5	8.0	7.2	6.7	4.0
Mortgage pools . . . . .	2.7	29.4	114.3	230.7	148.3	196.5	0.3	4.1	5.5	0.3	0.5	0.3
Other . . . . .	1.6	9.7	9.6	31.2	35.9	29.0	0.3	0.3	4.4	3.4	4.7	2.6

<sup>1</sup> 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. 827. Mortgage Delinquency and Foreclosure Rates and Private and Government Mortgage Insurance: 1970 to 1989

[In percent, except as indicated. Covers one- to four-family residential nonfarm mortgage loans]

ITEM	1970	1980	1983	1984	1985	1986	1987	1988	1989
Number of mortgage loans outstanding (1,000)	22,319	30,033	30,435	32,366	34,318	36,439	37,228	40,099	43,157
<b>Delinquency rates:</b>									
Total	3.13	4.97	5.59	5.67	5.83	5.56	4.97	4.79	4.83
Conventional loans	1.75	3.09	3.88	3.86	4.05	3.79	3.15	2.94	3.04
VA loans	3.03	5.34	6.09	6.40	6.63	6.57	6.22	6.23	6.47
FHA loans	3.65	6.55	7.06	7.29	7.44	7.15	6.57	6.56	6.77
<b>Foreclosure rates:</b>									
Total	0.33	0.38	0.67	0.73	0.81	0.98	1.06	0.95	0.81
Conventional loans	0.08	0.17	0.46	0.47	0.61	0.69	0.67	0.56	0.50
VA loans	0.25	0.46	0.76	0.82	0.88	1.14	1.28	1.25	1.08
FHA loans	0.47	0.53	0.84	0.98	1.01	1.22	1.44	1.40	1.16
Claims paid by private mortgage insurers <sup>3</sup> (mil. dol.)	(NA)	59	357	472	971	1,262	1,574	992	(NA)
Mortgage insurance outstanding: <sup>4</sup>									
Private (bil. dol.)	7.3	105.3	148.0	192.0	223.7	230.3	224.2	220.4	228.6
Government (bil. dol.)	97.3	195.2	248.8	265.9	288.8	328.9	367.4	414.2	(NA)

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

Source: Except as noted, Mortgage Bankers Association of America, Washington, DC, *National Delinquency Survey*, quarterly.

### No. 828 Mortgage Delinquency Rates, by Division: 1980 to 1989

[In percent. Annual average of quarterly figures. Covers one- to four-family residential nonfarm mortgage loans. Represents number of loans delinquent 30 days or more as percentage of loans serviced in survey. Excludes loans in foreclosure. For composition of divisions, see inside front cover]

YEAR	U.S. total	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Moun- tain	Pacific
1980	4.97	3.52	6.23	6.29	4.60	4.55	5.32	4.12	4.40	4.29
1985	5.83	4.22	6.31	7.18	4.96	5.11	5.98	6.54	6.10	4.96
1986	5.56	3.19	5.82	6.81	4.62	5.07	5.79	7.31	6.01	4.52
1987	4.97	2.85	5.08	5.94	3.93	4.54	5.36	7.37	5.48	3.82
1988	4.79	2.74	4.67	5.42	4.04	4.55	5.55	6.83	5.58	3.67
1989	4.83	3.13	4.85	5.32	4.18	4.61	6.24	7.14	5.35	3.31

Source: Mortgage Bankers Association of America, Washington, DC, *National Delinquency Survey*, quarterly.

### No. 829. Home Equity Loans—Insured Domestic Commercial Banks Offering Loans and Home Equity Balances, by Asset-Size of Bank: 1988 and 1989

[As of December 31]

ITEM	1988						1989					
	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	4,707	2,720	1,116	555	316	4,861	2,706	1,207	620	328		
Percent of all commercial banks	36	26	64	78	88	38	28	66	81	88		
Home equity debt outstanding (bil. dol.)	39.9	2.1	3.1	5.7	29.0	50.8	2.5	3.9	7.2	37.2		
All commercial banks:												
Home equity debt as percent of consumer loans plus home equity debt	10	5	9	11	11	12	6	10	12	12		
Home equity debt as percent of consumer loans plus all loans secured by homes	6	2	4	6	7	7	3	5	7	8		
Banks offering home equity loans:												
Home equity debt as percent of consumer loans plus home equity debt	12	13	12	13	12	15	15	14	15	14		
Home equity debt as percent of consumer loans plus all loans secured by homes	8	6	6	8	8	9	7	7	8	9		

Source: Board of Governors of the Federal Reserve System, *Domestic Offices, Commercial Bank Assets and Liabilities, Consolidated Report of Condition*, quarterly.

### No. 830. Consumer Credit Outstanding and Installment Credit Finance Rates: 1970 to 1990

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

TYPE OF CREDIT	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
<b>Credit outstanding</b>	<b>131.6</b>	<b>204.9</b>	<b>350.3</b>	<b>366.9</b>	<b>383.1</b>	<b>431.2</b>	<b>511.3</b>	<b>592.1</b>	<b>649.1</b>	<b>681.9</b>	<b>731.5</b>	<b>778.0</b>	(NA)
Ratio to disposable personal income <sup>1</sup> (percent)	18.3	17.9	18.3	17.2	16.9	17.8	19.2	20.9	21.5	21.3	21.0	20.6	(NA)
Installment:	103.9	167.0	298.2	311.3	325.8	369.0	442.6	518.3	573.0	610.5	664.7	716.6	739.0
Automobile paper	36.3	56.9	112.0	119.0	125.9	143.6	173.6	210.2	247.4	285.9	284.6	290.8	285.3
Revolving	4.9	14.5	55.1	61.1	66.5	79.1	100.3	121.8	135.9	153.1	174.1	197.1	218.2
Mobile home paper	2.4	15.3	18.7	20.1	22.6	23.6	25.9	26.8	27.1	25.9	25.2	22.3	21.8
All other loans	60.2	80.1	112.3	111.1	110.8	122.8	142.9	159.4	162.6	165.6	180.9	206.4	213.6
Noninstallment	27.7	37.9	52.1	55.6	57.3	62.2	68.7	73.8	76.1	71.4	66.8	61.4	(NA)
<b>FINANCE RATES (percent)</b>													
Commercial banks:													
New automobiles (48 months) <sup>2</sup>	(NA)	11.36	14.30	16.54	16.83	13.92	13.71	12.91	11.33	10.46	10.85	12.07	11.78
Mobile homes (120 months)	(NA)	11.82	14.99	17.45	18.05	15.91	15.58	14.96	13.99	13.38	13.54	14.11	14.02
Other consumer goods (24 months)	(NA)	13.08	15.47	18.09	18.65	16.68	16.47	15.94	14.82	14.23	14.68	15.44	15.46
Credit-card plans	(NA)	17.16	17.31	17.78	18.51	18.78	18.77	18.89	18.26	17.93	17.78	18.02	18.17
Finance companies:													
New automobiles	(NA)	13.12	14.82	16.17	16.15	12.58	14.62	11.98	9.44	10.73	12.60	12.62	12.54
Used automobiles	(NA)	17.63	19.10	20.00	20.75	18.74	17.85	17.59	15.95	14.61	15.11	16.18	15.99

NA Not available. <sup>1</sup> 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 708. <sup>2</sup> 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. 831. Delinquency Rates on Bank Installment Loans, by Type of Loan: 1970 to 1989

[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	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>DELINQUENCY RATES</b>											
Closed-end installment loans, total	2.14	2.82	2.61	2.39	1.94	2.09	2.32	2.26	2.47	2.49	2.64
Personal loans	2.39	3.53	3.20	3.04	2.84	3.16	3.83	3.11	3.66	3.34	3.52
Automobile, direct loans <sup>2</sup>	1.43	1.81	1.80	1.68	1.53	1.47	1.64	1.80	1.59	1.92	2.03
Automobile, indirect loans	1.94	2.29	2.03	1.73	1.50	1.77	2.02	2.09	2.20	2.46	2.61
Property improvement <sup>4</sup>	1.96	1.93	1.98	1.98	2.14	2.00	1.91	1.77	1.88	2.06	2.25
Home equity and second mortgage loans <sup>5</sup>	(NA)	(NA)	(NA)	(NA)	1.94	1.77	2.08	1.85	2.01	1.86	1.85
Mobile home loans	2.59	3.14	3.37	2.69	2.44	2.56	2.39	3.04	2.57	3.12	2.51
Recreational vehicle loans	(NA)	1.94	2.05	1.88	1.58	1.87	1.84	1.92	1.99	2.07	2.24
Bank card loans	(NA)	2.72	2.53	2.38	2.08	2.81	2.95	3.15	2.83	2.19	2.24
Revolving credit loans	(NA)	2.70	2.86	2.16	1.44	1.50	1.96	1.53	2.33	2.87	2.92
Home equity lines of credit loans (open-end) <sup>5</sup>	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	0.74	0.68	0.78
<b>REPOSSESSIONS PER 1,000 LOANS OUTSTANDING</b>											
Mobile home	3.59	1.57	1.47	1.14	1.23	1.29	1.21	2.50	1.58	1.77	1.63
Automobile, direct loans <sup>2</sup>	1.52	1.10	0.99	0.90	0.70	0.72	1.11	1.15	0.86	1.03	1.03
Automobile, indirect loans <sup>3</sup>	4.88	2.75	2.40	2.13	1.56	1.58	2.08	1.95	2.04	1.86	1.70

NA Not available. <sup>1</sup> Beginning 1983, includes home appliance loans. <sup>2</sup> Made directly by bank's lending function. <sup>3</sup> Made by automobile dealerships; loans in bank's portfolio. <sup>4</sup> Beginning 1983, own plan and FHA Title I loans. <sup>5</sup> Seasonally not adjusted.

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

### No. 832. Credit Cards—Holders, Numbers, Spending, and Debt, 1980 and 1989, and Projections, 2000

TYPE OF CREDIT CARD	CARDHOLDERS (mil.)			NUMBER OF CARDS (mil.)			CREDIT CARD SPENDING (bil. dol.)			CREDIT CARD DEBT (bil. dol.)		
	1980	1989	2000, proj.	1980	1989	2000, proj.	1980	1989	2000, proj.	1980	1989	2000, proj.
<b>Total</b> <sup>1</sup>	<b>86.1</b>	<b>109.5</b>	<b>118.3</b>	<b>526.0</b>	<b>956.9</b>	<b>1,167.0</b>	<b>201.2</b>	<b>430.3</b>	<b>893.0</b>	<b>80.2</b>	<b>206.7</b>	<b>435.7</b>
Bank	63.3	75.2	87.5	110.6	200.0	272.0	52.9	217.6	495.9	25.0	133.4	307.1
Oil company	68.5	82.1	90.2	110.0	122.0	134.0	28.9	24.0	40.6	2.2	3.0	5.1
Phone	(NA)	103.6	111.0	(NA)	109.0	124.0	(NA)	8.7	16.9	(NA)	1.0	2.2
Retail store	83.0	95.4	112.2	276.5	454.9	535.0	74.4	73.3	107.0	47.3	48.0	71.7
Travel and entertainment	10.5	22.7	34.5	10.4	27.0	41.0	21.2	83.5	182.3	2.7	9.8	27.4
Other <sup>2</sup>	13.4	8.2	9.0	18.5	44.0	61.0	23.8	23.2	50.2	3.0	11.5	22.4

NA Not available. <sup>1</sup> Cardholders may hold more than one type of card. <sup>2</sup> Includes airline, automobile rental, Discover (except for cardholders), hotel, motel, and other miscellaneous credit cards.

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



**No. 833. Money Stock and Liquid Assets: 1970 to 1990**

[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	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
<b>M1, total</b>	<b>215</b>	<b>409</b>	<b>437</b>	<b>475</b>	<b>521</b>	<b>552</b>	<b>620</b>	<b>725</b>	<b>750</b>	<b>786</b>	<b>794</b>	<b>825</b>
Currency	49	115	123	133	146	156	168	181	197	212	222	246
Travelers checks	1	4	4	4	5	5	6	6	7	8	7	8
Demand deposits <sup>1</sup>	165	261	231	234	239	244	267	302	287	286	279	277
Other checkable deposits <sup>2</sup>	(Z)	28	78	104	132	147	180	235	259	281	285	294
<b>M2, total</b>	<b>628</b>	<b>1,630</b>	<b>1,794</b>	<b>1,953</b>	<b>2,187</b>	<b>2,372</b>	<b>2,571</b>	<b>2,814</b>	<b>2,910</b>	<b>3,070</b>	<b>3,223</b>	<b>3,331</b>
M1	215	409	437	475	521	552	620	725	750	786	794	825
Nontransaction components in M2 <sup>3</sup>	414	1,221	1,357	1,479	1,665	1,819	1,951	2,090	2,160	2,284	2,430	2,505
Overnight repurchase (RP) agreements and Eurodollars <sup>4</sup>	1	29	37	40	56	61	73	82	83	83	77	74
Money market funds, general purpose and broker/dealer	(Z)	62	151	185	139	168	177	209	222	241	314	348
Money market deposit accounts	(Z)	(Z)	(Z)	43	379	417	513	571	525	501	486	506
Commercial banks	(Z)	(Z)	(Z)	26	230	267	332	378	356	350	353	378
Thrift institutions	(Z)	(Z)	(Z)	17	149	150	182	193	169	151	133	128
Savings deposits	261	400	344	357	305	285	301	370	412	424	404	411
Commercial banks	99	186	159	164	134	123	125	156	178	192	188	199
Thrift institutions	162	214	185	193	172	162	176	214	234	232	216	211
Small time deposits <sup>5</sup>	151	729	823	851	784	887	884	856	918	1,032	1,146	1,165
Commercial banks	79	286	348	380	351	387	384	366	368	448	531	598
Thrift institutions	72	442	475	471	433	500	500	490	530	584	615	567
<b>M3, total</b>	<b>677</b>	<b>1,987</b>	<b>2,234</b>	<b>2,442</b>	<b>2,693</b>	<b>2,983</b>	<b>3,202</b>	<b>3,495</b>	<b>3,677</b>	<b>3,919</b>	<b>4,055</b>	<b>4,113</b>
M2	628	1,630	1,794	1,953	2,187	2,372	2,571	2,814	2,910	3,070	3,223	3,331
Nontransaction components in M3 <sup>6</sup>	49	358	441	489	507	611	632	680	767	849	832	783
Large time deposits <sup>7</sup>	45	260	303	327	328	417	437	440	489	542	564	507
Commercial banks	45	216	249	264	231	271	286	290	327	368	402	386
Thrift institutions	1	45	54	63	96	147	151	150	163	174	162	121
Term RP's and term Eurodollars <sup>8,10</sup>	4	84	103	115	141	141	139	164	197	228	180	160
Money market funds, institution only	(Z)	15	38	51	43	63	65	84	89	87	102	126
<b>L, total</b>	<b>816</b>	<b>2,324</b>	<b>2,597</b>	<b>2,852</b>	<b>3,155</b>	<b>3,524</b>	<b>3,829</b>	<b>4,135</b>	<b>4,337</b>	<b>4,676</b>	<b>4,890</b>	<b>4,960</b>
M3	677	1,987	2,234	2,442	2,693	2,983	3,202	3,495	3,677	3,919	4,055	4,113
Savings bonds	52	72	68	68	71	74	79	92	101	109	118	126
Short-term Treasury securities <sup>11</sup>	49	133	149	184	212	261	298	281	254	271	327	328
Bankers acceptances	3	32	40	44	45	45	42	37	45	40	41	35
Commercial paper <sup>12</sup>	34	99	105	114	133	161	207	231	261	337	349	359

Z Less than \$500 million. <sup>1</sup> Currency outside U.S. Treasury, Federal Reserve Banks and the vaults of depository institutions. <sup>2</sup> Outstanding amount of nonbank issuers. <sup>3</sup> At commercial banks and foreign-related institutions. <sup>4</sup> 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. <sup>5</sup> This sum is seasonally adjusted as a whole. <sup>6</sup> Not seasonally adjusted. <sup>7</sup> Issued in amounts of less than \$100,000. Includes retail repurchase agreements. Excludes individual retirement accounts (IRAs) and Keogh accounts. <sup>8</sup> Issued in amounts of \$100,000 or more. Excludes those booked at international banking facilities. <sup>9</sup> Excludes those held by money market mutual funds, depository institutions and foreign banks and official institutions. <sup>10</sup> Excludes those held by depository institutions and money market mutual funds. <sup>11</sup> 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. <sup>12</sup> 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. 834. Selected Time Deposits and Other Accounts at Insured Commercial Banks—Deposits and Interest Rates: 1985 to 1990**

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

TYPE OF DEPOSIT	AMOUNT OUTSTANDING (bil. dol.)						AVERAGE RATE PAID (percent)					
	1985	1986	1987	1988	1989	1990	1985	1986	1987	1988	1989	1990
NOW accounts <sup>1</sup>	44.5	164.2	174.8	190.5	196.8	209.2	5.99	5.00	4.95	4.96	5.02	4.93
Money market deposit accounts <sup>2</sup>	330.1	380.0	353.8	346.4	350.3	376.3	6.71	5.19	5.43	5.87	6.40	(NA)
Interest-bearing time deposits <sup>3</sup>												
7-31 day	5.3	6.1	7.1	6.4	45.4	50.2	6.85	5.45	6.02	6.77	7.64	6.94
32-91 day	21.0	21.6	23.3	24.8			7.16	5.62	6.26	7.20		
92-182 day	147.8	131.5	132.4	136.3	152.8	167.6	7.50	5.70	6.75	7.84	7.83	7.19
183 day-1 year	66.1	72.2	96.8	128.0	177.4	220.8	7.77	5.93	7.14	8.19	7.86	7.33
1-2 <sup>1</sup> / <sub>2</sub> year	81.2	83.8	89.6	107.2	125.0	150.0	8.24	6.22	7.46	8.30	7.88	7.43
2 <sup>1</sup> / <sub>2</sub> year or more	115.4	120.7	121.3	133.0	129.2	138.1	8.73	6.61	7.86	8.39	7.86	7.52
All IRA and Keogh Plan deposits	59.4	73.1	83.2	94.0	109.2	131.2	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Retail repurchase agreements <sup>4</sup>	1.3	1.1	0.8	1.6	(NA)	(NA)	6.77	5.37	5.46	6.77	(NA)	(NA)

NA Not available. <sup>1</sup> 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 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. <sup>2</sup> 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. <sup>3</sup> All interest-bearing time deposits and open account time deposits with balances of less than \$100,000, including those held in IRAs and Keogh Plan deposits. <sup>4</sup> 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. 835. Bank Debits and Deposit Turnover: 1975 to 1989**

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

ITEM	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Debits to—</b>												
Demand deposits, all banks <sup>1</sup>	25.1	49.8	63.1	81.2	96.4	112.2	131.5	156.1	188.5	217.1	227.0	272.0
Major New York City banks	9.7	18.5	25.2	34.0	39.8	47.6	57.3	70.6	91.5	104.5	107.6	122.2
Other banks	15.4	31.3	37.8	47.2	56.6	64.6	74.2	85.5	97.0	112.6	119.4	149.7
ATS/NOW accounts <sup>2</sup>	(NA)	0.1	0.2	0.7	1.0	1.4	1.6	1.8	2.2	2.4	2.8	3.5
Money market deposit accounts	(NA)	(NA)	(NA)	(NA)	(NA)	0.6	0.9	1.2	1.6	2.0	2.4	2.8
Savings deposits	(NA)	0.6	0.7	0.7	0.7	0.7	0.4	0.4	0.4	0.5	0.6	0.6
<b>Deposit turnover:</b>												
All banks <sup>1</sup>	105	163	203	286	342	386	441	500	557	612	642	779
Major New York City banks	357	644	815	1,114	1,352	1,521	1,839	2,196	2,499	2,675	2,901	3,415
Other banks	73	113	135	186	225	249	278	306	321	357	377	478

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

**No. 836. Federal Reserve Bank of New York—Discount Rates: 1978 to 1991**

[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: Feb. 15 . . . . .	13	Aug. 2 . . . . .	11	April 21 . . . . .	6½
May 11 . . . . .	7	May 30 . . . . .	12	Aug. 16 . . . . .	10½	July 11 . . . . .	6
July 3 . . . . .	7½	June 13 . . . . .	11	Aug. 27 . . . . .	10	Aug. 21 . . . . .	5½
Aug. 21 . . . . .	7½	July 28 . . . . .	10	Oct. 12 . . . . .	9½	1987: Sept. 4 . . . . .	6
Sept. 22 . . . . .	8	Sept. 26 . . . . .	11	Nov. 22 . . . . .	9	1988: Aug. 9 . . . . .	6½
Oct. 16 . . . . .	8½	Nov. 17 . . . . .	12	Dec. 15 . . . . .	8½	1989: Feb. 24 . . . . .	7
Nov. 1 . . . . .	9½	Dec. 5 . . . . .	13	1984: April 9 . . . . .	9	1990: Dec. 19 . . . . .	6½
1979: July 20 . . . . .	10	Nov. 5 . . . . .	14	Nov. 21 . . . . .	8½	1991: Feb. 1 . . . . .	6
Aug. 17 . . . . .	10½	Nov. 2 . . . . .	13	Dec. 24 . . . . .	8		
Sept. 19 . . . . .	11	Dec. 4 . . . . .	12	1985: May 20 . . . . .	7½	In effect, March 25, 1991 . . . . .	6
Oct. 8 . . . . .	12	1982: July 20 . . . . .	11½	1986: March 7 . . . . .	7		

<sup>1</sup> See table 837, footnote 5.

**No. 837. Money Market Interest Rates and Mortgage Rates: 1970 to 1990**

[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	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Federal funds, effective rate	7.18	13.36	16.38	12.26	9.09	10.23	8.10	6.80	6.66	7.57	9.21	8.10
Commercial paper, 3-month	(NA)	12.66	15.33	11.89	8.88	10.10	7.95	6.49	6.81	7.66	8.99	8.06
Prime rate charged by banks	7.91	15.27	18.87	14.86	10.79	12.04	9.93	8.33	8.21	9.32	10.87	10.01
Eurodollar deposits, 3-month	8.52	14.00	16.79	13.12	9.57	10.75	8.27	6.70	7.07	7.85	9.16	8.16
Finance paper, 3-month <sup>2,3</sup>	7.18	11.49	14.08	11.23	8.70	9.73	7.77	6.38	6.54	7.38	8.72	7.87
Bankers acceptances, 90-day	7.31	12.72	15.32	11.89	8.90	10.14	7.92	6.39	6.74	7.56	8.87	7.93
Large negotiable CDs, 3-month, secondary market	7.56	13.07	15.91	12.27	9.07	10.37	8.05	6.52	6.86	7.73	9.09	8.15
Federal Reserve discount rate <sup>5</sup>	5½ - 6	10-13	12-14	8½ - 12	8½	8-9	7½ - 8	5½ - 7½	5½ - 6	6-6½	6½ - 7	6½ - 7
Taxable money market funds <sup>6</sup>	(NA)	12.68	16.82	12.23	8.58	10.04	7.71	6.26	6.12	7.11	8.87	7.82
Certificates of deposit (CDs): <sup>7</sup>												
6-month . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	9.99	7.83	6.51	6.47	7.18	8.34	(NA)
1-year . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	10.37	8.29	6.75	6.77	7.47	8.41	(NA)
2 1/2-year . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	10.06	10.82	9.00	7.13	7.16	7.77	8.33
5-year . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	11.25	9.66	7.60	7.66	8.11	8.30	(NA)
U.S. Government securities: <sup>8</sup>												
3-month Treasury bill . . . . .	6.39	11.43	14.03	10.61	8.61	9.52	7.48	5.98	5.77	6.67	8.11	7.50
6-month Treasury bill . . . . .	6.51	11.37	13.80	11.07	8.73	9.76	7.65	6.03	6.03	6.91	8.03	7.48
1-year Treasury bill . . . . .	6.48	10.89	13.14	11.07	8.80	9.92	7.81	6.08	6.32	7.13	7.92	7.35
Prime 1-year municipals <sup>9</sup> . . . . .	4.35	6.25	7.92	7.68	5.29	6.05	5.12	4.33	4.44	5.15	6.11	(NA)
Home mortgages:												
HUD series:												
FHA insured, secondary market . . . . .	9.03	13.44	16.31	15.31	13.11	13.82	12.24	9.91	10.16	10.49	10.24	10.17
Conventional, new-home <sup>12,13</sup> . . . . .	8.52	13.95	16.52	15.79	13.43	13.80	12.28	10.07	10.17	10.30	10.21	10.08
Conventional, existing-home <sup>12</sup> . . . . .	8.56	13.95	16.55	15.82	13.45	13.81	12.29	10.09	10.17	10.31	10.22	(NA)
Conventional, 15 yr. fixed <sup>13</sup> . . . . .	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	10.05	10.04	10.14	10.05	(NA)

NA Not available. <sup>1</sup> Based on daily offering rates of dealers. <sup>2</sup> Yields are quoted on a bank-discount basis, rather than an investment yield basis (which would give a higher figure). <sup>3</sup> Placed directly; averages of daily offering rates quoted by finance companies. <sup>4</sup> 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. <sup>5</sup> 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. <sup>6</sup> 12 month yield for period ending December 31. Source: The Donoghue Organization, Inc., Holliston, MA, *IBC/Donoghue's Money Fund Report*, weekly (copyright). <sup>7</sup> Annual averages. Source: Advertising News Service, Inc., North Palm Beach, FL, *Bank Rate Monitor*, weekly (copyright). <sup>8</sup> Averages based on daily closing bid yields in secondary market, bank discount basis. <sup>9</sup> Averages based on quotations for one day each month. Source: Salomon Brothers, Inc., New York, NY, *An Analytical Record of Yields and Yield Spreads*. <sup>10</sup> HUD=Housing and Urban Development. <sup>11</sup> Averages based on quotations for 1 day each month as compiled by FHA. <sup>12</sup> Primary market. <sup>13</sup> Average contract rates on new commitments.

Source of tables 835-837: Except as noted, Board of Governors of the Federal Reserve System, *Federal Reserve Bulletin*, monthly, and *Annual Statistical Digest*.

**No. 838. Commercial Paper Outstanding, by Type of Company: 1970 to 1989**

[In billions of dollars. As of December 31. Seasonally adjusted. Commercial paper is an unsecured promissory note having a fixed maturity of no more than 270 days]

TYPE OF COMPANY	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>All issuers</b> . . . . .	<b>33.4</b>	<b>124.4</b>	<b>165.8</b>	<b>166.4</b>	<b>187.7</b>	<b>237.6</b>	<b>298.8</b>	<b>330.0</b>	<b>357.1</b>	<b>455.0</b>	<b>525.3</b>
Financial companies	25.9	87.7	112.0	118.7	141.0	167.0	213.8	252.9	275.9	352.4	395.9
Dealer-placed paper	5.5	19.9	30.4	34.7	44.8	56.5	78.4	101.1	102.0	159.9	186.4
Directly-placed paper	20.4	67.8	81.6	84.0	96.2	110.5	135.3	151.8	173.9	192.4	209.6
Nonfinancial companies	7.5	36.7	53.8	47.7	46.7	70.6	85.0	77.1	81.2	102.6	129.4

<sup>1</sup> Institutions engaged primarily in activities such as, but not limited to, commercial, savings, and mortgage banking; sales, personal, and mortgage financing; factoring, finance leasing, and other business lending; insurance underwriting; and other investment activities. <sup>2</sup> Includes all financial company paper sold by dealers in the open market. <sup>3</sup> As reported by financial companies that place their paper directly with investors. <sup>4</sup> Includes public utilities and firms engaged primarily in such activities as communications, construction, manufacturing, mining, wholesale and retail trade, transportation, and services.

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

**No. 839. Security Prices: 1970 to 1990**

[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	1983	1984	1985	1986	1987	1988	1989	1990
<b>Bond prices (dollars per \$100 bond):</b>										
Standard & Poor's: Municipal <sup>1,2</sup>	72.3	57.4	51.4	47.9	53.0	65.1	62.7	62.0	66.1	66.0
Dow Jones and Co., Inc.: Yearly high	69.7	76.6	77.8	72.9	83.7	93.7	95.5	91.3	94.2	(NA)
Yearly low	64.4	61.0	69.4	64.8	72.3	83.7	81.3	86.9	87.4	(NA)
<b>Stock prices:</b>										
Standard & Poor's common index (500 stocks)(1941-43 = 10) <sup>4</sup>	83.2	118.7	160.4	160.5	186.8	236.3	268.8	265.9	323.1	334.6
Industrial	91.3	134.5	180.5	181.3	207.8	262.2	330.5	306.5	392.9	(NA)
N.Y. Stock Exchange common stock index (Dec. 31, 1965 = 50):										
Composite	45.7	68.1	92.6	92.5	108.1	136.0	161.7	150.0	180.1	183.5
Yearly high <sup>5</sup>	52.4	81.0	99.6	98.1	121.9	145.8	188.0	159.4	199.3	(NA)
Yearly low <sup>5</sup>	37.7	55.3	79.8	85.1	94.6	117.8	125.9	136.7	155.0	(NA)
Industrial	48.0	78.6	107.5	108.0	123.8	155.9	195.3	180.8	228.0	225.8
Transportation	32.1	60.5	89.4	85.6	104.1	119.9	140.4	134.0	174.9	158.6
Utility	37.2	37.3	47.0	46.4	56.8	71.4	74.3	72.2	94.3	90.6
Finance	54.6	64.3	95.3	89.3	114.2	147.2	146.5	127.4	162.0	133.2
American Stock Exchange Market Value Index (Aug. 31, 1973 = 50)	48.3	150.6	216.5	208.0	229.1	264.4	316.4	295.1	356.7	338.4
NASDAQ OTC composite <sup>6</sup>	(NA)	202.3	278.6	247.4	324.9	348.8	330.5	381.4	454.8	(NA)
Industrial	(NA)	261.4	323.7	260.7	330.2	349.3	338.9	379.0	448.0	(NA)
Insurance	(NA)	166.8	257.6	283.1	382.1	404.1	351.1	429.1	546.0	(NA)
Banks	(NA)	118.4	203.8	229.8	349.4	412.5	390.7	435.3	391.0	(NA)
Dow Jones and Co., Inc.: Composite (65 stocks) <sup>1,7</sup>	243.9	328.2	472.2	463.1	541.6	702.5	849.5	772.2	966.9	965.2
Industrial (30 stocks)	753.2	891.4	1,190.3	1,178.5	1,328.2	1,792.8	2,276.0	2,060.8	2,508.9	2,678.9
Transportation (20 stocks)	152.4	307.2	544.6	513.8	645.1	785.4	929.2	863.8	1,194.3	1,040.2
Utility (15 stocks)	108.8	110.4	130.0	131.8	157.6	195.2	201.7	179.7	205.7	211.5
Wilshire 5000 equity index (Dec. 31, 1980 = 1404.596) <sup>8</sup>	<sup>9</sup> 830.3	1,220.7	1,691.5	1,644.6	1,923.8	2,418.8	2,843.7	2,636.9	3,172.6	(NA)
Standard & Poor's: Dividend-price ratio (percent)	3.83	5.26	4.40	4.64	4.25	3.48	3.08	3.64	3.45	3.61
Earnings-price ratio (percent)	6.45	12.66	8.02	10.02	8.12	6.09	5.48	8.00	7.41	(NA)

NA Not available. <sup>1</sup> Source: U.S. Bureau of Economic Analysis. <sup>2</sup> Derived from average yields on basis of assumed 4 percent, 20-year bond; Wednesday closing prices. <sup>3</sup> 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. <sup>4</sup> 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. <sup>5</sup> Source: New York Stock Exchange, Inc., New York, NY, *Fact Book*, annual. <sup>6</sup> Source: National Association of Securities Dealers, Washington, DC, *Fact Book*, annual. OTC = over-the-counter. December monthly closing values. <sup>7</sup> Based on stocks listed on the New York Stock Exchange. <sup>8</sup> 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. <sup>9</sup> Represents Dec. 31, 1970.

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

## No. 840. Bond and Stock Yields: 1970 to 1990

[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	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
U.S. Treasury, constant maturities: <sup>1 2</sup>											
3-year	7.29	11.55	12.92	10.45	11.89	9.64	7.06	7.68	8.26	8.55	8.26
5-year	7.38	11.48	13.01	10.80	12.24	10.13	7.31	7.94	8.48	8.50	8.37
10-year	7.35	11.46	13.00	11.11	12.44	10.62	7.68	8.39	8.85	8.49	8.55
U.S. Govt., long-term bonds <sup>2 3</sup>	6.58	10.81	12.23	10.84	11.99	10.75	8.14	8.64	8.98	8.58	8.74
State and local govt. bonds, Aaa	6.12	7.86	10.86	8.80	9.61	8.60	6.95	7.12	7.36	7.00	(NA)
State and local govt. bonds, Baa	6.75	9.02	12.46	10.17	10.38	9.58	7.75	8.17	7.84	7.40	(NA)
High-graded municipal bonds (Standard & Poor's) <sup>5</sup>	6.51	8.51	11.57	9.47	10.15	9.18	7.38	7.73	7.74	7.24	7.25
Municipal (Bond Buyer, 20 bonds)	6.35	8.59	11.66	9.51	10.10	9.11	7.32	7.63	7.68	7.23	7.27
Corporate Aaa seasoned <sup>4</sup>	8.04	11.94	13.79	12.04	12.71	11.37	9.02	9.38	9.71	9.26	9.32
Corporate Baa seasoned <sup>4</sup>	9.11	13.67	16.11	13.55	14.19	12.72	10.39	10.58	10.83	10.18	10.36
Corporate, by years to maturity: <sup>6</sup>											
AA Industrial, 10 years	(NA)	12.05	13.98	11.06	12.91	11.11	8.35	8.91	9.40	9.26	(NA)
AAA Utilities, 30 years	8.72	12.57	14.95	12.21	13.46	11.79	9.15	9.40	9.75	9.39	(NA)
A Utilities, 30 years	9.17	13.68	15.84	12.82	13.87	12.20	9.63	9.89	10.19	9.89	(NA)
Corporate (Moody's) <sup>4</sup>	8.51	12.75	14.94	12.78	13.49	12.05	9.71	9.91	10.18	9.66	9.77
Industrials (49 bonds) <sup>8</sup>	8.26	12.35	14.54	12.25	13.21	11.80	9.96	9.83	9.91	9.66	9.77
Railroads (13 bonds) <sup>9</sup>	8.77	11.48	13.68	12.08	13.07	11.94	9.85	9.63	10.03	(NA)	(NA)
Public utilities (51 bonds) <sup>10</sup>	8.68	13.15	15.33	13.31	14.03	12.29	9.46	9.98	10.45	9.66	9.76
Stocks (Standard & Poor's): <sup>5</sup>											
Preferred (10 stocks) <sup>11</sup>	7.22	10.60	12.53	11.02	11.59	10.49	8.76	8.37	9.23	9.04	8.96
Common: Composite (500 stocks)	3.83	5.26	5.81	4.40	4.64	4.25	3.48	3.08	3.64	3.45	3.61
Industrials (400 stocks)	3.62	4.95	5.48	4.04	4.05	3.76	3.09	2.62	3.14	3.01	3.16

NA Not available. <sup>1</sup> Yields on the more actively traded issues adjusted to constant maturities by the U.S. Treasury. <sup>2</sup> Yields are based on closing bid prices quoted by at least five dealers. <sup>3</sup> 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. <sup>4</sup> Source: Moody's Investors Service, New York, NY. <sup>5</sup> Source: Standard & Poor's Corp., New York, NY. <sup>6</sup> *Standard & Poor's Outlook*, weekly. <sup>7</sup> Based on first trading day of each month, deferred call, new issue estimate. Source: Salomon Brothers, Inc., New York, NY. <sup>8</sup> *An Analytical Record of Yields and Yield Spreads*. <sup>9</sup> 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. <sup>10</sup> Covers 40 bonds for period 1970-1983, 38 bonds for 1984-1986, and 37 bonds for 1987 and 1988. <sup>11</sup> Covers 23 bonds for period 1970-1981, 15 bonds for 1982, and 17 bonds for 1983. Beginning 1989 there was not an acceptable number of issues to continue a yield average. <sup>12</sup> Covers 40 bonds for period 1970-1988. <sup>13</sup> 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. 841. Sales of Stocks and Options on Registered Exchanges: 1970 to 1989

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

EXCHANGE	Unit	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989
<b>Market value of all sales, all exchanges <sup>1 2</sup></b>	Bil. dol	136	522	657	1,023	1,004	1,260	1,868	2,492	1,702	2,004
New York	Bil. dol	108	398	515	816	815	1,024	1,453	1,987	1,380	1,581
American	Bil. dol	15	47	34	48	32	38	63	102	59	80
Midwest	Bil. dol	5	21	35	60	62	79	102	122	87	101
Chicago	Bil. dol		28	32	39	35	38	56	124	64	86
Pacific	Bil. dol	5	13	21	31	31	40	55	71	49	64
Philadelphia	Bil. dol	3	11	14	20	19	23	35	48	34	50
<b>STOCKS <sup>3</sup></b>											
Shares sold, all exchanges <sup>2</sup>	Million	4,539	15,488	22,414	30,146	30,456	37,046	48,338	63,771	52,533	54,239
New York	Million	3,213	12,390	18,211	24,253	25,150	30,222	39,258	53,038	44,018	44,140
American	Million	879	1,659	1,550	2,209	1,584	2,115	2,999	3,496	2,576	3,248
Midwest	Million	149	598	1,144	1,862	1,843	2,274	2,784	3,329	2,771	2,960
Pacific	Million	165	435	810	1,070	1,006	1,352	1,750	2,034	1,576	1,791
Market value, all exchanges <sup>2</sup>	Bil. dol	131	476	603	957	951	1,200	1,705	2,284	1,587	1,845
New York	Bil. dol	103	398	514	815	814	1,023	1,450	1,983	1,378	1,577
American	Bil. dol	14	35	20	31	21	26	43	53	31	43
Midwest	Bil. dol	5	21	35	60	62	79	102	122	87	101
Pacific	Bil. dol	5	11	18	27	28	37	51	57	41	52
<b>OPTIONS <sup>4</sup></b>											
Contracts traded, all exchanges <sup>2</sup>	Million	(NA)	97	137	149	197	233	289	305	196	227
Chicago	Million	(NA)	53	76	82	123	149	180	182	112	127
American	Million	(NA)	29	39	39	40	49	65	71	45	50
Market value of contracts traded, all exchanges <sup>2</sup>	Bil. dol	(NA)	45.8	53.7	64.2	53.0	59.1	87.9	118.9	62.6	76.8
Chicago	Bil. dol	(NA)	27.9	32.3	39.4	34.9	38.4	55.9	76.9	39.7	47.3
American	Bil. dol	(NA)	12.5	14.3	15.8	10.5	11.6	19.0	25.7	12.4	15.1
Options exercised:											
Number of contracts	Million	(NA)	4.9	9.2	13.6	11.9	10.5	14.5	17.0	11.4	14.6
Value	Bil. dol	(NA)	20.4	37.1	65.1	55.6	49.2	72.8	85.9	51.5	79.5

<sup>1</sup> Represents zero. NA Not available. <sup>2</sup> Includes market value of rights and warrants and, for 1970, bond sales. Excludes the value of options exercised. <sup>3</sup> Includes other registered exchanges, not shown separately. <sup>4</sup> Includes voting trust certificates, American Depositary Receipts, and certificate of deposit for stocks. <sup>5</sup> 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. 842. Foreign Purchases and Sales of U.S. Securities, by Type of Security, 1980 to 1989, and by Selected Country, 1988 and 1989

[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 U.S. Treasury bonds and notes, foreign currency series). Data cover new issues of securities and redemptions of securities. Includes transactions executed in the U.S. for the account 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 <sup>4</sup>				
	Total	Treasury bonds and notes <sup>1</sup>	U.S. Govt. corporations bonds	Corporate bonds <sup>3</sup>	Corporate stocks	Total	Treasury bonds and notes <sup>1</sup>	U.S. Govt. corporations bonds <sup>2</sup>	Corporate bonds <sup>3</sup>	Corporate stocks
1980	15.8	4.9	2.6	2.9	5.4	198.0	97.4	16.9	8.5	75.2
1984	31.4	21.5	1.2	11.7	-3.0	639.5	451.2	32.5	33.2	122.6
1985	78.3	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	69.4	25.6	5.0	22.5	16.3	3,315.4	2,649.3	80.6	103.6	482.0
<b>1988, total <sup>5</sup></b>	<b>74.8</b>	<b>48.8</b>	<b>6.7</b>	<b>21.2</b>	<b>-2.0</b>	<b>3,581.1</b>	<b>3,071.9</b>	<b>58.1</b>	<b>88.7</b>	<b>364.4</b>
United Kingdom	21.8	9.6	1.2	11.9	-1.0	925.6	799.9	16.3	36.0	73.4
Japan	31.4	21.8	2.8	4.9	1.9	1,372.8	1,223.6	23.5	21.2	104.6
Canada	5.6	3.8	0.3	0.4	1.1	149.4	110.3	1.1	4.0	33.9
West Germany	-3.7	-5.3	0.4	1.0	0.2	96.7	80.2	1.5	4.1	11.0
Switzerland	-2.8	-1.1	0.2	0.3	-2.2	63.8	24.8	0.4	3.7	34.9
Singapore	-0.6	0.4	0.1	(Z)	-0.3	63.2	59.9	0.5	0.1	2.6
<b>1989, total <sup>5</sup></b>	<b>98.3</b>	<b>54.6</b>	<b>15.1</b>	<b>18.9</b>	<b>9.6</b>	<b>4,777.5</b>	<b>4,153.7</b>	<b>87.8</b>	<b>119.2</b>	<b>416.7</b>
United Kingdom	42.4	20.2	5.2	13.2	3.7	1,278.3	1,110.1	21.7	49.9	96.6
Japan	12.1	2.4	5.7	0.6	3.3	2,035.4	1,913.2	35.5	25.9	60.9
Canada	1.0	0.7	0.3	0.8	-0.8	167.5	117.0	1.2	3.9	45.5
West Germany	6.8	7.9	-0.2	(Z)	-0.8	77.7	57.3	1.0	3.7	15.8
Sweden	1.5	0.9	(Z)	0.1	0.5	118.5	116.8	(Z)	0.2	1.5
Singapore	3.8	3.2	0.4	0.1	(Z)	97.7	94.0	1.0	0.4	2.3

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

### No. 843. United States Purchases and Sales of Foreign Stocks and Bonds, 1980 to 1989, and by Selected Country, 1988 and 1989

[In billions of dollars. See headnote, table 842. 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 <sup>1</sup>			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
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	6.9	7.9	1.1	596.0	406.1	189.8	207.0	94.4	199.1	95.5
<b>1988, total <sup>2</sup></b>	<b>9.4</b>	<b>7.4</b>	<b>2.0</b>	<b>597.1</b>	<b>444.5</b>	<b>152.7</b>	<b>226.0</b>	<b>77.3</b>	<b>218.5</b>	<b>75.4</b>
United Kingdom	6.6	6.2	0.4	229.2	177.9	51.3	92.0	25.9	85.8	25.5
Japan	(Z)	-0.7	0.7	122.8	71.5	51.3	35.4	26.0	36.1	25.3
Canada	3.7	4.2	-0.5	46.9	37.2	9.7	20.7	4.6	16.5	5.1
West Germany	1.2	-1.5	0.3	34.8	30.2	4.6	14.4	2.4	15.8	2.2
Switzerland	-0.5	-1.1	0.5	16.2	10.9	5.3	4.9	2.9	6.0	2.4
France	0.8	0.4	0.5	25.9	21.8	4.1	11.1	2.3	10.7	1.8
<b>1989, total <sup>2</sup></b>	<b>18.9</b>	<b>6.0</b>	<b>12.8</b>	<b>708.9</b>	<b>474.5</b>	<b>232.4</b>	<b>240.3</b>	<b>122.6</b>	<b>234.2</b>	<b>109.8</b>
United Kingdom	13.8	8.7	5.0	258.4	178.0	80.4	93.4	42.7	84.6	37.7
Japan	1.8	-2.8	1.0	154.6	87.9	66.7	42.6	33.8	45.3	32.8
Canada	4.2	2.9	1.3	75.0	64.1	10.9	33.5	6.1	30.6	4.8
West Germany	-2.3	2.7	0.4	35.4	28.3	7.1	12.8	3.8	15.5	3.4
Switzerland	2.5	0.5	2.0	15.4	6.9	8.5	3.7	5.3	3.2	3.3
France	2.4	0.5	1.9	30.7	22.7	8.0	11.6	5.0	11.1	3.0

Z Less than \$50 million. <sup>1</sup> Total purchases plus total sales. <sup>2</sup> Includes other countries, not shown separately.

Source of tables 842 and 843: U.S. Dept. of Treasury, *Treasury Bulletin*, quarterly.

### No. 844. New Security Issues of Corporations, by Type of Offering and Industry Group: 1982 to 1989

[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	1982	1985	1986	1987	1988	1989	TYPE OF OFFERING AND INDUSTRY GROUP	1982	1985	1986	1987	1988	1989
<b>Total</b> . . . . .	<b>87.5</b>	<b>239.2</b>	<b>424.8</b>	<b>392.6</b>	<b>410.3</b>	<b>375.3</b>	<b>Stocks, total</b> . . . . .	<b>30.6</b>	<b>35.5</b>	<b>68.4</b>	<b>66.5</b>	<b>57.8</b>	<b>57.9</b>
Bonds, total . . . . .	56.9	203.7	356.3	326.1	352.5	317.4	Preferred . . . . .	5.1	6.5	11.5	10.1	6.5	6.2
Public, domestic . . . . .	47.1	119.7	232.8	209.7	201.6	180.0	Common . . . . .	25.4	29.0	50.3	43.2	35.9	26.0
Private placement, domestic . . . . .	9.8	46.2	80.8	92.1	127.7	114.6	Private placement . . . . .	(NA)	(NA)	6.6	13.2	15.3	25.6
Sold abroad . . . . .	(NA)	37.8	42.8	24.3	23.2	22.8							
Manufacturing . . . . .	15.5	63.6	90.8	60.9	70.5	76.3	Manufacturing . . . . .	5.6	5.7	15.0	13.9	7.6	9.3
Commercial and miscellaneous . . . . .	5.4	17.2	41.9	49.8	62.0	49.2	Commercial and miscellaneous . . . . .	7.8	9.1	10.6	12.9	8.4	7.6
Transportation . . . . .	1.5	6.0	10.2	12.0	10.1	10.1	Transportation . . . . .	0.7	1.5	2.4	2.4	1.5	1.9
Public utility . . . . .	12.3	13.6	31.1	23.0	19.3	16.8	Public utility . . . . .	7.5	2.0	4.0	4.3	1.9	3.1
Communication . . . . .	2.4	10.9	16.4	7.3	6.0	8.5	Communication . . . . .	2.2	1.0	1.8	1.5	0.5	1.9
Real estate and financial . . . . .	19.7	92.3	165.9	173.1	184.7	156.6	Real estate and financial . . . . .	6.7	16.2	34.5	31.5	37.8	34.0

NA Not available.

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

### No. 845. Volume of Trading on New York Stock Exchange: 1970 to 1989

[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	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Shares traded</b> . . . . .	<b>Million</b>	<b>3,124</b>	<b>11,562</b>	<b>12,049</b>	<b>16,669</b>	<b>21,846</b>	<b>23,309</b>	<b>27,774</b>	<b>36,009</b>	<b>48,143</b>	<b>41,118</b>	<b>42,022</b>
Round lots . . . . .	Million	2,937	11,352	11,854	16,458	21,590	23,071	27,511	35,680	47,801	40,850	41,699
Average daily shares . . . . .	Million	11.6	44.9	46.9	65.1	85.3	91.2	109.2	141.0	189.0	161.5	165.5
High day . . . . .	Million	21.3	84.3	92.9	149.4	129.4	236.6	181.0	244.3	608.1	343.9	416.4
Low day . . . . .	Million	6.7	16.1	23.9	36.8	53.0	46.4	62.1	48.9	86.7	72.1	68.9
By size: <sup>1</sup>												
100-900 shares <sup>2</sup> . . . . .	Percent	(NA)	24.7	21.1	16.2	14.6	11.3	10.6	10.8	13.6	12.6	13.4
1,000-4,900 shares <sup>3</sup> . . . . .	Percent	(NA)	32.2	31.0	28.5	26.7	25.1	24.1	25.7	21.1	19.8	20.7
5,000-9,900 shares . . . . .	Percent	(NA)	11.4	12.1	12.8	12.7	13.8	13.8	13.9	65.3	67.6	65.9
10,000 or more shares <sup>4</sup> . . . . .	Percent	(NA)	31.7	35.8	42.5	46.0	49.8	51.5	49.6			
Odd lots . . . . .	Million	186	209	196	211	256	238	263	329	342	268	324
<b>Value of shares traded</b> . . . . .	<b>Bil. dol.</b>	<b>103</b>	<b>382</b>	<b>396</b>	<b>495</b>	<b>775</b>	<b>773</b>	<b>981</b>	<b>1,389</b>	<b>1,889</b>	<b>1,366</b>	<b>1,556</b>
Round lots . . . . .	Bil. dol.	95	375	389	488	765	765	971	1,374	1,874	1,356	1,543
Odd lots . . . . .	Bil. dol.	7	8	7	7	10	9	10	15	15	10	13
<b>Bond volume</b> <sup>5</sup> . . . . .	<b>Mill. dol.</b>	<b>4,495</b>	<b>5,390</b>	<b>5,733</b>	<b>7,155</b>	<b>7,572</b>	<b>6,982</b>	<b>9,046</b>	<b>10,464</b>	<b>9,727</b>	<b>7,702</b>	<b>8,836</b>
Daily average . . . . .	Mill. dol.	17.7	20.5	22.7	28.3	29.9	27.6	35.9	41.4	38.4	30.4	35.1

NA Not available. <sup>1</sup> Share volume of reported trades by size (percent of total) on New York Stock Exchange. <sup>2</sup> Beginning 1988, at 100-1,000 shares. <sup>3</sup> Beginning 1988, at 1,100-4,900 shares. <sup>4</sup> Includes bunched orders at the opening and re-opening of trading. <sup>5</sup> Par value.

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

### No. 846. NASDAQ—Securities Listed and Volume of Trading: 1980 to 1989

ITEM	Unit	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Companies listed . . . . .	Number	2,894	3,353	3,264	3,901	4,097	4,136	4,417	4,706	4,451	4,293
Issues . . . . .	Number	3,050	3,687	3,664	4,467	4,728	4,784	5,189	5,537	5,144	4,963
Shares traded . . . . .	Million	6,692	7,823	8,432	15,909	15,159	20,699	28,737	37,890	31,070	33,530
Average daily volume . . . . .	Million	26.5	30.9	33.3	82.9	59.9	82.1	113.6	149.8	122.8	133.1
Value of shares traded . . . . .	Bil. dol.	68.7	71.1	84.2	186.3	153.5	233.5	378.2	499.9	347.1	431.4

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

**No. 847. Securities Listed on N.Y. Stock Exchange: 1970 to 1989**

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

ITEM	Unit	1970	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Bonds:</b>												
Number of issuers	Number	843	1,045	1,049	1,031	1,034	1,024	1,010	951	885	846	794
Number of issues	Number	1,729	3,057	3,110	3,233	3,600	3,751	3,856	3,611	3,346	3,106	2,961
Face value	Bil. dol.	135	602	681	793	965	1,084	1,327	1,380	1,651	1,610	1,435
Market value	Bil. dol.	113	508	574	768	898	1,022	1,339	1,458	1,621	1,561	1,412
Average price	Percent	83.60	84.41	84.24	96.67	93.04	94.29	100.90	105.66	98.20	96.94	98.42
<b>Stocks:</b>												
Companies	Number	1,351	1,570	1,565	1,526	1,550	1,543	1,541	1,575	1,647	1,681	1,720
Number of issues	Number	1,840	2,228	2,220	2,225	2,307	2,319	2,298	2,257	2,244	2,234	2,246
Shares listed	Billion	16.1	33.7	38.3	39.5	45.1	49.1	52.4	59.6	72.0	76.1	83.0
Market value	Bil. dol.	636	1,243	1,144	1,305	1,584	1,586	1,950	2,199	2,216	2,457	3,030
Average price	Dollars	39.61	36.87	29.87	33.03	35.11	32.31	37.20	36.89	30.87	32.30	36.50
Cash dividends on common stock	Bil. dol.	19.8	53.1	60.6	62.2	67.1	68.2	74.2	76.2	84.4	102.2	101.8

Source: New York Stock Exchange, Inc., New York, NY, *Fact Book*, annual.**No. 848. Commodity Futures Trading on U.S. Exchanges—Volume of Trading: 1970 to 1989**

[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	1989
<b>Number of contracts traded</b>	<b>12.4</b>	<b>82.7</b>	<b>101.1</b>	<b>107.6</b>	<b>136.1</b>	<b>148.8</b>	<b>152.8</b>	<b>183.1</b>	<b>213.5</b>	<b>241.8</b>	<b>267.7</b>
Grain	2.2	18.3	19.8	14.9	17.8	15.9	10.7	10.3	10.9	15.9	15.9
Oilseeds/products	3.7	15.7	20.3	15.8	19.8	23.5	14.9	13.8	14.2	22.5	21.1
Livestock/products	3.4	11.8	9.8	11.0	11.1	8.4	7.9	8.6	8.8	9.6	8.2
Other agriculturals	2.0	7.8	4.6	4.9	6.3	6.0	5.1	6.7	5.7	9.8	10.7
Energy products	-	1.1	3.3	2.3	3.2	4.9	7.0	11.5	20.3	26.3	31.3
Metals	1.1	14.1	17.9	19.3	26.3	22.4	18.4	16.2	19.4	18.9	17.9
Financial instruments	-	10.2	20.1	31.3	40.2	51.0	72.1	96.9	114.3	117.6	136.7
Currencies	-	3.7	5.4	8.3	11.4	16.7	16.4	19.1	19.9	21.2	25.7

- Represents zero.

Source: U.S. Commodity Futures Trading Commission, *Annual Report*.**No. 849. Mutual Funds—Summary: 1970 to 1989**[See also *Historical Statistics, Colonial Times to 1970*, series X 536-539]

TYPE OF FUND	Unit	1970	1980	1983	1984	1985	1986	1987	1988	1989
<b>Number of funds, total</b>	<b>Number</b>	<b>361</b>	<b>564</b>	<b>1,026</b>	<b>1,246</b>	<b>1,531</b>	<b>1,843</b>	<b>2,323</b>	<b>2,718</b>	<b>2,918</b>
Money market funds	Number	(X)	96	307	329	348	360	389	432	463
Equity funds	Number	294	267	374	466	574	700	847	1,015	1,081
Income and bond funds	Number	67	149	201	240	323	409	565	681	735
Municipal bond funds	Number	(X)	42	78	114	174	247	368	415	438
Short-term municipal bond funds <sup>1</sup>	Number	(X)	10	66	97	112	127	154	175	201
<b>Shareholder accounts, total</b>	<b>Millions</b>	<b>(NA)</b>	<b>12.1</b>	<b>24.6</b>	<b>28.2</b>	<b>35.0</b>	<b>46.1</b>	<b>54.7</b>	<b>54.6</b>	<b>58.3</b>
Equity, bond, and income funds	Millions	(NA)	7.3	12.1	14.4	20.0	29.8	37.0	36.2	37.0
Money market funds and short-term municipal bond funds <sup>1</sup>	Millions	(NA)	4.8	12.5	13.8	15.0	16.3	17.7	18.6	21.3
<b>Assets, total</b>	<b>Bil. dol.</b>	<b>47.6</b>	<b>134.7</b>	<b>292.9</b>	<b>370.7</b>	<b>495.5</b>	<b>716.3</b>	<b>769.9</b>	<b>810.2</b>	<b>982.0</b>
Money market funds	Bil. dol.	(X)	74.4	162.5	209.7	207.5	228.3	254.7	272.3	358.7
Equity funds	Bil. dol.	45.1	44.4	77.0	83.1	116.9	161.5	180.6	194.8	249.1
Income and bond funds	Bil. dol.	2.5	11.1	22.0	33.3	95.4	187.0	196.2	190.8	199.2
Municipal bond funds	Bil. dol.	(X)	2.9	14.6	20.8	39.4	75.7	77.0	86.7	105.7
Short-term municipal bond funds <sup>1</sup>	Bil. dol.	(X)	1.9	16.8	23.8	36.3	63.8	61.4	65.6	69.3
<b>Sales, total</b>	<b>Bil. dol.</b>	<b>4.6</b>	<b>247.5</b>	<b>547.8</b>	<b>680.1</b>	<b>953.8</b>	<b>1,205.7</b>	<b>1,251.6</b>	<b>1,177.0</b>	<b>1,445.1</b>
Money market funds	Bil. dol.	(X)	232.2	463.0	572.0	730.1	792.3	869.1	903.4	1,134.6
Equity funds	Bil. dol.	4.2	5.6	22.4	20.3	30.1	57.7	72.1	31.0	54.5
Income and bond funds	Bil. dol.	0.4	2.6	8.8	15.7	64.8	118.3	89.7	43.5	44.5
Municipal bond funds	Bil. dol.	(X)	1.8	9.1	9.8	19.4	39.9	28.9	20.8	26.7
Short-term municipal bond funds <sup>1</sup>	Bil. dol.	(X)	5.3	44.5	62.3	109.4	197.5	191.8	178.3	184.8
<b>Redemptions, total</b>	<b>Bil. dol.</b>	<b>3.0</b>	<b>216.5</b>	<b>565.8</b>	<b>607.0</b>	<b>864.9</b>	<b>1,015.6</b>	<b>1,178.8</b>	<b>1,166.9</b>	<b>1,327.2</b>
Money market funds	Bil. dol.	(X)	204.5	508.7	531.0	732.3	778.3	865.7	899.4	1,055.1
Equity funds	Bil. dol.	2.8	5.7	9.3	10.9	18.2	27.2	40.2	34.8	38.3
Income and bond funds	Bil. dol.	0.2	1.5	3.1	5.1	11.1	30.7	58.6	45.0	41.0
Municipal bond funds	Bil. dol.	(X)	1.0	2.3	4.1	4.3	9.1	17.4	12.7	12.3
Short-term municipal bond funds <sup>1</sup>	Bil. dol.	(X)	3.8	42.4	55.9	98.8	172.3	196.9	175.0	180.5

NA Not available. X Not applicable. <sup>1</sup> The average maturity of the portfolio is generally less than 2 years.Source: Investment Company Institute, Washington, DC, *Mutual Fund Fact Book*, annual. (Copyright.)

**No. 850. Securities Industry—Revenues and Expenses: 1980 to 1989**

[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 <sup>1</sup>	
	1980	1982	1983	1984	1985	1986	1987	1988	1988	1989
<b>Revenues, total</b>	<b>19,984</b>	<b>28,801</b>	<b>36,904</b>	<b>39,607</b>	<b>49,844</b>	<b>64,424</b>	<b>66,104</b>	<b>66,701</b>	<b>51,825</b>	<b>59,537</b>
Commissions	6,800	7,370	10,392	9,270	10,955	13,977	16,574	11,992	8,784	10,151
Trading/investment gains	5,116	8,535	9,842	10,761	14,549	18,145	14,423	16,838	12,685	12,831
Underwriting profits	1,594	2,688	4,090	3,249	4,987	6,743	5,719	5,608	5,158	4,120
Margin interest	2,157	2,070	2,233	2,971	2,746	3,022	3,493	3,180	3,029	3,723
Mutual fund sales	278	629	1,493	1,452	2,754	4,540	4,069	2,644	1,414	1,580
Other	4,039	7,509	8,853	11,905	13,854	17,998	21,825	26,438	20,756	27,132
<b>Expenses, total</b>	<b>16,931</b>	<b>24,728</b>	<b>31,697</b>	<b>36,751</b>	<b>43,342</b>	<b>56,123</b>	<b>62,894</b>	<b>63,155</b>	<b>49,335</b>	<b>57,695</b>
Interest expense	3,893	6,452	6,847	10,693	11,470	14,233	16,473	19,731	16,311	24,070
Compensation	7,809	10,535	14,555	14,431	18,112	23,936	25,583	23,569	18,730	18,826
Commissions/clearance paid	1,079	1,299	1,787	1,907	2,314	2,995	3,563	2,858	1,754	1,855
Other	4,150	6,442	8,508	9,720	11,446	14,959	17,276	16,997	12,539	12,944
<b>Net income, pre-tax</b>	<b>3,053</b>	<b>4,073</b>	<b>5,207</b>	<b>2,857</b>	<b>6,502</b>	<b>8,301</b>	<b>3,210</b>	<b>3,546</b>	<b>2,490</b>	<b>1,842</b>

<sup>1</sup> 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. 851. U.S. Life Insurance Companies—Summary: 1970 to 1989**

[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	1982	1983	1984	1985	1986	1987	1988	1989
<b>U.S. companies</b>	<b>Number</b>	<b>1,780</b>	<b>1,958</b>	<b>2,060</b>	<b>2,117</b>	<b>2,193</b>	<b>2,261</b>	<b>2,254</b>	<b>2,337</b>	<b>2,343</b>	<b>2,350</b>
<b>Sales</b>	<b>Bil. dol.</b>	<b>207</b>	<b>655</b>	<b>920</b>	<b>1,279</b>	<b>1,390</b>	<b>1,530</b>	<b>1,578</b>	<b>1,656</b>	<b>1,716</b>	<b>1,788</b>
Ordinary	Bil. dol.	135	462	661	972	1,074	1,187	1,178	1,267	1,287	1,343
Group	Bil. dol.	65	190	257	306	315	342	400	388	428	444
Industrial	Bil. dol.	7	4	2	2	1	1	(Z)	(Z)	(Z)	(Z)
<b>Income</b>	<b>Bil. dol.</b>	<b>49.1</b>	<b>130.9</b>	<b>170.0</b>	<b>176.0</b>	<b>206.1</b>	<b>234.0</b>	<b>282.3</b>	<b>314.3</b>	<b>338.1</b>	<b>367.3</b>
Life insurance premiums	Bil. dol.	21.7	40.8	50.8	50.3	51.3	60.1	66.2	76.7	73.5	73.3
Percent of total	Percent	44.2	31.2	29.9	28.6	24.9	25.7	23.5	24.4	21.7	20.0
Annuity considerations	Bil. dol.	3.7	22.4	34.6	30.5	42.8	53.9	83.7	88.7	103.3	115.0
Health insurance premiums	Bil. dol.	11.4	29.4	35.0	38.2	40.7	41.8	44.2	47.6	52.3	56.1
Investment and other	Bil. dol.	12.3	38.3	49.6	57.0	71.3	78.2	88.2	101.3	109.0	122.9
<b>Disbursements</b>	<b>Bil. dol.</b>	<b>39.0</b>	<b>88.2</b>	<b>113.3</b>	<b>123.5</b>	<b>138.5</b>	<b>151.8</b>	<b>186.5</b>	<b>202.3</b>	<b>221.4</b>	<b>246.8</b>
Payments to policyholders <sup>2,3</sup>	Bil. dol.	25.6	59.0	71.2	80.9	89.8	95.7	131.4	144.4	156.8	178.3
Percent of total	Percent	65.6	66.9	62.8	65.5	64.8	63.0	70.5	71.4	70.8	72.2
Death payments	Bil. dol.	7.2	12.9	14.5	16.8	17.6	18.5	19.6	20.7	22.4	23.5
Matured endowments	Bil. dol.	1.0	0.8	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8
Annuity payments	Bil. dol.	1.7	7.4	10.3	12.7	18.0	19.7	17.8	20.3	21.9	26.0
Policy dividends	Bil. dol.	3.8	8.1	9.6	10.8	11.4	12.4	12.4	13.0	13.8	14.9
Surrender values <sup>3</sup>	Bil. dol.	2.9	6.4	9.8	12.5	14.5	15.9	49.6	53.7	58.1	73.4
Disability benefits	Bil. dol.	0.2	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.4	0.5
Commissions, expenses, etc. <sup>3</sup>	Bil. dol.	12.9	27.8	40.3	40.7	46.0	53.1	51.4	54.7	61.3	63.5
Dividends to stockholders	Bil. dol.	0.5	1.4	1.8	1.9	2.7	3.0	3.7	3.3	3.4	5.0
<b>BALANCE SHEET</b>											
<b>Assets</b>	<b>Bil. dol.</b>	<b>207</b>	<b>479</b>	<b>588</b>	<b>655</b>	<b>723</b>	<b>826</b>	<b>938</b>	<b>1,045</b>	<b>1,167</b>	<b>1,300</b>
Government securities	Bil. dol.	11	33	56	77	100	125	145	151	160	178
Corporate securities	Bil. dol.	89	227	269	297	323	374	433	502	585	664
Percent of total assets	Percent	42.7	47.4	45.7	45.3	44.6	45.3	46.2	48.1	50.1	51.1
Bonds	Bil. dol.	73	180	213	232	259	297	342	406	480	538
Stocks	Bil. dol.	15	47	56	65	63	78	91	97	104	126
Mortgages	Bil. dol.	74	131	142	151	157	172	194	214	233	254
Real estate	Bil. dol.	6	15	21	22	26	29	32	34	37	40
Policy loans	Bil. dol.	16	41	53	54	55	54	54	54	54	57
Other	Bil. dol.	11	32	49	54	64	72	81	90	98	106
Interest earned on assets <sup>4</sup>	Percent	5.30	8.02	8.91	8.96	9.45	9.63	9.35	9.10	9.03	9.10
<b>Liabilities</b> <sup>2,5</sup>	<b>Bil. dol.</b>	<b>190</b>	<b>445</b>	<b>547</b>	<b>609</b>	<b>673</b>	<b>769</b>	<b>873</b>	<b>977</b>	<b>1,092</b>	<b>1,216</b>
<b>Policy reserves</b> <sup>2</sup>	<b>Bil. dol.</b>	<b>168</b>	<b>390</b>	<b>479</b>	<b>532</b>	<b>584</b>	<b>665</b>	<b>762</b>	<b>862</b>	<b>969</b>	<b>1,084</b>
Annuities	Bil. dol.	49	182	252	297	342	411	489	562	642	730
Group	Bil. dol.	34	140	192	222	255	303	356	393	434	474
Individual <sup>8</sup>	Bil. dol.	15	41	61	75	87	108	133	169	208	256
Life insurance	Bil. dol.	115	198	214	221	226	236	252	276	300	324
Health insurance	Bil. dol.	4	11	13	15	17	19	21	24	27	30
Capital and surplus <sup>2</sup>	Bil. dol.	17	34	42	46	50	57	64	67	75	84

Z Less than \$500 million. <sup>1</sup> Includes Servicemen's Group Life Insurance: \$16.8 billion in 1970 and \$50.8 billion in 1986; as well as Federal Employees' Group Life Insurance: \$10.8 billion in 1986. <sup>2</sup> Includes operations of accident and health departments of life insurance companies. <sup>3</sup> Beginning in 1986, data not comparable to prior years due to change in accounting method. <sup>4</sup> Net rate. <sup>5</sup> Includes other obligations not shown separately. <sup>6</sup> 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. 852. U.S. Life Insurance Companies—New Long-Term Investments: 1970 to 1989**

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

ITEM	1970	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Total</b> .....	<b>23.9</b>	<b>42.5</b>	<b>72.6</b>	<b>77.9</b>	<b>83.7</b>	<b>110.5</b>	<b>169.9</b>	<b>202.5</b>	<b>295.3</b>	<b>421.9</b>	<b>456.7</b>	<b>434.7</b>	<b>472.0</b>
Annual percent change .....	-0.3	19.7	5.6	7.3	7.4	32.1	53.7	19.2	45.8	42.9	8.3	4.8	8.6
Government securities .....	0.8	3.7	6.9	7.0	10.6	24.3	49.1	62.9	99.9	154.3	155.7	134.8	161.0
Corporate securities .....	10.9	22.5	33.5	36.4	42.5	58.8	86.9	104.0	144.6	205.4	239.5	235.1	246.2
Bonds .....	6.8	16.6	23.1	22.3	23.0	33.0	50.8	68.7	98.3	137.5	165.1	180.6	182.2
Stocks .....	4.1	5.9	10.4	14.1	19.5	25.8	36.1	35.3	46.3	67.9	74.4	54.5	64.0
Mortgages .....	7.2	9.6	20.7	19.7	13.5	11.5	20.1	20.1	35.1	45.4	44.2	45.7	43.7
Real estate .....	0.9	2.1	2.8	3.3	4.5	4.5	4.3	6.0	6.0	7.1	7.1	8.4	8.7
Policy loans .....	4.1	4.6	8.7	11.5	12.6	11.4	9.5	9.5	9.7	9.7	10.2	10.7	12.4

<sup>1</sup> Change from immediate prior year.

**No. 853. Life Insurance in Force in the United States—Summary: 1970 to 1989**

[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)
	Number of policies, total (mil.)	Value (bil. dol.)					Ordinary	Group	Indus-trial	Cred- <sup>1</sup>	Per house-hold	Per in-sured house-hold	
		Total	Ordinary	Group	Indus-trial	Cred- <sup>1</sup>							
1970	355	1,402	731	545	39	88	6,110	6,910	500	1,000	22.1	26.6	11.3
1980	402	3,541	1,761	1,579	36	165	11,920	13,410	620	2,110	43.8	53.5	23.7
1981	400	4,064	1,978	1,889	35	162	13,310	15,400	630	2,220	49.3	60.2	25.8
1982	390	4,477	2,217	2,066	33	161	15,140	16,630	630	2,410	53.6	66.2	27.1
1983	387	4,966	2,544	2,220	31	171	17,380	17,530	630	2,650	59.2	73.1	28.9
1984	385	5,500	2,888	2,392	30	190	19,970	18,780	630	2,880	64.5	79.6	31.3
1985	386	6,053	3,247	2,562	28	216	22,780	19,720	640	3,100	69.7	86.1	32.7
1986	391	6,720	3,658	2,801	27	234	25,540	20,720	650	3,310	76.0	93.8	34.1
1987	395	7,452	4,139	3,043	27	243	28,510	22,380	650	3,330	82.8	102.2	35.6
1988	391	8,020	4,512	3,232	26	251	31,390	23,410	660	3,570	87.6	108.2	38.0
1989	394	8,694	4,940	3,469	24	260	34,410	24,510	670	3,600	93.6	115.5	40.7

<sup>1</sup> Insures borrower to cover consumer loan in case of death.

Source of tables 852 and 853: American Council of Life Insurance, Washington, DC, *Life Insurance Fact Book*, biennial.

**No. 854. Life Insurance Purchases in the United States—Number and Amount: 1970 to 1989**

[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 853]

YEAR	NUMBER OF POLICIES PURCHASED (1,000)						AMOUNT PURCHASED (bil. dol.)					
	Total	Ordinary		Group	Indus- trial	Total <sup>3</sup>	Ordinary		Group <sup>3</sup>	Indus- trial		
		Total	Percent—				Total	Percent—				
			Whole life <sup>1</sup>					Term <sup>2</sup>			Whole life <sup>1</sup>	Term <sup>2</sup>
1970 .....	23,769	10,968	90	10	5,219	7,582	193.1	122.8	59	41	63.7	6.6
1980 .....	29,007	14,750	78	22	11,379	2,878	572.6	385.6	43	57	183.4	3.6
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	0.9
1985 .....	33,880	17,104	78	22	16,243	533	1,231.2	910.9	62	38	319.5	0.7
1986 .....	34,623	16,811	77	23	17,507	305	1,308.8	933.6	61	39	374.7	0.4
1987 .....	33,153	16,225	75	25	16,698	230	1,352.5	986.7	57	43	365.5	0.3
1988 .....	31,589	15,579	81	19	15,793	217	1,406.9	995.7	61	39	410.8	0.3
1989 .....	29,960	14,694	80	20	15,110	156	1,441.7	1,020.7	59	41	420.7	0.3

<sup>1</sup> 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. <sup>2</sup> Life insurance payable to a beneficiary only when an insured dies within a specified period. <sup>3</sup> Includes Servicemen's Group Life Insurance: \$17.1 billion in 1970, \$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. 855. Life Insurance—Insurance in Force and Benefit Payments, by State: 1989**

[Applies to policyholders and payments in the U.S.]

REGION, DIVISION, AND STATE	INSURANCE IN FORCE			Benefit pay- ments <sup>1</sup> (mil. dol.)	REGION, DIVISION, AND STATE	INSURANCE IN FORCE			Benefit pay- ments <sup>1</sup> (mil. dol.)
	Policies (1,000)	Value (bil. dol.)	Avg. per house- hold (dol.)			Policies (1,000)	Value (bil. dol.)	Avg. per house- hold (dol.)	
<b>U.S.</b>	<b>393,951</b>	<b>8,694</b>	<b>93,800</b>	<b>80,200</b>	DC.	2,047	54	226,000	333
<b>Northeast</b>	<b>80,922</b>	<b>2,014</b>	<b>105,100</b>	<b>21,759</b>	VA.	13,083	239	105,200	1,829
<b>N.E.</b>	<b>20,706</b>	<b>537</b>	<b>109,300</b>	<b>5,326</b>	WV.	3,105	46	65,300	500
ME	1,648	35	74,400	317	NC	12,535	222	89,100	1,764
NH	1,742	40	96,700	340	SC	8,139	112	90,300	809
VT.	879	18	85,500	204	GA	12,881	246	104,300	1,722
MA	8,466	234	104,700	2,471	FL	17,885	380	74,900	4,098
RI	1,866	36	94,900	334	<b>E.S.C.</b>	<b>32,915</b>	<b>481</b>	<b>84,000</b>	<b>3,728</b>
CT.	6,105	174	144,100	1,660	KY.	6,237	102	72,900	847
<b>M.A.</b>	<b>60,216</b>	<b>1,477</b>	<b>103,700</b>	<b>16,433</b>	TN.	9,999	166	88,500	1,456
NY.	26,501	693	101,300	8,113	AL.	12,285	142	93,600	986
NJ.	11,802	346	121,100	3,705	MS.	4,394	70	75,700	439
PA.	21,913	438	96,500	4,615	<b>W.S.C.</b>	<b>41,098</b>	<b>890</b>	<b>90,200</b>	<b>6,605</b>
<b>Midwest</b>	<b>99,004</b>	<b>2,123</b>	<b>93,400</b>	<b>20,878</b>	AR.	2,866	55	60,300	431
<b>E.N.C.</b>	<b>71,062</b>	<b>1,486</b>	<b>93,600</b>	<b>14,858</b>	LA.	8,078	136	87,000	1,110
OH	18,384	375	90,400	3,681	OK	4,127	93	74,500	884
IN	10,199	187	89,000	1,916	TX.	26,027	606	98,700	4,180
IL.	20,011	448	102,600	4,510	<b>West</b>	<b>60,110</b>	<b>1,663</b>	<b>87,200</b>	<b>14,286</b>
MI	14,647	321	93,700	3,161	<b>MT</b>	<b>18,582</b>	<b>425</b>	<b>85,600</b>	<b>3,636</b>
WI.	7,821	155	84,300	1,590	MT	1,165	23	74,800	209
<b>W.N.C.</b>	<b>27,942</b>	<b>637</b>	<b>93,200</b>	<b>6,020</b>	ID.	1,377	29	79,300	235
MN.	6,341	155	94,400	1,451	WY.	642	16	89,300	124
IA.	4,652	99	90,400	1,109	CO.	5,159	128	100,100	1,050
MO.	8,653	186	93,600	1,704	NM.	1,786	41	75,600	375
ND.	927	23	91,800	169	AZ.	4,681	103	79,400	987
SD.	947	23	83,600	191	UT.	2,414	51	96,300	388
NE.	2,458	60	96,200	578	NV.	1,358	32	72,400	268
KS.	3,964	91	94,500	818	<b>Pac.</b>	<b>41,528</b>	<b>1,239</b>	<b>87,700</b>	<b>10,650</b>
<b>South</b>	<b>153,915</b>	<b>2,894</b>	<b>90,500</b>	<b>23,277</b>	WA.	5,318	149	79,700	1,376
<b>S.A.</b>	<b>79,902</b>	<b>1,523</b>	<b>93,000</b>	<b>12,944</b>	OR.	3,269	77	68,800	866
DE.	1,814	37	146,600	262	CA.	30,558	949	89,700	7,915
MD.	8,413	186	107,500	1,627	AK.	478	17	95,700	134
					HI.	1,905	46	126,400	359

<sup>1</sup> 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. 856. 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
<b>All organizations:</b>										
Total premium income	16,871	33,178	72,595	84,419	98,679	109,684	121,882	129,133	142,435	157,794
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	18,185	20,521
Net underwriting gain	-718	-2,014	-2,848	-3,359	-2,492	-1,114	2,279	1,166	-372	-1,817
<b>Blue Cross-Blue Shield:</b>										
Premium income	7,371	14,446	26,334	30,447	34,338	37,611	39,954	41,508	44,349	46,345
Claims expense	7,060	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
<b>Insurance companies:<sup>1</sup></b>										
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	40,109	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
<b>Other plans:</b>										
Premium income	1,196	4,657	17,347	20,006	22,907	25,201	30,789	35,138	41,518	47,739

<sup>1</sup> 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. 857. Health Insurance—Premium Income and Benefit Payments of Insurance Companies: 1970 to 1988

(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	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>Premiums</b> <sup>1</sup>	<b>11.5</b>	<b>20.8</b>	<b>37.9</b>	<b>43.7</b>	<b>49.0</b>	<b>58.3</b>	<b>63.2</b>	<b>70.4</b>	<b>75.2</b>	<b>75.5</b>	<b>84.1</b>	<b>98.2</b>
Group policies <sup>2</sup>	8.1	15.9	31.7	36.8	42.5	50.0	54.9	60.8	64.4	65.9	74.0	87.6
Individual and family policies	3.4	4.9	6.2	6.9	6.5	8.3	8.3	9.6	10.8	9.6	10.1	10.6
<b>Benefit payments</b>	<b>9.1</b>	<b>16.5</b>	<b>31.7</b>	<b>37.0</b>	<b>41.6</b>	<b>49.2</b>	<b>51.7</b>	<b>56.0</b>	<b>60.0</b>	<b>64.3</b>	<b>72.5</b>	<b>83.0</b>
Group policies <sup>2</sup>	7.5	14.2	27.9	33.0	37.7	44.2	46.9	50.3	53.7	58.9	66.5	76.4
Individual and family policies	1.6	2.3	3.8	4.0	3.9	4.9	4.8	5.7	6.3	5.4	5.9	6.6
Type of coverage:												
Loss of income	1.8	2.7	4.7	5.3	5.2	5.5	4.9	5.2	5.6	5.6	6.4	6.4
Medical expense	7.1	13.2	24.8	28.9	33.0	39.6	42.4	45.9	49.0	53.4	58.7	68.0
Dental	0.1	0.6	2.2	2.8	3.5	4.0	4.4	4.9	5.3	5.3	5.9	6.3

<sup>1</sup> 1970 refers to written premiums; thereafter, refers to earned premiums. <sup>2</sup> 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. <sup>3</sup> Includes Medicare supplement policies which are not available by type of coverage.

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

### No. 858. Property and Casualty Insurance—Summary: 1970 to 1988

(In billions of dollars. Minus sign (-) indicates loss. Premiums earned and losses incurred differ from table 859 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	28.9	30.6	32.6	36.6	43.2	46.8	49.9
Net underwriting gain/loss	0.1	-3.6	-1.5	-4.9	-8.1	-10.8	-18.2	-21.4	-12.8	-5.9	-7.6
Net investment income earned	2.1	4.5	12.6	14.6	15.6	16.5	18.1	19.8	21.9	24.0	28.1
Dividends to policyholders	0.5	0.7	1.8	2.0	2.2	2.4	2.3	2.4	2.3	2.9	2.9
Net income after taxes	1.6	0.6	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. 859. Property and Casualty Insurance—Premiums and Losses, by Line of Insurance: 1980 to 1988

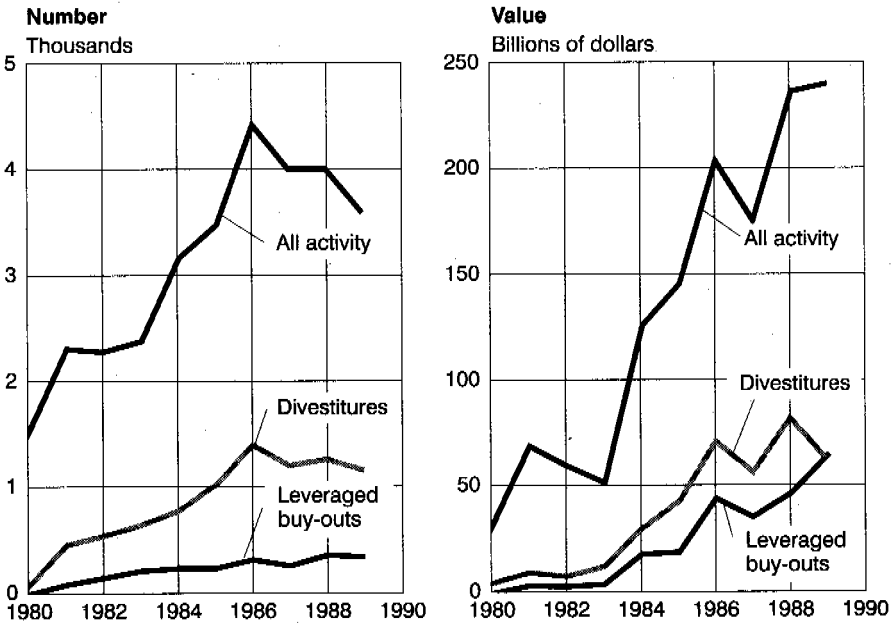
(In millions of dollars)

LINE OF INSURANCE	PREMIUMS EARNED					LOSSES INCURRED				
	1980	1985	1986	1987	1988	1980	1985	1986	1987	1988
<b>Total</b>	<b>86,612</b>	<b>131,115</b>	<b>166,637</b>	<b>182,982</b>	<b>194,188</b>	<b>61,813</b>	<b>114,376</b>	<b>133,041</b>	<b>141,512</b>	<b>146,487</b>
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	28,182	29,849	31,913	8,904	17,286	19,019	18,962	20,383
Workers' compensation	14,067	17,168	19,870	23,674	25,853	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	6,658	10,148	14,336	16,159	17,018	3,822	8,738	8,840	8,919	9,669
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	6,852	7,195	6,553	3,193	3,304	3,764	3,562	3,422
Reinsurance	3,089	4,788	6,828	6,530	7,026	2,461	4,318	5,649	5,531	5,345
Inland marine	2,180	3,315	3,758	3,966	4,069	1,439	2,058	1,791	1,859	2,009
Health	2,845	3,082	2,713	3,732	4,253	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
Marine	1,009	1,913	2,512	2,876	3,000	1,022	3,020	2,963	2,909	2,634
Farmowners	1,035	1,115	1,123	1,235	1,237	857	830	763	831	868
Aircraft	518	727	1,108	837	784	409	576	862	532	510
Boiler and machinery	162	472	659	768	710	126	381	456	595	514
Product liability	372	497	587	648	637	145	204	245	237	324
Financial guaranty	-	362	1,002	424	890	-	320	910	276	646
Earthquake	-	-	272	268	409	-	-	284	211	442
Burglary and theft	46	131	190	228	286	3	13	22	73	35
Glass	135	117	123	121	114	60	40	36	34	28
Other	34	29	30	26	29	20	8	10	8	11
	515	782	1,001	764	1,368	306	632	1,131	869	1,382

- Represents zero.

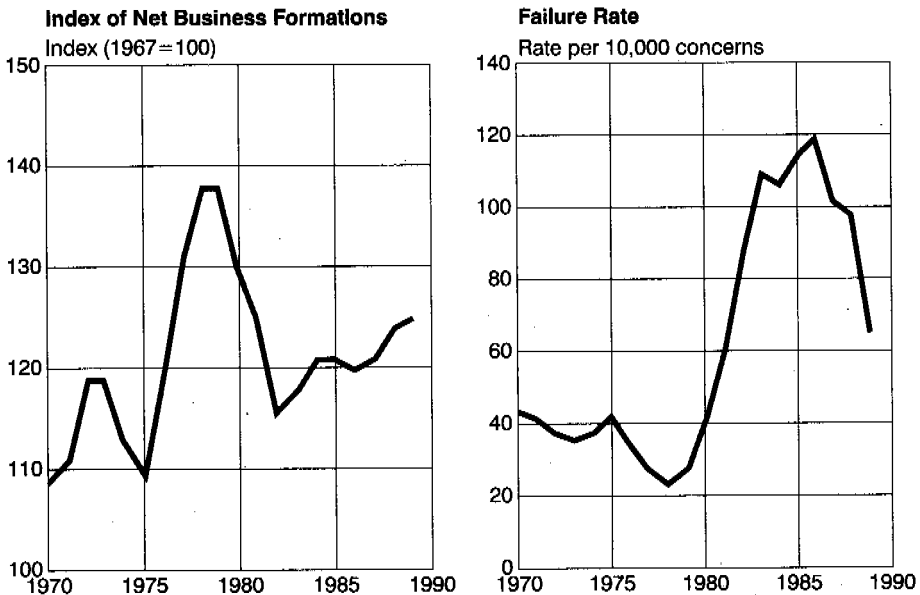
Source: The National Underwriter Co., Cincinnati, OH, *Argus F. C. & S. Chart*, annual (copyright).

Figure 17.1  
**Mergers and Acquisitions: 1980 to 1989**



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 888.

Figure 17.2  
**Index of Net Business Formations and  
 Business Failure Rates: 1970 to 1989**



Source: Chart prepared by U.S. Bureau of the Census. For data, see table 881.



## Section 17

# Business Enterprise

This section relates to the place and behavior of the business firm, and to business initiative in the American economy. It includes data on the number, type, and size of businesses; financial data of domestic and multinational U.S. corporations and their foreign affiliates; business investment, expenditures, and profits; business sales and inventories; consumer cooperatives; and business failures. Additional business data may be found in other sections, particularly 27 and 28.

The principal sources of these data are the *Survey of Current Business*, published by the Bureau of Economic Analysis (BEA); the *Federal Reserve Bulletin*, issued by the Board of Governors of the Federal Reserve System; the annual *Statistics of Income* reports of the Internal Revenue Service (IRS); *The Business Failure Record Through 1989*, issued by The Dun & Bradstreet Corporation, New York; and *Fortune* and *The Fortune Directory*, issued by Time, Inc., New York. Other sources are publications of the Securities and Exchange Commission (SEC), the Bureau of the Census, and the Administrative Office of the United States Courts.

**Business firms.**—A firm is generally defined as a business organization under a single management and may include one or more establishments (i.e., a single physical location at which business is conducted). The terms firm, business, company, and enterprise are used interchangeably throughout this section. Examples of series where the industrial distribution is based on data collected from establishments are those on capital stock (table 898), those on gross national product by industry (table 699), and those on employment and earnings (section 13). Examples of company-based series are those on business expenditures for new plant and equipment (table 897), those from IRS *Statistics of Income* (tables 869 and 870), and those on corporation profits by industry (tables 907 and 908). A firm doing business in more than one industry is classified by industry according to the major activity of the firm as a whole. The industrial classification is based on the *Standard Industrial Classification (SIC) Manual* (see text, section 13).

The IRS concept of a business firm relates primarily to the legal entity used for tax reporting purposes. The IRS *Statistics of Income* reports present data, based on a sample of tax returns before audit, separately for sole proprietorships, partnerships, and corporations. Data presented are for active enterprises only. A *sole proprietorship* is an unincorporated business owned by one person including large enterprises with many employees and hired managers to the part-time operations in which the owner is the only person involved. A *partnership* is an unincorporated business owned by two or more persons, each of whom has a financial interest in the business. The "persons" could be individuals, estates, trusts, other partnerships or corporations. A *corporation* is a business that is legally incorporated under State laws. The IRS recognizes many types of businesses as corporations, including joint-stock companies; insurance companies; and unincorporated associations such as business trusts, etc. While many corporations file consolidated tax returns, most corporate tax returns represent individual corporations, some of which are affiliated through common ownership or control with other corporations filing separate returns.

**Assets and liabilities.**—In its annual report, *Statistics of Income, Corporation Income Tax Returns*, the IRS presents balance sheet and income estimates for all active U.S. corporations. The Bureau of the Census issues the *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations* (QFR), which presents quarterly income account and balance sheet data for manufacturing, mining, and trade industries. This report was prepared by the Federal Trade Commission until responsibilities for QFR were transferred to Census beginning with the 4th quarter 1982 report.

One of the most comprehensive measures of the investment position of the business sector (and the only measure adjusted to current replacement cost) is the BEA capital stock series. See *Survey of Current Business*, August 1990.

**Income, profits, dividends, and taxes.**—Several agencies, among them IRS and BEA, compile corporate income account data. These data, however, are not comparable because of differing definitions 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 866, Federal Reserve Board) 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 conducted by the Bureau of the Census. For a discussion of coverage, concepts, and methodology, see the February 1985 issue of the *Survey of Current Business*, Bureau of Economic Analysis.

**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 901) are based on data from censuses (conducted every 5 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". Special surveys are conducted every five years as part of the economic censuses to determine the extent of business ownership by specific minority groups and women.

**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. 860. Number of Returns and Business Receipts, by Size of Receipts and Type of Business: 1970 to 1987

[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 <sup>1</sup> (bil. dol.)				
	1970	1980	1985	1986	1987	1970	1980	1985	1986	1987
<b>Corporate returns</b> . . . . .	<b>1,665</b>	<b>2,711</b>	<b>3,277</b>	<b>3,429</b>	<b>3,612</b>	<b>1,706</b>	<b>6,172</b>	<b>8,050</b>	<b>8,282</b>	<b>9,185</b>
Under \$25,000 <sup>2</sup> . . . . .	452	557	711	765	788	3	4	5	5	5
\$25,000-\$49,999 . . . . .	171	208	237	244	267	6	8	9	10	10
\$50,000-\$99,999 . . . . .	220	323	330	345	369	16	22	24	25	27
\$100,000-\$499,999 . . . . .	517	926	1,110	1,141	1,191	123	224	278	289	300
\$500,000-\$999,999 . . . . .	141	280	352	370	391	99	197	249	262	276
\$1,000,000 or more . . . . .	165	418	538	562	605	1,459	5,717	7,484	7,692	8,568
<b>Partnership returns</b> . . . . .	<b>936</b>	<b>1,380</b>	<b>1,714</b>	<b>1,703</b>	<b>1,648</b>	<b>92</b>	<b>286</b>	<b>349</b>	<b>379</b>	<b>411</b>
Under \$25,000 <sup>2</sup> . . . . .	502	638	1,036	1,057	1,052	4	5	4	4	2
\$25,000-\$49,999 . . . . .	125	182	154	145	123	5	7	6	5	3
\$50,000-\$99,999 . . . . .	120	184	152	154	142	9	13	11	11	7
\$100,000-\$499,999 . . . . .	162	290	281	261	240	33	64	61	58	46
\$500,000-\$999,999 . . . . .	17	48	48	46	45	12	33	34	34	28
\$1,000,000 or more . . . . .	10	37	42	44	44	30	164	234	267	326
<b>Non-farm proprietorship returns</b> <sup>3</sup> . . . . .	<b>6,494</b>	<b>9,730</b>	<b>11,929</b>	<b>12,394</b>	<b>13,091</b>	<b>199</b>	<b>411</b>	<b>540</b>	<b>559</b>	<b>611</b>
Under \$25,000 <sup>2</sup> . . . . .	4,738	6,916	8,250	8,515	8,984	30	44	54	(NA)	60
\$25,000-\$49,999 . . . . .	746	1,079	1,394	1,467	1,559	27	39	50	(NA)	55
\$50,000-\$99,999 . . . . .	562	836	1,094	1,138	1,172	40	59	77	(NA)	83
\$100,000-\$499,999 . . . . .	420	796	1,060	1,141	1,232	76	159	213	(NA)	251
\$500,000-\$999,999 . . . . .	21	74	89	95	102	14	50	61	(NA)	69
\$1,000,000 or more . . . . .	7	29	41	38	43	12	60	85	(NA)	93

NA Not available. <sup>1</sup> Excludes investment income except for partnerships (through 1986) and corporations in finance, insurance, and real estate. In 1987, partnerships and S corporations exclude gross income from rental real estate and other rental activities and portfolio income distributed directly to partners or shareholders. S corporations have no more than 35 shareholders (10 prior to 1983) most of which are individuals, electing to be taxed at the shareholder level. <sup>2</sup> Includes firms with no receipts. <sup>3</sup> 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. 861. Number of Returns, Receipts, and Net Income, by Type of Business, 1970 to 1987, and by Industry, 1987

[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 <sup>2</sup> (bil. dol.)			NET INCOME (less loss) <sup>3</sup> (bil. dol.)		
	Non-farm proprietor- ships <sup>1</sup>	Partnerships	Corpo- rations	Non-farm proprietor- ships <sup>1</sup>	Partnerships	Corpo- rations	Non-farm proprietor- ships <sup>1</sup>	Partnerships	Corpo- rations
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
1985	11,929	1,714	3,277	540.0	349.2	8,049.6	78.8	-8.9	240.1
1986	12,394	1,703	3,429	559.4	378.7	8,281.9	90.4	-17.4	269.6
1987 <sup>4</sup>	13,091	1,648	3,612	610.8	411.4	9,185.5	105.5	-5.4	328.2
Agriculture, forestry, and fishing <sup>5</sup>	361	149	117	14.5	6.8	71.8	2.0	2.0	1.6
Mining	159	60	42	6.6	15.3	85.8	-0.3	-1.3	0.3
Construction	1,636	62	371	89.3	28.3	442.5	14.5	2.7	8.7
Manufacturing	360	35	294	18.9	32.4	2,946.7	2.1	0.8	145.5
Transportation, public utilities	648	30	148	29.7	19.8	736.6	3.7	-3.7	37.5
Wholesale and retail trade <sup>6</sup>	2,368	185	972	216.3	70.6	2,691.3	11.2	2.6	38.0
Wholesale	339	20	317	35.4	22.9	1,304.7	3.5	0.8	17.8
Retail	1,974	165	650	177.3	47.7	1,380.1	7.3	1.8	20.2
Finance, insurance, real estate	1,225	828	521	42.0	123.2	1,589.2	14.4	-26.8	87.4
Services	5,977	291	1,120	183.5	116.4	616.5	56.0	18.0	9.3

<sup>1</sup> Through 1980, includes both individually owned business and farm returns; thereafter, includes only nonfarm business returns. <sup>2</sup> Excludes investment income except for partnerships (through 1986) and corporations in finance, insurance, and real estate. In 1987, partnerships and S corporations exclude gross income from rental real estate and other rental activities and portfolio income distributed directly to partners or shareholders. For definition of S corporation, see table 860, footnote 1. <sup>3</sup> 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. <sup>4</sup> Includes business not specifically allocated to industries below. <sup>5</sup> Represents agricultural services only. <sup>6</sup> Includes trade business not identified as wholesale or retail.

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

### No. 862. Number of Returns, Business Receipts, and Net Income, by Industry, Type of Business, and Size of Business Receipts: 1987

[Number in thousands; receipts in billions of dollars, 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 also *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 <sup>1</sup>			CORPORATIONS				
		Under \$100 mil.	\$100 mil.-\$499 mil.	\$500 mil. or more	Under \$1 bil. <sup>2</sup>	\$1 bil.-\$4.9 bil.	\$5 bil.-\$9.9 bil.	\$10 bil.-\$49.9 bil.	\$50 bil. or more
<b>All industrial divisions: <sup>3</sup></b>									
Number	13,091	1,317	240	89	3,007	461	71	60	13
Business receipts <sup>4</sup>	611	11.7	45.7	354.0	617.4	969.6	492.6	1,203.4	5,902.4
Net income (less loss)	105	-44,413	6,911	32,084	-3,342	13,652	9,681	35,108	273,125
<b>Agriculture, forestry, fishing: <sup>5</sup></b>									
Number	361	140	6	1	106	9	1	1	(Z)
Business receipts <sup>4</sup>	15	0.6	1.3	4.9	16.0	19.0	5.9	17.9	13.1
<b>Mining:</b>									
Number	159	50	5	2	38	3	1	(Z)	(Z)
Business receipts <sup>4</sup>	7	0.4	1.1	13.9	4.3	7.4	3.6	9.1	61.5
<b>Construction:</b>									
Number	1,636	33	21	6	293	64	9	5	(Z)
Business receipts <sup>4</sup>	89	1.2	5.1	20.0	75.2	131.9	58.4	96.8	80.2
<b>Manufacturing:</b>									
Number	360	21	8	2	195	69	14	13	4
Business receipts <sup>4</sup>	19	0.4	2.1	29.8	52.0	152.3	98.7	273.2	2,370.4
<b>Transportation, public utilities:</b>									
Number	648	20	6	2	119	23	3	2	1
Business receipts <sup>4</sup>	30	0.5	1.3	18.0	23.6	47.6	22.3	39.9	603.2
<b>Wholesale and retail trade:</b>									
Number	2,368	101	61	19	724	185	31	28	4
Business receipts <sup>4</sup>	216	3.2	14.2	53.2	197.1	395.1	215.9	550.0	1,333.2
<b>Finance, insurance, real estate:</b>									
Number	1,225	751	53	20	474	32	6	7	3
Business receipts <sup>4</sup>	42	0.8	3.5	119.0	57.4	69.2	43.9	137.2	1,281.4
<b>Services:</b>									
Number	5,977	182	74	31	1,032	77	6	4	1
Business receipts <sup>4</sup>	184	4.4	17.1	94.9	190.0	145.8	43.3	78.6	158.6

Z Less than 500 returns. <sup>1</sup> Size of receipts excludes investment income. <sup>2</sup> Includes businesses without receipts. <sup>3</sup> Includes businesses not allocable to individual industries. <sup>4</sup> Excludes investment income except for corporations (other than S corporations; see table 860, footnote 1) in finance, insurance and real estate. For partnerships, excludes gross income from rental real estate and other rental activities and portfolio income distributed directly to partners. <sup>5</sup> Represents agricultural services only.

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

### No. 863. Nonfarm Sole Proprietorship Returns—Selected Income and Deduction Items: 1970 to 1988

[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	1988
<b>Number of returns, total (1,000) <sup>1</sup></b>	<b>5,770</b>	<b>7,221</b>	<b>8,932</b>	<b>10,704</b>	<b>11,262</b>	<b>11,929</b>	<b>12,394</b>	<b>13,091</b>	<b>13,679</b>
Businesses with net income (1,000)	(NA)	(NA)	(NA)	7,390	8,003	8,641	9,248	9,884	10,492
Inventory, end of year	11,061	15,578	21,996	(NA)	23,233	24,970	24,477	26,333	27,313
<b>Business receipts, total <sup>2</sup></b>	<b>198,582</b>	<b>273,955</b>	<b>411,206</b>	<b>465,169</b>	<b>516,037</b>	<b>540,045</b>	<b>559,384</b>	<b>610,823</b>	<b>671,970</b>
Income from sales and operations	(NA)	272,343	407,169	455,382	507,234	528,675	548,273	598,315	658,687
<b>Business deductions, total <sup>2</sup></b>	<b>168,045</b>	<b>234,318</b>	<b>356,258</b>	<b>404,809</b>	<b>445,270</b>	<b>461,273</b>	<b>468,960</b>	<b>505,362</b>	<b>545,735</b>
Cost of goods sold/operations	109,149	146,261	209,890	212,631	229,906	232,294	232,135	255,045	277,880
Purchases	88,586	117,722	168,302	(NA)	(NA)	(NA)	(NA)	173,400	197,220
Labor costs	7,704	8,791	10,922	9,871	13,009	14,504	17,318	19,631	21,143
Materials and supplies	6,216	9,091	12,909	(NA)	(NA)	(NA)	(NA)	23,842	27,800
Commissions	1,274	2,226	3,333	(NA)	(NA)	(NA)	5,461	6,262	6,540
Salaries and wages (net)	15,107	20,228	26,561	31,666	34,886	38,266	38,691	42,330	43,007
Car and truck expenses	(NA)	(NA)	13,378	14,758	17,524	17,044	16,381	17,470	19,640
Rent paid	4,637	6,676	9,636	11,831	14,278	15,259	15,654	16,358	19,470
Repairs	2,445	3,044	5,032	(NA)	(NA)	(NA)	(NA)	7,438	8,104
Taxes paid	3,776	5,424	7,672	(NA)	(NA)	(NA)	(NA)	8,449	9,495
Utilities	(NA)	(NA)	4,790	(NA)	(NA)	(NA)	(NA)	13,362	14,618
Insurance	2,310	3,504	6,003	(NA)	(NA)	(NA)	10,783	11,719	12,528
Interest paid	1,784	3,391	7,190	9,926	11,025	11,914	11,504	11,616	12,071
Depreciation	5,452	7,958	13,953	22,070	23,900	26,291	26,418	25,657	26,078
Pension and profit sharing plans	73	125	141	123	258	311	638	548	450
<b>Net income (less loss)</b>	<b>30,537</b>	<b>39,637</b>	<b>54,947</b>	<b>60,359</b>	<b>70,767</b>	<b>78,773</b>	<b>90,423</b>	<b>105,461</b>	<b>126,323</b>
Businesses with net income	33,736	45,625	68,010	78,618	89,849	98,776	110,497	123,783	145,518

NA Not available. <sup>1</sup> Through 1980, includes both individually owned business and farm returns; thereafter, includes only nonfarm business returns. <sup>2</sup> Includes other amounts not shown separately.

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



## No. 864. Partnerships—Selected Items, by Industry: 1980 to 1988

[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 <sup>1 2</sup>	Total deductions <sup>2</sup>	Net income less loss <sup>2</sup>	Net income	Net loss
	Total	With net income	With net loss							
<b>All industries:</b>										
1980	1,380	774	605	8,420	597,504	285,967	283,749	8,249	45,062	36,813
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	1,648	865	783	16,963	1,381,297	411,457	423,499	-5,419	87,654	93,073
1988	1,654	901	753	17,291	1,580,194	463,956	464,991	14,493	111,384	96,892
<b>Agriculture, forestry, and fishing:</b>										
1980	126	72	54	381	24,595	21,611	22,859	472	2,539	2,067
1984	139	73	66	494	26,739	5,886	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	149	97	52	592	26,402	6,756	9,146	2,015	4,488	2,472
1988	122	80	42	555	24,106	8,988	11,602	1,079	3,827	2,748
<b>Mining:</b>										
1980	35	15	20	722	24,742	13,201	18,248	-4,208	3,920	8,128
1984	57	31	26	2,007	52,415	16,638	21,965	69	7,857	7,788
1985	62	33	30	2,207	66,930	19,922	21,920	1,482	7,884	6,402
1986	53	23	30	2,351	66,969	14,749	21,290	-3,458	5,214	8,672
1987	60	24	36	2,742	71,492	15,332	19,424	-1,360	5,698	7,058
1988	48	31	17	2,467	65,652	15,977	18,759	934	6,641	5,707
<b>Oil and gas extraction:</b>										
1980	31	14	17	686	18,881	9,252	13,659	-3,694	3,577	7,271
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	2,681	62,805	11,247	15,061	-1,295	5,109	6,403
1988	45	30	15	2,429	57,244	11,763	14,688	468	5,711	5,243
<b>Construction:</b>										
1980	67	51	16	160	9,811	18,407	17,202	1,560	2,119	559
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	17,077	26,295	24,293	2,766	3,350	584
1988	74	60	14	179	20,070	30,978	28,712	3,284	3,929	645
<b>Transportation and public utilities:</b>										
1980	20	11	10	73	9,291	5,868	5,821	248	1,092	844
1984	21	14	7	142	21,109	10,733	13,332	-2,007	1,280	3,268
1985	25	15	10	186	26,468	11,253	14,814	-3,066	1,360	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
1988	20	12	8	433	45,003	21,639	25,389	-2,292	2,951	5,244
<b>Manufacturing:</b>										
1980	30	20	10	92	11,252	15,327	16,142	-472	1,199	1,671
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	30,965	32,356	32,576	806	2,504	1,698
1988	26	12	14	173	41,714	43,724	43,345	1,540	3,598	2,058
<b>Wholesale and retail trade:</b>										
1980	200	123	77	487	17,727	65,793	63,988	2,475	3,374	900
1984	185	98	87	444	21,222	72,335	71,707	1,666	3,238	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	100	85	476	26,105	70,560	69,277	2,697	4,215	1,518
1988	180	104	76	490	26,512	83,640	56,375	3,351	4,742	1,391
<b>Finance, insurance, and real estate:</b>										
1980	637	313	325	5,566	454,531	87,133	91,382	-4,249	15,169	19,418
1984	791	350	441	7,408	770,457	94,362	113,606	-19,244	25,646	44,890
1985	844	369	475	7,755	979,787	92,309	118,237	-25,929	30,383	56,311
1986	853	350	503	9,459	1,068,220	112,594	145,574	-32,980	32,477	65,457
1987	828	365	463	10,327	1,040,671	123,239	139,480	-26,777	36,061	62,837
1988	869	398	471	10,880	1,200,673	115,415	127,356	-19,258	47,842	67,100
<b>Services:</b>										
1980	263	169	94	938	45,510	58,627	48,106	12,424	15,649	3,224
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	194	97	2,042	125,134	116,379	104,296	18,092	29,118	11,025
1988	296	197	99	2,060	154,548	141,909	126,505	25,639	37,527	11,888

<sup>1</sup> Business plus investment receipts for partnerships in finance, insurance, and real estate, and business receipts for all other industries through 1986. Beginning 1987, excludes gross income from rental real estate and other rental activities and portfolio income distributed directly to partners. <sup>2</sup> Beginning 1984, the agriculture, forestry, and fishing industries are based on revised collection procedures. See source for detail.

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

### No. 865. Partnership Returns—Selected Income Statement and Balance Sheet Items: 1970 to 1988

[In billions of dollars, except as indicated. Covers active partnerships only. All figures are estimates based on samples. See headnote, table 863. See also Appendix III and *Historical Statistics, Colonial Times to 1970*, series V 7-9]

ITEM	1970	1975	1980	1983	1984	1985	1986	1987	1988
<b>Partnerships, number (1,000)</b> . . . . .	<b>936</b>	<b>1,073</b>	<b>1,380</b>	<b>1,542</b>	<b>1,644</b>	<b>1,714</b>	<b>1,703</b>	<b>1,648</b>	<b>1,654</b>
Number with net income (1,000) . . . . .	640	661	774	784	845	876	851	865	901
Number with balance sheets (1,000) . . . . .	556	783	1,194	1,191	1,215	1,227	1,203	1,129	1,155
<b>Number of partners (1,000)</b> . . . . .	<b>3,698</b>	<b>4,951</b>	<b>8,420</b>	<b>10,589</b>	<b>12,427</b>	<b>13,245</b>	<b>15,229</b>	<b>16,963</b>	<b>17,291</b>
<b>Assets, total</b> <sup>1 2</sup> . . . . .	<b>116.8</b>	<b>235.5</b>	<b>597.5</b>	<b>887.0</b>	<b>1,030.8</b>	<b>1,269.4</b>	<b>1,403.8</b>	<b>1,381.3</b>	<b>1,580.2</b>
Depreciable assets (net) . . . . .	(NA)	113.1	239.1	345.9	581.6	695.9	779.9	567.5	621.2
Inventories, end of year . . . . .	(NA)	12.0	33.2	77.1	61.8	27.3	47.4	45.1	51.2
Land . . . . .	(NA)	36.7	70.2	98.4	122.0	152.2	179.1	177.9	200.3
<b>Liabilities, total</b> <sup>1</sup> . . . . .	<b>(NA)</b>	<b>193.9</b>	<b>488.7</b>	<b>745.2</b>	<b>855.4</b>	<b>1,269.4</b>	<b>1,175.7</b>	<b>1,385.7</b>	<b>1,580.2</b>
Accounts payable . . . . .	(NA)	12.3	33.9	34.7	32.8	46.9	43.6	41.3	48.9
Short-term debt <sup>3</sup> . . . . .	(NA)	22.7	48.0	67.3	68.6	102.8	92.5	81.7	86.6
Long-term debt <sup>4</sup> . . . . .	(NA)	536.3	178.0	268.3	322.3	382.0	429.2	429.9	473.6
Nonrecourse loans . . . . .	(NA)	( <sup>5</sup> )	118.9	194.8	260.2	327.6	365.0	388.4	436.9
Partner's capital accounts . . . . .	(NA)	41.6	108.8	141.8	175.5	200.2	228.0	247.4	267.1
<b>Total receipts</b> <sup>1 6 7</sup> . . . . .	<b>93.3</b>	<b>148.4</b>	<b>292.0</b>	<b>291.3</b>	<b>375.2</b>	<b>367.1</b>	<b>397.3</b>	<b>473.8</b>	<b>540.2</b>
Business receipts . . . . .	90.2	142.5	271.1	243.2	318.3	302.7	327.4	411.5	464.0
Interest received <sup>8</sup> . . . . .	0.9	2.4	10.9	15.0	16.7	20.6	21.7	17.9	19.0
<b>Deductions, total</b> <sup>1 7</sup> . . . . .	<b>83.6</b>	<b>140.7</b>	<b>283.7</b>	<b>293.9</b>	<b>378.7</b>	<b>376.0</b>	<b>414.7</b>	<b>423.5</b>	<b>465.0</b>
Cost of goods sold/operations . . . . .	46.0	64.7	113.9	125.3	180.9	146.3	164.2	237.2	252.6
Salaries and wages . . . . .	8.1	12.5	22.3	24.7	28.5	33.9	36.3	40.7	47.1
Taxes paid . . . . .	3.2	5.8	9.6	5.9	6.7	7.7	7.9	6.9	8.0
Interest paid . . . . .	4.5	12.1	28.4	22.4	25.4	28.7	29.5	20.0	23.2
Depreciation . . . . .	4.6	10.1	21.6	37.3	19.8	22.6	23.4	19.3	19.8
<b>Net income (less loss)</b> . . . . .	<b>9.8</b>	<b>7.7</b>	<b>8.2</b>	<b>-2.6</b>	<b>-3.5</b>	<b>-8.9</b>	<b>-17.4</b>	<b>-5.4</b>	<b>14.5</b>
Businesses with net income . . . . .	14.4	22.4	45.1	60.3	69.7	77.0	80.2	87.7	111.4

NA Not available. <sup>1</sup> Includes other amounts not shown separately. <sup>2</sup> Total assets, total liabilities, and partner's capital accounts are somewhat understated because not all partnership returns filed contained a complete balance sheet. <sup>3</sup> Represents mortgages, notes, and bonds payable in less than 1 year. <sup>4</sup> Represents mortgages, notes, and bonds payable in 1 year or more. <sup>5</sup> Tax year 1975 long-term debt included nonrecourse loans. <sup>6</sup> Beginning 1987, excludes gross income from rental real estate and other rental activities and portfolio income distributed directly to partners. <sup>7</sup> Beginning 1987, receipts, deductions, and net income from trade or business only. Except for total receipts, excludes income and expenses related to certain investment activities. See source for detail. <sup>8</sup> Beginning 1983, includes both interest and dividends.

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

### No. 866. Corporate Funds—Sources and Uses: 1970 to 1989

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

SOURCE AND USE	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989
<b>Sources, total.</b> . . . . .	<b>101.8</b>	<b>155.5</b>	<b>323.3</b>	<b>419.2</b>	<b>495.0</b>	<b>457.3</b>	<b>510.7</b>	<b>488.3</b>	<b>498.4</b>	<b>516.2</b>
Internal . . . . .	62.8	124.8	200.1	285.7	336.3	352.3	344.9	352.8	372.5	369.7
Domestic undistributed profits . . . . .	7.6	36.4	53.7	22.2	41.8	16.7	-10.4	7.5	19.4	3.1
IVA and CCA <sup>1</sup> . . . . .	-1.6	-17.9	59.2	5.1	25.1	53.5	56.3	25.8	13.9	3.0
Capital consumption allowances . . . . .	49.9	91.9	171.3	228.2	238.4	251.0	265.9	280.2	295.6	315.8
Foreign earnings <sup>2</sup> . . . . .	6.9	14.4	34.4	30.2	30.9	31.1	33.1	39.1	43.6	47.8
External <sup>3</sup> . . . . .	39.0	30.8	123.1	133.5	158.7	105.0	165.8	133.6	125.9	146.5
Percent of total . . . . .	38.3	19.8	38.1	31.8	32.1	23.0	32.5	27.5	25.3	28.4
Credit market funds . . . . .	34.2	23.1	70.7	78.3	95.1	50.9	123.0	69.0	67.0	65.3
Securities and mortgages . . . . .	26.3	39.4	30.5	44.6	-9.1	-3.0	58.9	38.1	-2.2	-13.0
Equity issues . . . . .	5.7	9.9	12.9	23.5	-74.5	-81.5	-80.8	-76.5	-130.5	-130.8
Bonds and mortgages <sup>4</sup> . . . . .	20.6	29.5	17.6	21.1	65.4	78.5	139.7	114.6	128.3	117.7
Loans and short-term paper . . . . .	7.8	-16.3	40.2	33.7	104.2	53.9	64.0	30.9	69.3	78.3
Other . . . . .	4.9	7.7	52.5	55.2	63.6	54.1	42.9	64.6	58.8	81.2
Profit taxes payable . . . . .	-3.7	-1.1	-0.8	6.7	4.4	-0.4	3.6	-0.7	-1.9	1.9
Trade debt . . . . .	7.1	6.2	38.0	37.0	33.7	34.0	3.1	18.0	3.2	19.8
Foreign direct investments in U.S . . . . .	1.5	2.6	15.3	11.5	25.6	20.5	36.1	47.3	57.6	59.5
<b>Uses, total.</b> . . . . .	<b>99.5</b>	<b>152.8</b>	<b>341.6</b>	<b>392.0</b>	<b>473.0</b>	<b>422.9</b>	<b>448.2</b>	<b>453.9</b>	<b>473.4</b>	<b>479.0</b>
Capital expenditures . . . . .	80.8	111.7	243.2	269.9	367.9	339.9	328.8	348.3	380.4	384.7
Increase in financial assets . . . . .	18.7	41.1	98.4	122.1	105.1	83.0	119.3	105.6	92.9	94.4
<b>Discrepancy (sources less uses)</b> . . . . .	<b>2.3</b>	<b>2.7</b>	<b>-18.3</b>	<b>27.2</b>	<b>22.0</b>	<b>34.4</b>	<b>62.6</b>	<b>32.4</b>	<b>25.0</b>	<b>37.2</b>

<sup>1</sup> Inventory valuation and capital consumption adjustment. <sup>2</sup> Foreign branch profits, dividends, and subsidiaries' earnings retained abroad. <sup>3</sup> Net increases in liability. <sup>4</sup> 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. 867. Nonfinancial Corporate Business-Sector Balance Sheet: 1970 to 1989**

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

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Total assets</b>	<b>1,305</b>	<b>2,210</b>	<b>4,004</b>	<b>4,479</b>	<b>4,650</b>	<b>4,868</b>	<b>5,204</b>	<b>5,444</b>	<b>5,735</b>	<b>6,073</b>	<b>6,425</b>	<b>6,799</b>
Tangible assets (current cost)	935	1,652	2,988	3,363	3,508	3,811	3,850	4,000	4,159	4,385	4,642	4,876
Reproducible	823	1,487	2,671	2,993	3,107	3,186	3,386	3,505	3,632	3,831	4,084	4,272
Land	112	164	318	370	401	425	464	495	527	554	577	604
Financial assets	370	559	1,015	1,116	1,142	1,257	1,355	1,444	1,576	1,688	1,784	1,863
Liquid assets <sup>1</sup>	69	125	197	220	267	302	326	354	429	437	472	484
Checkable deposits and currency	44	54	57	47	53	62	74	94	114	104	120	113
Time deposits	5	22	38	48	59	71	74	80	88	92	100	96
Consumer credit	15	20	25	25	25	29	31	32	32	35	37	39
Mutual fund shares	1	1	2	2	3	5	7	13	16	13	12	21
Trade credit	191	252	482	507	492	544	592	634	650	717	733	741
Miscellaneous assets	94	160	310	361	354	377	398	412	448	486	528	578
<b>Total liabilities</b>	<b>537</b>	<b>752</b>	<b>1,289</b>	<b>1,435</b>	<b>1,486</b>	<b>1,618</b>	<b>1,856</b>	<b>2,043</b>	<b>2,286</b>	<b>2,509</b>	<b>2,753</b>	<b>3,004</b>
Credit market instruments	352	533	828	925	966	1,044	1,217	1,354	1,556	1,712	1,899	2,096
Profit taxes payable	11	15	30	24	14	19	22	18	20	18	15	15
Trade debt	160	177	348	376	381	418	452	486	489	507	510	505
Foreign direct investment in U.S.	13	28	83	109	125	137	165	185	220	272	329	389
<b>Net worth</b>	<b>768</b>	<b>1,458</b>	<b>2,714</b>	<b>3,044</b>	<b>3,163</b>	<b>3,250</b>	<b>3,348</b>	<b>3,401</b>	<b>3,449</b>	<b>3,564</b>	<b>3,672</b>	<b>3,795</b>

<sup>1</sup> Includes other assets not shown separately.Source: Board of Governors of the Federal Reserve System, *Balance Sheets for the U.S. Economy*.**No. 868. Corporation Income Tax Returns—Selected Financial Items: 1970 to 1987**[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 compatibility 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	1982	1983	1984	1985	1986	1987
<b>Number of returns, total (1,000)</b>	<b>1,665</b>	<b>2,024</b>	<b>2,711</b>	<b>2,926</b>	<b>2,999</b>	<b>3,171</b>	<b>3,277</b>	<b>3,429</b>	<b>3,612</b>
Number with net income (1,000)	1,008	1,226	1,597	1,808	1,676	1,778	1,820	1,908	1,995
S Corporation returns <sup>1</sup> (1,000)	257	358	545	564	648	701	725	826	1,128
<b>BALANCE SHEET</b>									
<b>Assets, total<sup>2</sup></b>	<b>2,635</b>	<b>4,287</b>	<b>7,617</b>	<b>9,358</b>	<b>10,201</b>	<b>11,107</b>	<b>12,773</b>	<b>14,163</b>	<b>15,311</b>
Cash	177	290	529	541	590	596	683	763	754
Notes and accounts receivable	615	1,052	1,985	2,420	2,677	2,897	3,318	3,594	3,763
Inventories	190	318	535	581	599	664	715	733	829
Investments in Government obligations	197	316	472	606	685	726	917	1,059	1,092
Mortgage and real estate	328	548	894	942	982	1,127	1,259	1,377	1,455
Other investments	401	626	1,214	1,605	1,798	1,973	2,414	2,846	3,227
Depreciable assets	869	1,277	2,107	2,583	2,730	2,913	3,174	3,383	3,603
Depletable assets	19	39	72	95	108	115	112	116	123
Land	47	67	93	110	119	128	141	150	159
<b>Liabilities<sup>2</sup></b>	<b>2,635</b>	<b>4,287</b>	<b>7,617</b>	<b>9,358</b>	<b>10,201</b>	<b>11,107</b>	<b>12,773</b>	<b>14,163</b>	<b>15,311</b>
Accounts payable	149	263	542	679	671	741	892	909	998
Mortgages, notes, and bonds, short-term <sup>3</sup>	171	272	505	667	760	867	1,001	1,084	1,247
Mortgages, notes, and bonds, long-term <sup>4</sup>	363	587	987	1,224	1,323	1,494	1,699	1,958	2,141
Capital stock	201	252	417	658	787	839	920	1,191	1,292
Paid-in or capital surplus	197	299	532	782	874	1,068	1,421	1,726	1,988
Retained earnings	368	568	1,070	1,228	1,274	1,308	1,366	1,394	1,341
<b>Net worth</b>	<b>752</b>	<b>1,097</b>	<b>1,944</b>	<b>2,470</b>	<b>2,645</b>	<b>2,864</b>	<b>3,304</b>	<b>3,698</b>	<b>3,947</b>
<b>INCOME STATEMENT</b>									
<b>Receipts, total<sup>5</sup></b>	<b>1,751</b>	<b>3,199</b>	<b>6,361</b>	<b>7,024</b>	<b>7,135</b>	<b>7,861</b>	<b>8,398</b>	<b>8,669</b>	<b>9,185</b>
Business receipts <sup>6</sup>	1,621	2,962	5,732	6,157	6,395	6,948	7,370	7,535	8,415
Interest <sup>7</sup>	72	143	367	530	511	580	635	662	706
Rents and royalties	17	27	54	83	83	90	105	110	113
<b>Deductions, total<sup>8</sup></b>	<b>1,683</b>	<b>3,053</b>	<b>6,125</b>	<b>6,869</b>	<b>6,945</b>	<b>7,629</b>	<b>8,158</b>	<b>8,395</b>	<b>9,244</b>
Cost of sales and operations	1,146	2,130	4,205	4,271	4,308	4,693	4,894	4,923	5,596
Compensation of officers	33	58	109	129	141	157	171	185	200
Rent paid on business property	24	41	72	95	105	119	135	145	154
Taxes paid	50	82	163	166	173	192	201	203	211
Interest paid	62	129	345	515	475	536	569	573	590
Depreciation	53	86	157	213	241	265	304	313	317
Advertising	18	27	52	65	72	82	92	99	107
<b>Net income (less loss), total<sup>9</sup></b>	<b>66</b>	<b>143</b>	<b>239</b>	<b>154</b>	<b>188</b>	<b>233</b>	<b>240</b>	<b>270</b>	<b>328</b>
Net income	84	169	297	274	297	349	364	409	465
Deficit	18	26	58	120	109	116	124	139	137
<b>TAX ITEMS</b>									
Income subject to tax	72	147	247	205	219	257	266	276	312
Income tax before credits <sup>9</sup>	33	66	104	85	90	106	109	109	115
<b>Tax credits, total<sup>2</sup></b>	<b>5</b>	<b>26</b>	<b>42</b>	<b>40</b>	<b>40</b>	<b>44</b>	<b>48</b>	<b>37</b>	<b>21</b>
Foreign tax credit	5	20	25	19	20	21	24	21	21
<b>Income tax after credits<sup>9</sup></b>	<b>28</b>	<b>39</b>	<b>62</b>	<b>45</b>	<b>51</b>	<b>62</b>	<b>61</b>	<b>72</b>	<b>84</b>

<sup>1</sup> 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. <sup>2</sup> Includes items not shown separately. <sup>3</sup> Payable in less than 1 year. <sup>4</sup> Payable in one year or more. <sup>5</sup> Appropriated and unappropriated. <sup>6</sup> For 1987, receipts, deductions and net income of S corporations (footnote 1) limited to those from trade or business. Except for total receipts, excludes income and expenses related to certain investment activities. <sup>7</sup> For 1987, includes sales and cost of sales of securities, commodities and real estate by exchanges, brokers or dealers selling on their own account. <sup>8</sup> Includes tax-exempt interest on Government obligations issued by U.S., State, and local governments. <sup>9</sup> Consists of regular (and alternative tax); excludes minimum tax and adjustments for certain prior year credits.

Tax year 1970 includes surcharge of \$784 million.

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

# **No. 869. Corporation Income Tax Returns—Financial Summary, by Industry: 1970 to 1987**

[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	1982	1983	1984	1985	1986	1987
<b>Agriculture, forestry, and fishing:</b>								
Returns (1,000) . . . . .	37	81	91	92	98	103	107	117
Assets . . . . .	11.9	40.7	50.4	50.3	50.7	52.7	53.5	55.4
Liabilities . . . . .	7.9	29.3	36.3	36.7	38.4	37.2	38.4	37.2
Receipts <sup>2</sup> . . . . .	14.3	52.1	65.4	59.2	66.6	70.5	77.5	77.1
Deductions <sup>2</sup> . . . . .	14.2	51.4	65.4	59.4	66.4	70.6	76.3	75.4
Net income (less loss) <sup>2</sup> . . . . .	0.1	0.7	(-2)	-0.2	0.2	-0.1	1.1	1.6
<b>Mining:</b>								
Returns (1,000) . . . . .	14	26	37	37	41	41	40	42
Assets . . . . .	24.0	126.9	192.4	194.4	209.0	240.8	206.1	220.1
Liabilities <sup>1</sup> . . . . .	10.6	72.9	112.5	108.8	114.7	136.0	107.5	110.6
Receipts <sup>2</sup> . . . . .	17.7	176.7	203.1	132.4	123.5	142.0	98.6	96.8
Deductions <sup>2</sup> . . . . .	15.1	169.1	203.0	134.3	124.6	145.4	102.1	96.7
Net income (less loss) <sup>2</sup> . . . . .	1.8	7.8	0.5	-1.6	-0.4	-2.5	-3.1	0.3
<b>Construction:</b>								
Returns (1,000) . . . . .	139	272	282	284	307	318	342	371
Assets . . . . .	42.7	132.9	153.1	161.4	195.3	215.3	218.9	222.1
Liabilities <sup>1</sup> . . . . .	30.9	100.1	114.2	119.8	144.9	160.6	166.1	168.1
Receipts <sup>2</sup> . . . . .	90.6	267.2	281.7	290.8	338.6	387.2	412.5	454.8
Deductions <sup>2</sup> . . . . .	89.1	262.1	279.6	288.6	335.7	382.8	406.7	446.1
Net income (less loss) <sup>2</sup> . . . . .	1.5	5.3	2.3	2.3	2.9	4.4	5.8	8.7
<b>Manufacturing:</b>								
Returns (1,000) . . . . .	198	243	259	262	272	277	285	294
Assets . . . . .	612.9	1,709.5	2,060.7	2,233.0	2,417.6	2,644.4	2,931.6	3,111.7
Liabilities <sup>1</sup> . . . . .	304.0	960.3	1,163.8	1,279.9	1,392.6	1,544.7	1,807.2	1,920.0
Receipts <sup>2</sup> . . . . .	723.0	2,404.3	2,488.3	2,552.8	2,768.2	2,831.1	2,810.7	3,141.4
Deductions <sup>2</sup> . . . . .	692.5	2,290.6	2,423.3	2,469.3	2,661.2	2,733.1	2,723.7	3,012.1
Net income (less loss) <sup>2</sup> . . . . .	31.8	125.7	75.8	95.3	121.2	113.8	101.8	145.5
<b>Transportation and public utilities:</b>								
Returns (1,000) . . . . .	87	111	115	123	128	138	138	148
Assets . . . . .	287.7	758.4	919.9	998.9	1,084.9	1,246.4	1,310.2	1,352.5
Liabilities <sup>1</sup> . . . . .	168.5	467.7	567.0	604.6	660.9	755.9	807.7	842.4
Receipts <sup>2</sup> . . . . .	135.5	523.8	632.3	657.4	725.6	772.4	762.2	786.2
Deductions <sup>2</sup> . . . . .	127.9	504.0	614.4	638.2	697.2	747.8	740.7	749.0
Net income (less loss) <sup>2</sup> . . . . .	7.5	20.0	18.3	19.5	28.9	25.1	21.0	37.5
<b>Wholesale and retail trade:</b>								
Returns (1,000) . . . . .	518	800	840	852	897	917	939	972
Assets . . . . .	192.2	646.9	753.4	804.2	899.0	1,010.0	1,073.5	1,177.7
Liabilities <sup>1</sup> . . . . .	115.2	424.6	501.9	539.0	609.7	723.7	773.4	861.2
Receipts <sup>2</sup> . . . . .	522.5	1,955.5	2,017.7	2,119.4	2,307.6	2,473.9	2,547.4	2,766.7
Deductions <sup>2</sup> . . . . .	512.9	1,919.5	1,989.7	2,084.5	2,265.8	2,440.4	2,512.1	2,728.5
Net income (less loss) <sup>2</sup> . . . . .	9.7	35.8	28.4	35.3	42.0	33.1	34.0	38.0
<b>Finance, insurance, and real estate:</b>								
Returns (1,000) . . . . .	406	493	462	480	497	518	537	521
Assets . . . . .	1,401.2	4,022.2	4,987.5	5,487.2	5,939.0	7,029.5	7,985.6	8,732.3
Liabilities <sup>1</sup> . . . . .	1,204.7	3,491.7	4,220.5	4,670.4	5,037.3	5,867.5	6,483.4	7,097.4
Receipts <sup>2</sup> . . . . .	177.3	697.5	949.9	902.8	1,033.1	1,182.0	1,365.1	1,589.2
Deductions <sup>2</sup> . . . . .	161.6	652.6	915.2	856.7	985.7	1,104.6	1,245.5	1,476.7
Net income (less loss) <sup>2</sup> . . . . .	12.2	33.1	21.8	31.7	32.7	60.7	98.6	87.4
<b>Services:</b>								
Returns (1,000) . . . . .	281	671	820	848	899	939	1,012	1,120
Assets . . . . .	61.9	178.2	237.9	269.8	307.9	331.0	381.6	435.6
Liabilities <sup>1</sup> . . . . .	42.3	125.3	170.1	198.1	223.1	241.1	281.4	323.1
Receipts <sup>2</sup> . . . . .	69.6	279.9	380.8	416.5	490.3	534.6	591.9	663.1
Deductions <sup>2</sup> . . . . .	68.4	271.8	373.7	410.5	485.0	528.7	584.3	654.0
Net income (less loss) <sup>2</sup> . . . . .	1.2	8.2	7.2	6.0	5.5	5.9	7.0	9.3
<b>ANNUAL PERCENT CHANGE <sup>3</sup></b>								
<b>Receipts:</b>								
Agriculture, forestry, and fishing . . . . .	17.7	-2.4	0.5	-9.4	12.6	5.9	9.9	-0.5
Mining . . . . .	9.3	33.3	1.5	-34.8	-6.7	15	-30.6	-1.8
Construction . . . . .	8.0	5.7	0.6	3.2	16.4	14.4	6.5	10.2
Manufacturing . . . . .	1.8	11.7	-4.8	2.6	8.4	2.3	-0.7	11.7
Transportation and public utilities . . . . .	8.2	17.5	5.6	4.0	10.3	6.4	-1.3	3.1
Wholesale and retail trade . . . . .	2.8	11.6	-1.1	5.0	8.9	7.2	3.0	8.6
Finance, insurance, and real estate . . . . .	7.9	24.3	8.2	-5.0	14.4	14.4	15.5	16.4
Services . . . . .	15.9	14.2	9.8	9.4	17.7	9.0	10.7	12.0

Z Less than half the measure. <sup>1</sup> Liabilities does not include net worth. <sup>2</sup> For 1987, receipts, deductions and net income of S corporations limited to those from trade or business; those from investments are generally excluded. For definition of S corporation, see table 868, footnote 1. <sup>3</sup> Change from preceding year.

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

## No. 870. Corporation Income Tax Returns, by Asset Size-Class and Industry: 1987

[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. See table 868. 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. <sup>1</sup>	10 to 24.9 mil. dol.	25 to 49.9 mil. dol.	50 to 99.9 mil. dol.	100 to 249.9 mil. dol.	250 mil. dol. and over
<b>Agriculture, forestry, and fishing:</b>							
Returns	116,544	116,142	259	78	41	19	6
Assets	55,375	40,070	4,077	2,667	2,898	3,023	2,640
Receipts	77,057	57,770	5,482	3,134	4,034	3,970	2,657
Deductions	75,423	56,747	5,366	3,054	3,856	3,863	2,537
Net income (less loss)	1,627	1,016	127	81	177	107	119
<b>Mining:</b>							
Returns	42,050	41,164	433	192	111	80	71
Assets	220,137	15,377	6,424	6,876	10,139	21,524	159,798
Receipts	96,806	18,901	4,405	4,360	6,281	12,179	50,681
Deductions	96,661	18,959	4,496	4,340	5,991	12,083	50,792
Net income (less loss)	275	-64	-95	13	294	96	32
<b>Construction:</b>							
Returns	371,169	368,900	1,634	379	152	66	38
Assets	222,065	124,821	24,145	12,787	10,626	10,728	38,957
Receipts	454,831	333,330	40,401	19,110	13,921	17,135	30,934
Deductions	446,097	327,071	39,145	18,578	13,559	17,350	30,393
Net income (less loss)	8,701	6,237	1,245	525	356	-225	564
<b>Manufacturing:</b>							
Returns	294,211	284,213	5,401	1,883	1,006	787	922
Assets	3,111,709	189,753	83,716	65,883	70,838	123,571	2,577,948
Receipts	3,141,406	455,168	148,589	100,830	98,258	157,374	2,181,187
Deductions	3,012,111	447,941	143,731	96,892	93,207	150,205	2,080,135
Net income (less loss)	145,494	7,244	4,850	3,937	5,086	7,343	117,034
<b>Transportation and public utilities:</b>							
Returns	147,893	145,853	996	370	174	177	324
Assets	1,352,513	50,318	14,796	13,287	12,175	35,792	1,226,146
Receipts	786,179	122,368	18,101	10,814	10,884	28,009	598,004
Deductions	749,025	121,673	18,073	10,641	10,840	25,299	562,500
Net income (less loss)	37,467	695	27	177	51	693	35,826
<b>Wholesale and retail trade:</b>							
Returns	971,758	963,973	5,093	1,310	635	405	342
Assets	1,177,669	382,349	76,521	45,686	44,072	64,305	564,737
Receipts	2,766,717	1,332,905	217,856	117,668	108,773	154,476	835,038
Deductions	2,728,491	1,321,461	214,330	115,984	106,706	152,123	817,888
Net income (less loss)	38,040	11,409	3,518	1,715	2,055	2,390	16,952
<b>Finance, insurance, and real estate:</b>							
Returns	521,136	497,685	7,862	5,417	4,061	3,161	2,951
Assets	8,732,320	193,595	128,372	195,487	285,235	493,141	7,436,490
Receipts	1,589,218	196,015	36,398	42,095	54,098	89,638	1,170,975
Deductions	1,476,737	191,849	35,910	40,234	51,169	82,443	1,075,132
Net income (less loss)	67,403	3,941	174	1,258	1,903	5,539	74,588
<b>Services:</b>							
Returns	1,119,604	1,116,497	1,824	595	319	231	140
Assets	435,562	165,125	29,758	20,857	22,329	36,649	160,843
Receipts	663,133	445,714	31,432	23,139	24,045	31,865	106,939
Deductions	653,954	440,347	31,380	22,651	23,289	31,719	104,568
Net income (less loss)	9,252	5,334	57	498	764	139	2,460
<b>PERCENT DISTRIBUTION RECEIPTS</b>							
Agriculture, forestry, and fishing	100.0	75.0	7.1	4.1	5.2	5.2	3.4
Mining	100.0	19.5	4.6	4.5	6.5	12.6	52.4
Construction	100.0	73.3	8.9	4.2	3.1	3.8	6.8
Manufacturing	100.0	14.5	4.7	3.2	3.1	5.0	69.4
Transportation and public utilities	100.0	15.6	2.3	1.4	1.4	3.3	76.1
Wholesale and retail trade	100.0	48.2	7.9	4.3	3.9	5.6	30.2
Finance, insurance, and real estate	100.0	12.3	2.3	2.6	3.4	5.6	73.7
Services	100.0	67.2	4.7	3.5	3.6	4.8	16.1

<sup>1</sup> Includes returns with zero assets.

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

**No. 871. Employees and Payroll, by Employment-Size Class: 1975 to 1987**

[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	1975	1980	1981	1982	1983	1984	1985	1986	1987
<b>Employees, total</b> <sup>1</sup>	<b>1,000</b>	<b>60,519</b>	<b>74,844</b>	<b>74,848</b>	<b>74,287</b>	<b>72,974</b>	<b>75,021</b>	<b>81,111</b>	<b>83,379</b>	<b>85,484</b>
Under 20 employees	1,000	16,393	19,423	19,515	19,898	20,136	21,171	21,810	22,296	23,069
20 to 99 employees	1,000	16,272	21,168	21,231	21,143	20,806	22,449	23,539	24,311	25,221
100 to 499 employees	1,000	13,713	17,840	17,977	17,444	16,794	18,348	19,410	20,260	20,615
500 to 999 employees	1,000	4,872	5,689	5,497	5,436	5,186	5,614	5,716	5,780	5,922
1,000 or more employees	1,000	9,315	10,716	10,630	10,376	10,050	10,413	10,645	10,734	10,657
<b>Annual payroll</b> <sup>1</sup>	<b>Bil. dol.</b>	<b>596</b>	<b>1,035</b>	<b>1,076</b>	<b>1,198</b>	<b>1,269</b>	<b>1,339</b>	<b>1,514</b>	<b>1,608</b>	<b>1,724</b>
Under 20 employees	Bil. dol.	138	231	254	272	298	326	352	375	414
20 to 99 employees	Bil. dol.	147	261	288	303	319	358	388	414	449
100 to 499 employees	Bil. dol.	135	249	279	286	297	334	362	391	417
500 to 999 employees	Bil. dol.	53	91	99	104	107	120	126	132	140
1,000 or more employees	Bil. dol.	123	208	229	234	248	269	286	298	305

<sup>1</sup> Prior to 1987, 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. 872. Establishments, Employees, and Payroll, by Industry: 1975 to 1987**

[See headnote, table 871]

INDUSTRY	ESTABLISHMENTS (1,000)				EMPLOYEES (1,000)				PAYROLL (bil. dol.)			
	1975	1980	1985	1987	1975	1980	1985	1987	1975	1980	1985	1987
<b>All industries</b> <sup>1</sup>	<b>4,114</b>	<b>4,543</b>	<b>5,701</b>	<b>5,937</b>	<b>60,519</b>	<b>74,844</b>	<b>81,111</b>	<b>85,484</b>	<b>596</b>	<b>1,035</b>	<b>1,514</b>	<b>1,724</b>
Agricultural services <sup>2</sup>	40	46	64	76	195	290	380	438	2	3	5	6
Mining	24	30	37	33	720	994	943	725	10	22	28	23
Contract construction	364	418	476	558	3,322	4,473	4,480	4,884	44	75	98	113
Manufacturing <sup>3</sup>	306	319	358	371	18,372	21,165	19,429	19,003	213	355	458	484
Transportation <sup>3</sup>	147	168	203	228	3,908	4,623	4,809	5,107	51	88	123	138
Wholesale trade	350	365	438	466	4,332	5,211	5,624	5,820	52	89	130	146
Retail trade	1,190	1,223	1,407	1,516	12,271	15,047	16,852	18,417	76	124	179	205
Finance and insurance <sup>4</sup>	372	421	488	536	4,247	5,295	6,004	6,727	42	77	132	170
Services	1,118	1,278	1,712	1,980	12,655	17,186	21,549	24,140	102	197	346	433

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

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

**No. 873. Establishments, Employees, and Payroll, by Employment-Size Class and Industry: 1987**

[See headnote, table 871]

EMPLOYMENT SIZE-CLASS	Unit	All industries <sup>1</sup>	Agricultural services <sup>2</sup>	Mining	Contract construction	Manufacturing	Transportation <sup>3</sup>	Wholesale trade	Retail trade	Finance and insurance <sup>4</sup>	Services
<b>Establishments, total</b>	<b>1,000</b>	<b>5,937</b>	<b>76</b>	<b>33</b>	<b>558</b>	<b>371</b>	<b>228</b>	<b>466</b>	<b>1,516</b>	<b>536</b>	<b>1,980</b>
Under 20 employees	1,000	5,186	72	27	510	244	187	401	1,299	479	1,797
20 to 99 employees	1,000	628	3	5	44	90	33	59	196	47	148
100 to 499 employees	1,000	109	(Z)	1	5	32	7	6	20	8	30
500 to 999 employees	1,000	9	(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
<b>Employees, total</b>	<b>1,000</b>	<b>85,484</b>	<b>438</b>	<b>725</b>	<b>4,884</b>	<b>19,003</b>	<b>5,107</b>	<b>5,820</b>	<b>18,417</b>	<b>6,727</b>	<b>24,140</b>
Under 20 employees	1,000	23,069	252	129	2,071	1,475	881	2,129	6,719	1,931	7,308
20 to 99 employees	1,000	25,221	114	206	1,667	3,949	1,377	2,238	7,783	1,887	5,951
100 to 499 employees	1,000	20,615	52	239	818	6,493	1,362	1,095	3,319	1,501	5,716
500 to 999 employees	1,000	5,922	12	81	128	2,405	430	201	358	496	1,811
1,000 or more employees	1,000	10,657	8	70	200	4,681	1,037	157	238	912	3,355
<b>Annual payroll</b>	<b>Bil. dol.</b>	<b>1,724</b>	<b>6.5</b>	<b>23.5</b>	<b>113.1</b>	<b>484.1</b>	<b>137.5</b>	<b>146.2</b>	<b>205.1</b>	<b>170.4</b>	<b>432.6</b>
Under 20 employees	Bil. dol.	414	3.8	3.4	42.1	30.6	18.3	49.9	72.3	44.6	144.8
20 to 99 employees	Bil. dol.	449	1.6	6.0	40.4	85.2	33.2	55.0	81.0	46.7	99.0
100 to 499 employees	Bil. dol.	417	0.7	8.3	22.0	149.1	38.3	30.1	40.8	38.4	88.8
500 to 999 employees	Bil. dol.	140	(Z)	3.0	3.4	62.4	13.6	6.2	6.0	13.0	32.0
1,000 or more employees	Bil. dol.	305	(Z)	2.9	5.2	156.8	34.2	5.0	5.0	27.7	68.0

<sup>2</sup> Less than 500 establishments or \$500 million. <sup>1</sup> Includes nonclassifiable establishments not shown separately. <sup>2</sup> Includes forestry and fisheries. <sup>3</sup> Includes other public utilities. <sup>4</sup> Includes real estate.

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

## No. 874. Women-Owned Firms—Major Industry Statistics: 1982 and 1987

SIC <sup>1</sup> code	INDUSTRY	1982		1987					
		Women-owned firms		All firms		Women-owned firms			
		Number of firms (1,000)	Sales and receipts (mil. dol.)	Number of firms (1,000)	Sales and receipts (mil. dol.)	Number of firms (1,000)	Sales and receipts (mil. dol.)	Employees <sup>2,3</sup> (1,000)	Annual payroll <sup>2</sup> (mil. dol.)
(X)	<b>All industries<sup>4</sup></b>	<b>2,612.6</b>	<b>98,292</b>	<b>13,695.5</b>	<b>1,664,808</b>	<b>4,114.8</b>	<b>278,138</b>	<b>3,102.7</b>	<b>40,885</b>
(A)	Agriculture <sup>5</sup>	19.5	686	357.0	20,585	48.0	1,933	24.7	298
(B)	Mining	19.8	2,221	121.1	15,084	26.4	1,934	12.0	272
(C)	Construction	59.0	4,565	1,651.1	232,372	94.3	20,302	180.3	3,985
15	General building contractors	11.1	1,483	354.4	86,562	21.3	7,625	46.7	982
17	Special trade contractors	44.9	2,497	1,233.2	105,185	67.1	9,152	113.4	2,441
(D)	Manufacturing <sup>4</sup>	44.9	5,303	433.0	226,824	94.0	30,914	363.9	6,950
23	Apparel and other textile products	4.7	526	32.9	16,235	17.9	2,641	54.5	647
27	Printing and publishing	13.0	847	74.9	24,440	19.7	3,999	53.4	1,065
(E)	Transportation, public utilities <sup>4</sup>	38.9	3,229	592.8	76,355	79.8	10,936	106.4	1,798
42	Trucking and warehousing	16.2	1,342	358.3	40,866	27.4	4,654	48.9	953
47	Transportation services	13.7	1,282	87.3	14,043	30.4	3,968	24.9	358
(F)	Wholesale trade	32.1	9,190	439.2	298,264	82.5	42,805	187.8	4,089
(G)	Retail trade <sup>4</sup>	631.3	35,861	2,241.5	544,768	798.7	85,418	1,090.7	9,764
54	Food stores	36.8	6,047	198.2	79,112	48.5	14,428	140.5	1,232
55	Auto dealers, service stations	14.0	4,754	217.2	211,843	20.9	20,224	86.8	1,615
56	Apparel accessory stores	27.7	2,446	93.4	18,327	40.6	5,216	71.8	600
58	Eating and drinking places	66.2	6,884	325.8	73,114	90.8	14,167	507.5	3,214
(H)	Finance, insurance, real estate <sup>4</sup>	246.4	6,370	1,227.2	123,710	437.4	17,833	109.3	1,861
64	Insurance agents, brokers	29.2	882	309.1	22,106	53.2	2,306	20.7	397
65	Real estate <sup>6</sup>	212.0	4,733	734.0	68,541	335.4	12,641	69.2	1,010
(I)	Services <sup>4</sup>	1,284.8	26,278	5,937.7	417,105	2,269.0	61,123	1,016.0	11,625
70	Hotels and other lodging places	17.5	1,671	75.1	26,380	22.2	3,201	76.5	715
72	Personal services	394.6	5,500	1,081.8	30,196	561.7	10,289	203.1	1,756
73	Business services	(NA)	(NA)	1,834.8	98,137	690.5	18,936	302.5	3,787
75	Auto repair, services, and garages	11.0	929	348.7	29,990	23.5	2,644	38.5	563
76	Miscellaneous repair services	13.3	430	235.4	11,839	24.0	1,167	15.4	241
79	Amusement and recreation services	45.0	1,132	387.6	19,409	99.5	3,100	41.8	518
80	Health services	123.1	3,989	636.7	81,091	235.3	9,618	161.1	1,917
81	Legal services	23.3	853	249.1	55,293	41.9	2,220	19.6	356
83	Social services	2.3	229	323.0	5,469	269.2	3,047	70.5	566

NA Not available. <sup>1</sup> Standard Industrial Classification. <sup>2</sup> Firms with paid employees. <sup>3</sup> Employees for pay period including March 12. <sup>4</sup> Includes industries not shown separately. <sup>5</sup> Includes agricultural services, forestry, and fishing. <sup>6</sup> Excludes industry 6552 which is included in construction industries.

Source: U.S. Bureau of the Census, 1987 Survey of Women-Owned Businesses, series WB87-1.

## No. 875. Black-Owned Firms—Major Industry Statistics: 1982 and 1987

[Represents black-owned firms with at least 2 percent of black-owned sales and receipts]

SIC <sup>1</sup> code	INDUSTRY	1982		1987					
		Black-owned firms		All firms		Black-owned firms			
		Number of firms (1,000)	Sales and receipts (mil. dol.)	Number of firms (1,000)	Sales and receipts (mil. dol.)	Number of firms (1,000)	Sales and receipts (mil. dol.)	Employees <sup>2,3</sup> (1,000)	Annual payroll <sup>2</sup> (mil. dol.)
(X)	<b>Total<sup>4</sup></b>	<b>308.3</b>	<b>9,673</b>	<b>13,695.5</b>	<b>1,994,808</b>	<b>424.2</b>	<b>19,763</b>	<b>220.5</b>	<b>2,761</b>
(A)	Agriculture <sup>5</sup>	4.6	127	357.0	20,585	7.3	217	3.1	38
(C)	Construction	22.5	829	1,651.1	232,372	36.8	2,174	27.4	425
(D)	Manufacturing	3.7	345	433.0	226,824	8.0	1,023	13.7	244
(E)	Transportation and public utilities <sup>4</sup>	23.9	733	592.8	76,355	37.0	1,573	9.9	154
41	Passenger transit <sup>6</sup>	7.0	87	67.8	3,369	11.6	218	1.7	15
42	Trucking and warehousing	12.9	512	358.3	40,866	19.7	1,010	5.5	98
(F)	Wholesale trade	3.1	432	439.2	298,264	5.5	1,327	6.2	116
(G)	Retail trade <sup>4</sup>	70.8	3,481	2,241.5	544,768	66.2	5,890	62.5	571
54	Food stores	(NA)	820	198.2	79,112	9.0	1,001	7.9	65
58	Eating and drinking establishments	11.4	619	325.8	73,114	11.8	1,084	32.3	205
(H)	Finance, insurance, and real estate <sup>4</sup>	13.0	280	1,227.2	123,710	27.0	804	5.9	95
64	Insurance agents, brokers, and service	4.6	66	309.1	22,106	8.0	189	1.5	25
65	Real estate <sup>7</sup>	7.9	195	734.0	68,541	15.6	506	3.7	54
(I)	Services <sup>4</sup>	136.7	2,835	5,937.7	417,105	209.5	6,120	89.7	1,077
72	Personal services	38.7	551	1,081.8	30,196	56.8	960	12.1	110
73	Business services	(NA)	(NA)	1,834.8	98,137	59.2	1,570	32.6	373
75	Auto repair, services, and garages	7.3	224	348.7	29,990	11.8	427	4.5	57
76	Miscellaneous repair services	4.1	82	235.4	11,839	5.2	154	1.8	26
79	Amusement and recreation services	6.9	121	387.6	19,409	13.3	503	2.0	62
80	Health services	16.8	568	636.7	81,091	30.0	1,351	18.1	216
83	Social services	(NA)	(D)	323.0	5,469	13.2	224	6.0	47

D Withheld to avoid disclosing data for individual companies; data are included in higher-level totals. NA Not available. <sup>1</sup> Standard Industrial Classification code; see text, section 13. <sup>2</sup> Firms with paid employees. <sup>3</sup> Employees for pay period including March 12. <sup>4</sup> Includes industries not shown separately. <sup>5</sup> Includes agricultural services, forestry, and fishing. <sup>6</sup> Local and interurban. <sup>7</sup> Excludes 6552 which is included in construction industries.

Source: U.S. Bureau of the Census, 1987 Survey of Minority-Owned Business Enterprises, series MB87-1.

### No. 876. Women-Owned and Black-Owned Firms—Number, Receipts, and Employees for 10 Largest Metropolitan Areas: 1987

[Metropolitan areas as defined June 30, 1987. PMSA=Primary Metropolitan Statistical Area, see text, section 1 and Appendix II]

OWNERSHIP OF FIRM AND METROPOLITAN AREA	ALL FIRMS		FIRMS WITH PAID EMPLOYEES	
	Number	Sales and receipts (\$1,000)	Employees (number)	Annual payroll (\$1,000)
<b>WOMEN-OWNED FIRMS</b>				
Los Angeles-Long Beach, CA PMSA	162,417	10,775,455	102,904	1,508,084
New York, NY PMSA	136,209	17,314,335	137,968	2,704,914
Chicago, IL PMSA	89,424	9,195,448	88,824	1,475,619
Washington, DC-MD-VA PMSA	78,744	4,940,185	49,111	821,029
Philadelphia, PA-NJ PMSA	68,032	6,748,908	66,917	1,002,185
Houston, TX PMSA	58,866	2,652,715	24,848	341,183
Boston, MA PMSA	58,975	7,544,694	67,682	1,070,181
Detroit, MI PMSA	58,791	4,182,807	46,222	651,754
Dallas, TX PMSA	55,452	2,721,988	23,795	364,727
Anaheim-Santa Ana, CA PMSA	54,367	3,266,368	30,460	409,188
<b>BLACK-OWNED FIRMS</b>				
New York, NY PMSA	28,063	1,234,910	10,918	165,558
Los Angeles-Long Beach, CA PMSA	23,932	1,300,336	11,412	197,977
Washington, DC-MD-VA PMSA	23,046	951,945	9,804	155,925
Chicago, IL PMSA	15,374	908,500	8,769	116,565
Houston, TX PMSA	12,989	372,256	3,294	42,117
Atlanta, GA PMSA	11,804	747,367	6,828	103,361
Philadelphia, PA-NJ PMSA	10,249	612,995	5,478	71,643
Detroit, MI PMSA	9,852	514,324	5,912	65,722
Baltimore, MD PMSA	8,593	331,493	3,534	37,995
Dallas, TX PMSA	7,857	234,823	2,750	32,190

Source: U.S. Bureau of the Census, 1987 Survey of Minority-Owned Business Enterprises, series MB87-1 and 1987 Survey of Women-Owned Businesses, series WB87-1.

### No. 877. Women-Owned Firms—Number and Receipts, by State: 1982 and 1987

STATE	1982		1987				STATE	1982		1987			
	Firms (1,000)	Sales and receipts (mil. dol.)	Number of firms		Sales and receipts			Firms (1,000)	Sales and receipts (mil. dol.)	Number of firms		Sales and receipts	
			Total (1,000)	Per- cent of U.S. total (per- cent)	Total (mil. dol.)	Per- cent of U.S. total (per- cent)				Total (1,000)	Per- cent of U.S. total (per- cent)	Total (mil. dol.)	Per- cent of U.S. total (per- cent)
U.S.	2,612.6	98,292	4,114.8	30.0	278,138	13.9	MO	54.1	1,989	87.7	29.9	5,349	14.1
AL	30.9	1,268	48.0	27.0	3,624	13.7	MT	12.8	499	17.7	27.9	930	16.6
AK	9.5	379	14.0	28.6	829	16.6	NE	22.7	717	32.3	31.4	1,649	13.7
AZ	35.1	1,027	60.6	31.6	2,911	12.8	NV	11.7	450	18.8	31.5	1,414	14.2
AR	24.5	1,069	35.5	26.3	2,008	14.6	NH	11.9	392	22.7	28.5	1,858	14.2
CA	354.7	12,023	559.8	30.9	31,027	12.6	NJ	63.2	3,573	117.4	28.9	13,554	14.4
CO	57.4	1,829	89.4	34.0	4,261	15.8	NM	16.3	576	25.4	30.9	1,166	16.0
CT	35.5	1,401	60.9	31.0	5,320	15.2	NY	176.5	8,352	284.9	30.6	29,970	14.4
DE	5.7	196	9.7	31.4	753	16.2	NC	57.4	1,860	93.5	28.4	6,813	15.0
DC	8.9	334	11.0	37.6	774	11.9	ND	8.8	340	12.7	29.7	572	13.8
FL	125.4	4,789	221.4	30.1	16,828	16.9	OH	102.5	3,615	154.1	29.6	8,872	12.3
GA	53.3	1,848	88.1	28.8	5,874	12.0	OK	49.2	2,123	63.7	28.5	2,948	15.0
HI	14.4	356	21.7	35.6	857	13.1	OR	40.5	1,357	58.9	31.8	4,279	19.4
ID	13.4	427	19.0	27.9	813	12.5	PA	106.2	4,186	167.4	28.1	13,339	11.5
IL	110.3	4,567	177.1	30.8	13,884	14.0	RI	8.0	270	14.5	27.5	1,340	13.3
IN	62.0	3,192	89.9	30.5	8,913	17.6	SC	27.1	983	42.6	26.6	2,950	15.9
IA	36.1	1,137	53.6	30.8	2,905	16.0	SD	9.4	368	13.4	28.0	726	14.1
KS	36.8	1,235	53.5	31.5	2,661	15.6	TN	44.6	1,707	67.4	26.8	4,226	12.5
KY	36.6	1,583	53.5	27.6	3,265	14.4	TX	199.8	8,074	298.1	29.1	13,385	11.6
LA	38.3	2,201	55.9	27.3	2,962	13.8	UT	19.1	665	29.8	29.8	1,392	14.1
ME	14.5	420	23.9	27.1	1,635	15.7	VT	8.0	267	13.8	30.5	766	14.8
MD	48.4	1,530	81.9	33.6	5,509	13.3	VA	56.9	1,753	94.4	31.7	5,952	14.4
MA	63.2	1,778	111.4	31.2	11,140	16.8	WA	59.3	1,599	90.3	31.5	4,689	12.7
MI	87.1	2,790	134.0	31.4	7,889	12.3	WV	15.7	616	22.5	28.9	1,114	15.8
MN	56.2	1,751	88.1	31.4	4,991	14.3	WI	44.4	1,562	69.2	28.9	4,667	14.6
MS	20.4	955	29.0	25.8	2,062	15.7	WY	8.4	312	10.8	31.2	524	15.3

Source: U.S. Bureau of the Census, 1987 Survey of Women-Owned Business Enterprises, series WB87-1.



## No. 878. Black-Owned Firms—Number and Receipts, by State: 1982 and 1987

STATE	1982		1987				STATE	1982		1987			
	Firms (num- ber)	Sales and re- ceipts (mil. dol.)	Number of firms		Sales and receipts			Firms (num- ber)	Sales and re- ceipts (mil. dol.)	Number of firms		Sales and receipts	
			Total	Per- cent of U.S. total	Total (mil. dol.)	Per- cent of U.S. total				Total	Per- cent of U.S. total	Total (mil. dol.)	Per- cent of U.S. total
U.S. . .	308,260	9,619	424,165	3.1	19,763	1.0	MO . . . . .	5,782	194	7,832	2.7	336	0.9
AL . . . . .	6,806	206	10,085	5.7	440	1.7	MT . . . . .	55	3	77	0.1	7	0.1
AK . . . . .	433	(D)	507	1.0	14	0.3	NE . . . . .	682	(D)	863	0.8	31	0.3
AZ . . . . .	1,274	(D)	1,811	0.9	91	0.4	NV . . . . .	636	31	1,002	1.7	39	0.4
AR . . . . .	3,323	96	4,392	3.3	215	1.6	NH . . . . .	123	(D)	229	0.3	31	0.2
CA . . . . .	38,876	1,145	47,728	2.6	2,364	1.0	NJ . . . . .	9,121	430	14,556	3.6	996	1.1
CO . . . . .	2,163	69	2,871	1.1	106	0.4	NM . . . . .	486	14	587	0.7	27	0.4
CT . . . . .	2,455	77	4,061	2.1	226	0.6	NY . . . . .	24,044	658	36,289	3.9	1,886	0.9
DE . . . . .	982	34	1,399	4.5	78	1.7	NC . . . . .	13,333	355	19,487	5.9	746	1.6
DC . . . . .	8,179	201	8,275	28.3	412	6.3	ND . . . . .	54	9	57	0.1	1	-
FL . . . . .	15,596	571	25,527	3.5	1,212	1.2	OH . . . . .	12,390	326	15,983	3.1	626	0.9
GA . . . . .	13,490	457	21,283	7.0	1,180	2.4	OK . . . . .	2,837	(D)	3,461	1.5	94	0.5
HI . . . . .	271	6	399	0.7	12	0.2	OR . . . . .	644	(D)	848	0.5	34	0.2
ID . . . . .	84	3	94	0.1	5	0.1	PA . . . . .	9,501	324	11,728	2.0	747	0.6
IL . . . . .	14,785	632	19,011	3.3	1,100	1.1	RI . . . . .	283	(D)	489	0.9	18	0.2
IN . . . . .	5,011	(D)	5,867	2.0	350	0.7	SC . . . . .	9,129	(D)	12,915	8.6	444	2.4
IA . . . . .	603	(D)	703	0.4	45	0.2	SD . . . . .	51	3	63	0.1	5	0.1
KS . . . . .	1,903	61	2,323	1.4	154	0.9	TN . . . . .	7,200	230	10,423	4.1	386	1.1
KY . . . . .	2,814	75	3,738	1.9	120	0.5	TX . . . . .	27,361	790	35,725	3.5	1,084	0.9
LA . . . . .	12,359	435	15,331	7.5	532	2.5	UT . . . . .	164	10	202	0.2	9	0.1
ME . . . . .	109	3	131	0.1	5	-	VT . . . . .	83	(D)	98	0.2	7	0.1
MD . . . . .	13,776	328	21,678	8.9	720	1.7	VA . . . . .	13,192	325	18,781	6.3	811	2.0
MA . . . . .	2,782	83	4,761	1.3	252	0.4	WA . . . . .	2,046	61	2,583	0.9	176	0.5
MI . . . . .	10,947	322	13,708	3.2	701	1.1	WV . . . . .	622	(D)	727	0.9	39	0.6
MN . . . . .	1,042	39	1,448	0.5	125	0.4	WI . . . . .	1,844	83	2,381	1.0	191	0.8
MS . . . . .	6,464	204	9,667	8.6	532	4.1	WY . . . . .	90	3	81	0.2	4	0.1

- Represents or rounds to zero. D Withheld to avoid disclosing data for individual companies; data are included in higher-level totals.

Source: U.S. Bureau of the Census, 1987 Survey of Minority-Owned Business Enterprises, MB87-1.

## No. 879. 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 <sup>1</sup>		With an employee assistance program <sup>2</sup>		Total (1,000)	In establishments—			
		Number (1,000)	Percent	Number (1,000)	Percent		With a drug testing program <sup>1</sup>	With an employee assistance program <sup>2</sup>	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	4,767.1	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	0.7	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	6,647.9	40.5
Services . . . . .	1,553.4	21.5	1.4	85.8	5.5	24,170.6	2,093.1	8.7	2,080.0	25.2

<sup>1</sup> 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.

<sup>2</sup> 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. 880. Consumer and Farmer Cooperatives, by Type of Association: 1985 to 1988**

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

TYPE OF ASSOCIATION	1985			1987			1988		
	Associations	Members	Business	Associations	Members	Business	Associations	Members	Business
Credit unions <sup>1</sup>	15,045	45,265	74,409	14,335	50,065	99,541	13,878	52,957	113,744
Electric power cooperatives	868	10,032	11,032	846	10,113	11,401	839	10,242	11,976
Rural telephone cooperatives	250	1,047	607	249	1,079	676	247	1,115	740
Farmer cooperatives selling producer and consumer goods <sup>4</sup>	4,288	(NA)	16,641	3,960	(NA)	14,271	3,778	(NA)	15,424

NA Not available. <sup>1</sup> Covers federally insured credit unions. Source: National Credit Union Administration, *Annual Report of the National Credit Union Administration, 1989*. <sup>2</sup> Source: U.S. Rural Electrification Administration, *Statistical Report—Rural Electric Borrowers*. <sup>3</sup> Source: U.S. Rural Electrification Administration, *Statistical Report—Rural Telephone Borrowers*. <sup>4</sup> Data for fiscal years ending June or earlier in years shown.

Source: Except as noted, U.S. Dept. of Agriculture, Agricultural Cooperative Service, unpublished data.

**No. 881. New Business Incorporations and Business Failures—Number and Liabilities: 1970 to 1989**

[1970 excludes Hawaii; 1970 and 1975 exclude Alaska. 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 <sup>1</sup> (1,000)	Index of net business formations <sup>2</sup> (1967=100)	New incorporations (1,000)	FAILURES <sup>3</sup>			YEAR	Total concerns in business <sup>1</sup> (1,000)	Index of net business formations <sup>2</sup> (1967=100)	New incorporations (1,000)	FAILURES <sup>3</sup>		
				Number	Rate per 10,000 concerns	Current liabilities <sup>4</sup> (mil. dol.)					Number	Rate per 10,000 concerns	Current liabilities <sup>4</sup> (mil. dol.)
1970	2,442	108.8	264	10,748	44	1,888	1984	4,885	121.3	635	52,078	107	29,269
1975	2,679	109.9	326	11,432	43	4,380	1985	4,990	120.9	663	57,078	115	36,937
1980	2,780	129.9	532	11,742	42	4,635	1986	5,119	120.4	702	61,616	120	44,724
1981	2,745	124.8	581	16,794	61	6,955	1987	6,004	121.2	685	61,111	102	34,724
1982	2,806	116.4	566	24,908	88	15,611	1988	5,804	124.1	685	57,098	98	39,126
1983	2,851	117.5	602	31,334	110	16,073	1989, prel.	7,694	124.7	677	50,389	65	44,261

<sup>1</sup> Data through 1983 represent number of names listed in July issue of *Dun & Bradstreet Reference Book*. Data for 1984-89 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. <sup>2</sup> Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, May issues.

<sup>3</sup> 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. <sup>4</sup> Liabilities exclude long-term publicly held obligations; offsetting assets are not taken into account.

Source: Except as noted, Dun & Bradstreet Corporation, New York, NY, *The Failure Record Through 1989* and *Monthly Failure Report*.

**No. 882. New Business Incorporations and Number of Failures, by State: 1988 and 1989**

[1989 preliminary. Business incorporations in thousands. See headnote, table 881]

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	
	1988	1989	1988	1989		1988	1989	1988	1989		1988	1989	1988	1989
U.S.	685.1	677.4	57,096	50,389	IA	3.8	4.6	660	564	W.S.C.	53.0	56.7	10,542	8,416
N.E.	40.3	35.3	1,051	1,277	MO	10.3	10.0	1,381	1,156	AR	4.3	6.5	363	306
ME	3.1	2.8	84	132	ND	0.9	0.8	159	106	LA	9.1	9.0	1,438	1,402
NH	3.4	2.9	165	122	SD	1.0	1.0	148	142	OK	7.2	7.2	868	1,268
VT	2.0	1.8	53	51	NE	2.7	2.7	269	216	TX	32.5	34.0	7,873	5,440
MA	16.4	14.1	556	768	KS	4.4	4.4	846	668	Mt.	49.7	46.9	5,756	4,218
RI	3.4	3.3	42	56	S.A.	183.6	190.1	7,255	7,538	MD	1.3	1.3	241	191
CT	11.9	10.4	151	148	DE	31.5	31.0	64	32	IT	1.9	1.9	363	233
M.A.	132.2	126	4,619	4,167	DC	16.9	17.3	424	232	WY	0.8	0.9	205	119
NJ	77.7	73.4	2,360	1,962	VA	2.3	2.3	53	45	CO	16.2	13.4	2,233	1,520
NY	32.7	30.4	860	601	WV	17.7	18	928	1,179	NM	2.5	2.6	344	392
PA	21.8	22.2	1,399	1,604	NC	2.7	2.6	215	162	AZ	12.4	11.6	1,442	1,251
E.N.C.	89.6	91.2	9,067	8,827	SC	12.8	13.2	672	760	UT	3.8	3.9	599	283
OH	19.0	18.8	1,936	1,717	GA	6.2	6.9	385	183	NV	10.7	11.4	329	229
IN	13.0	14.0	923	925	FL	18.7	18.8	1,379	1,787	Pac	78.2	71.9	11,811	9,898
IL	28.7	28.9	3,301	3,387	E.S.C.	25.9	26.3	2,998	2,874	WA	10.1	10.7	1,658	1,317
MI	22.6	22.5	1,799	2,080	KY	75.0	80.0	3,135	3,158	OR	7.2	7.7	509	441
WI	6.3	7.0	1,108	718	TN	7.0	6.9	701	678	CA	56.4	48.2	9,178	7,826
W.N.C.	32.6	33.0	3,999	3,174	AL	8.5	8.5	1,169	1,169	AK	1.4	1.4	287	144
MN	9.5	9.6	536	322	MS	6.6	7.2	635	491	HI	3.2	3.8	179	170

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

## No. 883. Business Starts and Failures—Number and Rate, by Industry: 1985 to 1989

[1988 and 1989 business starts not available. Minus sign (-) indicates decrease]

SIC <sup>1</sup> code	INDUSTRY	BUSINESS STARTS				BUSINESS FAILURES				
		Number			Per- cent change, 1985- 87	Number			Per- cent change, 1988- 89	Rate per 10,000 firms, 1989
		1985	1986	1987		1985	1988	1989		
(X)	Total <sup>2</sup>	249,770	253,092	233,710	-7.7	57,253	57,098	50,389	-11.7	65
A	Agriculture, forestry, fishing	3,558	3,818	3,736	-2.1	2,699	1,819	1,438	-20.9	46
B	Mining	2,289	1,739	1,540	-11.4	796	493	346	-29.8	77
10	Metal mining	65	54	72	33.3	36	14	14	-	92
11	Anthracite mining	7	11	13	18.2	5	4	3	-25.0	84
121	Bituminous coal and lignite	258	271	201	-25.8	161	85	68	20.0	141
138	Oil and gas extraction	1,862	1,295	1,169	-9.7	565	371	245	-34.0	73
14	Nonmetallic minerals	97	108	85	-21.3	29	19	18	15.8	38
C	Construction	34,417	33,079	31,246	-5.5	7,005	6,828	6,959	1.9	84
15	General building contractors	13,324	13,039	12,557	-3.7	2,759	2,566	2,687	4.7	90
16	Construction, other than bldg.	1,822	1,555	1,330	-14.5	419	347	326	-6.1	78
17	Special trade contractors	19,271	18,485	17,359	-6.1	3,827	3,915	3,946	0.8	80
D	Manufacturing <sup>2</sup>	21,054	20,309	19,236	-5.3	4,869	4,226	3,915	-7.4	78
20	Food and kindred products	904	962	969	0.7	261	230	213	-7.4	86
22	Textile mill products	572	583	558	-4.3	110	92	72	-21.7	70
23	Apparel, other textile products	1,674	1,470	1,413	-3.9	338	301	206	-31.6	74
24	Lumber and wood products	1,366	1,365	1,192	-12.7	415	345	357	3.5	88
25	Furniture and fixtures	883	880	760	-13.6	236	229	250	9.2	152
26	Paper and allied products	269	283	294	3.9	55	63	52	-17.5	82
27	Printing and publishing	3,625	3,245	3,292	1.4	659	626	669	6.9	70
28	Chemicals and allied products	697	717	674	-6.0	172	124	103	-16.9	64
29	Petroleum refining	136	111	104	-6.3	26	21	19	-9.5	75
30	Rubber and misc. products	770	751	700	-6.8	157	123	107	-13.0	69
31	Leather and leather products	155	145	138	-4.8	47	22	29	31.8	82
32	Stone, clay, and glass products	615	612	617	0.8	159	148	122	-17.6	63
33	Primary metal products	355	401	378	-5.7	122	100	73	-27.0	81
34	Fabricated metal products	1,711	1,554	1,449	-6.8	484	450	369	-18.0	85
35	Machinery, exc. electric	2,865	2,839	2,540	-10.5	721	560	506	-9.6	67
36	Electric and electronic equipment	1,528	1,415	1,280	-9.5	329	244	264	8.2	107
37	Transportation equipment	803	709	676	-4.7	197	180	189	5.0	117
38	Instruments and related products	781	821	750	-8.6	110	120	102	-15.0	62
39	Miscellaneous	1,343	1,445	1,447	0.1	271	247	213	-13.8	60
E	Transportation, public utilities	8,672	8,496	8,060	-5.1	2,536	2,100	2,052	-2.3	79
40	Railroad transportation	13	32	34	6.3	9	2	2	-	12
41	Local passenger transit	654	546	577	5.7	148	133	172	29.3	78
42	Trucking and warehousing	3,954	3,598	3,358	-6.7	1,617	1,294	1,282	-0.9	105
44	Water transportation	378	440	374	-15.0	105	53	45	-15.1	44
45	Air transportation	458	418	394	-5.7	104	71	65	8.5	56
46	Pipelines, except natural gas	10	7	13	85.7	-	1	-	-100.0	67
47	Transportation services	1,950	2,123	1,952	8.1	322	369	279	-24.4	77
48	Communications	929	967	896	-7.3	173	127	122	-3.9	47
49	Electric, gas, sanitary services	326	363	459	26.4	58	50	85	70.0	37
F	Wholesale trade	28,707	26,749	24,136	-9.8	4,836	4,459	3,636	-18.5	65
G	Retail trade	72,578	72,509	65,381	-9.8	13,494	11,487	10,982	-4.4	55
H	Finance, insurance, real estate <sup>2</sup>	15,710	17,146	16,160	-5.8	2,676	2,539	2,839	11.8	46
60	Banking	524	474	407	-14.1	139	214	234	9.3	50
61	Credit agencies, except banks	1,411	1,560	1,405	9.9	193	194	182	-6.2	71
62	Security, commodity brokers	1,103	1,176	1,149	-2.3	177	158	188	19.0	70
63	Insurance agents, brokers, and services	1,304	1,327	1,535	15.7	259	51	56	9.8	18
65	Real estate	10,050	11,185	10,459	-6.5	1,638	1,501	1,621	8.0	48
I	Services <sup>2</sup>	57,702	59,424	54,788	-7.8	16,649	22,782	17,495	-23.2	68
70	Hotels and other lodgings	1,535	1,731	1,786	3.2	304	310	248	-20.0	35
72	Personal services	6,607	7,165	6,146	-14.2	1,030	948	1,089	14.9	34
73	Business services <sup>2</sup>	22,733	24,582	23,701	-3.6	6,132	11,320	6,301	-44.3	165
731	Advertising	1,500	1,539	1,417	7.9	230	272	244	-10.3	81
736	Personnel supply services	760	801	756	-5.6	99	101	112	10.9	56
737	Computer and data processing services	3,225	3,020	2,773	-8.2	373	324	335	3.4	70
75	Auto repair, services, and garages	5,997	5,550	5,193	-6.4	1,335	1,224	1,395	14.0	57
78,79	Motion pictures, amusement and recreation	4,554	4,364	3,434	-21.3	654	648	491	-24.2	55
80	Health services	4,026	4,656	4,298	-7.7	577	682	711	4.3	18
81	Legal services	1,296	1,337	1,292	-3.4	191	196	292	49.0	22
82	Educational services	674	636	567	-10.8	100	96	116	20.8	7
83	Social services	951	928	783	-15.6	200	145	214	47.6	20
84	Museums, art galleries, gardens	42	49	54	10.2	5	6	3	-50.0	6
86	Membership organizations	989	1,281	1,193	-6.9	69	67	57	-14.9	3

- Represents or rounds to zero. <sup>1</sup> Standard Industrial Classification; see text, section 13. <sup>2</sup> Includes industries not shown separately. <sup>3</sup> Includes interurban.

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

**No. 884. Bankruptcy Petitions Filed and Pending, by Type and Chapter: 1981 to 1989**

[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	1989
<b>Total, filed</b> . . . . .	<b>360,329</b>	<b>367,886</b>	<b>374,734</b>	<b>344,275</b>	<b>364,536</b>	<b>477,856</b>	<b>561,278</b>	<b>594,567</b>	<b>642,993</b>
Business <sup>1</sup> . . . . .	47,415	56,423	69,818	62,170	66,651	76,281	88,278	68,501	62,534
Non-business <sup>2</sup> . . . . .	312,914	311,443	304,916	282,105	297,885	401,575	473,000	526,066	580,459
Voluntary . . . . .	358,997	366,331	373,064	342,828	362,939	476,214	559,658	593,158	641,528
Involuntary . . . . .	1,332	1,535	1,670	1,447	1,597	1,642	1,620	1,409	1,465
Chapter 7 <sup>3</sup> . . . . .	265,721	255,098	251,322	232,994	244,650	332,679	397,551	423,796	457,240
Chapter 9 <sup>4</sup> . . . . .	1	4	3	4	3	7	10	3	7
Chapter 11 <sup>5</sup> . . . . .	7,828	14,059	21,207	19,913	21,425	24,443	22,566	18,891	17,465
Chapter 12 <sup>6</sup> . . . . .	(X)	(X)	(X)	(X)	(X)	(X)	4,824	3,099	1,717
Chapter 13 <sup>7</sup> . . . . .	86,778	98,705	102,201	91,358	98,452	120,726	136,300	148,771	166,539
Section 304 <sup>8</sup> . . . . .	1	-	1	6	6	1	27	17	25
<b>Total, pending</b> . . . . .	<b>361,664</b>	<b>461,287</b>	<b>537,306</b>	<b>577,567</b>	<b>608,945</b>	<b>726,577</b>	<b>808,504</b>	<b>814,195</b>	<b>879,340</b>

- Represents zero. X Not applicable. <sup>1</sup> Business bankruptcies include those filed under chapters 7, 9, 11, or 12. <sup>2</sup> Bankruptcies include those filed under chapters 7, 11, or 13. <sup>3</sup> Chapter 7, liquidation of non-exempt assets of businesses or individuals. <sup>4</sup> Chapter 9, adjustment of debts of a municipality. <sup>5</sup> Chapter 11, individual or business reorganization. <sup>6</sup> Chapter 12, adjustment of debts of a family farmer with regular annual income, effective November 26, 1986. <sup>7</sup> Chapter 13, adjustment of debts of an individual with regular income. <sup>8</sup> 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. 885. Small Business Administration Loans to All Small Businesses: 1980 to 1990**

[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	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Loans, all businesses . . . . .	1,000 . .	31.7	28.7	15.4	19.2	21.3	19.3	16.8	17.1	17.1	17.0	18.8
Loans, minority-owned businesses . . . . .	1,000 . .	6.0	5.2	2.5	2.7	3.1	2.8	2.0	2.1	2.2	2.4	2.6
Percent of all business loans . . . . .	Percent . .	19	18	16	14	15	15	12	12	13	14	14
Value of total loans <sup>1</sup> . . . . .	Mil. dol. .	3,858	3,668	2,038	3,007	3,450	3,217	3,013	3,232	3,434	3,490	4,258
Value of loans to minority-operated businesses <sup>2</sup> . . . . .	Mil. dol. .	470	454	238	295	383	324	265	299	343	385	474

<sup>1</sup> Includes both SBA and bank portions of loans. <sup>2</sup> SBA direct loans and guaranteed portion of bank loans only.

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

**No. 886. Small Business Birth, Death, and Net Growth Rates: 1980 to 1988**

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

ITEM	Birth rate <sup>1</sup>	Death rate <sup>2</sup>	Net growth <sup>3</sup>	ITEM	Birth rate	Death rate <sup>2</sup>	Net growth <sup>3</sup>
<b>All industries: 1980-82</b> . . . . .	9.5	9.1	0.4	<b>Wholesale trade: 1980-82</b> . . . . .	9.1	7.5	1.6
<b>1982-84</b> . . . . .	10.2	8.9	1.3	<b>1982-84</b> . . . . .	9.9	7.5	2.4
<b>1984-86</b> . . . . .	10.6	9.6	1.0	<b>1984-86</b> . . . . .	9.8	8.8	1.0
<b>1986-88</b> . . . . .	11.0	9.8	1.2	<b>1986-88</b> . . . . .	9.4	9.3	0.0
<b>Construction: 1980-82</b> . . . . .	8.9	9.6	-0.7	<b>Retail trade: 1980-82</b> . . . . .	8.5	9.6	-1.1
<b>1982-84</b> . . . . .	10.8	10.5	0.3	<b>1982-84</b> . . . . .	8.9	9.5	-0.6
<b>1984-86</b> . . . . .	10.9	10.0	0.9	<b>1984-86</b> . . . . .	9.8	10.3	-0.6
<b>1986-88</b> . . . . .	11.4	9.8	1.5	<b>1986-88</b> . . . . .	10.4	10.5	-0.1
<b>Manufacturing: 1980-82</b> . . . . .	8.1	7.3	0.8	<b>Services: 1980-82</b> . . . . .	11.4	9.3	2.1
<b>1982-84</b> . . . . .	8.8	7.1	1.7	<b>1982-84</b> . . . . .	11.8	8.7	3.1
<b>1984-86</b> . . . . .	8.7	8.2	0.5	<b>1984-86</b> . . . . .	11.7	9.4	2.4
<b>1986-88</b> . . . . .	9.3	8.7	0.6	<b>1986-88</b> . . . . .	13.0	9.8	3.2

<sup>1</sup> Business births represent the number of establishments formed during a specified period relative to the number in the initial year. <sup>2</sup> Business deaths represent the disappearance of an establishment or enterprise from the SBDB for financial or nonfinancial reasons relative to the initial year. <sup>3</sup> 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. 887. Federal Contract Actions—Small and Minority-Owned Small Businesses Share, by State of Principal Place of Performance: 1988 and 1989

[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]

REGION, DIVISION, AND STATE	TOTAL CONTRACT ACTIONS			SMALL BUSINESS SHARE			SMALL MINORITY-OWNED SHARE				
	1988	1989	Percent change 1988-89	1988	1989		Percent change 1988-89	1988	1989		Percent change 1988-89
					Amount	Percent of total			Amount	Percent of total	
<b>United States</b>	<b>161,898</b>	<b>158,938</b>	<b>-1.8</b>	<b>25,221</b>	<b>23,105</b>	<b>14.5</b>	<b>-8.4</b>	<b>5,012</b>	<b>5,103</b>	<b>3.2</b>	<b>1.8</b>
<b>Northeast</b>	<b>31,833</b>	<b>36,406</b>	<b>14.4</b>	<b>4,164</b>	<b>3,721</b>	<b>10.2</b>	<b>-10.6</b>	<b>493</b>	<b>599</b>	<b>1.6</b>	<b>21.6</b>
<b>New England</b>	<b>14,875</b>	<b>17,165</b>	<b>17.0</b>	<b>1,416</b>	<b>1,427</b>	<b>8.3</b>	<b>0.7</b>	<b>144</b>	<b>183</b>	<b>1.1</b>	<b>27.2</b>
Maine	623	388	-37.7	82	61	15.6	-26.2	2	4	0.9	83.7
New Hampshire	505	505	-0.1	69	63	12.5	-8.7	2	8	1.6	300.6
Vermont	145	184	27.2	15	19	10.1	24.4	(Z)	2	1.3	(X)
Massachusetts	7,773	9,344	20.2	744	815	8.7	9.6	85	117	1.3	37.4
Rhode Island	451	423	-6.3	159	140	33.0	-12.2	19	19	4.5	-0.3
Connecticut	5,178	6,321	22.1	347	329	5.2	-5.1	36	33	0.5	-7.7
<b>Middle Atlantic</b>	<b>17,158</b>	<b>19,242</b>	<b>12.1</b>	<b>2,748</b>	<b>2,284</b>	<b>11.9</b>	<b>-16.5</b>	<b>349</b>	<b>418</b>	<b>2.2</b>	<b>19.3</b>
New York	8,973	11,850	32.1	1,147	821	6.9	-28.4	95	111	0.9	16.8
New Jersey	3,791	3,769	-0.6	703	701	18.6	-0.3	80	103	2.7	28.6
Pennsylvania	4,394	3,622	-17.6	898	772	21.3	-14.0	174	202	5.6	16.3
<b>Midwest</b>	<b>24,280</b>	<b>24,821</b>	<b>2.2</b>	<b>3,577</b>	<b>3,516</b>	<b>14.2</b>	<b>-1.7</b>	<b>589</b>	<b>560</b>	<b>2.3</b>	<b>-5.0</b>
<b>East North</b>											
<b>Central</b>	<b>13,158</b>	<b>13,494</b>	<b>2.6</b>	<b>2,337</b>	<b>2,443</b>	<b>18.1</b>	<b>4.5</b>	<b>410</b>	<b>399</b>	<b>3.0</b>	<b>-2.8</b>
Ohio	6,319	6,521	3.2	786	847	13.0	7.8	218	231	3.5	5.9
Indiana	1,624	1,842	13.4	189	197	10.7	4.1	21	29	1.6	38.2
Illinois	2,510	2,239	-10.8	650	553	24.7	-14.9	123	120	5.3	-2.8
Michigan	1,518	1,531	0.9	396	412	26.9	4.1	25	12	0.8	-50.1
Wisconsin	1,187	1,361	14.6	316	434	31.9	37.4	23	7	0.5	-71.0
<b>West North</b>	<b>11,122</b>	<b>11,327</b>	<b>1.8</b>	<b>1,240</b>	<b>1,073</b>	<b>9.5</b>	<b>-13.5</b>	<b>179</b>	<b>161</b>	<b>1.4</b>	<b>-10.0</b>
Minnesota	2,260	1,887	-16.5	196	162	8.6	-17.3	18	1	0.1	-93.1
Iowa	703	583	-17.0	102	69	11.8	-32.3	14	5	0.8	-67.6
Missouri	6,382	7,093	11.1	428	386	5.4	-9.9	58	66	0.9	14.1
North Dakota	160	161	0.5	108	117	72.5	8.0	35	43	26.9	23.8
South Dakota	120	139	16.1	61	61	43.9	0.2	20	17	12.1	-15.5
Nebraska	400	373	-6.8	151	141	37.9	-6.4	7	7	1.9	3.3
Kansas	1,097	1,091	-0.6	194	137	12.6	-29.3	27	22	2.0	-19.4
<b>South</b>	<b>56,903</b>	<b>49,480</b>	<b>-13.1</b>	<b>10,651</b>	<b>9,975</b>	<b>20.2</b>	<b>-6.3</b>	<b>2,647</b>	<b>2,623</b>	<b>5.3</b>	<b>-0.9</b>
<b>South Atlantic</b>	<b>33,911</b>	<b>27,158</b>	<b>-19.9</b>	<b>6,658</b>	<b>6,096</b>	<b>22.4</b>	<b>-8.4</b>	<b>1,804</b>	<b>1,705</b>	<b>6.3</b>	<b>-5.5</b>
Delaware	302	189	-37.3	42	36	18.9	-14.5	2	5	2.7	156.2
Maryland	6,307	5,577	-11.6	1,236	1,170	21.0	-5.3	525	430	7.7	-18.1
District of Columbia	2,879	2,345	-18.6	778	664	28.3	-14.6	385	321	13.7	-16.6
Virginia	12,078	7,144	-40.9	2,216	2,003	28.0	-9.6	626	607	8.5	-3.0
West Virginia	333	330	-0.8	89	151	45.6	69.3	8	64	19.3	697.6
North Carolina	1,609	1,372	-14.8	506	376	27.4	-25.7	54	27	2.0	-49.5
South Carolina	1,882	2,123	12.8	294	296	13.9	0.6	29	39	1.8	35.3
Georgia	1,902	2,057	8.2	498	512	24.9	2.7	68	97	4.7	42.9
Florida	6,619	6,021	-9.0	999	889	14.8	-11.0	107	114	1.9	6.6
<b>East South</b>											
<b>Central</b>	<b>8,597</b>	<b>7,730</b>	<b>-10.1</b>	<b>1,673</b>	<b>1,350</b>	<b>17.5</b>	<b>-19.3</b>	<b>366</b>	<b>333</b>	<b>4.3</b>	<b>-9.0</b>
Kentucky	683	1,142	67.1	262	153	13.4	-41.6	44	59	5.2	34.9
Tennessee	2,827	2,987	6.0	450	406	13.6	-9.8	79	76	2.5	-3.7
Alabama	2,520	2,221	-11.9	733	616	27.7	-16.0	199	171	7.7	-14.1
Mississippi	2,567	1,371	-46.6	228	175	12.8	-23.2	44	26	1.9	-39.8
<b>West South</b>											
<b>Central</b>	<b>14,395</b>	<b>14,571</b>	<b>1.2</b>	<b>2,320</b>	<b>2,529</b>	<b>17.4</b>	<b>9.0</b>	<b>477</b>	<b>586</b>	<b>4.0</b>	<b>22.8</b>
Arkansas	846	495	-41.4	206	253	51.1	22.8	33	22	4.4	-33.8
Louisiana	2,073	2,307	11.3	338	400	17.3	18.3	54	56	2.4	4.0
Oklahoma	859	767	-10.7	378	329	42.9	-12.9	129	140	18.3	8.8
Texas	10,617	11,001	3.6	1,398	1,547	14.1	10.6	261	367	3.3	40.7
<b>West</b>	<b>48,882</b>	<b>48,251</b>	<b>-1.3</b>	<b>6,829</b>	<b>5,893</b>	<b>12.2</b>	<b>-13.7</b>	<b>1,283</b>	<b>1,321</b>	<b>2.7</b>	<b>3.0</b>
<b>Mountain</b>	<b>13,436</b>	<b>13,754</b>	<b>2.4</b>	<b>1,917</b>	<b>1,642</b>	<b>11.9</b>	<b>-14.3</b>	<b>456</b>	<b>451</b>	<b>3.3</b>	<b>-1.1</b>
Montana	148	154	4.0	110	99	64.6	-9.6	26	20	13.2	-21.9
Idaho	641	911	42.2	144	90	9.9	-37.4	15	17	1.9	13.6
Wyoming	174	131	-24.6	80	95	72.3	18.5	3	9	6.8	196.3
Colorado	3,812	3,899	2.3	389	425	10.9	9.4	101	108	2.8	7.3
New Mexico	3,185	3,088	-3.0	270	277	9.0	2.7	116	117	3.8	1.1
Arizona	3,020	3,142	4.0	353	316	10.1	-10.4	116	99	3.2	-14.3
Utah	1,592	1,503	-5.6	452	215	14.3	-52.5	57	31	2.0	-46.5
Nevada	864	925	7.1	119	124	13.4	4.4	22	49	5.3	123.2
<b>Pacific</b>	<b>35,446</b>	<b>34,498</b>	<b>-2.7</b>	<b>4,912</b>	<b>4,251</b>	<b>12.3</b>	<b>-13.5</b>	<b>827</b>	<b>870</b>	<b>2.5</b>	<b>5.2</b>
Washington	3,757	4,089	8.8	410	414	10.1	1.0	65	89	2.2	37.1
Oregon	1,206	325	-73.0	828	163	50.0	-80.3	48	22	6.6	-55.1
California	29,353	28,862	-1.7	3,164	3,119	10.8	-1.4	535	607	2.1	13.4
Alaska	564	613	8.8	237	290	47.3	22.3	29	35	5.7	20.6
Hawaii	566	608	7.4	273	265	43.5	-3.0	150	118	19.4	-21.4

X Not applicable. Z Less than 500,000.

Source: U.S. Small Business Administration, *The State of Small Business: A Report of the President*, annual. Data from Federal Procurement Data Center, September 13, 1990.

**No. 888. Mergers and Acquisitions—Summary: 1980 to 1989**

[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	1982	1983	1984	1985	1986	1987	1988	1989
All activity: Number	Number	1,558	2,298	2,395	3,176	3,489	4,463	4,024	4,022	3,602
Value	Mil. dol.	32,830	60,698	52,708	126,140	145,978	205,958	177,900	237,084	240,962
Divestitures: Number	Number	104	562	661	794	1,041	1,419	1,221	1,281	1,173
Value	Mil. dol.	5,090	8,362	12,949	30,572	43,534	72,427	57,797	83,472	63,367
Leveraged buyouts: Number	Number	11	164	231	254	255	337	279	381	361
Value	Mil. dol.	236	3,452	4,519	18,718	19,670	45,160	36,228	47,053	65,508
Form of payment: All cash	Percent	8	27	24	36	40	43	54	58	58
All stock	Percent	19	13	13	12	10	12	11	7	6
Combination cash, stock debt, other	Percent	17	22	28	26	24	20	18	16	18
Undisclosed	Percent	56	38	35	26	26	25	17	19	18
Ownership status of acquisition targets:										
Public acquired company:										
Number	Number	398	687	554	835	823	865	1,011	947	996
Value	Mil. dol.	11,948	46,701	31,899	85,692	91,653	109,217	103,029	128,703	162,722
Private acquired company:										
Number	Number	1,059	1,064	1,195	1,555	1,621	2,168	1,739	1,734	1,357
Value	Mil. dol.	15,911	6,400	8,344	10,069	10,608	24,454	15,067	23,186	16,071

<sup>1</sup> Price was given but form of payment was not.

**No. 889. Mergers and Acquisitions—Number and Value of Transactions, by Industry: 1989**

[See headnote table 888]

SIC <sup>1</sup> 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.)
	<b>Total activity</b> <sup>2</sup>	<b>3,602</b>	<b>240,962</b>	<b>2,804</b>	<b>172,748</b>	<b>542</b>	<b>53,100</b>	<b>256</b>	<b>15,114</b>
(A)	Agriculture, forestry, fishing	15	7.0	9	3.0	5	( <sup>3</sup> )	1	4.0
(B)	Mining	153	11,305	108	8,119	24	2,654	21	532
(C)	Construction	27	326	18	219	9	107	-	( <sup>3</sup> )
(D)	Manufacturing:								
20	Food and kindred products	112	15,640	75	6,024	19	7,730	18	1,886
22	Textile mill products	29	2,148	22	1,872	5	276	2	( <sup>3</sup> )
23	Apparel, other textile products	36	1,627	30	1,156	5	471	1	( <sup>3</sup> )
24	Lumber and wood products	16	580	13	571	3	9	-	( <sup>3</sup> )
26	Paper and allied products	48	5,769	28	2,876	8	134	12	2,759
27	Printing and publishing	137	8,005	96	4,482	33	3,523	8	( <sup>3</sup> )
28	Chemicals and allied products	176	43,180	100	30,674	51	12,259	25	247
30	Rubber and plastic products	78	1,811	58	1,443	10	181	10	187
32	Stone, clay, glass, and concrete	38	861	24	553	13	108	1	200
33	Primary metals industries	59	3,113	47	2,141	9	971	3	( <sup>3</sup> )
34	Fabricated metal products	108	5,048	84	4,796	12	85	12	166
35	Industrial machinery, computer equipment	237	8,067	170	5,810	48	1,625	19	632
36	Electrical and electronic equipment	189	10,685	143	4,874	37	4,566	9	1,244
37	Transportation equipment	76	3,123	55	2,684	12	393	9	47
38	Instruments and related products <sup>4</sup>	162	3,406	125	1,551	30	1,743	7	112
(E)	Transportation and public utilities	295	22,763	254	20,803	21	1,813	20	148
(F)	Wholesale trade	224	3,256	180	2,386	19	814	25	55
(G)	Retail trade	178	9,877	156	8,085	18	599	4	1,194
(H)	Finance, insurance, real estate	530	22,228	466	17,802	54	4,336	10	89
(I)	Services	580	21,674	472	13,364	77	7,502	31	808

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

Source of tables 888 and 889: MLR Publishing Company, Philadelphia, PA, *Mergers and Acquisitions*, 1989 (copyright). Publication contains extract from database, M&A Database.

**No. 890. Employee Stock Ownership Plans—Number of Plans and Participants: 1975 to 1989**

[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	2,331	503	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	9,400	9,630
1979	4,551	3,039	1984	6,904	6,576	1989	10,230	11,530

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

**No. 891. Patents and Trademarks: 1980 to 1989**

[In thousands. Calendar year data. Covers patents issued to citizens of the United States and residents of foreign countries. For data on copyrights, see table 936. For data on foreign countries, see table 1466. See also *Historical Statistics, Colonial Times to 1970*, series W 96-108]

ITEM	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Patent applications filed	113.0	114.5	118.4	112.4	120.8	127.1	133.0	139.8	151.9	166.3
Inventions	104.3	106.4	109.6	103.7	111.3	117.0	122.4	127.9	139.8	152.8
Designs	7.8	7.4	8.2	8.1	8.7	9.6	9.9	11.2	11.3	12.6
Botanical plants	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.4	0.4	0.4
Reissues	0.6	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.5
Patents issued	66.2	71.0	63.3	62.0	72.7	77.2	76.9	89.4	84.3	102.5
Inventions	61.8	65.8	57.9	56.9	67.2	71.7	70.9	83.0	77.9	95.5
Individuals	13.3	14.1	11.9	10.5	12.3	12.9	13.3	15.3	14.3	17.9
Corporations: United States	29.4	29.5	25.8	25.7	30.1	31.3	29.6	33.8	31.4	38.7
Foreign	18.2	21.0	19.2	19.6	23.6	26.4	27.0	32.9	31.4	38.0
U.S. Government	1.0	1.1	1.0	1.0	1.2	1.1	1.0	1.0	0.7	0.9
Designs	3.9	4.7	4.9	4.6	4.9	5.1	5.5	6.0	5.7	6.1
Botanical plants	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.4	0.6
Reissues	0.3	0.4	0.3	0.4	0.3	0.3	0.3	0.2	0.2	0.3
U.S. residents <sup>2</sup>	40.8	43.1	37.7	36.6	42.2	43.3	42.0	47.7	44.6	54.6
Foreign country residents <sup>2</sup>	25.4	27.9	25.6	25.4	30.5	33.9	34.9	41.7	39.7	47.9
Percent of total	38.4	39.2	40.5	41.0	42.0	43.9	45.4	46.6	47.1	46.7
Other published documents <sup>3</sup>	(Z)	0.1	(Z)	(Z)	(Z)	(Z)	0.2	0.2	0.2	0.2
Certificates of trademarks issued	24.7	48.6	48.4	46.8	54.0	71.7	51.8	51.4	54.3	63.1
Trademarks	18.9	42.7	42.4	40.5	48.6	65.8	46.7	47.3	47.4	55.3
Trademark renewals	5.9	5.9	6.0	6.2	5.4	5.9	5.1	4.1	6.9	7.8

Z Less than 50. <sup>1</sup> Includes patents to foreign governments. <sup>2</sup> Includes patents for inventions, designs, botanical plants, and reissues. <sup>3</sup> 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.

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

**No. 892. Patents, by State: 1989**

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

STATE	Total	Inven- tions	Designs	Botan- ical plants	Re- issue	STATE	Total	Inven- tions	Designs	Botan- ical plants	Re- issue
U.S. . . . .	54,625	50,185	3,883	345	212	MT . . . . .	87	84	3	-	-
AL . . . . .	339	298	40	-	1	NE . . . . .	132	126	4	2	-
AK . . . . .	39	38	1	-	-	NV . . . . .	133	117	16	-	-
AZ . . . . .	785	744	40	-	1	NH . . . . .	318	287	27	-	4
AR . . . . .	128	104	21	3	-	NJ . . . . .	3,269	3,079	156	18	16
CA . . . . .	8,430	7,564	682	162	22	NM . . . . .	185	177	7	-	1
CO . . . . .	880	788	79	8	5	NY . . . . .	4,479	4,105	352	5	17
CT . . . . .	1,705	1,563	128	5	9	NC . . . . .	873	794	7	2	7
DE . . . . .	447	440	6	-	1	ND . . . . .	62	55	7	-	-
DC . . . . .	57	49	8	-	-	OH . . . . .	2,856	2,595	235	18	8
FL . . . . .	1,934	1,702	196	29	7	OK . . . . .	648	599	45	2	2
GA . . . . .	705	645	56	1	3	OR . . . . .	719	612	79	23	5
HI . . . . .	71	63	7	1	-	PA . . . . .	2,980	2,804	159	7	10
ID . . . . .	169	162	7	-	-	RI . . . . .	204	158	43	-	3
IL . . . . .	3,092	2,845	224	8	15	SC . . . . .	445	412	27	-	-
IN . . . . .	1,059	981	68	2	8	SD . . . . .	36	33	3	-	-
IA . . . . .	427	396	31	-	-	TN . . . . .	568	519	46	1	2
KS . . . . .	307	261	46	-	-	TX . . . . .	3,384	3,218	148	9	9
KY . . . . .	277	247	29	1	-	UT . . . . .	362	332	29	-	1
LA . . . . .	474	449	18	1	6	VT . . . . .	134	122	12	-	-
ME . . . . .	125	112	11	-	2	VA . . . . .	782	722	56	2	3
MD . . . . .	874	807	58	7	2	WA . . . . .	985	921	53	8	-
MA . . . . .	2,134	1,982	134	11	7	WV . . . . .	164	157	7	-	-
MI . . . . .	2,768	2,619	133	3	13	WI . . . . .	1,265	1,164	94	-	7
MN . . . . .	1,451	1,339	102	2	8	WY . . . . .	35	33	2	-	-
MS . . . . .	112	98	14	-	-	PR . . . . .	25	23	2	-	-
MO . . . . .	704	640	61	1	2	U.S. Pacific Isl.	2	1	1	-	-

- Represents zero.

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

## No. 893. Patents, by Industry: 1970 to 1989

[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 totals, data for all years have been revised to reflect the U.S. Patent Classification System as of 1989]

SIC <sup>1</sup> code	INDUSTRY	1970	1980	1985	1987	1988	1989
(X)	<b>Total</b> .....	<b>64,429</b>	<b>61,819</b>	<b>71,661</b>	<b>82,952</b>	<b>77,924</b>	<b>95,539</b>
(X)	Durable goods:						
32	Stone, clay, glass and concrete products .....	2,113	2,077	2,269	2,458	2,435	3,087
33, 3462-3	Primary metals .....	793	767	786	801	884	982
34	Fabricated metal products <sup>2</sup> .....	7,648	7,417	8,290	9,718	8,783	10,750
35	Machinery, except electrical .....	18,436	17,094	20,300	22,042	20,832	24,116
36, 3825	Electrical and electronic equipment, and supplies .....	14,333	11,573	15,226	20,003	17,936	22,243
37, 348	Transportation and other public utilities <sup>3</sup> .....	4,081	4,043	4,957	6,063	5,457	6,177
38	Professional and scientific instruments .....	8,069	8,451	10,128	12,504	11,822	14,809
(X)	Nondurable goods:						
20	Food and kindred products .....	510	515	582	504	574	824
22	Textile mill products .....	725	643	811	834	847	1,018
28	Chemicals and allied products .....	9,618	10,754	11,312	11,314	11,126	13,941
13, 29	Petroleum, oil and gas extraction .....	863	793	1,031	961	839	1,027
30	Rubber and miscellaneous plastics products .....	4,774	4,933	5,892	6,240	6,265	7,598
(X)	All other SIC <sup>1</sup> groups .....	6,270	6,334	6,719	8,171	7,635	9,820

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

Source: U.S. Patent and Trademark Office, *Patenting Trends in the United States, State Country Report, 1963-1989*.

## No. 894. Consumer Packaged Goods—New Product Introductions: 1980 to 1990

[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	Beverages	Health and beauty	Household products	Pat products	Miscellaneous products
<b>Domestic and Imports:</b>						
1980 .....	1,192	256	834	331	86	197
1981 .....	1,356	262	868	315	74	237
1982 .....	1,782	332	919	390	103	113
1983 .....	3,013	587	1,355	473	138	105
1984 .....	2,678	589	1,094	303	108	227
1985 .....	2,327	585	1,222	463	139	294
1986 .....	2,764	657	1,327	385	107	194
1987 .....	2,895	634	1,526	362	152	292
1988 .....	2,781	597	1,496	310	151	222
1989 .....	2,866	524	1,492	313	204	206
<b>1990, total.</b> .....	<b>3,453</b>	<b>630</b>	<b>1,531</b>	<b>432</b>	<b>164</b>	<b>154</b>
<b>Percent:</b>						
New brands <sup>1</sup> .....	36.5	42.8	30.9	32.1	36.0	59.7
Brand extensions <sup>2</sup> .....	1.4	0.9	0.7	0.9	3.0	0.7
Line extensions <sup>3</sup> .....	62.1	56.3	68.4	67.0	61.0	39.6
<b>Types of new product innovation (percent):<sup>4</sup></b>						
Formulation <sup>5</sup> .....	54.6	52.1	46.0	38.6	33.3	37.8
New market <sup>6</sup> .....	0.6	-	-	-	-	-
Packaging <sup>7</sup> .....	14.5	18.3	20.1	30.0	33.3	40.5
Positioning <sup>8</sup> .....	29.3	29.6	31.0	31.4	33.4	16.2
Technology <sup>9</sup> .....	1.0	-	2.9	-	-	5.5
<b>CUMULATIVE</b>						
Domestic, except imports, 1980-90 .....	23,756	4,624	12,671	3,878	1,370	2,080
Imports, 1980-90 <sup>10</sup> .....	3,331	1,009	993	179	58	161
International, 1985-90 <sup>11</sup> .....	9,018	2,629	8,123	1,842	399	709

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

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



**No. 895. Gross Stock of Fixed Private Capital, Nonresidential and Residential, by Industry: 1980 to 1989**

(In billions of dollars. Estimates as of Dec. 31)

INDUSTRY	CURRENT DOLLARS				CONSTANT (1982) DOLLARS			
	1980	1985	1988	1989	1980	1985	1988	1989
<b>Fixed private capital</b>	<b>8,942.8</b>	<b>12,105.0</b>	<b>14,423.9</b>	<b>15,397.4</b>	<b>9,813.2</b>	<b>11,254.4</b>	<b>12,303.3</b>	<b>12,846.7</b>
<b>Nonresidential</b>	<b>4,844.4</b>	<b>6,706.4</b>	<b>7,895.6</b>	<b>8,387.5</b>	<b>5,420.0</b>	<b>6,348.3</b>	<b>6,947.9</b>	<b>7,156.2</b>
Agriculture, forestry and fisheries	319.2	383.6	381.2	394.2	357.4	343.7	315.5	307.6
Farms	295.2	350.1	342.8	353.3	330.6	312.8	283.5	275.2
Ag. serv., forestry and fisheries	24.0	33.5	38.4	40.9	26.7	30.9	32.0	32.4
<b>Mining</b>	<b>358.0</b>	<b>448.4</b>	<b>448.9</b>	<b>425.8</b>	<b>441.2</b>	<b>548.9</b>	<b>505.8</b>	<b>484.7</b>
Metal mining	26.4	35.3	36.3	37.6	30.0	32.0	30.2	29.8
Coal mining	31.7	46.9	48.3	49.2	36.5	43.7	41.3	40.3
Oil and gas extraction	282.5	344.0	342.6	316.6	354.8	452.9	416.3	396.9
Nonmetallic minerals, exc. fuels	17.4	22.3	21.7	22.4	19.9	20.3	18.0	17.7
<b>Construction</b>	<b>100.3</b>	<b>109.4</b>	<b>115.6</b>	<b>118.8</b>	<b>113.1</b>	<b>100.5</b>	<b>94.9</b>	<b>93.9</b>
<b>Manufacturing</b>	<b>1,108.1</b>	<b>1,497.2</b>	<b>1,726.5</b>	<b>1,823.6</b>	<b>1,236.4</b>	<b>1,393.5</b>	<b>1,454.3</b>	<b>1,483.1</b>
Durable goods	604.9	821.7	952.3	1,004.1	674.1	773.3	819.0	836.1
Lumber and wood products	28.8	34.1	36.7	38.1	32.2	30.7	29.3	29.3
Furniture and fixtures	8.9	11.9	14.2	15.2	9.9	10.9	11.9	12.2
Stone, clay, glass products	47.4	55.6	58.7	59.7	52.7	52.5	50.8	50.6
Primary metal industries	141.8	176.2	189.1	194.9	159.1	162.3	155.9	154.4
Fabricated metal products	68.6	91.7	108.6	115.1	76.3	84.9	90.2	92.4
Machinery, exc. electrical	94.8	135.3	157.0	165.4	105.0	134.9	147.9	151.9
Elec. and elec. equipment	70.2	119.5	153.1	167.0	78.8	112.3	133.3	140.6
Motor vehicles and equipment	72.5	91.8	104.9	105.6	80.5	86.0	88.2	88.2
Other transp. equipment	40.3	60.0	74.8	81.0	44.8	55.6	64.1	67.0
Instruments, related products	19.9	30.9	38.8	42.2	22.0	28.3	34.0	36.1
Misc. mfg. industries	11.6	14.7	16.5	17.0	12.9	13.5	13.5	13.5
Nondurable goods	503.2	675.6	774.2	819.5	562.3	620.1	635.3	647.1
Food and kindred products	100.4	134.2	156.7	165.8	112.0	122.1	126.5	129.1
Tobacco manufacturers	5.2	9.5	12.5	13.8	5.9	8.1	10.3	11.1
Textile mill products	33.9	41.4	45.3	46.9	38.0	37.1	35.5	35.1
Apparel; other textile products	11.1	13.4	14.3	14.6	12.4	12.3	11.3	11.6
Paper and allied products	68.5	94.9	114.9	126.0	77.2	87.4	94.1	99.4
Printing and publishing	35.7	51.7	65.5	71.6	39.7	48.2	55.0	58.4
Chemicals, allied products	141.9	183.5	202.9	213.0	158.6	170.0	169.1	169.3
Petroleum and coal products	88.6	98.3	107.0	111.0	76.3	89.6	87.9	87.6
Rubber, misc. plastic products	35.2	45.4	51.7	53.9	39.2	41.8	42.3	42.7
Leather and leather products	2.7	3.2	3.4	3.5	3.0	3.0	2.8	2.7
<b>Transportation and public utilities</b>	<b>1,444.5</b>	<b>1,947.5</b>	<b>2,233.8</b>	<b>2,350.8</b>	<b>1,621.9</b>	<b>1,795.5</b>	<b>1,906.3</b>	<b>1,925.9</b>
Transportation	501.2	586.2	617.4	634.1	551.1	541.2	530.4	529.4
Railroad transportation	237.6	255.6	253.1	254.9	258.3	232.2	215.5	211.3
Local, interurban pass. transit	9.3	9.6	10.1	10.5	10.2	8.8	8.5	8.7
Trucking and warehousing	75.7	105.0	124.5	130.6	84.7	93.3	101.0	103.5
Water transportation	50.9	65.8	73.1	76.3	57.3	63.9	64.1	64.5
Transportation by air	80.4	74.5	76.4	78.8	69.1	71.6	69.1	68.3
Pipelines, exc. natural gas	34.8	39.1	41.6	41.7	36.8	36.9	36.7	36.5
Transportation services	32.4	36.6	38.6	41.3	34.9	34.5	35.5	36.7
Communication	346.4	552.9	674.7	713.4	392.2	498.0	557.0	572.4
Telephone and telegraph	327.2	522.1	636.7	672.4	370.3	470.6	525.9	540.1
Radio and TV broadcasting	19.2	30.8	38.0	41.0	21.8	27.4	31.1	32.3
Elec., gas, and sanitary services	616.8	808.4	941.7	1,003.4	678.6	758.3	818.8	824.1
Electric services	467.9	631.9	740.5	794.5	521.0	590.2	642.0	642.9
Gas services	132.2	154.8	173.8	179.3	140.5	145.7	152.0	154.7
Sanitary services	16.7	21.7	27.3	29.5	17.2	20.4	24.9	26.6
<b>Wholesale trade</b>	<b>152.3</b>	<b>247.7</b>	<b>330.3</b>	<b>363.1</b>	<b>167.5</b>	<b>243.2</b>	<b>319.0</b>	<b>348.1</b>
<b>Retail trade</b>	<b>258.1</b>	<b>401.7</b>	<b>522.9</b>	<b>567.4</b>	<b>285.1</b>	<b>360.0</b>	<b>428.5</b>	<b>446.7</b>
<b>Finance, insurance, real estate</b>	<b>716.1</b>	<b>1,104.7</b>	<b>1,406.6</b>	<b>1,546.4</b>	<b>789.2</b>	<b>1,034.1</b>	<b>1,289.0</b>	<b>1,393.9</b>
Banking	78.3	131.6	193.8	225.5	86.3	138.4	217.5	256.6
Credit agencies other than banks	59.9	93.7	123.4	138.1	65.5	95.5	127.1	145.8
Security and commodity brokers and services	2.9	5.3	8.1	8.7	3.2	6.2	11.2	12.5
Insurance carriers	16.9	31.5	61.5	73.7	18.3	37.9	89.1	110.1
Insurance agents, brokers, and services	4.3	5.1	5.5	5.7	4.6	5.6	6.0	6.2
Real estate	546.4	823.3	994.9	1,071.5	603.3	734.3	809.4	831.1
Holding, other investment companies	7.3	14.2	21.5	23.2	7.9	16.3	28.7	31.6
<b>Services</b>	<b>367.8</b>	<b>566.3</b>	<b>727.7</b>	<b>797.3</b>	<b>408.2</b>	<b>528.9</b>	<b>634.6</b>	<b>676.2</b>
Hotels, other lodging places	63.2	102.1	131.4	144.4	69.8	90.9	107.5	112.9
Personal services	21.3	26.5	29.4	30.9	23.5	24.1	24.7	25.1
Business services	82.7	134.3	180.0	200.5	92.3	134.5	173.0	189.8
Auto repair; serv., garages	61.5	98.6	132.1	144.9	68.7	90.5	110.4	118.5
Misc. repair services	9.8	13.8	16.7	17.7	11.0	12.7	13.9	14.3
Motion pictures	8.7	11.1	13.2	14.1	9.3	10.8	12.2	12.8
Amusement, recreation services	30.1	41.1	49.0	52.3	33.6	37.8	41.3	42.7
Other services	90.4	138.8	176.0	192.5	100.0	127.5	151.7	160.1
Health services	49.8	85.8	113.5	126.0	55.1	78.4	96.1	102.5
Legal services	6.5	10.0	14.1	15.6	7.1	9.4	13.0	14.2
Educational services	2.3	2.6	3.0	3.2	2.5	3.0	4.0	4.3
Other	32.1	40.5	45.4	47.8	35.3	36.7	38.7	39.2
<b>Residential</b>	<b>4,098.4</b>	<b>5,398.5</b>	<b>6,528.3</b>	<b>7,009.9</b>	<b>4,393.1</b>	<b>4,906.1</b>	<b>5,354.4</b>	<b>5,487.6</b>
Farms	127.4	145.2	152.6	157.3	137.3	131.7	125.5	123.8
Real estate	3,971.0	5,253.3	6,375.8	6,852.6	4,255.8	4,774.4	5,228.9	5,363.8

<sup>1</sup> 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 issues.

### No. 896. Fixed Nonresidential Private Capital Valued in Current and Constant (1982) Dollars: 1970 to 1989

[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 1307]

ITEM	CURRENT DOLLARS						CONSTANT (1982) DOLLARS					
	1970	1980	1985	1987	1988	1989	1970	1980	1985	1987	1988	1989
<b>All industries:</b>												
Gross stocks	1,453.4	4,844.4	6,706.4	7,459.3	7,895.6	8,387.5	3,737.8	5,420.0	6,348.3	6,731.5	6,947.9	7,158.2
Equipment	679.3	2,353.3	3,286.6	3,685.4	3,942.7	4,185.9	1,620.0	2,651.1	3,153.6	3,417.6	3,581.3	3,750.8
Structures	774.1	2,491.1	3,419.8	3,773.9	3,952.9	4,201.6	2,117.8	2,768.9	3,194.7	3,314.0	3,366.7	3,407.4
Net stocks	865.1	2,807.4	3,771.7	4,149.4	4,377.3	4,633.0	2,212.2	3,137.7	3,576.5	3,752.4	3,860.9	3,959.8
Equipment	395.0	1,336.8	1,796.5	2,002.3	2,144.8	2,274.2	939.8	1,505.5	1,737.5	1,879.9	1,974.2	2,067.2
Structures	470.2	1,470.6	1,975.1	2,147.1	2,232.5	2,358.9	1,272.4	1,632.2	1,839.0	1,872.5	1,886.6	1,892.7
Depreciation	68.4	233.9	340.8	379.1	399.8	428.0	174.7	277.8	337.4	367.3	383.4	404.0
Equipment	46.7	159.4	233.4	262.2	278.0	298.6	109.7	188.8	229.8	255.9	271.2	289.7
Structures	21.7	74.5	107.4	116.8	121.8	129.4	65.1	89.0	107.6	111.4	112.2	114.3

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

### No. 897. Business Expenditures for New Plant and Equipment: 1980 to 1990

[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	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
<b>All industries</b> <sup>1</sup>	<b>286.4</b>	<b>324.7</b>	<b>326.2</b>	<b>321.2</b>	<b>373.8</b>	<b>410.1</b>	<b>399.4</b>	<b>410.5</b>	<b>455.5</b>	<b>507.4</b>	<b>533.0</b>
(1982 dollars) <sup>2</sup>	336.4	347.6	326.2	325.1	382.0	419.8	402.4	415.0	454.4	501.6	524.2
Manufacturing	112.6	128.7	124.0	117.4	139.6	152.9	138.0	141.1	163.5	183.8	192.8
Durable goods	54.8	58.9	54.6	51.6	64.6	70.9	65.7	68.0	77.0	82.6	83.0
Primary metals	6.7	7.2	6.8	5.9	6.8	7.5	6.7	8.6	11.0	12.0	12.2
Electrical machinery	10.2	11.4	12.2	12.7	16.2	17.1	15.6	16.8	20.8	20.5	22.2
Machinery, except electrical	10.7	12.4	12.3	12.0	13.6	13.8	11.4	11.9	13.7	14.6	13.8
Transportation equipment	16.1	16.9	13.6	11.9	16.6	19.6	18.9	16.7	15.8	16.7	18.0
Nondurable goods	57.8	69.8	69.4	65.7	75.0	82.0	72.3	73.0	86.4	101.2	109.8
Food and beverage	8.5	10.1	9.4	8.5	9.7	11.4	11.6	12.1	14.2	15.9	16.7
Paper	6.4	6.0	5.5	5.7	6.9	8.1	8.3	8.5	10.9	15.6	16.7
Chemicals	10.6	12.0	11.4	11.6	13.5	14.4	14.5	13.9	16.6	18.5	20.5
Petroleum	22.8	31.9	33.5	29.5	32.6	34.1	23.1	22.1	26.0	30.1	34.5
Mining	12.7	15.8	14.1	10.6	11.9	12.0	8.2	8.3	9.3	9.2	9.9
Public utilities	41.3	47.2	53.6	53.0	57.5	59.6	56.3	60.4	66.3	67.0	67.0
Transportation	13.6	12.7	11.8	10.8	13.4	14.6	15.1	16.6	18.8	21.6	21.6
Wholesale and retail trade	32.0	35.7	36.8	44.5	53.4	60.1	65.4	68.5	76.4	84.5	95.5
Finance and insurance	22.6	28.4	30.4	32.0	37.9	45.2	49.6	54.1	59.2	70.3	69.4
Personal and business services	24.9	26.3	25.6	25.1	28.5	28.8	28.4	30.1	32.9	34.6	33.8
Communication	26.8	30.1	30.1	27.9	31.6	37.1	38.2	37.2	37.2	39.8	43.0

<sup>1</sup> Surveyed quarterly. <sup>2</sup> For preparation of constant-dollar estimates, see source for detail. <sup>3</sup> Includes industries not shown separately. <sup>4</sup> Includes construction.

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

### No. 898. Gross Private Domestic Investment: 1970 to 1989

[In billions of dollars]

YEAR	CURRENT DOLLARS						CONSTANT (1982) DOLLARS					
	Gross private domestic investment				Less: Capital consumption allowances <sup>2</sup>	Equals: Net private domestic investment	Gross private domestic investment				Less: Capital consumption allowances <sup>2</sup>	Equals: Net private domestic investment
	Total <sup>1</sup>	Fixed investment	Non-residential	Residential			Total <sup>1</sup>	Fixed investment	Non-residential	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	426.7	210.3
1986	659.4	652.5	435.2	217.3	460.1	199.3	639.6	634.1	438.4	195.7	443.4	196.2
1987	699.5	671.2	444.9	226.3	487.0	212.6	669.0	646.2	449.8	198.4	460.8	208.2
1988	747.1	720.8	488.4	232.5	514.3	232.7	705.7	682.1	487.2	194.9	479.7	226.0
1989	771.2	742.9	511.9	231.0	554.4	216.8	716.9	693.1	506.1	187.0	506.0	210.8

<sup>1</sup> Includes change in inventories, not shown separately. <sup>2</sup> 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. 899. Composite Indexes of Economic Cyclical Indicators: 1980 to 1989

[1989 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	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	
LEADING INDICATORS												
Composite index . . . . .		1982 = 100 . . . . .	99.2	101.2	100.0	116.2	121.7	124.2	132.3	140.1	142.8	144.9
Building permits . . . . .		1967 = 100 . . . . .	96.7	80.0	80.7	131.1	134.8	138.1	141.2	122.9	115.8	107.6
Common stock prices, index <sup>2</sup> . . . . .		1941-43 = 100 . . . . .	118.8	128.0	119.7	160.4	160.5	186.8	236.3	286.8	265.8	322.8
Initial claims, unemployment insurance . . . . .		1,000 . . . . .	480	446	578	426	366	383	373	320	305	324
Change in sensitive materials prices <sup>3,4</sup> . . . . .		Percent . . . . .	0.4	-0.1	-0.9	1.1	0.2	-0.8	0.3	1.1	0.4	0.1
Vendor performance, slower deliveries . . . . .		Percent . . . . .	41	46	43	57	57	48	51	57	58	48
Average workweek, manufacturing <sup>5</sup> . . . . .		Hours . . . . .	39.7	38.8	38.9	40.1	40.7	40.5	40.7	41	41.1	41.0
Plant and equipment contracts and orders (1982 dol.) . . . . .		Bil. dol. . . . .	361	352	310	317	380	410	413	474	541	578
New orders, manufacturing, consumer goods and materials (1982 dol.) . . . . .		Bil. dol. . . . .	891	888	810	901	965	955	968	1,015	1,046	1,054
Money supply (M2) <sup>6</sup> (1982 dol.) . . . . .		Bil. dol. . . . .	1,835	1,820	1,875	2,045	2,116	2,227	2,367	2,435	2,460	2,435
Consumer expectations index . . . . .		1966 = 100 . . . . .	56.8	65.0	62.7	84.7	92.7	86.5	85.8	81.2	85.2	85.2
Change in manufacturers' unfilled orders, durable goods (1982 dol.) <sup>4</sup> . . . . .		Bil. dol. . . . .	-13	-13	-28	14	28	-	-1	16	22	24
COINCIDENT INDICATORS												
Composite index . . . . .		1982 = 100 . . . . .	107.2	107.3	100.0	101.9	112.2	116.0	118.7	122.4	128.2	132.9
Industrial production index . . . . .		1987 = 100 . . . . .	84.1	85.7	81.9	84.9	92.8	94.4	95.3	100.0	105.4	108.1
Employees, nonagricultural payrolls . . . . .		Million . . . . .	90.4	91.2	89.6	90.2	94.5	97.5	99.5	102.2	105.6	108.6
Personal income less transfer payments (1982 dol.) . . . . .		Bil. dol. . . . .	2,233	2,275	2,261	2,301	2,454	2,540	2,628	2,696	2,795	2,919
Sales, mfg. and trade (1982 dol.) . . . . .		Bil. dol. . . . .	4,341	4,358	4,184	4,362	4,726	4,871	5,050	5,230	5,420	5,517
LAGGING INDICATORS												
Composite index . . . . .		1982 = 100 . . . . .	105.5	102.8	100.0	91.4	100.7	107.7	111.7	111.3	114.9	119.8
Change in labor cost per unit of output, manufacturing <sup>4</sup> . . . . .		Percent . . . . .	10.1	6.3	3.8	-3.0	1.6	1.7	0.3	-2.2	2.3	3.1
Ratio, consumer installment credit to personal income . . . . .		Percent . . . . .	13.2	12.1	11.9	12.1	13.1	14.5	15.6	15.6	15.7	15.8
Average prime rate charged by banks . . . . .		Percent . . . . .	15.3	18.9	14.9	10.8	12.0	9.9	8.3	8.2	9.3	10.9
Average duration of unemployment . . . . .		Weeks . . . . .	11.9	13.8	15.6	19.9	18.1	15.6	15.0	14.5	13.5	11.9
Ratio, inventories to sales, mfg. and trade (1982 dol.) . . . . .		Ratio . . . . .	1.6	1.6	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.5
Commercial and industrial loans outstanding (1982 dol.) <sup>8</sup> . . . . .		Bil. dol. . . . .	225	233	268	261	296	329	349	354	364	389
Change in CPI for services <sup>4,9</sup> . . . . .		Percent . . . . .	15.2	14.0	6.8	3.1	5.6	5.0	4.8	4.1	4.7	4.4

- Represents or rounds to zero. <sup>1</sup> New private housing units authorized. <sup>2</sup> Standard and Poor's 500 stocks. <sup>3</sup> Producer prices of selected crude and intermediate materials and spot market prices of selected raw industrial materials. <sup>4</sup> Smoothed by an autoregressive-moving-average filter developed by Statistics Canada. <sup>5</sup> Production workers. <sup>6</sup> See table 833. <sup>7</sup> Copyrighted by the University of Michigan's Survey Research Center. <sup>8</sup> Includes commercial paper issued by nonfinancial companies. <sup>9</sup> Consumer Price Index.

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

## No. 900. Business Cycle Expansions and Contractions—Months of Duration: 1919 to 1990

[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.]

BUSINESS CYCLE REFERENCE DATE		Contraction (trough from previous peak)	Expansion (trough to peak)	LENGTH OF CYCLE	
Trough	Peak			Trough from previous trough	Peak from previous peak
March 1919 . . . . .	January 1920 . . . . .	17	10	251	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 . . . . .	6	12	64	18
November 1982 . . . . .	July 1990 . . . . .	16	92	28	108
Average, all cycles:					
1919-1945 (6 cycles) . . . . .		18	35	53	53
1945-1990 (8 cycles) . . . . .		11	350	56	361

<sup>1</sup> Previous peak: August 1918. <sup>2</sup> Previous trough: December 1914. <sup>3</sup> For 9 cycles.

Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, April 1991.

**No. 901. Manufacturing and Trade—Sales and Inventories in Current and Constant (1982) Dollars: 1970 to 1989**  
[in billions of dollars, except ratios]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>CURRENT DOLLARS</b>												
<b>Sales, average monthly</b>	<b>107</b>	<b>182</b>	<b>328</b>	<b>357</b>	<b>349</b>	<b>369</b>	<b>409</b>	<b>419</b>	<b>425</b>	<b>450</b>	<b>490</b>	<b>522</b>
Manufacturing	53	87	154	168	163	171	188	190	189	199	218	232
Retail trade	31	49	80	87	89	98	107	115	120	127	137	144
Merchant wholesalers	24	47	93	102	96	100	113	115	116	124	135	146
<b>Inventories</b>	<b>178</b>	<b>289</b>	<b>494</b>	<b>528</b>	<b>582</b>	<b>574</b>	<b>620</b>	<b>645</b>	<b>657</b>	<b>701</b>	<b>729</b>	<b>781</b>
Manufacturing	102	160	264	283	317	307	326	331	318	331	342	366
Retail trade	44	72	116	127	133	139	157	172	186	207	212	230
Merchant wholesalers	32	57	113	118	130	127	136	143	153	163	175	185
<b>Inventory-sales ratio</b> <sup>2</sup>	<b>1.62</b>	<b>1.52</b>	<b>1.41</b>	<b>1.52</b>	<b>1.67</b>	<b>1.56</b>	<b>1.52</b>	<b>1.54</b>	<b>1.55</b>	<b>1.50</b>	<b>1.49</b>	<b>1.50</b>
Manufacturing	1.91	1.77	1.61	1.74	1.94	1.80	1.73	1.74	1.68	1.61	1.58	1.58
Retail trade	1.39	1.38	1.40	1.46	1.49	1.42	1.47	1.50	1.55	1.55	1.55	1.60
Merchant wholesalers	1.30	1.19	1.10	1.20	1.35	1.27	1.20	1.24	1.32	1.26	1.30	1.27
<b>CONSTANT (1982) DOLLARS</b>												
<b>Sales, average monthly</b> <sup>3</sup>	<b>260</b>	<b>306</b>	<b>372</b>	<b>357</b>	<b>346</b>	<b>383</b>	<b>403</b>	<b>414</b>	<b>432</b>	<b>457</b>	<b>478</b>	<b>482</b>
Manufacturing	131	149	175	167	159	178	186	189	192	214	224	224
Retail trade	70	83	93	91	94	102	108	112	120	121	127	126
Merchant wholesalers	60	74	104	99	93	102	109	113	120	122	127	132
<b>Inventories</b>	<b>428</b>	<b>496</b>	<b>591</b>	<b>602</b>	<b>582</b>	<b>584</b>	<b>631</b>	<b>638</b>	<b>642</b>	<b>669</b>	<b>689</b>	<b>702</b>
Manufacturing	248	282	327	330	315	309	330	321	316	323	330	334
Retail trade	97	116	130	136	133	142	158	169	171	186	192	199
Merchant wholesalers	83	99	134	136	134	133	143	149	155	160	166	169
<b>Inventory-sales ratios</b> <sup>4</sup>	<b>1.64</b>	<b>1.62</b>	<b>1.59</b>	<b>1.68</b>	<b>1.68</b>	<b>1.53</b>	<b>1.56</b>	<b>1.54</b>	<b>1.49</b>	<b>1.46</b>	<b>1.44</b>	<b>1.46</b>
Manufacturing	1.90	1.90	1.87	1.98	1.99	1.74	1.77	1.70	1.64	1.51	1.47	1.49
Retail trade	1.39	1.39	1.40	1.48	1.41	1.39	1.46	1.51	1.43	1.54	1.52	1.58
Merchant wholesalers	1.39	1.34	1.29	1.37	1.44	1.30	1.31	1.32	1.29	1.31	1.31	1.28

<sup>1</sup> Book value; seasonally adjusted end-of-year data. See text, section 17. <sup>2</sup> Average inventories to average sales. Average inventories based on weighted averages of end-of-month figures. <sup>3</sup> Average monthly sales for fourth quarter. <sup>4</sup> 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," February 1990 and unpublished data; constant dollars from U.S. Bureau of Economic Analysis, *Survey of Current Business*, September issues.

**No. 902. Manufacturing Corporations, Assets, and Profits, by Asset Size: 1970 to 1989**

[Corporations and assets as of **end of 4th quarter**; profit for **entire year**. Through 1975, 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 <sup>1</sup> \$10 mil.	\$10-\$25 mil.	\$25-\$50 mil.	\$50-\$100 mil.	\$100- \$250 mil.	\$250 mil.-\$1 bil.	\$1 bil. and over
Corporations:									
1970 <sup>2</sup>	Number	197,807	<sup>3</sup> 195,000	1,202	533	366	289	218	102
1975	Number	(NA)	(NA)	1,750	705	450	392	276	151
1980	Number	(NA)	(NA)	1,777	941	590	491	369	244
1983	Number	(NA)	(NA)	(NA)	863	683	559	403	275
1984	Number	(NA)	(NA)	(NA)	872	703	601	420	287
1985	Number	(NA)	(NA)	(NA)	896	744	608	428	281
1986	Number	(NA)	(NA)	(NA)	962	741	628	445	291
1987	Number	(NA)	(NA)	(NA)	1,007	811	676	481	318
1988	Number	(NA)	(NA)	(NA)	(NA)	783	729	550	334
1989	Number	(NA)	(NA)	(NA)	(NA)	781	750	579	347
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
1980	Mil. dol	1,384,474	126,639	43,569	34,930	41,963	75,284	179,959	882,129
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	217,341	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	2,339,690	149,276	77,068	53,461	62,190	110,411	261,880	1,625,404
1989	Mil. dol	2,501,097	144,814	73,487	56,548	68,149	117,014	282,056	1,759,029
Net profit: <sup>4</sup>									
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
1980	Mil. dol	92,443	7,770	2,235	1,904	2,479	4,532	11,485	62,041
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	154,583	11,364	4,488	3,199	3,978	5,473	13,994	112,086
1989	Mil. dol	136,490	10,381	5,173	2,921	3,105	4,434	11,824	98,651

NA Not available. <sup>1</sup> 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. Source: U.S. Securities and Exchange Commission. <sup>2</sup> Data derived from U.S. Internal Revenue Service, *Statistics of Income*, annual. <sup>3</sup> After taxes.

Source: Except as noted, through 1980, U.S. Federal Trade Commission; thereafter, U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining and Trade Corporations*.

### No. 903. Largest Industrial Corporations—Sales, Assets, Profits, and Stockholder's Equity, by Sales Group Rank: 1988 and 1989

[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 <sup>1</sup>			PROFITS <sup>2</sup>			STOCKHOLDER'S EQUITY		
	1988	1989	Percent change 1988-89	1988	1989	Percent change 1988-89	1988	1989	Percent change 1988-89	1988	1989	Percent change 1988-89
<b>500 largest</b> . . . . .	<b>2,023.1</b>	<b>2,164.8</b>	<b>7.0</b>	<b>2,078.8</b>	<b>2,298.6</b>	<b>10.8</b>	<b>115.0</b>	<b>105.7</b>	<b>-8.1</b>	<b>696.0</b>	<b>720.8</b>	<b>3.3</b>
Top 100 . . . . .	1,409.9	1,518.3	7.7	1,541.1	1,709.4	10.9	81.3	75.5	-7.1	486.3	510.0	4.4
101 to 200 . . . . .	306.0	320.8	4.8	276.0	299.8	8.6	16.2	15.6	-3.7	104.0	107.1	3.0
201 to 300 . . . . .	155.3	163.4	5.2	133.3	144.3	8.3	10.5	7.4	-29.5	59.5	53.4	-10.3
301 to 400 . . . . .	92.5	98.3	6.3	73.0	85.9	17.7	4.5	4.9	8.9	27.4	31.4	14.6
401 to 500 . . . . .	59.4	63.9	7.6	55.4	59.2	6.9	2.5	2.4	-4.0	18.8	18.9	0.5
<b>Percent of total:</b>												
Top 100 . . . . .	69.7	70.1	(X)	74.1	74.4	(X)	70.7	71.4	(X)	70.0	70.8	(X)
101 to 200 . . . . .	15.1	14.8	(X)	13.3	13.0	(X)	14.1	14.8	(X)	14.9	14.9	(X)
201 to 300 . . . . .	7.7	7.5	(X)	6.4	6.3	(X)	9.5	7.0	(X)	8.5	7.4	(X)
301 to 400 . . . . .	4.6	4.5	(X)	3.5	3.7	(X)	3.9	4.6	(X)	3.9	4.3	(X)
401 to 500 . . . . .	2.9	3.0	(X)	2.7	2.6	(X)	2.2	2.3	(X)	2.7	2.6	(X)

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

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

### No. 904. 500 Largest Industrial Corporations—Selected Financial Items: 1970 to 1989

ITEM	Unit	1970	1980	1982	1983	1984	1985	1986	1987	1988	1989
Sales per employee . . . . .	\$1,000 . . .	29.5	71.1	91.0	92.2	100.6	106.0	110.7	124.4	137.9	146.0
Changes in profits . . . . .	Percent . . .	(NA)	(NA)	(NA)	12.0	24.9	-19.1	-7.9	41.3	26.9	-8.1
Sales per dollar of stockholder's equity . . . . .	Dollar . . .	2.4	3.12	2.74	2.66	2.78	2.80	2.79	2.77	2.93	2.96
Return on stockholder's equity . . . . .	Percent . . .	9.5	14.1	10.9	10.7	13.6	11.6	11.6	14.4	16.2	15.0
Return on sales . . . . .	Percent . . .	3.9	4.5	3.6	3.8	4.5	3.9	4.1	5.1	5.5	4.6
Total return to investors <sup>1</sup> . . . . .	Percent . . .	6.5	21.6	21.2	30.2	-0.8	26.3	16.1	6.6	14.1	17.5

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

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

### No. 905. 500 Largest Industrial Corporations—Selected Financial Items, by Industry: 1988 and 1989

[Data are medians and are ranked based on sales per employee for latest year shown. See headnote, table 903. 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 <sup>1</sup> (percent)	
	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989	1988	1989
<b>Total</b> . . . . .	<b>137.9</b>	<b>146.0</b>	<b>26.9</b>	<b>-8.1</b>	<b>2.93</b>	<b>2.96</b>	<b>16.2</b>	<b>15.0</b>	<b>5.5</b>	<b>4.7</b>	<b>14.1</b>	<b>17.5</b>
Petroleum refining . . . . .	469.4	537.0	62.7	-11.8	3.07	3.09	15.3	10.4	4.7	3.4	22.9	43.8
Mining, crude-oil production . . . . .	290.2	314.6	13.8	7.0	1.66	1.56	2.4	12.7	3.3	9.6	9.2	51.7
Tobacco . . . . .	153.2	226.6	17.4	8.5	3.37	5.21	22.5	20.1	7.8	5.4	36.9	12.3
Food . . . . .	197.9	211.3	14.6	14.0	5.33	5.52	15.7	20.7	2.8	3.6	24.9	27.9
Chemicals . . . . .	204.8	206.0	35.0	1.6	2.46	2.44	16.8	15.9	6.9	6.6	11.0	17.6
Metals . . . . .	172.2	195.8	110.4	9.7	3.06	2.77	18.4	17.8	6.2	4.6	16.0	10.2
Beverages . . . . .	203.0	194.4	16.5	18.3	2.35	2.31	22.8	23.2	8.0	8.1	21.2	41.0
Soaps, cosmetics . . . . .	222.0	178.1	28.4	9.0	3.45	4.13	18.5	18.9	5.3	4.2	15.1	39.4
Forest products . . . . .	168.7	174.8	45.0	-5.3	2.38	2.44	19.8	16.9	8.7	7.1	12.0	19.8
Building materials . . . . .	158.3	146.2	-17.7	7.0	2.17	1.78	-3.3	13.6	4.5	3.9	24.9	12.9
Pharmaceuticals . . . . .	132.1	144.3	16.8	19.6	1.91	1.88	23.6	25.5	13.5	13.0	14.7	37.6
Publishing, printing . . . . .	117.0	124.0	12.6	8.6	2.11	2.16	17.7	15.9	7.1	6.4	8.6	15.4
Computers (incl. office equip.) . . . . .	109.0	124.0	12.6	-9.0	2.38	2.57	14.7	12.8	6.2	5.9	-11.5	-14.0
Rubber and plastic products . . . . .	124.0	122.6	15.5	-2.2	3.42	3.35	15.8	12.9	4.4	4.8	31.3	-1.6
Aerospace . . . . .	112.2	120.4	11.6	-14.5	3.64	4.16	11.4	10.2	3.6	3.2	19.5	3.0
Metal products . . . . .	120.8	119.9	17.8	3.4	2.83	3.01	12.7	18.4	4.6	6.2	9.9	24.9
Motor vehicles and parts . . . . .	111.2	117.9	13.7	-21.2	3.96	4.07	14.5	9.8	3.5	3.0	22.2	-8.3
Industrial and farm equipment . . . . .	102.4	113.7	25.2	-10.5	2.92	2.92	12.7	12.1	4.3	3.8	20.3	-2.2
Scientific, photographic equipment . . . . .	109.2	113.5	17.2	4.8	2.14	2.28	12.1	13.0	5.0	5.1	1.6	11.9
Transportation equipment <sup>2</sup> . . . . .	110.7	109.5	21.1	-9.4	2.96	3.64	13.4	10.9	3.1	3.0	39.2	-10.4
Electronics . . . . .	95.1	100.4	18.9	10.0	2.60	2.90	16.8	14.5	5.1	4.2	4.8	12.6
Furniture . . . . .	90.3	87.8	32.9	-4.8	2.67	3.52	15.9	14.0	5.6	4.6	15.0	1.8
Textiles . . . . .	78.8	81.2	13.9	15.3	3.37	3.49	10.8	10.1	3.5	1.9	18.4	14.0
Apparel . . . . .	56.4	58.2	-3.4	6.5	3.90	3.95	17.5	19.5	4.3	4.4	24.1	25.3

<sup>1</sup> Includes both price appreciation and dividend yield, i.e., to an investor in the company's stock. <sup>2</sup> Excludes motor vehicles and aircraft.

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

**No. 906. Corporate Profits, Taxes, and Dividends: 1970 to 1989**

[In billions of dollars. Covers corporations organized for profit and other entities treated as corporations. 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	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Profits before taxes	76.0	134.8	237.1	226.5	189.6	207.6	240.0	224.3	221.6	275.3	316.7	307.7
Less: Income tax liability	34.4	50.9	84.8	81.1	63.1	77.2	93.9	86.4	106.3	126.9	136.2	135.1
Equals: Profits after taxes	41.7	83.9	152.3	145.4	106.5	130.4	146.1	127.8	115.3	148.4	180.5	172.6
Less: Net dividends	22.5	29.6	54.7	63.6	68.9	71.5	79.0	83.3	91.3	98.2	110.0	123.5
Equals: Undistributed profits	19.2	54.3	97.6	81.8	38.6	58.9	67.0	44.6	24.0	50.2	70.5	49.1
Capital consumption allowances <sup>3</sup>	57.2	90.2	164.7	166.3	225.8	259.7	287.2	328.3	339.7	355.6	369.9	372.0
Profits after tax plus capital consumption allowances	98.9	174.1	317.0	341.7	332.3	390.1	433.3	456.1	455.0	504.0	550.4	544.6

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

<sup>3</sup> Without capital consumption adjustment. Includes depreciation and accidental damages.

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. 907. Corporate Profits, by Industry: 1980 to 1989**

[In billions of dollars. Profits are without inventory valuation and capital consumption adjustments. Minus sign (-) indicates loss. See headnote, table 906]

INDUSTRY	BEFORE TAXES						AFTER TAXES					
	1980	1985	1986	1987	1988	1989	1980	1985	1986	1987	1988	1989
<b>Total</b>	<b>237.1</b>	<b>224.3</b>	<b>221.6</b>	<b>275.3</b>	<b>316.7</b>	<b>307.7</b>	<b>152.3</b>	<b>127.8</b>	<b>115.3</b>	<b>148.4</b>	<b>180.5</b>	<b>172.6</b>
<b>Domestic industries</b>	<b>202.7</b>	<b>193.1</b>	<b>188.5</b>	<b>237.9</b>	<b>273.4</b>	<b>256.9</b>	<b>117.9</b>	<b>96.7</b>	<b>82.1</b>	<b>111.0</b>	<b>137.2</b>	<b>121.8</b>
Agriculture <sup>1</sup>	0.6	-0.1	1.5	1.9	2.0	1.8	0.2	-0.4	1.1	1.4	1.4	1.4
Mining	6.5	-5	-3.9	0.3	1.4	1.8	4.7	-5.2	-4.2	-0.5	0.6	0.8
Construction	6.5	5.7	8.2	12.1	12.4	13.3	4.4	3.9	5.8	9.2	8.7	9.2
Manufacturing	96.3	81.2	57.0	94.3	118.3	106.6	57.1	48.6	25.2	50.8	71.8	62.7
Transportation	3.7	2.8	3.1	5.0	7.5	5.1	2.1	1.0	1.5	2.0	4.2	3.1
Communications	7.5	13.1	15.8	17.9	17.4	20.8	5.6	9.2	9.8	10.3	8.6	10.2
Public utilities	9.7	16.1	13.7	19.0	19.8	18.6	7.1	10.8	7.6	10.3	9.3	7.9
Wholesale and retail trade	39.0	45.1	44.3	45.6	48.1	47.3	26.8	28.2	25.7	28.1	29.5	28.3
Finance, insurance <sup>2</sup>	22.8	20.7	30.6	22.2	24.3	17.4	3.1	-8.9	-4.3	-14.9	-13.7	-21.0
Services	9.9	13.4	18.2	19.6	22.3	24.2	6.9	9.5	14.0	14.3	16.9	19.0
<b>Rest of world<sup>3</sup></b>	<b>34.4</b>	<b>31.2</b>	<b>33.1</b>	<b>37.5</b>	<b>43.3</b>	<b>50.9</b>	<b>34.4</b>	<b>31.2</b>	<b>33.1</b>	<b>37.5</b>	<b>43.3</b>	<b>50.9</b>

<sup>1</sup> Includes forestry and fisheries.

<sup>2</sup> Includes real estate.

<sup>3</sup> 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. 908. Corporate Profits With Inventory Valuation and Capital Consumption Adjustments—Financial and Nonfinancial Industries: 1970 to 1989**

[In billions of dollars. Minus sign (-) indicates loss. See headnote, table 906]

ITEM	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
<b>Corporate profits with IVA<sup>1</sup> and CCA<sup>2</sup></b>	<b>74.7</b>	<b>117.6</b>	<b>177.2</b>	<b>188.0</b>	<b>150.0</b>	<b>213.7</b>	<b>266.9</b>	<b>262.3</b>	<b>282.1</b>	<b>306.3</b>	<b>337.6</b>	<b>311.6</b>
Domestic industries	67.8	103.2	142.8	159.4	121.9	183.6	236.0	251.2	249.0	270.8	294.3	280.7
Financial	12.3	11.6	19.7	15.2	10.1	18.0	13.6	25.9	35.0	24.8	28.3	19.7
Nonfinancial	55.4	91.6	123.1	144.2	111.9	165.6	222.4	225.3	214.0	246.0	266.0	241.0
Rest of the world	6.9	14.4	34.4	28.5	28.0	30.2	30.9	31.2	33.1	35.5	43.3	50.9
<b>Corporate profits with IVA</b>	<b>88.5</b>	<b>123.9</b>	<b>194.0</b>	<b>202.3</b>	<b>159.2</b>	<b>196.7</b>	<b>234.2</b>	<b>222.6</b>	<b>228.3</b>	<b>255.9</b>	<b>289.8</b>	<b>285.1</b>
Domestic industries	62.6	109.5	159.6	173.8	131.2	166.6	203.3	191.4	195.2	218.4	246.5	235.2
Financial	12.2	11.2	20.0	16.5	11.8	18.1	13.0	22.8	32.0	20.7	22.4	15.4
Federal Reserve banks	3.6	5.7	11.9	14.5	15.4	14.8	16.7	16.8	16.0	16.2	18.1	20.7
Other	8.6	5.5	9.0	1.9	-3.6	3.3	-3.7	6.1	16.0	4.4	4.3	-5.2
Nonfinancial	50.4	98.3	138.6	157.3	119.4	148.5	190.3	168.6	163.2	197.8	224.1	219.8
Manufacturing	26.7	53.6	77.1	88.5	58.0	70.1	88.8	79.7	59.5	86.7	106.5	96.1
Durable goods <sup>3</sup>	10.2	19.8	21.3	21.0	2.1	17.2	38.1	28.5	30.8	41.0	42.8	37.1
Primary metal industries	0.8	2.7	2.5	3.1	-4.9	-4.9	-0.6	-1.4	2.6	2.8	6.3	6.2
Fabricated metal products	1.1	3.1	4.3	4.4	2.4	3.0	4.7	4.8	4.8	5.1	8.3	6.7
Machinery, except electrical	3.0	4.8	7.7	8.6	4.1	3.1	6.2	3.2	3.0	6.3	7.0	4.7
Electric and electronic equipment	1.2	2.4	4.7	4.1	1.7	3.7	5.5	3.6	2.9	6.2	6.7	7.4
Motor vehicles and equipment	1.2	2.0	-2.5	0.1	-0.8	5.1	9.0	7.2	4.1	2.8	1.5	-1.9
Nondurable goods	16.5	33.8	55.8	67.5	55.9	53.0	50.7	51.2	28.7	45.7	63.7	59.0
Food and kindred products	3.2	8.8	6.1	8.7	7.0	7.2	6.7	8.3	7.8	11.1	14.5	14.0
Chemicals and allied products	3.9	6.4	5.4	8.2	5.2	6.7	8.0	6.2	7.6	15.6	21.9	21.7
Petroleum and coal products	3.5	9.5	31.4	36.5	29.1	21.4	17.2	17.5	-7.6	-2.6	4.4	0.3
Transportation and public utilities	8.2	10.3	17.6	19.5	19.3	28.5	38.5	33.0	36.3	40.6	44.1	43.6
Wholesale and retail trade	9.6	22.2	21.6	32.5	34.6	38.9	51.2	44.1	44.1	37.9	37.1	38.7
Other	5.9	12.2	22.4	16.8	7.5	10.9	11.8	23.4	32.8	36.4	38.4	41.4

<sup>1</sup> Inventory valuation adjustment.

<sup>2</sup> Capital consumption adjustment.

<sup>3</sup> 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. 909. Selected Corporate Profits and Stockholders' Equity Ratios, by Industry: 1980 to 1989

[Averages of quarterly figures at annual rates. Beginning 1988, manufacturing 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	1988	1989	1980	1985	1988	1989	1980	1985	1988	1989
All manufacturing corporations <sup>1</sup> . . . .	13.9	10.1	16.2	13.7	4.9	3.8	6.0	5.0	2.3	1.9	1.5	1.4
Durable goods industries . . . . .	11.2	9.2	14.3	11.0	4.0	3.4	5.2	4.1	2.2	2.2	1.8	1.6
Stone, clay, and glass products . . . .	10.8	7.9	13.1	10.4	4.2	3.1	4.4	3.3	1.9	1.7	0.9	0.8
Primary metal industries . . . . .	11.7	-7.9	18.8	18.4	4.1	-2.6	4.8	4.6	1.7	1.2	1.0	1.1
Iron and steel . . . . .	9.0	-1.1	9.5	20.2	2.9	-2.6	1.8	2.7	1.7	0.8	0.6	0.6
Nonferrous metals . . . . .	15.6	-5.7	21.4	17.7	5.8	-2.5	7.6	6.3	1.9	1.6	1.5	1.5
Fabricated metal products . . . . .	13.9	9.2	13.3	13.6	4.2	2.9	3.9	3.8	2.1	1.6	1.4	1.3
Machinery, exc. electrical . . . . .	15.0	9.3	11.8	7.4	6.5	4.7	5.9	3.8	2.2	2.6	2.2	2.1
Electrical and electronic equipment . .	15.1	8.3	13.6	10.9	5.0	3.4	5.3	4.4	2.6	2.7	2.1	1.8
Transportation equipment . . . . .	-0.6	15.4	16.5	11.1	-0.3	4.1	5.1	3.6	2.7	2.9	2.2	2.1
Motor vehicles and equipment . . . .	-9.3	18.2	17.4	10.9	-3.4	4.9	5.6	3.6	3.4	4.2	2.4	2.4
Aircraft, guided missiles and parts . .	16.0	11.1	14.9	10.7	4.3	3.1	4.4	3.3	2.8	2.6	2.2	1.9
Instruments and related products . . .	17.5	10.1	16.1	12.4	9.3	5.7	8.6	6.2	4.3	3.5	1.7	1.6
Nondurable goods industries . . . . .	16.4	11.0	17.9	16.3	5.6	4.1	6.7	5.9	2.3	1.7	1.4	1.2
Food and kindred products <sup>2</sup> . . . . .	14.7	15.3	21.0	17.1	3.4	4.1	5.5	4.2	1.9	1.4	1.1	0.8
Tobacco manufactures . . . . .	19.8	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	11.7	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	1.8	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Textile mill products . . . . .	8.5	8.6	12.0	10.0	2.2	2.4	3.1	2.5	2.0	1.5	1.0	0.8
Paper and allied products . . . . .	12.1	9.7	19.2	15.6	5.1	4.0	7.5	6.2	2.0	1.7	1.6	1.3
Printing and publishing . . . . .	16.4	19.2	16.7	15.0	5.5	6.5	6.0	5.7	2.1	1.7	1.3	1.1
Chemicals and allied products . . . . .	15.4	9.4	20.3	19.7	7.1	4.7	9.1	8.8	2.2	2.1	1.6	1.5
Industrial . . . . .	11.9	4.2	20.4	17.9	5.4	2.2	8.9	8.3	1.9	1.8	1.5	1.5
Drugs . . . . .	19.9	15.2	30.3	28.0	13.2	9.8	15.9	15.1	3.0	3.2	2.0	2.1
Petroleum and coal products . . . . .	20.0	8.5	14.9	14.6	7.7	4.0	8.5	7.4	3.4	1.6	1.6	1.6
Rubber and misc. plastics products . .	6.7	9.5	16.5	12.1	2.0	2.6	4.1	3.1	1.6	1.6	1.0	1.0
Mining corporations, total <sup>3</sup> . . . . .	19.2	-4	2.3	6.0	11.3	-3.2	1.7	4.5	1.3	1.0	0.1	1.2
Retail trade corporations, total <sup>3</sup> . . .	13.2	12.5	12.6	13.2	1.7	2.2	2.0	1.9	1.2	1.4	0.8	0.7
Wholesale trade corporations, total <sup>3</sup> .	17.3	8.7	10.3	9.0	1.8	1.0	1.2	1.1	1.2	1.0	1.0	1.0

<sup>1</sup> Includes other industries not shown separately. <sup>2</sup> Beginning 1985, tobacco included in food and kindred products. <sup>3</sup> For 1985, 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. 910. Manufacturing Corporations—Sales, Profits, Stockholders' Equity, and Debt: 1960 to 1989

[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	Profits		Stock holders' equity <sup>1</sup>	Debt <sup>1</sup>	Sales	Profits		Stock holders' equity	Debt <sup>1</sup>	Sales	Profits		Stock holders' equity <sup>1</sup>	Debt <sup>1</sup>
		Before taxes	After taxes				Before taxes	After taxes				Before taxes	After taxes		
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	65	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	1,128	74	49	415	193
1983 . .	2,114	133	86	813	368	973	49	30	372	188	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	866	454	1,143	61	39	421	187	1,189	76	49	445	267
1986 <sup>2</sup> . .	2,221	129	83	875	501	1,126	52	33	436	203	1,096	78	51	438	298
1987 . .	2,378	173	116	901	553	1,178	78	53	444	229	1,200	95	63	457	324
1988 . .	2,596	216	155	958	622	1,285	92	67	469	265	1,312	124	88	489	357
1989 . .	2,745	189	136	999	732	1,356	75	55	501	308	1,388	114	81	498	424

<sup>1</sup> Annual data are average equity or debt for the year (using four end-of-quarter figures). <sup>2</sup> Beginning 1986, data exclude 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. 911. Corporate Philanthropy as a Percent of Worldwide Pretax Net Income: 1985 to 1989

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

INDUSTRY CLASS	1985	1987	1988	1989	INDUSTRY CLASS	1985	1987	1988	1989
All firms, median . . . . .	1.0	0.9	0.8	0.9	Petroleum and gas <sup>2</sup> . . . . .	0.7	0.9	0.5	0.8
Manufacturing firms, median. . . . .	1.1	1.0	0.8	0.9	Pharmaceuticals . . . . .	1.0	1.0	1.1	1.0
Chemicals . . . . .	1.1	0.8	0.7	0.8	Primary metal industries . . . . .	1.1	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Electrical machinery and equipment . . . . .	1.6	1.2	0.6	0.7	Printing and publishing . . . . .	1.3	0.8	2.3	1.7
Fabricated metal products . . . . .	0.8	1.2	0.8	1.0	Stone, clay and glass products . . . . .	1.5	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Food, beverage and tobacco . . . . .	1.2	1.3	1.0	1.4	Textiles . . . . .	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	0.8
Machinery, nonelectrical . . . . .	1.1	1.0	0.9	0.7	Transportation equipment <sup>4</sup> . . . . .	1.0	0.9	1.1	1.2
Paper and like products . . . . .	1.2	0.7	0.6	0.7	Nonmanufacturing firms, median . . . . .	0.9	0.7	0.9	1.0

<sup>1</sup> Primary metals and stone, clay, and glass firms included with fabricated metal firms. <sup>2</sup> Mining firms included with petroleum firms. <sup>3</sup> Fewer than 4 companies reporting. <sup>4</sup> Rubber and miscellaneous plastic firms included with transportation firms.

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

### No. 912. U.S. Largest Public Companies—Return on Equity, Debt Equity Ratio, Sales Growth, and Earnings per Share—by Industry: 1985 to 1989

[In percent, except ranks. For fiscal years ending in the 12 month period ending September 30. Included in the Forbes Universe of 1,177 companies is every firm with revenue of over \$400 million in 1990, electric and banking firms \$800 million. 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 <sup>1</sup>			1989		Sales <sup>3</sup>			Earnings per share		
	5-year rank	5-year average 1985-89	Latest 12 months 1989	Return on capital, latest 12 months	Debt/capital	5-year rank	5-year average 1985-89	Latest 12 months 1989	5-year rank	5-year average 1985-89	Latest 12 months 1989
All-Industry medians . . . . .	(X)	14.3	14.4	11.1	32.0	(X)	10.9	8.5	(X)	7.6	8.0
Health . . . . .	1	17.8	18.4	14.7	20.6	7	12.7	8.8	5	11.0	15.2
Food, drink and tobacco . . . . .	2	17.5	17.8	12.8	32.3	10	10.6	10.6	3	12.7	12.3
Entertainment and information . . . . .	3	17.8	15.2	12.8	31.6	6	12.7	6.8	4	8.0	12.2
Business services and supplies . . . . .	4	17.1	16.6	12	27.3	2	14.6	8.6	6	12.2	15.2
Retailing . . . . .	5	16.5	14.4	11.3	35.2	4	13.0	11.3	1	11.1	12.7
Aerospace and defense . . . . .	6	13.9	13.4	10.0	33.0	11	9.8	4.9	10	7.2	1.1
Consumer nondurables . . . . .	7	16.7	17.1	14.1	34.6	9	10.8	8.4	2	12.6	15.6
Chemicals . . . . .	8	16.5	17.4	15.7	26.9	17	7.3	8.6	11	13.1	14.3
Insurance . . . . .	9	14.7	12.0	11.0	17.3	3	14.1	8.4	9	9.6	9.0
Financial services . . . . .	10	13.7	13.9	9.1	31.5	1	12.5	16.9	7	8.5	7.1
Computers and communications . . . . .	11	14.3	13.6	9.2	23.8	8	11.5	8.8	12	-4.1	-1.0
Consumer durables . . . . .	12	14.2	15.0	11.6	33.4	12	10.3	7.1	16	5.8	0.2
Forest products and packaging . . . . .	13	15.2	18.8	12.5	30.1	15	11.5	10.0	8	27.0	12.8
Electric utilities . . . . .	14	13.3	12.4	7.1	41.1	14	2.6	3.5	13	-6.3	-2.5
Travel . . . . .	15	11.3	14.4	9.3	48.5	5	12.0	9.1	20	(NS)	-17.0
Transport . . . . .	16	9.9	10.6	7.0	37.2	13	11.0	5.3	14	-14.1	5.2
Energy . . . . .	17	9.2	10.7	8.0	36.5	20	-7.1	5.3	18	(NS)	3.8
Capital goods . . . . .	18	10.9	14.1	11.0	29.2	19	8.6	10.1	15	3.9	10.8
Construction . . . . .	19	5.0	4.4	7.1	41.0	16	10.4	5.9	19	(NS)	-32.9
Materials . . . . .	20	8.9	14.6	11.4	30.4	18	7.9	8.1	18	(NS)	4.9

NS Not significant. X Not applicable. <sup>1</sup> 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.

<sup>2</sup> After-tax profits, the amount remaining if the interest paid on long-term debt was taxed, and minority interest divided by a firm's total capitalization. Total capitalization is long-term debt, common and preferred equity, deferred taxes, investment tax credits and minority interest in consolidated subsidiaries. <sup>3</sup> Net sales plus other operating revenue.

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



**No. 913. Foreign Corporate Activity in the United States: 1987**

[Includes corporations controlled or owned by any foreign person (i.e., an individual, partnership, corporation, estate, or trust), directly or indirectly, based on 50 percent or more of a U.S. corporation's voting stock at the end of the tax year]

AREA AND COUNTRY <sup>1</sup>	Number of returns	Total assets (bil. dol.)	Total receipts <sup>2</sup> (bil. dol.)	Net income (less deficit) (mil. dol.)	TOTAL U.S. INCOME TAX	
					Before credits (mil. dol.)	After credits (mil. dol.)
<b>All corporations in the United States . . . . .</b>	<b>3,612,133</b>	<b>15,310.6</b>	<b>9,580.7</b>	<b>328,224</b>	<b>118,485</b>	<b>86,989</b>
<b>Corporations controlled by a foreign person, total . . . . .</b>	<b>44,862</b>	<b>959.4</b>	<b>686.8</b>	<b>5,608</b>	<b>5,676</b>	<b>4,561</b>
Canada . . . . .	8,264	80.0	51.5	476	458	347
Latin America . . . . .	6,054	34.1	37.3	-497	122	83
Other Western Hemisphere . . . . .	253	7.1	10.3	12	49	37
Europe, total <sup>3</sup> . . . . .	14,073	512.9	335.2	4,842	3,424	2,827
Common Market countries, total <sup>3</sup> . . . . .	11,467	469.7	291.1	4,372	3,072	2,543
Belgium . . . . .	192	7.1	7.1	388	131	72
France . . . . .	1,899	43.5	29.8	114	254	211
Netherlands . . . . .	1,940	135.3	77.2	454	581	434
United Kingdom . . . . .	3,801	209.5	103.0	3,356	1,570	1,412
West Germany . . . . .	2,390	57.5	62.8	142	434	351
Sweden . . . . .	1,033	11.9	14.4	266	121	86
Switzerland . . . . .	1,069	23.2	23.7	241	202	173
Africa . . . . .	660	0.7	0.3	-5	1	1
Asia, total <sup>3</sup> . . . . .	8,024	227.5	204.2	-229	1,071	1,024
Hong Kong . . . . .	2,071	29.3	5.4	240	14	8
Japan . . . . .	3,708	172.0	184.9	219	979	951
South Korea . . . . .	153	3.8	6.8	19	31	31
Oceania . . . . .	603	21.1	9.1	-93	26	25
Puerto Rico and U.S. Possessions . . . . .	3	2.3	3.6	257	97	39
Country not stated . . . . .	6,928	73.7	35.2	869	428	179

<sup>1</sup> Geographic location of the foreign owners country of residence, incorporation, organization, creation or administration.

<sup>2</sup> Total receipts includes business plus investment receipts. <sup>3</sup> Some countries not shown separately.

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

**No. 914. U.S. Multinational Companies—Assets, Sales, Employment, Employee Compensation, U.S. Exports and Imports: 1988**

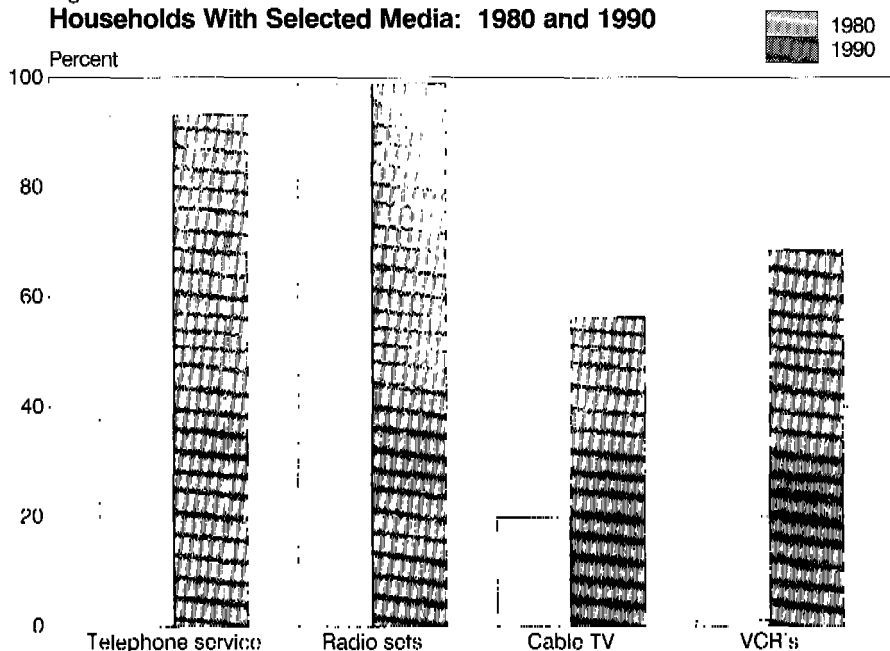
[In billions of dollars, except as indicated. Consists of non-bank U.S. parent companies and their foreign affiliates. U.S. parent is a U.S. person that owns or controls directly or indirectly, 10 percent or more of the voting securities of an incorporated foreign business enterprise, or an equivalent 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 <sup>1</sup>	U.S. PARENTS				FOREIGN AFFILIATES				U.S. exports shipped to foreign affiliates	U.S. imports shipped from foreign affiliates
	Total assets	Sales	Employment (1,000)	Employee compensation	Total assets	Sales	Employment (1,000)	Employee compensation		
<b>All industries . . . . .</b>	<b>4,353</b>	<b>2,827</b>	<b>17,935</b>	<b>591</b>	<b>1,204</b>	<b>1,195</b>	<b>6,404</b>	<b>151</b>	<b>95</b>	<b>87</b>
Petroleum . . . . .	425	294	656	29	193	208	296	11	2	9
Manufacturing . . . . .	1,630	1,430	9,815	366	455	620	4,141	98	66	68
Food and kindred products . . . . .	166	181	1,066	27	39	60	417	7	2	1
Chemical and allied products . . . . .	261	213	1,219	48	95	111	595	15	8	4
Primary and fabricated metals . . . . .	91	94	665	24	24	28	229	5	2	2
Machinery (except electrical) . . . . .	170	138	1,104	48	76	99	562	19	9	10
Electric and electronic equipment . . . . .	186	133	1,044	37	44	56	676	13	8	10
Transportation equipment . . . . .	431	372	2,220	102	93	162	804	21	30	35
Other . . . . .	326	298	2,498	81	84	103	858	19	7	7
Wholesale trade . . . . .	78	194	332	10	108	203	504	17	25	7
Finance (except banking), insurance, real estate . . . . .	1,539	377	1,050	40	349	51	165	6	(Z)	(D)
Services . . . . .	119	91	1,740	33	37	37	369	9	(Z)	(Z)
Other industries . . . . .	563	442	4,342	113	62	76	928	11	1	(D)

D Withheld to avoid disclosure. Z Less than \$500 million. <sup>1</sup> Represents industry of U.S. parent or industry of foreign affiliate.

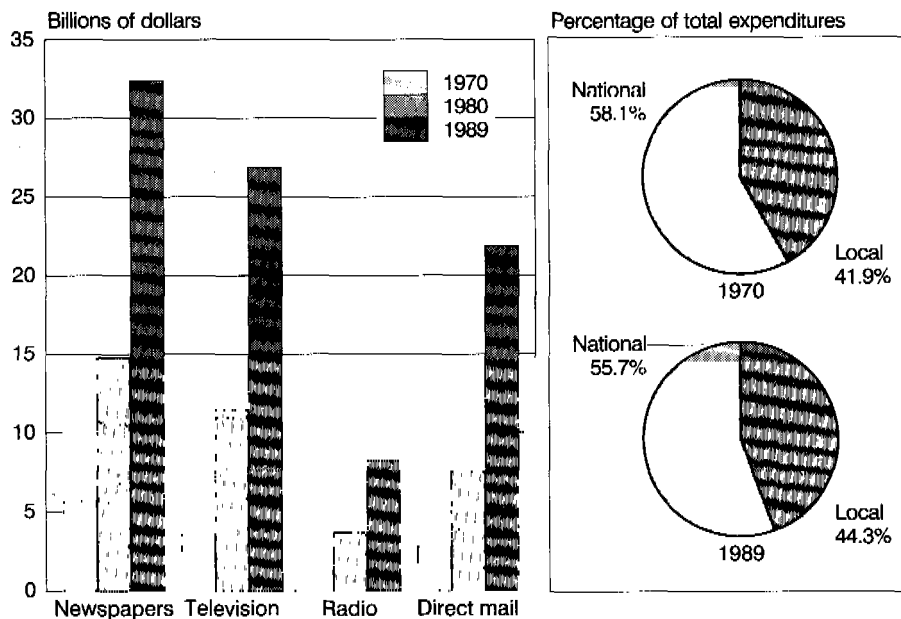
Source: U.S. Bureau of Economic Analysis, *Survey of Current Business*, June 1990.

Figure 18.1

**Households With Selected Media: 1980 and 1990**

Source: Chart prepared by U.S. Bureau of the Census. For data, see table 919.

Figure 18.2

**Advertising Expenditures, by Selected Media: 1970 to 1989**

Source: Chart prepared by U.S. Bureau of the Census. For data, see table 939.



## 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 5 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, NY 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 395 for annual data.)

**Advertising.**—Data on advertising expenditures are compiled primarily by McCann-Erickson, Inc., which compiles certain of the data shown (see tables 937-938). 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. 915. U.S. Postal Service—Summary: 1975 to 1989

[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	1983	1984	1985	1986	1987	1988	1989
Number of post offices . . . . .	30,754	30,326	29,990	29,750	29,557	29,344	29,319	29,203	29,083
Pieces of mail handled (est.) (bil.) . . . . .	89.3	106.3	119.4	131.5	140.1	147.4	153.9	161.0	161.6
First-class, number (bil.) <sup>1</sup> . . . . .	51.4	60.3	64.3	68.4	72.4	76.2	78.9	84.7	85.9
Percent . . . . .	57.6	56.7	53.8	52.0	51.7	51.7	51.3	52.6	53.2
Second class (bil.) . . . . .	9.1	8.4	9.2	9.5	10.4	10.6	10.3	10.4	10.5
Employees, total . . . . .	702	667	679	702	744	785	791	824	817
Regular . . . . .	559	536	547	561	586	606	751	764	764
Postmasters . . . . .	30	29	28	28	28	27	28	28	27
Office supervisors and tech. personnel . . . . .	37	36	39	45	46	49	55	55	55
Office clerks and mail handlers . . . . .	239	229	229	235	249	260	345	347	345
City carriers and vehicle drivers . . . . .	167	160	166	171	179	187	237	243	243
Rural carriers . . . . .	31	33	34	35	35	36	37	39	40
Other . . . . .	55	49	51	47	48	47	49	52	54
Substitute (part-time) . . . . .	143	130	132	141	159	179	40	60	53
Compensation and employee benefits (mil. dol.) . . . . .	10,805	16,541	20,070	22,157	24,349	25,576	27,229	30,749	32,368
Avg. salary per employee (dol.) <sup>3</sup> . . . . .	15,392	24,799	29,565	31,562	32,727	32,581	34,424	36,989	39,619
Pieces of mail per employee, avg . . . . .	127	159	176	187	188	188	195	195	198
Total revenue <sup>4</sup> . . . . .	11,590	19,106	24,699	26,474	28,956	31,021	32,297	35,939	38,920
Operating postal revenue . . . . .	10,015	17,143	23,582	25,314	27,736	30,102	31,529	35,036	38,415
Stamps, postal cards, etc. . . . .	2,819	4,287	5,709	6,023	6,520	6,969	7,246	7,784	8,381
Second-class postage paid in money (pound rates) <sup>5</sup> . . . . .	284	881	991	1,056	1,339	1,271	1,326	1,455	1,594
Other postage paid under permit and meter . . . . .	6,241	10,828	14,755	16,067	17,747	19,294	20,280	22,678	24,534
Box rents . . . . .	67	160	202	188	230	259	273	296	362
Miscellaneous . . . . .	556	892	1,801	1,847	1,774	2,174	2,255	2,683	3,449
Money-order revenues . . . . .	53	95	124	132	126	135	148	142	148
Government appropriations . . . . .	1,533	1,610	789	879	970	716	650	517	436
Percent of total revenue . . . . .	13.2	8.4	3.2	3.3	3.3	2.3	2.0	1.4	1.1
Investment income, net . . . . .	37	353	328	282	250	203	119	-30	16
Mail and service:									
First-class mail <sup>1</sup> . . . . .	5,798	10,146	14,255	15,216	16,740	18,035	18,786	21,402	23,234
Priority mail <sup>6</sup> . . . . .	411	612	849	928	960	1,011	1,086	1,329	1,416
Second-class publishers' mail <sup>7</sup> . . . . .	277	864	958	1,025	1,093	1,222	1,280	1,400	1,519
Third-class mail <sup>8</sup> . . . . .	1,348	2,412	3,677	4,241	4,887	5,606	6,148	2,311	7,924
Bulk rate . . . . .	1,167	2,168	3,482	4,039	4,697	5,414	5,947	7,096	7,668
Single piece rate and fees . . . . .	181	244	195	202	190	193	200	215	256
Fourth-class mail <sup>9</sup> . . . . .	718	805	753	774	763	814	823	929	908
Zone rate mail (parcels, catalogs, etc.) . . . . .	577	500	500	519	524	550	563	647	612
Special fourth-class rate . . . . .	130	272	206	210	199	213	203	223	235
Library rate and fees . . . . .	11	33	47	45	40	51	57	59	61
Government mail <sup>10</sup> . . . . .	484	745	913	901	934	992	907	(NA)	(NA)
International mail <sup>11</sup> . . . . .	390	596	874	859	882	934	957	992	1,081
Special services . . . . .	251	518	866	868	918	979	1,030	1,136	1,314
Express mail . . . . .	(X)	184	422	490	544	491	499	524	572
Mailgrams . . . . .	(X)	15	14	13	15	17	13	12	10
Other <sup>12</sup> . . . . .	1,913	2,205	1,118	1,159	1,220	919	769	903	452
Expenditures <sup>13</sup> . . . . .	12,578	19,412	24,083	26,357	29,207	30,716	32,520	36,119	38,370

NA Not available. X Not applicable. <sup>1</sup> Items mailed at 1st-class rates and weighing 12 ounces or less. <sup>2</sup> Includes mobile unit employees. <sup>3</sup> Includes fringe benefits. <sup>4</sup> 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. <sup>5</sup> Includes controlled circulation publications. <sup>6</sup> Items otherwise qualified as 1st-class or airmail that exceeds 12 ounces and 8 ounces, respectively. <sup>7</sup> 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. <sup>8</sup> Items less than 16 ounces in weight not mailed at either 1st- or 2d-class rates. <sup>9</sup> 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. <sup>10</sup> Penalty and franked. Beginning in 1989 penalty and franked mail are included in their appropriate classes of mail. <sup>11</sup> Mail from U.S. to foreign countries paid at international mail rates. <sup>12</sup> Consists of unassignable revenues; 1975 includes domestic airmail. <sup>13</sup> Shown in year in which obligation was incurred.

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

**No. 916. U.S. Postal Service—Volume of Mail, by Class: 1970 to 1989**

[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 915. 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	1988	1989	1970	1980	1985	1988	1989
Total	84,882	106,311	140,098	160,954	161,603	13,281	12,958	16,783	18,607	18,412
Domestic	83,986	105,348	139,269	160,228	160,880	13,055	12,742	16,584	18,385	18,184
1st class and airmail <sup>1</sup>	50,174	60,332	72,517	84,815	85,926	1,636	2,213	2,807	3,259	3,315
Priority mail	185	248	308	437	471	371	591	672	925	939
2d class <sup>2</sup>	9,914	10,221	10,360	10,483	10,523	3,641	3,478	3,986	4,118	4,170
3d class	19,974	30,381	52,170	63,250	62,779	2,032	3,240	6,453	7,652	7,479
4th class	877	633	576	674	626	4,786	2,661	2,156	2,336	2,196
Penalty	2,544	2,992	2,608	(NA)	(NA)	540	503	470	(NA)	(NA)
Franked and free for blind	218	540	710	569	555	49	56	40	51	85
International	896	963	829	726	724	226	216	219	222	228
Per capita: <sup>3</sup>										
Total, all domestic mail <sup>4</sup>	411	464	585	655	651	64	56	70	75	74
1st class and airmail	245	266	304	347	348	8	10	12	13	13
2d class <sup>2</sup>	49	45	44	43	43	18	15	17	17	17
3d class	98	134	219	259	254	10	14	27	31	30
4th class	5	3	2	3	3	23	12	9	9	9

NA Not available. <sup>1</sup> Beginning 1980, includes express mail established as a class of mail on October 9, 1977, and mailgrams. <sup>2</sup> See footnote 8, table 915. <sup>3</sup> 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. <sup>4</sup> Includes types of mail not shown separately.

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

**No. 917. U.S. Postal Service Rates for Letters and Post Cards: 1958 to 1990**

[Domestic airmail letters discontinued in 1973 at 13 cents per ounce; superseded by express mail. See also *Historical Statistics, Colonial Times to 1970*, series R 188-191]

DATE OF RATE CHANGE	SURFACE MAIL				Ex- press mail	DATE OF RATE CHANGE	SURFACE MAIL				Ex- press mail
	Letters			Postal and post cards			Letters			Postal and post cards	
	Each oz	First oz	Each added oz				Each oz	First oz	Each added oz		
1958 (Aug. 1) . .	\$0.04	(X)	(X)	\$0.03	(X)	1978 (May 29) . .	(X)	\$0.15	\$0.13	\$0.10	(X)
1963 (Jan. 7) . .	\$0.05	(X)	(X)	\$0.04	(X)	1981 (Mar. 22) . .	(X)	\$0.18	\$0.17	\$0.12	(X)
1968 (Jan. 7) . .	\$0.06	(X)	(X)	\$0.05	(X)	1981 (Nov. 1) . .	(X)	\$0.20	\$0.17	\$0.13	\$9.35
1971 (May 16) . .	\$0.08	(X)	(X)	\$0.06	(X)	1985 (Feb. 17) . .	(X)	\$0.22	\$0.17	\$0.14	\$10.75
1974 (Mar. 2) . .	\$0.10	(X)	(X)	\$0.08	(X)	1988 (Apr. 3) . .	(X)	\$0.25	\$0.20	\$0.15	\$12.00
1975 (Sept. 14) .	<sup>2</sup> (X)	<sup>2</sup> \$0.10	<sup>2</sup> \$0.09	<sup>2</sup> \$0.07	(X)	1989 (Aug.) . . . .	(X)	\$0.25	\$0.20	\$0.15	<sup>3</sup> \$12.00
1975 (Dec. 31) .	<sup>2</sup> (X)	<sup>2</sup> \$0.13	<sup>2</sup> \$0.11	<sup>2</sup> \$0.09	(X)						

X Not applicable. <sup>1</sup> 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. <sup>2</sup> As of October 11, 1975, surface mail service upgraded to level of airmail. <sup>3</sup> Over eight ounces and up to two pounds.

**No. 918. International Air Mail Rates From the United States: 1961 to 1990**

[Excludes Canada and Mexico]

DATE OF RATE CHANGE	ZONE 1 <sup>1</sup>		ZONE 1 <sup>2</sup>		ZONE 1 <sup>3</sup>		Postal and post cards	Aero-grammes
	Each 1/2 oz up to 2 ozs	Each added 1/2 oz	Each 1/2 oz up to 2 ozs	Each added 1/2 oz	Each 1/2 oz up to 2 ozs	Each added 1/2 oz		
1961 (July 1)	0.13	0.13	0.15	0.15	0.25	0.25	0.11	0.11
1967 (May 1)	0.15	0.15	0.20	0.20	0.25	0.25	0.13	0.13
1971 (July 1)	0.17	0.17	0.21	0.21	0.21	0.21	0.13	0.13
1974 (March 2)	0.21	0.17	0.26	0.21	0.26	0.21	0.18	0.18
1976 (January 3)	0.25	0.21	0.31	0.26	0.31	0.26	0.21	0.22
1981 (January 1)	0.35	<sup>4</sup> 0.30	0.40	<sup>5</sup> 0.35	0.40	<sup>5</sup> 0.35	0.28	0.30
1985 (February 17)	0.39	<sup>6</sup> 0.33	0.44	0.39	0.44	<sup>7</sup> 0.39	0.33	0.36
1988 (April 17)	0.45	0.42	0.45	0.42	0.45	0.42	0.36	0.39
1989 (August)	0.45	0.42	0.45	0.42	0.45	0.42	0.36	0.39

<sup>1</sup> 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. <sup>2</sup> Europe and Mediterranean Africa. <sup>3</sup> Rest of world. <sup>4</sup> Up to 32 oz.; 30 cents per additional ounce over 32. <sup>5</sup> Up to 32 oz.; 35 cents per additional ounce over 32. <sup>6</sup> Up to 32 oz.; 33 cents per additional ounce over 32. <sup>7</sup> Up to 32 oz.; 39 cents per additional ounce over 32. <sup>8</sup> Air letters collapsed to a single schedule except for Canada and Mexico.

Source of tables 917 and 918: U.S. Postal Service, "United States Domestic Postage Rate: Recent History", and unpublished data.

## No. 919. Utilization of Selected Media: 1970 to 1990

ITEM	Unit	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989	1990
Households with—												
Telephone service <sup>1</sup>	Percent	87.0	(NA)	93.0	(NA)	91.8	91.8	92.2	92.5	92.9	93.0	93.3
Radio sets	Millions	62.0	71.4	78.6	84.6	86.7	87.1	88.1	89.9	91.1	(NA)	92.8
Percentage to the household <sup>2</sup>	Percent	98.6	98.6	99.0	99.0	99.0	99.0	99.0	99.0	99.0	(NA)	99.0
Average number of sets	Number	5.1	5.6	5.5	5.5	5.5	5.5	5.4	5.4	5.6	(NA)	5.6
Television sets	Millions	59	69	76	83	84	85	86	87	89	90	92
Percent of total households	Percent	95.3	97.1	97.9	98.1	98.1	98.1	98.1	98.1	98.1	98.2	98.2
Television sets in homes	Millions	81	105	128	149	149	155	158	163	168	176	185
Average number of sets	Number	1.4	1.5	1.7	1.8	1.8	1.8	1.8	1.9	1.9	1.9	2.0
Color set households	Millions	21	47	63	74	76	78	80	83	85	87	90
Cable television <sup>4</sup>	Millions	4	9	15	28	33	36	39	42	44	48	52
Percent of TV households	Percent	6.7	12.6	19.9	34.0	39.3	42.8	45.6	47.7	49.4	52.8	56.4
VCR's <sup>5</sup>	Millions	(NA)	(NA)	1	5	9	18	31	43	51	58	63
Percent of TV households	Percent	(NA)	(NA)	1.1	5.5	10.6	20.8	36.0	48.7	58.0	64.6	68.6
Commercial radio stations:												
AM	Number	4,323	4,463	4,589	4,733	4,754	5,718	4,863	4,902	4,932	(NA)	4,975
FM	Number	2,196	2,767	3,282	3,527	3,716	5,875	3,944	4,041	4,155	(NA)	4,269
Television stations: <sup>6</sup> Total	Number	862	953	1,011	1,106	1,138	1,182	1,235	1,290	1,362	1,403	1,442
Commercial	Number	677	706	734	813	841	883	919	968	1,028	1,061	1,092
VHF <sup>3</sup>	Number	501	514	516	519	523	520	522	524	539	545	547
UHF <sup>3</sup>	Number	176	192	218	294	318	363	397	444	489	516	545
Cable television: <sup>6</sup>												
Systems	Number	2,490	3,506	4,225	5,600	6,200	6,844	7,600	7,900	8,500	(NA)	(NA)
Subscribers served	Millions	4.5	9.8	15.5	25.0	30.0	31.3	37.5	41.0	43.8	47.8	(NA)
Daily newspaper circulation: <sup>7</sup>												
Number	Millions	62	61	62	63	63	63	63	63	63	(NA)	63
Per capita <sup>8</sup>	Number	0.305	0.282	0.275	0.267	0.267	0.263	0.260	0.258	0.256	(NA)	0.251

NA Not available. <sup>1</sup> 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. <sup>2</sup> 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. <sup>3</sup> 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). <sup>4</sup> As of February. Excludes Alaska and Hawaii. Source: See footnote 3. <sup>5</sup> As of February 1986. <sup>6</sup> As of Jan. 1 of year shown. Number of television stations on the air. Source: See footnote 3. <sup>7</sup> As of Sept. 30. Source: Editor & Publisher, Co., New York, NY, *Editor & Publisher International Year Book*, annual (copyright). <sup>8</sup> 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. 920. Multimedia Audiences—Summary: 1990

(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	180,974	92.5	77.8	51.0	85.7	84.6
18-24 years old	25,162	90.5	69.5	50.2	95.6	79.1
25-34 years old	43,573	90.8	76.5	52.4	92.5	84.2
35-44 years old	35,816	92.4	78.0	54.8	91.0	88.1
45-54 years old	24,740	92.9	78.7	54.2	86.5	88.5
55-64 years old	22,247	94.0	81.5	52.6	78.7	85.4
65 years old and over	29,414	95.3	82.6	40.1	65.5	81.5
Male	86,307	92.1	75.7	53.1	88.0	85.4
Female	94,667	92.8	79.7	49.0	83.7	83.8
White	156,336	92.1	77.1	53.5	85.8	86.0
Black	20,257	95.1	83.1	34.8	85.5	78.4
Other	4,381	92.6	75.4	33.8	83.0	62.0
Spanish speaking	9,868	93.8	77.8	42.8	84.9	71.3
Not high school graduate	44,258	93.8	79.5	40.9	75.3	70.5
High school graduate	71,206	93.1	78.4	52.3	87.4	85.9
Attended college	33,285	91.3	76.6	55.5	90.7	90.5
College graduate	32,229	91.0	75.0	57.0	91.4	94.8
Employed:						
Full-time	98,104	91.1	76.0	54.5	92.2	87.5
Part-time	16,795	92.7	74.3	54.7	90.5	88.3
Not employed	66,074	94.4	81.1	44.8	74.9	79.3
Household income: Less than \$10,000	21,185	93.8	79.9	33.2	74.3	66.8
\$10,000 to \$19,999	32,464	93.6	79.0	41.7	77.8	78.6
\$20,000 to \$29,999	31,503	92.8	78.4	48.9	86.0	84.1
\$30,000 to \$34,999	15,525	92.0	78.6	53.5	88.1	86.9
\$35,000 to \$39,999	13,847	92.2	78.5	53.6	90.0	89.1
\$40,000 to \$49,999	22,636	92.7	80.0	56.9	90.9	89.3
\$50,000 or more	43,814	91.0	73.5	63.1	92.1	93.2

Source: Mediarmark Research Inc., New York, NY, *Multimedia Audiences*, Spring 1990. (Copyright.)

**No. 921. Communications Equipment—Factory Shipments: 1985 to 1989**

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

ITEM	1985	1986	1987	1988	1989	PERCENT CHANGE		
						1986-87	1987-88	1988-89
Shipments, total	41,032	44,329	44,713	48,485	50,750	0.9	8.4	4.7
Search, detection, navigation and guidance systems and equip.	27,057	29,921	31,426	32,119	33,100	-0.2	10.1	3.1
Radar systems and equipment	4,321	4,825	3,751	3,829	3,940	-22.5	3.9	2.9
Missile and space-vehicle-borne equip	2,732	3,410	4,169	4,648	4,850	11.7	15.5	4.3
Navigation systems and equip.	2,971	3,479	3,820	4,004	4,155	-2.2	10.3	3.8
Counter measures equipment	2,682	3,090	3,527	3,323	3,350	-12.5	3.6	0.8
Tracking radar	2,208	2,452	2,900	2,857	2,850	16.3	8.7	-0.2
Search, detect., ident., and tracking n.e.c	1,961	1,953	1,964	1,769	1,785	-1.2	3.6	0.9
Sonar search, detect., tracking systems	1,885	1,934	1,835	1,681	1,625	8.3	11.0	-3.3
Specialized elect. and comm. intelligence equip	1,810	1,895	2,049	2,308	2,485	6.3	14.2	7.7
Commercial, industrial, and military communications equipment	10,671	11,184	11,503	12,684	13,750	1.2	5.1	8.4
Space satellite communications systems	2,281	2,392	2,224	2,217	2,225	-13.9	6.8	0.4
Receivers, radio communications	1,953	2,001	1,764	1,984	2,165	-3.7	-0.1	8.6
Intercommunications systems	1,743	1,670	1,944	1,934	1,950	2.2	0.8	0.8
Broadcast studio and related elect. equip	1,562	1,554	1,608	1,831	1,950	18.1	9.8	6.5

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

Source: Electronic Industries Association, Washington, DC, *Electronic Market Data Book*, annual.**No. 922. Telephone and Telegraph Systems: 1970 to 1989**[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	1983	1984	1985	1986	1987	1988	1989
<b>Domestic telephone:</b> <sup>1</sup>											
Carriers	Number	56	62	59	62	61	39	39	37	54	53
Telephones	Million	105	130	157	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Access lines	Million	(NA)	(NA)	(NA)	(NA)	100	103	106	111	122	126
Miles of wire	Million	628	872	1,131	1,260	1,290	1,313	1,338	1,371	1,483	1,502
Gross book cost of plant	Bil. dol.	59.9	95.5	147.4	184.2	183.0	195.1	207.4	222.0	250.2	260.1
Depreciation reserves	Bil. dol.	13.2	18.8	26.5	39.7	42.9	50.0	58.7	69.8	84.7	94.2
Ratio to book cost	Percent	22.1	19.7	18.0	21.5	23.5	25.6	28.3	31.4	33.9	36.2
Capital stock and premium	Bil. dol.	16.4	21.6	31.3	43.4	48.9	48.1	41.5	42.8	45.4	45.7
Operating revenues	Bil. dol.	18.2	31.3	55.6	75.0	98.9	104.8	106.4	106.3	116.7	117.3
Operating expenses	Bil. dol.	11.7	20.2	37.3	50.9	74.7	78.6	79.0	79.8	90.8	91.7
Net operating income	Bil. dol.	3.1	5.6	10.0	12.4	12.4	13.4	13.9	14.5	16.5	16.2
Net income	Bil. dol.	2.3	3.6	8.6	7.6	8.5	9.5	10.4	11.1	12.6	12.4
Employees	1,000	839	840	938	858	742	(NA)	(NA)	(NA)	688	663
Compensation of employees	Bil. dol.	7.0	11.7	20.2	25.1	22.7	(NA)	(NA)	(NA)	24.9	24.4
<b>Overseas telephone:</b>											
Number of overseas calls	Million	23.4	62.2	199.6	369.5	427.6	411.7	477.6	579.6	705.7	1,007.8
Revenue from overseas calls	Mill. dol.	252	562	1,535	1,697	1,772	1,799	1,841	2,127	2,573	3,513.4
Ocean cable systems	Number	17	21	24	26	26	26	26	26	26	23
Communications satellites	Number	4	5	5	6	6	6	11	11	14	15
<b>Domestic and overseas telegraph:</b> <sup>6</sup>											
Carriers	Number	7	7	8	7	7	7	7	7	6	6
Revenue messages transmitted	Million	102	68	75	53	48	42	29	25	(NA)	(NA)
Message revenues	Mill. dol.	358	414	676	711	732	708	678	594	483	521
Total operating revenues	Mill. dol.	596	821	1,232	1,338	1,382	1,367	1,206	1,076	882	1,019
Operating revenue deductions	Mill. dol.	524	680	1,008	1,214	1,323	1,292	1,243	1,125	942	995
Operating income	Mill. dol.	72	102	147	115	48	102	-37	-48	-56	24
Teletypewriter messages	Million	46	54	68	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
<b>Return on investment:</b>											
Telephone	Percent	7.1	7.6	8.7	8.7	9.2	9.4	9.4	9.6	10.0	9.8
Overseas telegraph	Percent	10.6	12.0	15.9	6.8	3.3	6.7	-1.5	2.5	-5.5	3.9

NA Not available. <sup>1</sup> Includes Puerto Rico and Virgin Islands. Excludes intercompany duplications. Gross operating revenues of carriers reporting estimated at 90 percent of all carriers. Beginning 1988, based on new accounting rules, prior years not necessarily comparable. <sup>2</sup> Beginning 1985, number of carriers changed due to change in dollar requirement of reporting carriers from \$1,000,000 to \$100,000,000. <sup>3</sup> Includes company, service, and private. <sup>4</sup> Includes amortization reserves. <sup>5</sup> Excludes taxes. <sup>6</sup> After tax deductions. <sup>7</sup> Excludes contingency and retired satellites. <sup>8</sup> Excludes South American and most Caribbean operations of All America Cables and Radio, Inc. <sup>9</sup> Includes telex service; for domestic telegraph, excludes TWX. <sup>10</sup> After Federal income taxes. <sup>11</sup> 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. 923. 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 local exchange carriers account for assets, liabilities, revenue, 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 <sup>1</sup>				ALL TELEPHONE COMPANIES				
		1980	1985	1986	1987	1984	1985	1986	1987	1988
All companies	Number	1,483	1,402	1,380	1,360	1,440	1,426	1,404	1,384	1,371
Access lines	Millions	20.8	24.3	25.2	26.0	114.5	116.3	122.2	126.7	130.0
Total telephone plant	Bil. dol.	35.3	49.1	50.7	52.9	193.8	207.3	218.7	230.8	242.3
Operating revenues	Bil. dol.	10.5	17.2	18.5	19.9	73.9	78.4	82.4	84.9	89.9
Avg. daily conversations <sup>2</sup>	Millions	192	223	243	301	1,199	1,264	1,327	1,662	1,700
Local calls	Millions	177	203	210	251	1,111	1,182	1,206	1,500	(NA)
Toll calls	Millions	15	20	33	50	88	102	121	162	(NA)
Reporting companies <sup>3</sup>	Number	765	653	630	604	655	677	654	628	607
Access lines	Millions	19.4	23.4	24.2	24.7	113.6	117.4	121.2	124.9	129.7
Telephone plant in service <sup>4</sup>	Bil. dol.	32.5	45.5	47.7	48.3	186.2	200.0	212.4	222.3	238.3
Depreciation reserves <sup>5</sup>	Bil. dol.	7.8	14.3	15.5	15.9	45.7	52.9	61.1	69.6	80.0
Operating revenues	Bil. dol.	10.2	16.7	17.6	17.3	73.3	77.9	81.5	82.2	85.9
Operating expenses <sup>6</sup>	Bil. dol.	7.3	13.3	12.5	12.5	59.8	63.7	59.3	61.4	61.2
Net income	Bil. dol.	1.3	2.4	2.6	2.7	9.3	10.1	11.0	11.2	11.8
Stockholders' equity	Bil. dol.	9.6	13.9	14.0	15.1	63.1	66.5	66.6	69.4	75.8
Net income to stockholders	Percent	13.2	17.5	18.7	18.0	14.7	15.1	16.5	16.1	15.6
Employees	1,000	189	170	165	152	724	695	672	653	639
Wages and salaries	Bil. dol.	3.4	4.6	4.7	4.6	22.1	21.4	22.1	22.1	(NA)

NA Not available. <sup>1</sup> Companies independent of the Bell System, prior to divestiture of January 1984. <sup>2</sup> Average business day conversations beginning 1988. <sup>3</sup> Comprises only companies submitting operating information to source cited below.

<sup>4</sup> Total property plant and equipment beginning 1988. <sup>5</sup> Total accumulated depreciation and amortization beginning 1988.

<sup>6</sup> Excludes Federal income tax.

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

## No. 924. REA and Rural Telephone Bank Program—Summary: 1970 to 1989

ITEM	Unit	1970	1980	1983	1984	1985	1986	1987	1988	1989
Loans and guarantees approved, Dec. 31: <sup>1</sup>										
Borrowers	Number	862	990	1,037	1,035	1,034	1,037	1,037	1,018	1,016
REA amount	Mill. dol.	1,816	3,845	4,540	4,742	4,937	5,119	5,342	5,517	5,717
Guaranteed amount	Mill. dol.	-	418	672	701	679	679	673	644	631
Rural Telephone Bank amount	Mill. dol.	-	1,388	1,872	2,000	2,131	2,249	2,403	2,397	2,556
Route miles of line, <sup>2</sup> Dec. 31	1,000	547	798	847	868	872	869	877	896	911
Subscribers, Dec. 31	1,000	2,335	4,262	4,629	4,747	4,792	4,833	5,005	5,097	5,276
Telephones in service	1,000	2,989	6,770	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Total operating revenues	Mill. dol.	363	1,758	2,643	2,910	3,108	3,181	3,339	3,598	3,888
Total telephone plant	Mill. dol.	2,085	7,388	9,532	10,195	10,671	10,917	11,621	12,071	12,814
Employees	1,000	15	28	29	29	28	28	28	28	28

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

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

## No. 925. Private Radio Stations Authorized, by Class: 1985 to 1989

[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	1985	1987	1988	1989	CLASS	1985	1987	1988	1989
Private radio services <sup>1</sup>	2,419.5	2,657.1	2,748.0	2,828	Land transportation	37.7	40.0	40.1	40.4
Personal	(X)	470.4	475.3	501.7	Railroad	13.8	15.1	15.4	16.0
Citizens Band	(X)	-	-	-	Taxicab	6.1	6.0	5.9	5.9
General mobile	33.6	37.8	36.2	34.4	Interurban property	4.4	5.3	5.4	5.6
Radio control	(X)	-	-	-	Other	13.4	13.6	13.4	12.9
Amateur and disaster	415.4	432.6	439.1	487.3	Marine	525.3	573.7	605.4	620.4
Aviation	245.7	247.7	248.5	251.2	Ship	510.4	558.6	589.4	604.6
Aircraft	207.3	208.2	207.9	210.2	Alaskan	2.7	2.6	2.7	2.5
Aeronautical and fixed	10.9	11.2	11.7	11.7	Coastal and other	12.2	12.5	13.3	13.3
Civil air patrol	23.0	23.6	23.9	24.2	Public safety	194.5	212.6	221.4	228.5
Other	4.5	4.7	5.0	5.1	Police	42.3	46.1	47.8	49.1
Industrial	811.3	871.1	875.6	873.9	Fire	36.6	39.9	41.3	42.8
Power	34.4	40.5	42.8	44.3	Forestry conservation	9.6	10.3	10.7	11.1
Business	593.5	640.5	641.7	638.0	Highway maintenance	12.7	13.8	14.3	14.6
Petroleum	25.2	26.6	26.8	27.0	Special emergency	37.4	39.6	40.5	40.9
Forest products	9.8	10.9	11.3	11.6	Other	55.9	62.9	66.8	70.0
Special industrial	115.0	117.5	117.0	115.4	Operational fixed services <sup>2</sup>	23.1	27.9	29.2	29.9
Other	33.4	35.1	36.0	37.6					

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

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



**No. 926. Public Television Stations: 1976 to 1988**

[Calendar year data for 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	1976	1978	1980	1982	1984	1986	1988
Stations broadcasting . . . . .	253	272	281	291	303	305	(NA)
Number of broadcasters . . . . .	152	156	160	164	169	178	169
Average annual hours per broadcaster . . . . .	4,542	4,894	5,128	5,421	5,542	5,650	6,135
<b>BROADCAST HOURS, PERCENT DISTRIBUTION</b>							
Program content <sup>2</sup> . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
General <sup>2</sup> . . . . .	66.5	70.7	71.3	72.0	73.2	74.5	72.9
News and public affairs . . . . .	11.9	11.0	12.2	12.4	14.1	16.4	16.3
Information and skills . . . . .	19.9	23.6	22.8	24.5	25.5	29.5	21.7
Cultural . . . . .	20.9	22.1	21.9	22.8	20.1	20.5	17.9
General children's and youth's . . . . .	10.0	8.7	8.9	7.5	7.9	6.5	5.8
Instructional . . . . .	16.6	14.9	14.7	14.3	13.0	14.5	15.5
The Electric Co., Villa Alegre <sup>4</sup> . . . . .	1.8	1.6	1.5	1.1	1.0	0.4	(NA)
Other <sup>5</sup> . . . . .	14.8	13.3	13.2	13.2	12.0	14.1	(NA)
Sesame Street and The Electric Co. <sup>2</sup> . . . . .	17.8	16.1	15.5	14.8	11.4	11.4	11.7
Producer <sup>2</sup> . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Local . . . . .	10.1	7.7	7.0	6.7	5.7	5.2	5.2
Major public television production center, and other Consortium . . . . .	48.2	52.2	46.2	45.6	44.4	37.6	27.1
Children's television workshop . . . . .	1.7	1.8	2.7	2.6	3.3	3.1	9.8
Independent and commercial producers . . . . .	18.8	16.8	17.1	15.8	16.4	29.1	16.1
Foreign producer, international coproduction . . . . .	8.9	8.0	11.1	15.2	12.0	(NA)	23.8
Distributor <sup>2</sup> . . . . .	7.6	9.1	12.5	10.1	13.2	15.1	14.0
Local distribution only . . . . .	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Public broadcasting service . . . . .	10.0	7.4	6.8	6.2	5.6	4.9	6.4
Regional public television network . . . . .	69.3	71.6	69.8	67.1	65.3	63.9	62.0
Regional public television network . . . . .	6.2	5.4	7.6	10.8	13.0	14.0	17.8

NA Not available. <sup>1</sup> In 1988, only broadcasters in the 50 U.S. states were surveyed. <sup>2</sup> Includes other items not shown separately. <sup>3</sup> In 1986 and 1988, this category includes "Business or Consumer". <sup>4</sup> After 1976 these programs were double counted if aired during school hours when school is in session. <sup>5</sup> Excluding "Sesame Street" and "The Electric Company" but including "Mister Rogers". Includes adult educational.

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

**No. 927. Public Broadcasting Systems—Income, by Source: 1980 to 1989**

[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	1985	1986	1987	1988	1989, prel.	PERCENT DISTRIBUTION			
							1980	1985	1986	1989, prel.
CPB-qualified public radio stations . . . . .	217	288	295	299	308	313	(X)	(X)	(X)	(X)
Public television stations . . . . .	290	317	322	323	324	340	(X)	(X)	(X)	(X)
Total income . . . . .	705	1,096	1,134	1,295	1,368	1,528	100.0	100.0	100.0	100.0
Federal government . . . . .	193	179	186	243	248	264	27.3	16.3	18.0	17.3
State and local government <sup>1</sup> . . . . .	272	358	379	389	416	451	38.5	32.7	30.4	29.5
Subscribers and auction/marathon . . . . .	102	248	269	298	321	347	14.5	22.6	23.4	22.7
Business and industry . . . . .	72	171	171	196	213	241	10.3	15.6	15.6	15.8
Foundation . . . . .	24	43	38	48	51	69	3.3	3.9	3.7	4.5
Other . . . . .	43	97	92	121	120	156	6.0	8.9	8.8	10.2

X Not applicable. <sup>1</sup> Includes income received from State colleges and universities.

Source: Corporation for Public Broadcasting (CPB), Washington, DC, *Public Broadcasting Income, Fiscal Year, 1989*, and unpublished data.

**No. 928. Cable Television—Systems and Subscribers: 1970 to 1990**

[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 <sup>1</sup> —		PERCENT OF <sup>1</sup> —	
							Sys- tems	Sub- scribers	Sys- tems	Sub- scribers
1970 . . . . .	2,490	4,500	1981 . . . . .	4,375	18,300	1990, total <sup>2</sup>	9,612	48,613	100.00	100.00
1972 . . . . .	2,841	6,000	1982 . . . . .	4,825	21,000	50,000 and over . . . . .	194	18,162	2.02	37.36
1973 . . . . .	2,991	7,300	1983 . . . . .	5,600	25,000	20,000-49,999 . . . . .	396	12,363	4.12	25.43
1974 . . . . .	3,158	8,700	1984 . . . . .	6,200	30,000	10,000-19,999 . . . . .	493	6,917	5.13	14.23
1975 . . . . .	3,506	9,800	1985 . . . . .	6,600	32,000	5,000-9,999 . . . . .	846	4,520	6.72	9.30
1976 . . . . .	3,681	10,800	1986 . . . . .	7,600	37,500	3,500-4,999 . . . . .	399	1,666	4.15	3.43
1977 . . . . .	3,832	11,900	1987 . . . . .	7,900	41,100	1,000-3,499 . . . . .	1,678	3,219	17.46	6.62
1978 . . . . .	3,875	13,000	1988 . . . . .	8,500	44,000	500-999 . . . . .	1,329	953	13.83	1.96
1979 . . . . .	4,150	14,100	1989 . . . . .	9,050	47,500	250-499 . . . . .	1,331	480	13.85	0.99
1980 . . . . .	4,225	16,000	1990 . . . . .	9,575	50,000	Less than 250 . . . . .	2,422	333	15.19	0.68

<sup>1</sup> As of April 1, 1990. <sup>2</sup> Excludes 513 systems not available by subscriber size-group.

Source: Warren Publishing, Inc., Washington, DC, *Television & Cable Factbook*, annual. (Copyright.)

**No. 929. Cable and Pay TV—Summary, 1955 to 1989, and Projection to 1990**

[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 <sup>1</sup> (mil. dol.)		Units <sup>2</sup> (1,000)		Monthly rate (dol.)		Pay cable units	
			Total	Basic	Total pay <sup>3</sup>	Pay cable	Total pay <sup>3</sup>	Pay cable	Percent of homes passed	Percent basic
1955	250	5.00	20	20	(X)	(X)	(X)	(X)	(X)	(X)
1960	750	5.00	50	50	(X)	(X)	(X)	(X)	(X)	(X)
1965	1,500	5.00	95	95	(X)	(X)	(X)	(X)	(X)	(X)
1970	5,100	5.50	345	345	(X)	(X)	(X)	(X)	(X)	(X)
1975	9,800	6.50	804	774	469	469	(X)	(X)	(X)	(X)
1976	11,000	6.72	976	897	1,021	978	(NA)	7.85	11.1	23.6
1977	12,200	7.00	1,221	1,035	1,733	1,642	8.12	7.82	10.6	22.3
1978	13,400	7.26	1,496	1,177	3,580	3,289	8.62	8.09	17.9	25.0
1979	15,000	7.53	1,906	1,367	6,409	5,732	9.37	8.44	27.3	41.3
1980	17,500	7.85	2,603	1,668	10,389	9,144	9.78	8.80	27.9	50.6
1981	21,500	8.14	3,717	2,140	17,521	15,450	10.13	9.02	37.6	68.8
1982	25,400	8.46	5,097	2,628	23,179	20,791	10.36	9.57	46.2	84.0
1983	29,450	8.76	6,512	3,151	28,115	26,418	10.25	9.84	47.3	84.3
1984	32,850	9.20	7,892	3,696	31,027	29,966	10.32	10.08	49.5	87.5
1985	35,430	10.24	9,305	4,522	31,055	30,596	10.53	10.42	47.1	83.3
1986	38,740	11.09	10,520	5,341	32,428	32,064	10.40	10.31	46.2	80.8
1987	41,200	13.27	12,374	6,778	35,110	34,793	10.21	10.15	47.5	81.6
1988	44,200	14.45	13,979	7,883	39,144	38,819	10.22	10.18	50.3	85.0
1989	47,390	15.97	15,933	9,322	41,234	41,095	10.26	10.21	49.6	83.3
1990, proj.	50,455	16.23	17,784	10,074	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)

NA Not available. X Not applicable. <sup>1</sup> Includes installation revenue. <sup>2</sup> Individual program services sold to subscribers.<sup>3</sup> Includes multipoint distribution service (MDS) and satellite TV (STV).Source: Paul Kagan Associates, Inc., Carmel, CA, *The Cable TV Financial Databook*, annual. (Copyright.)**No. 930. Radio and Television Stations Owned by Newspapers and/or Magazines: 1961 to 1989**

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	1982, Dec. 1	300	263	251
1965, Oct. 31	391	170	174	1975, Dec. 1	320	238	197	1983, Dec. 1	288	257	248
1968, Dec. 4	381	191	183	1976, Dec. 1	322	238	209	1984, Dec. 1	268	256	255
1969, Dec. 1	394	245	189	1977, Dec. 1	314	238	211	1985, Dec. 1	264	255	253
1971, Feb. 1	402	248	191	1978, Dec. 1	319	252	221	1986, Dec. 1	232	226	271
1971, Dec. 1	318	209	176	1979, Dec. 1	318	257	226	1987, Dec. 1	195	188	260
1972, Dec. 1	325	171	178	1980, Dec. 1	315	264	230	1988, Dec. 1	193	193	266
1973, Dec. 1	304	211	179	1981, Dec. 1	311	277	246	1989, Dec. 1	195	195	252

Source: Broadcasting Publications Inc., Washington, DC, *The Broadcasting Yearbook*. (Copyright.)**No. 931. 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 manufactures and the Annual Survey of Manufactures; 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)	9,091	2,994	3,328	(NA)	4,020	1,745	2,130	(NA)	2,298
With 20 or more employees	2,147	2,554	(NA)	2,617	525	690	(NA)	876	346	419	(NA)	424
Employees <sup>1</sup> (1,000)	350	402	420	435	70	94	98	110	60	67	72	70
Payroll	4,306	6,555	8,381	9,025	1,020	1,986	2,711	2,983	830	1,327	1,776	1,860
Value of receipts	13,056	21,276	29,206	31,849	6,057	11,478	15,719	17,329	4,794	7,740	10,732	12,620
Cost of materials	3,539	6,006	7,024	7,533	2,289	4,568	5,558	5,873	1,544	2,420	3,100	3,663
Value added <sup>2</sup>	9,519	15,275	22,169	24,311	3,763	6,911	10,196	11,452	3,262	5,292	7,756	9,111
New capital expend.	478	1,029	1,296	1,523	79	195	274	246	80	174	203	240
Fixed assets, gross assets	5,026	8,701	(NA)	14,028	725	1,370	(NA)	2,528	680	1,109	(NA)	1,680
Inventories, Dec. 31	382	755	784	857	350	724	784	902	992	1,380	1,982	2,091

NA Not available. <sup>1</sup> Represents the average number of production workers plus the number of other employees in mid-March. <sup>2</sup> By 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-I-27A, and *1986 Annual Survey of Manufactures*, M86(AS)-1.

**No. 932. Newspapers and Periodicals—Number, by Type: 1970 to 1991**

[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	1984	1985	1986	1987	1988	1989	1990	1991
Newspapers <sup>1</sup>	11,383	11,400	9,620	9,151	9,134	9,144	9,031	10,088	10,457	11,471	11,689
Semiweekly	423	506	597	525	517	495	510	555	567	579	574
Weekly	8,903	8,824	7,159	6,798	6,811	6,857	6,750	7,438	7,622	8,420	8,546
Daily	1,838	1,819	1,744	1,711	1,701	1,651	1,646	1,745	1,773	1,788	1,781
Periodicals <sup>1</sup>	9,573	9,657	10,236	10,809	11,090	11,328	11,593	11,229	11,556	11,092	11,239
Weekly	1,858	1,918	1,716	1,376	1,367	1,383	1,400	880	828	553	511
Semi-monthly <sup>2</sup>	589	537	645	658	801	789	858	619	622	435	412
Monthly	4,314	4,087	3,985	4,096	4,088	4,066	4,031	4,192	4,445	4,239	4,340
Bimonthly	957	1,009	1,114	1,348	1,361	1,367	1,402	1,558	1,880	2,087	2,116
Quarterly	1,108	1,093	1,444	1,711	1,759	1,895	1,984	2,245	2,513	2,758	2,861

<sup>1</sup> Includes other not shown separately. <sup>2</sup> Includes fortnightly (every 2 weeks).

Source: Gale Research Inc., 1991 *Gale Directory of Publications and Broadcast Media*, 123rd. edition (Copyright.)

**No. 933. Number and Circulation of Daily and Sunday Newspapers: 1970 to 1989**

[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	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
NUMBER OF NEWSPAPERS													
Daily: Total <sup>1</sup>	1,748	1,756	1,763	1,745	1,730	1,711	1,701	1,688	1,676	1,657	1,645	1,642	1,626
Morning	334	339	382	387	408	434	446	458	482	499	511	529	530
Evening	1,429	1,436	1,405	1,388	1,352	1,310	1,284	1,257	1,220	1,188	1,166	1,141	1,125
Sunday	586	639	720	736	755	768	772	783	798	802	820	840	847
CIRCULATION (mil.)													
Daily: Total <sup>1</sup>	62.1	60.7	62.2	62.2	61.4	62.5	62.6	63.1	62.8	62.5	62.8	62.7	62.6
Morning	25.9	25.5	28.6	29.4	30.6	33.2	33.8	35.4	36.4	37.4	39.1	40.4	40.7
Evening	36.2	35.2	33.6	32.8	30.9	29.3	28.8	27.7	26.4	25.1	23.7	22.2	21.8
Sunday	49.2	51.1	54.4	54.7	55.2	56.3	56.7	57.5	58.8	58.9	60.1	61.5	62.0

<sup>1</sup> 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. 934. Number and Circulation of Daily Newspapers, by Population—Size Class of City: 1975 to 1989**

[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 <sup>1</sup>						NET PAID CIRCULATION <sup>1</sup> (1,000)					
	1975	1980	1985	1987	1988	1989	1975	1980	1985	1987	1988	1989
Morning dailies, total	339	387	482	511	529	530	25,491	29,413	36,361	39,123	40,452	40,759
In cities of—												
1,000,001 or more	14	20	22	28	25	28	7,159	8,795	9,367	12,169	10,910	11,727
500,001 to 1,000,000	25	27	24	25	25	23	5,581	5,705	6,887	5,915	5,948	5,053
100,001 to 500,000	89	99	121	123	124	130	7,836	8,996	12,197	12,542	14,517	14,890
50,001 to 100,000	69	75	87	92	96	94	2,619	2,973	3,653	3,946	3,968	4,071
25,001 to 50,000	67	64	83	89	96	97	1,422	1,701	2,145	2,411	2,879	2,927
Less than 25,000	75	102	145	157	163	158	874	1,243	2,099	2,141	2,207	2,087
Evening dailies, total	1,436	1,388	1,220	1,166	1,141	1,125	35,166	32,788	26,407	23,702	22,242	21,890
In cities of—												
1,000,001 or more	12	11	8	9	8	8	4,156	2,984	2,169	1,662	1,315	1,349
500,001 to 1,000,000	24	23	14	14	13	14	4,578	4,101	1,626	1,636	1,563	1,569
100,001 to 500,000	127	123	102	87	80	77	8,818	8,178	6,987	5,570	5,165	5,035
50,001 to 100,000	175	156	127	112	109	105	5,379	4,896	3,942	3,499	3,398	3,336
25,001 to 50,000	248	246	229	221	214	209	4,898	5,106	4,806	4,438	4,124	4,065
Less than 25,000	850	829	740	722	717	712	7,242	7,523	7,075	6,890	6,677	6,533

<sup>1</sup> 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. 935. Daily and Sunday Newspapers—Number and Circulation, by State: 1989**

[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 <sup>1</sup>		Number	Net paid circulation (1,000)		Number	Circulation <sup>1</sup>		Number	Net paid circulation (1,000)
		Net paid (1,000)	Per capita <sup>2</sup>					Net paid (1,000)	Per capita <sup>2</sup>		
Total	1,626	62,649	0.26	847	62,008	Missouri	45	1,252	0.25	19	1,329
Alabama	27	761	0.18	20	754	Montana	11	188	0.23	7	190
Alaska	7	125	0.24	4	144	Nebraska	19	469	0.29	7	437
Arizona	19	725	0.21	11	794	Nevada	8	280	0.26	4	310
Arkansas	32	571	0.23	17	665	New Hampshire	10	227	0.20	4	152
California	119	6,845	0.23	67	6,768	New Jersey	22	1,660	0.22	17	1,893
Colorado	27	970	0.29	11	1,146	New Mexico	19	313	0.21	13	283
Connecticut	23	867	0.27	11	829	New York	71	7,500	0.43	37	5,736
Delaware	2	144	0.22	2	169	North Carolina	54	1,447	0.22	31	1,403
District of Columbia	2	881	1.40	1	1,126	North Dakota	10	186	0.28	7	183
Florida	45	3,103	0.25	35	2,802	Ohio	87	2,749	0.25	33	2,868
Georgia	36	1,155	0.18	18	1,270	Oklahoma	49	741	0.23	41	881
Hawaii	6	245	0.22	5	262	Oregon	20	655	0.24	10	674
Idaho	12	207	0.20	8	222	Pennsylvania	93	3,300	0.26	30	3,182
Illinois	70	2,604	0.23	27	2,781	Rhode Island	7	295	0.30	3	308
Indiana	73	1,542	0.28	21	1,355	South Carolina	17	658	0.19	13	706
Iowa	37	733	0.26	10	733	South Dakota	12	167	0.24	4	135
Kansas	46	536	0.22	17	492	Tennessee	28	965	0.20	16	1,073
Kentucky	23	660	0.18	12	668	Texas	104	3,616	0.21	95	4,579
Louisiana	28	777	0.18	21	885	Utah	6	285	0.17	6	326
Maine	8	286	0.24	2	186	Vermont	8	129	0.23	3	100
Maryland	14	712	0.15	7	666	Virginia	34	2,504	0.42	15	966
Massachusetts	42	2,069	0.36	13	1,759	Washington	26	1,166	0.25	15	1,168
Michigan	52	2,541	0.27	21	2,562	West Virginia	23	440	0.23	10	394
Minnesota	25	948	0.22	13	1,136	Wisconsin	36	1,154	0.24	15	1,108
Mississippi	22	400	0.15	14	377	Wyoming	10	95	0.20	4	73

<sup>1</sup> Circulation figures based on the principal community served by a newspaper which is not necessarily the same location as the publisher's office. <sup>2</sup> Per capita based on total resident population estimated as of July 1, 1989.

Source: Editor & Publisher Co., New York, NY, *Editor & Publisher International Year Book*, annual (copyright).

**No. 936. Copyright Registration, by Subject Matter: 1985 to 1989**

[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	1986	1989	SUBJECT MATTER OF COPYRIGHT	1985	1986	1989
Total	539.8	565.3	618.3	Sound recordings	22.7	28.6	28.3
Monographs <sup>1</sup>	154.5	158.1	153.8	Renewals	43.8	43.8	38.6
Semiconductor chip products	0.9	0.9	1.2	Musical works <sup>2</sup>	47.9	159.5	197.2
Serials	120.0	114.0	133.9	Works of the visual arts <sup>3</sup>	50.0	60.4	66.2

<sup>1</sup> Includes computer software and machine readable works. <sup>2</sup> Includes dramatic works, accompanying music, choreography, pantomimes, motion pictures and filmstrips. <sup>3</sup> 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. 937. Advertising—Estimated Expenditures: 1950 to 1989**

[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	1989	123,930	68,990	54,940

Source: McCann-Erickson, Inc., New York, NY. Compiled for Crain Communications, Inc. In *Advertising Age* (copyright).

### No. 938. Advertising—Indexes of National Advertising Expenditures, by Medium: 1970 to 1989

[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	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
General index . . . . .	26	34	71	79	87	98	114	118	124	128	136	141
Network television . . . . .	23	32	72	78	86	97	116	113	117	119	128	128
Spot television . . . . .	25	33	67	77	89	99	112	123	134	140	146	150
Magazines . . . . .	30	34	73	82	86	99	115	120	124	131	142	156
Newspapers . . . . .	32	40	71	82	89	99	112	122	123	127	130	135

Source: McCann-Erickson, Inc., New York, NY. Compiled for Crain Communications, Inc. In *Advertising Age* (copyright).

### No. 939. Advertising—Estimated Expenditures, by Medium: 1970 to 1989

[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	1985	1986	1987	1988	1989	1970	1980	1985	1989
Total . . . . .	19,550	53,550	94,750	102,140	109,650	118,050	123,930	100.0	100.0	100.0	100.0
National . . . . .	11,350	29,815	53,355	56,850	60,625	65,610	68,990	58.1	55.7	56.3	55.7
Local . . . . .	8,200	23,735	41,395	45,290	49,025	52,440	54,940	41.9	44.3	43.7	44.3
Newspapers . . . . .	5,704	14,794	25,170	26,990	29,412	31,197	32,368	29.2	27.6	26.5	26.1
National . . . . .	891	1,963	3,352	3,376	3,494	3,586	3,720	4.6	3.7	3.5	3.0
Local . . . . .	4,813	12,831	21,818	23,614	25,918	27,611	28,648	24.6	24.0	23.0	23.1
Magazines . . . . .	1,292	3,149	5,155	5,317	5,607	6,072	6,716	6.6	5.9	5.4	5.5
Weeklies . . . . .	617	1,418	2,297	2,327	2,445	2,646	2,813	3.2	2.6	2.4	2.3
Women's . . . . .	301	782	1,294	1,376	1,417	1,504	1,710	1.5	1.5	1.4	1.4
Monthlies . . . . .	374	949	1,564	1,614	1,745	1,922	2,193	1.9	1.8	1.6	1.8
Farm publications . . . . .	62	130	186	192	196	196	212	0.3	0.2	0.2	0.2
Television . . . . .	3,596	11,469	21,022	22,881	23,904	25,686	26,891	18.4	21.4	22.2	21.7
Three networks . . . . .	1,658	5,130	8,060	8,342	8,500	9,172	9,110	8.5	9.6	8.5	7.4
Cable networks . . . . .	(NA)	45	594	676	760	942	1,197	(NA)	0.1	0.6	1.0
Syndication (nat'l) . . . . .	(NA)	50	520	600	762	901	1,288	(NA)	0.1	0.5	1.0
Spot (national) . . . . .	1,234	3,269	6,004	6,570	6,846	7,147	7,354	6.3	6.1	6.3	5.9
Spot (local) . . . . .	704	2,967	5,714	6,514	6,833	7,270	7,612	3.6	5.5	6.0	6.1
Cable (non-network) . . . . .	(NA)	8	130	179	203	254	330	(NA)	(Z)	0.1	0.3
Radio . . . . .	1,308	3,702	6,490	6,949	7,206	7,798	8,323	6.7	6.9	6.9	6.7
Network . . . . .	56	183	385	423	413	425	476	0.3	0.3	0.4	0.4
Spot . . . . .	371	779	1,335	1,348	1,330	1,418	1,547	1.9	1.5	1.4	1.2
Local . . . . .	881	2,740	4,790	5,178	5,463	5,955	6,300	4.5	5.1	5.1	5.1
Yellow Pages . . . . .	(NA)	2,900	5,800	6,500	7,300	7,781	8,330	(NA)	5.4	6.1	6.7
National . . . . .	(NA)	330	695	759	830	944	1,011	(NA)	0.6	0.7	0.8
Local . . . . .	(NA)	2,570	5,105	5,741	6,470	6,837	7,319	(NA)	4.8	5.4	5.9
Direct mail . . . . .	2,766	7,596	15,500	17,145	19,111	21,115	21,945	14.1	14.2	16.4	17.7
Business papers . . . . .	740	1,674	2,375	2,382	2,458	2,610	2,763	3.8	3.1	2.5	2.2
Outdoor . . . . .	234	578	945	985	1,025	1,064	1,111	1.2	1.1	1.0	0.9
Miscellaneous . . . . .	3,848	7,558	12,107	12,799	13,431	14,531	15,271	19.7	14.1	12.8	12.3

NA Not available. Z Less than .05 percent.

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. 940. Magazine Advertising—Expenditures, by Product Type: 1970 to 1989

[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	1984	1985	1986	1987	1988	1989	PERCENT DISTRIBUTION		
									1970	1980	1989
Expenditures . . . . .	1,193	2,846	4,668	4,961	5,120	5,390	5,943	6,644	100.0	100.0	100.0
Apparel, footwear, and accessories . . . . .	51	112	240	251	291	323	363	395	4.3	3.9	5.9
Automotive . . . . .	97	230	473	549	597	678	801	883	8.1	8.0	13.2
Beer, wine, and liquor . . . . .	98	239	230	240	225	208	213	257	8.2	8.4	3.9
Computers, office equipment, stationery . . . . .	32	79	321	250	219	247	252	288	2.7	2.8	4.3
Consumer services . . . . .	74	190	411	463	484	491	466	529	6.2	6.7	8.0
Drugs and remedies . . . . .	38	79	129	135	148	142	145	137	3.2	2.8	2.0
Food and food products . . . . .	86	199	289	342	389	377	377	435	7.2	7.0	6.5
Household equipment and supplies . . . . .	34	65	98	100	93	97	102	103	2.8	2.3	1.6
Household furnishings . . . . .	38	73	94	87	103	111	116	125	3.2	2.0	1.9
Jewelry, optical goods, camera . . . . .	30	79	107	101	113	121	142	154	2.5	2.8	2.3
Mail orders . . . . .	(NA)	(NA)	292	328	363	407	467	519	(NA)	(NA)	7.8
Publishing and media . . . . .	38	146	159	188	176	186	192	194	3.2	5.1	2.9
Retail . . . . .	53	(NA)	128	121	143	138	176	209	4.4	(NA)	3.1
Smoking materials . . . . .	65	290	423	383	322	334	352	402	5.4	10.2	6.0
Toiletries and toilet goods . . . . .	119	206	334	385	390	455	554	651	10.0	7.2	9.8
Travel, hotels, and resorts . . . . .	54	123	212	245	249	273	311	375	4.5	4.3	5.6
All other . . . . .	289	736	728	793	815	802	914	988	24.2	25.9	14.9

NA Not available. <sup>1</sup> Includes accessories and equipment. <sup>2</sup> Includes business services.

Source: Publishers Information Bureau, Inc., New York, NY, as compiled by Leading National Advertisers.

**No. 941. Television—Expenditures for Network Advertising: 1980 to 1989**

[In millions of dollars. See text, section 18 for a definition of network advertising]

TYPE OF PRODUCT	1980	1985	1988	1989	TYPE OF PRODUCT	1980	1985	1988	1989
Expenditures	5,147	8,313	9,580	9,559	Household equipment, supplies, and furnishings	225	275	339	323
Apparel, footwear, and accessories	131	161	230	269	Insurance	74	99	169	158
Automotive	529	848	1,307	1,491	Financial planning services	20	60	64	63
Beer and wine	242	428	480	364	Jewelry and cameras	119	129	129	111
Building material, equipment, fixtures	59	97	100	84	Laundry soaps, cleansers, and polishes	306	397	321	319
Computers, office equipment, and stationery	57	249	187	159	Movies	103	138	183	214
Confectionery, soft drinks	281	388	432	379	Pet products	144	175	126	134
Consumer services	178	303	473	437	Proprietary medicines	430	700	794	787
Dept. and discount stores	94	161	135	196	Publishing and media	34	50	43	61
Food and food products	844	1,502	1,639	1,685	Restaurants and drive-ins	132	416	514	604
Freight and industrial development	7	40	68	56	Tobacco products and supplies	8	6	1	-
Gas, lubricants, etc.	71	49	55	38	Toiletries and toilet goods	765	955	869	850
Home electronics equipment	50	36	68	56	Toys and sporting goods	93	152	117	126
Horticulture	15	30	40	38	Travel, hotels, and resorts	72	102	169	169
					All other	64	367	528	408

- Represents or rounds to zero. <sup>1</sup> Includes optical goods.

Source: Television Bureau of Advertising, Inc., New York, NY. Data compiled by The Arbitron Co., New York, NY.

**No. 942. Television—Estimated Time Charges for Spot Advertising: 1980 to 1989**

[In millions of dollars. Data represent activity in the top 75 markets monitored by The Arbitron Co., currently covering approximately 356 stations. See text, section 18 for a definition of types of advertising]

TYPE OF PRODUCT	1980	1985	1988 <sup>1</sup>	1989 <sup>1</sup>	TYPE OF PRODUCT	1980	1985	1988 <sup>1</sup>	1989 <sup>1</sup>
Estimated time charges	2,496	4,504	5,271	5,423	Home electronics equipment	73	67	113	116
Agriculture and farming	15	17	22	17	Horticulture	35	37	47	47
Apparel, footwear, and accessories	105	95	67	94	Household equipment, supplies and furnishings	133	217	167	175
Automotive	228	683	1,264	1,415	Insurance	34	88	94	104
Beer and wine	156	218	255	208	Jewelry, optical goods, and cameras	55	68	44	59
Building material, equipment, and fixtures	47	58	73	79	Laundry soaps, polishes	111	175	132	118
Computers, office equipment, and stationery	15	25	27	32	Pet products	33	60	43	41
Confectionery, soft drinks	212	355	325	303	Proprietary medicines	93	148	184	167
Consumer services	83	262	311	380	Publishing and media	78	147	154	130
Food and food products	507	927	967	958	Tobacco products, suppliers	8	14	8	5
Freight and industrial development	5	36	37	36	Toiletries and toilet goods	223	267	277	281
Gasoline, lubricants, etc.	50	102	124	164	Toys and sporting goods	104	211	202	193
					Travel, hotels, and resorts	76	187	229	215
					All other	17	40	105	86

<sup>1</sup> Excludes National Syndicated activity; therefore, not completely comparable to prior years.

Source: Television Bureau of Advertising, Inc., New York, NY. Data compiled by The Arbitron Co., New York, NY in the top 75 markets.

**No. 943. Television—Expenditures for Retail/Local Advertising: 1980 to 1989**

[In millions of dollars. See headnote, table 942]

TYPE OF PRODUCT	1980	1985	1988	1989	TYPE OF PRODUCT	1980	1985	1988	1989
Expenditures	1,983	3,899	4,848	5,076	Financial planning services	7	29	30	24
Amusements, entertainment	68	121	128	144	Jewelry stores	19	25	23	26
Appliance stores, repair	38	122	139	153	Legal services	5	38	64	82
Auto repair, service stations	28	73	93	89	Leisure time stores and services	42	107	129	134
Auto supply, accessory stores	12	41	38	40	Loan, mortgage companies	12	25	23	30
Auto, truck dealers	99	311	380	321	Mail order, catalog showrooms	13	23	11	11
Banks, S&L associations	141	195	191	197	Medical, dental services	13	87	130	145
Bldgs and home imprv't contr's	20	32	26	27	Movies	102	103	186	211
Carpet, floor covering stores	24	40	52	51	Newspapers	15	32	34	37
Clothing stores	46	82	121	144	Optical services, supplies	14	28	80	77
Department stores	131	186	150	213	Political	70	22	146	49
Discount department stores	74	115	115	117	Radio, cable TV	69	134	160	163
Drug stores	26	67	78	94	Realtors; real estate dev'l'rs	18	31	31	34
Education services	17	70	112	132	Rental services (non-auto)	15	38	36	31
Food stores, supermarkets	149	259	339	341	Restaurants, drive-ins	288	672	804	838
Furniture stores	111	187	238	278	Shoe stores	27	37	44	44
Gas, electric, water companies	16	38	46	50	Shopping centers, ass'ns	13	20	24	28
Health clubs, reducing salons	21	39	62	94	Sport, hobby, toy stores	23	41	47	47
Home centers and hardware stores	42	89	98	106	All other	137	278	362	374
Hotels, resorts, U.S.	18	62	78	82					

Source: Television Bureau of Advertising, Inc., New York, NY. Data compiled by The Arbitron Co., 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 1990 for production and consumption, in that order, for various fuels: Petroleum, 5,800 and 5,449 mil. Btu per barrel; total coal, 21,827 and 21,344 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 10,724 and 21,096 Btu per kilowatthour, respectively. The fossil fuel steam-electric power plant generation factor of 10,331 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. 944. Total Horsepower of All Prime Movers: 1960 to 1989

[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 horse- power	AUTOMOTIVE <sup>1 2</sup>		NONAUTOMOTIVE							
		Total	Percent of total	Total	Facto- ries <sup>3 4</sup>	Mines <sup>3 4</sup>	Rail- roads <sup>5</sup>	Merchant ships and sailing vessels <sup>4</sup>	Farms	Electric central sta- tions <sup>2</sup>	Air- craft <sup>5 6</sup>
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
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	728	194
1978 . . . . .	27,379	25,892	94.6	1,487	63	48	64	25	<sup>6</sup> 335	754	198
1979 . . . . .	28,162	26,617	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	58	29	358	942	270
1987 . . . . .	33,266	31,488	94.7	1,778	65	47	53	29	357	958	269
1988 . . . . .	34,200	32,415	94.8	1,785	65	47	53	28	356	969	267
1989 . . . . .	36,570	34,729	95.0	1,841	65	47	50	28	356	1,028	267

<sup>1</sup> Includes passenger cars, trucks, buses, and motorcycles. <sup>2</sup> As of July 1. <sup>3</sup> Beginning 1965, data are estimates. <sup>4</sup> This is an extensions of trends, since government agencies, suspended compilation of these power capacity statistics. <sup>5</sup> Beginning 1965, not strictly comparable with earlier years. <sup>6</sup> Includes private planes and commercial airlines. <sup>7</sup> Includes Alaska and Hawaii. <sup>8</sup> Includes estimates of about 3.0 million hp in farm animals and 30,000 in windmills.

Source: John A. Waring, Arlington, VA, unpublished estimates.

## No. 945. Energy Production and Consumption, by Major Source: 1960 to 1990

[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 <sup>1</sup>	Natural gas <sup>2</sup>	Other <sup>3</sup>		Coal	Petroleum <sup>1</sup>	Natural gas <sup>2</sup>	Other <sup>3</sup>	
1960	41.5	26.1	36.0	34.0	3.9	43.8	22.5	45.5	28.3	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
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	36.8	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	25.6	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	23.4	42.8	23.1	10.7	1.19
1988	66.0	31.4	26.2	29.9	12.4	80.2	23.5	42.7	23.1	10.7	1.22
1989	66.1	32.3	24.4	30.2	13.1	81.3	23.3	42.1	23.8	10.8	1.23
1990	<sup>4</sup> 67.6	33.5	22.9	29.9	13.8	<sup>5</sup> 81.5	23.4	41.3	23.8	11.5	1.21

<sup>1</sup> 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. <sup>2</sup> Production includes natural gas liquids; consumption excludes natural gas liquids. <sup>3</sup> Comprised of hydropower, nuclear power, geothermal energy and other. <sup>4</sup> Represents peak year for U.S. energy production. <sup>5</sup> Represents peak year for U.S. energy consumption.

Source: U.S. Energy Information Administration, *Annual Energy Review*.



## No. 946. Energy Supply and Disposition, by Type of Fuel: 1970 to 1990

[In quadrillion British thermal units (Btu). For Btu conversion factors, see text, section 19]

TYPE OF FUEL	1970	1973	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
<b>Production</b> <sup>1</sup>	<b>62.1</b>	<b>62.1</b>	<b>59.9</b>	<b>64.8</b>	<b>63.9</b>	<b>61.2</b>	<b>65.8</b>	<b>64.8</b>	<b>64.2</b>	<b>64.8</b>	<b>66.0</b>	<b>66.1</b>	<b>67.6</b>
Crude oil	20.4	19.5	17.7	18.2	18.3	18.4	18.9	19.0	18.4	17.7	17.3	16.1	15.5
Natural gas liquids	2.5	2.6	2.4	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.3	2.2	2.2
Natural gas	21.7	22.2	19.6	19.9	18.3	16.5	17.9	16.9	16.5	17.1	17.5	17.8	18.1
Coal	14.6	14.0	15.0	18.6	18.6	17.3	19.7	19.3	19.5	20.1	20.7	21.3	22.6
Nuclear electric power	0.2	0.9	1.9	2.7	3.1	3.2	3.6	4.2	4.5	4.9	5.7	5.7	6.2
Hydro electric power	2.6	2.9	3.2	2.9	3.3	3.5	3.3	2.9	3.0	2.6	2.3	2.8	2.9
Geothermal and other	(Z)	(Z)	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
<b>Net trade</b> <sup>4</sup>	<b>-5.7</b>	<b>-12.7</b>	<b>-11.8</b>	<b>-12.2</b>	<b>-7.5</b>	<b>-8.3</b>	<b>-9.0</b>	<b>-7.9</b>	<b>-10.4</b>	<b>-11.9</b>	<b>-13.2</b>	<b>-14.2</b>	<b>-13.8</b>
Exports	2.7	2.1	2.4	3.7	4.6	3.7	3.8	4.2	4.1	3.9	4.4	4.7	(NA)
Coal	1.9	1.4	1.8	2.4	2.8	2.0	2.2	2.4	2.3	2.1	2.5	2.7	(NA)
Imports	8.4	14.7	14.1	16.0	12.1	12.0	12.8	12.1	14.4	15.8	17.6	18.7	(NA)
Crude oil	2.8	6.9	8.7	11.2	7.4	7.1	7.3	6.8	9.0	10.1	11.0	12.5	(NA)
<b>Consumption</b> <sup>5</sup>	<b>66.4</b>	<b>74.3</b>	<b>70.6</b>	<b>76.0</b>	<b>70.8</b>	<b>70.5</b>	<b>74.1</b>	<b>73.9</b>	<b>74.2</b>	<b>76.8</b>	<b>80.2</b>	<b>81.3</b>	<b>81.5</b>
Petroleum products	29.5	34.8	32.7	34.2	30.2	30.1	31.1	30.9	32.2	32.9	34.2	34.2	33.6
Natural gas	21.8	22.5	19.9	20.4	18.5	17.4	18.5	17.8	16.7	17.7	18.6	19.4	19.4
Coal	12.3	13.0	12.7	15.4	15.3	15.9	17.1	17.5	17.3	18.0	18.8	18.9	19.1
Nuclear power	0.2	0.9	1.9	2.7	3.1	3.2	3.6	4.1	4.5	4.9	5.7	5.7	6.2
Hydro electric power	2.7	3.0	3.2	3.1	3.6	3.9	3.7	3.4	3.4	3.1	2.6	2.9	2.9
Geothermal and other	(Z)	(Z)	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.2

NA Not available. Z Less than 50 trillion. <sup>1</sup> Represents peak year for U.S. energy production. <sup>2</sup> Includes lease condensate. <sup>3</sup> Dry marketed gas. <sup>4</sup> Exports minus imports. <sup>5</sup> Represents peak year for U.S. energy consumption. <sup>6</sup> Includes industrial generation of hydropower and net electricity imports.

## No. 947. Selected Energy Indicators—Summary: 1970 to 1990

[Btu=British thermal unit. For Btu conversion factors, see text, section 19. Minus sign (-) indicates decrease]

ITEM	1970	1973	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990
<b>AVERAGE ANNUAL PERCENT CHANGE</b> <sup>1</sup>													
Gross national product <sup>2</sup>	3.0	5.2	-1.3	3.4	2.5	3.6	6.8	3.4	2.7	3.4	4.5	2.5	0.9
Energy production, total <sup>3</sup>	4.7	-0.6	-1.6	1.6	-0.8	-4.2	7.8	-1.6	-0.8	0.9	1.9	0.1	2.3
Crude oil <sup>4</sup>	4.3	-2.7	-4.5	0.6	0.9	0.5	2.5	0.7	-3.2	-3.8	-2.4	-8.7	-4.1
Natural gas	6.6	-0.1	-7.4	-0.9	-7.4	-9.4	8.5	-5.7	-2.6	3.5	2.5	1.5	1.5
Coal	2.3	-0.7	6.5	4.4	1.4	-7.5	14.3	-2.0	1.0	3.2	3.2	2.9	5.9
Energy consumption, total <sup>3</sup>	4.7	4.2	-2.8	1.5	-4.3	-0.5	5.1	-0.2	0.4	3.5	4.4	1.4	0.1
Petroleum products	4.9	5.7	-2.2	0.9	-5.3	-0.6	3.3	-0.4	4.1	2.1	4.0	-0.1	-1.6
Natural gas (dry)	6.7	-0.8	-8.2	0.5	-7.1	-6.2	6.6	-3.7	-6.3	6.2	4.8	4.5	0.2
Coal	1.2	7.4	(Z)	3.9	-3.7	3.8	7.4	2.4	1.2	4.3	4.7	0.5	0.6
<b>PER CAPITA</b> <sup>6</sup> (mil. Btu)													
Energy production	304	293	278	285	275	261	278	271	266	266	269	266	269
Energy consumption	327	351	327	384	305	301	313	310	308	316	328	328	325
Energy consumption per dollar of GNP <sup>2</sup> (1,000 Btu)	27.5	27.1	26.2	23.8	22.4	21.5	21.2	20.4	20.0	20.0	20.0	19.8	19.6

Z Less than .05 percent. <sup>1</sup> Represents annual average for period of intervals shown; for 1960, change from 1955. Percent change derived from Btu values. For explanation of average annual percent change, see Guide to Tabular Presentation. <sup>2</sup> Gross national product in constant (1982) dollars, see tables 698 and 700. <sup>3</sup> Includes types of fuel or power, not shown separately. <sup>4</sup> Includes lease condensate. <sup>5</sup> Based on resident population estimated as of July 1.

## No. 948. Energy Imports and Exports, by Type of Fuel: 1970 to 1989

[In quadrillion of Btu. For definition of Btu, see text, Section 19]

TYPE OF FUEL	1970	1973	1975	1979	1980	1982	1983	1984	1985	1986	1987	1988	1989
<b>Net imports:</b> <sup>1</sup>													
Coal	-1.93	-1.42	-1.74	-1.70	-2.39	-2.77	-2.01	-2.12	-2.39	-2.19	-2.05	-2.45	-2.58
Natural Gas (dry)	0.77	0.98	0.9	1.24	0.96	0.9	0.89	0.79	0.9	0.69	0.94	1.22	1.31
Petroleum	6.92	12.98	12.51	16.93	13.50	9.05	9.08	9.89	8.95	11.53	12.53	14.01	15.15
Other <sup>2</sup>	-0.04	0.14	0.08	0.27	0.18	0.28	0.36	0.40	0.41	0.35	0.48	0.36	0.14
<b>Imports:</b>													
Coal	(Z)	(Z)	0.02	0.05	0.03	0.02	0.03	0.03	0.05	0.06	0.04	0.05	0.07
Natural Gas (dry)	0.85	1.06	0.98	1.30	1.01	0.95	0.94	0.85	0.95	0.75	0.99	1.30	1.38
Petroleum	7.47	13.47	12.95	17.93	14.66	10.78	10.65	11.43	10.61	13.20	14.16	15.75	16.98
Other <sup>2</sup>	0.07	0.20	0.16	0.33	0.28	0.35	0.41	0.45	0.49	0.43	0.56	0.46	0.30
<b>Exports:</b>													
Coal	1.94	1.43	1.76	1.75	2.42	2.79	2.04	2.15	2.44	2.25	2.09	2.50	2.65
Natural Gas (dry)	0.07	0.08	0.07	0.06	0.05	0.05	0.06	0.06	0.06	0.06	0.05	0.07	0.07
Petroleum	0.55	0.49	0.44	1.00	1.16	1.73	1.57	1.54	1.66	1.67	1.63	1.74	1.84
Other <sup>2</sup>	0.11	0.06	0.08	0.06	0.09	0.06	0.05	0.05	0.08	0.07	0.07	0.10	0.16

Z Less than .005 quadrillion Btu. <sup>1</sup> Net imports equals imports minus exports. Minus sign (-) denotes an excess of exports over imports. <sup>2</sup> Coal coke and small amounts of electricity transmitted across U.S. borders with Canada and Mexico. Source of tables 946-948: U.S. Energy Information Administration, *Annual Energy Review*, and *Monthly Energy Review*.

## No. 949. Energy Consumption—End-Use Sector and Selected Source, by State: 1988

[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 <sup>1</sup>	Per capita <sup>2</sup> (mil. Btu)	Per cent change, 1987-1988	END-USE SECTOR				SOURCE				
				Residential	Commercial	Industrial	Transportation	Petroleum	Natural gas (dry)	Coal	Hydropower	Nuclear power
<b>United States</b> . . . . .	<b>80,246</b>	<b>327</b>	<b>4.5</b>	<b>16,371</b>	<b>12,642</b>	<b>29,045</b>	<b>22,187</b>	<b>34,223</b>	<b>18,562</b>	<b>18,886</b>	<b>2,639</b>	<b>5,661</b>
<b>Northeast</b> . . . . .	<b>12,536</b>	<b>248</b>	<b>3.3</b>	<b>3,291</b>	<b>2,601</b>	<b>3,188</b>	<b>3,459</b>	<b>6,384</b>	<b>2,292</b>	<b>2,064</b>	<b>544</b>	<b>1,273</b>
<b>New England</b> . . . . .	<b>3,063</b>	<b>236</b>	<b>3.8</b>	<b>894</b>	<b>645</b>	<b>588</b>	<b>939</b>	<b>1,944</b>	<b>361</b>	<b>184</b>	<b>167</b>	<b>349</b>
Maine . . . . .	372	309	13.2	85	53	113	122	258	3	7	61	54
New Hampshire . . . . .	243	224	0.2	73	39	54	77	180	13	33	19	2
Vermont . . . . .	129	232	5.4	35	24	26	44	74	5	(2)	38	44
Massachusetts . . . . .	1,346	229	1.9	399	315	215	418	848	217	117	32	12
Rhode Island . . . . .	216	218	4.0	66	45	44	62	121	32	4	7	2
Connecticut . . . . .	757	234	3.9	239	169	136	216	463	91	23	10	239
<b>Middle Atlantic</b> . . . . .	<b>9,473</b>	<b>252</b>	<b>3.2</b>	<b>2,397</b>	<b>1,956</b>	<b>2,800</b>	<b>2,520</b>	<b>4,440</b>	<b>1,931</b>	<b>1,880</b>	<b>377</b>	<b>924</b>
New York . . . . .	3,586	200	2.8	1,025	995	692	874	1,835	813	333	372	260
New Jersey . . . . .	2,286	296	1.5	524	452	524	786	1,273	425	81	42	257
Pennsylvania . . . . .	3,601	300	4.8	848	509	1,384	860	1,332	693	1,466	7	407
<b>Midwest</b> . . . . .	<b>19,860</b>	<b>332</b>	<b>5.8</b>	<b>4,630</b>	<b>3,149</b>	<b>7,265</b>	<b>4,814</b>	<b>7,004</b>	<b>4,675</b>	<b>6,682</b>	<b>134</b>	<b>1,554</b>
<b>East North Central</b> . . . . .	<b>13,985</b>	<b>332</b>	<b>5.6</b>	<b>3,272</b>	<b>2,184</b>	<b>5,356</b>	<b>3,172</b>	<b>4,638</b>	<b>3,371</b>	<b>4,713</b>	<b>31</b>	<b>1,148</b>
Ohio . . . . .	3,785	348	3.8	858	582	1,535	810	1,149	838	1,475	2	91
Indiana . . . . .	2,478	446	4.1	449	272	1,198	558	801	464	1,292	5	1
Illinois . . . . .	2,577	308	6.6	882	684	1,255	775	1,240	963	720	1	743
Michigan . . . . .	3,753	298	6.9	719	436	911	698	954	766	832	8	181
Wisconsin . . . . .	1,392	268	8.1	364	230	457	341	494	320	394	15	123
<b>West North Central</b> . . . . .	<b>5,875</b>	<b>331</b>	<b>6.2</b>	<b>1,358</b>	<b>965</b>	<b>1,909</b>	<b>1,642</b>	<b>2,365</b>	<b>1,304</b>	<b>1,969</b>	<b>103</b>	<b>406</b>
Minnesota . . . . .	1,315	305	8.5	321	192	455	347	507	296	304	4-10	132
Iowa . . . . .	942	333	7.4	223	139	348	232	337	241	306	7	34
Missouri . . . . .	1,511	294	4.6	394	287	354	475	639	254	547	15	96
North Dakota . . . . .	203	467	1.9	54	36	152	69	118	30	370	23	-
South Dakota . . . . .	203	284	5.1	54	32	52	65	106	25	34	54	-
Nebraska . . . . .	536	334	8.0	127	114	135	160	221	120	139	14	73
Kansas . . . . .	1,057	423	5.0	185	165	413	294	438	348	269	(2)	71
<b>South</b> . . . . .	<b>33,089</b>	<b>391</b>	<b>4.2</b>	<b>5,764</b>	<b>4,315</b>	<b>14,230</b>	<b>8,778</b>	<b>14,143</b>	<b>8,324</b>	<b>7,936</b>	<b>271</b>	<b>2,116</b>
<b>South Atlantic</b> . . . . .	<b>12,319</b>	<b>290</b>	<b>4.3</b>	<b>2,842</b>	<b>2,143</b>	<b>3,510</b>	<b>3,822</b>	<b>5,294</b>	<b>1,452</b>	<b>3,766</b>	<b>82</b>	<b>1,547</b>
Delaware . . . . .	230	349	3.6	47	32	88	63	142	30	69	-	-
Maryland . . . . .	1,240	268	3.0	325	173	399	344	510	178	301	14	126
District of Columbia . . . . .	174	283	0.8	36	75	32	30	42	33	1	-	-
Virginia . . . . .	1,840	306	4.0	431	361	458	590	792	170	343	4-2	226
West Virginia . . . . .	778	415	6.0	131	86	413	148	268	132	915	10	-
North Carolina . . . . .	1,947	300	3.8	457	320	594	576	774	157	515	30	313
South Carolina . . . . .	1,143	330	1.9	231	157	486	269	376	115	302	7	438
Georgia . . . . .	2,038	322	4.4	434	303	608	692	831	331	699	21	163
Florida . . . . .	2,929	237	6.1	750	636	432	1,110	1,559	306	611	2	281
<b>East South Central</b> . . . . .	<b>5,667</b>	<b>369</b>	<b>4.8</b>	<b>1,114</b>	<b>642</b>	<b>2,376</b>	<b>1,535</b>	<b>2,126</b>	<b>871</b>	<b>2,216</b>	<b>127</b>	<b>284</b>
Kentucky . . . . .	1,401	376	5.9	277	174	569	381	522	191	822	25	-
Tennessee . . . . .	1,714	350	1.9	376	180	697	461	581	221	611	47	42
Alabama . . . . .	1,614	393	4.8	295	189	756	374	579	243	653	55	139
Mississippi . . . . .	938	358	9.0	166	99	354	319	444	216	130	-	103
<b>West South Central</b> . . . . .	<b>15,103</b>	<b>562</b>	<b>4.0</b>	<b>1,808</b>	<b>1,530</b>	<b>8,344</b>	<b>3,421</b>	<b>6,723</b>	<b>6,001</b>	<b>1,984</b>	<b>62</b>	<b>285</b>
Arkansas . . . . .	790	330	10.4	164	103	297	226	309	219	219	29	96
Louisiana . . . . .	3,450	783	1.2	291	242	2,212	705	1,531	1,506	212	-	148
Oklahoma . . . . .	1,280	396	2.3	244	192	511	334	426	611	269	21	-
Texas . . . . .	9,583	569	4.8	1,109	993	5,324	2,156	4,457	3,665	1,264	12	41
<b>West</b> . . . . .	<b>14,722</b>	<b>290</b>	<b>4.2</b>	<b>2,685</b>	<b>2,579</b>	<b>4,322</b>	<b>5,134</b>	<b>6,695</b>	<b>3,272</b>	<b>2,203</b>	<b>1,693</b>	<b>717</b>
<b>Mountain</b> . . . . .	<b>4,279</b>	<b>321</b>	<b>5.4</b>	<b>814</b>	<b>835</b>	<b>1,297</b>	<b>1,334</b>	<b>1,678</b>	<b>881</b>	<b>2,045</b>	<b>288</b>	<b>253</b>
Montana . . . . .	334	415	4.9	58	50	142	84	144	43	181	84	-
Idaho . . . . .	355	354	5.6	74	69	127	86	113	42	10	70	-
Wyoming . . . . .	377	786	2.2	36	41	216	84	137	87	446	8	-
Colorado . . . . .	902	273	3.5	206	228	195	273	339	229	311	18	7
New Mexico . . . . .	524	347	4.8	73	100	157	194	218	185	266	1	-
Arizona . . . . .	898	258	4.7	196	199	175	328	352	129	309	80	246
Utah . . . . .	534	316	12.2	96	85	201	152	206	118	338	6	-
Nevada . . . . .	355	337	6.9	75	63	84	133	169	48	184	21	-
<b>Pacific</b> . . . . .	<b>10,443</b>	<b>279</b>	<b>3.7</b>	<b>1,871</b>	<b>1,744</b>	<b>3,025</b>	<b>3,800</b>	<b>5,017</b>	<b>2,391</b>	<b>158</b>	<b>1,405</b>	<b>464</b>
Washington . . . . .	1,807	389	6.5	359	294	640	513	706	151	99	707	64
Oregon . . . . .	880	318	4.2	193	156	250	280	350	89	3	372	68
California . . . . .	6,970	246	2.1	1,255	1,206	1,797	2,712	3,482	1,859	51	315	332
Alaska . . . . .	520	991	10.3	40	52	276	152	218	289	4	10	-
Hawaii . . . . .	266	243	13.3	24	36	62	143	261	3	1	1	-

- Represents zero. Z Less than .05 trillion Btu. <sup>1</sup> Sources of energy includes geothermal, wood and waste, and net interstate sales of electricity, including losses, not shown separately. <sup>2</sup> Based on estimated resident population as of July 1. <sup>3</sup> Includes 8.6 trillion Btu of net imports of coal coke not allocated by State. <sup>4</sup> Minus sign (-) indicates when amount of energy expended exceeds amount of energy consumed.

Source: U.S. Energy Information Administration, *State Energy Data Report, 1990-1988*.

**No. 950. Primary Energy Consumption, by End-Use Sector: 1960 to 1989**

[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]

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	20.1	37.2	24.2	18.7
1970	66.4	12.1	21.9	16.0	16.3	18.2	33.0	24.1	24.5
1973	74.3	12.3	23.6	18.5	19.9	16.6	31.8	24.9	26.8
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	30.5
1980	76.0	10.7	21.0	19.7	24.5	14.1	27.6	25.9	32.2
1981	74.0	10.0	19.7	19.5	24.8	13.5	26.6	26.4	33.5
1982	70.8	10.1	17.4	19.0	24.3	14.3	24.6	26.8	34.3
1983	70.5	9.7	16.7	19.1	24.9	13.8	23.7	27.1	35.3
1984	74.1	10.1	18.2	19.8	25.9	13.6	24.6	26.7	35.0
1985	74.0	9.8	17.5	20.1	26.5	13.2	23.6	27.2	35.8
1986	74.2	9.6	17.3	20.7	26.6	12.9	23.3	27.9	35.8
1987	76.8	9.7	18.2	21.3	27.6	12.7	23.7	27.7	35.9
1988	80.2	10.4	19.0	22.1	28.6	12.9	23.7	27.6	35.7
1989	81.2	10.6	19.3	22.1	29.2	13.2	23.7	27.2	35.9

Source: U.S. Energy Information Administration, *Annual Energy Review*.

**No. 951. Energy Expenditures and Average Fuel Prices, by Source and Sector: 1970 to 1988**

[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	1982	1983	1984	1985	1986	1987	1988
<b>EXPENDITURES</b> (mil. dol.)											
Total <sup>1 2</sup>	82,577	111,613	171,788	373,887	424,813	415,744	433,568	435,617	381,300	393,303	406,054
Natural gas	10,891	13,933	20,061	51,061	68,292	72,000	77,169	72,938	59,702	58,019	61,089
Petroleum products <sup>2</sup>	48,087	65,302	103,864	238,396	242,375	221,463	225,917	223,369	174,583	186,176	187,713
Motor gasoline	31,596	39,667	59,446	124,408	130,305	115,816	114,438	118,044	91,526	99,809	103,211
Distillate fuel oil	6,253	9,524	15,680	40,797	44,087	41,841	44,864	43,611	34,954	37,240	38,362
Jet fuel	1,440	2,000	4,192	13,923	14,974	13,940	15,064	14,747	10,505	11,448	11,322
Residual fuel	2,047	4,667	10,378	21,573	17,632	14,098	14,381	11,461	7,467	7,958	7,087
Coal	4,593	6,229	13,047	22,648	26,427	27,051	29,050	29,719	27,914	27,590	28,371
Electricity sales	23,351	33,780	50,680	98,098	127,394	134,746	142,438	149,242	151,806	154,692	162,074
Residential sector	20,082	27,075	36,845	68,827	86,834	92,352	96,157	98,728	96,627	97,814	103,205
Commercial sector	10,667	15,104	22,834	46,881	61,242	64,943	69,379	70,301	68,311	68,687	71,706
Industrial sector	16,458	23,531	41,173	94,505	102,961	101,405	108,993	105,269	90,252	89,833	90,167
Transportation sector <sup>2</sup>	35,370	45,903	70,937	163,674	173,776	157,044	159,039	161,318	126,110	136,970	140,976
Motor gasoline	30,525	38,598	57,992	121,809	127,949	113,843	112,044	115,201	89,404	97,527	100,988
Electric utilities	4,316	7,817	16,396	37,435	41,311	41,336	43,378	42,558	35,792	36,681	37,435
<b>AVERAGE FUEL PRICES</b> (dol. per mil. Btu)											
All sectors	1.65	2.02	3.33	6.91	8.53	8.47	8.36	8.43	7.36	7.37	7.28
Residential sector	2.12	2.73	3.83	7.55	9.92	10.85	10.86	11.12	10.97	10.83	10.87
Commercial sector	1.97	2.56	4.09	7.88	10.44	11.05	11.29	11.72	11.40	11.05	10.87
Industrial sector	0.83	1.08	2.20	4.71	6.14	6.30	6.21	6.10	5.37	5.16	4.96
Transportation sector	2.31	2.57	4.02	8.61	9.43	8.44	8.24	8.25	6.23	6.59	6.55
Electric utilities	0.32	0.46	0.96	1.75	2.01	1.98	1.97	1.85	1.55	1.51	1.45

<sup>1</sup> Includes electricity sales; excludes electricity generation. <sup>2</sup> Includes sources or fuel types not shown separately.

Source: U.S. Energy Information Administration, *State Energy Price and Expenditure Report*, annual.

## No. 952. Energy Expenditures—End-Use Sector and Selected Source, by State: 1988

[In millions of dollars, except as indicated. 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]

REGION, DIVISION, AND STATE	Total <sup>1</sup>	Per capita <sup>2</sup> (dol.)	Percent change, 1987- 1988	END-USE SECTOR				SOURCE				
				Resi- dential	Com- mercial	Indus- trial	Trans- portation	Petroleum products		Natural gas	Coal	Elec- tricity sales
								Total	Gas- oline			
<b>U.S. . . .</b>	<b>3406,054</b>	<b>1,652</b>	<b>3.1</b>	<b>103,205</b>	<b>71,706</b>	<b>90,167</b>	<b>140,976</b>	<b>187,713</b>	<b>103,211</b>	<b>61,089</b>	<b>28,371</b>	<b>162,074</b>
<b>Northeast . . .</b>	<b>76,921</b>	<b>1,520</b>	<b>2.4</b>	<b>23,848</b>	<b>17,047</b>	<b>12,565</b>	<b>23,460</b>	<b>35,583</b>	<b>18,197</b>	<b>11,214</b>	<b>3,207</b>	<b>32,505</b>
<b>N.E. . . .</b>	<b>20,619</b>	<b>1,590</b>	<b>4.8</b>	<b>6,415</b>	<b>4,122</b>	<b>2,903</b>	<b>7,178</b>	<b>11,417</b>	<b>5,863</b>	<b>2,023</b>	<b>336</b>	<b>8,083</b>
ME . . .	2,204	1,828	11.8	582	296	408	918	1,486	659	18	18	755
NH . . .	1,687	1,555	4.1	548	260	297	582	939	507	73	59	732
VT . . .	902	1,616	5.3	261	166	132	343	520	281	25	1	358
MA . . .	8,915	1,514	2.0	2,755	1,982	1,152	3,025	4,750	2,466	1,174	194	3,489
RI . . .	1,436	1,446	2.6	464	281	208	484	767	410	187	11	494
CT . . .	5,475	1,694	7.2	1,805	1,137	706	1,826	2,955	1,540	546	53	2,255
<b>M.A. . . .</b>	<b>56,302</b>	<b>1,496</b>	<b>1.5</b>	<b>17,433</b>	<b>12,925</b>	<b>9,662</b>	<b>16,282</b>	<b>24,166</b>	<b>12,334</b>	<b>9,191</b>	<b>2,871</b>	<b>23,967</b>
NY . . .	23,422	1,308	1.6	7,839	6,905	2,638	6,040	9,829	5,019	4,091	539	10,707
NJ . . .	13,991	1,813	0.9	3,893	2,987	2,283	4,828	6,898	3,231	2,087	139	5,266
PA . . .	18,889	1,574	1.8	5,701	3,033	4,741	5,414	7,439	4,084	3,013	2,193	7,994
<b>Midwest . . .</b>	<b>102,477</b>	<b>1,712</b>	<b>3.3</b>	<b>27,632</b>	<b>16,995</b>	<b>25,452</b>	<b>32,396</b>	<b>42,924</b>	<b>25,285</b>	<b>18,997</b>	<b>10,126</b>	<b>38,562</b>
<b>E.N.C. . . .</b>	<b>72,479</b>	<b>1,721</b>	<b>3.0</b>	<b>19,890</b>	<b>12,204</b>	<b>18,754</b>	<b>21,632</b>	<b>28,589</b>	<b>17,162</b>	<b>14,565</b>	<b>7,682</b>	<b>27,648</b>
OH . . .	19,047	1,753	2.2	5,169	3,250	4,964	5,665	7,240	4,569	3,688	2,260	7,650
IN . . .	11,052	1,988	2.6	2,669	1,425	3,514	3,444	4,359	2,340	1,921	2,040	3,994
IL . . .	19,665	1,693	1.6	5,641	3,763	4,828	5,433	7,565	4,436	3,934	1,320	7,997
MI . . .	15,199	1,645	4.6	4,242	2,587	3,769	4,602	6,114	3,849	3,507	1,460	5,398
WI . . .	7,516	1,555	5.9	2,169	1,179	1,679	2,488	3,311	1,988	1,515	602	2,609
<b>W.N.C. . . .</b>	<b>29,998</b>	<b>1,689</b>	<b>4.1</b>	<b>7,742</b>	<b>4,791</b>	<b>6,698</b>	<b>10,764</b>	<b>14,335</b>	<b>8,123</b>	<b>4,432</b>	<b>2,444</b>	<b>10,914</b>
MN . . .	6,756	1,568	7.8	1,791	903	1,570	2,492	3,247	2,006	1,052	378	2,432
IA . . .	4,820	1,703	4.2	1,310	699	1,212	1,598	2,155	1,261	874	391	1,731
MO . . .	8,324	1,619	3.7	2,349	1,536	1,397	3,042	3,819	2,327	1,090	752	3,375
ND . . .	1,425	2,136	0.8	287	175	467	496	693	364	103	424	406
SD . . .	1,115	1,562	3.0	300	159	199	456	634	380	102	43	374
NE . . .	2,732	1,704	4.6	643	520	504	1,064	1,377	706	439	122	915
KS . . .	4,826	1,933	0.3	1,062	799	1,349	1,616	2,410	1,099	772	334	1,681
<b>South . . .</b>	<b>151,245</b>	<b>1,787</b>	<b>2.7</b>	<b>35,432</b>	<b>22,946</b>	<b>38,974</b>	<b>53,892</b>	<b>72,632</b>	<b>38,414</b>	<b>19,908</b>	<b>12,453</b>	<b>61,711</b>
<b>S.A. . . .</b>	<b>67,463</b>	<b>1,590</b>	<b>3.2</b>	<b>18,428</b>	<b>11,920</b>	<b>12,141</b>	<b>24,975</b>	<b>31,128</b>	<b>18,961</b>	<b>5,792</b>	<b>6,202</b>	<b>30,879</b>
DE . . .	1,223	1,853	5.6	332	190	258	443	668	347	119	122	500
MD . . .	6,941	1,500	2.1	1,969	963	1,426	2,583	3,305	2,115	864	473	2,780
DC . . .	1,049	1,711	0.3	227	421	153	247	291	202	187	1	576
VA . . .	9,763	1,624	3.0	2,559	1,772	1,412	4,021	4,962	2,936	702	538	3,966
WV . . .	3,160	1,684	0.9	696	415	1,060	990	1,486	781	435	1,319	1,068
NC . . .	10,841	1,671	2.6	3,020	1,727	2,206	3,887	4,842	3,016	663	913	5,229
SC . . .	5,825	1,681	0.5	1,510	855	1,679	1,782	2,284	1,394	479	527	2,955
GA . . .	10,911	1,721	4.3	2,742	1,851	2,291	4,027	4,715	2,859	1,508	1,221	4,608
FL . . .	17,750	1,439	4.7	5,373	3,726	1,656	6,995	8,575	5,311	825	1,088	9,197
<b>E.S.C. . . .</b>	<b>26,910</b>	<b>1,753</b>	<b>2.8</b>	<b>6,109</b>	<b>3,227</b>	<b>7,731</b>	<b>9,843</b>	<b>12,251</b>	<b>6,990</b>	<b>2,726</b>	<b>3,313</b>	<b>11,456</b>
KY . . .	6,674	1,791	5.0	1,397	782	2,022	2,473	3,142	1,722	637	1,034	2,746
TN . . .	8,558	1,747	1.2	1,940	917	2,582	3,119	3,697	2,317	747	822	3,976
AL . . .	7,284	1,775	1.2	1,770	927	2,125	2,462	3,152	1,824	828	1,223	3,040
MS . . .	4,394	1,677	5.5	1,002	601	1,002	1,789	2,280	1,127	516	234	1,694
<b>W.S.C. . . .</b>	<b>56,872</b>	<b>2,116</b>	<b>2.1</b>	<b>10,895</b>	<b>7,799</b>	<b>19,102</b>	<b>19,074</b>	<b>29,253</b>	<b>12,463</b>	<b>11,390</b>	<b>2,938</b>	<b>19,376</b>
AR . . .	4,014	1,675	4.6	1,038	560	937	1,478	1,835	1,108	633	349	1,572
LA . . .	11,322	2,569	1.7	1,826	1,352	4,805	3,539	6,107	1,862	2,203	333	3,431
OK . . .	5,232	1,618	0.0	1,354	918	958	2,001	2,373	1,454	1,307	404	2,048
TX . . .	36,304	2,157	2.2	6,677	4,969	12,602	12,056	18,938	8,039	7,247	1,852	12,325
<b>West . . .</b>	<b>75,297</b>	<b>1,485</b>	<b>4.4</b>	<b>16,294</b>	<b>14,715</b>	<b>13,064</b>	<b>31,225</b>	<b>36,577</b>	<b>21,317</b>	<b>10,966</b>	<b>2,585</b>	<b>29,756</b>
<b>Mt. . . .</b>	<b>21,488</b>	<b>1,612</b>	<b>3.8</b>	<b>4,864</b>	<b>4,327</b>	<b>3,738</b>	<b>8,561</b>	<b>10,042</b>	<b>6,128</b>	<b>2,663</b>	<b>2,304</b>	<b>8,763</b>
MT . . .	1,457	1,810	3.5	275	210	360	612	781	425	149	104	522
ID . . .	1,572	1,567	3.5	332	269	382	589	752	449	168	17	635
WY . . .	1,323	2,756	2.8	176	177	448	521	665	267	131	391	466
CO . . .	4,594	1,392	0.7	1,088	1,079	612	1,815	2,058	1,405	817	337	1,717
NM . . .	2,479	1,642	1.9	483	554	378	1,064	1,281	756	321	313	823
AZ . . .	5,616	1,612	3.8	1,519	1,274	750	2,074	2,293	1,548	488	440	2,887
UT . . .	2,648	1,507	6.6	564	441	501	1,043	1,193	736	376	451	895
NV . . .	1,899	1,802	10.8	427	323	307	843	1,009	542	213	251	718
<b>Pac. . . .</b>	<b>53,809</b>	<b>1,440</b>	<b>4.7</b>	<b>11,430</b>	<b>10,388</b>	<b>9,326</b>	<b>22,664</b>	<b>26,535</b>	<b>15,191</b>	<b>8,303</b>	<b>281</b>	<b>20,993</b>
OR . . .	6,929	1,489	6.0	1,482	1,066	1,315	3,066	3,564	1,974	551	161	2,800
CA . . .	4,255	1,537	4.8	895	699	848	1,812	2,166	1,263	388	8	1,693
AK . . .	39,553	1,396	4.4	8,594	8,110	6,771	16,078	18,568	11,300	7,145	99	15,574
HI . . .	1,491	2,840	3.7	253	265	153	820	1,016	228	187	11	361
	1,581	1,443	6.1	206	248	239	888	1,221	426	32	2	565

<sup>1</sup> Includes sources not shown separately. <sup>2</sup> Total expenditures are the sum of purchases for each source (including electricity sales) less electric utility purchases of fuel. <sup>3</sup> Based on estimated resident population as of July 1. <sup>4</sup> 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. 953. 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	0.88
Electricity	Quad. Btu.	2.42	2.46	2.48	2.42	2.48	2.76	0.44	0.61	1.22	0.48
Fuel oil, kerosene	Quad. Btu.	1.71	1.55	1.33	1.14	1.26	1.22	0.87	0.16	0.17	0.02
Liquid petroleum gas	Quad. Btu.	0.31	0.36	0.31	0.29	0.31	0.32	0.02	0.13	0.12	0.05
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	0.1
Liquid petroleum gas	Bil. dol	2.1	2.9	2.7	2.7	3.1	2.8	0.2	1.0	1.1	0.4
AVERAGE PRICE											
Total	Dol./mil.Btu	6.49	8.03	8.93	10.18	10.73	10.71	10.26	9.18	12.82	10.53
Natural gas	Dol./mil.Btu	3.36	3.90	4.55	5.67	5.97	5.41	6.45	4.93	5.53	5.05
Electricity	Dol./mil.Btu	13.46	16.32	18.51	19.98	21.94	22.34	27.78	23.09	20.61	20.70
Fuel oil, kerosene	Dol./mil.Btu	6.29	8.04	8.89	8.42	7.64	5.89	5.79	5.97	6.29	6.10
Liquid petroleum gas	Dol./mil.Btu	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*. Not conducted in 1984 and 1986.

### No. 954. 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 953]

CHARACTERISTIC	CONSUMPTION (Btu's)					EXPENDITURES				
	Total <sup>1</sup> (quad.)	Avg. per house- hold <sup>1</sup> (mil.)	Nat- ural gas (quad.)	Elec- tricity (quad.)	Fuel oil <sup>2</sup> (quad.)	Total <sup>1</sup> (bil. dol.)	Avg. per house- hold <sup>1</sup> (dol.)	Nat- ural gas (bil. dol.)	Elec- tricity (bil. dol.)	Fuel oil <sup>2</sup> (bil. dol.)
<b>Total households</b>	<b>9.13</b>	<b>101</b>	<b>4.83</b>	<b>2.76</b>	<b>1.22</b>	<b>97.7</b>	<b>1,080</b>	<b>28.1</b>	<b>61.6</b>	<b>7.2</b>
Single family detached	6.32	115	3.30	1.97	0.80	67.6	1,226	17.5	43.1	4.8
Single family attached	0.53	99	0.29	0.16	0.07	6.0	1,135	1.7	3.8	0.5
2-4 unit building	0.94	93	0.61	0.20	0.13	9.1	905	3.4	4.9	0.8
5 or more unit building	0.96	64	0.51	0.28	0.17	10.1	681	2.8	6.5	0.8
Mobile home	0.39	76	0.12	0.16	0.05	4.8	948	0.6	3.3	0.3
<b>Year house built:</b>										
1939 or earlier	2.59	120	1.53	0.48	0.51	23.7	1,105	8.4	11.7	3.0
1940-1949	0.85	104	0.48	0.22	0.13	8.6	1,042	2.7	4.9	0.7
1950-1959	1.43	110	0.79	0.38	0.22	14.6	1,121	4.2	8.7	1.3
1960-1969	1.63	100	0.92	0.50	0.18	17.4	1,060	5.1	11.0	1.0
1970-1974	0.92	95	0.49	0.31	0.07	10.2	1,062	2.5	6.8	0.4
1975-1979	0.90	86	0.34	0.44	0.08	11.9	1,131	1.7	9.3	0.5
1980-1984	0.53	71	0.20	0.28	0.02	7.3	984	1.1	5.8	0.1
1985 or later	0.27	71	0.10	0.15	0.01	4.0	1,049	0.5	3.3	(B)
<b>Heating and cooling degree day zones:</b>										
Less than 2,000 CDD and- More than 7,000 HDD	0.94	110	0.42	0.23	0.21	8.8	1,030	2.1	4.8	1.2
5,500-7,000 HDD	3.26	126	2.09	0.69	0.44	30.0	1,156	10.6	16.3	2.6
4,000-5,499 HDD	2.34	107	1.09	0.67	0.51	24.9	1,138	6.6	14.9	2.9
Less than 4,000 HDD	1.38	77	0.73	0.53	0.05	16.6	931	4.1	11.5	0.4
More than 2,000 CDD and less than 4,000 HDD	1.20	74	0.51	0.64	0.01	17.4	1,068	2.8	14.2	0.1
<b>1987 family income:</b>										
Less than \$5,000	0.51	83	0.30	0.13	0.05	5.1	818	1.6	2.8	0.3
\$5,000-\$9,999	1.03	90	0.57	0.26	0.16	10.1	881	3.0	5.8	0.9
\$10,000-\$14,999	1.15	91	0.62	0.31	0.16	11.7	927	3.3	6.9	0.9
\$15,000-\$19,999	0.83	92	0.45	0.24	0.11	8.7	967	2.4	5.3	0.7
\$20,000-\$24,999	0.84	96	0.42	0.27	0.12	9.1	1,038	2.2	5.9	0.7
\$25,000-\$34,999	1.80	99	0.81	0.52	0.22	17.7	1,091	4.4	11.5	1.3
\$35,000-\$49,999	1.50	112	0.77	0.51	0.19	16.8	1,257	4.2	11.2	1.1
\$50,000 or more	1.67	129	0.90	0.52	0.22	18.6	1,440	4.9	12.1	1.3

B Base figure too small to meet statistical standards for reliability of derived figure. <sup>1</sup> Includes liquid petroleum gas, not shown separately. <sup>2</sup> Includes kerosene. <sup>3</sup> CDD=Cooling degree day; HDD=Heating degree day.

Source: U.S. Energy Information Administration, *Residential Energy Consumption Survey, 1987*.

# **No. 955. 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. See headnote, table 953]

HOUSEHOLD CHARACTERISTIC	CONSUMPTION PER HOUSEHOLD (mil. Btu)					EXPENDITURES PER HOUSEHOLD (dollars)				
	All households <sup>1</sup>	Households using as main heating fuel—				All households <sup>1</sup>	Households using as main heating fuel—			
		Natural gas	Electricity	Without air-conditioning	Fuel oil <sup>2</sup>		Natural gas	Electricity	Without air-conditioning	Fuel oil <sup>2</sup>
<b>Total households . . .</b>	<b>101</b>	<b>118</b>	<b>56</b>	<b>46</b>	<b>126</b>	<b>1,080</b>	<b>1,073</b>	<b>1,103</b>	<b>772</b>	<b>1,280</b>
<b>Region:</b>										
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
<b>Type:</b>										
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	665	709	482	793
Mobile home . . . . .	76	96	57	43	88	948	885	1,101	768	1,031
<b>Year house built:</b>										
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 1967 . . . . .	100	110	59	39	114	1,080	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	128	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
<b>1987 family income:</b>										
Less than \$5,000 . . . . .	83	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	1,036	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

<sup>1</sup> Includes households using liquid petroleum gas, not shown separately. <sup>2</sup> Includes kerosene.

## **No. 956. Residential Energy Expenditures, by Type of End Use and Household Characteristic: 1987**

[For period January through December 1987. See headnote, table 953]

CHARACTERISTIC	EXPENDITURES (bil. dol.)					EXPENDITURES PER HOUSEHOLD (dollars)				
	All end uses	End use				All end uses	End use			
		Space heating <sup>1</sup>	Air-conditioning <sup>2</sup>	Water heating <sup>1</sup>	Other <sup>3</sup>		Space heating <sup>1</sup>	Air-conditioning <sup>2</sup>	Water heating <sup>1</sup>	Other <sup>3</sup>
<b>Total households . . .</b>	<b>97.7</b>	<b>31.7</b>	<b>9.8</b>	<b>13.9</b>	<b>42.3</b>	<b>1,080</b>	<b>350</b>	<b>109</b>	<b>154</b>	<b>467</b>
<b>Type:</b>										
Single-family detached . .	67.6	21.5	7.0	9.2	29.9	1,226	391	127	187	542
Single-family attached . .	6.0	2.1	0.6	0.8	2.5	1,135	404	111	148	472
2-4 unit building . . . . .	9.1	3.4	0.6	1.3	3.8	905	338	60	131	376
5 or more unit building . .	10.1	3.1	1.3	1.7	4.1	881	206	85	114	276
Mobile home . . . . .	4.8	1.5	0.4	0.9	2.0	948	297	74	180	397
<b>Year house built:</b>										
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	0.7	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	145	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	130	162	463
1985 or later . . . . .	4.0	1.0	0.5	0.7	1.8	1,049	258	137	183	472
<b>1987 family income:</b>										
Less than \$5,000 . . . . .	5.1	1.9	0.3	0.8	2.0	818	312	55	135	316
\$5,000-\$9,999 . . . . .	10.1	3.7	0.7	1.6	4.1	881	324	63	139	354
\$10,000-\$14,999 . . . . .	11.7	4.0	0.9	1.8	4.9	927	319	75	145	388
\$15,000-\$19,999 . . . . .	6.7	2.9	0.7	1.3	3.7	967	323	83	148	414
\$20,000-\$24,999 . . . . .	9.1	2.9	0.9	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 . . . . .	16.8	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

<sup>1</sup> Heating from the primary and secondary heating equipment. <sup>2</sup> Cooling by refrigeration; does not include dehumidifiers, evaporative coolers, or fans not connected to air-conditioning equipment. <sup>3</sup> Appliance usage; includes fans in central, forced-air furnaces.

Source of tables 955 and 956: U.S. Energy Information Administration, *Residential Energy Consumption Survey, 1987*.

### No. 957. 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 tables in the Construction and Housing section. Tril.=trillion]

ITEM	Unit	All major fuels	Elec- tricity	Natural 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	Mill. 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	Mill. Btu	69	33	35	28	18	52
Expenditures, total	Mill. 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	0.84	0.22	0.19	0.17	0.57
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. 958. 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 in Section 26. For composition of regions, see fig. 1, inside front cover]

BUILDING CHARACTERISTIC	ALL BUILDINGS USING ANY MAJOR FUEL		CONSUMPTION (tril. Btu)			EXPENDITURES (mil. dol.)		
	Number (1,000)	Square feet (mil.)	Major fuel, total <sup>1</sup>	Elec- tricity	Natural gas	Major fuel, total <sup>1</sup>	Elec- tricity	Natural gas
<b>All buildings</b>	<b>3,992</b>	<b>56,825</b>	<b>5,040</b>	<b>2,390</b>	<b>1,723</b>	<b>60,762</b>	<b>47,186</b>	<b>8,355</b>
<b>Region:</b>								
Northeast	639	11,506	1,046	430	244	14,362	10,886	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
<b>Year constructed:</b>								
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	666	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	716	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 1983	342	5,179	388	254	102	5,632	4,862	520
1984 to 1986	286	4,517	354	216	106	4,783	4,100	510
<b>Principal activity within building:</b>								
Assembly	572	7,305	401	164	157	5,009	3,707	811
Education	241	7,292	635	179	254	5,782	3,606	1,189
Food sales/services	303	1,993	411	220	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	10	8,532	1,010	641	258	14,777	12,884	1,178
Public order and safety	63	678	86	30	25	720	475	133
Warehouse	491	8,558	466	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
<b>Square footage:</b>								
1,001 to 5,000	2,113	5,943	719	376	248	10,133	8,175	1,316
5,001 to 10,000	901	6,638	598	278	236	7,647	5,962	1,206
10,001 to 25,000	541	8,873	724	312	305	8,374	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

<sup>1</sup> 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. 959. Fossil Fuel Prices in Current and Constant (1982) Dollars: 1970 to 1989**

[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]

FUEL	1970	1973	1975	1979	1980	1982	1983	1984	1985	1986	1987	1988	1989, prel.
<b>CURRENT DOLLARS</b>													
Composite <sup>1</sup>	31.7	39.8	82.5	141.7	204.2	275.8	270.1	264.6	251.2	165.3	170.0	153.3	166.6
Crude oil	54.8	67.1	132.2	217.9	372.2	491.7	451.8	446.2	415.3	215.7	265.5	216.9	273.3
Natural gas	15.4	20.1	40.2	108.1	144.8	222.2	232.3	239.9	225.7	174.8	150.2	152.4	154.2
Bituminous coal	26.2	36.5	83.9	105.3	109.4	122.1	117.2	115.9	114.8	108.2	104.9	100.8	96.5
Anthracite coal	48.8	61.7	149.5	177.2	185.9	214.0	230.0	208.7	204.2	191.1	188.9	189.8	189.1
<b>CONSTANT (1982) DOLLARS</b>													
Composite <sup>1</sup>	75.5	80.4	138.4	180.3	238.3	275.8	260.0	245.7	225.9	145.1	144.8	126.4	131.9
Crude oil	130.5	135.6	222.9	277.2	434.3	491.7	434.6	414.3	373.5	189.4	226.1	178.8	216.4
Natural gas	36.7	40.6	67.8	137.5	169.0	222.2	223.6	222.7	203.0	153.5	127.9	125.6	122.1
Bituminous coal	62.4	73.7	141.5	134.0	127.7	122.1	112.8	107.6	103.2	95.0	89.4	83.1	76.4
Anthracite coal	116.2	124.6	252.1	225.4	216.9	214.0	221.4	193.8	183.6	167.8	160.9	156.5	149.7
GNP price deflator <sup>3</sup> (1982=100)	42.0	49.5	59.3	78.6	85.7	100.0	103.9	107.7	110.9	113.9	117.4	121.3	126.3

<sup>1</sup> Weighted by relative importance of individual fuels in total fuels production. <sup>2</sup> Includes lignite. <sup>3</sup> GNP=Gross national product; see text, section 15.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

**No. 960. World Energy Consumption, by Region and Energy Source: 1960 to 1988**

[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	COMSUMPTION (mil. metric tons)					PER CAPITA (kilograms)				PERCENT DISTRIBUTION			
	1960	1970	1980	1987	1988	1960	1970	1980	1988	1960	1970	1980	1988
<b>World, total</b>	<b>3,924</b>	<b>6,440</b>	<b>8,544</b>	<b>9,655</b>	<b>10,013</b>	<b>1,302</b>	<b>1,748</b>	<b>1,919</b>	<b>1,959</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
North America <sup>1</sup>	1,589	2,502	2,796	2,812	2,822	5,951	7,825	7,480	7,011	40.7	38.9	32.7	29.2
United States	1,454	2,217	2,364	2,366	2,458	8,047	10,811	10,386	10,015	37.1	34.4	27.7	24.5
South America	79	143	251	232	297	535	749	1,046	1,042	2.0	2.2	2.9	3.0
Europe	1,039	1,720	2,145	2,192	2,190	2,443	3,745	4,433	4,418	26.5	26.7	25.1	21.9
Asia	514	903	1,579	2,140	2,265	276	386	607	752	13.1	14.0	18.5	22.6
Japan	96	333	435	445	480	1,025	3,246	3,726	3,921	2.4	5.2	5.1	4.8
Soviet Union	595	999	1,473	1,862	1,954	2,777	4,132	5,549	6,888	15.2	15.5	17.2	19.5
Oceania	41	71	105	130	134	2,597	3,675	4,572	5,189	1.0	1.1	1.2	1.3
<b>Energy source:</b>													
Solid fuels	1,940	2,159	2,632	3,168	3,299	644	586	591	645	49.4	33.5	30.8	32.9
Liquid fuels	1,306	2,835	3,778	3,771	3,922	433	770	848	794	33.3	44.0	44.2	39.1
Natural gas	593	1,292	1,834	2,249	2,302	197	351	412	449	15.1	20.1	21.5	23.0
Electricity	84	154	301	466	490	28	42	68	95	2.1	2.4	3.5	5.0

<sup>1</sup> Includes Central America.

Source: Statistical Office of the United Nations, New York, NY, *Energy Statistics Yearbook*, annual. (Copyright.)

**No. 961. World Primary Energy Production, by Region and Type: 1973 to 1988**

[In quadrillion Btu. Btu=British thermal units. For Btu conversion factors, see source]

REGION AND TYPE	1973	1975	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>World total</b>	<b>244.8</b>	<b>245.0</b>	<b>287.3</b>	<b>286.6</b>	<b>281.7</b>	<b>280.0</b>	<b>282.1</b>	<b>296.8</b>	<b>304.2</b>	<b>314.0</b>	<b>321.9</b>	<b>333.1</b>
North America	73.3	71.1	78.2	80.5	80.9	81.3	78.9	84.6	84.1	82.8	84.1	86.0
United States	62.0	59.8	63.7	64.7	64.3	63.8	61.1	65.7	64.6	64.0	64.6	65.4
Central and South America	12.9	10.6	12.2	12.1	12.1	12.0	12.2	13.1	13.4	14.1	14.1	15.0
Western Europe	19.6	21.4	27.4	28.7	29.7	30.7	31.9	32.4	35.0	35.8	36.5	36.8
Eastern Europe and Soviet Union	51.4	55.9	66.1	69.2	69.7	72.2	74.2	76.5	78.6	81.5	83.5	85.2
Middle East	46.6	43.5	48.5	42.2	36.7	29.5	27.3	27.7	25.7	30.6	32.1	36.4
Africa	14.8	13.3	18.1	17.4	15.1	15.4	16.1	17.5	18.4	18.1	18.5	19.4
Far East and Oceania	26.2	29.3	36.7	36.5	37.5	38.9	41.5	45.1	49.0	51.1	53.1	54.2
Crude oil	117.8	111.6	131.8	127.6	119.5	113.9	113.4	116.2	114.7	119.5	120.4	125.4
Natural gas	43.2	43.9	51.6	52.8	54.2	53.7	54.1	59.1	61.4	62.6	65.6	67.1
Natural gas liquids	4.2	4.4	5.2	5.5	5.8	5.8	5.8	6.1	6.2	6.5	6.9	7.2
Coal	63.8	66.3	74.6	75.0	75.2	76.4	78.5	82.2	86.1	88.3	90.4	93.0
Hydroelectric power	13.5	15.0	17.6	18.2	18.4	18.9	19.8	20.4	20.7	20.9	21.1	21.3
Nuclear electric power	2.2	3.9	6.7	7.5	8.5	9.3	10.6	12.8	15.2	16.3	17.6	19.1

Source: U.S. Energy Information Administration, *International Energy Annual*.



## No. 962. U.S. Foreign Trade In Selected Mineral Fuels: 1970 to 1989

[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]

MINERAL FUEL	1970	1973	1975	1979	1980	1982	1983	1984	1985	1986	1987	1988	1989
<b>NATURAL GAS</b>													
Imports:													
Bil. cu. ft. . .	820.8	1,032.9	953.0	1,253.4	984.8	933.3	919.8	843.1	949.7	750.4	992.5	1,293.8	1,378.0
Tril. Btu . . .	846	1,060	978	1,300	1,006	950	942	847	952	748	992	1,296	1,381
Exports:													
Bil. cu. ft. . .	69.8	77.2	72.7	55.7	48.7	51.7	54.6	54.8	55.3	61.3	54.0	73.6	70.0
Tril. Btu . . .	72	79	74	56	49	52	55	55	56	62	55	75	71
Net trade:													
Bil. cu. ft. . .	-751.0	-955.7	-880.3	-1,197.7	-936.0	-881.6	-865.1	-788.3	-894.4	-689.2	-938.5	-1,220.2	-1,308.0
Tril. Btu . . .	-774	-981	-904	-1,243	-957	-898	-887	-792	-896	-686	-937	-1,221	-1,309
<b>CRUDE OIL</b>													
Imports: <sup>1</sup>													
Mill. barrels	483	1,184	1,498	2,380	1,926	1,273	1,215	1,254	1,168	1,525	1,706	1,869	2,120
Tril. Btu . . .	2,814	6,887	8,721	13,825	11,195	7,418	7,079	7,302	6,814	8,892	10,067	11,027	12,513
Exports:													
Mill. barrels	5	1	2	86	105	86	60	66	75	56	55	57	52
Tril. Btu . . .	29	4	12	497	609	500	348	384	432	326	319	329	300
Net trade:													
Mill. barrels	-478	-1,183	-1,496	-2,294	-1,821	-1,187	-1,155	-1,188	-1,093	-1,469	-1,651	-1,812	-2,068
Tril. Btu . . .	-2,785	-6,883	-8,709	-13,328	-10,586	-6,918	-6,731	-6,918	-6,382	-8,566	-9,748	-10,698	-12,214
<b>PETROLEUM PRODUCTS</b>													
Imports:													
Mill. barrels	765	1,099	712	707	603	593	629	736	681	747	731	840	792
Tril. Btu . . .	4,656	6,578	4,227	4,108	3,463	3,359	3,568	4,131	3,796	4,199	4,095	4,890	4,622
Exports:													
Mill. barrels	89	84	74	86	94	211	210	198	211	230	224	242	262
Tril. Btu . . .	520	482	427	505	551	1,224	1,217	1,161	1,225	1,344	1,311	1,412	1,533
Net trade:													
Mill. barrels	-676	-1,015	-638	-621	-509	-382	-419	-538	-470	-516	-507	-598	-531
Tril. Btu . . .	-4,136	-6,097	-3,800	-3,603	-2,912	-2,135	-2,351	-2,970	-2,571	-2,855	-2,784	-3,478	-3,068
<b>COAL</b>													
Imports:													
1,000 sh. tons . . .	36	127	940	2,059	1,194	742	1,271	1,286	1,952	2,212	1,747	2,134	2,851
Tril. Btu . . .	1	3	24	51	30	19	32	32	49	55	44	53	71
Exports:													
1,000 sh. tons . . .	71,733	53,587	66,309	66,042	91,742	106,277	77,772	81,482	92,880	85,518	79,607	95,023	100,815
Tril. Btu . . .	1,936	1,425	1,761	1,753	2,421	2,787	2,045	2,151	2,438	2,248	2,093	2,499	2,653
Net trade:													
1,000 sh. tons . . .	71,697	53,460	65,369	63,983	90,548	105,535	76,501	80,196	90,728	83,306	77,860	92,889	97,964
Tril. Btu . . .	1,935	1,422	1,738	1,702	2,391	2,768	2,013	2,119	2,389	2,193	2,049	2,446	2,581

<sup>1</sup> Beginning 1979, includes strategic petroleum reserve imports.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

## No. 963. Daily International Flow of Crude Oil, by Area: 1987

[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 . . . . .	24,476	4,674	400	1,676	8,651	2,044	1,125	3,090	2,816
United States . . . . .	151	(X)	17	131	-	-	-	-	3
North America, except U.S. . . . .	1,957	1,210	17	102	409	-	39	168	13
Central and South America . . . . .	1,413	706	46	444	172	-	18	5	22
Western Europe . . . . .	2,597	375	218	4	1,965	12	23	-	-
Eastern Europe and Soviet Union . . . . .	2,699	-	-	96	976	1,459	57	1	110
Middle East . . . . .	9,800	985	59	663	2,891	464	771	2,102	1,865
Africa . . . . .	3,826	997	43	175	2,218	92	185	16	98
Far East and Oceania . . . . .	2,034	401	-	61	20	17	32	798	705

- Represents zero. X Not applicable. <sup>1</sup> Includes shipments to Puerto Rico and Virgin Islands.

Source: U.S. Energy Information Administration, *International Energy Annual*.

## No. 964. Crude Oil Imports Into U.S., by Country of Origin: 1970 to 1989

(In millions of barrels. Barrels contain 42 gallons)

COUNTRY OF ORIGIN	1970	1973	1975	1979	1980	1982	1983	1984	1985	1986	1987	1988	1989
<b>Total</b> .....	<b>483</b>	<b>1,184</b>	<b>1,498</b>	<b>2,380</b>	<b>1,926</b>	<b>1,273</b>	<b>1,215</b>	<b>1,254</b>	<b>1,168</b>	<b>1,525</b>	<b>1,706</b>	<b>1,869</b>	<b>2,132</b>
Canada .....	245	365	219	99	73	78	100	125	171	208	222	249	230
Mexico .....	-	(Z)	26	160	186	235	280	241	261	227	220	227	261
Norway .....	-	-	5	28	53	37	24	41	11	19	25	23	46
Trinidad-Tobago .....	(Z)	22	42	45	42	34	30	32	36	34	27	26	27
United Kingdom .....	-	-	-	72	63	161	133	138	102	116	111	93	58
<b>OPEC</b> <sup>1</sup> .....	<b>222</b>	<b>767</b>	<b>1,171</b>	<b>1,866</b>	<b>1,414</b>	<b>633</b>	<b>540</b>	<b>553</b>	<b>479</b>	<b>771</b>	<b>876</b>	<b>987</b>	<b>1,222</b>
Algeria .....	2	44	96	222	167	33	64	71	31	28	42	21	22
Ecuador .....	-	17	21	11	6	12	21	17	20	23	8	12	29
Gabon .....	-	-	10	15	9	14	21	21	19	9	13	6	18
Indonesia .....	26	73	138	139	115	82	115	111	107	108	96	68	58
Iran .....	12	79	102	108	3	13	18	4	10	7	36	-	-
Iraq .....	-	2	(Z)	32	10	1	4	5	17	29	30	126	161
Kuwait .....	12	15	1	2	10	1	3	9	1	10	26	29	57
Libya .....	17	49	81	234	200	8	-	-	-	-	-	-	-
Nigeria .....	17	164	272	390	308	186	110	76	102	160	193	222	282
Qatar .....	-	3	7	11	8	3	-	1	-	4	-	-	-
Saudi Arabia .....	15	169	256	492	458	194	117	113	48	226	234	330	407
United Arab Emirates .....	23	26	43	103	63	30	7	33	13	14	21	8	7
Venezuela .....	98	126	144	107	57	56	60	93	112	152	178	161	181
Other .....	16	30	35	110	95	95	108	124	109	150	225	264	288

- Represents zero. Z Less than 500,000 barrels. <sup>1</sup>Organization of Petroleum Exporting Countries.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. 965. Crude Oil and Refined Products—Summary: 1973 to 1990

(Barrels of 42 gallons. Data are averages)

YEAR AND QUARTER	CRUDE OIL (1,000 bbl. per day)				REFINED OIL PRODUCTS (1,000 bbl. per day)				Total oil imports <sup>2</sup> (1,000 bbl. per day)	CRUDE OIL STOCKS <sup>3</sup> (mil. bbl.)	
	Input to refin- eries	Domestic produc- tion	Imports		Exports	Domestic demand	Imports	Exports		Total	Stra- tegic reserve
			Total <sup>1</sup>	Stra- tegic reserve							
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	8,807	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	6,549	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	580
1989	13,401	7,613	5,843	56	142	17,325	2,217	717	8,061	921	580
1st qtr	13,019	7,767	5,333	75	167	17,726	2,581	665	7,914	895	564
2d qtr	13,422	7,737	5,818	64	171	16,889	2,126	688	7,944	909	570
3d qtr	13,833	7,512	6,269	55	88	16,869	2,042	713	8,310	912	575
4th qtr	13,315	7,442	5,940	30	143	17,824	2,134	802	8,073	922	579
1990: <sup>4</sup>											
1st qtr	13,290	7,460	6,063	27	122	17,025	2,396	682	8,459	938	581
2d qtr	13,368	7,190	6,309	42	115	16,973	2,216	641	8,525	965	585

X Not applicable. <sup>1</sup> Includes Strategic Petroleum Reserve. <sup>2</sup> Crude oil (including Strategic Petroleum Reserve imports) plus refined products. <sup>3</sup> End of year or quarter. <sup>4</sup> Preliminary.Source: U.S. Energy Information Administration, *Monthly Energy Review*, April 1990.

**No. 966. Strategic Petroleum Reserve: 1977 to 1990**

[Million barrels, except as noted. The Strategic Petroleum Reserve is a stock of petroleum maintained by the Federal Government for use during periods of major supply interruption]

YEAR	Crude oil imports	Domestic crude oil deliveries	STOCKS AT YEAREND			Days of net petroleum imports <sup>3</sup>
			Quantity <sup>1</sup>	Percent of crude oil stocks <sup>2</sup>	Percent of total petroleum stocks	
1977	7.54	40.37	7.46	2.1	0.6	1
1980	16.07	1.30	107.80	23.1	7.7	17
1981	93.30	28.79	230.34	38.8	15.5	43
1982	60.19	3.79	293.83	45.7	20.5	68
1983	85.29	0.42	379.09	52.4	26.1	88
1984	72.04	0.05	450.51	56.6	28.9	96
1985	43.12	0.17	493.32	60.6	32.5	115
1986	17.56	1.21	511.57	60.7	32.1	94
1987	26.52	2.69	540.65	60.8	33.6	91
1988	18.76	(Z)	559.52	62.9	35.0	85
1989	20.35	-	578.86	62.9	36.7	81
1990	9.77	-	585.69	64.5	36.1	83

- Represents zero. Z Less than .005 million barrels. <sup>1</sup> Stocks do not include imported quantities in transit to Strategic Petroleum Reserve terminals, pipeline fill, and above ground storage. <sup>2</sup> Including lease condensate stocks. <sup>3</sup> Derived by dividing end-of-year strategic petroleum reserve stocks by annual average daily net imports of all petroleum. Calculated prior to rounding. <sup>4</sup> The quantity of domestic fuel oil which was in storage prior to injection of foreign crude oil.

Source: U.S. Energy Information Administration, *Annual Energy Review* and *Petroleum Supply Monthly*. Also *Petroleum Supply Annual*.

**No. 967. World Petroleum Consumption, by Major Consuming Country: 1970 to 1990**

[Million barrels per day. OECD = Organization for Economic Cooperation Development. For a complete list of OECD countries, see Section 31]

COUNTRY	1970	1973	1975	1980	1983	1984	1985	1986	1987	1988	1989	1990 <sup>1</sup>
World, total . . .	48.47	56.47	55.35	63.14	58.86	59.92	59.94	61.46	62.73	(NA)	(NA)	(NA)
OECD countries, total .	33.22	39.61	36.60	38.60	33.79	34.50	34.27	35.28	35.91	37.09	37.61	37.55
United States . . . . .	14.70	17.31	16.32	17.06	15.23	15.73	15.73	16.28	16.67	17.28	17.33	16.92
Australia . . . . .	0.51	0.59	0.60	0.59	0.59	0.61	0.63	0.63	0.64	0.67	( <sup>2</sup> )	( <sup>2</sup> )
Canada . . . . .	1.49	1.71	1.72	1.87	1.45	1.47	1.50	1.51	1.55	1.69	1.76	1.72
France . . . . .	1.89	2.42	2.14	2.26	1.84	1.75	1.78	1.77	1.79	1.80	1.66	1.86
West Germany . . . . .	2.43	2.92	2.52	2.71	2.32	2.32	2.34	2.50	2.42	2.42	2.28	2.32
Italy . . . . .	1.84	2.15	1.94	1.93	1.75	1.65	1.72	1.74	1.86	1.84	1.94	1.87
Japan . . . . .	3.85	5.07	4.50	4.96	4.40	4.58	4.38	4.44	4.48	4.75	4.98	5.28
Spain . . . . .	0.56	0.74	0.84	0.99	1.01	0.91	0.85	0.88	0.90	0.96	( <sup>2</sup> )	( <sup>2</sup> )
United Kingdom . . . . .	2.09	2.30	1.87	1.73	1.53	1.85	1.63	1.65	1.60	1.70	1.75	1.81
Other OECD . . . . .	3.87	4.41	4.16	4.50	3.67	3.63	3.72	3.90	4.00	3.99	( <sup>2</sup> )	( <sup>2</sup> )
Brazil . . . . .	0.51	0.77	0.87	1.16	1.01	1.07	1.13	1.30	1.32	1.35	(NA)	(NA)
China . . . . .	0.62	1.12	1.36	1.77	1.73	1.74	1.78	1.92	2.08	2.13	(NA)	(NA)
Mexico . . . . .	0.50	0.61	0.74	1.27	1.43	1.48	1.53	1.47	1.52	1.53	(NA)	(NA)
U.S.S.R. . . . .	5.30	6.57	7.47	9.00	8.95	8.91	8.95	8.98	9.00	8.86	(NA)	(NA)

NA Not available. <sup>1</sup> Preliminary. Represents average of January through April. <sup>2</sup> Included in OECD total.

Source: U.S. Energy Information Administration, *Annual Energy Review*, and *Monthly Energy Review*, August 1990 issue.

**No. 968. Energy Producing Companies—Selected Financial and Investment Indicators: 1978 to 1988**

[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; 22 during 1984 through 1987; and 23 in 1988]

ITEM	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
<b>INCOME STATEMENT (bil. dol.)</b>											
Operating revenues . . . . .	294.8	392.6	518.6	575.7	549.7	511.0	517.4	492.5	378.5	417.4	419.8
Operating expenses . . . . .	265.0	345.8	455.9	520.8	504.2	462.8	467.3	444.2	354.4	383.7	381.6
Operating income . . . . .	29.8	46.8	62.7	54.8	45.5	48.2	50.1	48.3	24.0	33.7	38.2
Pretax income . . . . .	30.2	48.6	66.9	60.0	45.2	47.4	47.6	43.6	20.6	25.0	34.3
Net income . . . . .	13.9	23.5	31.0	30.0	21.8	21.9	21.3	17.4	9.2	11.3	22.3
Funds from operations . . . . .	31.2	45.4	59.0	61.6	60.4	60.7	63.6	63.5	53.1	51.6	57.8
<b>BALANCE SHEET (bil. dol.)</b>											
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	293.6
Net investment in place . . . . .	148.1	169.9	202.6	240.8	282.5	296.3	309.1	315.4	310.0	316.4	309.6
Total assets . . . . .	237.1	282.8	333.0	372.5	411.9	421.8	442.9	438.4	427.0	443.6	437.8
<b>RATIOS (percent)</b>											
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	5.3
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	5.1
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	13.5
Long-term debt to stockholders' equity . . . . .	35.6	33.7	31.5	32.2	37.1	34.8	49.5	54.3	56.0	57.6	56.6
Long-term debt to total assets . . . . .	16.3	14.9	13.9	14.3	16.6	15.9	20.6	20.5	21.6	21.5	21.3

<sup>1</sup> The sum of net income, depreciation, depletion and amortization, deferred taxes, dry hole expenses, etc. <sup>2</sup> Composed of net property, plant and equipment plus investment and advances to unconsolidated subsidiaries. <sup>3</sup> Long-term debt includes amounts applicable to capitalized leases.

Source: U.S. Energy Information Administration, *Performance Profiles of Major Energy Producers*, annual.

### No. 969. Petroleum and Coal Products Corporations—Sales, Net Profit, and Profit Per Dollar of Sales: 1975 to 1989

[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	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Sales	Bil. dol.	121.8	242.7	333.2	376.1	357.1	312.7	338.4	320.9	226.5	248.3	252.2	265.3
Net profit:													
Before income taxes	Bil. dol.	13.3	32.2	39.1	35.3	27.8	27.1	24.5	17.7	9.8	14.2	27.3	23.7
After income taxes	Bil. dol.	9.3	21.9	25.5	23.7	19.7	19.3	17.2	12.7	8.8	10.9	21.2	19.5
Depreciation <sup>1</sup>	Bil. dol.	5.6	9.5	11.6	13.7	16.3	17.5	20.7	22.1	21.9	20.3	20.0	18.5
Profits per dollar of sales:													
Before income taxes	Cents	10.9	13.3	11.7	9.4	7.8	8.7	7.2	5.5	4.1	5.8	10.8	9.0
After income taxes	Cents	7.6	9.0	7.7	6.3	5.5	6.2	5.1	4.0	3.8	4.5	8.5	7.4
Profits on stockholders' equity:													
Before income taxes	Percent	17.9	30.0	30.7	25.6	18.7	17.8	14.3	11.7	6.8	10.1	19.2	17.8
After income taxes	Percent	12.5	20.4	20.0	17.2	13.2	12.7	10.0	8.5	6.1	7.7	14.9	14.6

<sup>1</sup> 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. 970. Major Petroleum Companies—Financial Data Summary: 1973 to 1989

[Data represent a composite of approximately 42 major worldwide petroleum companies aggregated on a consolidated, total company basis]

ITEM	1973	1975	1979	1980	1982	1983	1984	1985	1986	1987	1988	1989
<b>FINANCIAL DATA (bil. dol.)</b>												
Net income	11.8	11.6	32.8	32.9	21.1	20.6	22.7	19.4	10.8	15.0	24.6	24.1
Depreciation, depletion, etc.	10.5	11.3	24.9	32.5	37.2	37.4	45.3	53.0	43.7	45.0	34.3	35.0
Cash flow <sup>1</sup>	22.3	22.8	57.7	65.4	58.3	58.1	68.0	72.4	54.5	60.0	58.9	59.1
Dividends paid	4.0	4.7	8.0	9.3	10.6	10.5	11.6	12.0	12.1	12.4	14.0	14.9
Net internal funds available for investment or debt repayment	18.3	18.1	49.7	56.1	47.7	47.6	56.4	60.4	42.4	47.6	44.9	44.2
Capital and exploratory expenditures	16.3	26.9	51.1	62.1	67.8	50.7	57.5	58.3	38.3	50.1	62.4	59.4
Long-term capitalization	102.9	121.1	196.9	211.4	243.8	240.0	285.7	272.1	279.9	282.2	287.8	290.2
Long-term debt	22.5	28.9	48.1	49.8	62.6	61.0	95.8	93.5	95.5	86.4	86.5	91.6
Preferred stock	0.4	0.4	0.9	2.0	3.5	3.5	5.2	3.3	3.7	4.1	4.5	4.6
Common stock and retained earnings <sup>2</sup>	80.0	91.9	147.9	159.6	177.7	175.5	184.7	175.3	180.7	189.7	194.8	194.0
Excess of expenditures over cash income <sup>3</sup>	-2.0	8.9	1.4	6.0	20.1	3.1	1.1	-2.1	3.0	-2.5	17.5	15.2
<b>RATIOS<sup>5</sup> (percent)</b>												
Long-term debt to long-term capitalization <sup>4</sup>	22.0	23.8	24.4	23.6	25.7	25.4	33.5	34.4	34.1	31.3	30.8	31.6
Net income to total average capital	12.0	10.0	17.8	17.0	8.6	8.8	8.6	7.0	4.0	4.6	8.6	8.3
Net income to average common equity	15.6	13.1	24.0	22.5	11.5	12.0	12.5	10.8	6.2	7.3	12.8	12.4

<sup>1</sup> Generally represents internally-generated funds from operations. Sum of net income and noncash charges such as depreciation, depletion, and amortization. <sup>2</sup> Cash flow minus dividends paid. <sup>3</sup> Includes common stock, capital surplus, and earned surplus accounts after adjustments. <sup>4</sup> Capital and exploratory expenditures plus dividends paid minus cash flow. <sup>5</sup> 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, 1989-1988*, and earlier reports.

### No. 971. Electric Utility Sales and Average Prices, by End-Use Sector: 1970 to 1989

[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 <sup>1</sup>	Residential	Commercial	Industrial	Current dollars				Constant (1982) dollars <sup>2</sup>			
					Total <sup>1</sup>	Residential	Commercial	Industrial	Total <sup>1</sup>	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
1973	1,713	579	388	686	1.96	2.54	2.41	1.25	3.96	5.13	4.87	2.53
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	826	5.46	6.20	6.29	4.29	5.81	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	2,286	780	583	838	6.25	7.15	7.13	4.83	5.80	6.64	6.62	4.48
1985	2,324	794	606	837	6.44	7.39	7.27	4.97	5.81	6.66	6.56	4.48
1986	2,369	819	631	831	6.44	7.42	7.20	4.93	5.65	6.51	6.32	4.33
1987	2,457	850	660	858	6.37	7.45	7.08	4.77	5.43	6.35	6.03	4.06
1988	2,578	893	699	886	6.35	7.48	7.04	4.70	5.23	6.17	5.80	3.87
1989	2,634	904	724	915	6.44	7.64	7.21	4.72	5.10	6.05	5.71	3.74

<sup>1</sup> Includes other sectors not shown separately. <sup>2</sup> Based on the GNP implicit price deflator; see table 779.

Source: U.S. Energy Information Administration, *Annual Energy Review*.

# **No. 972. Electric Utility Industry-Electric Energy Net Generation, and Net Summer Capability by Type of Prime Mover, and Consumption of Fuels: 1970 to 1989**

[Net Generation for calendar years; other data as of December 31. See also *Historical Statistics, Colonial Times to 1970*, series S 32-52, S 78-82, and S 86-107]

ITEM	Unit	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989
<b>NET GENERATION</b>											
Total .....	Bil. kWh .....	1,532	1,918	2,286	2,310	2,416	2,470	2,487	2,572	2,704	2,779
Average annual change .....	Percent .....	7.3	4.5	3.5	0.3	4.5	2.2	0.7	3.4	5.0	2.7
Net generation, kWh per kW of net summer capability <sup>2</sup> .....	Rate .....	4,554	3,903	3,952	3,720	3,805	3,771	3,741	3,816	3,990	4,062
Investor owned .....	Bil. kWh .....	1,183	1,487	1,783	1,764	1,849	1,918	1,928	2,022	(NA)	(NA)
Percent of total utilities .....	Percent .....	77.2	77.5	78.0	76.4	76.5	77.7	77.5	78.6	(NA)	(NA)
Publicly owned .....	Bil. kWh .....	349	431	503	546	567	552	559	550	(NA)	(NA)
Municipal .....	Bil. kWh .....	71	82	87	73	75	74	79	86	(NA)	(NA)
Federal .....	Bil. kWh .....	186	221	235	258	254	233	225	205	(NA)	(NA)
Cooperatives and other .....	Bil. kWh .....	91	128	182	215	239	245	255	258	(NA)	(NA)
Source of energy:											
Coal .....	Percent .....	46.0	44.6	51.0	54.8	55.9	57.2	56.2	57.4	57.4	56.2
Nuclear .....	Percent .....	1.4	9.0	11.0	12.7	13.6	15.5	16.6	17.7	19.5	19.1
Oil .....	Percent .....	12.0	15.1	10.8	6.3	5.0	4.1	5.5	4.6	5.5	5.7
Gas .....	Percent .....	24.3	15.6	15.1	11.9	12.3	11.8	10.0	10.6	9.3	9.5
Hydro .....	Percent .....	16.2	15.6	12.1	14.4	13.3	11.4	11.7	9.7	8.2	9.5
Type of prime mover: <sup>4</sup>											
Hydro .....	Bil. kWh .....	248	300	276	332	321	281	291	250	223	264
Steam conventional <sup>5</sup> .....	Bil. kWh .....	1,240	1,414	1,726	1,661	1,742	1,778	1,756	1,837	1,921	1,945
Gas turbine and internal combustion .....	Bil. kWh .....	22	28	28	17	17	16	15	18	22	29
Steam nuclear .....	Bil. kWh .....	22	173	251	294	328	384	414	455	527	529
Other .....	Bil. kWh .....	1	3	6	9	9	11	12	12	12	11
<b>NET SUMMER CAPABILITY</b>											
Total <sup>6</sup> .....	Mill. kW .....	336	491	579	621	635	655	665	674	678	684
Average annual change .....	Percent .....	7.2	7.6	3.3	2.4	2.2	3.1	1.5	1.4	0.5	0.9
Hydro .....	Mill. kW .....	64	78	82	84	85	89	89	90	90	91
Steam conventional <sup>7</sup> .....	Mill. kW .....	248	333	397	425	431	437	441	440	442	444
Gas turbine .....	Mill. kW .....	13	37	43	43	44	44	43	44	44	45
Steam nuclear .....	Mill. kW .....	7	37	52	63	70	79	85	94	95	98
Internal combustion .....	Mill. kW .....	4	5	5	5	5	5	5	5	5	5
Geothermal and other .....	Mill. kW .....	(Z)	1	1	1	1	2	2	2	2	2
<b>NUMBER OF PRIME MOVERS</b>											
Prime movers, total <sup>8</sup> .....	Number .....	9,717	(NA)	11,084	(NA)	(NA)	(NA)	10,611	10,406	(NA)	(NA)
Hydro .....	Number .....	3,108	(NA)	3,275	(NA)	(NA)	(NA)	3,489	3,488	(NA)	(NA)
Steam conventional .....	Number .....	2,813	(NA)	2,862	(NA)	(NA)	(NA)	2,536	2,437	(NA)	(NA)
Gas turbine .....	Number .....	658	(NA)	1,447	(NA)	(NA)	(NA)	1,439	1,408	(NA)	(NA)
Steam nuclear .....	Number .....	16	(NA)	74	(NA)	(NA)	(NA)	99	109	(NA)	(NA)
Internal combustion .....	Number .....	3,118	(NA)	3,410	(NA)	(NA)	(NA)	2,988	2,917	(NA)	(NA)
<b>CONSUMPTION OF FUELS</b>											
Net generation by fuel <sup>9</sup> .....	Bil. kWh .....	1,284	1,818	2,010	1,978	2,095	2,189	2,196	2,322	2,481	2,515
Average annual change <sup>1</sup> .....	Percent .....	7.7	4.6	4.3	-0.5	5.8	4.4	0.3	5.6	6.6	1.4
Coal .....	Bil. kWh .....	704	853	1,162	1,259	1,342	1,402	1,386	1,464	1,541	1,551
Percent of total .....	Percent .....	54.8	52.7	57.8	63.7	64.1	64.0	63.1	63.0	62.1	61.7
Petroleum .....	Bil. kWh .....	184	289	246	144	120	100	137	118	149	158
Gas .....	Bil. kWh .....	373	300	346	274	297	292	249	273	253	264
Nuclear .....	Bil. kWh .....	22	173	251	294	328	384	414	455	527	529
Fuel consumed:											
Total energy equivalent .....	Quad. Btu. ....	13.40	15.19	18.57	17.75	18.53	18.79	18.59	19.37	20.12	20.48
Coal .....	Mill. sh. tons ..	320	406	569	625	664	694	685	718	758	766
Oil .....	Mill. bbl. ....	339	506	421	247	206	174	232	201	250	269
Gas .....	Bil. cu. ft. ....	3,832	3,158	3,682	2,911	3,111	3,044	2,602	2,844	2,636	2,768

NA Not available. Z Less than .5 million kWh. <sup>1</sup> Change from immediate prior year except for 1970, change from 1960. For explanation of average annual percent change, see Guide to Tabular Presentation. <sup>2</sup> 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. <sup>3</sup> Includes small percentage (.5%) from wood and waste, geothermal, and petroleum coke.

<sup>4</sup> A prime mover is the engine, turbine, water wheel, or similar machine which drives an electric generator. <sup>5</sup> Fossil fuels only.

<sup>6</sup> Includes wind, solar thermal, and photovoltaic, not shown separately. <sup>7</sup> Includes fossil steam, wood, and waste. <sup>8</sup> Each prime mover type in combination plants counted separately. Includes geothermal, wind, and solar, not shown separately.

<sup>9</sup> 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. 973. Electric Utility Industry—Capability, Peak Load, and Capacity Margin: 1970 to 1989

[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 (1,000 kW)		Winter peak load <sup>1</sup> (1,000 kW)		Summer	Winter <sup>1</sup>	Summer		Winter <sup>1</sup>	
	Amount	Change from prior year <sup>2</sup>	Amount	Change from prior year <sup>2</sup>			Amount (1,000 kW)	Percent of capa- bility	Amount (1,000 kW)	Percent of capa- bility
1970	326,900	26,600	339,050	27,600	274,650	248,550	52,250	16.0	90,500	26.7
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	561,550	23,950	408,050	383,100	137,650	25.2	178,450	31.8
1979 <sup>3</sup>	544,506	(X)	554,525	(X)	398,424	368,876	146,082	26.8	185,649	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	397,800	143,924	25.2	188,769	32.2
1982	586,142	13,923	598,066	11,987	414,909	373,985	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	201,674	32.9
1984	604,240	7,791	622,125	9,673	451,150	436,374	153,090	25.3	185,751	29.9
1985	621,597	17,357	636,475	14,350	460,503	423,660	161,094	25.9	212,815	33.4
1986	633,291	11,694	646,721	10,246	476,993	422,857	156,298	24.7	223,864	34.6
1987	648,118	14,827	662,977	16,256	496,185	448,277	151,933	23.4	214,700	32.4
1988	661,580	13,462	676,940	13,963	529,460	466,533	132,120	20.0	210,407	31.1
1989	669,352	7,772	(NA)	(NA)	523,432	496,378	145,920	21.8	(NA)	(NA)

X Not applicable. NA Not available. <sup>1</sup> Prior to 1973, data was for the month of December. <sup>2</sup> For 1970 and 1975, change from 1969 and 1974, respectively. <sup>3</sup> 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. 974. Electric Energy—Net Generation, 1980 to 1989, and Installed Generating Capacity, 1980 and 1988, by State

[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	1988	1989		1980	1988		1980	1988	1989		1980	1988
			Total	Per- cent from coal						Total	Per- cent from coal		
U.S. ....	2,286.4	2,704.3	2,778.6	55.8	613.5	723.9	VA WV	34.3 70.8	45.2 81.3	43.4 82.9	55.5 99.1	11.7 15.2	13.6 15.2
N.E. ....	78.2	93.4	97.4	17.7	21.1	22.6	NC	72.1	78.4	87.1	58.0	15.6	20.9
ME	7.9	9.5	11.6	-	2.4	2.4	SC	41.9	65.2	67.0	35.5	11.7	16.3
NH	6.0	7.0	7.1	43.1	1.6	1.4	GA	63.3	82.4	92.4	68.6	16.3	21.7
VT	3.8	5.0	4.8	0.0	0.9	1.1	FL	95.9	124.1	124.3	47.8	29.0	36.0
MA	34.8	34.7	39.2	30.9	9.6	10.0	E.S.C.	214.1	228.9	243.4	71.4	53.3	61.9
RI	1.0	0.8	0.5	-	0.3	0.3	KY	57.1	76.4	70.8	93.6	13.6	16.6
CT	24.7	36.4	34.3	6.1	6.3	7.4	TN	60.2	60.0	74.0	62.6	15.9	18.2
M.A.	260.5	317.8	326.0	42.8	78.4	83.7	AL	78.3	67.5	77.6	67.8	18.2	19.9
NY	108.6	124.7	130.1	19.4	31.4	33.2	MS	18.5	25.1	21.1	41.4	5.5	7.2
NJ	29.4	40.2	41.1	20.4	12.6	14.6	W.S.C.	313.1	355.8	362.8	49.4	84.7	104.5
PA	122.5	152.9	154.8	68.4	34.4	35.9	AR	19.7	33.8	33.4	55.7	7.2	9.8
E.N.C.	397.0	465.2	482.6	73.7	107.9	121.4	LA	45.7	56.8	52.7	34.3	12.9	18.2
OH	110.2	124.0	131.3	89.6	27.4	27.6	OK	44.6	44.0	44.5	54.2	11.3	13.6
IN	70.6	84.0	88.6	98.6	17.1	21.5	TX	203.0	221.2	232.3	51.0	53.3	62.9
IL	103.4	123.3	126.8	40.3	29.9	36.9	MT	158.8	239.5	235.4	78.3	35.8	51.9
MI	74.8	88.9	91.5	73.9	22.7	24.2	MT	15.5	24.8	25.8	62.5	3.2	4.9
WI	37.8	45.0	44.4	71.7	10.7	11.2	ID	9.5	6.7	8.9	-	2.0	2.1
W.N.C.	168.2	215.0	213.7	74.9	49.0	58.2	WY	22.4	39.1	36.8	98.0	4.1	5.9
MN	31.5	40.3	38.6	67.5	8.8	9.4	CO	23.6	30.9	32.3	91.1	6.1	7.3
IA	21.8	27.7	27.8	85.5	7.3	8.5	NM	24.7	26.4	28.3	89.8	5.0	5.6
MO	48.9	59.7	59.4	83.8	13.8	16.6	AZ	36.9	61.6	53.1	60.9	9.4	15.9
ND	15.8	27.4	25.7	92.5	3.4	4.7	UT	12.1	29.6	30.5	97.3	2.1	5.2
SD	8.6	7.9	7.0	34.2	2.2	2.6	NV	14.1	20.3	19.7	78.2	3.9	5.0
NE	16.3	20.6	21.1	54.9	5.1	5.7	Pac	278.8	262.4	275.3	3.4	71.9	82.8
KS	25.1	31.4	34.2	66.9	8.3	10.7	WA	92.3	83.6	86.1	9.9	23.0	23.3
S.A.	417.8	526.3	541.9	61.3	111.5	136.9	OR	36.6	41.0	45.0	1.0	8.5	10.4
DE	6.7	9.0	8.5	59.9	1.6	1.9	CA	140.3	126.0	131.9	-	37.8	45.9
MD	32.2	40.4	35.8	66.1	9.2	10.4	AK	3.1	4.2	4.4	6.9	1.1	1.7
DC	0.7	0.5	0.7	-	1.2	0.9	HI	6.5	7.6	7.9	-	1.4	1.5

- Represents or rounds to zero.

Source: U.S. Energy Information Administration, 1980, *Power Production, Fuel Consumption, and Installed Capacity Data*, annual; thereafter, *Electric Power Annual*, *Electric Power Monthly*, December 1989 issue, and *Inventory of Power Plants in the United States*, annual.

### No. 975. 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 972, 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
<b>Total</b> .....	<b>5,398</b>	<b>6,145</b>	<b>5,677</b>	<b>257.3</b>	<b>481.6</b>	<b>552.8</b>	<b>4,319</b>	<b>4,939</b>	<b>4,729</b>	<b>79.1</b>	<b>140.3</b>	<b>165.3</b>
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	859	45.8	40.6	32.0	753	684	539	12.2	13.5	13.3
100,000-500,000 kW .....	684	758	733	128.0	162.4	166.4	110	164	193	20.4	34.6	43.6
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	2,088	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	802	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	0.2	0.4	0.3	26	87	108	0.3	0.7	0.8
Other .....	4	16	32	0.1	1.0	1.8	-	-	15	-	-	0.1

- Represents zero. <sup>1</sup> Includes geothermal, wind, and solar.

Source: U.S. Energy Information Administration, unpublished data.

### No. 976. Electric Energy Sales, by Class of Service, 1970 to 1989, and by State, 1989

[In billions of kilowatthours]

REGION, DIVISION, AND STATE	Total <sup>1</sup>	Residential	Commercial	Industrial	REGION, DIVISION, AND STATE	Total <sup>1</sup>	Residential	Commercial	Industrial
1970 .....	1,392.3	466.3	306.7	570.9	Nebraska .....	17.5	6.7	5.1	4.3
1973 .....	1,712.9	579.2	388.3	686.1	Kansas .....	25.8	9.0	8.7	7.7
1975 .....	1,747.1	588.1	403.0	687.7	<b>South</b> .....	<b>1,093.0</b>	<b>406.8</b>	<b>271.1</b>	<b>381.6</b>
1980 .....	2,094.4	717.5	488.2	815.1	<b>South Atlantic</b> .....	<b>519.4</b>	<b>206.0</b>	<b>146.5</b>	<b>150.1</b>
1981 .....	2,147.1	722.3	514.3	825.7	Delaware .....	8.1	2.6	2.2	3.2
1982 .....	2,086.4	729.5	526.4	744.9	Maryland .....	58.8	20.5	15.0	22.4
1983 .....	2,151.0	750.9	543.8	776.0	Dist. of Columbia .....	0.0	0.0	0.0	0.0
1984 .....	2,278.4	777.7	578.3	840.6	Virginia .....	73.4	29.2	20.2	16.0
1985 .....	2,309.5	791.0	609.0	824.5	West Virginia .....	23.0	7.7	5.0	10.2
1986 .....	2,350.8	817.7	641.5	808.3	North Carolina .....	87.9	32.5	22.5	31.1
1987 .....	2,457.3	850.4	660.4	858.2	South Carolina .....	53.5	17.3	11.1	24.3
1988 .....	2,578.1	892.9	699.1	896.5	Georgia .....	76.7	28.1	21.4	26.3
<b>1989, total</b> .....	<b>2,633.8</b>	<b>904.5</b>	<b>723.8</b>	<b>914.8</b>	Florida .....	138.1	68.1	49.1	16.7
<b>Northeast</b> .....	<b>411.8</b>	<b>135.8</b>	<b>139.2</b>	<b>121.4</b>	<b>East South Central</b> .....	<b>219.9</b>	<b>76.7</b>	<b>35.2</b>	<b>103.4</b>
<b>New England</b> .....	<b>104.7</b>	<b>38.0</b>	<b>37.1</b>	<b>27.4</b>	Kentucky .....	57.2	16.8	8.9	29.1
Maine .....	11.5	4.0	2.6	4.6	Tennessee .....	75.4	28.8	9.3	36.4
New Hampshire .....	9.1	3.6	2.0	3.5	Alabama .....	57.9	19.7	10.5	27.1
Vermont .....	4.7	1.8	1.5	1.4	Mississippi .....	29.5	11.5	6.5	10.9
Massachusetts .....	45.7	15.8	18.3	10.4	<b>West South Central</b> .....	<b>353.6</b>	<b>124.1</b>	<b>89.4</b>	<b>126.0</b>
Rhode Island .....	6.4	2.4	2.4	1.4	Arkansas .....	25.3	9.7	5.8	9.1
Connecticut .....	27.3	10.5	10.3	6.2	Louisiana .....	61.6	20.4	13.3	24.7
<b>Middle Atlantic</b> .....	<b>307.1</b>	<b>97.6</b>	<b>102.0</b>	<b>93.9</b>	Oklahoma .....	37.5	14.2	10.1	11.3
New York .....	129.2	38.3	47.1	32.1	Texas .....	229.2	79.8	60.2	82.8
New Jersey .....	63.3	20.7	26.5	15.7	<b>West</b> .....	<b>501.4</b>	<b>160.0</b>	<b>155.8</b>	<b>165.6</b>
Pennsylvania .....	114.6	38.6	28.5	46.1	<b>Mountain</b> .....	<b>155.4</b>	<b>48.3</b>	<b>46.2</b>	<b>52.4</b>
<b>Midwest</b> .....	<b>827.7</b>	<b>202.2</b>	<b>157.9</b>	<b>246.3</b>	Montana .....	12.9	3.4	2.7	6.5
<b>East North Central</b> .....	<b>444.5</b>	<b>134.6</b>	<b>109.1</b>	<b>184.2</b>	Idaho .....	17.7	5.7	4.6	7.1
Ohio .....	129.9	38.6	30.0	56.9	Wyoming .....	11.4	1.7	2.0	7.5
Indiana .....	72.6	22.2	15.8	33.9	Colorado .....	29.8	9.5	13.2	6.3
Illinois .....	109.1	32.3	30.9	38.4	New Mexico .....	13.5	3.4	4.5	4.7
Michigan .....	84.9	25.2	20.1	36.3	Arizona .....	40.4	15.2	13.1	9.6
Wisconsin .....	48.0	16.2	12.3	18.7	Utah .....	14.9	4.1	4.4	5.6
<b>West North Central</b> .....	<b>183.2</b>	<b>67.5</b>	<b>48.8</b>	<b>62.1</b>	Nevada .....	14.8	5.2	3.8	5.2
Minnesota .....	45.8	14.7	7.8	22.6	<b>Pacific</b> .....	<b>346.0</b>	<b>111.7</b>	<b>107.4</b>	<b>113.2</b>
Iowa .....	28.6	10.4	6.6	10.8	Washington .....	87.7	28.5	17.0	38.6
Missouri .....	52.0	20.8	17.6	12.8	Oregon .....	41.9	15.1	11.5	14.8
North Dakota .....	7.1	3.1	1.6	2.2	California .....	204.4	64.2	74.9	55.8
South Dakota .....	6.3	2.9	1.4	1.7	Alaska .....	4.1	1.6	1.9	0.4
					Hawaii .....	8.0	2.2	2.1	3.6

<sup>1</sup> Includes other service, not shown separately.

Source: U.S. Energy Information Association, *Electric Power Monthly*, December 1989 issue.

## No. 977. Electric Utilities—Generation, Sales, Revenue, and Customers: 1970 to 1989

[Sales and revenue are to and from ultimate customers]

CLASS	Unit. . .	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988, prel.	1989, prel.
Generation <sup>1</sup>	Bil. kWh	1,532	1,918	2,286	2,241	2,310	2,416	2,470	2,487	2,572	2,704	2,781
Sales <sup>2</sup>	Bil. kWh	1,391	1,733	2,126	2,100	2,160	2,281	2,308	2,355	2,435	2,549	2,609
Residential or domestic	Bil. kWh	448	586	734	733	750	783	793	820	846	885	896
Percent of total	Percent	32.2	33.8	34.5	34.9	34.7	34.3	34.4	34.8	35	35	34
Commercial <sup>3</sup>	Bil. kWh	313	418	524	517	546	578	606	629	658	696	719
Industrial <sup>4</sup>	Bil. kWh	573	662	794	770	783	835	820	819	844	878	903
Revenue	Bil. dol.	22.1	46.9	95.5	121.6	129.6	143.1	149.2	152.5	155.7	162.5	168.0
Residential or domestic	Bil. dol.	9.4	18.8	37.6	47.2	51.2	56.1	58.6	60.9	63.0	66.3	68.2
Percent of total	Percent	42.7	40.1	39.4	38.8	39.5	39.2	39.3	39.9	40.5	40.8	40.6
Commercial <sup>3</sup>	Bil. dol.	6.3	13.5	27.4	34.2	37.1	41.3	44.1	45.4	46.7	49.1	51.3
Industrial <sup>4</sup>	Bil. dol.	5.4	12.7	27.3	35.9	36.6	40.8	41.4	40.9	40.6	41.8	43.0
Ultimate customers, Dec. 31 <sup>2</sup>	Million	72.5	81.8	92.7	95.3	97.0	99.4	101.6	103.0	104.6	106.0	108.0
Residential or domestic	Million	64.0	72.6	82.2	84.4	85.8	87.9	89.8	91.0	92.4	93.6	95.3
Commercial <sup>3</sup>	Million	7.9	8.6	9.7	10.0	10.3	10.6	10.9	11.1	11.4	11.6	11.9
Industrial <sup>4</sup>	Million	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Avg. kWh used per customer	1,000	19.4	21.4	23.2	22.2	22.5	23.2	22.9	23.1	23.5	24.0	24.3
Residential	1,000	7.1	8.2	9.0	8.7	8.8	9.0	8.9	9.1	9.2	9.5	9.5
Commercial <sup>3</sup>	1,000	40.0	49.0	54.5	52.3	53.8	55.2	56.1	57.2	58.4	60.1	61.2
Avg. annual bill per customer	Dollar	307	579	1,040	1,285	1,349	1,453	1,482	1,494	1,501	1,532	1,567
Residential	Dollar	149	262	462	563	602	644	658	675	688	708	722
Commercial <sup>3</sup>	Dollar	804	1,580	2,848	3,452	3,660	3,940	4,080	4,127	4,147	4,239	4,366
Avg. revenue per kWh sold	Cents	1.59	2.70	4.49	5.79	6.00	6.27	6.47	6.47	6.39	6.37	6.44
Residential	Cents	2.10	3.21	5.12	6.44	6.83	7.17	7.39	7.43	7.45	7.49	7.61
Commercial <sup>3</sup>	Cents	2.01	3.23	5.22	6.61	6.80	7.14	7.27	7.22	7.10	7.05	7.14
Industrial <sup>4</sup>	Cents	0.95	1.92	3.44	4.66	4.68	4.88	5.04	4.99	4.82	4.76	4.76

<sup>1</sup> Source: 1970-1975, U.S. Federal Power Commission; thereafter, U.S. Energy Information Administration, *Monthly Energy Review*, February 1989. <sup>2</sup> Includes other types not shown separately. <sup>3</sup> Small light and power. <sup>4</sup> Large light and power.  
Source: Except as noted, Edison Electric Institute, Washington, DC, *Statistical Yearbook*.

## No. 978. Electric Utilities—Balance Sheet and Income Account of Privately Owned Companies: 1970 to 1988

[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 <sup>1</sup>				MAJOR-INVESTOR-OWNED ELECTRIC UTILITIES <sup>2</sup>							
	1970	1975	1980	1981	1981	1982	1983	1984	1985	1986	1987	1988
<b>COMPOSITE BALANCE SHEET</b>												
Assets and other debits	87.4	157.1	260.0	286.0	285.1	315.0	342.4	375.6	404.7	426.1	446.3	454.3
Electric utility plant <sup>3</sup>	93.3	160.7	266.9	292.7	291.6	321.2	347.9	364.7	396.9	419.5	434.6	449.4
Depreciation and amortization	20.3	31.9	55.5	61.5	61.1	67.6	74.3	77.1	85.1	93.9	103.2	113.5
Net electric utility plant	73.1	128.8	211.5	231.2	230.5	253.6	273.6	287.5	311.8	325.6	331.4	335.9
Other utility plant	9.0	11.7	14.8	15.7	16.7	17.5	17.6	19.9	21.2	23.1	24.6	
Depreciation and amortization	2.1	3.1	4.5	4.9	4.9	5.3	5.8	6.1	6.5	7.2	7.8	8.5
Net other utility plant	6.9	8.6	10.3	10.8	10.8	11.4	11.8	12.1	13.4	14.0	15.2	16.1
Total utility plant	102.3	172.4	281.7	308.4	307.3	337.9	365.5	395.3	431.1	455.9	475.7	493.0
Depreciation and amortization	22.3	35.0	60.0	66.4	66.0	72.9	80.0	82.0	97.4	107.7	119.7	131.3
Net total utility plant	79.9	137.4	221.7	242.0	241.3	265.0	285.4	307.3	333.8	348.2	357.0	361.6
Other property and investments	1.7	4.5	6.5	7.9	7.9	9.1	10.3	10.8	12.1	13.5	15.8	15.2
Current and accrued assets	5.3	13.5	26.2	28.7	28.6	31.7	33.3	37.9	39.4	38.4	40.9	39.1
Deferred debits	0.4	1.7	5.5	7.3	7.3	9.3	13.4	19.3	19.4	26.1	32.9	38.3
Liabilities and other credits <sup>4</sup>	87.4	157.1	260.0	286.0	285.1	315.0	342.4	375.3	404.7	426.1	446.3	454.3
Capital stock	20.8	37.8	59.3	63.9	63.7	70.3	75.9	79.0	82.8	81.6	79.9	80.7
Other paid-in capital	4.4	11.5	21.5	24.0	23.9	27.7	31.0	34.0	36.3	38.4	40.3	40.4
Retained earnings	9.4	14.7	22.7	25.0	24.8	27.9	31.9	37.1	41.1	46.0	48.0	47.1
Subsidiary earnings <sup>5</sup>	(X)	0.6	1.1	1.3	1.3	1.6	1.7	1.9	2.2	2.3	2.6	2.5
Long-term debt	41.9	70.8	105.3	115.5	115.2	124.0	131.6	140.6	152.7	157.2	158.4	160.7
Current and accrued liabilities	7.3	13.7	26.3	28.4	28.1	28.6	29.5	32.0	32.0	34.0	39.3	38.4
Deferred credits and operating reserves	0.9	2.7	9.8	11.5	11.0	15.1	16.8	19.0	20.9	22.4	25.6	28.1
Deferred income taxes <sup>6</sup>	2.2	5.4	14.1	16.7	16.6	19.4	23.6	28.1	32.7	39.6	45.9	50.2
<b>COMPOSITE INCOME ACCOUNTS</b>												
Electric operating revenues	19.8	44.6	87.1	102.3	101.7	109.3	116.7	128.3	135.3	138.3	138.5	143.9
Electric operating expenses	15.3	36.1	73.4	86.0	85.5	91.1	98.2	105.5	111.1	110.2	111.6	115.3
Net electric operating revenues	4.5	8.5	13.6	16.3	16.2	18.1	20.5	22.8	24.1	28.1	27.0	28.6
Other utility operating income	0.4	0.5	0.7	0.9	0.7	0.9	0.9	1.1	1.2	1.1	1.1	1.2
Total utility operating income	4.9	9.0	14.4	17.0	17.0	19.1	21.4	24.0	25.3	27.2	28.1	29.8
Other income	0.8	2.2	3.6	4.4	4.4	5.3	6.5	6.8	7.4	7.2	6.6	5.0
Total income	5.7	11.3	18.0	21.4	21.3	24.4	28.0	30.8	32.7	34.4	34.8	34.8
Income deductions	2.3	5.1	7.3	8.7	8.7	8.4	10.1	11.1	14.0	14.0	15.6	18.8
Net income	3.4	6.1	10.7	12.7	12.7	15.0	17.9	19.7	18.7	20.4	19.0	16.0

X Not applicable. <sup>1</sup> There were 197 utilities of this type in 1981. <sup>2</sup> There were 181 utilities of this type in 1987. <sup>3</sup> Includes construction work in progress. <sup>4</sup> Includes contributions in aid of construction through 1970. <sup>5</sup> Unappropriated undistributed. <sup>6</sup> Cumulative. Beginning 1975, includes net extraordinary income.

Source: 1970-1975, U.S. Federal Power Commission and 1979-1980, 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. 979. Nuclear Power Plants—Number, Capacity, and Generation: 1965 to 1989**

ITEM	1965	1970	1975	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990, prel.
Operable generating units <sup>1</sup>	6	18	54	70	77	80	86	95	100	107	108	110	111
Net summer capacity <sup>1, 2</sup> (mil. kW)	0.8	7.0	37.2	51.7	59.9	63.0	69.7	79.4	85.2	93.6	94.7	98.2	99.6
Electricity generated (bil. kWh)	4	22	173	251	283	294	328	384	414	455.3	527	529.4	576.8
Percent of total electric utility generation	0.4	1.4	9.0	11.0	12.6	12.7	13.6	15.5	16.6	17.7	19.5	19.0	20.6
Capacity factor <sup>3</sup>	(NA)	(NA)	56.0	56.4	56.7	54.4	56.3	57.9	56.9	57.4	63.5	62.2	66.1

NA Not available. <sup>1</sup> As of yearend. <sup>2</sup> 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. <sup>3</sup> 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. 980. Commercial Nuclear Power Generation, by Country: 1970 to 1989**

[Generation for calendar years; other data as of December. Excludes Communist countries]

COUNTRY	REACTORS				ELECTRICITY GENERATED <sup>1</sup> (bil. kWh)				GROSS CAPACITY (1,000 kW)			
	1970	1980	1985	1989	1970	1980	1985	1989	1970	1980	1985	1989
Total	64	208	297	353	73.9	617.8	1,264.4	1,659.1	15,186	128,847	225,417	289,433
U.S.	15	74	89	110	23.2	265.2	399.1	555.2	5,211	56,529	80,327	103,643
Argentina	-	1	2	2	-	2.3	4.8	5.0	-	357	1,005	1,005
Belgium	1	3	7	7	0.3	12.5	34.5	41.2	11	1,744	5,709	5,718
Brazil	-	-	1	1	-	-	3.4	1.6	-	-	657	657
Canada	1	9	15	18	0.9	40.4	62.9	83.2	220	5,588	10,332	12,919
China: Taiwan	-	2	6	6	-	8.2	28.7	28.3	-	1,272	5,146	5,146
Great Britain	27	33	37	40	26.5	37.2	59.6	71.3	4,783	9,012	12,280	15,273
Finland	-	4	4	4	-	7.0	18.8	18.8	-	2,296	2,400	2,400
France	4	22	44	55	5.7	61.2	224.0	303.9	1,806	15,412	38,595	54,755
India	2	4	5	6	2.2	2.9	4.4	4.0	400	860	1,095	1,330
Italy	3	4	3	2	3.3	2.2	7.0	0.0	631	1,490	1,330	1,132
Japan	3	22	33	38	3.3	81.0	152.0	185.3	828	15,117	24,686	29,445
Netherlands	1	2	2	2	0.4	4.2	3.9	4.0	55	529	540	540
Pakistan	-	1	1	1	-	0.1	0.3	(Z)	-	137	137	137
South Africa	-	-	2	2	-	-	5.7	11.7	-	-	1,930	1,930
South Korea	-	1	4	9	-	3.5	16.5	47.4	-	587	2,866	7,616
Spain	1	3	8	10	0.9	5.2	28.0	56.1	160	1,117	5,812	7,857
Sweden	1	8	12	12	(Z)	26.7	58.6	65.6	12	5,770	9,915	10,243
Switzerland	1	4	5	5	1.9	14.3	22.4	22.8	364	2,034	3,079	3,079
West Germany	4	11	16	22	5.3	43.7	125.7	149.5	907	8,996	16,912	23,944
Yugoslavia	-	-	1	1	-	-	4.1	4.1	-	-	664	664

- Represents zero. Z Less than 50 million kWh.

Source: McGraw-Hill, Inc., New York, NY, *Nucleonics Week*, January issues. (Copyright.)

**No. 981. Uranium Supply, Enrichment, and Discharged Commercial Reactor Fuel: 1970 to 1989**

[Years ending Dec. 31, except as noted. For additional data on uranium, see Section 25 on mining. For explanation of kilogram, see weights and measures]

ITEM	Unit	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989
<b>URANIUM CONCENTRATE</b>											
Production	Mil. lb.	25.81	23.20	43.70	21.16	14.88	11.31	13.51	12.99	13.13	13.80
Exports	Mil. lb.	4.20	1.00	5.80	3.30	2.20	5.30	1.60	1.00	3.30	2.90
Imports	Mil. lb.	-	1.40	3.60	8.20	12.50	11.70	13.50	15.10	15.80	13.00
Delivered price	Dol./lb.	(NA)	10.50	26.00	38.21	32.65	31.43	30.01	27.37	25.65	19.56
<b>ENRICHMENT</b>											
Enriched product <sup>1</sup>	Mil. Swu <sup>2</sup>	5.10	9.92	10.69	<sup>3</sup> 8.46	<sup>4</sup> 11.2	<sup>4</sup> 10.2	<sup>4</sup> 8.6	<sup>4</sup> 8.1	<sup>4</sup> 9.9	<sup>4</sup> 11.9
For domestic customers	Mil. Swu <sup>2</sup>	3.74	4.36	6.89	<sup>3</sup> 4.69	<sup>4</sup> 5.8	<sup>4</sup> 6.0	<sup>4</sup> 4.9	<sup>4</sup> 4.4	<sup>4</sup> 6.3	<sup>4</sup> 7.6
For foreign customers	Mil. Swu <sup>2</sup>	1.36	5.56	3.80	<sup>3</sup> 3.77	<sup>4</sup> 5.4	<sup>4</sup> 4.2	<sup>4</sup> 3.7	<sup>4</sup> 4.7	<sup>4</sup> 3.6	<sup>4</sup> 4.3
Sales	Mil. dol.	(NA)	376	1,379	2,329	<sup>4</sup> 1,457	<sup>4</sup> 1,403	<sup>4</sup> 1,085	<sup>4</sup> 921	<sup>4</sup> 1,094	<sup>4</sup> 1,320
<b>DISCHARGED COMMERCIAL REACTOR FUEL<sup>3</sup></b>											
Annual discharge	Metric tons	82	499	1,193	1,224	1,257	1,330	1,431	1,615	(NA)	(NA)
Inventory, yearend	Metric tons	118	1,538	6,434	9,749	11,006	12,481	13,881	(NA)	(NA)	(NA)
On-site storage	Metric tons	(NA)	(NA)	(NA)	9,300	10,642	11,953	13,267	(NA)	(NA)	(NA)
Off-site storage	Metric tons	(NA)	(NA)	(NA)	449	364	528	614	(NA)	(NA)	(NA)

- Represents zero. NA Not available. <sup>1</sup> Based on sales. <sup>2</sup> 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. Jan.-Sept. only. <sup>3</sup> Fiscal years. <sup>4</sup> Uranium content. Source: Nuclear Assurance Corporation, Atlanta, GA. <sup>5</sup> 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. 982. Nuclear Power Plants—Number of Units and Net Summer Capability, 1988, and Net Generation, 1989, by State

DIVISION AND STATE	Number of units, 1988	NET SUMMER CAPABILITY, 1988		NET GENERATION, 1989		DIVISION AND STATE	Number of units, 1988	NET SUMMER CAPABILITY, 1988		NET GENERATION, 1989	
		Total (mil. kW)	Percent of total <sup>1</sup>	Total (mil. kW)	Percent of total <sup>1</sup>			Total (mil. kW)	Percent of total <sup>1</sup>	Total (mil. kW)	Percent of total <sup>1</sup>
U.S. ....	108	94.7	14.0	529,355	19.1	VA. ....	4	3.4	26.5	-	-
N. Eng. ....	8	5.4	24.4	118,171	27.9	WV. ....	-	-	-	2,719	7.6
ME. ....	1	0.8	35.8	33,126	34.0	NC. ....	5	4.7	23.5	-	-
NH. ....	-	-	-	6,942	59.7	SC. ....	7	6.3	42.8	14,264	32.9
VT. ....	1	0.5	45.0	-	-	GA. ....	3	2.6	13.4	-	-
MA. ....	2	0.8	8.5	3,607	75.8	FL. ....	5	3.7	11.4	29,212	33.5
RI. ....	-	-	-	3,015	7.7	E. So. Cent. ....	8	8.3	14.3	40,780	60.9
CT. ....	4	3.2	45.1	-	-	KY. ....	-	-	-	24,961	27.0
Mid. Atl. ....	18	16.3	21.2	19,563	57.1	TN. ....	2	2.3	13.5	20,916	16.8
NY. ....	6	4.8	15.4	85,045	26.1	AL. ....	5	4.8	25.7	34,854	14.4
NJ. ....	4	3.9	28.6	22,847	17.6	MS. ....	1	1.1	16.4	-	-
PA. ....	8	7.7	23.8	23,032	56.0	W. So. Cent. ....	5	5.0	5.0	15,603	21.1
E. No. Cent. ....	23	20.1	18.2	39,166	25.3	AR. ....	2	1.7	17.7	11,524	14.9
OH. ....	2	2.0	7.9	159,837	23.0	LA. ....	2	2.0	11.9	7,826	37.2
IN. ....	-	-	-	119,641	24.8	OK. ....	-	-	-	31,225	8.6
IL. ....	13	12.6	38.7	12,661	9.6	TX. ....	1	1.3	2.1	8,844	26.5
MI. ....	5	4.0	17.8	-	-	Mt. ....	4	3.9	7.9	12,391	23.5
WI. ....	3	1.5	14.0	74,820	59.0	MT. ....	-	-	-	-	-
W. No. Cent. ....	8	5.5	10.4	21,312	23.3	ID. ....	-	-	-	9,990	4.3
MN. ....	3	1.5	17.7	10,848	24.5	WY. ....	-	-	-	52,316	10.2
IA. ....	1	0.5	6.4	40,196	18.8	CO. ....	1	0.2	3.1	8,380	3.6
MO. ....	1	1.1	7.5	10,926	28.3	NM. ....	-	-	-	-	-
ND. ....	-	-	-	3,139	11.3	AZ. ....	3	3.7	25.4	-	-
SD. ....	-	-	-	8,344	14.1	UT. ....	-	-	-	-	-
NE. ....	2	1.3	23.1	-	-	NV. ....	-	-	-	529	1.6
KS. ....	1	1.1	11.9	-	-	Pac. ....	8	7.8	9.4	-	-
So. Atl. ....	26	22.4	17.7	8,077	38.3	WA. ....	1	1.1	4.6	7,850	14.8
DE. ....	-	-	-	9,709	28.4	OR. ....	1	1.1	9.8	-	-
MD. ....	2	1.7	17.2	199,031	17.3	CA. ....	6	5.6	12.6	-	-
DC. ....	-	-	-	132,852	24.5	AK. ....	-	-	-	43,936	16.0
						HI. ....	-	-	-	6,118	7.1

- Represents zero. <sup>1</sup> For total capability and generation, see table 974.

Source: U.S. Energy Information Administration, *Electric Power Monthly*, December 1989 issue, and *Inventory of Power Plants in the United States 1988*.

### No. 983. Privately Owned Gas Utility Industry—Balance Sheet and Income Account: 1970 to 1988

[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 1988*, series S 205-218]

ITEM	1970	1975	1980	1983	1984	1985	1986	1987	1988	1989
<b>COMPOSITE BALANCE SHEET</b>										
Assets, total <sup>1</sup>	34,929	50,286	75,851	100,499	98,933	104,478	104,008	109,390	121,667	123,820
Total utility plant <sup>2</sup>	38,541	49,384	67,071	82,038	83,118	88,121	91,606	93,540	99,933	106,017
Depreciation and amortization	10,696	16,779	26,162	34,208	35,542	36,377	36,776	41,162	44,423	47,054
Utility plant (net)	27,845	32,605	40,909	47,380	47,576	51,744	54,830	52,378	55,510	58,963
Investment and fund accounts	3,024	9,198	15,530	21,531	21,872	23,871	21,850	25,660	31,552	28,111
Current and accrued assets	3,674	7,543	17,243	27,571	25,367	24,771	21,477	21,025	23,402	24,836
Deferred debts <sup>2</sup>	386	940	2,169	3,567	4,118	4,092	5,851	8,633	9,658	10,364
Liabilities, total <sup>1</sup>	34,929	50,286	75,851	100,499	98,933	104,478	104,008	109,390	121,667	123,820
Capitalization, total <sup>1</sup>	28,646	39,044	51,382	65,040	64,458	65,799	66,660	68,312	69,875	74,753
Capital stock	12,965	18,500	29,315	38,488	38,959	39,517	39,902	38,212	39,898	43,889
Long-term debts	15,681	19,544	22,067	26,552	25,499	26,282	26,758	28,100	29,977	30,864
Current and accrued liabilities	4,832	8,158	18,119	25,150	23,043	26,125	23,855	26,664	33,735	31,005
Deferred income taxes <sup>3</sup>	788	2,052	4,149	6,537	7,000	7,769	8,363	9,901	10,685	11,292
Other liabilities and credits	663	1,032	2,201	3,772	4,432	4,785	5,130	6,513	7,372	6,770
<b>COMPOSITE INCOME ACCOUNT</b>										
Operating revenues, total	16,380	30,550	85,918	116,096	115,491	103,945	80,978	69,566	69,754	70,363
Operating expenses <sup>4</sup>	14,306	27,480	81,789	110,142	109,165	96,320	75,470	64,409	64,696	64,262
Operation and maintenance	11,636	22,957	74,508	100,495	98,953	88,572	66,032	56,054	57,032	55,990
Federal, State, and local taxes	1,569	2,763	4,847	6,508	7,146	6,590	6,133	5,179	4,241	4,843
Operating income	2,074	3,070	4,129	5,954	6,326	5,625	5,506	5,157	5,058	6,101
Utility operating income	2,159	3,221	4,471	6,303	6,647	6,030	5,943	5,452	5,202	6,274
Income before interest charges <sup>1</sup>	2,457	4,137	6,929	8,717	9,068	7,636	7,085	6,845	7,472	8,784
Net income <sup>1</sup>	1,427	2,502	4,194	5,158	5,619	3,785	3,980	2,971	3,352	4,641
Dividends	1,006	1,509	2,564	3,638	4,471	4,060	3,882	3,453	3,151	3,113

<sup>1</sup> Beginning 1975, not comparable with 1970 due to Federal Power Commission ruling requiring adoption of the equity method in reporting earnings of subsidiaries. <sup>2</sup> Includes capital stock discount and expense and reacquired securities. <sup>3</sup> Includes reserves for deferred income taxes. <sup>4</sup> Includes expenses not shown separately.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual. (Copyright.)

## No. 984. Gas Utility Industry—Summary: 1970 to 1989

[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	1983	1984	1985	1986	1987	1988	1989
<b>Customers</b>	<b>1,000</b>	<b>41,482</b>	<b>44,555</b>	<b>47,223</b>	<b>48,799</b>	<b>49,325</b>	<b>49,971</b>	<b>50,704</b>	<b>51,576</b>	<b>52,422</b>	<b>53,356</b>
Residential	1,000	38,097	40,950	43,489	44,894	45,367	45,929	46,583	47,362	48,133	48,980
Commercial	1,000	3,131	3,367	3,498	3,676	3,730	3,816	3,892	3,980	4,069	4,161
Industrial and other	1,000	254	237	236	229	228	228	229	234	220	215
<b>Sales<sup>2</sup></b>	<b>Tril. Btu</b>	<b>16,044</b>	<b>14,863</b>	<b>15,413</b>	<b>12,858</b>	<b>13,162</b>	<b>12,616</b>	<b>11,125</b>	<b>10,543</b>	<b>10,705</b>	<b>10,551</b>
Residential	Tril. Btu	4,923	4,991	4,826	4,450	4,628	4,513	4,381	4,385	4,695	4,798
Percent of total	Percent	30.7	33.6	31.3	34.6	35.2	35.8	39.4	41.6	43.9	45.5
Commercial	Tril. Btu	2,007	2,387	2,453	2,298	2,396	2,338	2,239	2,156	2,306	2,323
Industrial	Tril. Btu	8,439	6,837	7,957	5,970	5,981	5,635	4,338	3,848	3,544	3,242
Other	Tril. Btu	674	648	177	140	147	130	167	155	160	188
<b>Revenues<sup>2</sup></b>	<b>Mill. dol.</b>	<b>10,283</b>	<b>19,101</b>	<b>48,303</b>	<b>65,837</b>	<b>67,496</b>	<b>63,293</b>	<b>51,201</b>	<b>45,492</b>	<b>46,162</b>	<b>47,493</b>
Residential	Mill. dol.	5,207	8,445	17,432	26,173	27,485	26,864	24,759	23,622	24,828	26,172
Percent of total	Percent	50.8	44.2	36.1	39.8	40.7	42.4	48.4	51.9	53.8	55.1
Commercial	Mill. dol.	1,620	3,302	8,183	12,659	13,205	12,722	11,274	10,271	10,681	11,077
Industrial	Mill. dol.	3,181	6,745	22,215	26,315	26,094	23,086	14,495	11,069	10,113	9,660
Other	Mill. dol.	274	608	473	690	712	621	673	530	538	584
<b>Prices per mil. Btu<sup>3</sup></b>	<b>Dollars</b>	<b>0.64</b>	<b>1.29</b>	<b>3.13</b>	<b>5.12</b>	<b>5.13</b>	<b>5.02</b>	<b>4.60</b>	<b>4.32</b>	<b>4.31</b>	<b>4.50</b>
Residential	Dollars	1.06	1.69	3.61	5.88	5.94	5.95	5.65	5.39	5.29	5.45
Commercial	Dollars	0.81	1.38	3.34	5.51	5.51	5.44	5.04	4.77	4.63	4.77
Industrial	Dollars	0.38	0.99	2.79	4.41	4.36	4.10	3.34	2.88	2.85	2.98
<b>Gas mains mileage</b>	<b>1,000</b>	<b>913</b>	<b>980</b>	<b>1,052</b>	<b>1,095</b>	<b>1,102</b>	<b>1,119</b>	<b>1,134</b>	<b>1,151</b>	<b>1,169</b>	<b>1,185</b>
Field and gathering	1,000	66	68	84	92	94	94	94	94	92	91
Transmission	1,000	252	263	266	273	272	271	271	274	276	276
Distribution	1,000	595	649	702	730	736	754	769	784	801	818
<b>Construction expenditures</b>	<b>Mill. dol.</b>	<b>2,506</b>	<b>2,466</b>	<b>5,350</b>	<b>4,078</b>	<b>4,645</b>	<b>5,671</b>	<b>5,342</b>	<b>5,328</b>	<b>6,166</b>	<b>7,341</b>
Transmission	Mill. dol.	1,019	590	1,583	1,065	1,301	1,562	1,448	1,295	1,568	2,081
Distribution	Mill. dol.	913	910	1,869	1,845	2,266	2,577	2,920	3,055	3,389	3,980
Production and storage	Mill. dol.	370	831	1,546	746	543	965	383	251	268	276

<sup>1</sup> Annual average. <sup>2</sup> Excludes sales for resale. <sup>3</sup> For definition, see text, section 19. <sup>4</sup> Includes general.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual. (Copyright.)

## No. 985. Gas Utility Industry—Customers, Sales, and Revenues, by State: 1989

[See headnote, table 984. For definition of Btu, see text, section 19]

DIVISION AND STATE	CUSTOMERS <sup>1</sup>		SALES <sup>3</sup> (mil. Btu)		REVENUES <sup>3</sup> (mil. dol.)		DIVISION AND STATE	CUSTOMERS <sup>1</sup>		SALES <sup>3</sup> (mil. Btu)		REVENUES <sup>3</sup> (mil. dol.)	
	Total <sup>2</sup>	Residential	Total <sup>2</sup>	Residential	Total <sup>2</sup>	Residential		Total <sup>2</sup>	Residential	Total <sup>2</sup>	Residential	Total <sup>2</sup>	Residential
<b>U.S.</b>	<b>53,356</b>	<b>48,981</b>	<b>10,551</b>	<b>4,798</b>	<b>47,493</b>	<b>26,172</b>	<b>VA</b>	<b>653</b>	<b>587</b>	<b>124</b>	<b>55</b>	<b>672</b>	<b>359</b>
<b>N. Eng.</b>	<b>2,018</b>	<b>1,828</b>	<b>400</b>	<b>178</b>	<b>2,289</b>	<b>1,278</b>	<b>WV</b>	<b>381</b>	<b>349</b>	<b>64</b>	<b>39</b>	<b>305</b>	<b>205</b>
ME	16	12	4	1	21	5	<b>NC</b>	<b>551</b>	<b>485</b>	<b>131</b>	<b>39</b>	<b>625</b>	<b>253</b>
NH	83	72	15	7	94	48	<b>SC</b>	<b>360</b>	<b>321</b>	<b>93</b>	<b>21</b>	<b>419</b>	<b>136</b>
VT	23	20	6	2	31	14	<b>GA</b>	<b>1,382</b>	<b>1,275</b>	<b>202</b>	<b>99</b>	<b>1,043</b>	<b>602</b>
MA	1,217	1,110	256	108	1,371	754	<b>FL</b>	<b>474</b>	<b>431</b>	<b>282</b>	<b>14</b>	<b>879</b>	<b>102</b>
RI	207	189	30	18	190	125	<b>E. So. Cent</b>	<b>2,451</b>	<b>2,202</b>	<b>487</b>	<b>190</b>	<b>2,036</b>	<b>974</b>
CT	472	425	89	42	582	332	<b>KY</b>	<b>676</b>	<b>611</b>	<b>118</b>	<b>67</b>	<b>519</b>	<b>309</b>
<b>Mid. Atl.</b>	<b>8,788</b>	<b>8,088</b>	<b>1,422</b>	<b>839</b>	<b>8,303</b>	<b>5,427</b>	<b>TN</b>	<b>654</b>	<b>569</b>	<b>163</b>	<b>50</b>	<b>846</b>	<b>233</b>
NY	4,156	3,853	574	366	3,643	2,526	<b>AL</b>	<b>711</b>	<b>653</b>	<b>118</b>	<b>47</b>	<b>540</b>	<b>286</b>
NJ	2,163	1,946	382	195	2,108	1,248	<b>MS</b>	<b>410</b>	<b>369</b>	<b>88</b>	<b>26</b>	<b>331</b>	<b>146</b>
PA	2,469	2,289	466	278	2,552	1,653	<b>W. So. Cent</b>	<b>5,856</b>	<b>5,358</b>	<b>1,730</b>	<b>401</b>	<b>5,566</b>	<b>2,091</b>
<b>E. No. Cent.</b>	<b>11,816</b>	<b>10,855</b>	<b>2,328</b>	<b>1,500</b>	<b>11,038</b>	<b>7,470</b>	<b>AR</b>	<b>554</b>	<b>491</b>	<b>92</b>	<b>44</b>	<b>398</b>	<b>213</b>
OH	2,950	2,720	563	373	2,794	1,920	<b>LA</b>	<b>979</b>	<b>914</b>	<b>226</b>	<b>59</b>	<b>781</b>	<b>342</b>
IN	1,421	1,295	278	158	1,376	854	<b>OK</b>	<b>890</b>	<b>802</b>	<b>204</b>	<b>73</b>	<b>643</b>	<b>324</b>
IL	3,507	3,212	709	468	3,120	2,150	<b>TX</b>	<b>3,433</b>	<b>3,151</b>	<b>1,208</b>	<b>205</b>	<b>3,843</b>	<b>1,212</b>
MI	2,733	2,531	536	375	2,558	1,826	<b>Mt.</b>	<b>3,255</b>	<b>2,949</b>	<b>527</b>	<b>255</b>	<b>2,253</b>	<b>1,271</b>
WI	1,205	1,097	242	128	1,190	720	<b>MT</b>	<b>196</b>	<b>173</b>	<b>42</b>	<b>20</b>	<b>158</b>	<b>80</b>
<b>W. No. Cent.</b>	<b>4,642</b>	<b>4,184</b>	<b>914</b>	<b>472</b>	<b>3,748</b>	<b>2,147</b>	<b>ID</b>	<b>129</b>	<b>111</b>	<b>17</b>	<b>9</b>	<b>78</b>	<b>43</b>
MN	1,033	935	244	119	989	542	<b>WY</b>	<b>123</b>	<b>109</b>	<b>24</b>	<b>12</b>	<b>102</b>	<b>56</b>
IA	781	698	168	80	668	373	<b>CO</b>	<b>1,077</b>	<b>965</b>	<b>166</b>	<b>91</b>	<b>719</b>	<b>423</b>
MO	1,309	1,207	220	129	980	614	<b>NM</b>	<b>257</b>	<b>239</b>	<b>52</b>	<b>29</b>	<b>253</b>	<b>156</b>
ND	97	85	20	10	86	46	<b>AZ</b>	<b>611</b>	<b>564</b>	<b>114</b>	<b>28</b>	<b>443</b>	<b>187</b>
SD	116	103	23	12	95	54	<b>UT</b>	<b>485</b>	<b>432</b>	<b>78</b>	<b>49</b>	<b>336</b>	<b>233</b>
NE	481	419	98	46	388	204	<b>NV</b>	<b>387</b>	<b>358</b>	<b>33</b>	<b>17</b>	<b>164</b>	<b>93</b>
KS	825	738	141	76	542	315	<b>Pac</b>	<b>9,661</b>	<b>9,087</b>	<b>1,659</b>	<b>605</b>	<b>7,171</b>	<b>3,274</b>
<b>So. Atl.</b>	<b>4,869</b>	<b>4,429</b>	<b>1,084</b>	<b>358</b>	<b>4,989</b>	<b>2,241</b>	<b>WA</b>	<b>479</b>	<b>421</b>	<b>136</b>	<b>38</b>	<b>523</b>	<b>209</b>
DE	94	86	22	8	107	49	<b>OR</b>	<b>347</b>	<b>302</b>	<b>53</b>	<b>23</b>	<b>269</b>	<b>139</b>
MD	829	764	134	70	735	439	<b>CA</b>	<b>8,721</b>	<b>8,265</b>	<b>1,427</b>	<b>528</b>	<b>6,220</b>	<b>2,968</b>
DC	146	131	33	13	205	96	<b>AK</b>	<b>80</b>	<b>69</b>	<b>40</b>	<b>13</b>	<b>120</b>	<b>49</b>
							<b>HI</b>	<b>34</b>	<b>31</b>	<b>3</b>	<b>1</b>	<b>39</b>	<b>9</b>

<sup>1</sup> Averages for the year. <sup>2</sup> Includes other service, not shown separately. <sup>3</sup> Excludes sales for resale.

Source: American Gas Association, Arlington, VA, *Gas Facts*, annual. (Copyright.)

**No. 986. Wood Energy Consumption, by Region and Sector: 1980 to 1987**

[In trillions of Btu, except percent. For composition of regions, see fig. 1, inside front cover. NA Not available]

YEAR	Total	Percent of total energy consumption	REGION				SECTOR			
			North-east	Midwest	South	West	Residential	Industrial	Commercial	Electric utilities
1980	2,483	3.2	386	329	1,380	388	859	1,600	21	4
1981	2,412	3.2	389	331	1,291	402	869	1,519	21	3
1982	2,395	3.3	351	339	1,334	372	837	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
1987	2,437	7.0	350	474	1,147	487	852	1,576	(NA)	9

**No. 987. 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	0.7	1.0	1.0	1.0	0.7	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 986 and 987: U.S. Energy Information Administration, *Annual Energy Review*.**No. 988. Water Power—Developed and Undeveloped Capacity, by Division: 1950 to 1989**[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	1988	1989	1950	1960	1970	1980	1985	1988	1989
U.S.	18.7	33.2	52.0	64.4	68.8	71.3	71.8	87.6	114.2	128.0	129.9	76.4	75.8	75.2
New England	1.2	1.5	1.5	1.5	1.7	1.9	1.9	3.3	2.9	3.3	4.7	4.4	4.5	4.5
Middle Atlantic	1.7	2.5	4.3	4.3	4.5	4.8	4.8	6.6	7.6	4.5	5.1	5.4	5.8	5.2
East North Central	0.9	0.9	0.9	0.9	1.1	1.1	1.1	2.3	3.0	1.6	2.0	1.8	1.7	1.7
West North Central	0.6	1.6	2.7	2.8	2.9	3.1	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	6.6	6.7	8.2	8.4	9.6	9.6	7.4	7.2	7.1
East South Central	2.7	3.8	5.2	5.6	5.9	5.9	5.9	4.7	4.6	3.8	3.3	2.7	2.4	2.4
West South Central	0.5	0.9	1.9	2.3	2.3	2.4	2.4	3.6	3.9	3.3	4.7	5.4	4.9	4.8
Mountain	2.3	4.6	6.2	7.4	8.1	8.5	8.9	23.4	23.6	26.7	34.2	19.4	19.4	19.3
Pacific	6.0	13.8	23.9	33.7	35.8	37.1	36.8	29.8	53.8	70.9	62.9	26.8	26.9	27.0

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. 989. Solar Collector Shipments, by Type, End-Use, and Market Sector: 1975 to 1988**

[In thousands of square feet, except number of manufacturers. Solar collector is a device for intercepting sunlight, converting the light to heat, and carrying the heat to where it will be either used or stored. 1985 data are not available]

YEAR	Number of manufacturers	Total shipments <sup>1</sup>	COLLECTOR TYPE		END USE			MARKET SECTOR		
			Low temperature	Medium temperature, special, other	Pool heating	Hot water	Space heating	Residential	Commercial	Industrial
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	6,095	1,848	263
1979	349	14,251	8,395	5,857	8,551	2,958	1,722	11,387	2,015	314
1980	233	19,398	12,233	7,165	12,029	4,790	1,688	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	18,821	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 <sup>2</sup>	97	4,862	3,751	1,111	3,494	1,181	127	4,131	703	13
1987 <sup>2</sup>	58	4,114	3,157	957	3,111	964	23	3,775	305	11
1988 <sup>2</sup>	50	4,059	3,326	732	3,304	726	7	3,796	255	7

NA Not available. <sup>1</sup> Includes other end uses and market sectors not shown separately. <sup>2</sup> Declines between 1984 and 1988 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 emphasis 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 problems of concept and definition and the data should, therefore, be regarded as broad estimates rather than precise quantitative statements. See sources for details.

The National Science Board's biennial *Science and Engineering Indicators* 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. 990. Research and Development (R&D)—Outlays: 1955 to 1989**

[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 <sup>1</sup>		ANNUAL PERCENT CHANGE <sup>3</sup>		PERCENT OF TOTAL R&D OUTLAYS					
	Total	Defense space related	Other	Total (bil. dol.)	Percent of GNP <sup>2</sup>	Current dollars	Constant dollars	Federally funded defense/space-related			Other outlays		
								Total	Defense	Space	Total	Non-federal	Federal
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	9.4	7.5	55	52	3	44	35	9
1961	14.3	8.0	6.3	45.8	2.7	5.9	4.9	56	50	6	44	35	9
1962	15.4	8.5	6.9	48.2	2.7	7.5	5.2	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	8.8	56	37	19	43	34	9
1965	20.0	10.8	9.2	59.4	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	1.6	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	2.3	6.7	1.7	41	32	9	59	44	15
1973	30.7	11.7	19.0	62.4	2.3	7.9	1.7	38	30	8	62	47	15
1974	32.9	12.2	20.7	61.5	2.2	7.0	-1.5	37	30	7	63	49	14
1975	35.2	13.0	22.2	59.9	2.2	7.2	-2.6	37	29	8	64	49	15
1976	39.0	14.0	25.0	62.1	2.2	10.8	3.8	36	28	8	65	49	16
1977	42.8	15.0	27.8	63.7	2.1	9.6	2.4	35	28	7	66	50	16
1978	48.1	15.9	32.2	66.8	2.1	12.5	4.9	33	27	6	67	50	17
1979	54.9	17.6	37.3	70.1	2.2	14.1	4.9	32	26	6	69	51	18
1980	62.6	18.8	43.8	73.2	2.3	13.9	4.5	30	25	5	70	53	17
1981	71.9	21.6	50.3	76.6	2.4	14.8	4.6	30	25	5	70	54	16
1982	80.0	25.6	54.4	80.0	2.5	11.3	4.4	32	27	5	68	54	14
1983	89.1	28.5	60.6	85.7	2.6	11.4	7.2	32	28	4	68	54	14
1984	101.1	33.4	67.7	93.8	2.7	13.5	9.4	33	29	4	67	55	12
1985	113.7	38.7	75.1	102.4	2.8	12.5	9.2	34	30	4	66	54	12
1986	119.9	40.8	79.1	105.2	2.8	5.4	2.7	34	30	4	66	54	12
1987	127.3	40.7	86.6	108.3	2.8	6.2	3.0	32	28	4	68	54	14
1988	135.2	43.3	92.0	111.4	2.8	6.2	2.9	32	28	4	68	54	14
1989, est.	142.0	46.9	95.1	112.1	2.7	5.0	0.6	33	28	5	67	54	13

<sup>1</sup> Based on GNP implicit price deflator. <sup>2</sup> GNP ... Gross National Product. <sup>3</sup> Change from prior year shown; 1955 change from 1954.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1990*, and unpublished data.

**No. 991. Research and Development (R&D)—Source of Funds and Performance Sector: 1970 to 1989**

[In millions of dollars. See headnote, table 992]

YEAR	Total	SOURCE OF FUNDS				PERFORMANCE SECTOR					
		Federal Govt.	Industry	Univ., col-leges	Other <sup>1</sup>	Federal Govt.	Industry	Univ., col-leges	Associated FFRDC's <sup>2</sup>	Other <sup>1</sup>	
<b>Current dollars:</b>											
1970	26,134	14,891	10,444	462	337	4,079	18,067	2,335	737	916	
1975	35,213	18,109	15,820	749	535	5,354	24,187	3,409	987	1,276	
1980	62,582	29,452	30,914	1,316	900	7,632	44,505	6,049	2,246	2,150	
1981	71,851	33,405	35,947	1,540	959	8,426	51,810	6,829	2,486	2,300	
1982	80,001	36,574	40,694	1,719	1,014	9,141	58,650	7,306	2,479	2,425	
1983	89,126	40,829	45,252	1,918	1,127	10,582	65,268	7,864	2,737	2,675	
1984	101,116	45,635	52,203	2,091	1,187	11,572	74,800	8,594	3,150	3,000	
1985	113,745	52,070	57,979	2,356	1,340	12,945	84,239	9,663	3,523	3,375	
1986	119,863	54,629	61,074	2,772	1,388	13,535	88,179	10,904	3,895	3,350	
1987	127,316	58,508	64,088	3,135	1,585	13,413	94,117	12,080	4,206	3,500	
1988	135,231	62,136	67,855	3,437	1,803	14,281	99,422	13,422	4,531	3,575	
1989, est	142,000	65,850	70,350	3,850	1,950	15,800	103,000	14,450	4,850	3,900	
<b>Constant (1982) dollars: <sup>3</sup></b>											
1970	62,403	35,632	24,851	1,114	807	9,833	42,986	5,629	1,777	2,179	
1975	59,882	30,985	26,679	1,302	916	9,308	40,781	5,926	1,716	2,151	
1980	73,222	34,547	36,067	1,553	1,055	9,006	51,919	7,138	2,650	2,508	
1981	76,623	35,686	38,260	1,652	1,024	9,040	55,140	7,327	2,667	2,448	
1982	80,001	36,574	40,694	1,719	1,014	9,141	58,650	7,306	2,479	2,425	
1983	85,741	39,249	43,569	1,840	1,083	10,152	62,842	7,545	2,626	2,576	
1984	93,768	42,281	48,455	1,933	1,099	10,696	69,433	7,943	2,912	2,785	
1985	102,396	46,825	52,254	2,112	1,205	11,606	75,925	8,664	3,159	3,042	
1986	105,159	47,868	53,655	2,421	1,216	11,820	77,472	9,522	3,401	2,943	
1987	108,317	49,728	54,586	2,657	1,347	11,367	80,168	10,237	3,564	2,981	
1988	111,434	51,175	55,947	2,827	1,485	11,744	81,977	11,038	3,726	2,948	
1989, est	112,080	51,957	55,550	3,035	1,538	12,454	81,333	11,390	3,823	3,080	

<sup>1</sup> Nonprofit institutions. <sup>2</sup> University associated federally-funded R&D centers. <sup>3</sup> Based on gross national product implicit price deflator.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1990*.

### No. 992. Research and Development (R&D) Funds, by Performance Sector and Source: 1970 to 1989

[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	1982	1983	1984	1985	1986	1987	1988	1989, est.
<b>Total R&amp;D</b> <sup>1</sup>	<b>26,134</b>	<b>62,582</b>	<b>80,001</b>	<b>89,126</b>	<b>101,116</b>	<b>113,745</b>	<b>119,863</b>	<b>127,316</b>	<b>135,231</b>	<b>142,000</b>
In 1982 dollars <sup>2</sup>	62,403	73,222	80,001	85,741	93,768	102,396	105,159	108,317	111,434	112,080
Percent Federal as source	57.0	47.1	45.7	45.8	45.1	45.8	45.8	46.0	45.9	46.4
Percent of gross national product	2.6	2.3	2.5	2.6	2.7	2.8	2.8	2.8	2.8	2.7
Federal Government	4,079	7,632	9,141	10,582	11,572	12,945	13,535	13,413	14,281	15,800
Industry	18,067	44,505	58,650	65,268	74,800	84,239	88,179	94,117	99,422	103,000
Federal funds	7,779	14,029	18,545	20,680	23,396	27,196	28,247	31,311	32,959	34,200
Industry funds	10,288	30,476	40,105	44,588	51,404	57,043	59,932	62,806	66,463	68,800
Universities and colleges	2,335	6,049	7,306	7,864	8,594	9,663	10,904	12,080	13,422	14,450
Federal funds	1,647	4,095	4,759	4,980	5,417	6,056	6,702	7,328	8,165	8,600
Industry funds	81	238	339	389	474	561	717	807	892	1,000
University and college funds <sup>3</sup>	462	1,316	1,719	1,918	2,091	2,356	2,772	3,135	3,437	3,850
Other nonprofit institutions funds <sup>3</sup>	165	400	489	577	612	690	713	810	928	1,000
Universities and colleges, associated federally funded R&D centers	737	2,246	2,479	2,737	3,150	3,523	3,895	4,206	4,531	4,850
Other nonprofit institutions	916	2,150	2,425	2,675	3,000	3,375	3,350	3,500	3,575	3,900
Federal funds	649	1,450	1,650	1,850	2,100	2,350	2,250	2,250	2,200	2,400
Industry funds	95	200	250	275	325	375	425	475	500	550
Other	172	500	525	550	575	650	675	775	875	950
<b>Total research, basic and applied</b> <sup>2</sup>	<b>9,269</b>	<b>22,265</b>	<b>28,927</b>	<b>32,316</b>	<b>35,733</b>	<b>40,008</b>	<b>44,120</b>	<b>46,756</b>	<b>49,357</b>	<b>52,170</b>
In 1982 dollars <sup>2</sup>	22,198	26,122	28,927	31,066	33,108	35,980	38,667	39,741	40,651	41,184
Percent Federal as source	60.1	55.3	52.1	52.4	51.5	51.4	47.1	47.8	47.5	47.9
Federal Government	1,904	3,666	4,194	4,710	4,764	5,056	5,160	5,438	5,338	5,900
Industry	4,029	9,775	14,227	16,150	18,373	21,117	23,787	24,820	25,856	26,750
Federal funds	1,207	2,190	3,341	4,104	4,700	5,836	5,209	5,694	5,902	6,150
Industry funds	2,822	7,585	10,886	12,046	13,673	15,281	18,578	19,126	19,954	20,600
Universities and colleges	2,223	5,712	6,903	7,438	8,172	9,211	10,385	11,498	12,779	13,740
Federal funds	1,563	3,895	4,534	4,755	5,217	5,858	6,477	7,078	7,890	8,300
Industry funds	56	221	315	362	441	522	667	751	830	930
University and college funds <sup>3</sup>	449	1,224	1,599	1,784	1,945	2,191	2,578	2,916	3,196	3,580
Other nonprofit institutions funds <sup>3</sup>	155	372	455	537	569	642	663	753	863	930
Universities and colleges, associated federally funded R&D centers	485	1,627	1,923	2,198	2,479	2,584	2,633	2,705	2,919	3,170
Other nonprofit institutions	628	1,465	1,680	1,820	1,945	2,040	2,155	2,295	2,465	2,610
Federal funds	409	930	1,075	1,180	1,250	1,250	1,300	1,325	1,400	1,450
Industry funds	77	160	200	220	260	300	340	380	400	440
Other	142	395	405	420	435	490	515	590	665	720
<b>Total basic research</b>	<b>3,531</b>	<b>8,410</b>	<b>10,415</b>	<b>11,618</b>	<b>12,883</b>	<b>14,178</b>	<b>16,570</b>	<b>17,780</b>	<b>18,460</b>	<b>19,880</b>
In 1982 dollars <sup>2</sup>	8,483	9,896	10,415	11,157	11,922	12,731	14,498	15,091	15,193	15,678
Percent of total R&D	13.5	13.4	13.0	12.7	12.5	12.5	13.8	14.0	13.7	14.0
Percent Federal as source	70.0	70.1	68.1	66.8	65.8	64.7	60.3	61.2	61.3	61.6
Federal Government	559	1,182	1,465	1,690	1,861	1,923	2,019	2,046	2,050	2,350
Industry	602	1,325	1,904	2,223	2,608	2,862	4,046	4,149	3,988	4,050
Federal funds	158	290	381	463	476	489	550	757	633	650
Industry funds	444	1,035	1,523	1,760	2,132	2,373	3,496	3,392	3,355	3,400
Universities and colleges	1,796	4,019	4,864	5,288	5,709	6,539	7,476	8,343	8,870	9,800
Federal funds	1,296	2,852	3,392	3,538	3,816	4,341	4,866	5,372	5,661	6,000
Industry funds	40	142	196	236	282	342	445	505	544	615
University and college funds <sup>3</sup>	350	786	993	1,164	1,246	1,436	1,722	1,960	2,099	2,370
Other nonprofit institutions funds <sup>3</sup>	110	239	283	350	365	420	443	506	566	615
Universities and colleges, associated federally funded R&D centers	269	1,124	1,317	1,472	1,675	1,749	1,859	2,012	2,222	2,450
Other nonprofit institutions	305	760	865	945	1,030	1,105	1,170	1,230	1,330	1,430
Federal funds	189	450	535	600	650	675	700	700	750	800
Industry funds	44	95	115	125	150	170	200	220	230	250
Other	72	215	215	220	230	260	270	310	350	380
<b>Total development</b>	<b>16,865</b>	<b>40,317</b>	<b>51,074</b>	<b>56,810</b>	<b>65,383</b>	<b>73,737</b>	<b>75,743</b>	<b>80,560</b>	<b>85,874</b>	<b>89,830</b>
In 1982 dollars <sup>2</sup>	40,206	47,100	51,074	54,675	60,660	66,416	66,493	68,578	70,782	70,916
Percent of total R&D	64.5	64.4	63.8	63.7	64.7	64.8	63.2	63.3	63.5	63.3
Percent Federal as source	55.3	42.5	42.1	42.0	41.6	42.7	44.7	45.0	45.1	45.5

<sup>1</sup> Basic research, applied research, and development. <sup>2</sup> Based on gross national product implicit price deflator. <sup>3</sup> Includes State and local government funds received by these institutions and used for research and development. <sup>4</sup> Includes estimates for independent nonprofit hospitals and voluntary health agencies.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1990*.

**No. 993. Funds for Research and Development—Performance Sector by State: 1987**

[In millions of dollars. See headnote, table 992. Data may differ slightly due to revisions not available on the State level]

REGION, DIVISION, AND STATE	Total	Indus- try	Federal govern- ment	Univer- sities and col- leges <sup>1</sup>	Other non- profit <sup>2</sup>	REGION, DIVISION, AND STATE	Total	Indus- try	Federal govern- ment	Univer- sities and col- leges <sup>1</sup>	Other non- profit <sup>2</sup>
<b>U.S. . . .</b>	<b>127,862</b>	<b>94,282</b>	<b>13,413</b>	<b>16,284</b>	<b>3,883</b>	<b>VA. . . .</b>	<b>2,561</b>	<b>1,342</b>	<b>884</b>	<b>207</b>	<b>129</b>
<b>Northeast . .</b>	<b>32,120</b>	<b>25,654</b>	<b>1,561</b>	<b>3,792</b>	<b>1,112</b>	<b>WV. . . .</b>	<b>188</b>	<b>87</b>	<b>57</b>	<b>44</b>	<b>1</b>
<b>N.E. . . .</b>	<b>11,340</b>	<b>8,324</b>	<b>862</b>	<b>1,482</b>	<b>671</b>	<b>NC. . . .</b>	<b>2,219</b>	<b>1,741</b>	<b>130</b>	<b>314</b>	<b>35</b>
ME. . . .	79	41	5	17	15	SC. . . .	649	523	12	96	18
NH. . . .	161	94	19	48	(2)	GA. . . .	1,429	1,001	96	324	8
VT. . . .	283	247	4	32	(2)	FL. . . .	3,123	2,133	719	252	19
MA. . . .	7,772	5,492	576	1,073	632	<b>E.S.C. . .</b>	<b>3,903</b>	<b>2,534</b>	<b>864</b>	<b>461</b>	<b>43</b>
RI. . . .	554	234	240	66	15	KY. . . .	356	249	27	78	2
CT. . . .	2,474	2,216	18	231	9	TN. . . .	941	649	126	153	13
<b>M.A. . . .</b>	<b>20,780</b>	<b>17,330</b>	<b>700</b>	<b>2,310</b>	<b>441</b>	AL. . . .	2,352	1,592	584	153	23
NY. . . .	8,403	6,559	160	1,351	333	MS. . . .	234	44	127	58	5
NJ. . . .	6,728	6,141	255	323	9	<b>W.S.C. . .</b>	<b>6,526</b>	<b>4,914</b>	<b>433</b>	<b>1,107</b>	<b>71</b>
PA. . . .	5,631	4,630	284	619	98	AR. . . .	195	135	24	36	1
<b>Midwest . . .</b>	<b>28,821</b>	<b>24,224</b>	<b>1,387</b>	<b>2,994</b>	<b>217</b>	LA. . . .	321	134	35	149	3
<b>E.N.C. . . .</b>	<b>21,984</b>	<b>18,429</b>	<b>1,237</b>	<b>2,170</b>	<b>148</b>	OK. . . .	534	384	34	99	17
OH. . . .	4,936	3,569	991	329	47	TX. . . .	5,462	4,261	341	811	49
IN. . . .	2,197	1,944	64	188	1	<b>West . . .</b>	<b>36,902</b>	<b>27,387</b>	<b>3,075</b>	<b>5,773</b>	<b>686</b>
IL. . . .	5,369	4,284	73	942	70	<b>Mt. . . .</b>	<b>7,067</b>	<b>4,484</b>	<b>854</b>	<b>1,632</b>	<b>117</b>
MI. . . .	7,922	7,415	87	397	23	MT. . . .	55	7	15	30	(2)
WI. . . .	1,549	1,217	22	303	7	ID. . . .	532	488	15	25	4
<b>W.N.C. . . .</b>	<b>6,837</b>	<b>5,795</b>	<b>150</b>	<b>824</b>	<b>68</b>	WY. . . .	36	4	8	17	7
MN. . . .	2,533	2,242	26	222	42	CO. . . .	1,705	1,261	133	238	73
IA. . . .	540	343	20	177	(2)	NM. . . .	2,388	993	421	963	11
MO. . . .	2,174	1,905	46	207	16	AZ. . . .	1,145	845	83	207	10
ND. . . .	120	60	20	39	1	UT. . . .	1,034	809	99	121	5
SD. . . .	23	4	6	12	1	NV. . . .	168	57	77	28	6
NE. . . .	158	62	22	72	2	<b>Pac. . . .</b>	<b>29,835</b>	<b>22,923</b>	<b>2,221</b>	<b>4,141</b>	<b>549</b>
KS. . . .	1,288	1,179	9	94	6	WA. . . .	3,523	3,071	122	238	93
<b>South . . . .</b>	<b>27,685</b>	<b>16,556</b>	<b>6,913</b>	<b>3,648</b>	<b>468</b>	OR. . . .	474	294	32	132	16
<b>S.A. . . .</b>	<b>17,256</b>	<b>9,208</b>	<b>5,615</b>	<b>2,080</b>	<b>354</b>	CA. . . .	25,557	19,475	2,011	3,849	422
DE. . . .	(3) <sup>(1)</sup>	(3) <sup>(1)</sup>	3	32	3	AK. . . .	86	10	23	30	13
MD. . . .	4,609	1,350	2,507	710	41	HI. . . .	159	73	33	57	5
DC. . . .	(3) <sup>(1)</sup>	(3) <sup>(1)</sup>	1,208	85	100	Undistributed	2,333	361	477	76	1,419

Z Less than \$0.5 million. <sup>1</sup> Distribution by States includes R&D performed in only Doctoral degree granting institutions; data shown by region and division includes R&D performed in all institutions. <sup>2</sup> For other sector, funds distributed by State include only Federal obligations to organizations in the nonprofit sector (\$2,081 million) and all State governments' intramural R&D performance (\$383 million). Nonprofit R&D performance using non-Federal funds are undistributed. <sup>3</sup> For the industry sector, reported data fall within the range specified, but have been withheld by the Census Bureau to avoid disclosing individual company operations. Range for state total is R&D performance of Federal government, universities and colleges, and other sector, plus the low and high ends of the industry R&D performance range. <sup>4</sup> Between \$884 and \$1,030 million. <sup>5</sup> Between \$846 and \$992 million. <sup>6</sup> Between \$1,432 and \$1,578 million. <sup>7</sup> Between \$39 and \$185 million.

Source: U.S. National Science Foundation, *National Patterns of R&D Resources: 1989*.**No. 994. Federal Obligations for Research and Development, by Agency in Current and Constant (1982) Dollars: 1975 to 1990**

[In millions of dollars, except percent. For fiscal years ending in year shown; see text, section 9. Includes those agencies with obligations of \$1 billion dollars or more in 1990. See *Historical Statistics, Colonial Times to 1970*, series W 142, for total R&D expenditures]

AGENCY	1975	1980	1983	1984	1985	1986	1987	1988	1989, est.	1990, est.
<b>CURRENT DOLLARS</b>										
<b>Obligations, total <sup>1</sup></b>	<b>19,039</b>	<b>29,830</b>	<b>38,712</b>	<b>42,225</b>	<b>46,380</b>	<b>51,412</b>	<b>55,253</b>	<b>56,935</b>	<b>61,902</b>	<b>66,084</b>
Dept. of Defense. . . . .	9,013	13,981	22,993	25,373	29,792	32,938	35,232	35,415	37,630	40,242
Dept. of Health and Human Services. . . . .	2,281	3,780	4,353	4,831	5,451	5,658	6,606	7,158	7,888	8,376
National Aeronautics and Space Administration. . . . .	3,064	3,234	2,662	2,822	3,327	3,420	3,787	4,330	5,688	6,870
Dept. of Energy. . . . .	2,047	4,754	4,537	4,674	4,966	4,688	4,757	5,036	5,479	5,282
National Science Foundation. . . . .	595	882	1,062	1,203	1,346	1,353	1,471	1,533	1,664	1,881
Dept. of Agriculture. . . . .	420	688	848	866	943	929	948	1,017	1,049	1,045
<b>CONSTANT (1982) DOLLARS <sup>2</sup></b>										
<b>Obligations, total <sup>1</sup></b>	<b>33,098</b>	<b>35,202</b>	<b>37,140</b>	<b>39,028</b>	<b>43,359</b>	<b>44,898</b>	<b>46,823</b>	<b>46,822</b>	<b>48,794</b>	<b>49,954</b>
Dept. of Defense. . . . .	15,668	16,499	22,059	23,452	26,711	28,764	29,856	29,125	29,662	30,419
Dept. of Health and Human Services. . . . .	3,965	4,461	4,176	4,465	4,887	4,941	5,598	5,887	6,218	6,331
National Aeronautics and Space Administration. . . . .	5,327	3,816	2,554	2,608	2,983	2,986	3,209	3,561	4,484	5,193
Dept. of Energy. . . . .	3,559	5,610	4,352	4,320	4,452	4,094	4,031	4,142	4,319	3,993
National Science Foundation. . . . .	1,034	1,041	1,019	1,112	1,206	1,182	1,246	1,261	1,311	1,422
Dept. of Agriculture. . . . .	730	811	813	801	845	811	803	836	827	790

<sup>1</sup> Includes other agencies, not shown separately. <sup>2</sup> See footnote 1, table 990.Source: U.S. National Science Foundation, *Federal Funds for Research and Development*, annual.



### No. 995. Federal Funding for Research and Development, by Selected Budget Function, in Current and Constant (1982) Dollars: 1980 to 1991

[In millions of dollars. For fiscal years ending in year shown; see text, section 9. Excludes R&D plant. Represents budget authority. Functions shown are those for which \$1 billion or more was authorized for 1991. See *Historical Statistics, Colonial Times to 1970*, series W 126, for total obligations]

FUNCTION	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990, est.	1991, est.
<b>CURRENT DOLLARS</b>											
<b>Total</b> <sup>1</sup>	<b>29,739</b>	<b>36,115</b>	<b>38,768</b>	<b>44,214</b>	<b>49,887</b>	<b>53,249</b>	<b>57,069</b>	<b>59,106</b>	<b>62,115</b>	<b>63,805</b>	<b>68,278</b>
8 functions, percent of total	96.5	97.9	98.1	98.1	98.3	98.3	98.2	98.3	98.2	98.4	98.3
National defense	14,946	22,070	24,936	29,287	33,698	36,926	39,152	40,099	40,642	39,877	41,421
Health	3,694	3,869	4,298	4,779	5,418	5,565	6,556	7,076	7,773	8,358	8,793
Space research and technology	2,738	2,584	2,134	2,300	2,725	2,894	3,398	3,683	4,555	5,577	7,556
General science	1,233	1,359	1,502	1,676	1,862	1,873	2,042	2,160	2,373	2,499	2,813
Energy	3,603	3,012	2,578	2,581	2,389	2,286	2,053	2,126	2,419	2,991	2,761
Natural resources and environment	999	965	952	963	1,059	1,062	1,133	1,160	1,255	1,362	1,408
Transportation	887	791	876	1,040	1,030	917	908	896	1,064	1,144	1,342
Agriculture	585	693	745	762	836	815	822	882	907	949	1,010
<b>CONSTANT (1982) DOLLARS</b> <sup>2</sup>											
<b>Total</b> <sup>1</sup>	<b>35,094</b>	<b>36,115</b>	<b>37,194</b>	<b>40,866</b>	<b>44,726</b>	<b>46,502</b>	<b>48,362</b>	<b>48,608</b>	<b>48,962</b>	<b>48,231</b>	<b>49,624</b>
National defense	17,637	22,070	23,923	27,070	30,213	32,247	33,179	32,977	32,036	30,144	30,105
Health	4,359	3,869	4,123	4,417	4,858	4,860	5,556	5,819	6,127	6,318	6,391
Space research and technology	3,231	2,584	2,047	2,126	2,443	2,527	2,880	3,029	3,590	4,216	5,492
General science	1,455	1,359	1,441	1,549	1,669	1,636	1,730	1,776	1,871	1,889	2,044
Energy	4,252	3,012	2,473	2,386	2,142	1,996	1,740	1,748	1,807	2,261	2,007
Natural resources and environment	1,179	965	913	890	949	927	960	954	989	1,030	1,023
Transportation	1,047	791	840	961	923	801	769	737	839	865	975
Agriculture	690	693	715	704	750	712	697	725	715	717	734

<sup>1</sup> Includes other functions, not shown separately. <sup>2</sup> See footnote 1, table 990.

Source: U.S. National Science Foundation, *Federal R&D Funding by Budget Function*, annual.

### No. 996. National Research and Development (R&D) Expenditures as a Percent of Gross National Product, by Country: 1975 to 1989

YEAR	TOTAL R&D					NON DEFENSE R&D <sup>1</sup>				
	United States	France	West Germany	Japan	United Kingdom	United States	France	West Germany	Japan	United Kingdom
1975	2.2	1.8	2.2	2.0	2.1	1.6	1.5	2.1	2.0	1.5
1980	2.3	1.8	2.4	2.2	(NA)	1.7	1.4	2.3	2.2	(NA)
1985	2.8	2.3	2.8	2.8	2.3	2.0	1.8	2.5	2.8	1.6
1987	2.8	2.3	2.8	2.8	2.3	2.0	1.8	2.7	2.8	1.7
1988	2.8	2.3	2.8	2.9	2.2	2.0	1.8	2.6	2.9	1.7
1989	2.7	(NA)	(NA)	(NA)	(NA)	1.9	(NA)	(NA)	(NA)	(NA)

NA Not available. <sup>1</sup> Estimated.

Source: U.S. National Science Foundation, *Science Indicators*, biennial; *National Patterns of R&D Resources: 1990*; and *International Science and Technology Data Update*, annual.

### No. 997. Research and Development (R&D) Expenditures in Science and Engineering at Universities and Colleges in Current and Constant (1982) Dollars: 1981 to 1988

[In millions of dollars]

CHARACTERISTIC	1981	1985	1987	1988	CHARACTERISTIC	1981	1985	1987	1988
<b>CURRENT DOLLARS</b>					<b>CONSTANT (1982) DOLLARS</b>				
<b>Total</b>	<b>6,829</b>	<b>9,663</b>	<b>12,080</b>	<b>13,422</b>	<b>Total</b>	<b>7,327</b>	<b>8,664</b>	<b>10,237</b>	<b>11,038</b>
Basic research	4,578	6,539	8,343	8,870	Basic research	4,911	5,863	7,070	7,294
Applied R&D	2,252	3,124	3,737	4,552	Applied R&D	2,416	2,801	3,167	3,744
Source of funds:					Source of funds:				
All governments	5,107	6,804	8,349	9,287	All governments	5,479	6,100	7,075	7,638
Institutions' own funds	995	1,609	2,114	2,314	Institutions' own funds	1,067	1,442	1,792	1,903
Industry	294	561	807	892	Industry	315	503	684	734
Other	434	690	810	928	Other	466	619	686	763
Fields:					Fields:				
Physical sciences	765	1,144	1,382	1,532	Physical sciences	821	1,026	1,171	1,260
Environmental sciences	550	702	828	891	Environmental sciences	590	629	702	733
Mathematical sciences	87	128	178	199	Mathematical sciences	93	115	151	163
Computer sciences	132	281	372	410	Computer sciences	141	252	316	337
Life sciences	3,689	5,272	6,476	7,236	Life sciences	3,958	4,727	5,488	5,951
Psychology	127	158	188	214	Psychology	137	142	160	176
Social sciences	366	380	499	550	Social sciences	393	340	423	452
Other sciences	145	185	271	308	Other sciences	155	166	229	253
Engineering	968	1,414	1,885	2,084	Engineering	1,039	1,267	1,597	1,714

<sup>1</sup> See footnote 1, table 990.

Source: U.S. National Science Foundation, *Survey of Scientific and Engineering Expenditures at Universities and Colleges*, annual.

**No. 998. 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
<b>CURRENT DOLLARS</b>											
<b>Federal obligations, total</b>	<b>3,237</b>	<b>4,547</b>	<b>8,299</b>	<b>8,641</b>	<b>8,777</b>	<b>9,345</b>	<b>10,039</b>	<b>10,972</b>	<b>11,619</b>	<b>13,433</b>	<b>14,073</b>
Annual percent change <sup>1</sup>	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
<b>CONSTANT (1982) DOLLARS<sup>2</sup></b>											
<b>Federal obligations, total</b>	<b>7,802</b>	<b>7,905</b>	<b>9,793</b>	<b>9,271</b>	<b>8,777</b>	<b>8,965</b>	<b>9,279</b>	<b>9,837</b>	<b>10,147</b>	<b>11,384</b>	<b>11,573</b>
Annual percent change <sup>1</sup>	0.6	-8.0	0.3	-5.3	-5.3	2.1	3.5	6.0	3.1	12.2	1.7
Academic science/engineering obligations	5,273	4,878	5,654	5,432	5,180	5,450	5,830	6,507	6,489	7,257	7,510
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	3,487	3,905	4,910	4,732	4,554	4,820	5,036	5,600	5,839	6,135	6,346
Research and development plant	108	78	45	30	31	36	46	102	92	195	167
Other science/engineering activities	1,678	895	699	670	594	594	748	805	758	928	997
Nonscience/engineering activities	2,529	3,027	4,139	3,839	3,597	3,515	3,449	3,330	3,658	4,127	4,063

<sup>1</sup> Percent change from immediate prior year. <sup>2</sup> See footnote 1, table 990.

Source: U.S. National Science Foundation, *Survey of Federal Support to Universities, Colleges, and Selected Nonprofit Institutions*, annual.

**No. 999. Federal R&D Obligations to Selected Universities and Colleges: 1981 to 1988**

[For fiscal years ending in year shown; see text, section 9. For the top 45 institutions receiving Federal R&D funds in 1988. 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 1988 FEDERAL R&D OBLIGATIONS	OBLIGATIONS (\$1,000)				RANK			
	1981	1985	1987	1988	1981	1985	1987	1988
<b>Total, all institutions<sup>1</sup></b>	<b>4,410,931</b>	<b>6,246,161</b>	<b>7,239,490</b>	<b>7,717,052</b>	<b>(X)</b>	<b>(X)</b>	<b>(X)</b>	<b>(X)</b>
45 institutions, percent of total	62.5	61.5	61.9	61.7	(X)	(X)	(X)	(X)
Johns Hopkins University	363,429	297,374	374,656	431,593	1	1	1	1
Stanford University	106,073	174,961	201,049	211,092	3	3	2	2
Massachusetts Institute of Technology	146,035	189,558	188,430	187,558	2	2	3	3
University of Washington	99,965	146,179	164,882	181,393	4	4	4	4
University of California—Los Angeles	94,945	128,211	147,795	154,547	5	5	6	5
University of Michigan	73,999	108,035	134,933	148,446	11	11	7	6
University of California—San Francisco	64,814	98,536	124,811	147,553	15	16	12	7
University of California—San Diego	91,403	103,633	151,768	139,149	6	13	5	8
Columbia University—Main Division	83,659	127,331	130,724	139,108	9	6	10	9
Yale University	73,526	109,227	132,909	135,421	12	10	9	10
Cornell University	72,671	119,966	128,695	134,568	13	8	11	11
University of Wisconsin—Madison	86,918	124,604	134,021	131,186	8	7	8	12
Harvard University	87,830	109,414	123,301	125,242	7	9	13	13
University of Pennsylvania	76,136	103,119	109,531	120,029	10	15	15	14
University of Minnesota	72,001	103,272	119,746	119,831	14	14	14	15
University of California—Berkeley	64,065	106,710	96,748	106,153	16	12	18	16
University of Colorado	46,146	71,424	87,999	105,772	22	23	21	17
Pennsylvania State University	47,099	76,726	94,572	105,243	21	19	19	18
University of Southern California	49,221	89,706	104,295	99,399	20	17	16	19
University of Illinois—Urbana	53,583	83,122	96,769	95,748	19	18	17	20
Washington University	54,170	71,978	89,055	95,388	17	22	20	21
University of Rochester	42,983	70,379	85,674	94,885	25	25	22	22
Duke University	44,287	69,169	84,622	92,763	23	26	23	23
University of NC at Chapel Hill	38,447	63,105	81,473	85,266	30	27	25	24
University of Chicago	53,992	71,194	82,769	84,668	18	24	24	25
University of Texas at Austin	43,756	72,379	76,495	84,400	24	21	26	26
New York University	40,636	74,577	75,986	79,516	28	20	27	27
University of Pittsburgh	38,512	58,620	72,236	79,380	29	28	28	28
Carnegie—Mellon University	21,915	48,872	69,454	74,577	57	38	29	29
University of Iowa	35,300	55,117	63,479	72,309	34	31	33	30
Yeshiva University	42,590	56,988	65,028	66,835	27	29	30	31
California Institute of Technology	32,959	55,083	57,122	65,982	40	32	36	32
University of Arizona	36,308	49,740	64,351	65,258	33	37	32	33
Baylor College of Medicine	35,062	45,837	56,255	63,117	35	45	39	34
Case Western Reserve University	33,744	47,994	56,774	62,989	38	40	37	35
Ohio State University	42,899	56,065	64,550	62,946	26	30	31	36
University of Massachusetts	22,418	46,046	57,926	62,300	55	44	35	37
University of Alabama—Birmingham	29,970	44,093	62,240	59,933	44	46	34	38
Vanderbilt University	27,426	39,909	54,653	58,389	49	48	40	39
University of Miami	28,956	33,709	49,547	58,241	46	59	46	40
University of Utah	38,163	50,938	56,590	56,686	31	36	38	41
University of Florida	30,845	47,716	52,888	55,748	43	41	43	42
University of California—Davis	31,757	43,156	50,289	55,239	42	47	44	43
University of Maryland—College Park	27,313	51,073	48,728	54,072	50	35	48	44
Boston University	27,019	46,152	53,381	53,930	51	43	41	45

X Not applicable. <sup>1</sup> 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. 1000. Funds for Performance of Industrial Research and Development (R&D), by Source of Funds and Selected Industries, in Current and Constant (1982) Dollars: 1970 to 1988**

[In millions of dollars. Covers basic research, applied research, and development. See also *Historical Statistics, Colonial Times to 1970*, series W 144-160]

1972 SIC code	INDUSTRY	1970	1975	1980	1983	1984	1985	1986	1987	1988
(X)	CURRENT DOLLARS									
(X)	<b>Total funds</b>	<b>18,067</b>	<b>24,187</b>	<b>44,505</b>	<b>65,268</b>	<b>74,800</b>	<b>84,239</b>	<b>88,179</b>	<b>94,117</b>	<b>99,422</b>
28	Chemicals and allied products	1,773	2,727	4,636	7,185	7,927	8,540	8,843	9,878	10,774
13,29	Petroleum refining and extraction	515	693	1,552	(D)	(D)	(D)	(D)	1,897	1,958
35	Machinery	1,729	3,196	5,901	9,027	10,504	12,216	(D)	(D)	(D)
36	Electrical equipment	4,220	5,105	9,175	12,681	13,778	14,432	14,980	16,053	16,744
371	Motor vehicles and motor vehicles equipment	1,591	2,340	4,955	5,318	6,057	6,984	(D)	(D)	(D)
372,376	Aircraft and missiles	5,219	5,713	9,198	15,406	18,858	22,231	21,050	24,488	25,667
38	Professional and scientific instruments	744	1,173	3,029	4,286	4,602	5,013	5,103	5,264	5,561
(X)	All other <sup>2</sup>	2,276	3,240	6,059	(D)	(D)	(D)	(D)	(D)	(D)
(X)	<b>Company funds</b>	<b>10,288</b>	<b>15,582</b>	<b>30,476</b>	<b>44,588</b>	<b>51,404</b>	<b>57,043</b>	<b>59,932</b>	<b>62,806</b>	<b>66,463</b>
28	Chemicals and allied products	1,593	2,490	4,264	6,792	7,738	8,310	8,664	9,685	10,580
13,29	Petroleum refining and extraction	493	(D)	1,401	2,074	2,245	2,194	1,971	1,883	1,937
35	Machinery	1,469	2,687	5,254	7,911	10,721	10,701	10,819	12,132	12,132
36	Electrical equipment	2,008	2,798	5,431	8,158	9,037	9,271	8,767	10,602	11,193
371	Motor vehicles and motor vehicles equipment	1,278	2,022	4,300	4,754	5,384	6,164	7,171	7,267	7,769
372,376	Aircraft and missiles	1,213	1,285	2,570	4,010	4,764	5,649	6,066	5,969	5,852
38	Professional and scientific instruments	550	1,001	2,456	3,816	4,211	4,622	4,752	4,991	5,346
(X)	All other <sup>2</sup>	1,684	(D)	4,800	7,073	7,306	10,132	10,722	10,277	11,654
(X)	CONSTANT (1982) DOLLARS <sup>3</sup>									
(X)	<b>Total funds</b>	<b>42,986</b>	<b>40,781</b>	<b>51,919</b>	<b>62,842</b>	<b>69,433</b>	<b>75,925</b>	<b>77,472</b>	<b>80,168</b>	<b>81,977</b>
28	Chemicals and allied products	4,218	4,598	5,408	6,918	7,358	7,697	7,765	8,414	8,884
13,29	Petroleum refining and extraction	1,225	1,168	1,811	(D)	(D)	(D)	(D)	1,616	1,614
35	Machinery	4,114	5,389	8,684	8,692	9,750	11,010	(D)	(D)	(D)
36	Electrical equipment	10,040	8,607	10,703	12,210	12,789	13,008	13,161	13,674	13,806
371	Motor vehicles and motor vehicles equipment	3,785	3,945	5,780	5,120	5,622	6,295	(D)	(D)	(D)
372,376	Aircraft and missiles	12,417	9,632	10,730	14,833	17,505	20,037	18,494	20,859	21,163
38	Professional and scientific instruments	1,770	1,978	3,534	4,107	4,272	4,518	4,483	4,464	4,585
(X)	All other <sup>2</sup>	5,415	5,463	7,068	(D)	(D)	(D)	(D)	(D)	(D)
(X)	<b>Company funds</b>	<b>24,478</b>	<b>26,272</b>	<b>35,553</b>	<b>42,931</b>	<b>47,716</b>	<b>51,413</b>	<b>52,655</b>	<b>53,497</b>	<b>54,801</b>
28	Chemicals and allied products	3,790	4,198	4,974	6,540	7,181	7,490	7,612	8,250	8,724
13,29	Petroleum refining and extraction	1,173	(D)	1,634	1,997	2,084	1,977	1,732	1,604	1,597
35	Machinery	3,495	4,530	6,129	7,617	9,952	9,645	9,505	10,334	10,003
36	Electrical equipment	4,778	4,718	6,336	7,855	8,389	8,356	8,561	9,031	9,229
371	Motor vehicles and motor vehicles equipment	3,041	3,409	5,016	4,577	4,998	5,556	6,300	6,190	6,406
372,376	Aircraft and missiles	2,886	2,187	2,998	3,861	4,422	5,091	5,329	5,084	4,825
38	Professional and scientific instruments	1,309	1,688	2,865	3,674	3,909	4,168	4,175	4,251	4,408
(X)	All other <sup>2</sup>	4,007	(D)	5,600	6,810	6,782	9,132	9,420	8,754	8,608

D Figure withheld to avoid disclosure of information pertaining to a specific organization or individual. X Not applicable.  
<sup>1</sup> 1972 Standard Industrial Classification. See text, section 13. <sup>2</sup> All other manufacturing and nonmanufacturing. <sup>3</sup> See footnote 1, table 990.

Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

**No. 1001. R&D Funds as a Percent of Net Sales in R&D—Performing Manufacturing Companies, by Industry: 1970 to 1988**

1972 SIC code	INDUSTRY GROUP	TOTAL R&D FUNDS AS A PERCENT OF NET SALES					COMPANY R&D FUNDS AS A PERCENT OF NET SALES				
		1970	1980	1985	1987	1988	1970	1980	1985	1987	1988
(X)	Total <sup>2</sup>	3.7	3.0	4.4	4.6	4.8	2.2	2.1	3.0	3.1	3.2
20	Food and kindred products <sup>3</sup>	0.5	0.4	(D)	0.6	(D)	0.5	(D)	0.6	0.6	0.5
26	Paper and allied products	0.9	1.0	(D)	(D)	(D)	0.5	(D)	1.0	0.8	0.6
28	Chemicals and allied products	3.9	3.6	5.0	5.3	5.4	3.5	3.3	4.9	5.2	5.3
13,29	Petroleum refining and extraction	1.0	0.6	(D)	1.0	1.1	0.9	0.5	0.9	1.0	1.1
30	Rubber products	2.3	2.2	(D)	(D)	(D)	1.7	(D)	1.8	1.6	1.6
32	Stone, clay, and glass products	1.8	1.4	(D)	2.6	(D)	1.7	1.3	2.3	2.5	2.6
33	Primary metals	0.8	0.7	(D)	0.9	0.8	0.8	0.5	0.9	0.9	0.8
34	Fabricated metal products	1.2	1.4	1.5	1.5	1.6	1.1	1.2	1.4	1.2	1.3
35	Machinery	4.0	5.0	7.6	(D)	(D)	3.4	4.5	6.7	7.1	7.5
36	Electrical equipment	7.3	6.6	7.6	8.2	8.1	3.4	3.9	4.8	5.4	5.4
371	Motor vehicles and motor vehicle equipment	3.5	4.9	3.8	(D)	(D)	2.8	4.2	3.1	3.4	3.4
372,376	Aircraft and missiles	16.2	13.7	14.9	14.7	15.4	3.8	3.8	3.9	3.6	3.5
38	Professional and scientific instruments	5.7	7.5	8.9	7.9	7.7	4.2	6.1	8.3	7.5	7.4

D Figure withheld to avoid disclosure of information pertaining to a specific organization or individual. X Not applicable.  
<sup>1</sup> 1972 Standard Industrial Classification. See text, section 13. <sup>2</sup> Includes all manufacturing industries. <sup>3</sup> Includes tobacco products (SIC 21) for 1985-88.

Source: U.S. National Science Foundation, *Research and Development in Industry*, annual.

### No. 1002. Federal Obligations for Research, by Field of Science in Current and Constant (1982) Dollars: 1980 to 1990

[In millions of dollars. For fiscal years ending in year shown; see text, section 9. See headnote, table 995]

FIELD	1980	1982	1983	1984	1985	1986	1987	1988	1989	1990, est.
<b>CURRENT DOLLARS</b>										
<b>Research, total.</b>	<b>11,597</b>	<b>13,022</b>	<b>14,254</b>	<b>14,979</b>	<b>16,133</b>	<b>16,502</b>	<b>17,940</b>	<b>18,650</b>	<b>20,416</b>	<b>21,091</b>
Basic	4,674	5,482	6,260	7,067	7,819	8,153	8,942	9,474	10,464	11,201
Applied	6,923	7,541	7,993	7,911	8,315	8,349	8,998	9,176	9,951	9,891
Life sciences	4,192	4,746	5,178	5,636	6,363	6,464	7,341	7,725	8,276	8,739
Psychology	199	218	241	267	327	334	370	390	431	449
Physical sciences	2,001	2,500	2,891	2,969	3,046	3,069	3,253	3,317	3,726	3,966
Environmental sciences	1,261	1,148	1,251	1,276	1,404	1,482	1,512	1,607	1,774	1,756
Mathematics and computer sciences	241	350	419	440	575	615	641	643	724	756
Engineering	2,830	3,387	3,517	3,624	3,618	3,739	3,906	3,956	4,364	4,258
Social sciences	524	386	435	436	460	416	480	486	561	589
Other sciences, n.e.c. <sup>1</sup>	350	287	320	331	342	383	438	527	559	580
<b>CONSTANT (1982) DOLLARS<sup>2</sup></b>										
<b>Research, total.</b>	<b>13,686</b>	<b>13,022</b>	<b>13,675</b>	<b>13,845</b>	<b>14,461</b>	<b>14,411</b>	<b>15,203</b>	<b>15,337</b>	<b>16,093</b>	<b>15,943</b>
Basic	5,516	5,482	6,006	6,532	7,010	7,120	7,578	7,791	8,249	8,467
Applied	8,170	7,541	7,669	7,312	7,455	7,291	7,625	7,547	7,844	7,477
Life sciences	4,947	4,746	4,968	5,209	5,705	5,645	6,221	6,352	6,524	6,606
Biological (excluding environmental)	2,160	2,079	2,212	2,369	2,587	2,614	2,968	3,028	3,139	3,210
Environmental biology	271	184	186	231	233	231	245	248	239	244
Agricultural	528	549	542	473	546	527	480	486	471	463
Medical	1,814	1,773	1,849	1,953	2,124	2,061	2,258	2,419	2,499	2,506
Life sciences, n.e.c.	175	161	179	183	214	212	270	173	175	183
Psychology	235	218	231	247	293	292	313	321	340	339
Biological aspects	71	60	61	75	82	79	83	87	95	101
Social aspects	112	98	100	100	128	125	131	123	121	118
Psychological sciences, n.e.c. <sup>1</sup>	52	61	70	72	83	88	99	111	124	120
Physical sciences	2,361	2,500	2,774	2,744	2,731	2,680	2,756	2,728	2,937	2,998
Astronomy	337	276	343	353	372	409	443	387	441	469
Chemistry	536	481	499	560	583	578	577	578	613	611
Physics	1,395	1,611	1,779	1,697	1,628	1,577	1,571	1,624	1,722	1,749
Physical sciences, n.e.c.	92	133	153	133	148	116	167	138	160	169
Environmental sciences	1,488	1,148	1,200	1,179	1,259	1,294	1,281	1,322	1,398	1,327
Atmospheric	483	426	442	401	436	455	469	483	507	506
Geological	474	358	320	332	385	388	374	363	383	384
Oceanography	309	261	330	336	357	375	362	379	385	331
Environmental sciences, n.e.c.	221	104	109	110	81	76	76	96	123	107
Mathematics and computer sciences	284	350	402	407	515	537	543	529	571	571
Mathematics	107	128	128	140	165	161	173	179	187	186
Computer sciences	152	171	206	198	251	264	252	241	269	275
Mathematics and computer sciences, n.e.c. <sup>1</sup>	25	51	69	69	100	112	117	109	114	110
Engineering	3,340	3,387	3,374	3,350	3,244	3,265	3,310	3,254	3,440	3,219
Aeronautical	836	741	787	795	662	677	687	659	729	727
Astronautical	357	291	308	367	381	460	529	473	514	561
Chemical	114	95	139	134	228	215	183	212	229	173
Civil	187	202	181	187	194	177	173	177	170	167
Electrical	610	612	590	582	562	589	666	601	635	548
Mechanical	245	201	256	176	239	207	198	198	193	201
Metallurgy and materials	279	309	319	315	394	389	307	376	402	345
Engineering, n.e.c.	712	935	794	793	584	552	567	557	568	496
Social sciences	618	386	418	403	412	363	407	400	442	445
Anthropology	20	15	12	17	16	12	13	12	12	12
Economics	228	157	159	136	143	115	126	131	131	131
Political science	14	8	11	10	13	10	10	10	12	13
Sociology	84	52	65	65	60	59	63	67	81	89
Social sciences, n.e.c. <sup>1</sup>	272	155	171	175	180	168	196	179	207	200
Other sciences, n.e.c. <sup>1</sup>	413	287	307	305	306	335	371	433	440	438

<sup>1</sup> N.e.c. — Not elsewhere classified. <sup>2</sup> See footnote 1, table 990.

Source: U.S. National Science Foundation, *Federal Funds for Research and Development*, annual.

### No. 1003. Scientists and Engineers Employed in Research and Development: 1970 to 1988

[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	1988
<b>Total</b>	<b>543.8</b>	<b>651.2</b>	<b>683.3</b>	<b>711.9</b>	<b>751.7</b>	<b>797.8</b>	<b>849.2</b>	<b>896.5</b>	<b>923.3</b>	<b>949.2</b>
Industry (excl. social scientists)	375.6	469.2	498.8	525.4	562.5	603.3	646.8	684.2	703.0	716.8
Universities and colleges, total	79.5	95.9	98.3	99.5	100.4	103.4	108.5	118.0	126.5	135.1
Scientists and engineers	61.3	72.7	73.9	74.5	75.5	77.3	81.1	89.1	95.2	101.8
Graduate students	18.2	23.2	24.4	25.0	24.9	26.1	27.4	28.9	31.3	33.3
Federal Government (incl. DOD)	67.5	58.6	59.2	60.0	61.3	62.1	62.9	63.3	62.3	65.8
Other nonprofit institutions	21.2	27.5	27.0	27.0	27.5	29.0	31.0	31.0	31.5	31.5

<sup>1</sup> 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: 1990*.

### No. 1004. Research and Development Scientists and Engineers—Average Full-Time-Equivalent Employment and Cost, by Industry: 1975 to 1988

[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]

1972 SIC code	INDUSTRY	1975	1980	1981	1982	1983	1984	1985	1986	1987	1988
(X)	EMPLOYED SCIENTISTS										
(X)	Average FTE of scientists										
(X)	and engineers (1,000) <sup>2 3</sup> . . . . .	363.9	469.2	498.8	525.4	582.5	603.3	646.8	684.2	703.0	716.8
28	Chemicals <sup>4</sup> . . . . .	44.8	53.1	58.2	64.5	68.6	70.5	73.5	74.4	74.4	76.6
35	Machinery . . . . .	54.3	65.7	72.6	77.8	83.3	84.4	85.7	93.1	97.4	99.1
36	Electrical equipment <sup>5</sup> . . . . .	81.5	100.7	108.4	109.2	110.9	113.2	115.6	123.1	130.4	136.2
371	Motor vehicles . . . . .	25.7	36.7	32.6	29.5	28.8	27.7	31.3	42.1	48.8	46.6
372,376	Aircraft and missiles . . . . .	67.2	90.6	93.2	97.1	107.3	120.9	137.5	137.5	133.3	139.3
(X)	CONSTANT (1982) DOLLARS <sup>6</sup>										
(X)	Cost per scientist or										
(X)	engineer (\$1,000) <sup>3 7</sup> . . . . .	112.1	110.7	110.6	111.8	111.7	115.1	117.4	113.2	114.1	114.4
28	Chemicals <sup>4</sup> . . . . .	102.7	102.0	102.8	102.5	100.9	104.4	104.8	104.5	113.1	115.9
35	Machinery . . . . .	99.3	104.9	99.9	103.8	104.4	115.6	128.4	(D)	(D)	(D)
36	Electrical equipment <sup>5</sup> . . . . .	105.7	106.3	101.4	100.0	110.1	113.0	112.6	106.9	104.9	101.3
371	Motor vehicles . . . . .	153.6	157.7	156.9	162.6	177.8	196.2	201.1	(D)	(D)	(D)
372,376	Aircraft and missiles . . . . .	143.5	118.5	136.7	148.8	138.3	144.8	145.7	134.5	156.6	152.0

D Withheld to avoid disclosure. X Not applicable. <sup>1</sup> 1972 Standard Industrial Classification; see text, section 13. <sup>2</sup> The mean number of FTE R&D scientists and engineers employed in January of the year shown and the following January. <sup>3</sup> Includes industries not shown separately. <sup>4</sup> Includes allied products. <sup>5</sup> Includes communication. <sup>6</sup> See footnote 1, table 990. <sup>7</sup> 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. 1005. Estimated Characteristics of Employed Scientists and Engineers: 1988

[Percent distribution, except as indicated. Represents total science and engineering employment in the United States]

CHARACTERISTIC	Total	Engi- neers	Life scien- tists	Com- puter spe- cialists	Phys- ical scien- tists	SOCIAL SCIENTISTS					Envi- ron- mental scien- tists	Mathe- matical scientist
						Total	Econo- mists	Other social scien- tists	Psy- cho- logists			
Total <sup>1</sup> (1,000). . . . .	5,286.4	2,718.6	458.6	708.3	312.0	531.0	219.8	311.2	275.9	113.4	168.6	
Male . . . . .	83.6	95.5	72.1	69.1	85.1	69.2	79.6	61.8	52.2	89.1	73.3	
Female . . . . .	16.4	4.5	27.8	30.9	14.9	30.8	20.4	38.2	47.8	10.8	26.6	
White . . . . .	90.1	90.6	90.3	88.3	89.6	88.9	90.7	87.7	92.8	94.4	86.4	
Black . . . . .	2.6	1.6	2.1	3.7	2.1	6.1	3.8	7.7	3.7	0.9	5.6	
Asian . . . . .	5.1	5.6	4.4	6.6	6.6	2.7	3.2	2.3	1.7	1.4	5.5	
Native American . . . . .	0.4	0.5	0.7	0.1	0.2	0.4	0.6	0.2	0.4	0.6	0.1	
Hispanic <sup>2</sup> . . . . .	1.8	1.9	2.2	1.2	1.7	1.7	2.1	1.4	1.7	1.9	2.3	
Type of employer:												
Industry . . . . .	68.0	79.5	37.9	78.7	56.1	52.5	64.0	44.4	40.7	58.4	42.0	
Educational institutions . . . . .	13.5	4.3	35.2	6.6	25.4	24.5	19.0	28.5	31.0	16.0	44.1	
Nonprofit organizations . . . . .	3.5	1.5	7.3	2.4	3.3	6.0	2.3	8.7	17.6	1.2	2.0	
Federal Government . . . . .	7.5	7.5	10.1	6.5	10.2	5.5	7.8	3.9	2.6	15.6	8.2	
Military . . . . .	0.8	1.0	0.4	0.7	0.4	0.4	0.2	0.5	0.2	1.4	0.8	
Other government . . . . .	5.1	4.6	7.5	3.6	2.9	9.6	5.2	12.7	6.1	5.6	1.9	
Other and unknown . . . . .	1.6	1.7	1.6	1.5	1.8	1.3	1.5	1.2	1.7	1.7	0.9	

<sup>1</sup> Includes those not reporting. <sup>2</sup> Persons of Hispanic origin may be of any race. <sup>3</sup> Includes self-employed.

Source: U.S. National Science Foundation, *U.S. Scientists and Engineers: 1988*, and *Women and Minorities in Science and Engineering*, January 1990.

### No. 1006. Professional Scientific, Engineering, and Technical Personnel in the Federal Government, by Occupational Group: 1970 to 1988

[In thousands, except percent. As of October. Excludes health professional personnel]

OCCUPATIONAL GROUP	1970	1980	1985 <sup>1</sup>	1986 <sup>1</sup>	1987 <sup>1</sup>	1988 <sup>1 2</sup>	PERCENT FEMALE					
							1970	1980	1985 <sup>1</sup>	1986 <sup>1</sup>	1987 <sup>1</sup>	1988 <sup>1 2</sup>
Total . . . . .	180.3	206.9	238.0	239.2	240.0	217.6	6.7	9.5	13.8	14.6	15.4	13.8
Scientific personnel . . . . .	77.2	88.0	91.4	89.5	89.1	86.7	8.0	12.7	15.6	16.3	22.7	17.6
Physical sciences . . . . .	29.8	27.6	27.6	27.3	27.1	26.5	6.4	9.5	12.5	13.1	13.9	14.4
Mathematics . . . . .	8.6	11.1	11.0	10.6	10.4	9.8	17.4	19.8	22.8	23.3	23.7	23.4
Life sciences . . . . .	26.9	30.5	33.5	32.5	33.1	33.2	4.1	8.7	12.1	13.0	14.2	15.0
Social sciences . . . . .	6.6	10.5	10.1	10.1	10.1	10.4	16.2	23.3	25.1	25.7	26.3	26.4
Economics . . . . .	4.3	5.9	5.9	5.8	5.6	5.5	11.1	17.4	20.6	21.1	21.3	21.5
Other . . . . .	2.3	4.6	4.2	4.3	4.5	4.9	25.1	30.8	31.5	31.9	32.6	31.9
Geography <sup>3</sup> . . . . .	3.3	4.9	5.7	5.6	4.9	3.6	8.5	14.8	17.0	16.9	18.0	19.2
Psychology . . . . .	2.2	3.3	3.4	3.4	3.5	3.3	13.7	16.8	21.4	22.4	23.6	23.0
Engineering personnel . . . . .	83.0	89.6	105.1	106.2	109.7	108.2	0.5	1.9	5.3	5.8	6.7	7.2
Computer specialists . . . . .	20.1	29.3	41.5	43.5	41.2	22.7	21.1	23.3	31.4	32.8	34.8	31.2

<sup>1</sup> Excludes Post Office. <sup>2</sup> Not comparable with previous years. Excludes employees with less than a bachelor's degree.

<sup>3</sup> Includes statistics. <sup>4</sup> Includes community planning. <sup>5</sup> Includes cartography and land surveying.

Source: U.S. National Science Foundation. Compiled from data supplied by the U.S. Office of Personnel Management.

### No. 1007. 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	Total <sup>1</sup>	WAGE AND SALARY WORKERS								Self-employed
		Min- ing <sup>2</sup>	Con- struc- tion	Manu- facturing	Trans- por- tation <sup>3</sup>	Trade	FIRE <sup>4</sup>	Services	Government	
<b>Scientists and engineers . . . . .</b>	<b>2,360.5</b>	<b>49.1</b>	<b>24.7</b>	<b>881.5</b>	<b>103.4</b>	<b>59.8</b>	<b>88.1</b>	<b>616.8</b>	<b>398.7</b>	<b>128.0</b>
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	0.1	58.4	2.2	2.2	0.2	54.8	39.2	7.0
Life scientists . . . . .	154.3	0.2	(Z)	19.1	0.8	1.9	0.6	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 . . . . .	193.6	0.4	(Z)	(Z)	1.5	(Z)	10.0	76.1	51.4	54.0
Systems analysts, EDP . . . . .	402.5	3.1	1.2	86.5	18.2	28.7	59.8	115.7	62.1	27.0
Engineers <sup>5</sup> . . . . .	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	0.4	1.1	70.9	77.9	6.0
Electrical/electronics . . . . .	439.1	1.1	4.6	232.2	38.7	14.0	0.9	102.5	37.0	8.0
Mechanical engineers . . . . .	224.5	1.8	4.6	138.6	6.4	6.5	0.9	48.0	13.8	4.0
<b>Engineering and science technicians . . . . .</b>	<b>1,272.9</b>	<b>18.2</b>	<b>24.8</b>	<b>495.1</b>	<b>76.6</b>	<b>84.1</b>	<b>6.2</b>	<b>378.8</b>	<b>164.9</b>	<b>18.0</b>
Electrical/electronics technicians . . . . .	341.2	0.8	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	0.9	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)	0.5	60.2	21.9	8.0
Computer programmers . . . . .	518.9	3.3	2.2	100.1	24.6	46.6	77.7	209.2	38.8	16.0

Z Fewer than 50. <sup>1</sup> Includes agriculture, forestry, and fishing not shown separately. <sup>2</sup> Includes oil and gas extraction. <sup>3</sup> Includes communications and public utilities. <sup>4</sup> Finance, insurance, and real estate. <sup>5</sup> Includes kinds of engineers and technicians not shown separately.

Source: U.S. Bureau of Labor Statistics, *Monthly Labor Review*, November 1989. (Data collected biennially.)

### No. 1008. Doctoral Scientists and Engineers—Selected Characteristics: 1975 to 1987

[In thousands]

CHARACTERISTIC	1975	1985	1987		CHARACTERISTIC	1975	1985	1987	
			Num- ber	Em- ployed				Num- ber	Em- ployed
<b>Total . . . . .</b>	<b>270.4</b>	<b>424.6</b>	<b>451.4</b>	<b>419.1</b>					
Field:					Race:				
Life scientists . . . . .	68.3	109.9	117.5	107.4	White . . . . .	245.4	377.9	403.4	373.0
Physical scientists . . . . .	58.5	73.1	75.8	68.6	Black . . . . .	2.6	5.9	6.7	6.4
Psychologists . . . . .	31.3	54.9	59.4	56.4	Asian/Pacific Islander . . . . .	13.9	35.5	37.5	36.4
Social scientists . . . . .	38.6	68.5	72.3	65.9	Other and not reported . . . . .	8.4	5.2	3.8	3.4
Economists . . . . .	12.6	19.1	19.6	17.8	Employment status:				
Other social scientists . . . . .	26.0	49.4	52.7	48.0	Full-time employed . . . . .	240.6	371.9	386.8	386.8
Engineers . . . . .	43.5	67.9	71.1	67.8	Part-time employed . . . . .	7.3	16.7	20.0	20.0
Mathematical scientists . . . . .	14.2	17.5	17.8	16.7	Postdoctorates . . . . .	8.2	11.8	12.3	12.3
Computer specialists . . . . .	3.5	15.0	18.6	18.6	Unemployed/seeking . . . . .	2.5	3.4	4.6	(X)
Environmental scientists . . . . .	12.5	18.0	19.0	17.8	Unemployed/not seeking . . . . .	2.4	3.9	4.2	(X)
Sex:					Retired/not employed . . . . .	8.7	16.2	21.8	(X)
Men . . . . .	244.9	360.6	378.0	352.4	Other . . . . .	0.4	0.8	0.8	(X)
Women . . . . .	25.6	64.0	73.4	66.7	Not reported . . . . .	0.5	(X)	1.0	(X)

X Not applicable.

Source: U.S. National Science Foundation, *Characteristics of Doctoral Scientists and Engineers in the United States*, biennial series.

### No. 1009. Graduate Science/Engineering Students in Doctorate-Granting Institutions of Higher Education by Sex, Citizenship, and Enrollment Status: 1975 to 1988

[As of fall. Includes outlying areas]

FIELD OF SCIENCE OR ENGINEERING	TOTAL (1,000)				PERCENT—									
					Female				Part-time				Foreign	
	1975	1980	1987	1988	1975	1980	1987	1988	1975	1980	1987	1988	1987	1988
<b>Total, all surveyed fields . . . . .</b>	<b>293.8</b>	<b>333.7</b>	<b>385.4</b>	<b>391.7</b>	<b>17.8</b>	<b>33.6</b>	<b>36.3</b>	<b>37.3</b>	<b>28.4</b>	<b>30.9</b>	<b>32.1</b>	<b>31.6</b>	<b>22.8</b>	<b>22.5</b>
Engineering, total . . . . .	64.6	70.1	97.0	97.0	2.9	8.7	12.4	12.8	42.6	40.2	38.0	38.0	33.1	33.1
Sciences, total . . . . .	206.6	227.1	246.2	250.6	20.2	35.4	39.3	40.1	24.0	26.8	27.2	26.8	21.3	21.0
Physical sciences . . . . .	24.5	25.4	31.0	31.3	10.9	16.6	21.3	22.3	13.3	12.4	10.7	10.6	32.7	32.4
Environmental . . . . .	11.0	12.8	13.4	13.0	11.2	22.7	26.1	26.9	18.0	19.8	24.7	25.4	15.7	16.2
Mathematical sciences . . . . .	14.4	13.6	16.2	16.8	14.7	25.4	29.4	29.3	30.2	31.2	24.0	23.2	35.7	34.5
Computer sciences . . . . .	7.0	11.4	26.1	27.0	8.5	21.8	23.8	24.5	41.2	48.2	45.1	43.7	28.8	27.8
Agricultural sciences . . . . .	10.1	11.6	10.3	10.3	11.2	23.5	26.5	27.5	15.5	17.2	16.7	16.8	26.8	26.9
Biological sciences . . . . .	40.9	42.7	43.6	44.7	24.6	38.0	43.1	44.1	15.0	16.1	14.5	14.2	19.7	19.2
Psychology . . . . .	26.9	29.4	31.6	32.7	31.0	51.6	61.8	62.6	26.8	26.6	28.0	27.0	4.2	4.1
Social sciences . . . . .	71.8	80.3	74.0	74.9	21.8	41.3	46.6	47.3	31.1	35.8	37.7	37.3	19.3	19.1
Health fields, total . . . . .	22.6	36.4	42.1	44.2	37.9	70.8	74.0	75.2	27.7	38.7	47.3	45.2	7.8	7.5

Source: U.S. National Science Foundation, *Survey of Graduate Science and Engineering Students and Postdoctorates*, annual.

**No. 1010. Doctorates Conferred, by Recipients' Characteristics, 1980 to 1989, and by Selected Science and Engineering Fields, 1989**  
 (In percent, except as indicated)

CHARACTERISTIC	ALL FIELDS		1989									
	1980	1985	All fields <sup>1</sup>	Engineering	Physical sciences <sup>2</sup>	Earth sciences	Mathematics	Computer sciences	Biological sciences <sup>3</sup>	Agricultural	Social sciences <sup>4</sup>	Psychology
<b>Total conferred (1,000)</b> . . . . .	<b>31,020</b>	<b>31,297</b>	<b>34,319</b>	<b>4,536</b>	<b>3,249</b>	<b>736</b>	<b>861</b>	<b>612</b>	<b>4,106</b>	<b>1,088</b>	<b>3,117</b>	<b>3,209</b>
Male . . . . .	69.7	65.7	63.5	91.8	81.1	79.9	81.9	82.5	62.6	79.0	66.9	43.9
Female . . . . .	30.3	34.3	36.5	8.2	18.9	20.1	18.1	17.5	37.4	21.0	33.1	56.1
Median age <sup>5</sup> . . . . .	32.2	33.3	33.8	31.1	29.5	32.2	30.7	32.0	31.2	33.3	34.1	33.7
<b>CITIZENSHIP<sup>6</sup></b>												
<b>Total conferred (1,000)</b> . . . . .	<b>30,156</b>	<b>29,921</b>	<b>31,367</b>	<b>4,138</b>	<b>2,999</b>	<b>678</b>	<b>771</b>	<b>573</b>	<b>3,876</b>	<b>1,006</b>	<b>2,801</b>	<b>2,755</b>
US citizen . . . . .	83.6	78.1	73.9	44.8	65.5	77.7	51.0	58.8	80.0	60.2	63.4	94.4
Foreign citizen . . . . .	16.4	21.9	26.1	55.2	34.5	22.3	49.0	41.2	20.0	39.8	36.6	5.6
<b>RACE/ETHNICITY<sup>7</sup></b>												
<b>Total conferred (1,000)</b> . . . . .	<b>26,512</b>	<b>24,693</b>	<b>24,777</b>	<b>2,214</b>	<b>2,111</b>	<b>557</b>	<b>428</b>	<b>394</b>	<b>3,277</b>	<b>651</b>	<b>1,980</b>	<b>2,652</b>
White <sup>8</sup> . . . . .	84.7	86.2	86.2	77.4	85.7	91.0	86.2	80.5	88.1	87.6	84.4	89.5
Black <sup>8</sup> . . . . .	4.2	4.2	3.8	1.4	1.5	0.7	1.9	0.3	1.6	2.2	5.2	3.6
Asian/Pacific <sup>8</sup> . . . . .	4.2	4.3	5.1	16.2	7.3	4.1	5.6	13.2	6.0	3.5	4.5	2.1
Indian/Alaskan <sup>8</sup> . . . . .	0.3	0.4	0.4	0.3	0.5	1.1	-	0.5	0.2	0.3	0.4	0.4
Hispanic <sup>8</sup> . . . . .	1.8	2.6	2.7	2.1	2.8	1.6	2.6	1.0	2.2	2.8	3.2	3.3
Other/unknown . . . . .	4.9	2.2	1.8	2.5	2.3	1.4	3.7	4.6	1.9	3.7	2.3	1.1

- Represents or rounds to zero. <sup>1</sup> Includes other fields, not shown separately. <sup>2</sup> Astronomy, physics, and chemistry. <sup>3</sup> Biochemistry, botany, microbiology, physiology, zoology, and related fields. <sup>4</sup> Anthropology, sociology, political science, economics, and international relations. <sup>5</sup> For definition of median, see Guide to Tabular Presentation. <sup>6</sup> For those with known citizenship. Includes those with temporary visas. <sup>7</sup> Excludes those with temporary visas. <sup>8</sup> Non-Hispanic.

Source: U.S. National Science Foundation, Division of Science Resources Studies, *Survey of Earned Doctorates*.

**No. 1011. Nobel Prize Laureates in Chemistry, Physics, and Physiology/Medicine—Selected Countries: 1901 to 1989**

(Presented by location of award-winning research and by date of award)

COUNTRY	1901-1989				1901-1915	1916-1930	1931-1945	1946-1960	1961-1975	1976-1989
	Total	Physics	Chemistry	Physiology/Medicine						
<b>Total</b> . . . . .	<b>400</b>	<b>137</b>	<b>114</b>	<b>149</b>	<b>52</b>	<b>41</b>	<b>49</b>	<b>74</b>	<b>92</b>	<b>92</b>
United States . . . . .	156	54	35	67	3	3	14	38	41	57
United Kingdom . . . . .	69	21	24	24	7	8	11	14	20	9
West Germany <sup>1</sup> . . . . .	57	17	28	12	15	12	11	4	8	7
France . . . . .	22	8	7	7	10	3	2	-	5	2
Soviet Union . . . . .	10	7	1	2	2	-	-	4	3	1
Japan . . . . .	4	3	1	-	-	-	-	-	2	1
Other countries . . . . .	82	27	18	37	15	15	11	13	13	15

- Represents zero. <sup>1</sup> Includes East Germany before 1946.

Source: U.S. National Science Foundation, unpublished data.

**No. 1012. 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 <sup>1</sup>		DEFENSE		Other	YEAR	Total	NASA <sup>1</sup>		DEFENSE		Other
		Total	Percent of total	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 . . . . .	26,373	8,302	31.5	17,679	67.0	392
1976 . . . . .	6,660	4,075	61.2	2,444	36.7	142	1989 . . . . .	30,196	10,616	35.2	19,100	63.3	480

<sup>1</sup> 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. <sup>2</sup> Includes transition quarter, July 1 to Sept. 30, 1976. <sup>3</sup> Includes \$2.1 billion for replacement of shuttle orbiter Challenger. 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. 1013. Space Vehicle Systems—Net Sales and Backlog Orders: 1965 to 1989**

[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	1984..	5,225	3,019	2,206	4,624	3,099	1,525
1970..	1,956	1,025	931	1,184	786	398	1985..	6,300	4,241	2,059	6,707	4,941	1,766
1975..	2,119	1,096	1,023	1,304	1,019	285	1986..	6,304	4,579	1,725	8,063	6,028	2,035
1980..	3,483	1,461	2,022	1,814	951	863	1987..	8,051	5,248	2,803	12,393	9,460	2,933
1981..	3,856	1,736	2,120	3,174	2,164	1,010	1988..	8,622	6,190	2,432	10,838	7,880	2,958
1982..	4,749	2,606	2,143	4,337	2,403	1,934	1989..	9,770	6,489	3,281	12,617	9,118	3,499
1983..	4,940	2,420	2,520	4,865	2,733	2,132							

<sup>1</sup> 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. 1014. National Aeronautics and Space Administration—Budget Summary: 1988 to 1990**

[In millions of dollars]

ITEM	1988	1989	1990	ITEM	1988	1989	1990
<b>Appropriations, total . . . .</b>	<b>9,027</b>	<b>10,898</b>	<b>12,297</b>	<b>Space flight, control and data communication programs</b>	<b>3,811</b>	<b>4,464</b>	<b>4,556</b>
<b>Research and development.</b>	<b>3,295</b>	<b>4,267</b>	<b>5,246</b>	Space Shuttle production and operational capability . . . . .	1,088	1,128	1,120
Space science and applications . .	1,576	1,830	2,004	Orbiter . . . . .	329	262	219
Physics and astronomy . . . . .	611	734	861	Propulsion systems . . . . .	595	582	642
Life sciences . . . . .	70	78	106	Launch and mission support . . . .	165	264	259
Planetary exploration . . . . .	329	417	392	Space transportation operations . .	1,810	2,305	2,494
Space applications . . . . .	566	601	645	Flight hardware . . . . .	777	1,113	1,205
Environmental observations . . . .	314	414	439	Flight operations . . . . .	584	686	759
Safety, reliability, and quality assurance . . . . .	14	22	23	Launch and landing operations . .	450	507	530
Commercial programs . . . . .	74	45	57	Expendable launch vehicles . . . .	28	86	142
Space transportation capability development . . . . .	610	681	562	Space and ground network, communications and data systems . .	884	945	975
Upper stages . . . . .	155	139	85	Space network . . . . .	436	484	531
Engineering and technical base . .	134	155	182	Ground network . . . . .	232	228	234
Space lab . . . . .	67	89	96	Communications and data systems . . . . .	217	233	211
Aeronautics and space technology.	612	769	795	<b>Research and program management . . . . .</b>	<b>1,743</b>	<b>1,892</b>	<b>2,049</b>
Aeronautical research and technology . . . . .	335	404	450	<b>Construction of facilities . . . .</b>	<b>178</b>	<b>275</b>	<b>437</b>
Space research and technology . .	224	296	286	<b>Inspector General . . . . .</b>	<b>(X)</b>	<b>(X)</b>	<b>9</b>
Transatmospheric research and technology . . . . .	53	69	59				
Space station . . . . .	392	900	1,770				
Tracking and data advanced systems . . . . .	18	19	19				

X Not applicable. <sup>1</sup> Includes other items not shown separately.

Source: U.S. National Aeronautics and Space Administration, *NASA News*.

**No. 1015. NASA Outlays for Operational Activities and for Research and Development: 1970 to 1989**

[In millions of dollars, except personnel. For fiscal year ending in year shown; see text, section 9]

YEAR	Total outlays	PERFORMANCE (operations)			PERFORMANCE (R&D)				FACILITIES (R&D)				Personnel (number) <sup>2</sup>
		Total operations	Space flight	Other	Total	Space flight	Space science, applications	Air transport and other	Total R&D	Space flight	Space science, applications <sup>1</sup>	Air transport and other	
1970..	3,753	(3)	(3)	(3)	<sup>3</sup> 3,699	<sup>3</sup> 2,195	<sup>3</sup> 963	<sup>3</sup> 541	54	14	21	19	31,350
1975..	3,266	(3)	(3)	(3)	<sup>3</sup> 3,181	<sup>3</sup> 1,500	<sup>3</sup> 1,076	<sup>3</sup> 606	85	35	9	42	24,333
1980..	4,850	1,245	914	331	3,465	1,642	1,341	482	140	38	5	97	22,613
1983..	6,664	4,018	3,431	587	2,538	596	1,486	456	108	26	-	82	22,246
1984..	7,048	3,317	2,854	463	3,539	1,183	1,667	689	192	44	20	128	21,415
1985..	7,251	4,034	3,310	724	2,970	542	1,834	594	247	70	23	154	21,423
1986..	7,404	3,673	2,947	726	3,432	740	2,101	591	299	107	26	166	21,228
1987..	7,591	4,027	3,250	777	3,250	768	1,583	899	314	119	25	170	21,831
1988..	9,092	4,861	3,845	1,016	3,832	1,037	1,777	1,018	399	130	48	221	21,991
1989..	11,051	5,545	4,622	923	4,975	1,455	2,743	777	531	259	45	227	23,019

- Represents zero. <sup>1</sup> Includes technology.

<sup>2</sup> Source: U.S. National Aeronautics and Space Administration, 1970-1985, *Personnel Management Information Systems (PMIS)*, annual; beginning 1986, *The Civil Service Work Force*, annual.

<sup>3</sup> Performance (operations) included in performance (R&D).

<sup>4</sup> Excludes intragovernmental funds, Federal Financing Bank, direct loan principal repayments-\$67 million in 1985.

Source: Except as noted, U.S. Office of Management and Budget, *Budget of the United States Government*, annual, and unpublished data.



### No. 1016. Space Shuttle System Expenditures by NASA in Constant (1982) Dollars: 1973 to 1990

[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. <sup>1</sup>	Con- struction	Produc- tion	Opera- tions	YEAR	Total	D.D.T. and E. <sup>1</sup>	Con- struction	Produc- tion	Opera- tions
1973.....	58	-	58	-	-	1982.....	2,932	894	20	1,283	735
1974.....	325	216	109	-	-	1983.....	3,014	-	26	1,635	1,354
1975.....	1,543	1,407	136	-	-	1984.....	3,127	-	73	690	2,364
1976.....	2,619	2,541	79	-	-	1985.....	2,636	-	42	1,376	1,218
1977.....	2,258	2,089	60	109	-	1986.....	2,606	-	-	1,164	1,422
1978.....	2,062	1,898	103	61	-	1987.....	4,165	-	-	2,611	1,553
1979.....	2,251	1,713	42	496	-	1988.....	2,538	-	-	948	1,590
1980.....	2,751	1,339	42	907	463	1989.....	3,084	-	-	943	2,141
1981.....	2,724	1,041	13	1,093	578	1990.....	2,996	-	-	968	2,028

- Represents or rounds to zero. <sup>1</sup> Design, development, testing, and evaluation.

Source: U.S. Congress, Congressional Budget Office, unpublished data.

### No. 1017. Space Shuttle Flights—Summary: 1981 to 1991

FLIGHT NUMBER	Date	Mission/ Orbiter name	Crew size	Days duration	FLIGHT NUMBER	Date	Mission/ Orbiter name	Crew size	Days duration
1.....	4/12/81	Columbia	2	2	24.....	1/12/86	Columbia	7	6
4.....	6/27/81	Columbia	2	7	25.....	1/28/86	Challenger	7	-
2.....	11/12/81	Columbia	2	2	26.....	9/29/88	Discovery	5	4
3.....	3/22/82	Columbia	2	8	27.....	12/2/88	Atlantis	5	4
5.....	11/11/82	Columbia	4	5	29.....	3/13/89	Discovery	5	5
6.....	4/4/83	Challenger	4	5	30.....	5/4/89	Atlantis	5	4
7.....	6/18/83	Challenger	5	6	28.....	8/8/89	Columbia	5	5
8.....	8/30/83	Challenger	5	6	34.....	10/18/89	Atlantis	5	5
9.....	11/28/83	Columbia	6	10	33.....	11/22/89	Discovery	5	5
10.....	2/3/84	Challenger	5	8	32.....	1/9/90	Columbia	5	10
11.....	4/6/84	Challenger	5	7	36.....	2/28/90	Atlantis	5	5
12.....	8/30/84	Discovery	6	6	31.....	4/24/90	Discovery	5	6
13.....	10/5/84	Challenger	7	8	41.....	10/6/90	Discovery	5	4
14.....	11/8/84	Discovery	5	8	38.....	11/15/90	Atlantis	5	4
15.....	1/24/85	Discovery	5	3	35.....	12/2/90	Columbia	7	9
16.....	4/12/85	Discovery	7	7	39.....	3/91	Discovery	7	8
17.....	4/29/85	Challenger	7	7	37.....	4/91	Atlantis	5	5
18.....	6/17/85	Discovery	7	7	40.....	5/91	Columbia	7	9
19.....	7/29/85	Challenger	7	8	43.....	7/91	Discovery	5	9
20.....	8/27/85	Discovery	5	7	44.....	8/91	Atlantis	6	10
21.....	10/3/85	Atlantis	5	4	45.....	11/91	Discovery	5	5
22.....	10/30/85	Challenger	8	7	42.....	12/91	Atlantis	7	7
23.....	11/26/85	Atlantis	7	7					

- Represents zero.

Source: U.S. National Aeronautics and Space Administration, *Payload Flight Assignments NASA Mixed Fleets*, monthly, and *Pocket Statistics*, January, 1990.

### No. 1018. World-Wide Successful Space Launches: 1957 to 1989

[Criterion of success is attainment of Earth orbit or Earth escape]

COUNTRY	Total	1957- 1959	1960- 1964	1965- 1969	1970- 1974	1975- 1979	1980- 1984	1985	1986	1987	1988	1989
Total.....	3,192	21	268	586	555	607	605	120	103	110	116	101
Soviet Union.....	2,180	6	76	302	405	461	483	97	91	95	90	74
United States.....	905	15	192	279	139	126	93	17	6	8	12	18
Japan.....	38	-	-	-	5	10	12	2	2	3	2	2
European Space Agency.....	30	-	-	-	-	1	8	3	2	2	7	7
India.....	3	-	-	-	-	-	3	-	-	-	-	-
China: Mainland.....	23	-	-	-	2	6	6	1	2	2	4	-
Israel.....	1	-	-	-	-	-	-	-	-	-	1	-

Represents zero. <sup>1</sup> 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: 1957-1989*, March 1990.