

Methodological Notes to the Statistical Series

To obtain data mentioned in the methodological notes as "available upon request," write to:

Business Statistics Branch
Business Outlook Division (BE-52)
Bureau of Economic Analysis
U.S. Department of Commerce
Washington, DC 20230

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1. Source: U.S. Department of Commerce, Bureau of Economic Analysis. "Personal income" is the income received by persons from all sources, that is, from participation in production, from both government and business transfer payments, and from government interest, which is treated like a transfer payment. "Persons" consists of individuals, nonprofit institutions that primarily serve individuals, private noninsured welfare funds, and private trust funds. Proprietors' income is treated in its entirety as received by individuals. Life insurance carriers and private noninsured pension funds are not counted as persons, but their saving is credited to persons. Personal income is the sum of wage and salary disbursements, other labor income, proprietors' income with inventory valuation and capital consumption adjustments, rental income of persons with capital consumption adjustment, personal dividend income, personal interest income, and transfer payments to persons, less personal contributions for social insurance.

"Wage and salary disbursements" consists of the monetary remuneration of employees, including the compensation of corporate officers; commissions, tips, and bonuses; voluntary employee contributions to certain deferred compensation plans such as 401(k) plans; and receipts in kind that represent income. Retroactive wages are counted when paid rather than when earned.

"Other labor income" consists of employer payments to private pension and profit-sharing plans, private group health and life insurance plans, privately administered workers' compensation plans, supplemental unemployment benefit plans, corporate directors' fees, and several minor categories of employee compensation, including judicial fees to jurors and witnesses, compensation of prison inmates, and marriage fees to justices of the peace.

"Proprietors' income with inventory valuation and capital consumption adjustments" is the current-production income (including income in kind) of sole proprietors and partnerships and of tax-exempt cooperatives. The imputed net rental income of owner-occupants of farm dwellings is included. Dividends and monetary interest received by proprietors of nonfinancial business and rental incomes received by persons not primarily engaged in the real estate business are excluded; these incomes are included in dividends, net interest, and rental income of persons. The two valuation adjustments are designed to obtain income measures in which inventory withdrawals and charges for depreciation of fixed capital are valued at replacement cost, the valuation concept underlying national income and product accounting, rather than at historical cost, the valuation concept underlying business accounting. The capital consumption adjustment also restates depreciation to reflect uniform service lives and a straight-line depreciation formula.

"Rental income of persons with capital consumption adjustment" is the net current-production income of persons from the rental of real property, except income of persons primarily engaged in the real estate business; the imputed net rental income of owner-occupants of nonfarm dwellings; and the royalties received by persons from patents, copyrights, and rights to natural resources. The capital consumption adjustment is described in the preceding paragraph.

"Personal dividend income" is the dividend income of persons from all sources. It equals net dividends paid by corporations less "dividends received by government." Dividends received by government consists of dividends received by State and local general government, primarily by their retirement systems.

"Personal interest income" is the interest income (monetary and imputed) of persons from all sources. It equals net interest plus "interest paid by government" less "interest received by government" plus "interest paid by persons." The last item consists of all interest paid by individuals except mortgage interest.

"Transfer payments" to persons is income payments to persons for which no current services are performed. It consists of business transfer payments to persons and government transfer payments. Government transfer payments consists of benefits from the following social insurance funds: Old-age, survivors, and disability insurance (social security); hospital insurance; supplementary medical insurance; unemployment insurance; government employee retirement; railroad retirement; pension benefit guaranty; veterans life insurance; workers' compensation; military medical insurance; and temporary disability insurance. Government transfer payments also includes benefits from certain other programs: Veterans benefits, in addition to veterans life insurance; food stamps; black lung; supplemental security income; and public assistance (including medicaid). Government payments to nonprofit institutions, other than for work under research and development contracts, are also included.

Personal income differs from national income in that it includes transfer payments and interest received by persons, regardless of source, while it excludes both employee and employer contributions for social insurance, corporate profits tax liability, corporate inventory valuation and capital consumption adjustments, and undistributed corporate profits. A minor difference also appears in the wage and salary component, in that retroactive wage payments are included in personal income when disbursed and in national income when earned.

The sources and methods used in compiling the monthly series are given in the following paragraphs.

Annual estimates of private wages and salaries, by industry, and of State and local government wages and salaries are based mainly on tabulations of wages and salaries of employees covered by State unemployment insurance compiled by the Bureau of Labor Statistics (BLS). Monthly estimates of private wages and salaries are based on payroll indexes calculated by using data from the BLS monthly survey of employment, hours, and earnings. Monthly estimates of State and local government wages and salaries are based on BLS monthly data on employment and information from the BLS Employment Cost Index. Annual and monthly estimates of Federal Government wages and salaries are based on data from the Office of Personnel Management and the Office of Management and Budget.

Annual estimates of other labor income, except for the most recent year, are based on: For private pension and profit-sharing funds, employer contributions from Internal Revenue Service tabulations of business tax returns when available and judgmental trends in other years; for group health and life insurance, total premiums paid from trade sources and the Health Care Financing Administration and data on the employer share of premiums paid from a trade source; and for workers' compensation, contributions from trade sources. Annual estimates for the most recent year are based on: For group health insurance, total premiums paid from Health Care Financing Administration; and for others in this category, judgmental trends. Monthly estimates are based on judgmental trends.

Annual estimates of nonfarm proprietors' income, except for the most recent year, are based on Internal Revenue Service tabulations of business tax returns, adjusted for understatement of income on tax returns and several conceptual differences. Annual estimates for the most recent year and monthly estimates are based on: For the construction, trade, and services industries, indicators of activity (such as value of housing put in place); for most other industries, judgmental trends. Annual and quarterly estimates of farm proprietors' income are based on Department of Agriculture data on net income, obtained by deriving gross income (cash receipts from marketings, inventory change, government payments, other cash income, and noncash income) and subtracting production expenses, adjusted to exclude corporate profits from Internal Revenue Service tabulations of business tax returns. Monthly estimates are interpolated from the quarters with modifications to reflect subsidy payments and price movements.

Annual estimates of rental income from owner-occupied and tenant-occupied nonfarm housing are derived as space rent (see nonfarm housing in personal consumption expenditures) less related expenses, including depreciation, maintenance and repairs (from the Bureau of Labor Statistics quarterly consumer expenditure survey), mortgage interest (estimated by applying an interest rate to outstanding mortgage debt from the Federal Reserve Board), and property taxes (from Census Bureau quarterly surveys of State and local tax collections). In addition, estimates of rent from tenant-occupied nonfarm housing are adjusted to cover only rental income accruing to persons not primarily engaged in the real estate business.

Quarterly estimates for space rent, mortgage interest, and property taxes are derived in the same way as the annual estimates. Quarterly estimates for maintenance and repairs are based on the number of units in the housing stock and the CPI for maintenance and repairs. Depreciation estimates are based on investment outlays, price indexes for capital goods, and depreciation rates; all other expenses are based on judgmental trends.

Annual and quarterly estimates of rental income from nonfarm nonresidential properties are based on judgmental trends.

Annual estimates of royalties, except for the most recent year, are based on Internal Revenue Service tabulations of royalties reported on individual tax returns. Annual estimates for the most recent year and quarterly estimates are based on judgmental trends. Annual estimates of rent from farms owned by nonoperator landlords are prepared in conjunction with farm proprietors' income; see that description. Quarterly estimates are based on judgmental trends.

Monthly estimates of total rental income are based on monthly estimates of nonfarm residential space rent and consumption of fixed capital and interpolations of quarterly estimates for other components.

Annual estimates of personal dividend income, except for the most recent year, are based on Internal Revenue Service tabulations of corporation tax returns. Annual estimates for the most recent year and monthly estimates are estimated from a Bureau of Economic Analysis sample of financial reports of corporations.

Annual estimates of personal interest income are derived from net interest and are calculated as net interest, plus interest paid by government, less interest received by government, plus interest paid by persons. In addition to monetary interest flows, personal interest income includes flows of interest in kind (imputed interest). Annual estimates of domestic monetary net interest are derived from Internal Revenue Service tabulations of business tax returns or, when these tabulations are not available, interest receipts and payments from regulatory agencies (such as the Federal Deposit Insurance Corporation), from trade sources, or from applying interest rates to assets/liabilities from Federal Reserve Board flow of funds accounts. Foreign monetary net interest is estimated as part of the balance of payments accounts.

Annual estimates of imputed net interest paid by banks, savings and loan associations, and credit unions are based on interest payments and receipts from regulatory agencies. Estimates of net imputed interest paid by investment companies and life insurance carriers are based on property income earned from Internal Revenue Service tabulations of business tax returns, and for the most recent year, from trade sources. Net imputed interest paid by noninsured pension funds is estimated from the Federal Reserve Board flow of funds accounts. Federal Government interest is derived by the Bureau of Economic Analysis from the *Budget of the United States* and from Treasury Department data. State and local government interest is based on annual and quarterly Census Bureau survey data. Interest paid by persons is the sum of the monthly estimates, which are based mainly on applying interest rates to Federal Reserve data on outstanding consumer credit.

Quarterly estimates of personal interest income are derived by estimating monetary and imputed interest received by persons separately. Estimates of monetary interest received by persons are derived by applying interest rates to household assets from the Federal Reserve Board flow of funds accounts. Estimates of imputed interest received by persons are based on judgmental trends. Monthly estimates of personal interest income are interpolations of the quarterly estimates.

Annual estimates of business transfer payments to persons are based on Internal Revenue Service tabulations of business tax returns. Other components, such as liability payments for personal injury, are based on information from other government and trade sources. Annual estimates of Federal Government transfer payments are derived largely from the *Budget of the United States*, Treasury Department data, and agency data on the individual programs. State and local government transfer payments are derived from Census Bureau surveys and from reports by Federal agencies that fund certain State and local government programs. Monthly estimates of business transfer payments and of State and local government transfer payments are based on judgmental trends. Monthly estimates of Federal Government transfer payments are based largely on monthly Treasury Department data.

Monthly estimates of employee contributions for old-age, survivors, disability, and hospital insurance, unemployment insurance, railroad retirement insurance, State-administered workers' compensation programs, and Government employee retirement systems are based on relevant wage and salary data, taking into account

changes in contribution rates. Medical insurance premiums, veterans life insurance premiums, and Federal workers' compensation contributions are based on records of the agencies concerned. Annual estimates of old-age, survivors, disability, and hospital insurance contributions by the self-employed are derived from data supplied by the Social Security Administration.

Monthly data for 1961-87 for the series indicated by a star are in appendix I. A discussion of monthly estimates of personal income and its disposition appears in the November 1979 SURVEY OF CURRENT BUSINESS. A discussion of the latest comprehensive revision incorporating changes in definitions and classifications, and improvements in statistical methods appears in the December 1991 SURVEY OF CURRENT BUSINESS. Annual estimates for 1929-58 and quarterly estimates for 1946-58 appear in *National Income and Product Accounts of the United States: Volume 1, 1929-58*; annual, quarterly, and monthly estimates for 1959-88 appear in *National Income and Product Accounts of the United States: Volume 2, 1959-88*; annual, quarterly, and monthly estimates for 1987-90 appear in the January 1992 issue of the SURVEY. See also the 1986, 1987, 1988, 1989, 1990, and 1992 July SURVEYS.

2. "Commodity-producing industries" consists of the following Standard Industrial Classification (SIC) divisions: Agriculture, forestry, and fishing; mining; construction; and manufacturing. "Distributive industries" consists of the following SIC divisions: Transportation (excluding the U.S. Postal Service); communications; electric, gas, and sanitary services; wholesale trade; and retail trade. "Service industries" consists of the rest-of-the-world sector and the following SIC divisions: Finance, insurance, and real estate; and services. "General government and government enterprises" consists of Federal, State and local general government and government enterprises. See note 1 above for sources and methods used in compiling the estimates.

3. "Personal contributions for social insurance," which is subtracted to arrive at personal income, includes payments by employees, self-employed, and other individuals who participate in the following programs: Old-age, survivors, and disability insurance (social security); hospital insurance; supplemental medical insurance; unemployment insurance; government employee retirement; railroad retirement; veterans life insurance; and temporary disability insurance.

4. Equals personal income less the following farm components: Wages and salaries, other labor income, proprietors' income with inventory valuation and capital consumption adjustments, and net interest.

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1. See note 1 for p. 1.

2. "Personal tax and nontax payments" is tax payments (net of refunds) by persons resident in the United States that are not chargeable to business expense and certain other personal payments to government agencies (except government enterprises) that are treated like taxes. Personal taxes includes taxes on income, including realized net capital gains; on transfers of estates and gifts; and on personal property. Nontaxes includes donations and fees, fines, and forfeitures. Personal contributions to social insurance is not included.

"Disposable personal income" is personal income less personal tax and nontax payments. It is the income available to persons for spending or saving.

"Personal outlays" is the sum of personal consumption expenditures, interest paid by persons, and personal transfer payments to the rest of the world (net). The last item is personal remittances in cash and in kind to the rest of the world less such remittances from the rest of the world.

"Personal saving" is personal income less the sum of personal outlays and personal tax and nontax payments. It is the current saving of individuals (including proprietors), nonprofit institutions that primarily serve individuals, life insurance carriers, private noninsured welfare funds, and private trust funds. Personal saving may also be viewed as the sum of the net acquisition of financial assets (such as cash and deposits, securities, and the change in the net equity of individuals in life insurance and in private noninsured pension funds) and the change in physical assets less the sum of net borrowing and of consumption of fixed capital.

A discussion of the latest comprehensive revision incorporating changes in definitions and classifications, and improvements in statistical methods appears in the December 1991 SURVEY OF CURRENT BUSINESS. Annual estimates for 1929-58 and quarterly estimates for 1946-58 appear in *National Income and Product Accounts of the United States: Volume 1, 1929-58*; annual, quarterly, and monthly estimates for 1959-88 appear in *National Income and Product Accounts of the United States: Volume 2, 1959-88*; annual, quarterly, and monthly estimates for 1987-90 appear in the January 1992 issue of the SURVEY. See also the 1986, 1987, 1988, 1989, 1990, and 1992 July SURVEYS.

3. "Personal consumption expenditures" is goods and services purchased by persons resident in the United States. Persons are defined as individuals and nonprofit institutions that primarily serve individuals. Most of personal consumption expenditures (PCE) consists of purchases of new goods and of

services by individuals from business. In addition, PCE includes purchases of new goods and of services by nonprofit institutions, net purchases of used goods by individuals and nonprofit institutions, and purchases abroad of goods and services by U.S. residents traveling or working in foreign countries. PCE also includes purchases for certain services provided by the government—primarily tuition payments for higher education and charges for medical care. Finally, PCE includes imputed purchases that keep PCE invariant to changes in the way that certain activities are carried out—for example, whether housing is rented or owned or whether employees are paid in cash or in kind. (Purchases of residential structures by individuals and nonprofit institutions that primarily serve individuals are classified as gross private domestic investment.) “Durable goods” are commodities that can be stored or inventoried and that have an average life of at least 3 years; “nondurable goods” are all other commodities that can be stored or inventoried. “Services” are commodities that cannot be stored and that are consumed at the place and time of purchase.

Personal consumption expenditures for goods as well as services are estimated for benchmark years as final demand components of the input-output accounts. For goods, the basic data are: Product shipments in producers prices reported in the census of manufacturers; nonmanufactured foods and fuels, derived from censuses of agriculture and mineral industries; imports, including transportation costs, insurance, and duties; and changes in wholesalers’ and retailers’ inventories. The available supply is apportioned at producers’ prices among intermediate uses, investment, exports, government purchases, and personal consumption expenditures. To the derived consumption expenditures at producers’ prices are added estimates of transportation costs, wholesale and retail margins, and sales taxes, based principally on Interstate Commerce Commission data and data from the censuses of wholesale trade, retail trade, and transportation.

Estimates of consumption expenditures for goods for years between and beyond benchmarks and quarterly and monthly consumption expenditures estimates rest chiefly on the trends shown by the Census Bureau’s retail sales figures by kind of store; quantity series and price information (for such items as autos, gasoline, and tobacco); and other data from government and nongovernment sources.

Periodic comprehensive sources, notably the censuses of population and housing, service industries, retail trade, governments, and agriculture, provide underlying data for space rental values, personal care services, repair services, recreation services, and other components that together constitute approximately 60 percent of the dollar value of consumer services. The information is supplemented by comprehensive annual reports of Federal Government agencies, such as the Department of Education for private higher education outlays, the Federal Communications Commission for telephone service, the Interstate Commerce Commission for railroad and bus travel, the Department of Energy for natural gas, the Securities and Exchange Commission for brokerage fees, the Department of Transportation for air travel, and the Census Bureau for data on hotels; health, legal, personal, household moving, automotive, repair, and recreation services; and public hospitals and higher education. Important use also is made of annual data available from private sources such as the American Council of Life Insurance and A.M. Best Company for insurance items, the American Hospital Association for hospital services, the Edison Electric Institute and the American Gas Association for electric and gas utilities, the American Public Transit Association for outlays for local transportation, and the New York Stock Exchange for brokerage fees.

A more detailed description of concepts, sources, and methods used in estimating personal consumption expenditures appears in BEA Methodology Paper No. 6: *Personal Consumption Expenditures*.

4. Includes data for items not shown separately.

5. Disposable personal income in 1987 dollars is derived using the implicit price deflator for personal consumption expenditures.

6. Constant-dollar or “real” estimates—i.e., estimates from which price change has been removed, are generally obtained by dividing the most detailed current-dollar components by appropriate price indexes.

“Personal consumption expenditures” is deflated mainly by price series that are components of the Consumer Price Index compiled by the Bureau of Labor Statistics, U.S. Department of Labor.

7. The implicit price deflators are a by product of the deflation of GDP. They are derived as the ratio of current-dollar to constant-dollar GDP (or component)—multiplied by 100. They are weighted averages of the detailed price indexes used in the deflation of GDP. In each period, the weights are based on the composition of constant-dollar output in that period. Thus changes in the implicit price deflator reflect not only changes in prices but also changes in the composition of GDP. Consequently, the implicit price deflator can give misleading signals of price change, and its use as a measure of price change should be avoided.

PAGES 3-7

1. Source: Board of Governors of the Federal Reserve System, Division of Research and Statistics. The index measures changes in the physical volume or quantity of output of manufacturing, mining, and electric and gas utilities. It reflects output changes at all stages within manufacturing and mining industries (including intermediate as well as final products). The index does not cover production on farms, in the construction industry, in transportation, or in various trade and service industries. A number of groups and subgroups include data for individual series not published separately.

Since the index of industrial production was first introduced by the Board in the 1920’s, it has been revised from time to time to take account of the growing complexity of the economy, the availability of more data, improvements in statistical processing techniques, and refinements in methods of analysis.

The figures presented here reflect the benchmark revision of the industrial production index introduced by the Board in April 1990. With the revision, the reference year of the index was moved from 1977 to 1987=100.

The method used in combining the individual series is the weighted average of relatives. This consists of (1) reducing each series into relatives, with the average for the base period, 1987, as 100; (2) multiplying each series of relatives by a base-year weight factor; and (3) adding the products (relatives multiplied by weights) for any 1 month and dividing by sum of the weights to obtain the index number for the month. The weights used are percentage weight factors. Because the total of the percentage weight factors is equal to 100, the sum of the products of all series for any 1 month (all series times their respective weight factors) gives the index of industrial production for that month. The products of the component series and their weights give the number of points contributed to the index by individual series. This method of computation facilitates analysis of the changes in the index. For example, it makes it possible to observe the points contributed by each series or group of series, and therefore to determine which series or group of series is responsible for the month-to-month changes in the total index or in the index for any group or subgroup of industries.

The weights used are based on value added—the difference between the value of production and the cost of materials or supplies consumed. Different value-added weights for different years are used in an attempt to represent accurately the evolution of relative prices. In the revised index, 1977 weights have been used for the 1977-81 period, 1982 weights for 1982-86, and 1987 weights from 1987-90. The individual series and the weighted aggregates for each of these periods have been linked to form a continuous index expressed as a percentage of output in 1987.

Components of the index are adjusted for two kinds of short-time recurring fluctuations, i.e., for differences in the number of working days from month to month and for seasonal variation. Beginning with indexes for January 1947, allowances for holiday observances have been made in seasonal factors rather than in working-day adjustments. Except for Easter, each of the principal holidays is in the same month each year—January, May, July, September, November, and December. Reported product data are converted to a daily average basis by adjusting for the number of working days in the reporting period. No allowances for holiday shutdowns are made in the working-day adjustment; consequently, the effects of holiday observances on monthly output are reflected in the indexes unadjusted for seasonal variation. No working day adjustment is made for monthly series based on input data: Production-hours worked or Kilowatt-hour consumed.

Individual series are seasonally adjusted by the X-11 Arima Method which replaces the X-11 version of the Census Method II seasonal adjustment procedure.

Monthly data for 1963-87 for those series indicated by a star appear in appendix I. Monthly data for other series prior to 1988 are available from the Industrial Output Section, Board of Governors of the Federal Reserve System, Washington, DC 20551. A more detailed description, together with a history of the index, a glossary of terms, and a bibliography is presented in *Industrial Production-1986 Edition*. This publication is available from the Publication Services, Board of Governors of the Federal Reserve System, Washington, DC 20551.

PAGES 8 and 9

1. Source: U.S. Department of Commerce, Bureau of the Census. For specific information on sources of data and descriptions of series, see footnotes 2, 3, and 4.

Beginning January 1982, manufacturers' inventories are valued using methods other than last-in-first-out (LIFO) in order to reflect the current costs of goods held as inventory. Beginning December 1980, the retail trade and merchant wholesalers' inventories are also valued using non-LIFO methods. Previously, inventories were valued using a mixture of LIFO and non-LIFO methods. For further information, see footnotes 2, 3, and 4.

2. Until 1982, manufacturers' inventories are book values of stocks on hand at the end of the period and are valued according to the valuation method used by each respondent, and the aggregates are a mixture of LIFO and non-LIFO values. About one-fourth of manufacturers' inventories are valued on a LIFO basis. Beginning 1982, inventories are valued using non-LIFO methods. For more information, see the Current Industrial Report, *Manufacturers' Shipments, Inventories, and Orders: 1982-1986, M3-1(86)*, chapter 1, p. V.

A detailed description of the series and revised data for all currently available series appear in the Current Industrial Report, *Manufacturers' Shipments, Inventories, and Orders: 1982-1990, M3-1(90)*. Current data are available in Current Industrial Reports, *Manufacturers' Shipments, Inventories, and Orders, Series M3-1*. Explanations of previous revisions to the series and historical data appear in the 1988 and earlier editions of BUSINESS STATISTICS.

3. Until December 1980, retail trade inventories are book values of merchandise on hand at the end of the period and are valued according to the valuation method used by each respondent, and the aggregates are a mixture of LIFO and non-LIFO values. Beginning December 1980, inventories are valued using non-LIFO methods as described in the Current Business Report, *Revised Monthly Retail Sales and Inventories: January 1977 through December 1986, BR-13-86S*, p. 6. Although the LIFO method is used extensively by department and food stores, its use is more widespread in manufacturing than in retail trade.

A detailed description of the series and current data are available in Current Business Reports, *Monthly Retail Trade, Sales and Inventories, Series BR*. Revised data for all currently available series appear in the Current Business Report, *Revised Monthly Retail Sales and Inventories: January 1981 through December 1990, BR90-R*. Explanations of previous revisions to the series and historical data appear in the 1988 and earlier editions of BUSINESS STATISTICS.

4. Until December 1980, merchant wholesalers' inventories are book values of merchandise on hand at the end of the period and are valued according to the valuation method used by each respondent, and the aggregates are a mixture of LIFO and non-LIFO values. Beginning December 1980, inventories are valued using non-LIFO methods as described in the Current Business Report, *Revised Monthly Wholesale Trade, Sales and Inventories, December 1984 through December 1986, BW-13-86S*, p. 5.

A detailed description of the series and revised data for all currently available series appear in the Current Business Report, *Revised Monthly Wholesale Trade, Sales and Inventories, January 1984 through December 1990, BW90-R*. Current data are available in Current Business Reports, *Monthly Wholesale Trade, Sales and Inventories, Series BW*. Explanations of previous revisions to the series and historical data appear in the 1988 and earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Commerce, Bureau of Economic Analysis (BEA). Manufacturing shipments are deflated primarily using components of the Producer Price Index combined with the Annual Survey of Manufactures (ASM) product-class shipments weights. Retail sales are deflated by the kind-of-business classification using components of the Consumer Price Index for All Urban Consumers combined with the 1977 census commodity-line sales weights. Merchant wholesalers' sales are deflated by the kind-of-business classification primarily using components of the Producer Price Index combined with the 1977 census commodity-line sales weights.

BEA prepares the constant-dollar estimates of manufacturing inventories at the two-digit SIC industry level by the stage of fabrication and the merchant wholesalers' and retailers' inventories by the kind-of-business classification. The deflators are primarily the weighted averages of components of the Producer Price Index with appropriate lag structures based on information about inventory turnover periods. For further information, see the SURVEY OF CURRENT BUSINESS, "Constant-Dollar Manufacturing Inventories," November 1981.

6. Annual data are based on unadjusted monthly data.

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1. Source: U.S. Department of Commerce, Bureau of the Census. The data for inventory-sales ratios are based on the monthly seasonally adjusted sales and inventory series for manufacturers, retail trade, and merchant wholesalers. The ratios are derived by dividing the end-of-month inventories by the monthly total sales. For specific references for the manufacturing, retail trade, and merchant wholesalers series, see the relevant footnotes for pages 8 and 9.

2. Source: U.S. Department of Commerce, Bureau of Economic Analysis. The business inventory-sales ratio series and the detail by industry and by

durability are available beginning 1967. Detailed monthly and quarterly series are usually presented in the SURVEY OF CURRENT BUSINESS each quarter.

PAGES 11-17

1. Source: U.S. Department of Commerce, Bureau of the Census. For information about manufacturing sales and inventories, see footnotes 1 and 2 for pages 8 and 9.

2. The total includes data for items not shown separately.

3. The supplementary series comprises two components—household durable goods industries and capital goods industries. Household durable goods industries cover those that produce the following: Household furniture; kitchen articles and pottery; cutlery and handtools; household appliances; household audio and video equipment; ophthalmic goods, watches, and clocks; and miscellaneous personal goods, such as jewelry, silverware, toys and games, sporting goods, musical instruments, and burial caskets.

The capital goods component is divided into two categories—defense and nondefense capital goods. Defense capital goods are the capital goods that are produced for the Department of Defense. The following capital goods are classified as both defense capital goods and nondefense capital goods: Ordnance and accessories; communication equipment; complete aircraft, missiles, and space vehicles; aircraft, missile, and space vehicle engines and parts; ships, tanks, and tank components; and search and navigation equipment. In addition, nondefense capital goods includes the following goods: Steam engines and turbines (including nuclear); internal combustion engines including diesel, except automotive and aircraft; construction, mining, and material handling equipment; metalworking machinery; special industry machinery; general industrial machinery; computer and office equipment; refrigeration, heating, and service industry machinery; electrical transmission and distribution equipment; electrical industrial apparatus; and railroad equipment.

4. Annual data for manufacturers' shipments are based on monthly data that are not seasonally adjusted.

PAGES 18-20

1. Source: U.S. Department of Commerce, Bureau of the Census. For information about the surveys and methodologies used to measure manufacturers' shipments, inventories, new orders, and unfilled orders, see the Current Industrial Report, *Manufacturers' Shipments, Inventories, and Orders: 1982-1990, M3-1(90)*. Current data are available in Current Industrial Reports, *Manufacturers' Shipments, Inventories, and Orders, Series M3-1*.

2. The total includes data for items not shown separately.

3. See footnote 3 for pages 11-17.

4. Annual data for new orders are based on monthly data that are not seasonally adjusted but that are adjusted for trading-day and calendar-month variations.

5. The data for nondurable goods industries cover those industries that produce the following: Textile mill products; leather and leather products; paper and allied products; and printing and publishing products. Unfilled orders for other nondurable goods industries are zero.

6. For the nondurable goods industries that produce food and related products, tobacco products, apparel and related products, petroleum and coal products, chemicals and allied products, and rubber and plastics products, the data for sales are considered equal to those for new orders.

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1. See footnote 1 for pages 18-20.

2. See footnote 3 for pages 11-17.

3. Source: Dun & Bradstreet, Inc. Figures for new business incorporations represent the total number of stock corporations issued charters under the general business corporation laws of the various States and the District of Columbia. The statistics include completely new businesses that are incorporated, existing businesses that are changed from the non-corporate to the corporate form of organization, existing corporations that have been given certificates of authority to operate also in another State, and existing corporations transferred to a new State. Data for incorporations beginning 1963 include the District of Columbia.

Seasonally adjusted new business incorporations beginning January 1964 utilize factors developed by the Bureau of the Census Method II seasonal adjustment program.

Monthly data prior to 1988 and annual data prior to 1963 appear in earlier editions of BUSINESS STATISTICS.

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1. Source: Dun & Bradstreet, Inc. Failures as defined in Dun & Bradstreet statistics, include businesses that ceased operations following assignments or bankruptcy; ceased with loss to creditors after actions such as foreclosure, execution, or attachments with insufficient assets to cover all claims; concerns involved in court actions such as receivership, reorganization, or arrangement; voluntary discontinuances with known loss to creditors; or voluntary compromises with creditors out of court, where obtainable. If creditors are paid in full voluntary discontinuances such as, loss of capital, inadequate profits, ill health, retirement, etc., are not recorded as failures by Dun & Bradstreet.

The series shown refer to liabilities at the time of failure. They include all accounts and notes payable and all obligations, whether in secured form or not, known to be held by banks, officers, affiliated companies, supplying companies, or the Government. They do not include long-term publicly held obligations. Offsetting assets are not taken into account.

The failure data through June 1975 are for 48 States and the District of Columbia; data beginning July 1975 include Hawaii, and beginning September 1976, they include Alaska. Beginning 1984, data include the following industry sectors: Agriculture, forestry, and fishing; finance, insurance, and real estate; and the service sector in its entirety. All industries in the U.S. are now represented in the Dun & Bradstreet business failure coverage.

The classification of the failure records by industries conforms to the *Standard Industrial Classification Manual*, in order to facilitate direct comparison between failures and any other series of data based on the same official code.

The failure index relates the number of failures in each month to the number of enterprises listed in the Dun & Bradstreet Reference Book. It shows the annual rate at which business concerns would fail if the number of failures and concerns listed in that month prevailed for an entire year. The index is expressed as the annual number of failures per 10,000 listed industrial and commercial enterprises. The "unadjusted" figures have been slightly adjusted to equalize, insofar as possible, the number of working days each month. Seasonal fluctuations have been removed in the adjusted index by a method using deviations from a 12-month moving average.

Monthly data for the failure index are only available through December 1983 due to discontinuance of series. Data starting with 1984 will be available only on an annual basis, see note 3 for this page regarding comparability of the data.

Monthly data for 1963-87 for the series indicated by a star are in appendix I; monthly data for all series for 1963-87, together with pertinent qualifications, appear in earlier editions of BUSINESS STATISTICS.

2. See 3d paragraph of note 1 for this page.

3. As of January 1984 Dun & Bradstreet expanded the compilation of business closing statistics in certain industry groupings. As a result, calculations of industrial breakdowns have been changed to reflect the new collection criteria and data reported for individual industries prior to 1987 are not comparable with succeeding years.

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1. Source: U.S. Department of Agriculture (USDA), National Agricultural Statistics Service, Agricultural Statistics Board (formerly Statistical Reporting Service, Crop Reporting Board). Indexes are based on estimates of prices received by farmers for their products sold at local markets—point of first sale—or at the point to which farmers deliver their products.

The reported prices received by farmers are tabulated and averaged by State. The State estimates of average prices are weighted by marketing or production estimates to arrive at national averages.

Subgroup indexes from September 1952 to January 1965 were weighted by the 1953-57 average cash receipts for agricultural commodities and for individual items 1953-57 calendar year sales were used. Indexes for 1965 forward are weighted by calendar year marketings for 1971-73.

For combining the various subgroup indexes into an all-crop, an all-livestock and livestock products, and an all-farm-products index, weights are percentages based on average cash receipts of farmers (with adjustments to reflect imputed weights for items not included in the index) for the two periods, 1953-57, and 1971-73.

There are 44 commodities represented in the index as of January 1992. These items accounted for about 91 percent of total cash receipts from farm marketings during 1971-73.

The percentage-weights of the groups, based on average cash receipts in 1953-57, and 1971-73 are shown in the following table:

Group Weights: Index of Prices Received by Farmers

Commodity Group	[Percent]	
	1953-57 ¹	1971-73 ²
All farm products	100.0	100.0
All crops	45.2	44.2
Commercial vegetables	4.2	4.1
Cotton	8.4	2.9
Feed grains and hay	9.1	12.1
Food grains	7.9	7.2
Fruit	4.7	4.5
Oil-bearing crops	4.9	9.2
Potatoes, sweetpotatoes, and dry edible beans	1.9	1.8
Tobacco	4.1	2.4
Livestock and products	54.8	55.8
Dairy products	14.6	11.1
Meat animals	29.1	37.2
Poultry and eggs	10.7	7.5
Wool4	Dropped

1. September 1952 to January 1965.

2. January 1965 forward.

The indexes shown here are not adjusted for seasonal variations. The original reports have adjusted indexes for five subgroups—fresh market fruit; fresh market vegetables; potatoes, sweetpotatoes, and dry edible beans; dairy products; and poultry and eggs.

The index of prices received by farmers was last revised in May 1976 when the weight-base period was changed from 1953-57 to 1971-73. For further information concerning this revision write to the U.S. Department of Agriculture, National Agricultural Statistics Service, Agricultural Statistics Board, Washington, DC 20250 for the technical reports. For additional details concerning these indexes see the following USDA publications: (1) *Major Statistical Series, Volume 1, Agricultural Prices, and Expenditures, Farm Employment, and Wages, Agriculture Handbook 671*; (2) *Agricultural Economics Research*, April 1950; (3) *Agricultural Economics Research*, April-July 1959; (4) special reports, *1976 Revision of Agricultural Price Indexes*; and (5) *Scope and Methods*, Miscellaneous Publication No. 1308 issued in September 1983.

Monthly data for 1963-87 for those series indicated by a star appear in appendix I. Annual and monthly data back to January 1910 appear in various issues of *Agricultural Prices* and Supplements thereto and the annual publication *Agricultural Statistics* (available from the U.S. Department of Agriculture, National Agricultural Statistics Service, Agricultural Statistics Board, Washington, DC, 20250).

To facilitate comparison with other indexes, the indexes of prices received by farmers have been converted to a 1977 reference base. The converted indexes supplement, but do not replace the official indexes, which, pursuant to law, are published on the 1910-14=100 base. Annual indexes back to 1910 and monthly indexes back to 1965 on the new base, along with comparable indexes on the 1910-14 base, are published in the *Agricultural Prices* 1980 and subsequent annual summaries. Data for current months, on both bases, appear in the monthly issues of *Agricultural Prices*.

2. Includes data for items not shown separately.

3. Source: U.S. Department of Agriculture (USDA), National Agricultural Statistics Service, Agricultural Statistics Board (formerly Statistical Reporting Service, Crop Reporting Board). The Index of Prices Paid by Farmers, Including Interest, Taxes, and Wage Rates, is a measure of the changes that occur in the level of prices paid by farmers and their families for commodities and services used in living and farm production. In addition to commodities, the combined index (Parity Index) includes data for interest per acre on indebtedness secured by farm real estate, taxes per acre on farm real estate, and wage rates paid hired farm labor.

Prices paid by farmers are compiled primarily from data reported by firms that sell to farmers and ranchers. Prices paid for individual commodities are collected by States, and then weighted by estimates of purchases of the commodity by farmers in each State to obtain a national average. Survey procedures and frequency were changed in 1977 and 1986. See *Agricultural Prices*, January 1977 and March 1986 for program changes (available from U.S. Department of Agriculture, National Agricultural Statistics Service, Agricultural Statistics Board, Washington, DC 20250).

For the period September 1952-64, weights were based on 1955 expenditures and for 1965 forward 1971-73 expenditures. The commodity-group indexes are

combined into an index representing commodities used in both living and production, together with interest, taxes, and wage rates paid hired farm labor, by weighting the group indexes in proportion to the percentage of total expenditures represented by the commodities and services in the corresponding groups in the respective periods.

Percentage weights used in deriving the combined index are shown in the following table:

**Group Weights: Index of Prices Paid by Farmers
Including Interest, Taxes, and Wage Rates**

	[Percent]	
	Weight Base Period	
	1955 ¹	1971-73 ²
Family living items	39.50	30.4
Production items	50.90	57.6
Taxes	2.04	2.8
Interest96	4.0
Wage rates	6.60	5.2
Commodities, services, interest, taxes, and wage rates	100.00	100.0

1. September 1952 to January 1965.

2. January 1965 forward.

Monthly data for 1963-87 for the series indicated by a star appear in appendix I.

Annual indexes back to 1910 and monthly and quarterly indexes for 1923-60 were published in USDA, Statistical Reporting Service, Statistical Bulletin No. 319, 1962. A detailed description of the 1950 and 1959 revisions of the indexes appears in the April-July 1959 issue of *Agricultural Economics Research*. A technical description of the 1976 revision may be obtained from the U.S. Department of Agriculture, National Agricultural Statistics Service, Agricultural Statistics Board, Washington, DC 20250. Reference should also be made to the following USDA publications for: (1) Method of Computing Parity Prices—*Agricultural Prices*, each January issue; (2) a description of the major indexes and Parity Index—*Major Statistical Series, Volume 1, Agricultural Prices, Expenditures, Farm Employment, and Wages*, Agricultural Handbook 671; (3) years through 1975—supplements to the September issues of *Agricultural Prices*; (4) 1976-1985—the August issues of *Agricultural Prices*; (5) 1986 and later years—the July issues of *Agricultural Prices*; and (6) additional detail concerning these indexes—*Scope and Methods*, Miscellaneous Publication No. 1308 issued in September 1983. These publications are available from the U.S. Department of Agriculture, National Agricultural Statistics Service, Agricultural Statistics Board, Washington, DC 20250.

To facilitate comparison with other indexes, the indexes of prices paid by farmers have been converted to a 1977 reference base. The converted indexes supplement, but do not replace the official indexes, which, pursuant to law, are published on the 1910-14=100 base. Annual indexes back to 1910 and monthly indexes back to 1965 on the new base, along with comparable indexes on the 1910-14 base, are published in the *Agricultural Prices* 1980 and subsequent annual summaries. Data for current periods on both bases, appear in the January, April, July, and October monthly issues of *Agricultural Prices*.

4. The Parity Ratio is the quotient, expressed as a percentage, obtained by dividing the Index of Prices Received by Farmers by the Parity Index (Prices Paid, Including Interest, Taxes, and Wage Rates), both indexes on the 1910-14=100 base. It measures whether the purchasing power of farm products are, on the average, greater or less than the purchasing power of farm commodities in the base period, 1910-14.

A ratio that incorporates and reflects Government payments made directly to farmers is identified as an "Adjusted Parity Ratio." It is described in detail in the January 1964 issue of *Agricultural Prices*. Since 1964, data for the two most recent years for the Adjusted Parity Ratio appear in each January issue of *Agricultural Prices*. (A monthly "preliminary Adjusted Parity Ratio" is described in the April 1967 issue of *Agricultural Prices*, and the figures appear in each monthly issue through February 1986 and, thereafter, in the April, July, October, and January monthly issues.) Annual data for 1963-91 are shown in the following table:

Adjusted Parity Ratio, 1963-91
[1910-14=100]

Year	Year
1963	1978
1964	1979
1965	1980
1966	1981
1967	1982
1968	1983
1969	1984
1970	1985
1971	1986
1972	1987
1973	1988
1974	1989
1975	1990
1976	1991
1977	

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1. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). The Consumer Price Indexes (CPI's) are statistical measures of the average changes in the cost of fixed, or constant, "market baskets" of consumer goods and services purchased by the index population, either all urban consumers or urban wage earners and clerical workers.

The most recent major revision of the indexes became effective with the release of CPI data for January 1987. Principal objectives of this revision were: (1) To update the content and weights of the market basket of goods and services priced for the CPI; (2) to update the statistical sample of urban areas, outlets, and unique items used in calculating the CPI; (3) to improve the statistical methods used for computing a number of CPI components; and (4) to improve operating procedures. BLS Report 736, titled: "The Consumer Price Index: 1987 Revision", dated January 1987, provides background information and further detail on these changes.

The reference base for the indexes was updated to 1982-84=100 effective with the release of the CPI data for January 1988. All indexes that had been expressed on a base of 1967=100, or any other base through December 1981, were rebased to 1982-84=100. Only indexes with a base later than December 1981 maintained their current bases. The indexes as published in this edition of BUSINESS STATISTICS, and beginning with the February 1988 SURVEY OF CURRENT BUSINESS, are on the new reference base.

CPI's are based on prices of food, clothing, shelter, and fuels, transportation fares, charges for doctors' and dentists' services, drugs, and other goods and services that people buy for day-to-day living. Prices are collected in 85 urban areas across the country from about 57,000 housing units, and about 19,000 retail establishments—grocery and department stores, hospitals, filling stations, and other types of stores and service establishments. 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 every month in the five largest geographic areas and every other month in other areas. Prices of most goods and services are obtained by personal visits of BLS representatives.

The quantity and quality of items contained in the respective market baskets are held constant except at times of weight revisions. The CPI's reflect, therefore, only changes in prices and none of the other factors that affect family living expenses, such as change in family composition; they do not reflect changes in the kinds and amounts of goods and services families buy, or the total amount families spend for living, or the differences in living costs in different places.

The indexes are of the weighted aggregative type. When it was first issued in 1919 (with index data going back to 1914), the time-to-time changes in retail prices were weighted according to expenditures of wage earners and clerical workers in large cities during 1917-19. At different times it has been necessary to modernize the samples and methods of calculation of the index and to bring up to date the "market basket" of goods and services included. The index numbers as currently published, utilize the 1917-19 expenditure weights for the 1913-24 period; 1934-36 expenditure weights for the 1930-49 period; and the average of the two sets of weights for the intervening period of 1925-29. Weights for 1950-52 represent 1947-49 spending patterns, and those for 1953-63 were estimated 1952 spending patterns, based on a study of consumer expenditures in 1950. Weights for 1964-77 were derived from reported expenditures of a carefully selected sample of wage-earner and clerical-worker families and individuals in 1960-61 and adjusted for price changes between the survey dates and 1963. Weights for 1978-86 were derived from a consumer expenditure survey

undertaken over the 1972-73 period and adjusted for price change between the survey dates and December 1977. Beginning in 1987 the spending patterns reflected in the CPI's were derived from a consumer expenditure survey undertaken over the 1982-84 period. The reported expenditures were adjusted for price change between the survey dates and December 1986.

The BLS Consumer Expenditure Survey (CES) provides the basis for selecting and weighting the market baskets to be priced in the CPI's. For the 1987 revision, expenditures from the 1982-84 period were used. The CES is composed of two separate surveys—an interview survey and a diary survey, both conducted by the Bureau of the Census for BLS. Each expenditure reported in the two surveys is coded to one of 364 entry level items (ELI's), which constitute the most detailed level of the CPI classification structure. These ELI's are grouped to form 184 price item strata, which is the lowest level for which expenditure weights are calculated. These strata are combined to form 69 expenditure classes—categories of commodities or services with similar characteristics. Expenditure classes are joined to form the seven major groups of expenditures: (1) Food and beverages, (2) housing, (3) apparel and upkeep, (4) transportation, (5) medical care, (6) entertainment, and (7) other goods and services. Coverage of some of the major component indexes is described in the following paragraphs.

The *food* index component includes both food at home and food away from home (restaurant meals and other food bought and eaten away from home). Prior to the revision made in January 1953, prices for "food away from home" were estimated to move like prices for "food at home," but since that date have been measured by prices for restaurant meals and snacks (including vending machine items). (See the technical notes, "Food Distribution Changes and the Consumer Price Index," Reprint No. 2434 from the January 1964 *Monthly Labor Review*; "Calculation of Average Retail Food Prices," published in the January 1965 issue of the *Monthly Labor Review*; and "Revision of the CPI Food Outlet Sample," Reprint No. 2563 from the January 1968 *Monthly Labor Review*.)

The *housing* index measures changes in rental costs and expenses connected with the acquisition and operation of a home. The CPI-U, beginning with data for January 1983, and the CPI-W, beginning with data for January 1985, reflect a change in methodology used to compute the homeownership component. A rental equivalence measure replaced the asset-price approach. (For a detailed discussion of the change in the treatment of homeownership, see "Changing the Homeownership Component of the Consumer Price Index to Rental Equivalence," *CPI Detailed Report*, January 1983.) Effective with the 1987 revision, owner use of vacation property is included in the weight for lodging while out of town.

The *private transportation* index includes prices paid by urban consumers on such items as new and used automobiles, gasoline, motor oil, tires, repairs and maintenance, insurance, registration fees, driver's licenses, parking fees, etc. City bus, streetcar, subway, taxicab, intercity bus, airplane, and railroad coach fares are some of the components of the public transportation index. (Additional information may be found in the August 1956 *Monthly Labor Review*, Reprint No. 2202; the January 1978 and subsequent *CPI Detailed Reports*; and the May 1961 *Monthly Labor Review*, Reprint No. 2368.) Effective with the 1987 revision, all sales of used cars by consumers are subtracted from used car purchases; thus, used car prices represent purchases by consumers from the nonconsumer sectors. In addition, "quality adjustments" are being made to used as well as new car prices.

The *medical care* index includes prices for several drugs and prescriptions; other medical care commodities; physicians' services; dentists' fees; other professional services; hospital rooms, other hospital and medical care services; and health insurance. Health insurance is represented by prices for a number of hospital and professional services for which claims are paid, plus a small portion representing the insurer's earnings or "overhead." (For details on health insurance, see the technical note, "Health Insurance in the Revised CPI," in the November 1964 *Monthly Labor Review*. See also the August 1978 and April 1988 *Monthly Labor Reviews*.) Effective with the 1987 revision, the presentation of health insurance is changed although the basic pricing method is not. The benefits portion of premiums is allocated to appropriate expenditure categories; the index for health insurance now represents only the retained earnings portion of the premiums.

In December 1991, the relative importance of the goods and services priced for the CPI-U was as follows: Food and beverages, 17.627; housing, 41.544; apparel and upkeep, 6.097; transportation, 17.013; medical care, 6.689; entertainment, 4.357; and other goods and services 6.674. For the CPI-W, the comparable figures were as follows: Food and beverages 19.547; housing, 39.078; apparel and upkeep, 6.092; transportation, 18.939; medical care, 5.674; entertainment, 4.027; and other goods and services, 6.643.

In calculating the index, price changes for the various items in each location are combined with weights that represent their importance in the spending of their respective index population. Individual urban area data are then combined in the total index with weights based on estimated 1980 population of all urban consumers or of urban wage earners and clerical workers. Over half (57%) of the weight is carried by the 29 largest areas (29% of the weight is carried by the 5 largest areas), 8.6 percent of the weight is carried by the 12 areas selected to represent the smallest areas with urban population less than 50,000. (These limits vary by region.)

Monthly releases of the U.S. Department of Labor contain, in addition to the national average, indexes for areas grouped by region and area size of the country, and for the following selected local areas: Chicago-Gary-Lake County, IL-IN-WI; Los Angeles-Anaheim-Riverside, CA; New York-Northern New Jersey-Long Island, NY-NJ-CT; Philadelphia-Wilmington-Trenton, PA-NJ-DE-MD; San Francisco-Oakland-San Jose, CA; Baltimore MD; Boston-Lawrence-Salem, MA-NH; Cleveland-Akron-Lorain, OH; Miami-Fort Lauderdale, FL; St. Louis-East St. Louis, MO-IL; Washington, DC-MD-VA; Dallas-Fort Worth, TX; Detroit-Ann Arbor, MI; Houston-Galveston-Brazoria, TX; and Pittsburgh-Beaver Valley, PA.

Beginning January 1966, the BLS monthly releases show seasonally adjusted *national* indexes for selected groups, subgroups, and special groups where there is a significant seasonal pattern of price change. The factors currently in use were derived by the X-11-ARIMA Seasonal Adjustment Method. In January of each year, seasonally adjusted indexes and seasonal factors for the preceding 5 years are updated based on data through the previous December.

Monthly data for 1963-87 (where available) for those series indicated by a star appear in appendix I. Historical data tables, some providing annual data prior to 1963 and monthly or quarterly data prior to 1988, including the special group indexes are available from the Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC 20212.

The indexes are initially issued in a press release about two weeks following the month to which the data pertain. The *CPI Detailed Report* is issued about a month after the press release. Detailed data and quarterly articles analyzing price developments in the Nation's economy are presented in the *Monthly Labor Review*.

Additional information on the concept, methods of calculation, uses, and limitations of the index may be found in the following U.S. Department of Labor publications:

Monthly Labor Review

Articles:

- "The Revised Consumer Price Index" (February 1953)
- "New Features of the Revised Consumer Price Index" (April 1964)
- "New Consumer Price Indexes by Size of City" (August 1972, Reprint No. 2822)
- "Measuring Regional Price Change in Urban Areas" (October 1973, Reprint No. 2920)
- "Updating the Consumer Price Index—An Overview" (July 1974, Reprint No. 1979)

Technical Notes:

- "The Statistical Structure of the Revised Consumer Price Index" (August 1964)
- "Seasonally Adjusted CPI Components" (August 1966)

BLS Bulletins

- No. 593, "CPI Issues" (February 1980)
- No. 699, "Changes in Cost of Living in Large Cities in the United States, 1913-1941"
- No. 966, "Consumers' Prices in the United States, 1942-48"
- No. 1039, "Interim Adjustment of Consumers' Price Index"
- No. 1140, "The Consumer Price Index: A Layman's Guide"
- No. 1165, "Consumer Prices in the United States, 1949-52"
- No. 1256, "Consumer Prices in the United States, 1953-58"
- No. 1366, "Seasonal Factors—Consumer Price Index: Selected Series, June 1953-May 1961"
- No. 1517, "The Consumer Price Index: History and Techniques"
- No. 1554, "The Consumer Price Index: Technical Notes"
- No. 1711, "BLS Handbook of Methods"
- No. 2134-2, "BLS Handbook of Methods"
- No. 2285, "BLS Handbook of Methods"

Pamphlets

- "Facts About the Revised Consumer Price Index" (1978, Revised)
- "Using the CPI for Escalation - Report 761" (1991)

Other

- Report No. 517, "The Consumer Price Index: Concepts and Content Over the Years" (Revised, May 1978)
- Report No. 736, "The Consumer Price Index: 1987 Revision" (January 1987)

2. Includes data for items not shown separately.

1. See note 1 for p. 24.
2. Includes costs for lodging while out of town and tenants' insurance not shown separately.

3. This index reflects costs associated with homeowners' consumption of shelter service. This index combines the subindexes of owners' equivalent rent and household insurance. See also note 1 for p. 24.

No data are available prior to December 1982.

4. Includes residential telephone, water, sewerage service, and other utilities not shown separately.

5. Titled "fuel oil, coal and bottled gas" in the 1986 and earlier editions of BUSINESS STATISTICS.

6. Includes data for items not shown separately.

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1. For a detailed discussion on the Consumer Price Index, see note 1 for p. 24. Seasonally adjusted price indexes are designed to eliminate the effect of changes that normally occur at the same time and in about the same magnitude every year—such as price movements resulting from changing climatic conditions, production cycles, model changeovers, holidays, and sales.

The factors currently used for computing the seasonally adjusted indexes were derived by the X-11-ARIMA Seasonal Adjustment Method. In January of each year, seasonally adjusted indexes and seasonal factors for the preceding 5 years are updated based on data through the previous December. Detailed descriptions of BLS seasonal adjustment procedures are available upon request from the Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC 20212.

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1. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). The Producer Price Index, formerly known as the Wholesale Price Index, is designed to measure changes in prices received by domestic producers for finished, intermediate, and crude goods, as well as for particular industries and their products. The change to the name "Producer Price Index," which became effective when March 1978 data were released, was made to reflect the coverage of the data more accurately. At the same time there was a shift in analytical emphasis from the All Commodities Index, the Industrial Commodities Index, and other traditional commodity grouping indexes to the Finished Goods Index and other stage-of-processing (SOP) indexes.

Prices used in calculating Producer Price Indexes represent prices received by domestic producers in the first important commercial transaction for each commodity. These indexes measure only "real" changes; i.e., price changes not influenced by changes in quality, quantity, terms of sale, level of distribution, unit prices, or source of price. Most quotations are the selling prices of selected manufacturers or other producers, although a few prices are those quoted on organized exchanges or markets. Transaction prices are sought instead of list or book prices.

Producer Price Indexes can be analyzed by stage of processing. SOP indexes (formerly known as economic sector indexes) organize products according to the class of buyer and the degree of processing, manufacturing, or assembling to which the products are subjected before they enter the market. The three major SOP indexes are: (1) *Finished goods*, commodities that will not undergo further processing and are ready for sale to the ultimate user (e.g., automobiles, meats, apparel, machine tools); (2) *Intermediate materials, supplies, and components*, commodities that have been processed but require further processing before they become finished goods (e.g., steel mill products, cotton yarns, lumber, flour) as well as of goods that are physically complete that are purchased by business firms as inputs for their operations (e.g., diesel fuel and paper boxes); and (3) *Crude materials for further processing*, products entering the market for the first time which have not been manufactured or fabricated but which will be processed before becoming finished goods (e.g., scrap metals, crude petroleum, raw cotton, livestock).

Another structure, by commodity, organizes products by similarity of end-use or material composition. Each individual product is grouped under one of 15 major commodity groups, two of which comprise the Farm Products and Processed Foods and Feeds Index and the other 13 of which compose the Industrial Commodities Index; the All Commodities Index is composed of all 15 major commodity groups.

For analysis of general price trends, SOP indexes are more useful than commodity grouping indexes. This is because commodity grouping indexes sometimes produce exaggerated or misleading signals of price changes by reflecting the same price movement through various stages of processing. For example, suppose that a price rise for steel scrap results in an increase in the price of steel sheet and then an advance in price of automobiles produced from that steel. The All Commodities Index and the Industrial Commodities Index would

reflect the same price movement three times—once for the steel scrap, once for the steel sheet, and once for the automobiles. This multiple counting occurs because the weighting structure for the All Commodities Index uses the total shipment values for all commodities at all stages of processing. On the other hand, the Finished Goods Index would reflect the change in automobile prices, the Intermediate Materials Index would reflect the steel sheet price change, and the Crude Materials Index would reflect the rise in the price of steel scrap.

Some products may be allocated to more than one stage-of-processing grouping. For example, while most gasoline is sold to individual consumers as a finished good, business firms also purchase gasoline as an intermediate product for their motor vehicle fleets. In such cases, the total weight of the commodity is distributed among the various SOP categories according to the class of customer and the relative proportion of output that is consumed at each level of processing. For the period 1947-66, the basis of this distribution was the BLS interindustry study for the year 1947. For the period 1967-75, the 1958 interindustry study of the U.S. Department of Commerce, Bureau of Economic Analysis (BEA) was used as the basis for distribution. The 1967 interindustry study of the BEA was used as the basis for distribution from 1976 through 1980. Since then, 1972 input-output data have been used.

The BLS revises the Producer Price Index weighting structure periodically when data from industrial censuses become available. After January 1987, the weighting structure was derived from the total net selling value of commodities reported in the 1982 economic censuses. From 1976 through 1986, the weighting structure incorporated values of net shipments of commodities in 1972 as reported in the census of manufactures, census of minerals industries, and other sources. From 1967 through 1975, weights were based on the 1963 industrial censuses and, from 1961 through 1966, on the 1958 censuses. 1987 weights will be incorporated as of January 1992.

The index as published in the 1971-86 editions of BUSINESS STATISTICS and, the February 1971-January 1988 issues of the SURVEY OF CURRENT BUSINESS, reflects the series converted to the reference base 1967=100 except where noted. Indexes on the 1967 base were first published by BLS when January 1971 data were released.

The index as published in the 1988 and subsequent editions of BUSINESS STATISTICS and, beginning with the February 1988 SURVEY OF CURRENT BUSINESS, reflects the series converted to the reference base 1982=100. Indexes were first published by BLS on the 1982=100 base when January 1988 data were released.

These rebasings of the Producer Price Index did not affect the general concepts and methods used in the index nor were they accompanied by a change in the base weights. The methodology employed in converting to the new reference bases involved routine arithmetical calculations that did not affect the continuity or statistical comparability of the index series.

In January 1986, BLS essentially completed the first comprehensive revision of the Producer Price Indexes. This revision has resulted in the following improvements to the indexes: (1) The new system is no longer commodity-oriented but is instead industry-oriented, which is more consistent with the structures used for many other measures of economic performance; (2) scientific sampling techniques have replaced the previous judgmental procedures; (3) coverage of production has been expanded; (4) samples of producers and products have been expanded; and (5) imports have been completely eliminated. This revision established a new system of price indexes, consisting of three major components: (1) Industry and product price indexes; (2) commodity price indexes; and (3) SOP price indexes. For more information regarding the underlying concepts and methodology of this revision, see Chapter 16, "Producer Prices," published in the *BLS Handbook of Methods*, Bulletin 2285. An updated chapter on PPI methodology will appear in the 1992 edition of this Handbook. 1988 Reprints are available upon request from the Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC 20212.

For periods shown here through 1966, the prices most often used were those that prevailed on a particular day of the month—usually Tuesday of the week containing the 15th of the month; beginning January 1967 prices relate, for the most part, to the Tuesday of the week in which the 13th of the month falls. For some commodities, however, another day may be selected as a more representative trading day; e.g., some farm products are priced as of Monday.

The index is calculated as a weighted average of price changes. The weights used in the index represent the total net selling value of commodities (including the value of sales for export) produced or processed in the United States and flowing into primary markets. Values are f.o.b. production point and exclusive of excise taxes. The weight universe includes values from industries classified as manufacturing, agriculture, forestry, fishing, mining, gas and electricity and public utilities. In recent years, the PPI system has been expanding into services and other sectors that do not produce physical outputs; it includes values for goods competitive with those produced in the producing sector of the economy, such as waste and scrap materials. All systematic production is included, but individually priced items, such as works of art, are excluded.

Calculation of an individual commodity price index starts with the average of prices for individual company reporters, with individual company reports weighted

by each company's relative size. The short-term relative of price change, which is the ratio of the current month's average price to the previous month's average price, is then applied to the previous month's index to derive the current month's index. The individual weighted commodity price relatives are summed to produce a commodity grouping aggregate, which is then divided by its corresponding weighted value in the index base period. Similar procedures are used to derive indexes for SOP, durability of product groupings, and a number of special composite groupings.

For a more detailed description of Producer Price Indexes and methods of calculation, see *BLS Handbook of Methods*, Bulletin 2285, available from the Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC 20212. For more detailed descriptions of SOP indexes, see *Supplement to Producer Prices and Price Indexes, Data for 1983; Wholesale Prices and Price Indexes, Supplement 1976, Data for 1975; and Wholesale Prices and Price Indexes, January 1967 (Final) and February 1967 (Final)*.

Monthly data for 1963-87 for those series indicated by a star appear in appendix I. Historical data tables providing annual and monthly data for all available periods for all published series are available upon request from the Bureau of Labor Statistics, U.S. Department of Labor, Washington, DC 20212.

2. Prior to January 1967, entitled "farm products and processed foods." Although there were changes in composition, the index is considered to be comparable with the earlier series. The index now includes alcoholic and nonalcoholic beverages and manufactured animal feeds in addition to the items included in the former index.

3. This index includes alcoholic and nonalcoholic beverages and manufactured animal feeds corresponding to the census of manufactures classification system and is not comparable with the former index "processed foods" as published in the 1965 and earlier editions of BUSINESS STATISTICS.

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1. For a detailed discussion on Producer Price Indexes, see note 1 for p. 27. Effective January 1967, the title of this group of indexes was changed from "Commodities other than farm products and foods" to "Industrial commodities." Although the industrial commodities group of indexes excludes alcoholic and nonalcoholic beverages and manufactured animal feeds, it is considered generally comparable with the former group of indexes.

Effective January 1976, the following changes were made: (1) Textile products were reclassified and the weights were revised, and (2) fibers, yarns, threads, and fabrics were grouped largely according to current marketing patterns whereas; prior to January 1976, they were classified according to type of fiber.

2. Prior to January 1967, "machinery and equipment" and "transportation equipment" were combined and published as one special group index titled "machinery and motive products." Effective January 1967, they were separated into two major group indexes in the new regular classification structure. "Transportation equipment" as published in the 1967 and subsequent editions of BUSINESS STATISTICS includes the former subgroups of machinery and motive products titled "motor vehicles" and "transportation equipment, R.R. rolling stock."

3. See note 1 for this page.

4. Prior to January 1967 titled "motor vehicles" and shown formerly under "machinery and motive products" (see note 2 for this page).

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1. For a detailed discussion on Producer Price Indexes, see note 1 for p. 27. The seasonally adjusted data are designed to eliminate the effect of changes that normally occur at about the same time and in about the same magnitude each year. Such price movements result from normal weather patterns, regular production and marketing cycles, model changeovers, seasonal discounts, and holidays. Seasonal factors are revised at the beginning of each year to take into account the most recent 12 months of data. Seasonally adjusted data for the previous 5 years are thus subject to change each January.

2. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). The purchasing power of the dollar measures changes in the quantity of goods and services a dollar will buy at a particular date compared with a selected base date. It must be defined in terms of: (1) The specific commodities and services that are to be purchased with the dollar; (2) the market level (producer, retail, etc.) at which they are purchased; and (3) the dates for which the comparison is to be made. Thus, the purchasing power of the dollar for a selected period, compared with another period, may be measured in terms of a single commodity or a large

group of commodities, for example, all goods and services purchased by consumers at retail, or all finished commodities sold in primary markets.

The BLS publishes two basic price indexes that may be used to calculate the purchasing power of the dollar in the United States: (1) The Producer Price Index for Finished Goods, which relates to prices received by the producers of finished commodities at the primary market level, and (2) the Consumer Price Index (CPI-W, through 1977; CPI-U, beginning 1978) which measures average changes in retail prices of goods and services. See note 1 for p. 24 for an explanation of the difference between the CPI-W and the CPI-U. The original indexes from which the purchasing power series are computed are shown on pp. 24 and 27.

Beginning with data for January 1983, the purchasing power of the dollar as measured by the consumer prices was affected by a change in methodology used to compute the homeownership component. For additional information regarding this change, see note 1 for p. 24.

The purchasing power of the dollar is computed by dividing the price index number for the base period by the price index number for the date to be compared, and expressing the result in dollars and cents. The base period is the period in which the purchasing power is \$1.00. The purchasing power of the dollar for Dec. 1991 based on the CPI-U is computed as follows:

CPI-U for base period of 1982-84		CPI-U for Dec. 1991		Purchasing power of the dollar for Dec. 1991
100.0	÷	137.9	=	\$0.725

Monthly data for 1963-87 appear in appendix I. Historical data tables providing monthly data back to 1913 (based upon the CPI), and back to 1947 (based upon the PPI), are available upon request.

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1. Source: U.S. Department of Commerce, Bureau of the Census. New construction covers the complete original erection of structures; mechanical installations such as plumbing, heating, elevators, etc. to new or existing structures; additions, alterations, and major replacements to an existing building, or the conversion of space to other uses requiring structural changes; outside construction of fixed structures such as highways and streets, railroad tracks, air fields, piers, sewers, electric power and distribution lines, and similar facilities built into or fixed to the land.

Value put in place estimates represent the value of construction installed or erected at the site during a given period. For an individual project, this includes the cost of materials installed or erected; cost of labor (both by contractors and force account) and a proportionate share of the cost of construction equipment rental; contractor's profit and project owner's overhead costs; architectural and engineering fees; interest and taxes paid during construction; and miscellaneous costs charged to the project on the owner's books.

The total value-in-place for a given period is the sum of the value put in place on all projects underway during this period, regardless of when work on each individual project was started or when payment was made to the contractors. For some categories, published estimates represent payments made during a period rather than the value of work actually done during that period. For other categories, estimates are derived by distributing the total construction cost of the project by means of historic construction progress patterns.

The distinction between private and public (Federal, State, and local) construction is made on the basis of ownership during the construction period, not source of funds.

Where the basic data for an individual series are not available on a monthly basis, no monthly value put in place estimates are published, but monthly estimates are included in all affected totals. The methodology described below applies to the current estimating procedures.

Construction cost of one-unit houses started each month is estimated using data from the Census Bureau's Housing Starts Survey and Housing Sales Survey. The estimated cost of all single units started is then distributed into monthly value put in place by applying fixed patterns of monthly construction progress.

Construction cost is estimated separately for units built to be sold or rented and units built by the owner or for the owner on contract. In both cases, the total cost is obtained by multiplying the number of units started by an average construction cost per unit. For units built to be sold or rented, the average construction cost is the average sales price at the time of start multiplied by the factor 0.7813. This factor eliminates an estimate of the cost of "nonconstruction" items such as raw land, marketing costs, closing costs, and moveable appliances. The average construction cost for units built by the owner or for the owner on contract is the average contract value at time of start increased by the factor

1.0190 to eliminate "nonconstruction" items and add the value of land development done by the builder.

Value-in-place estimates for buildings of two or more units are directly measured from monthly progress reports from a sample of new residential building projects selected from reports of housing units in the Housing Starts Survey. Once a project is started, the owner is asked to report the value of work done each month until the project is completed. About 3,000 projects are in the sample each month, including newly selected projects and projects carried over from previous months.

Improvements to private residential buildings are estimated on the basis of quarterly surveys of owners of residential properties. No monthly estimates are published for this series.

Private nonresidential construction expenditure estimates are based on a Monthly Construction Progress Survey conducted by the Bureau of the Census. This survey uses three different sources for identifying nonresidential projects: (1) Computer tapes from the F.W. Dodge Division of the McGraw-Hill Information Systems Company for projects valued at \$50,000 or more in the entire United States except Hawaii; (2) Building permits from the permit-issuing places of Honolulu and Maui in Hawaii; and (3) Projects in the United States in a sample of areas not covered by building permit systems or reported by Dodge.

A sample of building projects is selected from these sources and monthly progress reports are requested from the owners, builders, or architects responsible for these buildings. Estimates are prepared from the sample data; they are adjusted for undercoverage and appropriate imputations are made for nonrespondents. About 5,800 projects are in the survey at any one time.

Annual farm nonresidential construction expenditure estimates are extrapolated from the annual U.S. Department of Agriculture report, *Income and Balance Sheet Statistics*. No monthly or quarterly estimates are published for this series.

Annual estimates for most privately owned public utilities (covering construction expenditures by railroads and by electric light and power, gas, and petroleum pipeline companies) are based on data obtained from Federal regulatory agencies or from cooperating private companies and trade associations. Preliminary current values for electric are from the Bureau of the Census' quarterly Plant and Equipment survey and railroad values are from the Interstate Commerce Commission's quarterly survey. No monthly estimates are published for these series.

Expenditure estimates for the telecommunications category are developed from two sources. First, telephone construction is obtained from a number of the largest independent telephone companies and adjusted to account for the entire industry. Estimates prior to January 1984 were developed by the American Telephone and Telegraph Company. The second source, television cable construction, was first introduced in Current Construction Reports, C30 series, *Value of New Construction Put in Place* in May 1989. These estimates are based on forecasts from *CableVision* magazine.

Monthly expenditure estimates for State and locally owned construction are based on progress reports from a sample of projects owned by State and local governments. The sampling and estimation procedures used to obtain these data are similar to those for the private nonresidential buildings survey. The sole source of information for identifying State and local projects is F.W. Dodge. About 5,200 projects are in the survey at any one time, including newly selected projects as well as projects carried over from previous months.

Expenditure estimates for virtually all types of federally owned construction are based on reports compiled by the responsible Federal agencies.

Seasonal adjustment factors for most series, including the series for which monthly values are estimated but not published, have been computed using X-11-ARIMA, a modification of the Census Method II seasonal adjustment program. Seasonally adjusted values are computed for individual types of construction, and the values for individual types are combined as required to obtain values for total series.

Monthly data for 1963-87 for series indicated by a star appear in appendix I. Monthly estimates on a more detailed basis are published currently by the Bureau of the Census in Current Construction Reports, C30 series, *Value of New Construction Put in Place*, which is available on a subscription basis. Monthly data for 1964-91 for all series, as well as comprehensive explanations of the data, are available upon request from the Census Bureau.

2. Includes data not shown separately.

1. See note 1 for p. 30.
2. Includes data not shown separately.

1. Source: F.W. Dodge Division, McGraw-Hill Information Systems Company. Data cover new construction, additions, and major alteration projects; maintenance work is excluded.

Beginning January 1969, data cover construction in 50 States and the District of Columbia. In the period 1956-68 data cover 48 contiguous States and the District of Columbia; prior to 1956, 37 Eastern States and the District of Columbia.

F.W. Dodge construction statistics are based on data obtained from: Dodge Reports, permit place reports, publications, and sampling. Permit place and sample information are used for one- and two-family house data. The bulk of nonresidential and residential data is based on Dodge Reports.

The valuation figures contained in Dodge construction statistics represent, as nearly as possible, actual construction costs. Construction cost of a project is exclusive of land, architect's fees, and, in the case of manufacturing buildings, the cost of equipment that is not an integral part of the structure.

The monthly indexes of total value of construction are based on seasonally adjusted data. The annual indexes are based on annual figures and are not averages of the monthly indexes.

Monthly data prior to 1988 for series indicated by a star are in appendix I; monthly data for 1963-87 for all other series appear in earlier editions of BUSINESS STATISTICS. Except for the index, the annual totals for 1963-91 reflect revisions not distributed to the monthly data.

2. Source: *Engineering News-Record*. Data are not directly comparable with *Engineering News-Record's* discontinued New Plans series, which were shown in the 1984 and earlier editions of BUSINESS STATISTICS, because of different minimum project values. Data cover new construction plans for public (Federal, State, and local) and private projects in the United States, and as before, exclude one and two-family homes.

The New Plans series is drawn from a database called Dodge Major Projects and covers projects valued at \$750,000 or more entering the planning stage. The database covers 49 States, with Hawaii excluded.

Monthly totals are combinations of 4- or 5-week periods ending on the Thursdays falling within the month. For this reason, care should be exercised in making month-to-month comparisons. Monthly figures may vary from year-to-year cumulative totals because F.W. Dodge routinely adjusts both its plans and contracts as corrected information becomes available.

3. Source: U.S. Department of Commerce, Bureau of the Census. A housing start consists of the start of construction on a new housing unit, when located within a new building that is intended primarily as a housekeeping residential building designed for nontransient occupancy. Start of construction for private housing units is defined as the beginning of excavation for the footings or foundation of a building; for public housing units it is defined as when the construction contract is awarded. All housing units in a multifamily building are counted as being started when excavation for the building is started. A housing unit is a single room or group of rooms intended for occupancy as separate living quarters by a family, by a group of unrelated persons living together, or by a person living alone. A housekeeping residential building is one consisting primarily of housing units. Housing starts exclude group quarters (such as dormitories, and rooming houses), transient accommodations (such as transient hotels, motels, tourist courts), and mobile homes. Publicly owned housing includes housing units in buildings for which construction contracts were awarded by Federal, State, and local governments. Units in structures built by private developers for sale upon completion to local public housing authorities under the U.S. Department of Housing and Urban Development "Turnkey" program are classified as private.

The seasonal factors were developed using the X-11 version of the Census Method II. A description of the X-11 version appears in Bureau of the Census Technical Paper No. 15, "The X-11 Variant of the Census Method II Seasonal Adjustment Program."

Monthly data for 1963-87 for total privately-owned housing units started, unadjusted and seasonally adjusted at annual rates, appear in appendix I. Monthly data for 1961-87, except as noted below, for all other series appear in earlier editions of BUSINESS STATISTICS. Monthly data for 1977-78 (for total, private and public new housing units started) and 1978 (for one-family structures, privately owned, seasonally adjusted) have been revised and are available upon request. For a comprehensive explanation of the series shown here, see the January or April monthly issue of Current Construction Reports, C20 series, titled *Housing Starts*, published by the Census Bureau.

4. Beginning January 1969, data cover construction in 50 States and the District of Columbia.

5. Data are for 5 weeks; other months, 4 weeks.

6. Beginning December 1988, series has been discontinued by the Census Bureau.

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1. Source: U.S. Department of Commerce, Bureau of the Census. New private housing units authorized by local building permits relate to the time of issuance of permits rather than to the actual start of construction. They do, however, provide some indication of activity in residential building in advance of the start of actual construction. Although construction is started on most residential buildings in the same month in which the permit is issued, several months or more may pass between the issuance of a permit and the start of construction. On the average, for all types of structures combined, a very small percentage of the units authorized by permits are not built and the permits are allowed to lapse. In 1986, about 96 percent of all new residential construction was in areas requiring building permits.

Beginning January 1984, data are for 17,000 permit-issuing places. The coverage has varied in number over the years (16,000 for 1978-83; 14,000 for 1972-77; 13,000 for 1967-1971; 12,000 for 1963-66; and 10,000 prior to 1963), thus making the series not comparable throughout.

Basically, the procedure followed in arriving at the monthly building permit authorization totals involves cumulating monthly data from the most active permit-issuing places that were selected with certainty, with estimates for the less active places based on a stratified probability sample of these places.

Monthly data for total new private housing units authorized for 1963-87 appear in appendix I. Monthly data for 1962-87 for one-family structures authorized appear in earlier editions of BUSINESS STATISTICS. Revised data for 1978 are available upon request. For more detailed figures for new private housing units authorized by local building permits, see Current Construction Reports, C20 series, *Housing Starts*. For a more comprehensive explanation of the series, see Current Construction Reports, C40 series, *Housing Units Authorized by Building Permits*.

2. Sources: Beginning November 1977, the National Conference of States on Building Codes and Standards (NCSBCS) and U.S. Department of Commerce, Bureau of the Census. Prior to November 1977, Manufactured Housing Institute (MHI) and U.S. Department of Commerce, Bureau of the Census. Data are collected from all mobile home manufacturing establishments in the continental United States. The mobile homes must meet certain residential requirements in compliance with the Mobile Home Construction and Safety Standards Act of 1974. The Department of Housing and Urban Development (HUD) is responsible for its enforcement, with NCSBCS acting as its agent. Seasonally adjusted data are calculated by the Bureau of the Census.

Mobile homes are defined as single, expandable, and multiwide living units with undercarriages and wheels. No mobile offices, mobile classrooms, or other units designed not to be dwelling units are included. Each mobile home shipped is counted as an individual living unit; a multiwide unit consisting of two or more singles joined together at the site, is counted as a single unit.

Monthly seasonally adjusted data for 1963-87 appear in appendix I.

3. Source: U.S. Department of Commerce, Bureau of the Census. In 1990, the Department of Commerce Composite Construction Cost Index was replaced by two series—the Bureau of the Census Composite Construction Price Index (Fixed-Weights) and an Implicit Price Deflator.

The fixed-weighted price index is a weighted average of the individual price index series used to deflate the Value of New Construction Put in Place (VIP) series. In calculating the index, the weights (the composition of current dollar VIP in 1987 by category of construction) are held constant. Consequently, the index reflects only changes in prices. The implicit price deflator is a derived ratio of total current to constant dollar VIP (multiplied by 100). It is the average of the individual price indexes used in the deflation of VIP, but the prices are weighted by the composition of VIP each period. As a result, the implicit price deflator reflects not only changes in prices, but also changes in the composition of VIP, and its use as a measure of price change is discouraged.

The cost indexes currently used for calculating the construction activity series in 1987 prices and thus entering into the composite index are as follows: U.S. Department of Commerce, Bureau of the Census Single-Family Houses Under Construction (residential buildings, nonresidential buildings, military); Turner Construction Company (nonresidential buildings, military); U.S. Department of Transportation, Federal Highway Administration Composite Index (highways and streets, railroads, military, selected types); Bureau of Reclamation (conservation and development, railroads, sewers, selected types); Handy-Whitman Public Utility Indexes (electric light and power, gas, telecommunications, petroleum pipelines, and water supply facilities).

Monthly data for 1963-87 appear in appendix I.

4. Source: *Boeckh Building Cost Index Numbers*. E.H. Boeckh and Associates, an operating unit of American Appraisal Associates, compiles bimonthly national cost indexes (with 1926-29=100 as the original base period) for three types of construction: Residences; Apartments, hotels, and office buildings; and Commercial and factory buildings. The indexes shown here have been converted to a 1987 base by the U.S. Department of Commerce.

These national indexes are averages of indexes for 20 major pricing areas. For each of the locations, 115 elements of labor, material, insurance and tax rates are researched and computer processed. They are also adjusted to reflect the effect of labor shortages and labor efficiency, as determined by studies in each of the 20 pricing areas.

The selected building materials include common brick, common lumber, portland cement, structural steel, heating and plumbing equipment, glass, hardware, and paint. Materials cost data are obtained from construction contractors and building trade associations. Weights are based on studies by the compiler of actual building costs and vary by type of structure.

The indexes on the (1987=100) base are available back to 1961 for annual data and 1976 for bimonthly data.

5. Source: *Engineering News-Record (ENR)*. The indexes shown here reflect data as of the 1st of the indicated month and are published on two bases, 1913=100 and 1967=100.

The Construction Cost Index and the Building Cost Index have four components each, three material items and labor. The material items for both indexes are: (1) The average mill price for structural steel shapes; (2) a 20-city average of wholesale prices for portland cement; (3) a 20-city average of wholesale prices for 2 inches x 4 inches S4S pine and fir in carload lots. The labor component of the Construction Cost Index, which is designed to show the movement of construction cost in general, is the common labor rate, ENR 20-city average, while the labor component of the Building Cost Index is the ENR 20-city average for three skilled labor trades, carpenters, bricklayers, and structural iron workers. The labor rates are shown on p. 57 under construction wages.

The component series are weighted according to their relative importance as determined by the compilers. Since the indexes are computed with real prices, the proportion a given component has in the index will vary with its relative escalation rate. In the late 1970's labor's share of the index decreased because materials prices were rising faster than wage rates. In 1971, when labor rates were rising rapidly, common labor represented 76 out of every 100 in the Construction Cost Index. This trend began to reverse itself in 1981. With common labor and material cost inflation slowing to a crawl in recent years, ENR's 1991 Construction Cost Index was:

	Percent
Common labor	77
Structural steel	13
Lumber, 2 x 4's	8
Portland cement	2

In the Building Cost Index, skilled labor represented 61 out of every 100 in 1971, and steel only 19. With skilled wage hikes and prime material costs increases now modest, ENR's Building Cost Index for 1991 was:

	Percent
Skilled labor	61
Structural steel	22
Lumber, 2 x 4's	14
Portland cement	3

Although the quantities involved remain constant, the materials weights are revised on rare occasions to reflect the new price quoting bases dictated by changes in pricing systems of supplying industries. Nevertheless, those weight changes affect the materials component very little during the year of change.

Since the skilled labor rate used in the Building Cost Index is considerably higher than the common labor rate used in the Construction Cost Index, a weight of 68.38 man-hours was substituted for the common labor weight of 200 man-hours.

Both the Construction Cost Index and the Building Cost Index measure the effects of wage-rate and material-price trends. They are not adjusted for productivity, managerial efficiency, competitive conditions, contractor overhead and profit, design changes or other less tangible cost factors.

In times when productivity is low, the selling price of construction, represented by the final costs of structures in place, will be relatively higher than the index. At the other extreme, when productivity is usually higher and bidding competition sharp, such as in a recession, the selling price of finished construction will generally fall below ENR's material and labor cost trends.

Monthly data for 1967-87 for Building and Construction Cost indexes appear in the 1971 and subsequent editions of BUSINESS STATISTICS; monthly data for 1951-66 are available upon request.

6. Source: U.S. Department of Transportation, Federal Highway Administration. The index is a composite derived from average contract prices for fixed amounts of the following items: Common excavation; surfacing (portland cement concrete pavement and bituminous concrete pavement); and structures (reinforcing steel, structural steel, and structural concrete). In more exact terms, the index is a price index, measuring price changes for fixed amounts of the items represented.

The base quantities for 1977 involved in these data are as follows: 282,964,000 cubic yards of roadway excavation; 17,997,210 square yards of portland cement concrete surfacing with an average thickness of 9 inches; 24,709,443 tons of bituminous concrete surfacing; 415,428,395 pounds of reinforcing steel for structures; 448,019,089 pounds of structural steel; and 2,320,758 cubic yards of structural concrete.

The annual figures are weighted averages derived from quarterly data. Quarterly data on the 1977=100 base for 1979-88 appear in earlier editions of BUSINESS STATISTICS; quarterly data for 1972-78 are available upon request. Detailed discussion of the index appears in *Public Roads Magazine*, volume 45, No. 1, June 1981. For further information, contact the Federal Highway Administration, Office of Engineering, Federal-Aid and Design Division, Washington, DC 20590.

7. Beginning 1963, data are from 12,000 permit-issuing places; prior thereto, 10,000.
8. Beginning 1967, data are from 13,000 permit-issuing places.
9. Beginning 1972, data are from 14,000 permit-issuing places.
10. Beginning 1978, data are from 16,000 permit-issuing places.
11. Beginning 1984, data are from 17,000 permit-issuing places.

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1. Sources: Federal Housing Administration (FHA) and Veterans Administration (VA). The data on applications for FHA home mortgage insurance represent requests by an approved lender for FHA to insure a mortgage on a proposed one- to four-family home, or home newly constructed while under FHA inspections. To make application for home mortgage insurance the lender submits a completed FHA application form and any other required documents to the FHA insuring office that serves the area in which the property to be covered is located. These data are limited to one- to four-family homes and therefore are closely comparable with the VA program referred to below.

Requests for VA appraisals are requests for determination of reasonable value of homes to be built (or already built) for occupancy by veteran owners only; they may be initiated by the veteran, lender, builder, owner, or sponsor. For the most part the requests relate to single-family homes.

For both the FHA and VA series the seasonally adjusted annual rate figures are based on adjusted daily rates (which are derived by dividing data for a given month by the number of working days in that month; i.e., excluding Saturdays, Sundays, and holidays).

The FHA and VA series indicate the importance of these Government programs in the field of new home construction. However, certain limitations in these series should be observed, particularly in their relation to other data. Although FHA and VA may make inspections during construction and the units may be counted as FHA or VA "starts," the permanent financing after completion is not always underwritten by FHA or VA. Also, some applications for FHA commitments or requests for VA appraisals may not be approved or may lapse. There is some duplication of units in applications for FHA commitments and requests for VA appraisals. In cases where both agencies issue valuation commitments the agency that makes the compliance inspection reports the unit as a start, even though the mortgage may finally be underwritten by the other agency or by neither agency.

Monthly data for 1963-87 (seasonally adjusted at annual rate) covering applications for FHA commitments and VA appraisals appear in appendix I; monthly data for 1961-87 (unadjusted) for FHA applications and VA appraisals appear in earlier editions of BUSINESS STATISTICS.

2. Source: Department of Housing and Urban Development, Federal Housing Administration. Data relate to the annual or monthly volume of home mortgages insured under the provisions of Title I, Sections 2 and 8, and Title II of the National Housing Act. It includes cases processed under the standard processing procedure as well as cases processed by approved lenders under the Direct Endorsement program.

The series includes only those mortgages on properties on which inspection of the completed home has been made and the mortgage endorsed for insurance by the Federal Housing Administration. The data represent the aggregate face amount of the insured mortgages.

Annual data prior to 1963 and monthly data for 1949-87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: Veterans Administration. Data represent the principal amount of home loans guaranteed or insured under the authority of the Servicemen's Readjustment Act of 1944, as amended (now Chapter 37, Title 38, U.S. Code). Section 1810 (Title 38, U.S. Code) provides for the guaranty of loans to veterans, the proceeds of which are to be used for purchasing residential property or constructing a dwelling to be occupied as the veteran's home or for the purpose

of making repairs, alterations, or improvements in property owned by him and occupied as his home. Originally, only veterans of World War II were eligible. Korean conflict veterans were made eligible by amendment to the act in July 1952. Public Law 89-358, approved March 3, 1966, extended eligibility to veterans with service after January 31, 1955; i.e., post-Korean veterans.

In 1944, the first mortgage home loans carried a guaranty of 50 percent of the loan, up to a maximum of 2,000. The guaranty has been increased over the years through subsequent legislation. As of February 1, 1988, the amount guaranteed may be 50 percent of the loan up to \$45,000, or 40 percent of the loan over \$45,000, with a maximum guaranty of \$36,000. Private lending institutions make the loans, with the Government guaranteeing the loan within the limits stated above. Beginning October 1, 1980, the Direct Loan Program, which authorized the Veterans Administration to lend up to \$33,000 directly to the veteran when funds from private sources were not available, was suspended by congressional action for everyone except severely disabled veterans who are eligible for and receive the Specially Adapted Housing Grant for "wheelchair housing."

Monthly data for 1947-87 appear in earlier editions of BUSINESS STATISTICS.

4. Source: Federal Housing Finance Board. Data represent the amount of Federal Home Loan Bank advances to member institutions. The members include some State-chartered savings and loan associations that are not insured by the Savings Association Insurance Fund (SAIF).

End-of-year data prior to 1963 and monthly data for 1939-87 appear in earlier editions of BUSINESS STATISTICS.

5. Source: Office of Thrift Supervision. Beginning 1985, the estimating procedure includes all thrift institutions insured by the Savings Association Insurance Fund (SAIF)—Federal Savings and Loan Insurance Corporation (FSLIC) prior to September 1989. These institutions include savings and loan associations (including building and loan associations, cooperative banks, homestead associations, and similar institutions) and mutual savings banks. The estimates before 1985 are based upon data reported monthly by only insured savings and loan associations. Accordingly, data from 1985 to present are not strictly comparable with prior data.

Statistics presented are estimates of the amount of mortgage loans closed during the specified periods. In general, these estimated totals are derived by expanding mortgage loans made by insured institutions on the basis of the relationship between assets of insured institutions and total assets of all thrift institutions.

Only loans on homes (one- to four-family residential properties and five or more family units) are included in the construction and purchase loan-purpose categories. Loans on homes for any other purpose (e.g., refinancing, repairs and reconditioning, taxes and insurance), and all nonhome loans are grouped under "all other purposes." Prior to 1973, loans on residential structures with five or more family units were not included in the construction and purchase loan-purpose categories, but came under "all other purposes."

All federally chartered associations are required to be members of the Federal Home Loan Bank System, while membership is optional for State-chartered associations.

Annual data prior to 1963 and monthly data for 1936-54, 1957-60, and 1965-87 appear in earlier editions of BUSINESS STATISTICS.

6. See 3d paragraph of note 5 for this page.

7. See 1st paragraph of note 5 for this page.

8. Beginning with February 1989 data, associations in conservatorship are excluded.

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1. Source: Newspaper Advertising Bureau, Inc. Beginning with 1988, the lineage data have been generated by an industry wide survey by the Newspaper Advertising Bureau, Inc. Prior to 1988 advertising lineage data for approximately 700 daily and 500 Sunday newspapers are combined with data for newspaper advertising rates. Adjustments are made for discounting practices.

The advertising of retail merchants is included under the classification "Retail". The advertising of products is included under the classification "National". The retail advertiser is the merchant whose customers are the consumers. The national advertiser is the manufacturer, who distributes to these merchants.

No comparable monthly data prior to 1981 and only quarterly data after December 1987 are available. Annual data are available upon request, back to 1959.

2. For information about the merchant wholesalers series, see footnotes 1 and 4 for pages 8 and 9.

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1. For information about retail trade sales, see footnotes 1 and 3 for pages 8 and 9.
2. The data include kinds of business that are shown separately in the Census Bureau's reports.

PAGES 39-41

1. For information about retail trade inventories, see footnotes 1 and 3 for pages 8 and 9.
2. The data include kinds of business that are shown separately in the Census Bureau's reports.
3. Source: U.S. Department of Commerce, Bureau of the Census. Multiunit firms are retail companies that had 11 or more retail stores at the time the sample was selected and that were also qualified for certainty selection. In order to qualify for certainty selection, the total annual sales of these companies had to exceed specified dollar-volume cutoffs, which varied by the company's kind-of-business classification. For more information about multiunit firms, see Current Business Reports, *Monthly Retail Trade, Sales and Inventories, Series BR*. The data prior to 1978 are not comparable with those shown here.

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1. Source: U.S. Department of Labor, Bureau of Labor Statistics. The data are derived from a sample survey of households that represents the U.S. civilian noninstitutional population 16 years and over. The survey is conducted each month by the Bureau of the Census for the Bureau of Labor Statistics. Information is collected by trained interviewers from a sample of about 60,000 households, representing 729 areas in 50 States and the District of Columbia. The data collected are based on the activity or status reported for the calendar week, Sunday through Saturday, that includes the 12th day of the month.

The concepts and definitions underlying labor force data follow.

Noninstitutional population.—The noninstitutional population includes members of the Armed Forces residing in the United States (as obtained from the Department of Defense) and the civilian noninstitutional population. The civilian noninstitutional population comprises all civilians 16 years of age and older who are not inmates of penal or mental institutions, sanitariums, or homes for the aged, infirm, or needy.

Labor force.—The labor force includes resident Armed Forces and the civilian labor force. The civilian labor force comprises all civilians classified as employed or unemployed, in accordance with the following criteria.

Employed.—Employed persons comprise those civilians who, during the survey week, were either (a) "At work"—those who did any work for pay or profit, or worked without pay for 15 hours or more on a family farm or business; or (b) "With a job but not at work"—those who did not work but had a job or business from which they were temporarily absent because of vacation, illness, labor-management dispute, bad weather, or because they were taking time off for various other reasons (whether or not they received pay for the time off, or were seeking other jobs). Each employed person is counted only once; those who hold more than one job are counted in the job at which they worked the greatest number of hours during the survey week.

Unemployed.—Unemployed persons are all civilians who had no employment during the survey week, were available for work, except for temporary illness, and had made specific efforts to find employment sometime during the prior 4 weeks. Persons who were waiting to be recalled to a job from which they had been laid off or were waiting to report to a new job within 30 days need not be looking for work to be classified as unemployed.

Civilian labor force participation rate.—The civilian labor force participation rate represents the proportion of the civilian noninstitutional population that is in the civilian labor force.

Employment-population ratio.—The employment-population ratio represents the proportion of the civilian noninstitutional population that is employed.

Long-term unemployed.—This group comprises those persons unemployed 15 consecutive weeks or longer. If a person ceases to look for work for 2 weeks or more (or is employed), the continuity of long-term unemployment is broken.

Unemployment rate.—The civilian worker unemployment rate represents the number of unemployed as a percent of the civilian labor force. The unemployment rates by occupation are based on the last full-time job lasting 2 weeks or more.

Civilians in the noninstitutional population, 16 years of age and over, who are not classified as employed or unemployed are defined as "not in the labor force." This group includes those engaged in own home housework, in school, unable to work because of long-term illness, retired, too old, seasonal workers for whom the survey week fell in an "off" season (not reported as unemployed), persons who became discouraged and gave up the search for work, and the voluntarily idle. Also included are those doing only incidental family work (less than 15 hours) during the survey week.

As indicated, there have been several periods of noncomparability in the labor force data shown in this and previous volumes, which resulted from the introduction of decennial census data into the Current Population Survey estimation procedures, expansions of the sample, and other improvements made to increase the reliability of the estimates. For strict comparability, the following allowances should be made when making certain data comparisons:

(1) Beginning in 1953, the introduction of 1950 census data added about 600,000 to the population and about 350,000 to the labor force, total employment, and agricultural employment. Other categories were relatively unaffected.

(2) Beginning in 1960, the inclusion of Alaska and Hawaii added about 500,000 to the population, about 300,000 to the labor force, and about 240,000 to nonagricultural employment. Other categories were not appreciably affected.

(3) Beginning in 1962, the introduction of 1960 census data reduced the population by about 50,000, and the labor force and total employment by about 200,000. Other categories were virtually unchanged.

(4) Beginning in 1972, the introduction of 1970 census data added about 800,000 to the population, and a little over 300,000 to the labor force and total employment. A subsequent adjustment in March 1973 (based on 1970 census data) which substantially affected major categories for white and black and other workers, resulted in a net increase of 60,000 in the labor force and total employment. Other categories were not significantly affected.

(5) Beginning in 1978, an expansion in the sample and changes in the estimation procedures added about 250,000 to the labor force and total employment.

(6) Beginning in 1982, changes in the estimation procedures and the introduction of 1980 census data caused substantial increases in the population and estimates of persons in all labor force categories. Rates on labor force characteristics, however, were essentially unchanged. In order to avoid major breaks in series, some 30,000 labor force series were adjusted back to 1970. The effect of the 1982 revisions on various data series and an explanation of the adjustment procedure used are described in "Revisions in the Current Population Survey Beginning in January 1982," in the February 1982 issue of *Employment and Earnings*. The revisions did not, however, smooth out the breaks in series occurring between 1972 and 1979 that are described above.

(7) Beginning in 1986, the population controls used in the estimation procedures were revised to reflect an explicit estimate of the number of undocumented immigrants (largely Hispanic) since 1980 and an improved estimate of the number of legal foreign-born immigrants for the same time period. As a result, the civilian population and labor force estimates were raised by nearly 400,000; civilian employment was increased by about 350,000. The Hispanic-origin civilian population and labor force estimates were raised by about 425,000 and 305,000 respectively, and civilian employment by 270,000. Overall and subgroup unemployment levels and rates were not significantly affected. Because of the magnitude of the adjustments for Hispanics, data were revised back to January 1980 to the extent possible. An explanation of the changes and their effect on estimates appears in "Changes in the Estimation Procedure in the Current Population Survey Beginning in January 1986" in the February 1986 issue of *Employment and Earnings*.

Nonagricultural employment in the labor force series differs in levels and trends from estimates compiled from establishment payrolls—see page 45 and following pages. Factors such as definitions, coverage, and sources account for the differences. This series, from the direct household-interview survey, includes domestics and other private household workers, self-employed persons, and unpaid family workers who worked 15 hours or more in the survey week in family-operated enterprises, whereas the payroll or establishment survey covers only employees on payrolls of nonfarm establishments; persons holding more than one job during the survey week are counted once in the household survey, but multiple jobholders are counted each time (i.e., on each payroll) in the establishment survey; and persons with a job not at work (i.e., absent because of bad weather, work stoppages, personal reasons, etc.) are included in the household survey but are excluded from the payroll survey if on leave without pay for the entire payroll period.

The Explanatory Notes of the original monthly source publication, *Employment and Earnings*, provide detailed information on the concepts underlying labor force data, historical comparability, estimating procedures, measures of sampling variability, as well as comparisons with similar series.

Annual and monthly data for 1963-87 for series shown with a star are in appendix I.

2. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). Since January 1980, the seasonal adjustment procedure used by BLS for labor

force data is the X-11-ARIMA (Auto Regressive Integrated Moving Average), which was developed at Statistics Canada as an extension of the standard X-11 method used for most of the 1970's. This procedure, which places more emphasis on recent data, provides better seasonal adjustments than does the X-11 method alone. A detailed description of the procedure appears in "The X-11-ARIMA Seasonal Adjustment Method," by Estela Bee Dagum, Statistics Canada Catalogue No. 12-564E, January 1983.

All seasonally adjusted civilian labor force and unemployment rate statistics, as well as the major employment and unemployment estimates, are computed by aggregating independently adjusted series. For example, the seasonally adjusted levels of total unemployment, civilian employment, the civilian labor force, and the seasonally adjusted unemployment rate are all produced by aggregation of the seasonally adjusted results for component series. The seasonally adjusted level of total unemployment is the sum of the seasonally adjusted levels of unemployment for the four sex-age groups (men and women 16-19, and men and women 20 years and over). Seasonally adjusted employment is the sum of the seasonally adjusted level of employment for eight sex-age-industry groups (men and women 16-19, and men and women 20 years and over, employed in nonagricultural and agricultural industries). The seasonally adjusted civilian labor force is the sum of all 12 components. Finally, the seasonally adjusted civilian worker unemployment rate is calculated by taking the total seasonally adjusted unemployment level as a percent of the total seasonally adjusted civilian labor force.

Monthly seasonally adjusted data for 1963-87 for the series shown with a star are in appendix I. Monthly seasonally adjusted data for 1948-91 are available from the source.

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1. See notes 1 and 2 for p. 42.

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1. See notes 1 and 2 for p. 42.

PAGE 45

1. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). Data relate to all of the United States and are obtained from payroll records from a sample of over 350,000 establishments employing over 41 million nonfarm wage and salary workers. For an explanation of the differences between employees on nonfarm establishment payrolls and nonagricultural employment as a component of the labor force series, see note 1 for p. 42.

Workers covered—The estimates of employees (other than government—see paragraph below) include all full-time and part-time workers in nonfarm establishments who received pay for the pay period, or any part of the pay period, that includes the 12th day of the month. Not covered are proprietors, the self-employed, unpaid volunteer or family workers, farm workers, domestic workers in households, military personnel, and employees of the Central Intelligence and National Security Agencies; salaried officers of corporations are included. Persons on an establishment payroll who are on paid sick leave (when pay is received directly from the employer), on paid holiday or vacation, or who work during a portion of the pay period even though they are unemployed or on strike during the rest of the period are counted as employed. Not counted as employed are persons who are laid off, on leave without pay or on strike for the entire period, or who are hired but have not been paid during the period. Persons who worked in more than one establishment during a single reporting period are counted each time reported, whether the duplication is due to turnover or dual jobholding. A distinction is made between the two principal categories of workers: (1) all employees and (2) production and related workers, construction workers, and nonsupervisory workers. "All employees" comprise all persons, both supervisory and nonsupervisory. For the definition of production or nonsupervisory workers, see note 1 for p. 48.

Employment in Federal Government establishments relates to civilian employees only and represents those who occupied positions the last day of the month. Intermittent workers are counted if they performed any service during the month. BLS considers regular full-time teachers (private and governmental) to be

employed during the summer vacation period whether or not they are specifically paid in those months.

The data are classified in accordance with the *Standard Industrial Classification Manual, 1987* (Office of Management and Budget). In June 1991, the BLS revised the employment estimates to reflect March 1990 benchmarks.

Benchmark adjustments—Employment estimates are compared periodically with comprehensive counts of employment, which provide "benchmarks" for the various nonfarm industries, and appropriate adjustments are made as indicated. The primary sources of benchmark information on employment data, by industry, are compiled quarterly by State agencies from reports of establishments covered under State unemployment insurance laws. These tabulations cover about 98 percent of the total nonagricultural employment in the United States. Benchmark data for the residual are obtained from the records of the Social Security Administration, the Interstate Commerce Commission, and a number of other agencies in private industry or government.

The estimates for the benchmark month are compared with new benchmark levels, industry by industry. If revisions are necessary, the monthly series of estimates between benchmark periods are adjusted at levels between the new benchmark and the preceding one, and the new benchmark for each industry is then carried forward progressively to the current month by use of the sample trends. Thus, under this procedure, the benchmark is used to establish the level of employment; the sample is used to measure the month-to-month changes in the level.

Data for all months since the last benchmark to which the series has been adjusted are subject to revision. To provide users of the data with a convenient reference source for the revised data, the BLS publishes, as soon as possible after each benchmark revision, a summary volume of employment, hours, and earnings statistics entitled *Supplement to Employment and Earnings*. Monthly and annual data for employment, hours, and earnings by industry are published in the July 1991 *Supplement to Employment and Earnings* (unadjusted data beginning 1989 and seasonally adjusted data beginning 1986). Prior periods are in *Employment, Hours, and Earnings, United States, 1909-90*, BLS Bulletin 2370 (1991).

Monthly data for 1963-87 for the series shown with a star are in appendix I. Estimates shown in earlier editions of BUSINESS STATISTICS are according to earlier benchmarks and seasonal adjustment factors then in use.

2. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). See note 1 for this page for sources, coverage, and definitions of the establishment (or payroll) employment statistics.

The seasonal movements that recur periodically (such as warm and cold weather, crop-growing cycles, holidays, vacations, etc.) are, generally, the largest single component of month-to-month changes in employment. After adjusting the data to remove such seasonal variation, the basic trends are more evident.

Since the early 1980's the BLS has also used the X-11-ARIMA procedure to seasonally adjust establishment-based series for all employees, women employees, production workers, hours, and earnings. Seasonal adjustment factors are directly applied to the component levels. Seasonally adjusted totals for employment series are then obtained by aggregating seasonally adjusted components directly, while hours and earnings series represent weighted averages of the seasonally adjusted component series. Seasonally adjusted data are not published for a small number of series characterized by small seasonal components relative to their trend-cycle and/or irregular components. These series, however, are used in aggregating to broader seasonally adjusted levels.

Seasonally adjusted average weekly earnings are the product of seasonally adjusted average hourly earnings and seasonally adjusted average weekly hours. Average weekly earnings in constant dollars, seasonally adjusted, are obtained by dividing average weekly earnings, seasonally adjusted, by the seasonally adjusted Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W), and multiplying by 100. Indexes of aggregate weekly hours, seasonally adjusted, are obtained by multiplying average weekly hours, seasonally adjusted, by production or nonsupervisory workers, seasonally adjusted, and dividing by the 1982 base. For total private, goods-producing, private service-producing, and major industry divisions, the indexes of aggregate weekly hours, seasonally adjusted, are obtained by summing the aggregate weekly hours, seasonally adjusted, for the appropriate component industries and dividing by the 1982 base.

Seasonal adjustment factors for Federal Government employment are derived from unadjusted data that include Christmas temporary workers employed by the Postal Service. The number of temporary census workers for the decennial census are removed, however, prior to the calculation of seasonal adjustment factors.

The revised seasonally adjusted series for the establishment data reflect experience through March 1991. Seasonal adjustment factors to be used for current adjustment appear in the June 1991 issue of *Employment and Earnings*.

Monthly data for 1963-87 for the series shown with a star are in appendix I and also appear in BLS Bulletin 2370, *Employment, Hours, and Earnings, United States, 1909-90*; however, the *Supplement to Employment and Earnings* published in July 1991 should be used for unadjusted data beginning April 1989 and seasonally adjusted data beginning 1986. Figures shown in earlier editions of

BUSINESS STATISTICS are not comparable since they are based on earlier benchmarks and seasonal adjustment factors.

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1. See note 1 for p. 48.
2. See note 2 for p. 45.

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1. See note 1 for p. 45.
2. See note 2 for p. 45.

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1. See note 1 for p. 45.
2. See note 2 for p. 45.
3. The government division includes Federal, State, and local activities such as legislative, executive, and judicial functions, as well as all government-owned and government-operated business enterprises, establishments, and institutions (arsenals, navy yards, hospitals, etc.), and government force account construction. The figures relate to civilian employment only. Federal Government employment excludes employees of the Central Intelligence Agency and the National Security Agency.
4. See note 1 for p. 48.

PAGE 48

1. Source: U.S. Department of Labor, Bureau of Labor Statistics. The employment estimates are for all 50 States and the District of Columbia.

See note 1 for p. 45 regarding sampling, estimating, industrial classification, seasonal adjustment procedure, and benchmark adjustments. The data cover all production and related workers in mining and manufacturing; construction workers in construction; and nonsupervisory workers in transportation, communication, electric, gas, and sanitary services; wholesale and retail trade; finance, insurance, and real estate; and services. Included are full-time and part-time workers who are on payrolls of private nonfarm establishments and who received pay for all or any part of the pay period that includes the 12th day of the month. Not counted are persons who are laid off, on leave without pay, or on strike for the entire period. Persons who worked in more than one establishment during a single reporting period are counted each time reported, whether the duplication is due to turnover or dual jobholding. The manufacturing series exclude manufacturing operations in government establishments such as arsenals and navy yards; these are covered in the government division, p. 47.

"Production and related workers" include working supervisors and all nonsupervisory workers (including group leaders and trainees) engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping, trucking, hauling, maintenance, repair, janitorial, guard services, product development, auxiliary production for plant's own use (e.g., power plant), recordkeeping, and other services closely associated with these production operations.

"Construction workers" include the following employees in the construction division: Working supervisors, qualified craft workers, mechanics, apprentices, laborers, etc., engaged in new work, alterations, demolition, repair, maintenance, etc., whether working at the site of construction or working in shops or yards at jobs (such as precutting and preassembling) ordinarily performed by members of the construction trades.

"Nonsupervisory employees" include employees (not above the working supervisory level) such as office and clerical workers, repairers, salespersons, operators, drivers, physicians, lawyers, accountants, nurses, social workers, research aides, teachers, drafters, photographers, beauticians, musicians, restaurant workers, custodial workers, attendants, line installers and repairers, laborers, janitors, guards, and other employees at similar occupational levels whose services are closely associated with those of the employees listed.

Monthly data for 1963-87 for series indicated by a star are in appendix I. Current national employment estimates for over 600 separate industries appear in the monthly publication *Employment and Earnings*.

2. See note 2 for p. 45.

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1. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). The hours and earnings series are based on reports of gross payroll and corresponding paid hours for full- and part-time production and related workers, construction workers, or nonsupervisory workers who received pay for any part of the pay period that included the 12th of the month. See note 1 for p. 48 for descriptions of these workers. Total payrolls are before deductions; e.g., for old-age and unemployment insurance, group insurance, withholding taxes, bonds, and union dues. The payroll figures also include pay for overtime, holidays, vacations, and sick leave (paid directly by the employer for the period reported). Excluded from the payroll figures are fringe benefits (health and other types of insurance, contributions to retirement, etc., paid by the employer); bonuses (unless earned and paid regularly each pay period); other pay not earned in the pay period reported (e.g., retroactive pay); tips; and the value of free rent, fuel, meals, or other payment in kind.

Hours and earnings are based on payroll information from a sample of industrial and commercial establishments collected under the cooperative Federal-State program. These estimates are based on a slightly smaller sample than that for employment estimates, since a few establishments that report employment do not furnish payroll and hour information. Reporting establishments are classified by industry on the basis of major product or activity as determined by sales or receipts data for the previous calendar year. The classification is in accordance with the *Standard Industrial Classification Manual, 1987*. Independent benchmarks are not available for the hours and earnings series. At the time of the annual adjustment of the employment series to new benchmarks, the levels of hours and earnings may be affected slightly by the revised employment weights (which are used in computing the industry averages for hours and earnings), as well as by the changes in seasonal adjustment factors also introduced with the benchmark revision. See 3d paragraph of note 1 for page 45.

Average weekly hours.—The workweek information relates to the average hours for which pay was received and differs from standard or scheduled hours. Such factors as unpaid absenteeism, labor turnover, part-time work, and work stoppages cause average weekly hours to be lower than scheduled hours of work for an establishment. Also, group averages further reflect changes in the workweek of component industries. When the pay period reported is longer than 1 week, the figures are reduced to a weekly basis. Some of the industries in this series are not seasonally adjusted because the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision. Overtime or other premium-paid hours are not converted to straight-time equivalent hours. (See note 4 for this page relating to average overtime hours worked, and note 2 for p. 54 for average hourly earnings excluding overtime.)

Average hourly earnings.—Data are on a "gross" basis; that is, they reflect not only changes in basic hourly and incentive wage rates but also such variable factors as premium pay for overtime and late-shift work, and changes in output of workers paid on an incentive basis. Also, shifts in the volume of employment between relatively high-paid and low-paid work and changes in workers' earnings in individual establishments affect the general average of hourly earnings. Averages of hourly earnings should not be confused with wage rates, which represent the rates stipulated for a given unit of work or time, while earnings refer to the actual return to the worker for a stated period of time. The earnings series do not represent total labor cost to the employer because of the exclusion of irregular bonuses, retroactive items, payments of various welfare benefits, payroll taxes paid by employers, and earnings for those employees not covered under the production-worker or nonsupervisory-worker definition. Similarly, average weekly earnings are not the amounts available to workers for spending, since they do not reflect such deductions as those for income and social security taxes, etc. Earnings expressed in 1982 dollars (real earnings) are adjusted for changes in purchasing power since the base period, 1982, by dividing the current earnings by the Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Method of computing industry series.—"Average weekly hours" for individual industries are computed by dividing production or nonsupervisory worker hours (reported by plants classified in each industry) by the number of production or nonsupervisory workers (reported for the same establishments). Similarly, "average hourly earnings" are obtained by dividing the reported total production or nonsupervisory worker payroll by the total production or nonsupervisory worker hours. Estimates for both hours and hourly earnings for nonfarm divisions

and major industry groups are averages (weighted by employment for hours and by aggregate hours for hourly earnings) of the figures for component industries. "Average weekly earnings" are computed by multiplying average hourly earnings by average weekly hours. In addition to the factors mentioned above, which exert varying influences upon average hourly earnings, average weekly earnings are affected by changes in the length of the workweek, part-time work, work stoppages, labor turnover, and absenteeism. Persistent long-term increases in the proportion of part-time workers in retail trade and many of the service industries have reduced average workweeks and have affected the average weekly earnings series. The BLS monthly publication, *Employment and Earnings*, provides current hours and earnings averages for about 470 separate industries.

Monthly data for 1963-87 for the series shown with a star are in appendix I. Seasonally adjusted monthly data beginning 1986, and monthly data not adjusted for seasonal variation beginning 1989 are in the July 1991 *Supplement to Employment and Earnings*. Prior periods are in *Employment, Hours, and Earnings, United States, 1909-90*; BLS Bulletin 2370 (1991).

2. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). Data for the private nonfarm sector, excluding government workers, are derived from employer reports to the States plus additional sources (including the Bureau of Census report, *County Business Patterns*, etc.) not covered in the sample reports. (See note 1 for this page and note 1 for pp. 45 and 48 for concepts and definitions for employees, production and nonsupervisory workers, hours, and earnings.)

Monthly hours and earnings data for total private payrolls and the transportation and communication, trade, finance, and services divisions are available beginning January 1964. Figures for all private employees are available beginning 1939. Monthly data beginning 1989 and seasonally adjusted data beginning 1986 are in the July 1991 *Supplement to Employment and Earnings*. Prior periods are in *Employment, Hours, and Earnings, United States, 1909-90*; BLS Bulletin 2370 (1991).

3. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). See note 1 for this page for definitions, concepts, computation, and limitations of average weekly hours, and average hourly and weekly earnings statistics.

Hours and earnings series are seasonally adjusted by applying factors directly to the corresponding unadjusted series; seasonally adjusted average weekly earnings are the product of seasonally adjusted hourly earnings and weekly hours. Weekly earnings in constant dollars, seasonally adjusted, are obtained by dividing seasonally adjusted average weekly earnings by the seasonally adjusted Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W).

Monthly data for 1963-87 for the series shown with a star are in appendix I. Monthly seasonally adjusted data beginning 1986 are in the July 1991 *Supplement to Employment and Earnings* (BLS). Prior periods are in BLS Bulletin 2370, *Employment, Hours, and Earnings, United States, 1909-90* (1991). Data shown in earlier editions of BUSINESS STATISTICS reflect earlier benchmarks and seasonal adjustment factors then in use.

4. Source: U.S. Department of Labor, Bureau of Labor Statistics. Overtime hours are defined as those for which premiums are paid because the hours are in excess of the number of hours of either the straight-time workday or the workweek during the pay period that includes the 12th day of the month. Weekend and holiday hours are included only if overtime premiums are paid. Hours for which only shift differential, hazard, incentive, or other similar types of premiums are paid are excluded.

The concept pertains to hours worked at a rate higher than straight time; it includes premium hours worked even when the weekly total is below 40. This may occur in industries where the normal workweek is under 40 hours (such as printing or apparel). On the other hand, hours paid for at double time for holidays actually worked (when straight time is paid for holidays not worked) would not be reported as overtime hours. Also excluded are hours worked beyond the normal workweek that are not compensated at premium rates.

Since overtime hours are premium hours by definition, the weekly hours and overtime hours do not necessarily move in the same direction from month to month; for example, premiums may be paid for hours in excess of the straight-time workday although less than a full week is worked, as noted above. Diverse trends at the industry-group level may also be caused by a marked change in hours for a component industry where little or no overtime was worked in both the previous and current months. In addition, such factors as work stoppages, absenteeism, and labor turnover may not have the same influence on overtime hours as on gross hours. Overtime hours are computed for individual manufacturing industries by dividing production worker overtime hours by the number of production workers.

Monthly data for 1963-87 are shown in appendix I.

5. This series is not seasonally adjusted because the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

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1. See note 1 for p. 50.
2. See note 3 for p. 50.
3. See note 4 for p. 50.
4. This series is not seasonally adjusted because the seasonal component is small relative to the trend-cycle and/or irregular components and consequently cannot be separated with sufficient precision.

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1. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). Aggregate paid hours of wage and salary workers, in all industries except agriculture, are derived principally from the BLS payroll statistics from establishments. See note 1 for pages 45, 48, and 50 for descriptions and concepts of the basic data for employees, production workers or nonsupervisory workers, and average weekly hours. These data are supplemented by data from the labor force survey, the Employment and Wages program, and BLS studies of wages and supplements in the manufacturing sector, which provide data on the regularly scheduled workweek of white-collar employees.

Data for seasonally adjusted average weekly gross hours (times 52 weeks) are multiplied by the seasonally adjusted employment for all employees (which include supervisors and salaried officers of corporations) for each industry division except manufacturing. Although the weekly hours data refer to production or nonsupervisory workers only, it is assumed for the hours computation in the nonmanufacturing industries that the length of the workweek is the same for both wage and salary workers. A separate estimate is developed for nonproduction workers' weekly hours in the manufacturing industry.

Monthly data for 1963-87 for all nonfarm industries are in appendix I.

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1. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). Indexes of aggregate weekly employee hours are derived from the BLS summary of employers' payroll statistics; see note 1 for pages 45, 48, and 50 of this volume for descriptions and concepts of the basic data for employees and hours, used in preparing the indexes. Aggregate employee hours are obtained by multiplying seasonally adjusted production or nonsupervisory workers by seasonally adjusted average weekly hours and dividing by the monthly average for the 1982 period. For total private, goods-producing, service-producing, and major industry divisions, the indexes are obtained by summing the seasonally adjusted aggregate weekly employee hours for the component industries and dividing by the monthly average for the 1982 period.

Monthly seasonally adjusted data beginning January 1986 are in the July 1991 *Supplement to Employment and Earnings*. Prior periods are in BLS Bulletin 2370, *Employment, Hours, and Earnings, United States 1909-90* (1991).

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1. See note 1 for p. 50.
2. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). These data eliminate only the paid earnings due to overtime at one and one-half times the straight-time rate for hours in excess of normally scheduled hours of either the straight-time workday or workweek. No adjustment is made for other premium-payment provisions—for example, holiday work, late-shift work, and overtime rates other than time and one-half. (Any overtime work paid for at double-time rates would be treated as if it were paid for at time and one-half rates.) Average hourly earnings excluding overtime are computed by dividing total production worker payroll for the industry group by the sum of total production worker hours and one-half of total overtime hours. (See note 4 for p. 50 for a description of overtime hours.)

In the BLS monthly publication, *Employment and Earnings*, data on average hourly earnings excluding overtime are available for total manufacturing and 20 major industry groups in the manufacturing division. Seasonally adjusted data are also available for total manufacturing.

Monthly data for 1963-87, are shown in appendix I; also see BLS Bulletin 2370, *Employment, Hours, and Earnings, United States, 1909-90* and the July

1991 *Supplement to Employment and Earnings*. Data for prior years are available from the source.

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1. See note 1 for p. 50.
2. See note 2 for p. 54.

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1. See note 1 for p. 50.
2. See note 3 for p. 50.

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1. Source: *Engineering News-Record*. Figures represent the hourly wages of common and skilled labor in the construction industry as of the 1st of each month. The data are compiled from monthly reports of correspondents in 20 cities as follows: Atlanta, Baltimore, Birmingham, Boston, Chicago, Cincinnati, Cleveland, Dallas, Denver, Detroit, Kansas City, Los Angeles, Minneapolis, New Orleans, New York, Philadelphia, Pittsburgh, St. Louis, San Francisco, and Seattle. The rates are arithmetic averages of wages actually paid in the 20 cities and cover take-home pay plus fringe benefits, including welfare fund, pension fund, etc.; the data reflect retroactive wage increases. The skilled labor rates are averages for three principal trades (bricklayers, carpenters, and structural ironworkers); the common labor rates are averages for building and heavy construction workers.

Annual data prior to 1963 and monthly data for 1932-87 appear in earlier editions of BUSINESS STATISTICS.

2. Sources: Interstate Commerce Commission (ICC) and the Bureau of Labor Statistics (BLS). Average hourly earnings of employees of class I railroads are based on the number of persons (excluding executives, officials, and staff assistants) on the payroll at the middle of the month. Beginning 1972, the data are for line-haul railroads only, that is, excluding figures for switching and terminal companies; data prior to 1972 include these companies. Because of the unavailability of data from ICC, BLS is the source for monthly data, beginning January 1978, with the annual figures representing an average of the 12 months.

The total compensation (from which the hourly earnings are derived) includes employees' contributions but excludes taxes paid by the railroads for old-age retirement and unemployment insurance. Backpay resulting from retroactive wage agreements and other adjustments are excluded from the monthly figures but are included in computing the annual averages; the averages therefore may differ substantially in some years from the average of the monthly figures. Average hourly earnings are affected by changes in the proportion of employees in each wage group, as well as by changes in wage rates. For the period 1971-77, the ICC published figures for only the months of June and December and for the year.

Annual data prior to 1963 and monthly figures for 1929-87 appear in earlier editions of BUSINESS STATISTICS.

3. See note 3 for p. 50.
4. See notes 1 and 2 for p. 50.

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1. See note 1 for p. 50.

2. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). The Employment Cost Index (ECI)—the most comprehensive measure available of labor cost trends—is a quarterly measure of the average change in the cost of labor, free from the influence of employment shifts among occupations and industries. The compensation series covers not only changes in wages and salaries but also employers' costs for employee benefits.

Wages and salaries are defined as the hourly straight-time wage rate or, for workers not paid on an hourly basis, straight-time earnings divided by the corresponding hours. Straight-time wage and salary rates are total earnings before payroll deductions, excluding premium or supplemental pay for overtime and for work on weekends and holidays, shift differentials, and nonproduction bonuses such as lump-sum payments provided in lieu of wage increases. Production

bonuses, incentive earnings, commission payments, and cost-of-living adjustments are included in straight-time wage and salary rates.

The major benefits covered by the ECI include paid leave, supplemental pay, severance pay, health and life insurance, pension and saving plans, social security, and unemployment insurance.

Coverage of the private sector excludes the self-employed, owner-managers, private household workers, and unpaid family workers. Coverage of the public sector includes State and local government workers, but excludes Federal Government workers.

The wage, salary, and benefit cost data from which the ECI are computed are obtained quarterly from a sample of about 5,400 establishments and a sample of occupations within those establishments. The data apply to the pay periods containing the 12th day of the survey months of March, June, September, and December. Earnings of salaried employees, earnings of workers paid under incentive systems, and benefit cost data are converted to an hours worked basis. Fixed weights are used to derive all of the industry and occupation series indexes. Since June 1986, employment counts from the 1980 Census of Population have been used as weights. Prior to June 1986, employment counts from the 1970 Census were used. The computation of the index is based on the standard formula for a fixed-weighted index. This index and its submeasures are constructed consistently across industries and occupations and are, therefore, mutually comparable. More detailed information on the ECI is available in several sources, including chapter 8, "The Employment Cost Index" of the BLS *Handbook of Methods*, Bulletin 2285; an annual bulletin, *Employment Cost Indexes and Levels, 1975-90*, Bulletin 2372; and several articles published in the *Monthly Labor Review*.

BLS also publishes indexes for benefit costs. Historical data for the employment cost indexes are available back to June 1981 from BLS.

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1. See note 1 for p. 58.

2. Source: The Conference Board, Inc. The index of help-wanted advertising volume is based on the number of help-wanted ads published in the classified sections of leading newspapers, currently one in each of 51 cities located throughout the country, representing 51 major labor market areas. (As of 1971, one newspaper was deleted.) In 1968, nonagricultural wage and salary employment in the 52 labor market areas selected for the index represented 72 percent of employment in the 200 major labor areas defined by the Bureau of Labor Statistics and 51 percent of total nonagricultural employment in the United States. Currently, nonagricultural wage and salary workers in the 51 areas included in the index represent about 50 percent of total U.S. nonagricultural employment.

The original data are adjusted for monthly variation in the number of Sundays and for seasonal variation. Seasonal adjustment is made for each individual newspaper series by The Conference Board. The seasonal factors are reviewed annually and are recalculated when necessary. After the Sunday adjustment and the seasonal adjustment, the average daily want-ad volume in each city is converted to an index on a base of 1967 average monthly volume equal to 100.

In combining these city indexes into regional totals, weights are applied to each city index, representing the proportionate weight of annual nonagricultural employment in each of the labor-market areas represented in the sample. The effect of this weighting is to adjust for differences among cities in the ratio of help-wanted advertising to the number of nonagricultural employees. These differences reflect different competitive positions of the individual papers represented in the sample and variations in the relative importance of newspaper advertising volume as a means of seeking employees. The city indexes are summed into regional and national indexes by multiplying each city index by the appropriate weight.

As stated above, the index covers ads published in classified sections of newspapers; it excludes ads in financial, sports, and other sections. Also, it should be noted that the index is based on the number of ads, not the number of jobs advertised.

In addition to the national index, data are available from the source for each of the nine major regions and 51 individual cities. For an analysis of the behavior of the index (with reference to the business cycle and labor market conditions), see The Conference Board's Technical Paper No. 21 (1977).

Monthly data for 1971-87 are in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). Work stoppages include all known strikes or lockouts involving 1,000 workers or more and lasting a full shift or longer. Data are based largely on newspaper accounts and cover all workers idle one shift or more in establishments directly involved in a stoppage. They do not measure the indirect or secondary effect on other establishments whose employees are idle owing to material or service shortages. In the 1979 and earlier editions of BUSINESS STATISTICS, these

estimates measured the impact of strikes involving 6 workers or more and are not comparable with those shown here.

Annual data for 1947-62 are available upon request. Monthly data for 1979-87 appear in earlier editions of BUSINESS STATISTICS. Annual and monthly data (1947-81) on the old base (6 or more workers) are available from BLS.

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1. Source: U.S. Department of Labor, Employment and Training Administration. These series (first shown in the 1988 edition of BUSINESS STATISTICS) cover the 50 States and the District of Columbia. Puerto Rico and the Virgin Islands are not included.

State programs cover operations of regular programs under State unemployment insurance laws. In 1976, the law was amended to extend coverage (effective January 1, 1978) to include virtually all State and local government employees plus many agricultural and domestic workers.

The Federal civilian employees unemployment insurance program (UCFE) provides unemployment insurance protection to civilian employees of the Federal Government or of wholly or partially owned instrumentalities, with the following exceptions: Elective officers in the executive and legislative branches of Government, certain foreign service personnel, temporary emergency workers, and other small groups.

Unemployment compensation for ex-servicemembers (UCX) provides unemployment insurance protection to veterans under the law of the State in which the claim for compensation is filed.

An "initial claim" is the first claim in a benefit year filed by a worker after losing his job, or the first claim filed at the beginning of a subsequent period of unemployment in the same benefit year. The initial claim establishes the starting date for any insured unemployment that may result if the claimant is unemployed for 1 week or longer. Transitional claims (filed by persons as they start a new benefit year in a continuing spell of unemployment) are excluded; therefore the data represent more closely instances of new unemployment.

"Insured unemployment" for a given month is the average weekly number of weeks claimed by covered persons in that month under State programs. Operations under extended duration provisions are not included.

The rate of insured unemployment for a month is the average weekly insured unemployment for that month divided by the average monthly covered employment for a one year period lagged 2 completed quarters. The rate of insured unemployment for a year is the average weekly insured unemployment for that year divided by the average monthly covered employment for a one year period lagged 4 completed quarters.

"Average Weekly Benefit Amount" represents benefits paid for total unemployment divided by the number of weeks compensated for total unemployment.

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1. Source: Federal Reserve Bank of New York. The figures represent the total acceptance liability outstanding on the last day of the month of banks and bankers in the United States and of agencies of foreign banks in this country. Data comprise acceptances based on (a) imports, (b) exports, (c) goods stored in the United States or shipped between points in the United States and foreign countries, and (d) dollar exchange. Data by classes of acceptances are available in the *Federal Reserve Bulletin*.

Beginning January 1988, the number of respondents in the bankers acceptance survey was reduced from 155 to 111 institutions—those with \$100 million or more in total acceptances. The new reporting group accounts for over 90 percent of total acceptance activity.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS.

2. Source: Federal Reserve Bank of New York; published in *Federal Reserve Bulletin*. Commercial paper is short-term, negotiable, unsecured promissory notes sold by reporting companies with original maturities of 270 days or less, for which the reporting company has received but not yet repaid the proceeds of the sale. Amounts placed are according to a varying number of companies. Dealer-placed paper is as reported by dealers and includes all financial paper sold in the open market. Directly placed paper is as reported by financial companies that place their paper directly with investors, and is payable on demand.

Financial companies are 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. Nonfinancial companies include public utilities and firms engaged primarily in activities such as communications, construction, manufacturing, mining, wholesale and retail trade, transportation, and services.

Monthly data for 1971-87 appear in the 1975 and subsequent editions of BUSINESS STATISTICS; those prior to 1971 are available from the Board of Governors of the Federal Reserve System.

3. Source: Farm Credit System. Data provide a comprehensive picture of the Farm Credit System activities as reported by the Farm Credit Corporation of America and the Federal Farm Credit Banks Funding Corporation.

The Farm Credit System is a nationwide system of lending institutions and affiliated service and other entities. Through its Banks and its associations, the System provides credit and related services to farmers, ranchers, producers or harvesters of aquatic products, rural homeowners, certain farm related businesses, agricultural and aquatic cooperatives, and rural utilities. System institutions are federally chartered under the Farm Credit Act of 1971, as amended, and are subject to regulation by a federal agency, the Farm Credit Administration.

The United States is divided into twelve Farm Credit districts, each of which was served, as of January 1, 1988, by a Federal Land Bank (FLB), a Federal Intermediate Credit Bank (FICB), and a Bank for Cooperatives (BC). The Banks also included the Central Bank for Cooperatives (CBC) located in Denver, Colorado. In early July 1988, in 11 of the 12 districts, the FLB and the FICB merged to form a Farm Credit Bank (FCB) pursuant to the Agricultural Act of 1987, as amended. The FCBs succeeded to virtually all the statutory authorities of their respective constituent Banks. In the remaining district, the FLB of Jackson is in receivership, and as a result, the FLB did not merge with FICB. The CBC and 10 of the 12 district BCs merged, effective January 1, 1989, to form CoBank. The Banks maintain service entities to provide a variety of services to System institutions and their borrowers.

Data in greater detail and descriptions of the lending institutions in the System may be found in the Farm Credit System Annual Information Statement.

4. Source: Board of Governors of the Federal Reserve System. Data represent the consolidated condition of the 12 Federal Reserve banks, as reported at the end of the month.

Total assets include Reserve bank credit outstanding and the gold certificate account, as well as these items not shown separately: Special drawing rights certificate account, Federal Reserve notes of other banks, other cash, bank premises, cash items in process of collection, and other assets. Reserve bank credit outstanding also includes items not shown separately: Acceptances bought outright and held under repurchase agreements (beginning December 1966), and Reserve bank float (i.e., uncollected cash items minus deferred availability cash items).

Total liabilities include—in addition to deposits and Federal Reserve notes—capital accounts, other liabilities and accrued dividends, and deferred availability cash items. Total deposits are mainly member-bank reserve balances; they also include the U.S. Treasurer's general account, foreign deposits, and other deposits.

Federal Reserve notes constitute the major part of the country's currency in circulation and are liabilities of the Reserve banks that issue them. They are a prior lien on all assets of the Reserve banks and are specifically secured by the pledge of collateral at least equal to the amount of notes issued. This collateral may consist of gold certificates, U.S. Government securities, and eligible short-term paper discounted or purchased by the Reserve bank. In the past, the amount of notes that could be issued was subject to another limitation, namely, that the Reserve bank have gold certificate reserves of a given percentage of the Federal Reserve notes in actual circulation. The requirement, which no longer prevails, was 40 percent prior to June 12, 1945, and 25 percent from that date until March 18, 1968.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS.

5. Includes data not shown separately.

6. Includes direct and guaranteed securities.

7. All annual data through 1978 are for fiscal years ending June 30. Beginning 1979, annual data are for calendar years ending December 31.

8. A change in reporting instructions resulted in offsetting shifts in the dealer-placed and directly placed financial company paper in October 1979.

9. Effective December 1, 1982, there was a break in the commercial paper series. The key changes in the content of the data involved additions to the reporting panel, the exclusion of broker- or dealer-placed borrowings under any master note agreements from the reported data, and the reclassification of a large portion of bank-related paper from dealer placed to directly placed.

10. Correction of a previous misclassification of paper by a reporter created a break in the series beginning December 1983. The correction added some paper to nonfinancial and to dealer-placed financial paper.

11. Beginning October 1984, the number of respondents in the bankers acceptance survey was reduced from 340 to 160 institutions—those with 50 million or more in total acceptances. The new reporting group accounts for over 95 percent of total acceptance activity.

12. Effective December 31, 1987, eight brokers and dealers in commercial paper were added to the reporting panel resulting in a series break. End of month figures on the old basis are as follows: All issuers, 352,915; financial companies, 275,907; dealer placed, 103,667; directly placed, 172,240; and nonfinancial companies, 77,008.

13. Beginning with January 1988 data, the number of respondents in the bankers acceptance survey was reduced from 155 to 111 institutions—those with \$100 million or more in total acceptances. The new reporting group accounts for over 90 percent of total acceptance activity.

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1. See note 4 for p. 61.
2. Includes data not shown separately.
3. Beginning December 1, 1959, banks were again authorized to count part of their vault cash as legal reserves, and after November 23, 1960, this privilege was extended to include all vault cash.

4. Source: Board of Governors of the Federal Reserve System. Total member bank reserves held consist of reserve balances with Federal Reserve banks (which exclude required clearing balances and adjustments to compensate for float) plus vault cash used to satisfy reserve requirements.

With respect to required reserves, the Board of Governors of the Federal Reserve System has legal power to set (within specified limits) the percentage of deposits that must be held in reserve for each reserve classification. Excess reserves are the difference between reserves actually held and required reserves; they indicate the extent to which member banks may legally expand their loans and investments without having recourse to the Federal Reserve banks.

Free reserves are the difference between the excess reserves of member banks and member bank borrowings at Federal Reserve banks, plus extended credit. A negative figure indicates a situation in which borrowings are larger than excess reserves; the term "net borrowed reserves" is frequently used.

Monthly data for 1963-87 for those series indicated by a star appear in appendix I. Annual data prior to 1963 and monthly data for 1947-62 (1959-87 for required reserves) appear in earlier editions of BUSINESS STATISTICS.

5. Source: Board of Governors of the Federal Reserve System. Data cover the condition of large weekly reporting commercial banks as of the last Wednesday of the month or year (data prior to 1985 are as of the Wednesday nearest the end of the month or year). The weekly reporting banks are 168 of the largest commercial banks in the Nation, both members and nonmembers of the Federal Reserve System. These banks voluntarily report their balances in assets and liability accounts as shown in these tables.

The series has been revised from time to time to extend the coverage and to reflect other improvements. The 1988 revision, carried back to January 1984, reflects changes in the panel of reporting banks. The new reporting panel was increased net by eight banks, reflecting in part the addition of 16 new reporting banks whose total assets in the U.S. offices had grown to over \$3 billion as of June 30, 1987. Seven previous reporters with assets under \$2 billion discontinued reporting at the beginning of 1988, and two existing reporters that merged at the end of 1987 continued reporting as a single bank. In 1988, the new reporting panel of 168 banks accounted for 52 percent of the total assets in U.S. offices of domestically chartered banks.

For data shown in this volume, there are four major breaks in comparability: (1) Effective with data for January 1988, to incorporate the aforementioned revision; (2) Effective with data for January 1979, to reflect changes in the panel of reporting banks and in item content; (3) Effective with data for January 1972, to reflect changes in the panel of reporting banks, a change in consolidation basis, and changes in content of several of the asset and liability items; (4) Effective with data for July 1965, to cover the largest volume of bank assets possible in the smallest number of banks, and to account for a major share of the short-term fluctuations in major bank asset and liability categories. A revision of lesser significance was effective with data for June 1969.

More complete details on the July 1965 revision appear in the August 1966 issue of the *Federal Reserve Bulletin*. A description of the June 1969 revision appears in the August 1969 *Federal Reserve Bulletin*. Further information on the January 1979, 1984, and 1988 revisions is available from the Banking Section of the Division of Research and Statistics at the Federal Reserve Board, Washington, DC 20551.

6. In addition to items shown separately, the demand deposits total includes banks in foreign countries, foreign governments and official institutions, and certified and officers' checks.

7. Revised basis; not comparable with earlier data (see 3d and 4th paragraphs of note 5 for this page).

8. Change in reporting procedures; earlier data not strictly comparable.

9. Revised basis; not comparable with earlier data (see 2d paragraph of note 5 for this page).

10. Average for December.

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1. See note 5 for p. 62.

2. In addition to individuals, partnerships, and corporations, the nontransaction balances total includes the following: States and political subdivisions; U.S. Government; depository institutions in the United States; and foreign governments, official institutions, and banks.

3. The term "adjusted" denotes exclusion of loans and Federal funds transactions with domestic commercial banks and, through May 1969, after deduction of valuation reserves; beginning June 1969, data are reported gross (before deduction of valuation reserves).

4. Loans to nonbank depository and other institutions include loans to sales finance and personal finance companies, other business credit companies, mutual savings banks, insurance companies, mortgage companies, savings and loan associations, and Federal lending agencies. No comparable data are available for periods prior to April 1961.

5. "Other loans" include loans to individuals, agricultural loans, loans to foreign banks, loans to foreign governments, Federal funds sold to nonbank brokers and dealers and to others, plus "all other loans," and lease financing receivables.

6. Includes data for "bills" and "certificates" not shown separately.

7. Revised basis; not comparable with earlier data (see 3d and 4th paragraphs of note 5 for p. 62).

8. Change in reporting procedures; earlier data not strictly comparable.

9. Revised basis; not comparable with earlier data (see 2d paragraph of note 5 for p. 62).

10. Break in series due to definitional change. No comparable data are available prior to 1984. (See note 11 for this page regarding loan obligations of States and political subdivisions.)

11. Securities of Federal agencies and corporations have been shifted out of "other securities" and are now combined with U.S. Treasury securities. Also, loan obligations of States and political subdivisions have been shifted out of "other securities" and are now shown separately among the loan items.

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1. Source: Board of Governors of the Federal Reserve System. The series was revised in 1990 to reflect new benchmark and seasonal adjustments as well as revisions in data received from sample banks that report data weekly.

Benchmark corrections are made periodically in these series to correct for estimation errors that arise in blowing up sample bank reports to represent all banks. New blowup factors, derived from quarterly condition reports, have been updated through the December 1991 reports for all insured banks and all foreign-related institutions that are represented in the commercial bank universe.

In addition, data from 1984 forward include a number of institutions formerly excluded from the series. These institutions are state-chartered trust companies without deposits and a number of industrial banks that had become insured between 1985 and 1989.

During the 1985 revision, there were important definitional changes, with the most significant being the shift of certain obligations of States and political subdivisions from "other securities" to loans and the shift of Federal agency securities from other securities to a new combination with U.S. Treasury securities. The latter combination, which raised "U.S. Government securities" and lowered other securities by \$166.8 billion as of December 31, 1983, was estimated back to December 1972. The shift of State and political subdivision obligations to loans was not carried back before January 1984; consequently, there are offsetting breaks in series, lowering the other securities and raising the total loan components of bank credit by \$33.2 billion at the beginning of 1984.

Revised historical data back to December 1972, together with a description of numerous breaks in series, are available upon request from the Banking Section, Division of Research and Statistics, Board of Governors of the Federal Reserve System, Washington, DC 20551.

2. Excludes loans to commercial banks in the U.S.

3. Source: Board of Governors of the Federal Reserve System. The prime rate is the interest rate banks charge their most creditworthy business customers for short-term loans. It is the base used to scale upward the rates charged on most loans to other business customers. The prime rate is not as sensitive as money market instrument rates, which fluctuate daily in response to short-term changes in supply and demand. Rather, its movements tend to be infrequent, changing only by increments of one quarter of a percentage point. Major banks tend to

change their prime rate in response to increasing differentials with selected open market money rates.

The monthly data are averages computed by multiplying each "predominant" prime rate (the rate charged by the majority of 30 large money market banks) by the number of days it was in effect during the month, summing these products, and dividing by the number of days in the month. The annual data are unweighted averages of the monthly averages.

For a discussion of the history of the prime rate and its role in the lending process, see "The Prime Rate", *Monthly Review*, Federal Reserve Bank of New York, April and May 1962, pp. 54-59 and 70-73, respectively.

4. Reported by the Board of Governors of the Federal Reserve System. Data represent the charge on loans made to member commercial banks by Federal Reserve banks. Each Reserve bank establishes its own discount rate, subject to review by the Board of Governors of the Federal Reserve System. In practice, the discount rates are generally uniform among the 12 Reserve banks.

Federal Reserve loans to depository institutions are for short-term adjustments in their reserves, and are not generally available for extended periods. For further information, see The Federal Reserve Act, section 10(b), 11(b), 13, 14(d), and 19(b7); Regulation A of the Board of Governors of the Federal Reserve System (12 CFR 201).

Monthly data for 1963-87 appear in appendix I; annual data prior to 1963 and monthly data for 1929-62 appear in earlier editions of BUSINESS STATISTICS.

5. Source: Office of Thrift Supervision (OTS). Data are combined weighted averages of interest rates on conventional first-mortgage loans for the purchase of single-family homes. They are confined to loans originated directly (rather than by correspondents) and are compiled from data received through the cooperation of a representative sample of four major types of lenders in the United States. These lending institutions are savings and loan associations, mortgage companies, mutual savings banks, and commercial banks.

Federally underwritten mortgages are excluded from the survey, as are loans for any purpose other than for purchase of a home.

Monthly data for 1963-87 appear in the earlier editions of BUSINESS STATISTICS.

6. Source: Federal Reserve Bank of New York; published in *Federal Reserve Bulletin*. Beginning November 1977, data are unweighted averages of offering rates quoted by at least five dealers (in the case of commercial paper) or finance companies (in the case of finance paper). Previously, these rates were the most representative rates quoted by those dealers and finance companies. For bankers' acceptances, data through 1975 are the average of the midpoint of the range of daily dealer closing rates offered for domestic issues. Beginning January 1976, yields are the most representative rates for top-rated banks only. Yields, for the bankers' acceptances, commercial paper, and finance paper, are quoted on a bank-discount basis, rather than an investment yield basis (which would give a higher figure). Rates on dealer-placed commercial paper are for firms whose bond rating is Aa or the equivalent. Data through October 1979 show a maturity of 120-179 days. Beginning November 1979, maturity is for 180 days. For finance paper, data through October 1979 show a maturity of 150-179 days. Beginning November 1979, maturity is for 180 days.

Monthly data for 1970-78 for rates on finance company paper placed directly appear in the 1979 edition of BUSINESS STATISTICS, with data through 1987 appearing in subsequent editions. Annual data prior to 1963 and monthly data for 1938-87 for rates on bankers' acceptances and commercial paper appear in earlier editions of BUSINESS STATISTICS.

7. Source: Board of Governors of the Federal Reserve System. Three-month Treasury bills are auctioned and issued weekly. An average interest rate, expressed on a bank discount basis, is computed for each weekly issuance, on the basis of varying prices at which portions of the issue are awarded to the highest bidders. The monthly series is the average of the four or five weekly rates for each month. (These auction rates are similar to, but not the same as, market rates; the latter are rates on outstanding bills, based on daily trading quotations.)

The auction average rate for each week is dated as of the date of issue of the bills, usually a Thursday, even though the auction usually occurs on the Monday of that week or, at times, on Friday of the preceding week. Therefore, the monthly average of weekly rates sometimes includes the results of an auction that occurred late in the preceding month.

Monthly data for 1963-87 appear in appendix I; monthly data for 1941-62 appear in earlier editions of BUSINESS STATISTICS.

8. Weighted by number of loans.

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1. Source: Board of Governors of the Federal Reserve System. The consumer installment credit series covers most short- and intermediate-term credit extended to individuals through regular business channels, usually to finance the purchase of consumer goods and services or to refinance debts originally incurred

for such purposes, and scheduled to be repaid (or with the option of repayment) in two or more installments. Debt secured by real estate (including first liens, junior liens, and home equity loans) is excluded. Credit extended to governmental agencies and nonprofit or charitable organizations, as well as credit extended to business or to individuals exclusively for business purposes, is excluded.

There are four major types of consumer installment credit. "Revolving" credit includes credit arising from purchases on credit card plans of retail stores and banks, cash advances and check credit plans of banks, and some overdraft credit arrangements. "Automobile" credit represents credit extended for the purchase of new or used passenger automobiles whether or not the credit is specifically secured by the automobile purchased. "Mobile home" credit covers credit extended for the purchase of mobile homes. "Other" includes personal cash loans, sales finance contracts for nonautomotive goods, and home improvement loans (both FHA-insured and noninsured) made to finance the maintenance and improvement of dwellings units.

The consumer credit series is based on comprehensive benchmark data that become available periodically. Current monthly estimates are brought forward from the latest benchmarks in accordance with weighted changes indicated by sample data. Classifications are made on a "holder" basis. Thus, installment paper sold by retail outlets is included in figures for the banks and finance companies that purchased the paper.

The amount of outstanding credit represents the sum of the balances in the installment receivable accounts of financial institutions and retail outlets at the end of each month. Net change measures the change during the month in the amount of consumer installment credit outstanding. It is defined as the amount of consumer installment credit extended less the amount liquidated (including repayments, charge-offs, and other credits) during the month. Each monthly change is computed by subtracting the seasonally adjusted amount outstanding at the end of the previous month from the amount outstanding at the end of the current month. Information is not available to make separate estimates of the amount of extensions, liquidations, and chargeoffs of bad debts.

The estimates of the amount of credit outstanding and net change include any finance and insurance charges included as part of the installment contract. Also included in some cases is unearned income on loans, because some lenders cannot separate the components.

The seasonally adjusted data are adjusted for differences in the number of trading days and for seasonal influences. The seasonal factors used are derived by the X-11-ARIMA process.

Current data are available monthly, in the Federal Reserve statistical release G.19, "Consumer Installment Credit," and in the *Federal Reserve Bulletin*.

Monthly data for 1963-87 for series indicated by a star appear in appendix I. The latest revised monthly data for other series prior to 1988 are available from the Board of Governors of the Federal Reserve System (Washington, DC 20551).

2. Includes auto dealers.

3. Beginning January 1977, includes revolving retail credit, which was separated from the total retail credit; data not comparable with those for earlier periods. Also, excludes 30-day charge credit held by travel and entertainment companies.

4. "Pools of securitized assets" are outstanding balances of pools upon which securities have been issued; these balances are no longer carried on the balance sheets of the loan originators.

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1. Source: U.S. Treasury Department. These data incorporate the changes in the President's Budget for 1969, in accordance with those recommendations of the President's Commission on Budget Concepts that were adopted and implemented during fiscal year 1968. They now cover all Federal agencies and programs, including virtually all programs financed by trust and deposit funds, which prior to that time were not included in what was called the "administrative budget."

Beginning fiscal year 1967, data are on the basis of the *Monthly Statement of Receipts and Outlays of the U.S. Government*, compiled from reports received from disbursing, collecting, and administrative agencies of the Government. Data for prior years were derived on basis of the unified budget concepts adopted January 1968.

2. "Net receipts" represents gross budget receipts less refunds.

3. Source: U.S. Treasury Department. These data are on the basis of the *Monthly Statement of Receipts and Outlays of the U.S. Government*. "Borrowing from the public" is the net transactions of total agency securities, plus public debt securities as published in daily Treasury statements, minus the Federal securities held as investment of Government accounts and noninterest-bearing public debt securities held by the International Monetary Fund and international lending institutions in recognition of U.S. Government subscription commitments.

4. Includes "reduction in cash balances."

5. Source: U.S. Treasury Department. Data are on the basis of daily Treasury statements and administrative accounts and reports. "Gross debt outstanding" includes investment transactions of the Departments of Health and Human Services (formerly Department of Health, Education, and Welfare), Housing and Urban Development, Labor, Transportation, Treasury, and the Veterans Administration and other independent agencies; it also includes other securities held by the public.

6. Includes data not shown separately. Amount of public debt securities outstanding have been adjusted to exclude issues to the International Monetary Fund and other international lending institutions.

7. Includes holdings of Federal Reserve banks.

8. Source: U.S. Treasury Department. Data cover only budgetary operations of the Federal Government; i.e., only those operations involving accounts that determine the total surplus or deficit. All yearly data through 1976 are fiscal year totals ending June 30. Effective with 1977, annual figures are for fiscal year ending September 30. Beginning fiscal year 1967, actual figures are from the *Monthly Statement of Receipts and Outlays of the U.S. Government*, compiled from reports received from all Government collecting, disbursing, and administrative agencies and the Treasurer of the United States. Data for prior years were derived on basis of the unified budget concepts adopted January 1968. The Monthly Statement shows gross receipts, refunds, and net receipts; and outlays, applicable receipts, and net outlays. Budget receipts and outlays shown in this volume are "net."

Budget accounts include general accounts (which are credited with receipts not designated by Congress for specific purposes and cover most appropriations and expenditures), special accounts (or funds earmarked by Congress for specific purposes), revolving accounts (financing a continuing cycle of operations in which expenditures generate receipts, and the receipts are available for expenditure without further action by Congress), consolidated working fund (established to receive, and subsequently disburse, advance payments from other agencies or bureaus), management fund account (to facilitate accounting for and administration of intragovernmental activities that are financed by two or more appropriations), trust fund accounts (moneys held in trust for use in carrying out specific purposes or programs), and transfer appropriation accounts (allocations that are treated as nonexpenditure transactions at the time the allocation is made).

Items under receipts are explained as follows: "Individual income taxes"—taxes both withheld and not withheld; "social insurance taxes and contributions"—employment taxes and contributions, unemployment insurance, and contributions for other insurance and retirement (see also note 10 for this page); "other"—excise taxes (see also note 11 for this page), estate and gift taxes, customs duties, and other miscellaneous receipts.

Monthly data for July 1967–December 1987 are in earlier editions of BUSINESS STATISTICS.

9. Includes individual income taxes designated for the Presidential election campaign fund. Prior to February 1974, these taxes are included in "Other."

10. Includes taxes and contributions for Federal old-age and survivors insurance trust fund, Federal disability insurance trust fund, Federal hospital insurance trust fund, railroad retirement accounts, unemployment insurance, Federal supplementary medical insurance trust fund, Federal employees retirement contributions, and other retirement contributions.

11. Includes excise taxes on alcohol and tobacco; windfall profits tax; manufacturers excise taxes, retailers excise taxes (repealed effective June 22, 1965); and miscellaneous.

12. Beginning September 1991, the Federal debt series are net of premium and discount.

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1. See note 8 for p. 67.

2. Includes data not shown separately.

3. The U.S. Department of Health, Education, and Welfare was redesignated as the U.S. Department of Health and Human Services by the Department of Education Organization Act, which was approved on October 17, 1979 and implemented on May 4, 1980.

4. Includes interest payments by Government corporations and other business-type activities on securities issued to the Treasury.

5. Source: U.S. Treasury Department. From 1966 through November 1974, data are compiled from the daily Treasury statement; and then from the *Treasury Bulletin*. Figures are the gold stock at the end of the months and years indicated.

Through March 17, 1968, private U.S. sales of gold (including newly mined gold) to the U.S. Treasury and private purchases (for industrial purposes) from the Treasury affected official gold reserves. These U.S. Treasury transactions were discontinued after that date as a result of an international monetary agreement providing that officially held gold should be used only to effect transfers among monetary authorities.

End-of-year data prior to 1963 and monthly data for 1936–87 appear in earlier editions of BUSINESS STATISTICS. Increases in the figures in 1972 and 1973 reflect revaluation of the gold stock on the basis of the changed gold content of the dollar. The revaluations add 828 million to the gold stock on May 8, 1972, and 1,165 million on October 18, 1973.

6. Gold prices for the months are averages of daily quotations, whereas annual prices are averages of the 12 months as compiled by Handy and Harman and published, beginning 1967, in *Metals Week*, a McGraw-Hill publication. Prior to 1967, the data appeared in *Metal and Mineral Markets*, a weekly news service of the *Engineering and Mining Journal*. Quotations are per troy ounce 0.9995 purity and represent the lowest prices at which gold, in commercial bar form of acceptable brand and quality, is offered to Handy and Harman for nearby delivery at New York in quantities sufficient to meet daily requirements.

7. Silver prices for the months are averages of daily quotations, whereas annual prices are averages of the 12 months as compiled by Handy and Harman and published, beginning 1967, in *Metals Week*, a McGraw-Hill publication. Prior to 1967, the data appeared in *Metal and Mineral Markets*, a weekly news service of the *Engineering and Mining Journal*. Quotations are per troy ounce purity 0.999 fine.

Beginning 1962, quotations represent the lowest prices at which silver, in commercial bar form of acceptable brand and quality, in accordance with Association for Standardized Testing Method (ASTM) designation B413–69, is offered to Handy and Harman for nearby delivery at New York in quantities sufficient to meet daily requirements. Prior to 1962, prices are for silver contained in unrefined silver-bearing materials; they were determined by Handy and Harman on the basis of actual sales of bar silver (0.999 fine) in amounts of 50,000 troy ounces or more for nearby delivery at New York. Silver contained in unrefined silver-bearing materials submitted for refining is quoted at a discount from silver in commercial bar form.

Annual data prior to 1963 and monthly data for 1929–87 appear in earlier editions of BUSINESS STATISTICS.

8. Beginning 1962, data are for silver in commercial bar form (until mid-November 1962, priced one-quarter of a cent higher than on former basis; four-tenths of a cent higher from November 15, 1962 to September 2, 1968; one cent higher effective September 3, 1968).

9. Social Security Trust Fund outlays are included in expenditures beginning fiscal year 1963; prior thereto, reflected under the Treasury Department.

10. From September 1965 through January 1971, data include gold deposits by the International Monetary Fund for the purpose of mitigating the impact of gold payments to the Fund for quota increases by countries that purchased such gold from the United States. The United States has a corresponding gold liability to the Fund.

11. In 1975, the U.S. Treasury sold gold from the gold stock in public auctions, and in 1975–76, sold gold for the striking of American Revolution Bicentennial medals.

12. From May 1978 through 1979, the U.S. Treasury sold gold at auction to the public, decreasing the gold stock. Subsequently, the U.S. Treasury sold gold medallions and commemorative coins to the public. Beginning October 1986, the U.S. Treasury struck gold bullion coins. As these coins are sold to the public the gold stock is decreased. However, when possible, the gold stock is replenished by purchases of newly mined U.S. gold, thereby, restoring the gold stock to its October 22, 1986, levels.

13. Beginning June 1979, data reflect budget outlays by the Department of Health and Human Services. Prior data are for budget outlays by the Department of Health, Education, and Welfare.

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1. Source: U.S. Treasury Department. Data are for the end of the period; monthly through 1982, and quarterly beginning 1983. Currency and coin in circulation includes all U.S. money outside of the Federal Reserve banks and the Treasury, with two exceptions: (1) Gold coin and silver coin "known" to have been exported; and (2) all gold coin outstanding. Thus, the figures include currency and coin held by the public and by banks, and any "unreported" U.S. money carried or shipped abroad.

Gold coin was withdrawn from circulation in January 1934. Gold coins minted in recent years, such as the Statue of Liberty gold coins, the Olympic gold coins, and the Eagle gold coins, are not included in the currency and coin statement since such coins are sold to the public at premium prices and are not used as a medium of exchange.

Outstanding currency amounts shown on statements published before 1967 have been reduced for old series currencies and the 1928 series gold certificates as authorized by the Old Series Currency Adjustment Act. In addition, an act to reduce/write off silver certificates issued after June 3, 1929, was approved on June 24, 1967. In December 1971, the outstanding coin amounts was decreased by the

transfer of some \$2.9 million Carson City silver dollars to GSA as authorized by an act approved on December 31, 1970.

Annual data prior to 1963 and monthly data for 1936-87 appear in earlier editions of BUSINESS STATISTICS.

2. Source: Board of Governors of the Federal Reserve System. The series shown here were revised and expanded in early 1980 to reflect the redefinition of the monetary aggregates by the source agency. The redefinition was prompted by the emergence, in recent years, of new monetary assets—for example, negotiable order of withdrawal (NOW) accounts and money market mutual fund shares—and alterations in the basic character of established monetary assets—for example, the growing similarity of, and substitution between, the deposits of thrift institutions and those of commercial banks.

Presently the Federal Reserve publishes three monetary aggregates which replace the old M-1 through M-5 measures. In addition, a very broad measure of liquid assets has been adopted. The principle underlying these new monetary aggregates is that similar assets should be combined at the same level of aggregation. The definitions of the monetary aggregates are as follows:

M1.—Consists of (1) currency outside the Treasury, Federal Reserve Banks, and the vaults of depository institutions; (2) travelers checks of nonbank issuers; (3) demand deposits at all commercial banks other than those due to depository institutions, the U.S. Government, and foreign banks and official institutions less cash items in the process of collection and Federal Reserve float; and (4) other checkable deposits (OCD) consisting of NOW and automatic transfer service (ATS) accounts at depository institutions, credit union share draft accounts, and demand deposits at thrift institutions.

M2.—Consists of M1 plus overnight (and continuing contract) repurchase agreements (RP's) issued by all commercial banks and overnight Eurodollars issued to U.S. residents by foreign branches of U.S. banks worldwide, money market deposit accounts (MMDA's), savings and small-denomination time deposits (time deposits—including retail RP's—issued in denominations of less than \$100,000), and balances in both taxable and tax-exempt general purpose and broker/dealer money market mutual funds (MMMF's). Keogh and individual retirement account (IRA) balances at depository institutions and in MMMF's are excluded. Also excluded all balances held by U.S. commercial banks, money market funds (general purpose and broker/dealer), foreign governments and commercial banks, and the U.S. Government.

M3.—This measure equals M2 plus large-denomination time deposits (those in denominations of \$100,000 or more) and term RP liabilities issued by commercial banks and thrift institutions, term Eurodollars held by U.S. residents at foreign branches of U.S. banks worldwide and at all banking offices in the United Kingdom and Canada, and balances in both taxable and tax-exempt institutions-only MMMF's. Excludes amounts held by depository institutions, the U.S. Government, money market funds, and foreign banks and official institutions. Also subtracted is a consolidation adjustment that represents the estimated amount of overnight RP's and Eurodollars held by institution-only MMMF's.

L.—This broad measure of liquid assets equals M3 plus nonbank public holdings of U.S. savings bonds, short-term Treasury obligations, bankers acceptances and commercial paper, net of MMMF holdings of these assets.

The currency component consists of currency outside the U.S. Treasury, the Federal Reserve Banks, and the vaults of all depository institutions.

The demand deposit component consists of demand deposits at all commercial banks and foreign-related institutions, other than those due to depository institutions, foreign banks and official institutions, and U.S. Government, less cash items in the process of collection and Federal Reserve float (float represents reserves credited to depository institutions on checks in process of collection by Federal Reserve banks for which offsetting debits have not yet been made against the reserve accounts of the drawee banks).

Other checkable deposits include ATS and NOW balances at depository institutions, credit union share draft balances, and demand deposits at thrift institutions.

Overnight (and continuing contract) RP's are those issued by commercial banks to the nonbank public, and overnight Eurodollars are those issued by foreign branches of U.S. banks to U.S. nonbank customers. Data for these components are not seasonally adjusted. Another component for which only unadjusted data are available is the money market fund balances. These funds enable investors to buy shares in a money market portfolio and earn money market rates of return without investing the traditional large sums needed for direct investment. Assets of the funds were zero prior to November 1973. Whereas these shares are highly liquid, the money market deposit accounts have a specific maturity. Assets in these accounts were zero prior to December 1982.

The time deposit series consist of small denomination time deposits, and large denomination time deposits. They mature at a specified period, and earlier withdrawals result in substantial interest penalties. Savings deposits and MMDA's are interest-bearing deposits that do not have a specific maturity.

Small denomination time deposits—including retail RP's—are issued in amounts of less than \$100,000. All IRA and Keogh account balances at commercial banks and thrifts are subtracted from small time deposits. Large denomination time deposits are those issued by commercial banks (less those held

by MMMF's, depository institutions, and foreign banks and official institutions) and thrift institutions in amounts of \$100,000 or more, excluding those booked at international banking facilities.

Consolidation adjustments have been made in the construction of each of the measures, in order to avoid double counting of the public's monetary assets. One major consolidation adjustment involves the netting of deposits held by depository institutions with other depository institutions. In constructing M1, demand deposits held by commercial banks and by thrift institutions have been removed. Similarly, savings and time deposits held by depository institutions are also appropriately netted at the M2 and M3 levels. The other major kind of consolidation adjustment involves removing certain assets held by money market mutual funds from several components appearing in the M2, M3, and L measures. These institutions issue shares to the public and use the proceeds to acquire a variety of liquid assets that are components of the new M2, M3, and L measures. To avoid first counting these amounts as money market mutual fund shares and then counting them again as money market fund holdings of RP's, CD's, commercial paper, and so forth, holdings of each of these assets by general purpose and broker/dealer and institution-only money market funds are subtracted from the relevant components.

Seasonally adjusted M1 is calculated by summing currency, travelers checks, demand deposits, and OCD's, each seasonally adjusted separately. Seasonally adjusted M2 is computed by adjusting its non-M1 component as a whole and then adding this result to seasonally adjusted M1. Seasonally adjusted M3 is obtained by adjusting its non-M2 component as a whole and then adding this result to seasonally adjusted M2. Seasonal adjustment factors for the components of the money stock have been revised using the same X-11-ARIMA procedure adopted in 1982.

A detailed explanation of the new measures was published in the February 1980 issue of the *Federal Reserve Bulletin*. Monthly and weekly data from 1959 to date are available from the Money and Reserves Projection Section of the Division of Monetary Affairs at the Federal Reserve Board, Washington, DC 20551.

Monthly data for 1963-87 for those series indicated by a star appear in appendix I.

3. Money market deposit accounts are included with savings deposits.

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1. Source: Beginning the fourth quarter of 1982, U.S. Department of Commerce, Bureau of the Census. Prior to the fourth quarter of 1982, the Federal Trade Commission. Quarterly estimates for all manufacturing corporations (including newspapers beginning 1969), classified by both industry and asset size, are produced from uniform, confidential income statements and balance sheets received each calendar quarter from a probability sample of all enterprises classified as manufacturers (according to the Standard Industrial Classification (SIC)) and required to file U.S. Corporation Income Tax Form 1120.

The conventional accounting concept of profits used in the estimates differs from the national income concept. In the latter, capital gains and dividends received by corporations are deducted from profits, capital losses and depletion charges are added to profits, and adjustments are made for international flows affecting profits.

The consolidated enterprise concept used in the estimates eliminates the multiple counting of all interplant and other intracompany transfers included in establishment statistics and, to the fullest extent possible, eliminates the multiple counting of all intercorporate transfers included in statistics based on unconsolidated or partly consolidated reports from multicorporate enterprises.

Due to mergers and acquisitions in the prior year, data are revised in the first quarter of each year to reflect industry reclassification.

Quarterly estimates for 1951-87 appear in earlier editions of BUSINESS STATISTICS.

2. Beginning in 1985, tobacco industry data were collapsed into food industry data, due to major mergers and acquisitions.

3. Beginning fourth quarter 1973, because of changes in method of consolidation (to minimize the effect of foreign operations of multinational enterprises), data are not comparable with those for earlier periods.

4. Prior to fourth quarter 1973 for petroleum refining only.

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1. Source: *The Bond Buyer* of New York. Data represent sales of securities, including long-term refunding issues, by States and municipalities in the United States and sales of bonds of U.S. territories and insular possessions and

municipalities, therein. The figures include Public Housing Authority note and bond issues, which are in effect backed by Federal guarantee of payment. Also included are preliminary loan notes issued by local public agencies to finance urban renewal projects. These notes are secured by the full faith and credit of the U.S. Government.

Annual data prior to 1963 and monthly data for 1929-87 for long-term issues, and 1929-33 and 1936-87 for short-term issues, appear in earlier editions of BUSINESS STATISTICS.

2. Source: Board of Governors of the Federal Reserve System. Credit extended by brokers are data for member firms of the New York Stock Exchange. "Margin Credit" is all credit extended for the purpose of purchasing or carrying stocks, or related instruments, subject to initial margin requirements and secured by restricted collateral. Beginning July 1983, under the revised Regulation T, margin credit at broker-dealers includes credit extended against stocks, convertible bonds, stocks acquired through exercise of subscription rights, corporate bonds, and government securities. Separate reporting of data for margin stocks, convertible bonds, and subscription issues was discontinued in April 1984. "Free credit balances" are in accounts with no unfilled commitments to the brokers and are subject to withdrawal upon demand.

Monthly data for 1971-87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: Standard & Poor's Corporation. Data are based on Wednesday closing prices. An arithmetic average of yields to maturity for the 15 high-grade municipal bonds is first computed (see note 6 for this page). The resulting series is then converted to a price basis by using bond yield tables. A 4-percent coupon with 20 years to maturity is assumed.

Annual data prior to 1963 and monthly data for 1941-87 appear in earlier editions of BUSINESS STATISTICS.

4. Source: New York Stock Exchange. Data represent volume (par value) of bond sales on the New York Stock Exchange, as reported on the ticker, computed as of the trading date. Some stopped bond sales and other sales not reported on the ticker are excluded.

Annual data prior to 1963 and monthly data for 1936-87 appear in earlier editions of BUSINESS STATISTICS.

5. Source: Moody's Investors Service. These averages were set up in 1928 to include 10 bonds of each rating (Aaa, Aa, A, and Baa) for each group (railroads, public utilities, and industrials), making 120 bonds in all. Since January 1, 1935, however, there has not been a full set of 10 bonds in some rating classifications because of the limited number of suitable issues. In 1988, the number of bonds in some rating classifications were increased to improve the reliability of the numbers. Each rating can now include up to 20 bonds. As of December 1991, there were 98 bonds used, distributed in each group as follows: Public utility—10 Aaa, 13 Aa, 12 A, and 11 Baa bonds; and industrial—7 Aaa, 14 Aa, 18 A, and 13 Baa bonds.

Occasional substitutions in the bond list have been made when ratings have been changed, when a bond has been called, when a bond sold too far above its call price, or because of approaching maturity. Suitable adjustments (usually small), which are gradually amortized, are introduced to prevent such substitutions from impairing the comparability of the series. No convertible or other unusual issues are included. Due to the lack of sufficient components outstanding, the railroad average was discontinued as of July 13, 1989.

Averages are computed as follows: A daily yield based on the closing price for each individual bond is first computed and then unweighted arithmetic averages of these yields are compiled for the different rating classifications. The corporate averages by ratings (Aaa, Aa, A, and Baa) and the group averages (railroad, public utility, and industrial) are compiled by averaging these rating-classification yields. Thus each rating group enters into the overall averages on the same basis regardless of the number of bonds. The overall corporate yield average is the average of the three groups (railroad, public utility, and industrial). The monthly series are averages of daily figures and the annual series are averages of 12 monthly figures.

Monthly data for 1963-87 for Aaa and Baa bonds appear in appendix I; annual data prior to 1963 and monthly data for 1934-87 (except for revisions listed below) for all series appear in earlier editions of BUSINESS STATISTICS.

6. Beginning December 18, 1967, Aaa railroad bonds not included; data not comparable with earlier figures.

7. New series beginning June 1984.

8. The Aaa public utility average was suspended January 17, 1984, because of a lack of appropriate issues. The average corporate and the Aaa corporate do not include Aaa utilities from January 17 to October 12. The Aaa utility average was reinstated on October 12.

9. The railroad average was discontinued by Moody's on July 13, 1989. Therefore, the July average reflects only eight working days.

10. Effective March 1991 the Security Markets series have been discontinued.

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1. Source: *The Bond Buyer*. Data represent the yield of a representative bond, having a maturity of about 20 years and selling at a price close to par. Originally the series included bonds of the 20 largest cities (excluding Washington, DC). Substitutions in the list of cities have been made from time to time, as some cities paid off the bulk of their debts or for many years had no debt outstanding with a sufficiently long maturity. As of December 1988, these indexes included bonds issued by 7 cities, 10 states, 2 counties (Dade County, Florida and Nassau County, New York), and 1 territory (Puerto Rico). Data are compiled as of Thursday of each week, and the figures shown here are for the Thursday nearest the end of the month (either the last Thursday of the given month or the first Thursday of the following month).

Monthly data for 1963-87 appear in appendix I. Annual data prior to 1963 and monthly data for 1923-62 appear in earlier editions of BUSINESS STATISTICS.

2. Source: Standard & Poor's Corporation. The series is an arithmetic average of yields to maturity of 15 high-grade domestic municipal bonds. The yields are based on Wednesday closing prices and the monthly figures are averages of the four or five weekly figures for the month. These yields are used to compute the price data for municipal bonds shown on page 72.

Annual data prior to 1963 and monthly data for 1923-87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: Board of Governors of the Federal Reserve System. Data are computed by the U.S. Department of the Treasury, based on prices reported to it by the Federal Reserve Bank of New York. Yields are based on a composite of daily closing-bid quotations in the New York over-the-counter market. Before April 1953, they were based on the mean of the closing bid-and-ask quotations.

The monthly series represents monthly averages of daily yields of bonds that are neither due nor callable in less than 10 years.

Monthly data for 1963-87 appear in appendix I; monthly figures for October 1941 through 1962 appear in earlier editions of BUSINESS STATISTICS.

4. Source: Dow Jones & Co., Inc.; data published in *The Wall Street Journal*. The averages are computed from daily closing prices of representative stocks listed on the New York Stock Exchange. The industrial averages are based on 30 stocks and the transportation averages on 20 stocks for the entire period beginning October 1928 and March 1928 respectively; the public utility averages were based on 20 stocks until June 1938 when the number was reduced to 15.

Substitutions have been made at various times in the actual stocks included in the averages, such as when a stock becomes too inactive, or when its movements, because of an extremely low price, become so small as to have little effect on the average, etc. Also, over the period covered, a number of splits have occurred in the stocks represented, and many large stock dividends have been paid. To preserve the historical continuity of the series, adjustments for these changes have been made, including appropriate adjustments of the dividing factors used to compute the averages.

At the end of December 1991 for example, instead of adding the closing prices for the 30 industrials, etc., and dividing by the number of stocks in each group, the computed daily averages were derived by using the following divisors: Industrials, 0.559; transportation, 0.669; utilities, 1.997; 65 stocks, 2.707. (The latest dividing factors will be found each day in *The Wall Street Journal*.)

A more detailed description of the method of constructing the averages is given in "Dow Jones Averages: A Non-Professional's Guide," available from The Educational Service Bureau, Dow Jones & Co., P.O. Box 300, Princeton, N.J. 08540.

Monthly data for 1963-87 for industrial stocks appear in appendix I; annual data prior to 1963 and monthly figures for 1934-87 for all series and back to 1923 for industrial and transportation (formerly railroad) stocks appear in the earlier editions of BUSINESS STATISTICS.

5. Source: Standard & Poor's Corporation. These indexes are the series introduced by the compilers in early 1957. Since that time, the composite index has been based on 500 stocks. For the back record, the compilers standardized on the former "90 composite" index, and the "500 composite" was linked to the former data to provide continuous historical comparisons. Monthly averages and annual ranges for the composite, industrials, transportation, utilities, and financial are based on daily indexes. All other stock price indexes are based on weekly indexes. The data are based on weekly indexes prior to 1928 for the composite, industrials, and utilities, and prior to July 1976 for transportation and financial. For railroads, the figures from 1928 to July 1, 1976 are based on daily indexes. As of December 1991, the number of stocks included in the following indexes was: capital goods, 104; consumer goods, 164; railroads, 6; money center banks, 6; major regional banks, 16; and property-casualty insurance, 6.

The formula used is generally defined as a "base-weighted aggregative" expressed in relatives, with the average value for the base period 1941-43 equal to 10. The basic formula is modified as necessary to adjust for arbitrary price changes caused by the issuance of rights, stock dividends, splits, etc.

For a complete description of the indexes see the 1992 edition of "Security Price Index Record," published by Standard & Poor's Corporation.

Monthly data for 1963-87 for the combined index (500 stocks) and the 400 industrial stocks appear in appendix I; annual data prior to 1963 and monthly data for 1953-87 (1955-87 for bank stocks) appear in earlier editions of BUSINESS STATISTICS. Monthly data prior to 1953 (1955 for bank stocks) and for 1970-74 (covering 20 transportation stocks and 40 financial stocks) are available upon request.

6. Includes data not shown separately.

7. Beginning January 1991 data, Roadway Services, Inc. is included in the Dow Jones Transportation Average replacing Pan Am Corp. Roadway Services is listed on the NASDAQ National Market System. Comparability with earlier averages is not affected by this change.

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1. See note 5 for p. 73.

2. Source: New York Stock Exchange (NYSE). These monthly indexes, introduced in July 1966, are based on the averages of the daily closing prices of all common stocks listed on the NYSE. When first published, the transportation index was based on 76 issues, the finance index on 75 issues, the utility index on 136 issues, and the industrial index on the nearly 1,000 NYSE-listed common stocks not included in the other three subgroup indexes. The number of issues in each group changes slightly from time to time.

The NYSE Composite Index measures the changes in the aggregate value of all the common stocks listed on the Exchange. The index base is set at 50.00 as of December 31, 1965. Adjustments in the base market values are made, when necessary, to compensate for new listings, delistings, mergers, and price changes resulting from issuance of rights.

To provide historical continuity the index has been linked statistically to the weekly index of common stocks compiled by the Securities and Exchange Commission (SEC) for the years 1939-64. Similar in structure to the NYSE index, the SEC index encompassed 300 issues, accounting for nearly three-fourths of the market value of all NYSE-listed common stocks. The NYSE Composite Index is thus available on a daily close basis beginning May 28, 1964, and on a weekly close basis from January 7, 1939 to May 28, 1964, the four group indexes (on a daily close basis), beginning December 31, 1965.

Monthly data for June 1964-December 1987 for the composite index and for 1966-87 for the other indexes are shown in earlier editions of BUSINESS STATISTICS beginning with the 1967 edition. Daily and weekly indexes, as indicated in the paragraph above, are available from the New York Stock Exchange.

3. Source: National Association of Securities Dealers, Inc. The National Association of Securities Dealers Automated Quotations (NASDAQ) System included securities of 4,451 over-the-counter companies with a total market value of 350.5 billion at the end of 1988. The NASDAQ National Market System (NASDAQ/NMS), which covers NASDAQ securities that meet certain market and financial criteria (such as shares outstanding and asset size), includes 2,790 larger NASDAQ companies.

NASDAQ price indexes include all NASDAQ/NMS equities (except warrants) and other NASDAQ domestic common stocks not designated on NMS. They are market-value weighted and are not adjusted for cash dividends. The monthly indexes are averages of daily closing values. For NASDAQ/NMS equities, all indexes use the last sale; for non-NMS equities, the indexes use the highest bid. NASDAQ indexes were set equal to 100 on February 5, 1971, and NASDAQ/NMS indexes were set equal to 100 on July 10, 1984.

For NASDAQ/NMS issues, total daily volume of shares sold for each issue is the sum of the volume of the reported transactions. This same concept is used by the principal exchanges. For non-NMS issues, the volume of shares sold is calculated by summing the higher of the buy or sell number of shares for each issue as entered by each NASDAQ marketmaker. This is equivalent to the net change in the marketmaker's inventory plus the number of shares that the marketmaker has both bought and sold. The market value is the monthly total of daily dollar volume for all trading days in the month. The daily dollar volume is the sum of each issue's trade size multiplied by that trade's sale price for NASDAQ/NMS issues and the total daily share volume multiplied by the closing high bid for non-NMS issues.

4. Average for 7 months (June-December).

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1. Source: Standard & Poor's Corporation. Monthly data are averages of weekly yields for each group. These yields are obtained by dividing the aggregate cash dividends (based on the latest known annual rate) by the aggregate market

value of the stocks in the group. The stocks in the group are selected for their market performance rather than their dividend records (at various times some of the component companies have omitted dividends).

Annual data prior to 1963 and monthly data for 1973-87 for the composite, industrial, and utilities are published in earlier editions of BUSINESS STATISTICS; monthly data for periods prior to 1973 are available upon request.

2. Source: Securities and Exchange Commission. Data are on the basis of trades cleared during the month. Clearances occur some time after the transaction date. Sales of voting trust certificates, American depository receipts, and certificates of deposit are included; sales of rights and warrants are not included (note that data in the 1957 and earlier issues of BUSINESS STATISTICS include such sales).

Annual data prior to 1963 and monthly data for 1955-87 appear in earlier editions of BUSINESS STATISTICS. Revisions for New York Stock Exchange: market value—1975—December, 11,016; volume—1975—December, 423. Monthly data for October 1934-54 are available upon request.

3. Source: New York Stock Exchange. Data for volume of sales are exclusive of odd lot and stopped sales. The figures are on the basis of sales effected, instead of sales cleared as shown in the adjacent column.

Annual data prior to 1963 and monthly data prior to 1975 appear in the 1975 and earlier editions of BUSINESS STATISTICS. Monthly figures for 1975-87 are available upon request.

4. See note 3 for p. 74.

5. Source: New York Stock Exchange. Data show the market value of all stocks listed on the Exchange, and the number of shares listed. Market values are based on prices as of the close of the last market session of the month. The figures have been compiled on a monthly basis (as of the end of the month) as far back as December 1924.

End-of-year data prior to 1963 and end-of-month data for 1925-87 appear in earlier editions of BUSINESS STATISTICS.

6. Data through March 1948 are based on 15 stocks; for the period April 1948-August 1965 on 14 stocks; thereafter, on 10 stocks.

7. Average for July-December; no data available prior to July 1976.

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1. Source: U.S. Department of Commerce, Bureau of the Census. Detailed data are contained in the monthly FT 925 reports. These reports also contain a general explanation of foreign trade statistics as well as of the sampling and estimating procedures and their effect on these statistics. (See also last two paragraphs of this note regarding sampling and estimating.)

Data are compiled primarily from copies of Shippers' Export Declarations and import entries filed with the U.S. Customs officials. The statistics show the trade of the U.S. Customs area (the 50 States, the District of Columbia, and Puerto Rico) and beginning 1981, of the U.S. Virgin Islands with foreign countries. Prior to 1981, data on trade between the U.S. Virgin Islands and foreign countries were separately compiled and published, but not included in the regular trade statistics. Also included are shipments into and out of U.S. Foreign Trade Zones.

Export statistics generally show country of ultimate destination as known to the exporter at the time of shipments; if this is not known, country of consignment.

Imports are shown by country of origin, except that where the importer cannot readily obtain information as to the country of origin, the country of shipment is reported. In addition, countries reported as origin may actually represent shipment for merchandise that is transshipped before it reaches the United States.

Monthly data for 1963-87 for those series indicated by a star appear in appendix I. Annual data prior to 1963 and monthly data for 1955-87 (except minor revisions for 1956 exports to Canada) are in earlier editions of BUSINESS STATISTICS.

Exports.—Total exports reflect exports of domestic and foreign merchandise. Export figures reflect both Government and nongovernment shipments of merchandise from the U.S. Customs territory, U.S. Foreign Trade Zones (and the U.S. Virgin Islands beginning 1981), with the exception of the following types of shipments: (1) Merchandise shipped in-transit through the United States from one foreign country to another; (2) goods destined for the U.S. Armed Forces or U.S. diplomatic missions abroad for their own use; (3) bunker fuel and supplies and equipment for vessels and planes engaged in foreign trade; (4) nonmonetary gold and silver in the form of ore, sweepings, scrap, base and refined bullion, etc. (beginning January 1969 silver in the above-mentioned forms is included in the regular statistics; beginning January 1978, nonmonetary gold is included in these forms); (5) issued monetary coins of all component metals; and (6) items of relatively small statistical importance, such as household and personal effects of travelers, and goods for the personal use of U.S. Government employees abroad, etc.

Included in the export figures are Department of Defense Military Assistance Program Grant-Aid shipments and economic assistance shipments under the Foreign Assistance Act. The data also reflect shipments of agricultural commodities under P.L. 480 (The Agricultural Trade Development and Assistance Act of 1954, as amended) and related laws. Exports of uranium and other nuclear materials are also included in the data as a result of the lifting of security restrictions in 1961.

Imports.—The import statistics reflect both Government and nongovernment imports of merchandise into the U.S. Customs territory, U.S. Foreign Trade Zones, and the U.S. Virgin Islands without regard to whether the importation involves a commercial transaction. The import statistics, in general, are a complete record of merchandise that physically moves into the United States from foreign countries (except for in-transit shipments). However, the following are excluded: American goods returned to the United States by U.S. Armed Forces; shipments of relatively small statistical significance, such as personal and household effects, and temporary imports; issued monetary coins of all component metals; and (prior to January 1978) gold in the form of ores, concentrates, waste and scrap, and refined bullion. Silver in these forms is included beginning January 1969. With the lifting of security restrictions, uranium imports are included, effective January 1961.

General imports are a combination of entries for immediate consumption and entries into bonded warehouses. Imports for consumption are a combination of entries for immediate consumption and withdrawals from bonded warehouses for consumption.

Export and import value.—The value reported in the export statistics is defined as the value at the U.S. port of export, based on the selling price (or cost if not sold), including inland freight, insurance, and other charges to the U.S. port of export. The value, as defined, is equivalent to an f.a.s. (free alongside ship) value, excluding the cost of loading the goods aboard the exporting carrier and transportation or other costs beyond the port of export. The import values, through 1973 and beginning January 1982, are customs import values. Through 1973, customs values were as appraised by the U.S. Customs Service in accordance with the legal requirements of Sections 402 and 402a of the Tariff Act of 1930, as amended. They were based either on foreign market value, export value, constructed value, or American selling price, etc., and generally represented a value in the foreign country; they therefore excluded U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise to the United States. This valuation was primarily used for collecting import duties and frequently did not reflect the actual transaction value. The Customs import value, as of January 1982, reflects the value of imports as appraised by the U.S. Customs Service in accordance with the legal requirements of the Tariff Act of 1930, as amended (most recently by the Trade Agreements Act of 1979). This Customs value as amended by the Trade Agreements Act of 1979, is generally defined as the price actually paid or payable for merchandise when sold for exportation to the United States, excluding U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise to the United States. In the case of transactions between related parties, the relationship between buyer and seller should not influence the Customs value.

Effective through June 1989, for overland shipments originating in Canada only, the Customs value generally does not include costs incurred in bringing the merchandise from the interior point of origin to the Canadian border point.

In those instances where assistance was furnished to a foreign manufacturer for use in producing an article which is imported into the United States, the value of the assistance is required to be included in the Customs value reported for the merchandise. Such "assists" include both tangible and intangible assistance, such as, machinery, tools, dies and molds, blue prints, copyrights, research and development, and engineering and consulting services. Therefore, unit values for some imports, if derived by using the Customs value, may be substantially increased due to the inclusion of such "assists."

From January 1974 through December 1981, imports are valued on a f.a.s. basis. The f.a.s. value represents the transaction value of imports at the foreign port of exportation; it is based on the purchase price, i.e., the actual transaction value and generally includes all charges incurred in placing the merchandise alongside the carrier at the port of exportation in the country of exportation.

Sampling and estimating shipments.—In the export statistics, for Canada, the 10-percent sample was maintained and applied to shipments valued \$100-\$1,999; \$251-\$1,999; and \$501-\$1,999 effective January 1963, October 1969, and March 1979 respectively. For exports to countries other than Canada, using a 50-percent sample, data were estimated for shipments valued \$100-\$499 (July 1953 through September 1969), \$251-\$499 (October-December 1969 and September 1970 through February 1978), from January through August 1970 export data were fully compiled, \$251-\$999 (March 1978 through February 1979), and \$501-\$999 (March 1979 through June 1981). Effective July 1981 through December 1984, the statistics for exports to countries other than Canada, reflected fully compiled data for shipments valued over \$500. The estimated data for the above-mentioned low-valued export shipments are combined with fully compiled data for the nonsampled shipments to produce the commodity, country, and other totals shown in the export statistics. Effective January 1985 through December 1986, export

statistics were fully compiled on shipments valued over \$1,000 to all countries. Value data for shipments valued under \$1,001 were estimated for individual countries using factors based on the ratios of low-valued shipments to individual country totals. Effective January 1987 through September 1989, export statistics were fully compiled for shipments valued over \$1,500 to all countries. Value data for shipments valued under \$1,501 were estimated for individual countries using factors based on the ratios of low-valued shipments to individual country totals. Effective October 1989, export statistics are fully compiled on shipments valued over \$2,500 to all countries. Value data for shipments valued under \$2,501 are estimated for individual countries using factors based on the ratios of low-valued shipments to individual country totals for past periods. The export statistics also include estimates for shipments valued under \$100 prior to October 1969, and under \$251 from October 1969 to February 1979, under \$501 from March 1979 through December 1984, and under \$1,001 since January 1985 in country totals but are not classified by commodity.

In the import statistics, data for informal entries (generally containing items valued under \$251) and various types of formal entries valued under \$100, in general, were estimated prior to June 1965, usually from a 1-percent sample. Data for both formal and informal entries valued under \$251 have been estimated since July 1965, based on a 1-percent sample for all years except 1967 and 1970, when a 5-percent sample was used. The estimates, although not classified by commodity, are included in country and other import totals. Prior to January 1985, the total value of the estimated low-valued shipments generally amounts to less than 1-percent of the import total. Effective August 1982 through December 1984, shipments valued under \$251 are estimated from factors based on the ratios of under-\$251 shipments to individual country totals. Effective January 1985 through September 1989, import statistics were fully compiled on shipments valued over \$1,000 except for articles that must be reported on formal entries when valued over \$250. Effective October 1989, import statistics are fully compiled on shipments valued over \$1,250 or, under certain textile programs, for any article that must be reported on a formal entry. Value data for shipments valued under \$1,251 and not required to be reported on formal entries are estimated for individual countries using factors based on the ratios of low-valued shipments to individual country totals for past periods. The total value of the estimated low-valued shipments generally amounts to slightly less than 4 percent of the import total.

2. Data are adjusted for working day and seasonal variation by the Census Method II Seasonal Adjustment Program. A description of this method appears in "Electronic Computer and Business Indicators" by Julius Shiskin, National Bureau of Economic Research, Occasional Paper 57, New York. The Bureau of the Census Technical Paper Number 15 (1967 revision), "The X-11 Variant of the Census Method II Seasonal Adjustment Program," presents a description of the adjustment process as performed by computer, the many options available to the user, and a sample of the computer printout of an adjusted series.

Monthly data for 1963-87 on a seasonally adjusted basis appear in appendix I.

3. Includes data for items not shown separately.

4. Comprises Union of Soviet Socialist Republics in Asia and Europe.

5. See paragraph 6 of note 1 for this page regarding the inclusion of nonmonetary gold and silver ores, base bullion, and refined bullion, etc.

6. Beginning with annual data for 1970 and monthly data for 1987, adjustments have been made for undocumented U.S. exports to Canada.

7. Effective October 3, 1990, the German Democratic Republic (GDR; East Germany) ceased to exist as a sovereign state and became a part of the Federal Republic of Germany. Accordingly, effective with the statistics for October 1990, all merchandise imported from or exported to the former GDR will be included as trade with the Federal Republic of Germany.

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1. See note I for p. 76 for a general description of foreign trade statistics.

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1. See note 1 for p. 76 for a general description of foreign trade statistics.

2. The data for commodity groups and principal commodities shown here and since the 1967 volume replace those shown in earlier volumes of BUSINESS STATISTICS by economic classes and principal commodities. Because of regrouping of commodities and changes in the export commodity classifications, it is not possible to make direct comparisons between these groups and those in the earlier volumes. Monthly data for 1965-87 are in the 1969 and later editions of BUSINESS STATISTICS.

3. Annual data for agricultural and nonagricultural products includes revisions not distributed to the months. For total exports and agricultural and nonagricultural totals, annual data prior to 1963 and monthly data for 1929-87 will be found in earlier editions of BUSINESS STATISTICS.

4. See paragraph 6 of note 1 for p. 76 regarding the inclusion of nonmonetary gold, silver ores, base bullion, and refined bullion, etc.

5. Beginning with annual data for 1970 and monthly data for 1987, adjustments have been made for undocumented U.S. exports to Canada.

6. Beginning with January 1989 data, undocumented exports to Canada are now included, resulting in a break with December 1988 data.

7. Beginning January 1989, buses are excluded from "Motor vehicles and parts" and included in "Other manufactured goods," resulting in a break with December 1988 data.

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1. See note 1 for p. 76 for a general description of foreign trade statistics.
2. See note 2 for p. 76 regarding the method of seasonal adjustment.
3. Includes data for items not shown separately.
4. Union of Soviet Socialist Republics in Asia and Europe.
5. Beginning January 1978, total imports include shipments of nonmonetary gold ore, base bullion (including sweepings, waste, and scrap), and refined bullion. Silver in these forms has been included since January 1969.
6. See note 1 for p. 76 regarding valuation of imports.
7. See note 7 for p. 76.

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1. See note 1 for p. 76 for a general description of foreign trade statistics.
2. See note 1 for p. 76 regarding valuation of imports.

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1. See note 1 for p. 76 for a general description of foreign trade statistics.
2. The data for general imports by commodity groups and principal commodities shown here and since the 1967 volume replace those for imports for consumption by economic classes and principal commodities shown in earlier volumes of BUSINESS STATISTICS. Because of this substitution and some regrouping of the commodities, it is not possible to make direct comparisons between these groups and those in the earlier volumes.
3. See note 1 for p. 76 regarding valuation of imports.

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1. See note 1 for p. 76.
2. Source: U.S. Department of Labor, Bureau of Labor Statistics. The export price index provides a measure of price change for all products sold by U.S. residents to foreign buyers. ("Residents" is defined as in the national income accounts: it includes corporations, businesses, and individuals but does not require the organizations to be U.S. owned nor the individuals to have U.S. citizenship.) The import price index provides a measure of price change for goods purchased from other countries by U.S. residents.

The monthly import and export price indexes are based on the end-use classification system as defined in tables 4.3 and 4.4 in the SURVEY OF CURRENT BUSINESS. Data for the monthly indexes are collected for approximately 7,000 products from over 1,900 companies. Most prices are collected by mail questionnaire. Respondents are requested to supply the net transaction price for the pricing month. The data generally represent transactions early in the month.

The index weights represent the total dollar value of U.S. foreign trade in a designated base year and are distributed among several thousand weight-group categories. Values assigned to each of these weight-group categories are based on trade value figures compiled by the Bureau of the Census for the base year. Currently, BLS uses 1985 trade weights.

For a discussion of the general method of computing International Price Indexes, see *BLS Handbook of Methods*, Bulletin 2285.

3. Source: U.S. Department of Commerce, Bureau of the Census. See note 1 for p. 76 for general description of foreign trade statistics. Shipping weight figures represent the gross weight of shipments, including the weight of immediate containers, wrappings, crates, and moisture content, but excluding containers such as cargo vans and similar substantial outer containers used for containerized cargo. Export and import values are as defined in note 1 for page 76.

The data cover only waterborne trade, including traffic through Atlantic, Gulf, Pacific, and Great Lake ports. They include shipments on all types of watercraft engaged in foreign trade that are required to make formal clearance and to file manifests of cargoes laden aboard under U.S. Customs Regulations; they also include shipments by vessels not required to make formal customs clearances, which include ferryboats and passenger vessels making three or more trips a week between a U.S. port and a foreign port.

Vessel export figures represent exports of domestic and foreign merchandise laden at the U.S. Customs area for shipment to foreign countries and include export shipments to civilian agencies of the U.S. Government as well as those foreign-aid program shipments that are not controlled by the Department of Defense.

Elements excluded from the vessel export figures for pertinent periods are as follows: (1) Shipments to U.S. Armed Forces of military and naval supplies and equipment for their own use; (2) shipments of "special category" commodities (commodities for which detailed information may not be released for security reasons); (3) all commodities exported under foreign-aid programs as Department of Defense controlled cargo (Department of Defense controlled cargo consists of those shipments under foreign-aid programs—such as the International Cooperation Administration Program, the Civilian Supply Program, and grant-aid shipments under the Department of Defense Military Assistance Program—that are exported from the United States on U.S. Army or Navy transports or U.S. flag commercial vessels chartered by the Department of Defense under time, voyage, and space charter arrangements); (4) for the periods July 1953–December 1955 and July 1956–December 1962, shipments individually valued less than \$500; for the period January–June 1956, shipments individually valued less than \$1,000; and for the periods January 1963–December 1969 and September 1970–December 1974, shipments to Canada individually valued less than \$2,000 and those to other countries individually valued less than \$500. However, the annual data (except for 1964) include estimates for the \$100–\$499, the \$100–\$999, and the \$100–\$1,999 shipments, based on a 10-percent sample of such shipments. (Prior to July 1953, export shipments of less than \$100 were excluded.) For the period January 1985–December 1986, shipments to all countries valued \$1,000 or less were excluded. Effective January 1987, shipments to all countries valued \$1,500 or less are excluded.

Vessel import figures are general imports and represent the total of imports for immediate consumption plus entries into Customs-bonded storage and manufacturing warehouses made at U.S. Customs area from foreign countries. The following elements are excluded from the vessel import figures: (1) American goods returned by the U.S. Armed Forces for their own use; (2) import shipments on Army or Navy transports and, effective with April 1952 statistics, on vessels under time and voyage charter to the Military Sea Transportation Service; (3) prior to 1954, import shipments valued at less than \$100 where the shipping weight was less than 10,000 pounds; from January 1954 to December 1957, imports valued at less than \$100 (irrespective of weight) and those having a shipping weight of less than 2,000 pounds (irrespective of value); from January 1958 to June 1965, those shipments having a value of less than \$100 regardless of shipping weight; from July 1965 to December 1984, those shipments valued \$250 and under reported on both formal and informal entries. Effective January 1985, shipments valued \$1,000 or less are excluded. The following types of shipments are excluded from both the vessel export and import data: (1) Shipments of household and personal effects; (2) shipments by mail and parcel post; (3) shipments of vessels under their own power and afloat; (4) merchandise shipped in bond through the United States in transit from one foreign country to another "without having been entered as an import" (imported merchandise cleared through Customs and subsequently reexported is included in both the import and export statistics); (5) U.S. trade with Puerto Rico and with U.S. possessions and trade between U.S. possessions.

Annual data are statistical-year totals, and monthly data are on a statistical-month basis; i.e., they are tabulated from reports received in the month, regardless of when the shipment was made.

Monthly figures for 1951-58 (statistical-month basis) for shipping weight will be found in the 1961, 1959, 1957, and 1955 editions of BUSINESS STATISTICS (data therein are in long tons). Monthly data for 1959-87 for shipping weight (in short tons) and value appear in the 1963 and subsequent editions of BUSINESS STATISTICS; those for periods prior to 1959 for value are available in the reports of the source agency.

4. Beginning January 1965, data are not strictly comparable with those for earlier periods because of the inclusion of "special category" items removed from the restricted list.

5. See note 1 for p. 76 regarding valuation of imports.

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1. Source: U.S. Department of Transportation, Research and Special Programs Administration, Office of Airline Statistics; formerly Civil Aeronautics Board (CAB). Data cover scheduled and nonscheduled services of all certificated route air carriers. Scheduled service refers to transport service operated according to published flight schedules, including extra sections and related nonrevenue flights. Nonscheduled service refers to revenues from flights, such as charter flights, that are not operated in regular scheduled service.

Beginning January 1981, data are not directly comparable with earlier data. The changing nature of airline operations under deregulation necessitated a reevaluation and restructuring of air carrier groupings. The data are classified in two broad operational groups, "domestic" and "international". The "domestic" group encompasses operations within and between the 50 States and the District of Columbia, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands; Canadian transborder; and for certain carriers, Mexican transborder operations. All other operations are considered "international". Prior to 1969, operations between the 48 States and Alaska or Hawaii are included in the international category.

A "revenue passenger-mile" represents 1 revenue passenger transported 1 mile in revenue service. Revenue passenger-miles are computed by summing the products of the revenue aircraft miles flown on each inter-airport hop multiplied by the number of revenue passengers carried on that hop. Effective January 1974, revenue passengers were redefined to exclude travel and cargo agents and tour conductors traveling under reduced-rate transportation. For earlier periods, nonrevenue passengers covered only airline employees and their families traveling for token charges. For the months of December 1974 and December 1973, the percentage of nonrevenue passenger-miles to total passenger-miles is as follows (percent): Total certificated route carriers, 5.8 and 3.9; domestic, 5.5 and 3.8; international, 7.1 and 4.3.

"Revenue passenger-load factor" represents the percent that revenue passenger-miles are of available seat-miles in revenue passenger service. "Total revenue ton-miles" applies to the total of passenger plus nonpassenger traffic, i.e., the sum of passenger and baggage, freight, express, U.S. mail, and foreign mail. "Revenue ton-mile" is 1 ton (2,000 pounds) of revenue traffic transported 1 statute mile (5,280 feet). "Ton-miles" are the product of aircraft miles flown on each inter-airport hop multiplied by the number of tons carried on that hop.

Monthly and quarterly data for 1967-87 are in earlier editions of BUSINESS STATISTICS. Data prior to 1967 are available in the CAB monthly report, "Air Carrier Traffic Statistics" and the quarterly, "Air Carrier Financial Statistics". The series shown in the 1969 and earlier editions of BUSINESS STATISTICS are for domestic trunk carrier operations only.

2. Total includes other revenues not shown separately.

3. Beginning 1969, operations between the 48 States and Alaska and Hawaii are included in the domestic group and excluded from the international group of carriers. Traffic statistics for 1969, comparable with data for earlier years, for domestic and for international operational operations, respectively, are as follows: Passenger-miles (billions), 95.95; 29.47; cargo ton-miles (millions), 1,971; 1,385; mail ton-miles (millions), 616; 729.

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1. See note 1 for p. 83.

2. Source: American Public Transit Association. Data are estimated totals for all organized local passenger transportation agencies (publicly and privately owned) in the United States. The estimates of passengers carried are based on reports from member and nonmember companies whose operations represent approximately 85 percent of the total industry.

The urban transit industry covers local motor bus, railway (subway, elevated, and surface lines), suburban or commuter railroads, and trolley coach traffic. Excluded from the figures are long distance interstate motor carriers, sightseeing buses, school buses, and taxicabs.

Beginning 1972, data have been restated to cover all "unlinked passenger trips," rather than revenue passengers as in data of earlier periods. Each time a rider boards a transit vehicle it is counted as an "unlinked passenger trip." For example, a rider who transfers from one bus to another bus in going from origin to destination takes two "unlinked passenger trips" regardless of whether that rider uses a revenue transfer, a free transfer, or no transfer at all.

Monthly data for 1972-87 for the latter series are available upon request; monthly data for 1947-76 for the former series appear in earlier editions of BUSINESS STATISTICS.

3. See note 3 for p. 83.

4. See 3d paragraph of note 2 for this page regarding change affecting comparability of data.

5. Beginning 1974, comparison of operating revenues and expenses with prior periods is affected by revised reporting regulations—"other" transport-related revenues and expenses are reported gross in operating revenues and in expenses rather than as net in operating revenues. For 1974, for total certificated route carriers, the effect of the reporting change increased operating revenues and expenses by less than 3 percent.

6. Beginning Jan. 1981, data are not comparable with earlier data because of the inclusion of commuter railroads and a sample of small transit systems.

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1. Source: Interstate Commerce Commission. Net income includes fixed charges, non-operating income, income taxes, unusual or infrequent items, earnings attributable to discontinued segments, extraordinary items, and cumulative effect of changes in accounting principles. Beginning with 1976, data are for the 100 largest class I carriers. Prior to 1976 all class I carriers were included. In 1976 class I carriers were those with annual revenues of \$3 million dollars or more. Effective January 1980, contract carriers are not included because the data filed by these carriers were substantially reduced in scope. Beginning 1973, data refer to actual tonnage carried; earlier data, to billed tonnage.

Annual data prior to 1963 and quarterly data for 1951-87 are in earlier editions of BUSINESS STATISTICS.

2. Source: American Trucking Associations (ATA), Inc., Statistical Analysis Department. The index (calculated by the link relative method) is based on the ATA monthly survey of class I and class II intercity motor carriers of general freight. The index is adjusted for seasonal variation and for the number of trading days in accordance with factors developed by the U.S. Department of Commerce, Bureau of the Census, based on data supplied by the ATA.

Beginning 1974, comparison of tonnage carried with prior periods is affected by a change in reporting actual tonnage carried instead of tonnage billed.

Annual data for 1957-62 and monthly data for 1957-87 are available upon request.

3. Source: Association of American Railroads. Data cover class I railroads, which were defined in 1990 by the ICC and its annual determination as those having annual operating revenues of \$94.4 million. The operating revenues have been indexed for inflation every year since 1978 based on the BLS Railroad Freight Price Index. Data exclude switching and terminal companies.

Net railway operating income is the difference between railway operating revenues and the total of railway operating expenses, railway tax accruals, and net equipment and joint facility rents. Ordinary income is calculated after "income from nonrailroad operations" is added and interest on debt and other fixed charges are deducted. (Prior to 1967, ordinary income was reported as net income). Ton-miles refer to 1 ton of freight moved 1 mile.

Quarterly data will not add to annual totals because of frequent changes in the railroad industry due to reclassifications and mergers.

Annual data prior to 1963 and monthly or quarterly data for 1934-87 are in earlier editions of BUSINESS STATISTICS.

4. Includes mail, express, and other operating revenue not shown separately. Effective 1974, mail and express revenues are included in freight revenues; for the years 1971, 1972, and 1973, total mail and express revenues are as follows (millions of dollars): 133.3; 100.7; 86.2.

5. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). The index measures changes in prices of shipping goods by rail in the United States. It reflects price changes for all line-haul railroad shipments and it is not influenced by changes in quantity, shipping terms, types of service, etc. The index is not intended to measure changes in railroad revenues or shipper costs that result from changes in service or mode.

The price index is derived from a sample of shipments from the Interstate Commerce Commission's 1-percent waybill sample. BLS obtains data on quantities of goods shipped (and other specifications for each shipment) from the waybill selected for pricing. The index relates to the movement of a specific quantity of freight between two specific locations (line-haul service) and any requested services. Identical shipments of commodities are used and are defined by precise specifications to incorporate the principal price-determining factors. Therefore, the prices used in the index conform with the concept of the railroad's price for shipping a fixed set of commodities under specified conditions. The prices used are the rates in effect on the 15th of each month for identical shipments of commodities; the prices are derived from schedules (tariffs) published by the carriers.

Monthly indexes for 1969-87 are available upon request. A detailed explanation of concepts, methods, uses, and limitations appears in the June 1975 *Monthly Labor Review*, together with rail freight monthly price indexes for 11 commodity groups for 1969-74.

6. Beginning 2d quarter 1971, data for the National Railroad Passenger Corporation (Amtrak) are excluded.

7. See 1st paragraph of note 1 for this page regarding comparability of data.

8. Beginning 1984, data are calculated on 1983 year-end depreciation accounting basis.

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1. Source: Laventhol & Horwath. Beginning September 1990, data are no longer available. The data reflect reports received from several hundred transient hotels, full-service motor hotels, and economy hotels operating throughout the year. Prior to 1972, adjustments were made gradually for changes in the types and number of hotels participating in the survey. Beginning 1972, figures for hotels (and restated data for 1971) reflect changes in the composition of the sample. Therefore, data prior to 1971 are not directly comparable with figures shown beginning 1971.

Data for average sale per occupied room refer to room revenue, that is, average daily rent and not to scheduled room rates.

The restaurant sales index for each month is related to the corresponding month of the base year 1967. As the sample varied from month to month, it was necessary to compute the index from percentage changes (the given month as compared with the corresponding month in the preceding year) based on the reports received. The index represents the hotel and motor hotel industry only and includes both food and beverage sales.

Annual data prior to 1963 and monthly data for 1929-87 for hotels, May 1971-December 1986 for motor hotels, and 1981-87 for economy hotels appear in earlier editions of BUSINESS STATISTICS. Monthly data for 1980 for economy hotels are available upon request.

2. Sources: U.S. Department of Justice, Immigration and Naturalization Service (INS) (through 1975), and U.S. Department of Transportation (from INS records, beginning 1976). Data are compiled from passenger manifests or lists required by law and from regulations prepared for vessels and aircraft traveling between the United States and foreign countries. (Planes carrying passengers on flights originating or terminating in Canada are exempt from the manifest requirement.)

Beginning 1976, data cover air travel only; travel by sea is omitted. For 1973-75 data for average annual travel by sea were as follows (thousands): U.S. citizens—arrivals, 814; departures, 784; aliens—arrivals, 159; departures, 129.

Through 1975, data cover arrivals and departures of aliens and citizens, by sea and air between ports of the United States (defined as ports of the U.S. mainland, Alaska, Hawaii, Guam, Puerto Rico, and the Virgin Islands; also U.S. immigration offices located in Canada) and foreign territory. Therefore, travel between foreign countries and outlying areas of the United States is covered. Excluded from the figures are travel over land borders (except Mexican air travel, which is included effective July 1958), crewmen, military personnel, and travelers between the United States and its possessions. Cruise travel (passengers making cruises on round trips without change of vessel) for both inward and outward passengers is included effective July 1958.

Aliens are defined as immigrants arriving to establish residence here; nonimmigrants coming for temporary stays (e.g., tourists, students, or government officials); and resident aliens returning from visits abroad.

Annual data prior to 1963 and monthly data for 1951-78 and quarterly data for 1979-87 are in earlier editions of BUSINESS STATISTICS. Preliminary monthly data are shown in the SURVEY OF CURRENT BUSINESS; however, they are replaced with revised quarterly data. Data may not add to annual totals because of revisions and corrections not applied to monthly or quarterly data.

3. Source: U.S. Department of State, Passport Services. Data represent total passports issued, including renewals through August 25, 1968. A single passport may be used for an unlimited number of trips and (through December 31, 1982) cover more than one person.

In 1959 and 1968, rules governing renewal of passports were changed. Prior to September 14, 1959, passports were issued for 2 years and could be renewed for 2 additional years. For the period September 14, 1959-August 25, 1968, the potential life of the passport was extended to 5 years; the passport was issued for 3 years and could be renewed for 2 additional years. Effective August 26, 1968, renewals are no longer issued.

For the period August 26, 1968-December 31, 1982, passports were issued for 5 years and beginning January 1, 1983, the life of the passport has been further extended to cover a total of 10 years.

Annual data prior to 1963 and monthly data for 1931-87 are in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of the Interior, National Park Service. Data are compiled from reports from all national parks in the United States and represent "recreation visits" to national parks. Such visits to the Virgin Islands National Park and Samoa National Park are excluded. A "recreation visit" is the entry of

any person into a national park in order to make use of recreational services, conveniences, or facilities provided by the National Park Service; a person who enters a park several times in a month or year is counted as a "visit" at each entry.

There are currently 48 areas designated as national parks within the United States. They are as follows: Acadia, Arches, Badlands, Big Bend, Biscayne, Bryce Canyon, Canyonlands, Capitol Reef, Carlsbad Caverns, Channel Islands, Crater Lake, Denali (formally Mount McKinley), Everglades, Gates of the Arctic, Glacier, Glacier Bay, Grand Canyon, Grand Teton, Great Basin, Great Smokey Mountains, Guadalupe Mountains, Haleakala, Hawaii Volcanoes, Hot Springs, Isle Royale, Katmai, Kenai Fjords, Kings Canyon, Kobuk Valley, Lake Clark, Lassen Volcanic, Mammoth Cave, Mesa Verde, Mount Rainier, North Cascades, Olympic, Petrified Forest, Redwood, Rocky Mountain, Sequoia, Shenandoah, Theodore Roosevelt, Voyageurs, Wind Cave, Wrangell-St. Elias, Yellowstone, Yosemite, and Zion.

Monthly "recreation visits" data for 1979-1987 are in the 1982 and subsequent editions of the BUSINESS STATISTICS. Annual data for 1939-78 and monthly data for 1957-78 for "visits" (a visit includes employees and service personnel who enter a park for employment reasons in addition to those who enter for recreational reasons) to national parks are in the 1979 and earlier editions of BUSINESS STATISTICS.

5. See 2d paragraph of note 2 for this page regarding change in comparability in data.

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1. Source: U.S. Department of Commerce, Bureau of the Census. Data shown for production represent total quantity of each chemical produced, including quantity consumed in the plant, or sold or transferred to other plants or warehouses of the same company. Products produced under toll agreements are reported by the establishment that owns the raw material from which the products are produced. The data provide a measure of total production, but do not necessarily indicate amounts entering the market since, in some cases, figures are included for material produced by an intermediate process in the production of another end product.

The figures are believed to be essentially complete except, in some years, for quantities of various chemicals produced by plants either owned or operated by the Federal Government or operated solely for its account. It should be noted, however, that production of certain chemicals by plants operated by the Tennessee Valley Authority and production of certain chemicals (such as nitric acid, sodium sulfate, and sulfuric acid) in Government-owned, privately operated plants are included.

Beginning in 1991 data are available only on a quarterly basis.

Annual data prior to 1963 and monthly data prior to 1988 (with some exceptions listed in the methodological notes) appear in earlier editions of BUSINESS STATISTICS.

2. Data exclude quantities produced and consumed in municipalities.

3. Data include white (yellow) and red (technical) phosphorus.

4. Data cover soluble silicate glass, liquid and solid. Amounts produced and consumed in making meta-, ortho-, and sesquisilicates are excluded.

5. Data represents high and low purity of sodium sulfate including Glauber's salt.

6. Source: U.S. Department of the Interior, Bureau of Mines. Data comprise native sulfur by the Frasch process and recovered elemental sulfur produced from hydrogen sulfide obtained from sour natural gas, petroleum refinery gas, water gas, and other fuel gases.

Annual totals for production reflect revisions not distributed to the months. Stocks are those held at mines or plants, in transit, and in warehouses at the end of the month.

Effective with the 1984 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in the 1982 and earlier editions are in thousands of long tons and may be converted to thousands of metric tons by dividing by 0.984206.

Annual data prior to 1963 and monthly data for 1959-87 are in earlier editions of BUSINESS STATISTICS.

7. Annual total reflects revisions not distributed to the months.

8. Beginning January 1982, the reporting basis changed from 100-percent TiO₂ to commodity weight.

9. Beginning with October 1988, data include amounts to tetrabasic (pyro) sodium phosphate to avoid disclosing such data for individual firms.

10. Figure is being suppressed to avoid disclosing figures for individual companies.

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1. See note 1 for page 87.
2. Represents total amount of original solution produced, including amounts used for fertilizer, explosives, other uses, and amounts consumed in manufacturing other products such as nitrogen solutions.
3. Consists of "synthetic" and "byproduct, other than coke oven."
4. Data represent the gross amount of sulfuric acid produced by the contact and chamber processes, including oleums and fortified spent acid strengthened by the addition of sulfur trioxide, which is produced for use or sale. Recovery and reuse of acid by such methods as hydrolysis and evaporation (concentration) are excluded. Amounts produced in Government-owned, contractor-operated plants are included.
5. Source: U.S. Department of Commerce, Bureau of the Census. Data cover all plants in the United States, including Government-owned plants, known to have facilities for the manufacture of superphosphate and other phosphatic fertilizers.
Effective with 1981, data represent "gross weight" and are not directly comparable with data shown for earlier periods, which are reported on a 100-percent P_2O_5 and a 18-percent P_2O_5 basis.
See earlier editions of BUSINESS STATISTICS, for the specific years and conversion factors for comparability of data.
The statistics pertain only to superphosphate and phosphatic fertilizer materials as such and exclude data for these products in dry-base or dry-mixed goods. Data cover all grades of superphosphate (i.e., normal, enriched, and concentrated), as well as ammonium phosphates and other phosphatic fertilizer materials.
Annual data prior to 1963 and monthly data prior to 1988 appear in earlier editions of BUSINESS STATISTICS.
Beginning 1991, data are available only on a quarterly basis.
6. Source: Potash & Phosphate Institute (formerly known as American Potash Institute). Tonnage sales reported by the Potash & Phosphate Institute represent more than 99 percent of the potash produced in North America. Recently, fertilizer manufacturers have absorbed approximately 95 percent of the potash produced, while the remaining amount is consumed by industrial users.
Potash sales are reported in K_2O tons equivalent because the potassium content of the salts mined in different parts of the world varies.
Exports, as reported by the Potash & Phosphate Institute but excluded here, totaled 4,111,287 tons K_2O in 1991.
Annual data prior to 1963 and monthly data for 1936-87 appear in earlier editions of BUSINESS STATISTICS.
7. Source: U.S. Department of Commerce, Bureau of the Census. Imports are for consumption. (For a general explanation of foreign trade data, see note 1 for p. 76.)
Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying thousands of short tons by .907185.
Annual data prior to 1963 and monthly data for 1941-87 appear in earlier editions of BUSINESS STATISTICS.
8. Annual total reflects revisions not distributed to the months.
9. Reported annual total; includes data being withheld to avoid disclosure of operations of individual firms.
10. See 2d paragraph of note 6 for this page.
11. Less than 500 metric tons.

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1. See note 1 for p. 87.
2. Data exclude quantities from railroad shops, shipyards, welding shops, and small establishments using portable generators.
3. Data include an unspecified amount of hydrogen produced for sale or transfer to plants consuming hydrogen in the production of ammonia, but exclude amounts produced by the ammonia dissociation process (cracking of ammonia).
4. Low purity nitrogen (less than 99.5 percent) included beginning January 1971. Data exclude amounts produced and consumed in the manufacture of synthetic ammonia or ammonia derivatives.
5. Low purity oxygen (less than 99.5 percent) included beginning January 1970. Data exclude amounts produced and consumed in the manufacture of synthetic ammonia or ammonia derivatives.
6. Source: U.S. International Trade Commission (formerly U.S. Tariff Commission), with the exception of data for glycerin, which are furnished by the U.S. Department of Commerce, Bureau of the Census. Synthetic organic chemicals are classified on the basis of their principal use as follows: Cyclic intermediates, dyes, organic pigments, medicinal chemicals, flavor and perfume materials, plastics and resin materials, rubber-processing chemicals, elastomers

(synthetic rubber), plasticizers, surface-active agents, pesticides and related products, miscellaneous end-use chemicals and chemical products, and miscellaneous cyclic and acyclic chemicals.

The chemicals shown are: *Medical Chemicals* (aspirin), which include the medicinal and feed grades of all organic chemicals having therapeutic value. *Miscellaneous Cyclic and Acyclic Chemicals* (Ethyl acetate, Formaldehyde, and Methanol), which are used as refrigerants, aerosols, solvents, catalysts, additives in plastics and food products, and, especially, a wide range of acyclic chemical intermediates. *Cyclic Intermediates* (Phthalic anhydride), most of which are used in the manufacture of more advanced synthetic organic chemicals and finished products, such as dyes, medicinal chemicals, elastomers (synthetic rubber), pesticides, and plastics and resin materials. Except for ethyl acetate (prior to 1985) and formaldehyde, the products are reported on the basis of 100 percent content of the specified material.

Any differences between the annual data and the sum of monthly or quarterly data, are the result of revised annual totals, for which there are no corresponding monthly or quarterly revisions.

Except for glycerin, data have been converted to thousands of metric tons, effective with the 1988 edition of BUSINESS STATISTICS. Data shown in the 1986 and earlier editions may be converted to the new measurement as follows: Thousands of pounds multiplied by .453592 and thousands of gallons (for methanol) multiplied by 3.0113379.

Annual data prior to 1963 and monthly data for 1939-87 appear in earlier editions of BUSINESS STATISTICS.

7. Source: U.S. Treasury Department, Bureau of Alcohol, Tobacco, and Firearms. Data for operations, as defined below, cover the United States and Puerto Rico.

Production figures are net, i.e., gross production (original production plus production by redistillation) minus the quantity used in redistillation and cover alcohol and spirits produced by facilities of distilled spirits plants.

Stock figures represent alcohol and spirits in bonded storage at distilled spirits plants, including stocks in denaturing facilities of these plants. A *tax gallon* for spirits of 100 proof or over is the alcoholic equivalent of a U.S. gallon at 60° F., containing 50 percent of ethyl alcohol by volume; for spirits of less than 100 proof, the tax gallon is equal to the wine gallon. A *wine gallon* is a U.S. gallon of liquid measure equal to the volume of 231 cubic inches.

More complete data for alcohol and spirits, including details by States, are available in monthly reports published by the source.

Annual data prior to 1963 and monthly data for 1934-87, appear in earlier editions of BUSINESS STATISTICS.

8. Annual total reflects revisions not distributed to the months.

9. Beginning January 1970, data include low purity (less than 99.5 percent) oxygen and are not comparable with those shown for earlier periods. Separate data are not available for low purity oxygen.

10. Beginning January 1971, data include low purity (less than 99.5 percent) nitrogen and are not comparable with those shown for earlier periods.

11. Data are partially estimated for first three quarter of 1991 and are not available. Value for 4th quarter 1991 is based on partially estimated production data.

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1. Source: U.S. Treasury Department, Bureau of Alcohol, Tobacco, and Firearms. Data cover operations of all denaturing plants in the United States and Puerto Rico. The figures include completely denatured and specially denatured alcohol produced from domestic alcohol and spirits and also from alcohol imported under authority of the Revenue Act of 1942. Figures for withdrawals represent removals from plants including amounts shipped to bonded dealers and, beginning July 1980, amounts used for fuel, which are shown separately beginning with the 1984 edition of BUSINESS STATISTICS.

A *wine gallon* is a U.S. gallon of liquid measure equivalent to the volume of 231 cubic inches.

Data by States are also contained in monthly reports published by the source.

Annual data prior to 1963 and monthly data for 1934-87, and some scattered revisions for earlier periods shown in the methodological notes, appear in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. International Trade Commission (formerly U.S. Tariff Commission). Plastics and resin materials are high molecular weight polymers which, at some stage in their manufacture they are in such physical condition that they can be shaped or processed by the application of heat and pressure. Depending on the chemical composition, manufacturing process, or intended use the commercial products may contain plasticizers, fillers, extenders, stabilizers, coloring agents, or other additives (polyethylene and polypropylene resins, have these additives). Polyvinyl resins are reported on a resin-content basis—i.e., they exclude these additives.

Resins materials may be in the form of solutions, pastes, or emulsions for applications such as protective coatings, adhesives, or paper and textile treatment.

Thermosetting resins are those which harden with a change in composition in the final treatment so that in their final state as finished articles they cannot again be softened by heat or solvents; whereas, *thermoplastic resins* of which three types are shown here, are those which in their final state as finished articles can be repeatedly softened by heat and hardened by a decrease in temperature.

Data represent total quantities produced for consumption within the same plant, for transfer to other plants of the same company, for sale, and under toll agreement between two firms; i.e., one firm furnishes the raw materials and pays the processing costs and the other firm prepares the finished product and returns it to the first firm.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying millions of pounds by .453592.

Annual totals for all years reflect revisions not distributed to the months. Annual data prior to 1963 and monthly data for 1948-87 appear in earlier editions of BUSINESS STATISTICS.

3. Polyethylene resins are used for film, sheeting, and molding and extrusion materials.

4. Polypropylene resins are used in the manufacture of various plastic products such as battery cases, toys and novelties, domestic uses (i.e., furniture, home appliances, in-door out-door carpeting, etc.), luggage, food containers, building and construction materials.

5. Data cover resins for film, sheeting, molding and extrusion, textile and paper coating and treating, flooring, adhesives, protective coatings, and other uses.

Beginning January 1972, data exclude polyvinyl acetate, polyvinyl alcohol, and other vinyl resins and are not comparable with those for earlier periods.

6. Source: U.S. Department of Commerce, Bureau of the Census. Effective with the 1982 edition of BUSINESS STATISTICS, coverage represents total value of shipments of U.S. manufacturers of paint, varnish, and lacquer. The product categories are:

Architectural coatings.—Stock type or shelf goods formulated for normal environmental conditions and general applications on new and existing residential, commercial, institutional, and industrial structures. These products comprising exterior and interior solvent and water-type coatings are normally distributed through wholesale-retail channels and purchased by the general public, painters, building contractors, governmental bodies, etc.

Product coatings for original equipment manufacturers (OEM).—Coatings and lacquers formulated specifically for application during the manufacturing process of automobiles and other transportation equipment, appliances, heating equipment, air-conditioner finishes, and other industrial equipment and product finishes.

Special purpose coatings.—These coatings may also be stock type or shelf goods but differ from architectural coatings since they are formulated for special applications and/or special environmental conditions such as extreme temperatures, chemicals, fumes, etc. Coatings for transportation after market are also included.

Effective with the 1984 edition of BUSINESS STATISTICS, annual data back to 1977 and monthly data back to 1979 have been restated based upon the following:

(1) Annual figure for 1977 is from the 1977 Census of Manufactures.

(2) Annual figure for 1978 is from the annual survey of manufactures.

(3) Annual and monthly data for 1979-80 are the result of benchmarking the trend in the original monthly series to annual totals established for 1981-82 in the current industrial report, *Paint and Allied Products*, MA28F(82)-1 and for 1978 in the annual survey of manufactures.

(4) Beginning 1981, data are estimates of the total U.S. value of shipments of paint, varnish and lacquer, which were developed by increasing the product category totals reported to the Bureau of the Census by inflation factors.

These factors are used because the annual survey panel was selected to measure approximately 90-percent of total shipments in the paint industry. The factors (based on 1977 census relationships for 1981 and 1982, and 1982 census relationships for 1983 through 1987) bring each product class value up to 100-percent.

Comparability of the annual data through 1976, (which represent total factory sales) with those beginning 1977 (which are total value of shipments) is not considered to be greatly affected.

Monthly data for 1981, 1983, and 1984 appear in earlier editions of BUSINESS STATISTICS. Monthly data for 1979-80 and 1982 are available upon request. Annual and monthly data for the individual categories shown here are not available prior to January 1979.

7. See 2d paragraph of note 5 for this page regarding the exclusion of data on certain polyvinyl material.

8. Beginning in 1991, data are available only on a quarterly basis.

1. Source: U.S. Department of Energy, Energy Information Administration. Total production of electric energy is the sum of energy produced in the United States by electric utilities. It is categorized here as generated by fuels (i.e., coal, oil, gas, nuclear, and other, which includes geothermal, wood, and waste) and waterpower (i.e., hydroelectric).

Data for "electric utilities" are based on reports obtained from all electric supply systems producing for public use, and cover plants of both the privately- and municipally-owned electric utilities, as well as other publicly-owned producers. This latter group is composed of Federal projects, cooperatives, power districts, and State projects. Coverage is substantially 100 percent, comprising at the end of 1988 a total 3,050 generating plants operated by approximately 800 utilities.

Monthly data for 1963-87 for total production by electric utilities appear in appendix I. Annual data prior to 1963 and monthly data prior 1988 for all others appear in earlier editions of BUSINESS STATISTICS. Some revisions not shown in earlier editions are available upon request.

2. Source: Edison Electric Institute. Data are estimated U.S. totals for the entire electric light and power industry contributing to the public supply of electricity. The figures comprise operations of all private, municipal, cooperative, governmental, and industrial enterprises engaged in the production or distribution of electricity for the use of the public.

Because of differences among respondents in the "commercial and industrial" classification and the continuous reclassification between small and large light and power companies, year-to-year comparisons are more significant when made of total commercial and industrial sales than when made of each separate classification.

Annual data prior to 1963 and monthly data prior to 1988 appear in earlier editions of BUSINESS STATISTICS. Some revisions and monthly data converted to quarterly data not shown in earlier editions, are available upon request.

3. Annual total reflects revisions not distributed to the monthly data.

1. Source: American Gas Association (AGA). Data represent complete coverage of the gas utility industry (includes all regulated distribution and transmission companies but excludes producers) in the United States. Because of the diminishing importance of manufactured and mixed gas relative to natural gas, data listed separately for these in the 1971 and earlier editions of BUSINESS STATISTICS are shown in aggregate as total utility gas beginning with the 1973 edition.

The number of customers excludes customers purchasing gas for resale. Likewise, the sales and revenue figures exclude data for gas resold.

The various classes of service are based on the primary purpose for which the gas is used or the type of customer to which a stated rate shall apply. The common classes of service as applied to ultimate customers and as recommended by the AGA for use by utilities, although not uniformly accepted, are defined below.

"Residential" applies to service supplied for domestic purposes under individual contracts in a single-family dwelling or building, or in an individual flat or apartment in a multi-family dwelling or building or portion thereof occupied as the home, residence, or sleeping place of one or more persons.

"Commercial" applies to service to customers engaged in wholesale or retail trade, agriculture, communications, finance, fisheries, forestry, insurance, real estate, transportation, etc., and to customers not directly involved in other classes of services.

"Industrial" applies to service supplied for a process that creates a product or changes raw or unfinished materials into another form or product (including electric generation) or that involves the extraction of a raw material from the earth.

"Other" applies to service to municipalities or other governmental agencies and interdepartmental sales if made under a definite rate schedule.

For periods prior to 1976, data for "Other" electric generation are included in the "Other" class of service. For the period 1976-84, data for all electric generation are included in the "Industrial" class of service. Beginning 1985, sales and revenue data of electric generation are shown separately. However, total customers of electric generation (less than 500) continue to be included in the "Industrial" class of service. Separate data on sales and revenue of electric generation are not available for periods prior to 1985.

Quarterly data for 1973-75 (except as noted below), 1979, and 1981-87 appear in earlier editions of BUSINESS STATISTICS. Quarterly data for 1969-72, 1975 (for revenue from sales to customers), 1976-78, and 1980 have been revised

and are available upon request. Quarterly data for 1945-68 for total utility gas (comparable with annual data shown in the 1979 and subsequent editions of BUSINESS STATISTICS) are available from the American Gas Association; those for natural gas and manufactured and mixed gas are shown separately in the 1971 and earlier editions of BUSINESS STATISTICS.

2. See 8th paragraph of note 1 for this page regarding change in coverage.
3. Reported annual total; revisions not reflected in the monthly data.

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1. Source: U.S. Treasury Department, Bureau of Alcohol, Tobacco, and Firearms. Data cover operations of all breweries in the United States. The figures represent production, taxable withdrawals, and stocks (on brewery premises) of beer, ale, and other liquors produced from fermented malt. Cereal beverages (i.e., beverages containing less than one-half of 1 percent alcohol by volume) are not included.

In addition to the taxable withdrawals published here, the original reports show data for tax-free withdrawals, covering amounts withdrawn for export and for vessels and aircraft, consumed on brewery premises, and used for cereal beverages.

Annual data prior to 1963 and monthly data for 1933-87 (and scattered revisions for earlier periods shown in the methodological notes) appear in the 1988 and earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Treasury Department, Bureau of Alcohol, Tobacco and Firearms. The data represent complete coverage of operations of registered distilleries and fruit distilleries.

In addition to whisky, which is shown separately, the totals for distilled spirits include rum, gin, brandy, vodka, and other distilled spirits (spirits-fruit produced at fruit distilleries; spirits-grain, spirits-cane, etc., produced at registered distilleries). Production figures are net—that is, gross production (original production plus production by redistillation) minus the quantity of distilled spirits used in redistillation.

Stocks are domestic stocks in bonded storage at distilled spirits plants, based on the original entry gage. Losses are not determined until withdrawal and, therefore, are not included except for distilled spirits in cases for which losses have already been determined.

A *tax gallon* for spirits of 100 proof or over is equivalent to the proof gallon (the alcoholic equivalent of a U.S. gallon at 60° F., containing 50 percent of ethyl alcohol by volume). For spirits of less than 100 proof, the tax gallon is equivalent to the wine gallon (a U.S. gallon of liquid measure equivalent to the volume of 231 cubic inches).

Annual data prior to 1963 and monthly data for 1933-87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: Distilled Spirits Council of the U.S. Data are based on sales in all States (see earlier editions of BUSINESS STATISTICS for the beginning years of sales for all States).

Figures for the "license" States are based on tax collections, gallonage shipments to wholesalers, or shipments by wholesalers to retailers (wholesaler depletion); those for monopoly States, on actual wholesale and retail sales reported by State liquor control authorities.

A *wine gallon* is the standard U.S. gallon containing 231 cubic inches.

Annual data prior to 1963 and monthly data for 1938-87 (years for revised data, available from the source) appear in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Commerce, Bureau of the Census. Data are imports for consumption. They include spirits, cordials, liqueurs, bitters, ethyl alcohol, and compounds containing spirits. For a general explanation of foreign trade data, see note 1 for p. 76. For definition of a standard proof gallon, see 4th paragraph of note 2 for this page.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of proof liters. Data shown in the 1986 and earlier editions may be converted by multiplying millions of proof gallons by 3.78541.

Annual data prior to 1963 and monthly data for 1936-87 (and scattered revisions for earlier periods shown in the methodological notes) appear in the 1988 and earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Treasury Department, Bureau of Alcohol, Tobacco, and Firearms. The data are based on reports of all bonded wine cellars. Stocks are those on wine cellar premises. Data cover champagne, other effervescent wines, and artificially carbonated wines. In addition to the data on effervescent wines published here, the original reports show data for vermouth and special natural wines other than vermouth.

Annual data prior to 1963 and monthly data for 1938-87 (and scattered revisions for earlier periods shown in the methodological notes) appear in the 1988 and earlier editions of BUSINESS STATISTICS.

6. Source: U.S. Department of Commerce, Bureau of the Census. Data are imports for consumption. Figures for effervescent wines include champagne and all other sparkling wines. Still wines (shown on p. 94 of this volume) include vermouth, rice wine (sake), and other still wines. For a general explanation of foreign trade data see note 1 for p. 76.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of liters. Data shown in the 1986 and earlier editions may be converted by multiplying millions of wine gallons by 3.78541.

Annual data prior to 1963 and monthly data for 1936-87 appear in earlier editions of BUSINESS STATISTICS.

7. Barrels of 31 wine gallons (i.e., gallons of 231 cubic inches).

8. Reported annual total; revisions not reflected in the monthly data.

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1. Source: U.S. Treasury Department, Bureau of Alcohol, Tobacco, and Firearms. The data are based on reports of all bonded wine cellars. Production of still wines represents the amount removed from fermenters, exclusive of distilling materials produced at wineries. Stock figures (representing stocks on wine cellar premises) also exclude data for distilling materials. Data for taxable withdrawals and for stocks include vermouth and special natural wines other than vermouth.

In addition to taxable withdrawals of still wines, as shown here, the original reports from the source reflect considerable quantities of still wines withdrawn tax free for the following purposes: For use in production of effervescent wines, nonbeverage wines, and vinegar; for export; for use as distilling materials; and through September 1979, for family use and for use of the United States.

Distilling materials produced at wineries represent substandard wines produced with excessive water or residue materials that are used as distilling materials in the production of brandy.

Annual data prior to 1963 and monthly data for 1936-87 (and some scattered revisions for earlier periods shown in the methodological notes) appear in the 1988 and earlier editions of BUSINESS STATISTICS.

2. See note 6 for p. 93.

3. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data are compiled from manufacturers' reports sent directly to the Department; data for 1991 are estimates. Total cheese production includes American-type cheese and foreign and miscellaneous types (Swiss, Brick and Munster, Limburger, Italian, Neufchatel, cream cheese, blue mold, etc.) but excludes cottage cheese and (through 1973) full-skim American. The figures shown separately for American cheese include production from whole milk only, which generally is the basis for 99 percent or more of the total American cheese output; data represent largely Cheddar cheese but include other varieties known as Colby, Washed or Stirred curd, Jack, and Monterey.

Annual data prior to 1963 and monthly data for 1938-87 (except for some periods of 1982, where only quarterly data are shown, and some monthly revisions) appear in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data represent stocks held in warehouses artificially cooled to a temperature of 50 degrees Fahrenheit or lower, where food products are normally stored for 30 days or more.

Stocks of butter and cheese exclude those held in refrigerated space owned, leased, or operated by the armed services. Stocks are shown here as data for the end of the preceding period.

Annual data prior to 1963 and monthly data for 1932-87 (for some periods of 1982, only quarterly data) appear in earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Labor, Bureau of Labor Statistics. First shown in the 1984 edition of BUSINESS STATISTICS. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

Annual indexes for 1947-62 and monthly indexes for 1947-87 are available upon request.

6. Source: U.S. Department of Commerce, Bureau of the Census. Data for cheese are imports for consumption and include all classes of cheese.

Data for milk (shown on p. 95) are exports of condensed and evaporated milk and cream. Beginning January 1978, under a revision of Export Schedule B, condensed milk and evaporated milk (formerly shown separately) are reported as a single total, which also includes bulk shipments (in barrels, drums, and tanks) formerly excluded. As a result of this change, data for earlier periods are not comparable with those beginning January 1978. For a general explanation of foreign trade data see note 1 for p. 76.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying millions of pounds by .453592.

Annual data prior to 1963 and monthly data for 1929-87, (and some scattered revisions for earlier periods shown in the methodological notes) appear in the 1988 and earlier editions of BUSINESS STATISTICS. See the 1979 edition of BUSINESS STATISTICS, for change in reporting of exports and imports monthly and annual data.

7. Annual total reflects revisions not distributed to the months.

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1. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data for production represent the entire industry for unsweetened evaporated milk and for sweetened condensed milk. The series relate to case goods produced from whole milk.

Data for stocks represent complete coverage and comprise stocks held by manufacturers at all points, those in transit, and those contracted for but not delivered.

See the 1971 and 1973 editions of BUSINESS STATISTICS, for comparability of production and stock data.

Annual data prior to 1963 and monthly data for 1929-87 (except for some periods of 1982, where only quarterly data are shown) appear in earlier editions of BUSINESS STATISTICS.

2. See note 6 for p. 94.

3. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data are estimated total production of milk on farms, based on daily average milk production per cow (from a sample group of farms) and the estimated number of cows on farms.

Annual data prior to 1963 and monthly data prior to 1988 (for some periods of 1982, only quarterly data), are available upon request.

4. Source: U.S. Department of Agriculture, Economic Research Service. Data represent the consumption of fluid milk in the manufacture of the principal dairy products. The products currently included in the data are creamery butter, cheese, evaporated and condensed milk (case goods), creamed cottage cheese, dry whole milk, and frozen products (ice cream, ice milk, and frozen desserts). Beginning 1958, the creamed cottage cheese and frozen products were added, and account was taken of the monthly variation in production resulting from changes in milkfat content (the earlier series was based on milk of average fat content for the year).

Annual data prior to 1963 and monthly data 1963-87, except for some periods of 1982, where only quarterly data are shown, (and scattered revisions for earlier periods shown in the methodological notes) appear in the 1988 and earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data represent the average price received by farmers for fluid milk including premium payments and before hauling charges are deducted for all milk sold during the month to plants and dealers. Data cover (1) Milk eligible for the fluid market (i.e., eligible for fluid consumption as milk or cream including any surplus of such milk that may be subsequently diverted to manufacture) and (2) milk of manufacturing grade (i.e., milk of manufacturing grade sold by farmers to creameries, cheese plants, condenseries, and other plants for use in manufacturing dairy products). In computing the monthly and annual average prices for the series shown here, weights used to combine prices are estimates of quantities of each grade sold in each State each month.

Annual data prior to 1963 and monthly data for 1955-87 appear in earlier editions of BUSINESS STATISTICS.

6. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data for production (except 1986 figures, which are estimates) are as reported by all firms operating dry-milk factories in the United States. Data for stocks cover dry milk held by manufacturers at all points, those in transit, and those contracted for but not delivered.

Annual data prior to 1963 and monthly data for 1941-87, except for some periods of 1982, where only quarterly data are shown, (and some scattered revisions for earlier periods shown in the methodological notes) appear in the 1988 and earlier editions of BUSINESS STATISTICS.

7. Source: U.S. Department of Commerce, Bureau of the Census. Data cover exports of dry whole milk and nonfat dry skim milk for human consumption. Shipments under the Army Civilian Supply Program are included. For a general explanation of foreign trade data, see note 1 for p. 76.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying millions of pounds by .453592.

See 1979 and earlier editions of BUSINESS STATISTICS, for comparability of data for exports of whole and nonfat dry milk.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS.

8. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Prices for nonfat dry milk are based on reports of manufacturers covering actual sales to jobbers, wholesalers, grocers, and similar buyers, f.o.b. factory, on the basis of cash or short-term credit. The figures shown here are based on prices of nonfat dry milk made by both the spray and roller process. Data exclude the price for spray-dried nonfat milk sold in retail packages.

Annual data prior to 1963 and monthly data for 1939-87 appear in earlier editions of BUSINESS STATISTICS.

9. Annual total reflects revisions not distributed to the months.

10. See 2d paragraph of note 6 for p. 94 regarding changes affecting comparability of the data.

11. Effective January 1978, the export commodity classification system was completely restructured; data may not be strictly comparable with those shown for earlier periods.

12. Average based on quotations for fewer than 12 months.

13. Effective with 1986 data, coverage has been reduced to 21 selected States, representing approximately 85 percent of U.S. production. Comparable data for 1985 are available upon request.

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1. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Figures represent the year's total crop; 1991 estimates are preliminary. Crop estimates prior to 1963 are shown in earlier editions of BUSINESS STATISTICS.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying millions of bushels by .0217728.

2. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Stocks through 1975 are reported by the source as of the beginning of each quarter but are shown in the BUSINESS STATISTICS as of the end of the preceding quarter. For the period 1976-85, stocks are reported as of April 1, June 1, October 1, and January 1 of each year and are shown in the BUSINESS STATISTICS in the preceding month. For the period 1986-87, quarterly stock estimates are not available. However, the June 1 stocks represent end of crop year and are shown also as the annual figure. Beginning 1988, quarterly estimates have been restored and are reported as of June 1, September 1, and December 1, and, beginning 1989, estimates will be reported as of March 1 rather than April 1. These estimates are shown in the BUSINESS STATISTICS in the preceding month. Second quarter estimates, through 1975, and June estimates, beginning 1976, represent previous year's crop.

New grain is not reported in the figures until the beginning of the new crop year.

Data for off-farm stocks represent stocks at mills, elevators, warehouses, terminals, processors and (through the 1974 crop years) those owned by Commodity Credit Corporation that were in bins and other storage under their control.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of metric tons. Data shown in earlier editions may be converted by multiplying millions of bushels by .0217728.

End-of-quarter stocks for 1981-87 appear in earlier editions of BUSINESS STATISTICS. End-of-quarter stocks through 1980 have been revised and are available upon request.

3. Source: U.S. Department of Commerce, Bureau of the Census. Data include the grain equivalent of malt (1 bushel of malt per bushel of barley) as converted from the original data by the U.S. Department of Commerce, Bureau of Economic Analysis. For periods when barley flour was exported, this also was included, converted to grain equivalent of 5.5 bushels to the barrel. The conversion factor is that used by U.S. Department of Agriculture and takes into account changes in milling practices.

The weight per bushel for barley is 48 pounds. Data include shipments under the Army Civilian Supply Program but exclude amounts of pearl barley. For a general explanation of foreign trade data see note 1 for p. 76.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying millions of bushels by 21.7728. Also, data shown beginning with the 1988 edition were converted to the new measurement using unrounded data and results are somewhat different from those using rounded data shown in earlier editions of BUSINESS STATISTICS.

Annual data prior to 1963 and monthly data for 1945-87 appear in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Labor, Bureau of Labor Statistics. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

Annual indexes for 1947-62 and monthly indexes for 1947-87 are available upon request.

5. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Figures represent the year's total crop; 1991 estimates are preliminary.

Data for corn production are for grain only (in the 1961 and earlier editions of BUSINESS STATISTICS, data relate to "all corn," including corn used for silage, forage, etc.). Crop estimates for 1929-62 are shown in earlier editions of BUSINESS STATISTICS.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying millions of bushels by .0254016.

6. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Stocks through 1975 are reported by the source as of the beginning of each quarter but are shown in the BUSINESS STATISTICS as of the end of the preceding quarter. For the period 1976-85, stocks are reported as of April 1, June 1, October 1, and January 1 of each year and are shown in the BUSINESS STATISTICS in the preceding month. Beginning 1986, quarterly stock estimates are reported as of April 1, June 1, September 1, and December 1, and, beginning 1987, estimates are reported as of March 1 rather than April 1. These estimates are shown in the BUSINESS STATISTICS in the preceding month. October 1 estimates, through 1985, and September 1 estimates, beginning 1986, represent previous year's crop. In addition, annual figures, beginning 1986, represent December 1 stock estimates whereas annual figures for earlier years represent January 1 (end-of-calendar year) stock estimates.

New grain is not reported in the figures until the beginning of the new crop year. A ten-year series (1975-85) has been developed and is available from the National Agricultural Statistics Service for total stocks of corn to assist users in shifting to the new reporting periods introduced in 1986. However, on-farm and off-farm breakdowns are not available.

Data for off-farm stocks represent stocks at mills, elevators, warehouses, terminals, processors and (through the 1974 crop years) those owned by Commodity Credit Corporation that were in bins and other storage under their control.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of metric tons. Data shown in earlier editions may be converted by multiplying millions of bushels by .0254016.

End-of-quarter stocks for 1979-87 appear in earlier editions of BUSINESS STATISTICS.

7. Source: U.S. Department of Commerce, Bureau of the Census. Data include corn plus the grain equivalent of cornmeal and corn flour—6.194 bushels of corn to a barrel of cornmeal (or 3.16 bushels per cwt.) as converted from the original data by the U.S. Department of Commerce, Bureau of Economic Analysis. The conversion factor is that used by U.S. Department of Agriculture and takes into account changes in milling practices.

The weight per bushel for corn (shelled) is 56 pounds. Data include shipments under the Army Civilian Supply Program. For a general explanation of foreign trade data see note 1 for p. 76.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying millions of bushels by .0254016.

Annual data prior to 1963 and monthly data for 1945-87 appear in earlier editions of BUSINESS STATISTICS.

8. Annual total reflects revisions not distributed to the months.

9. Effective January 1978, the export commodity classification system was completely restructured; data may not be strictly comparable with those shown for earlier periods.

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1. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Figures represent the year's total crop; estimates for 1991 are preliminary. Data for rice production are for California and Southern States (Texas, Louisiana, Arkansas, Mississippi and Missouri); small amounts produced in other States are not included.

Crop estimates for 1929-62 appear in earlier editions of BUSINESS STATISTICS.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of metric tons. Data shown in the 1986 and earlier editions may be converted as follows: Millions of bushels of oats multiplied by .0145152 and millions of 100-pound bags of rice multiplied by .0453592.

2. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Stocks through 1975 are reported by the source as of the beginning of each quarter but are shown in the BUSINESS STATISTICS as of the end of the preceding quarter. For the period 1976-85, stocks are reported as of April 1, June 1, October 1, and January 1 of each year and are shown in the BUSINESS STATISTICS in the preceding month. Beginning 1986, quarterly stock estimates are no longer available. However, the June 1 stocks (representing end of crop year) are shown here as the annual figure and will continue to be available.

Second quarter figures through 1975 and June figures beginning 1976 represent previous year's crop. New grain is not reported in the figures until the beginning of the new crop year.

Data for off-farm stocks represent stocks at mills, elevators, warehouses, terminals, processors and (through the 1974 crop years) those owned by Commodity Credit Corporation that were in bins and other storage under their control.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of metric tons. Data shown in earlier editions may be converted by multiplying millions of bushels by .0145152.

End-of-quarter stocks for 1981-87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Commerce, Bureau of the Census. Data include exports of oats plus the grain equivalent of oatmeal (7.6 bushels of oats to 100 pounds of oatmeal) as converted from the original data by the U.S. Department of Commerce, Bureau of Economic Analysis. The conversion factor is that used by U.S. Department of Agriculture and takes into account changes in milling practices.

The weight per bushel for oats is 32 pounds. Data include shipments under the Army Civilian Supply Program. For a general explanation of foreign trade data see note 1 for p. 76.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying millions of bushels by 14515.2. Also, data shown beginning with the 1988 edition were converted to the new measurement using unrounded data and the results are somewhat different from those using rounded data shown in earlier editions of BUSINESS STATISTICS.

Annual data prior to 1963 and monthly data for 1945-87 appear in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Labor, Bureau of Labor Statistics. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

Annual indexes for 1947-62 and monthly indexes for 1947-87 are available upon request.

5. Source: Rice Millers' Association. Data cover the movement of domestic rice at all mills in Louisiana, Texas, Arkansas, Mississippi, Florida, and Tennessee; they are projected estimates from a compilation of reports from member mills of the Association and one nonmember mill. Brewers' rice is excluded from all figures. Shipments through May 1965 represent distribution "to the trade;" beginning June 1965 they also include distribution to Government agencies (shipments "to other mills" are not included). The stock figures include both milled rice and rough rice in terms of cleaned (converted on the basis of 162 pounds of rough rice to 105.3 pounds of milled); they cover rice in store mills only.

Annual data prior to 1963 and monthly data for 1947-87 appear in earlier editions of BUSINESS STATISTICS.

6. Source: U.S. Department of Commerce, Bureau of the Census. Data cover paddy or rough rice, and milled rice; wild rice is not included. Figures are on a clean equivalent basis, with rough rice reduced on the basis of 162 pounds of rough rice to 105.3 pounds of clean. Shipments under the Army Civilian Supply Program are included. For a general explanation of foreign trade data see note 1 for p. 76.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying millions of pounds by .453592.

Annual data prior to 1963 and monthly data for 1947-87 appear in earlier editions of BUSINESS STATISTICS.

7. Based on fewer than 12 months of quotations.

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1. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Figures represent the year's total crop; estimates for 1991 are preliminary.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of metric tons. Data shown in the 1986 and earlier editions may be

converted as follows: Millions of bushels of rye multiplied by .0254016 and millions of bushels of wheat multiplied by .027216.

Crop estimates for 1929-62 appear in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of Labor, Bureau of Labor Statistics. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

Annual indexes for 1947-62 and monthly indexes for 1947-87 are available upon request.

3. Source: U.S. Department of Agriculture, Economic Research Service. Data represent the disappearance of domestic wheat as used for flour (including that used for breakfast food), feed, seed, alcohol production, military procurement, and for export or shipment to outlying areas.

Effective with the 1986 edition of BUSINESS STATISTICS, data reflect a change in the reporting periods from those shown in earlier editions. The quarterly data, available back through 1976, now represent the three-month periods of December-February, March-May, June-August, and September-November. Annual data, back through 1976, now represent the new twelve-month period of December-November.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of metric tons. Quarterly data for 1976-84 have been converted and are available upon request.

4. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Stocks through 1975 are reported by the source as of the beginning of each quarter but are shown in the BUSINESS STATISTICS as of the end of the preceding quarter. For the period 1976-85, stocks are reported as of April 1, June 1, October 1, and January 1 of each year and are shown in the BUSINESS STATISTICS in the preceding month. Beginning 1986, quarterly stock estimates are reported as of April 1, June 1, September 1, and December 1, and, beginning 1987, estimates are reported as of March 1 rather than April 1. October 1 estimates, through 1985, and September 1 estimates, beginning 1986, represent previous year's crop. These estimates are shown in the BUSINESS STATISTICS in the preceding month. In addition, annual figures, beginning 1986, represent December 1 stock estimates whereas annual figures for earlier years represent January 1 (end-of-calendar year) stock estimates.

New grain is not reported in the figures until the beginning of the new crop year. A ten-year series (1975-85) has been developed and is available from the National Agricultural Statistics Service for total stocks of wheat to assist users in shifting to the new reporting periods introduced in 1986. However, on-farm and off-farm breakdowns are not available.

Data for off-farm stocks represent stocks at mills, elevators, warehouses, terminals, processors and (through the 1974 crop years) those owned by Commodity Credit Corporation that were in bins and other storage under their control.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of metric tons. Data shown in earlier editions may be converted by multiplying millions of bushels by .027216.

End-of-quarter stocks for 1979-87 appear in earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Commerce, Bureau of the Census. Data include exports of wheat, plus the grain equivalent of wheat flour (July 1957-December 1963, 2.3 bushels; and, beginning January 1964, 2.33 bushels of wheat per 100 pounds of flour) as converted from the original data by the U.S. Department of Commerce, Bureau of Economic Analysis. The conversion factor is that used by U.S. Department of Agriculture and takes into account changes in milling practices.

The weight per bushel for wheat is 60 pounds. Data include shipments under the Army Civilian Supply Program. For a general explanation of foreign trade data see note 1 for p. 76.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in millions of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying millions of bushels by .027216.

Annual data prior to 1963 and monthly data for 1939-87 appear in earlier editions of BUSINESS STATISTICS.

6. Annual total reflects revisions not distributed to the months.

7. Effective January 1978, the export commodity classification system was completely restructured; data may not be strictly comparable with those shown for earlier periods.

8. Based on a 11-month average.

basis of their proportion of production reported in the census of manufactures. All data relate to regular-grind flour only.

Annual data prior to 1963 and monthly data for 1947-87 (and other pertinent notes) appear in earlier editions of BUSINESS STATISTICS. It should be noted, millfeed production was shown as "offal" in the 1979 and earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of Commerce, Bureau of the Census. Data are based on reports from merchant mills reporting wheat-flour production and represent complete coverage (see note 1 for this page). Data cover total stocks held by reporting mills at the end of each quarter.

Annual data prior to 1963 and quarterly data for 1947-87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Commerce, Bureau of the Census. See note 5 for p. 100 regarding conversion factors. Army Civilian Supply Program shipments are included. For a general explanation of foreign trade data see note 1 for p. 76. It should be noted that in the 1965-73 editions of BUSINESS STATISTICS, the unit for wheat flour exports was shown incorrectly as "thousands of sacks"; it should have read "millions of sacks."

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying thousands 100-pound sacks by .0453592.

Annual data prior to 1963 and monthly data for 1939-87 appear in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Labor, Bureau of Labor Statistics. First shown in the 1984 edition of BUSINESS STATISTICS. For a general explanation of Producer Price Indexes, see note 1 for p. 27. Monthly indexes for 1983-84 are available upon request.

5. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data represent the total commercial slaughter (at federally inspected and, through 1979, other commercial plants) of poultry meat on a ready-to-cook basis; however, slaughter on farms for home use and nonfarm production are excluded. Beginning January 1980, data represent federally inspected slaughter only; comparability of the data is not greatly affected. The estimates are based on available indications of marketings developed from information on inventories, number raised, intentions to raise and market poultry, as well as on chicken placements and current monthly marketings.

Annual data prior to 1963 and monthly data for 1955-87 appear in earlier editions of BUSINESS STATISTICS.

6. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data cover stocks held in public, private, and semiprivate warehouses and meatpacking plants where food products are generally stored for 30 days or more; they are shown here as data for the end of the preceding period. Stocks held in space owned or leased and operated by the armed services are not included.

Stocks of poultry include all types and are for frozen poultry only. Beginning 1987, stocks of canner style pack are included in both stocks of poultry and of turkeys.

Annual data prior to 1963 and monthly data for 1929-87 (except for some periods of 1982, where quarterly data are shown) appear in earlier editions of BUSINESS STATISTICS.

7. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data are estimates of prices received for commercial broilers by producers in the Georgia area at point of sale out of producers' hands, and represent the average for chickens and other young, meat-type birds as well (i.e., fryers, roasters, heavy pullets, capons, and rock cornish). These price estimates are based on reports submitted currently by chicken producers, chicken buyers, and others well informed regarding chicken prices; in addition, market reports from terminal markets are considered when available.

Beginning 1972, the annual averages are for a market year (December-November) instead of a calendar year as formerly.

Annual data prior to 1963 and monthly data for 1955-87 appear in earlier editions of BUSINESS STATISTICS.

8. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data represent eggs produced by farm flocks and by commercial flocks. Monthly or, for 1982, quarterly estimates of total eggs produced are based on returns from egg producers who report for the first day of each period the number of layers on hand and the number of eggs produced. The total egg production, in cases of 30 dozen each, is obtained by multiplying the estimated total number of layers by the number of eggs produced per layer.

Annual estimates of layers on December 1 of each year are based on a survey covering all large producers and a sample of smaller producers. At the end of the year adjustments are made in the number of layers on the first of each month or quarter, where necessary, so they will agree with the annual estimates. The monthly/quarterly rates of lay are then applied to the adjusted number of layers to secure the adjusted total egg production for each month or quarter. Data for

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1. Source: U.S. Department of Commerce, Bureau of the Census. Data are estimated totals based on reports from commercial mills with a daily capacity of 400 sacks and over. The reported data from these larger mills account for about 98 percent of the estimated totals. Estimates for smaller mills are included on the

all years have been so adjusted. The estimates are also reviewed every 5 years and are adjusted where necessary.

Beginning 1972, the annual totals are for a market year (December–November) instead of a calendar year as formerly.

Annual data prior to 1963, quarterly data for 1982, and monthly data for 1963–81 and 1983–87 (except as noted below) appear in earlier editions of BUSINESS STATISTICS. There have been revisions in all the monthly data prior to 1963 and for 1970–74; some of these revisions are available upon request.

9. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data for shell eggs are for cases of 30 dozen each, weighing about 45 to 47 pounds. The amount of frozen eggs (white, yolks, whole, and/or mixed) obtained from a case of shell eggs has been about 39.5 pounds per case since 1957; in earlier years, the yield was somewhat lower. See also 1st paragraph of note 6 for this page.

Annual data prior to 1963 and monthly data for 1929–87 (for some periods of 1982, only quarterly data) appear in earlier editions of BUSINESS STATISTICS.

10. Source: U.S. Department of Agriculture, Agricultural Marketing Service. Data represent weekly average prices for consumer grade A large, cartoned, white, shell eggs to volume buyers, delivered to store door, Chicago metropolitan area.

The series established in November 1968, is not comparable with data published in the 1973 and earlier editions of BUSINESS STATISTICS.

Monthly data for 1971–87 appear in earlier editions of BUSINESS STATISTICS.

11. Annual total reflects revisions not distributed to the months.

12. See 2d paragraph of note 7 for this page.

13. See 3d paragraph of note 8 for this page.

14. Effective January 1978, the export commodity classification system was completely restructured; data may not be strictly comparable with those shown for earlier periods.

15. See 1st paragraph of note 5 for this page.

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1. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Federally Inspected data are summarized weekly and accumulated to a monthly total, (for 1982, quarterly data are reported). There are generally four types of slaughtering plants, (1) *Federally Inspected (FI)*, Plants that transport meat interstate and must employ federal inspectors to assure compliance with USDA standards. (2) *Talmadge-Aiken (TA)*, Plants in which USDA is responsible for federal inspection. However federal inspection is carried out by State employees. These plants are considered to be federally inspected. (3) *Non-Federally (NFI)*, Plants which sell and transport only intrastate. State inspectors assure compliance with individual State standards for these NFI plants. Mobile slaughtering units are excluded and are considered farm slaughter. (4) *Custom-Exempt*, Plants that do not sell meat but operate on a custom basis only. The animals and meat are not inspected, but the facilities must meet health standards. These are considered NFI plants and head kill is included in NFI totals.

In 1991, over 95 percent of the total U.S. slaughter for any species is under FI. Approximately 1,200 plants in the U.S. are operated under Federal Inspection and 3,000 plants under State inspection. Slaughter from State-inspected TA plants is included in FI totals.

Annual data prior to 1963, quarterly data for 1982, and monthly data for 1929–81 and 1983–87 appear in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of Agriculture, Agricultural Marketing Service. Prices for beef steers are for choice, 1,100-1,300 pounds, and are based on the means of the daily range of quotations. These data are not comparable with those shown in the 1973 and earlier editions of BUSINESS STATISTICS. The price of stocker and feeder cattle is the average price of all weights of such cattle, weighted by the number shipped for each weight group. The annual averages for these series are the averages of the monthly figures weighted by the quantities of all grades (or weights) shipped within each month.

For beef steers, monthly data for 1971–87 appear in earlier editions of BUSINESS STATISTICS. Annual data for 1955–60 and monthly data for 1955–70 are available from the source.

For stocker and feeder cattle, annual data prior to 1963 and monthly data for 1938–87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Agriculture, Agricultural Marketing Service. Monthly data are for choice grade veal calves, South St. Paul, representing through August 1988, averages per 100 pounds and, beginning September 1988, averages per head. These averages are based on the means of the daily quotations. Annual data, beginning with 1988, represent averages per head.

Data shown through August 1988 are comparable with that shown in the 1977–86 editions of BUSINESS STATISTICS but not comparable with data shown beginning September 1988.

4. Sources: U.S. Department of Agriculture, Agricultural Marketing Service (AMS) and National Agricultural Statistics Service (NASS), formerly Statistical Reporting Service. The hog price (from AMS) represents the weighted average cost per 100 pounds of packers' and shippers' purchases of barrows and gilts at Sioux City.

The hog-corn price ratio (from NASS) represents the number of bushels (56 pounds) of shelled corn equal in value to 100 pounds of hog (live weight); it is based on average prices received by farmers on the 15th of each month for all grades of corn and all grades of hogs.

Beginning 1970, the annual averages for the hog-corn price ratio are for a market year (December–November) instead of a calendar year as formerly.

Annual data prior to 1963 and monthly data for 1967–June 1970 and 1973–87 for the price of hogs appear in earlier editions of BUSINESS STATISTICS.

Annual data prior to 1963 and monthly data for 1941–58 and 1965–87 for the hog-corn price ratio appear in earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Agriculture (USDA), Agricultural Marketing Service (AMS). The average price of lambs is based on the bulk of sales prices from data of the USDA, AMS, Livestock and Meat Reporting Service.

Annual data prior to 1963 and monthly data for 1967–87 appear in earlier editions of BUSINESS STATISTICS.

6. See 3d paragraph of note 4 for this page.

7. Average based on quotations for fewer than 12 months.

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1. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). The reported data is for commercial livestock slaughter estimates and are the actual counts of animals slaughtered in Federally inspected plants. The counts are combined with data from State-administered Non-Federally inspected slaughter plants to derive total commercial slaughter.

Red meat production is the carcass weight after slaughter including beef, veal, pork, and lamb and mutton.

Based upon the latest data shown here, over 95 percent of all meats produced are subjected to Federal inspection.

Annual data prior to 1963, quarterly data for 1982, monthly data for 1973–81 and 1983–87, and notes on comparability due to change of reporting for data of earlier periods appear in the earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Data cover stocks held in public and private refrigerated warehouses, and meatpacking plants where food products are generally stored for 30 days or more. Stocks held in space owned or leased and operated by the armed services are not included. Stocks are shown here as data for the end of the preceding period.

Beginning 1976, data exclude cooler beef and pork.

"Total meat stocks" comprise the following items: Beef and veal, lamb and mutton, and pork (see data separately shown); canned ham and other canned meat products.

Annual data prior to 1963 and monthly data for 1929–87 (except for some periods of 1982, where quarterly data are shown) appear in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Commerce, Bureau of the Census. For a general explanation of foreign trade data see note 1 for p. 76.

The foreign trade figures comprise fresh meats and chilled or frozen, canned, pickled, cured, and other prepared and processed meats. Data for total meats (both exports and imports) include beef and veal, pork, mutton and lamb, canned meats, fresh game, edible meat offal, sausage, sausage ingredients, casings (for 1961 only), fresh poultry (in exports only), and horsemeat (in imports, beginning September 1961).

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying millions of pounds by .453592.

Annual data prior to 1963 and monthly data prior to 1988 for exports and imports appear in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Agriculture, Agricultural Marketing Service. Effective January 1979, data are for central United States, which includes the east coast; for January 1972–December 1978, prices are for east coast (New York and Philadelphia average); prior thereto they are for New York. Comparability of the data is not affected by the change in coverage.

Data represent the wholesale price for beef, fresh steer carcasses, choice (600–700 pounds). Monthly data are averages of weekly prices, which are based on the mean of the daily range of quotations of the market news service; annual figures are simple averages of monthly data.

Annual data prior to 1963 and monthly data for 1945–87 appear in earlier editions of BUSINESS STATISTICS.

5. Beginning 1966, data include custom slaughtering in plants for farmers as part of the commercial meat production estimates and are not comparable with 1965 and earlier periods.

6. Annual total reflects minor revisions not allocated to the months.

7. Beginning January 1969, quotations are carlot rather than l.c.l. and are not comparable with earlier data. Average price on carlot basis for 1968 is \$0.454 per pound.

8. Average based on quotations for fewer than 12 months.

9. See 2d paragraph of note 2 for this page regarding change affecting comparability of data.

10. Effective January 1978, the export commodity classification system was completely restructured; data may not be strictly comparable with those shown for earlier periods.

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1. See note 1 for p. 101.

2. See note 2 for p. 101.

3. See note 3 for p. 101.

4. Source: U.S. Department of Labor, Bureau of Labor Statistics. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

No indexes are available prior to December 1988.

5. Source: U.S. Department of Agriculture, Agricultural Marketing Service. Monthly data are based on the means of the daily range of quotations. Prices are for 8-12-pound average loins through May 1967, and 8-14-pound average thereafter; this minor change does not affect the comparability of the series. Quotations at New York exclude locally dressed meat.

Annual data prior to 1963 and monthly data for 1940-87 appear in earlier editions of BUSINESS STATISTICS.

6. Source: U.S. Department of Commerce, Bureau of the Census. Data represent imports for consumption. For a general explanation of foreign trade data, see note 1 for p. 76.

Data for imports of coffee represent crude coffee only.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in metric units. Data shown in the 1986 and earlier editions may be converted as follows: Thousands of long tons of cocoa multiplied by 1.016 equals thousands of metric tons, and thousands of 60-kilogram bags of coffee multiplied by 60 equals metric tons.

Annual data prior to 1963 and monthly data for 1929-87 for cocoa and 1955-87 for coffee appear in earlier editions of BUSINESS STATISTICS.

7. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). This series, first shown in the 1988 edition of BUSINESS STATISTICS, is from the BLS International Price Program and provides a measure of price change for coffee and coffee substitutes purchased from other countries. Prices are based on the cost, insurance, and freight (c.i.f.) value at the U.S. port of importation; they include the other costs associated with bringing the product to the U.S. border, but do not include duty charges. To the extent possible, the data gathered refer to transactions completed during the first 2 weeks of the third month of each calendar quarter—March, June, September, and December.

The weighting structure of these indexes reflects U.S. foreign trade flows based on 1985 data.

Quarterly data for 2d Qtr. 1975-4th Qtr. 1987 are available upon request. Data for earlier periods are not available.

8. Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration. These data represent the total holdings of frozen fish (including shellfish), both fresh-water species, and (beginning January 1974) farm-raised catfish, in cold-storage warehouses; stocks of salted and smoked fish are not included. The figures cover stocks as of the end of the month. The monthly reports give details as to holdings and the amount of fish frozen each month.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS. Scattered revisions for periods prior to 1963 are shown in the footnotes in the 1982 and earlier editions of BUSINESS STATISTICS.

9. See note 5 for p. 101.

10. Annual total reflects revisions not available by months.

11. See 1st paragraph of note 8 for this page regarding change affecting comparability of data.

12. See 2d paragraph of note 2 for p. 101 regarding change affecting comparability of data.

13. Effective January 1978, the export commodity classification system was completely restructured; data may not be strictly comparable with those shown for earlier periods.

1. Source: U.S. Department of Commerce, Bureau of the Census. For a general explanation of foreign trade data, see note 1 for p. 76. In January 1978, the export commodity classification system was completely restructured; basing the new structure on the organizational framework of the *Tariff Schedules of the United States*. As a result, coverage for exports and imports of sugar are identical; covering sugars, syrups, and molasses derived from sugar cane or sugar beets, which are principally of crystalline structure or in a dry amorphous form. It should be noted that exports of sugar for years prior to 1978 may not be strictly comparable with those shown for subsequent years. Exports of sugar include shipments under the Army Civilian Supply Program. Imports of sugar represent imports for consumption.

In the 1977 and earlier editions of BUSINESS STATISTICS, data for imports of sugar were shown separately as "raw" and "refined" and should be combined for comparison with imports shown beginning with the 1979 edition.

Data for tea are imports for consumption.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in metric units. Data shown in the 1986 and earlier editions may be converted as follows: Short tons of sugar exports multiplied by .907185 equals metric tons; thousands of short tons of sugar imports multiplied by .907185 equals thousands of metric tons; and, thousands of pounds of tea imports multiplied by .453592 equals metric tons.

Annual data prior to 1963 and monthly data prior to 1988 (also other pertinent notes), appear in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of Labor, Bureau of Labor Statistics. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

Annual indexes prior to 1963 for raw sugar and monthly indexes prior to 1988 are available upon request.

3. Source: U.S. Department of Agriculture, National Agricultural Statistics Service (formerly Statistical Reporting Service). Figures represent each year's total crop; the 1991 figure is preliminary. Crop estimates for 1929-62 are shown in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Agriculture (USDA), Agricultural Marketing Service. Data represent stocks of leaf tobacco in the United States and Puerto Rico (on a farm-sales-weight basis), reported as owned by all leaf tobacco dealers, manufacturers, quasi-manufacturers, growers' cooperative associations, warehousemen, brokers, holders, and owners (except the original growers of tobacco, and manufacturers who, according to the returns of the Commissioner of Internal Revenue, manufactured less than 35,000 pounds of tobacco, less than 185,000 cigars, or less than 750,000 cigarettes during the first three quarters of the preceding calendar year). All Government loan stocks are included as dealer holdings. Growers are not required to report their stocks under the law. Data are on an ownership basis; i.e., they include stocks actually owned by those enumerated above. Data by type of tobacco are available from reports of the Tobacco Division, Agricultural Marketing Service, U.S. Department of Agriculture.

All data on domestic stemmed tobacco have been converted to an unstemmed basis, and the unstemmed is further converted to a farm-sales weight by allowing for normal shrinkage and losses of dirt, sand, and moisture in handling. Each type of tobacco has a different yield; the conversion factors used in these computations are shown in the quarterly *Tobacco Stocks Report*, issued by USDA. Foreign data are converted to an unstemmed basis, and since the weight at time of entry is analogous to the farm-sales weight of domestic types, they can be combined directly with the data for domestic types on a farm-sales-weight basis. Data are reported as of the first of April, July, October, and January, and are shown here as the end of the preceding month.

End-of-year data prior to 1963 and end-of-quarter data for 1938-87 appear in earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Commerce, Bureau of the Census. Data for leaf tobacco represent total exports or imports of unmanufactured tobacco, including stems, trimmings, and scrap. Exports include shipments under the Army Civilian Supply Program. Imports represent imports for consumption. For a general explanation of foreign trade data, see note 1 for p. 76.

Effective with the 1988 edition of BUSINESS STATISTICS, data for tobacco exports and imports are shown in metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying thousands of pounds by .453592.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS.

6. Source: U.S. Treasury Department, Bureau of Alcohol, Tobacco, and Firearms. Tax-exempt withdrawals include withdrawals of small cigarettes (those weighing not more than 3 pounds per thousand) for the following purposes: Export, use of the United States (including sea stores), personal consumption, and beginning July 1961, for experimental purposes.

Annual data prior to 1963 and monthly data for July 1943-December 1987 appear in earlier editions of BUSINESS STATISTICS.

7. Source: U.S. Treasury Department, Bureau of Alcohol, Tobacco, and Firearms. Data represent taxable withdrawals from domestic factories and are based on the number of stamps used by manufacturers. In recent years small cigarettes (i.e., those weighing not more than 3 pounds per thousand) represent close to 100 percent of the total production of cigarettes; large cigars (i.e., those weighing more than 3 pounds per thousand) have accounted for approximately less than 70 percent of the total production of cigars.

Annual data prior to 1963 and monthly data prior to 1988 appear in earlier editions of BUSINESS STATISTICS.

8. Annual total includes revisions not distributed to the months.

9. Average based on quotations for fewer than 12 months.

10. See 1st paragraph of note 1 for this page.

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1. Source: U.S. Department of Commerce, Bureau of the Census. The data represent exports of all leather and lining leather but exclude sole and rough leather. The total covers sheep and lamb glove and garment leather; pig and hog leather; and antelope, ass, bovine, buckskin, buffalo, cabretta, calf, capeskin, caribou, cattle, colt, cordovan, deerskin, dik-dik, doeskin, elk, gazelle, goat, horsehide, kid, kip, mule, ranchhide, reindeer, and zebra leather. Also covered are cattle and kip side upper leather (grain and splits); calf and whole kip (grain and other) upper leather; goat and kid upper leather; sheep and lamb upper and lining leather; cattle and kip side patent upper leather; and other upper leather (including lining and patent) not elsewhere specified.

Annual data prior to 1963 and monthly data for 1955 and July 1956-December 1987 appear in earlier editions of BUSINESS STATISTICS. In the 1967 and earlier editions, the "glove and garment leather" should be added to the "upper and lining leather" to arrive at the total export figure.

2. Source: U.S. Department of Labor, Bureau of Labor Statistics. The leather index is based on prices for finished cattlehide and kipside leather; finished sheep and lamb leather; and rough, crust, and wet blue.

The index is based on prices for 1 day each month (beginning January 1967, the Tuesday of the week in which the 13th of the month falls; for 1952-66, Tuesday of the week containing the 15th).

Monthly data for 1947-87 are available upon request.

3. Source: U.S. Department of Commerce, Bureau of the Census. Data are based on a sample of all known manufacturers of footwear and represent total U.S. production of nonrubber footwear and production of shoes with soles vulcanized to fabric upper and rubber and/or plastic protective footwear.

Beginning 1965, substantial changes were introduced into the detailed classification of footwear as a result of recommendations of the Interagency Shoe Committee and the Shoe Manufacturers' Industry Advisory Committee. These changes affect the comparability of earlier data with those beginning 1965. However, the totals shown are directly comparable.

Annual data prior to 1963 and monthly data for 1953-87 and 1941-46 appear in earlier editions of BUSINESS STATISTICS. Revised monthly data for 1947-52 are available upon request.

4. Source: U.S. Department of Commerce, Bureau of the Census. Effective January 1965, data reflect adoption of revised export schedule and cover exports of new boots, shoes, and other footwear (including men's, youths' and boys', women's, misses', children's, infants', house slippers, including moccasins for housewear, and footwear, n.e.c., including athletic footwear); exports of military-type shoes, etc., are excluded.

Data include shipments under the Army Civilian Supply Program. For a general explanation of foreign trade data, see note 1 for p. 76.

Annual data prior to 1963 and monthly data for 1938-87 appear in earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Labor, Bureau of Labor Statistics. Indexes are based on prices covering specifications as follows: men's leather upper, dress and casual; women's leather upper; and women's plastic upper.

The indexes are based on prices for 1 day each month; the Tuesday of the week in which the 13th of the month falls.

Monthly data from 1973-87 for women's leather upper are available upon request.

6. See 2d paragraph of note 3 for this page.

7. See 1st paragraph of note 4 for this page.

8. Because of an overall revision to the export commodity classification system effective January 1, 1978, data may not be strictly comparable with those shown for earlier periods.

9. Data withheld to avoid disclosing figures for individual companies.

10. Beginning in 1991 data are available on a quarterly basis.

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1. Source: National Forest Products Association (NFPA). Data for all years are estimated industry totals (including Hawaii beginning January 1963) based on monthly reports from regional associations. The figures relate essentially to the operations of sawmills and planing mills (general); they include rough, dressed (surfaced), and worked lumber (i.e., lumber that, in addition to being dressed, has been matched, shiplapped, or patterned). Data for separately operated flooring mills are not included (see p. 107 for hardwood flooring data).

Reports on total and hardwood stocks are no longer available, as of June 1988.

Annual totals may contain revisions not distributed to the months.

Annual data prior to 1963 and monthly data (except for stocks) for 1949, and 1961-87 appear in earlier editions of BUSINESS STATISTICS. Earlier monthly data are available upon request.

2. Source: U.S. Department of Commerce, Bureau of the Census. For a general explanation of foreign trade data, see note 1 for p. 76.

Exports of sawmill products include all types of hardwood and softwood lumber (rough-sawed, dressed, and worked or patterned) and flooring; hardwood small-dimension stock; railroad cross ties; and mine ties.

Imports of sawmill products are imports for consumption. The data include softwood and hardwood sawed lumber and timber (boards, planks, deals, flooring, siding, and other forms, rough, planed or dressed, or otherwise processed but not further manufactured than planed and tongued and grooved), as well as sawed railroad ties, dowels (through August 1963), box shooks and packing boxes (through 1953).

Annual data prior to 1963 and monthly data for 1939-87 appear in earlier editions of BUSINESS STATISTICS.

3. Beginning September 1963, data exclude dowels, formerly included.

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1. Source: Western Wood Products Association. Data are estimates representing total softwood operations for the Douglas fir (Coast) region. Although Douglas fir predominates, output of the region also includes West Coast hemlock, Western red cedar, Sitka spruce, white fir, Ponderosa pine, sugar pine, Idaho white pine, and incense cedar.

Beginning January 1954, the region (designated as West Coast woods in the SUPPLEMENTS prior to the 1951 edition) comprises the portions of the States of Washington and Oregon west of the Cascades including the pine production of Jackson and Josephine counties of Oregon, which for earlier years is included in data for the Western Pine region. This modification does not seriously affect comparability of the data.

Shipments include both domestic and export shipments. Data for stocks apply to gross mill stocks; changes from month to month are computed from differences between production and shipments adjusted to reported inventory figures.

Annual data prior to 1963, monthly data prior to 1988 and other pertinent notes appear in earlier editions of BUSINESS STATISTICS. Figures for 1989-90 are subject to revision.

2. Source: U.S. Department of Commerce, Bureau of the Census. For a general explanation of foreign trade data, see note 1 for p. 76. Exports of Douglas fir (including "Oregon pine") sawmill products include rough-sawed, dressed, and treated lumber. This series does not cover logs or unsawed and hewn timber, nor laths, shingles, and other manufactured wood products.

Figures for "sawed timber" cover lumber 5 inches and over in least dimension, also lumber worked or patterned; those for "boards, planks, etc." are for lumber less than 5 inches in least dimension.

Southern pine exports (shown on p. 107) include dressed lumber and timber (both untreated and treated with preservative), as well as flooring and other worked or patterned wood products. In conformance with revisions in the export schedule, data for flooring, etc., are included beginning 1949, and data for treated boards, planks, etc., beginning 1952. Hewn or unsawed wood and wood manufacturers, such as laths or shingles, are not included. The following species of pine are covered: Southern yellow, Georgia, loblolly, long leaf, Nicaraguan yellow, pitch, short leaf, and slash.

Annual data prior to 1963 and monthly data for 1949-87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Labor, Bureau of Labor Statistics. Dressed softwood is wood from trees of coniferous species that has been dressed or surfaced by planing on at least one edge or face. For a general description of the Producer Price Indexes, see note 1 for p. 27.

Annual data prior to 1963 and monthly data prior to 1988 are available upon request.

4. See note 1 for p. 107.

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1. Source: National Forest Products Association (NFPA). Data for all years are estimates of total national output of Southern yellow pine compiled by the Southern Forest Product Association from monthly lumber grading agency reports representing in recent years about 97 percent of total output. Coverage of reports on stocks and unfilled orders is somewhat less.

Shipments include domestic and export shipments. Stock figures are estimated gross stocks at mills and concentration yards; monthly stock changes are computed from the difference between total production and shipments. Changes in unfilled orders are similarly computed from the difference between total orders and shipments.

Annual totals may contain revisions not distributed to the months.

Annual data prior to 1963 and monthly data prior to 1988 appear in earlier editions of BUSINESS STATISTICS. Also see earlier editions for notes with information pertaining to time periods not shown in this edition.

2. See note 2 for p. 106.

3. See note 3 for p. 106.

4. Source: Western Wood Products Association. Data for all years are estimates of total softwood production in the Western pine (Inland) region.

Shipments include domestic and export shipments. Stocks represent estimated gross stocks at mills; month-to-month changes are computed from differences between production and shipments adjusted to reported inventory figures.

Data comprise all softwood production in the Western pine region defined as follows: Washington and Oregon east of the Cascades; pine production only in Jackson and Josephine counties in Oregon through 1953 (see 3d paragraph of note 1 for p. 106); California (except in the 12 northwestern coastal counties); Arizona; Colorado; Idaho; Montana; Nevada; New Mexico; South Dakota; Utah; and Wyoming. The softwood species included are as follows: Ponderosa pine, sugar pine, Idaho white pine, larch and Douglas fir, white fir, Engelmann spruce, Western red, incense cedar, lodge pole pine, and hemlock.

Annual data prior to 1963 and monthly data for 1945-87 appear in earlier editions of BUSINESS STATISTICS.

5. Source: National Oak Flooring Manufacturers Association. Data for all years are estimates of total industry output from monthly reports by mills representing about 90 percent of total industry output.

"Oak flooring" usually includes a small portion (totaling approximately 3 percent) of maple, beech, birch, and pecan.

Annual data prior to 1963 and monthly data for 1949-87, appear in earlier editions of BUSINESS STATISTICS.

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1. Source: American Iron and Steel Institute (AISI). Figures are as compiled by the AISI from Census reports. Beginning with January 1989, exports and imports are classified by the Harmonized Commodity Classification System and are not directly comparable with data for earlier periods.

Steel mill products include semifinished products, structural shapes, plates, rail and track accessories, concrete reinforcing bars, bar shapes under 3 inches, hot rolled and cold finished bars, pipe and tubing, wire, black plate, tin plate, and sheets and strips. Exports of secondary tin plate are included in steel mill exports. Scrap imports and exports include tin plate scrap; imports also cover rails for scrap and rerolling, and exports omit ships for scrapping. Data for both exports and imports exclude iron ore, advanced (or fabricated) steel manufactures, iron products (other than pig), and ferroalloys.

Exports cover shipments of domestic merchandise; imports cover those for consumption. For a general explanation of foreign trade data, see note 1 for p. 76.

Annual data prior to 1963 and monthly data for exports and imports of steel mill products (1957-87), scrap (1938-87), and pig iron (1961-87) appear in earlier editions of BUSINESS STATISTICS. Note that scrap imports shown in the BUSINESS STATISTICS prior to the 1961 edition omit tin plate scrap. Monthly data for steel mill products exports and imports (1954-56) and pig iron exports and imports (1953-60) are available upon request.

2. Includes heavy melting grades and scrap in bundles; tin plate and terneplate scrap; iron or steel; iron scrap; and other steel scrap. Data beginning 1951 have been adjusted to exclude exports of tinplated circles, strip, cobbles, etc.; these items (amounting to 14,600 tons in 1951) are included in scrap exports for earlier years and in steel mill products beginning 1965.

3. Sources: U.S. Department of the Interior, Bureau of Mines, and U.S. Department of Commerce, Bureau of the Census (compiled jointly). The estimated industry totals are derived from a combined survey covering iron and steel foundries and steel ingot producers. Annual data beginning 1974 and monthly data beginning January 1975 reflect an expanded survey of iron and steel

foundries; for 1974 the additional coverage, accounting for about 3 percent of scrap consumption of direct reduced iron, totaled 614,000 tons. Annual totals include revisions not distributed to the monthly data.

Production of scrap is from recirculating (home, plant, or recycled scrap), obsolete (molds, stools, machinery, and buildings—excluding rerolling rails), and other (including slag) scrap. Receipts of purchased scrap from dealers and all others are net after deducting scrap shipped, transferred, or otherwise disposed of during the period.

Complete iron and steel scrap stocks are not available; some producers (railroads and manufacturers) are not canvassed. The original monthly reports also show production, receipts, etc., of ferrous scrap by type of manufacturer and scrap consumption by grade.

Effective with this edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in earlier editions may be converted by multiplying thousands of short tons by .907185.

Annual data prior to 1963 and monthly data for 1941-87 for consumption and stocks and monthly data for 1953-87 for production and receipts appear in earlier editions of BUSINESS STATISTICS. Monthly data for 1951-52 for production and receipts are available upon request.

4. Source: U.S. Department of the Interior, Bureau of Mines. The composite scrap price as quoted by the *American Metal Market* represents the average of consumers' buying prices, delivered at the Chicago, Pittsburgh, and Philadelphia markets.

Monthly data for 1982-87 are available upon request.

5. Beginning 1970, imports of scrap exclude figures for rerolling rails and other articles of metal scrap, and imports of pig iron exclude figures for sponge iron and ferrous scale. Imports for 1969 excluding these items and comparable with data for 1970 are as follows (in short tons): scrap 335,000 and pig iron, 407,000.

6. Beginning January 1985, data have been revised because of a new estimation procedure and may not be comparable with earlier periods.

7. Less than 500 short tons.

8. Beginning with January 1989, exports and imports are classified by the Harmonized System and are not directly comparable with earlier data.

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1. Source: U.S. Department of the Interior, Bureau of Mines. Monthly data are industry totals based on reports from a sample canvass of large and medium-size mines in the United States. Annual figures are derived from actual reports from all known mines and are believed to represent 100 percent of the industry. Beginning 1964, byproduct material was excluded from the yearend figures for stocks at mines. However, byproduct material continued to be included in the end-of-month figures through 1982. Since January 1983, byproduct material has been excluded from end-of-month figures. Stocks after 1982 are not comparable with those of previous years because of the reclassification of some stocks from the usable to the byproduct category. Because of changes in individual company accounting procedures since 1985, the end-of-month stock figures may not fully account for all of the stocks at U.S. loading docks on Lake Superior.

The data refer to usable ore, the bulk of which are agglomerates produced at the mines by pelletizing, sintering, or briquetting. The remainder is primarily direct-shipping ore (shipped directly from mines to consumers with only minimal treatment for removal of waste constituents) and concentrates (produced by washing, gravity, or other classification methods). Sinter and other agglomerates produced at consuming plants are excluded.

Data shown in editions prior to BUSINESS STATISTICS, 1961-88, may be converted to thousands of metric tons by multiplying thousands of long tons by 1.016.

Annual data prior to 1963 and monthly data for 1943-87 appear in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of the Interior, Bureau of Mines, compiled from Bureau of the Census foreign trade data. The data represent imports for consumption. Prior to 1989, imports of iron ore included manganese iron ore, containing not more than 10 percent by weight of manganese, and dross or residuum from burnt pyrites. Effective with the reporting of March 1989 imports, the manganese cutoff value was raised to 20 percent.

Beginning with January 1989, exports and imports are from the Bureau of Mines' *Mineral Industry Surveys* as well as based upon the Harmonized Commodity Classification System. Because of these changes, 1989 data may not be directly comparable with those of earlier periods. For a general explanation of foreign trade data, see note 1 for p. 76.

Data shown in editions prior to BUSINESS STATISTICS, 1961-88, may be converted to thousands of metric tons by multiplying thousands of long tons by 1.016.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS. Revisions for November and December 1950 are 729,000 and 429,000 long tons.

3. Sources: American Iron Ore Association and American Iron and Steel Institute. The data cover ores originating in the United States, Canada, and other foreign countries. Iron ore is defined as including all iron ore, iron ore concentrates, and iron ore agglomerates produced at or near mine locations.

Consumption figures include small quantities of ore sold to nonreporting companies and ore used for other purposes. Consumption figures exclude comparatively small tonnages of ore consumed by the cement and paint industries and other miscellaneous use. (Shipments of iron ore, compiled by the U.S. Department of the Interior, Bureau of Mines, also shown on this page, include shipments to these users, as well as ore consumed in ferroalloy furnaces.)

Data shown in editions prior to BUSINESS STATISTICS, 1961-88, may be converted to thousands of metric tons by multiplying thousands of long tons by 1.016.

Annual data prior to 1963 and monthly data for 1957-87 are in earlier editions of BUSINESS STATISTICS. Monthly data prior to 1957 are not available.

4. Source: U.S. Department of the Interior, Bureau of Mines, compiled from Bureau of the Census foreign trade data. The data cover exports of all grades of iron ore and concentrates. For scattered years, prior to 1979, monthly data included small quantities of reexports of foreign ore. Beginning January 1979, monthly data exclude reexports. Exports of unroasted iron pyrites were excluded prior to 1989. Beginning with January 1989, exports and imports are from the Bureau of Mines' *Mineral Industry Surveys* as well as based upon the Harmonized Commodity Classification System. Because of these changes, 1989 data may not be directly comparable with those of earlier periods. For a general explanation of foreign trade data, see note 1 for p. 76.

Data shown in editions prior to BUSINESS STATISTICS, 1961-88, may be converted to thousands of metric tons by multiplying thousands of long tons by 1.016.

Annual data prior to 1963 and monthly data for 1955-87 appear in earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Commerce, Bureau of the Census. Data represent general imports. For a general explanation of foreign trade data, see note 1 for p. 76. The data (reported in manganese content) cover imports of manganese metal (unwrought and unalloyed), including waste and scrap; manganese ore, including ferruginous and manganiferous iron ore (containing more than 10 percent of manganese); and ferromanganese and ferrosilicon manganese alloys. Data shown in editions prior to BUSINESS STATISTICS, 1961-88, may be converted to thousands of metric tons by multiplying thousands of long tons by 1.016.

Annual data prior to 1963 and monthly data for 1955-87 appear in earlier editions of BUSINESS STATISTICS.

6. Data are no longer available.

7. Data may not be comparable with earlier data; see note 2 for this page.

8. Data may not be comparable with earlier data; see note 4 for this page.

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1. Source: American Iron and Steel Institute (AISI). According to the AISI, its coverage of total blast-furnace production is 100 percent. The data cover blast-furnace production of pig iron, including silvery pig iron. Data as shown in the 1959-77 editions of BUSINESS STATISTICS exclude production of ferroalloys in blast furnaces. Beginning with the 1979 edition, data beginning 1975 include ferroalloys and are not comparable with earlier periods shown.

Annual data prior to 1963 and monthly data for 1955-87 appear in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of the Interior, Bureau of Mines. Data represent estimated industry totals derived from a combined survey covering iron and steel foundries and steel ingot producers.

Effective with this edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in earlier editions may be converted by multiplying thousands of short tons by .907185.

Annual data prior to 1963 and monthly data for 1941-87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Commerce, Bureau of the Census. All data are estimated industry totals. The monthly estimates are derived from a combined sample survey; all blast furnaces, all large foundries, and all producers of selected foundry items are included in the sample.

The original reports show separate data for gray iron and for ductile (nodular) iron castings by type (cast iron pressure and soil pipe and fittings, molds for heavy steel ingots, and other gray iron castings). Semisteel alloy iron and white iron castings are included in the gray iron castings total. Tonnages represent the weight of rough castings before machining. Total shipments include castings

produced and consumed at the same location in the production of finished products and castings shipped for use by the reporting company or by an affiliate, subsidiary, or parent company, as well as those for sale.

Annual data prior to 1963 and monthly data for 1929-46 for malleable iron, 1943-46 for iron products, and 1949-87 for all series appear in earlier editions of BUSINESS STATISTICS. Revised monthly data for 1947-48 for all series are available upon request.

4. Source: American Iron and Steel Institute. Through 1966, the data are from companies that account for virtually the entire output of all steel for castings produced by ingot makers. Beginning 1967, the term "raw steel production" was substituted for "ingots and steel for castings" and refers to the total production of raw steel. Raw steel is defined as steel in the first solid state after melting suitable for further processing or sale, including ingots, steel for foundry castings, and strand or pressure cast blooms, billets, slabs, or other product forms.

The production rate of capability utilization is based on tonnage capability to produce raw steel for a sustained full order book. Data are not available for periods prior to 1975.

Monthly data for tonnage of steel for 1963-87 are shown in appendix I. Annual data prior to 1963 and monthly data for 1938-60 (for tonnage of steel) and 1975-87 (for production rate of capability utilization) appear in earlier editions of BUSINESS STATISTICS.

5. Beginning in 1990, monthly data have been discontinued.

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1. Source: American Iron and Steel Institute (AISI). Data are compiled from reports of companies representing nearly 100 percent of the total production of the industry. The industry includes only those processors that are also primary producers of steel. Net shipments (i.e., after deducting shipments between reporting companies for conversion, further processing, or resale) cover all grades of steel (carbon, alloy, stainless, and heat-resisting). Items covered by product class are described below.

Semifinished products—ingots and steel for castings, blooms, slabs, billets, and wire rods.

Rails and accessories—all rails, tie plates, and joint bars.

Pipe and tubing—standard and line pipe, oil country goods, mechanical, pressure, structural, pipe for piling, and stainless pipe and tubing.

Wire-drawn and/or rolled (formerly titled *wire and wire products*)—drawn wire.

Tin mill products—electrolytic and hot dipped tin plate, tin free steel, black plate, and other products.

Sheets and strip—hot and cold rolled sheets, electrical, galvanized and all other metallic coated sheets and strip, and hot and cold rolled strip.

Annual totals include adjustments not reflected in the monthly data.

Monthly data for 1963-87 for total shipments only appear in appendix I. Annual data prior to 1963 and monthly data for 1953-87 appear in earlier editions of BUSINESS STATISTICS; monthly data by products for 1950-52 are available upon request.

2. Includes shipments of tool steel not shown separately.

3. Titled "wire and wire products" in the 1986 and earlier editions of BUSINESS STATISTICS.

4. Includes shipments of sheets and strip (electrical, hot dipped and electrolytic galvanized, and other metallic coated) and hot and cold rolled strip, not shown separately.

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1. Source: American Iron and Steel Institute (AISI). See note 1 for p. 111 regarding steel products shipments by product and for a description of industry and product coverage.

Data for total shipments are shown on p. 111. Preliminary monthly estimates are shown for the latest period in the SURVEY OF CURRENT BUSINESS and replaced with final quarterly shipments once they are available.

The other group includes steel shipped for electrical equipment; appliances and other domestic and commercial products (such as furniture and professional and institutional equipment); agricultural machinery and products; oil and gas drilling; mining, quarrying, and lumbering; ordnance, etc.; aircraft and aerospace; shipbuilding and marine equipment; as well as steel for further processing into mill shapes, steel products, or for resale and, beginning January 1976, oil and gas supply houses and pipelines.

Annual data prior to 1963 and quarterly data for 1963-87 are in earlier editions of BUSINESS STATISTICS.

2. Sources: Steel Service Center Institute (SSCI), for service centers inventories, and U.S. Department of Commerce, Bureau of the Census. Monthly inventories from producing mills are based on information collected from companies that produce over 50 percent of total steel output. Estimates have been derived to represent 100-percent coverage of steel producers and are benchmarked annually to the Current Industrial Reports, *Steel Mill Products*.

Estimates for steel service centers' (warehouses) inventories are based on the SSCI monthly Business Conditions Report and are derived from a current monthly sample of steel service centers, which accounts for approximately 30 percent of the total inventory of steel mill products held by steel service centers. The sample is tested by SSCI each year against an independent steel consumption data base. Data shown here represent the SSCI data inflated to provide estimates of the total inventories of steel mill products held by steel service centers.

Monthly data for 1962-87 for inventories of steel in process and finished steel and 1971-87 for steel service centers appear in earlier editions of BUSINESS STATISTICS. Monthly data for 1962-87 for total inventories of producing steel mills and 1962-70 for steel service centers are available upon request.

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1. Source: U.S. Department of the Interior, Bureau of Mines. Production data of primary aluminum are based on monthly reports from all producers; final yearly totals are derived from an annual industry canvass.

Estimates of metal containing aluminum recovered from scrap represent the total industry and are based on annual surveys by the Bureau of Mines. Through 1981, these estimates represent aluminum content only. Beginning 1982, they represent metallic (mostly aluminum) content.

Annual data prior to 1963 and monthly data for 1941-87 are in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of the Interior, Bureau of Mines, compiled from Bureau of the Census foreign trade data. Beginning with January 1989, exports and imports are from the Bureau of Mines' *Mineral Industry Surveys* as well as based upon the Harmonized Commodity Classification System. Because of these changes, 1989 data may not be directly comparable with those of earlier periods. For a general explanation of foreign trade data, see note 1 for p. 76.

Imports of metal and alloys (crude) refer to unwrought metal other than alloys, including aluminum in coils not greater than 0.375 inch in diameter, unwrought alloys of aluminum (except aluminum silicon), hollow cast extrusion ingots. Imports of plates, sheets, etc., also cover wrought rods, bars, strip, angles, shapes, and sections. Not included are imports of aluminum wire, waste and scrap, and powders and flakes. Beginning with January 1989, data are imports for consumption, and are not directly comparable with earlier general imports data.

Exports of aluminum and aluminum alloys are summarized as unwrought crude metal (pig, blooms, ingots, billet—including extrusion ingot and billet—bars, blocks, slabs, shot) and as semicrude shapes and forms (plates, sheets, bars, rods, tubes, pipes, and fittings). Excluded are exports of foil, powders and flakes, and wire and electrical conduit. Annual exports include small quantities of miscellaneous semifabricated forms not included in the monthly data.

Annual data prior to 1963 and monthly data for 1953-87 for imports (except as noted below) and 1957-87 for exports (1969-87 for plates, sheets, etc.) are shown in earlier editions of BUSINESS STATISTICS.

Effective with the 1984 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. It should be noted, however, that in the 1984 and 1986 editions, annual and monthly data for 1984-86 were published incorrectly in "short" tons (but labeled as "metric" tons). Data shown in the 1982 and earlier editions and the incorrect data shown in the 1984 and 1986 editions may be converted by multiplying short tons by .907185.

3. Source: U.S. Department of the Interior, Bureau of Mines. Prices are *Metals Week* monthly average spot or market price. The purity of primary aluminum is usually 99.7 percent.

Monthly data for 1983-87 are in earlier editions of BUSINESS STATISTICS. Monthly data for October 1971 to December 1982 are available upon request.

4. Sources: U.S. Department of Commerce, Bureau of the Census; and International Trade Administration.

Data are tabulated from a survey of all known producers of aluminum ingot and mill products shipping 10,000 pounds or more per month. Data for net shipments of ingot (both primary and secondary) include shipments by importers and represent shipments to consuming industries; i.e., to foundries for producing castings, to steel plants and others for destructive uses, as well as shipments for export. Ingot shipped for further processing into mill products is not included.

Annual data prior to 1963 and monthly data for 1952-87 for total ingot and mill products are shown in earlier editions of BUSINESS STATISTICS. Monthly data for total mill products (1946-87) and for sheet and plate excluding foil for 1959-87 and including foil for 1942-58 are also shown in earlier editions.

Monthly data for 1942-45 for total mill products and 1954-58 for plate and sheet, excluding foil, are available upon request. No data for inventories are available prior to 1967.

5. Source: U.S. Department of Commerce, Bureau of the Census. The data represent total industry shipments of aluminum and aluminum-base alloy castings, whether for commercial sale or for use by the producing company.

For a description of the survey methodology used to develop this series, see Current Industrial Reports, *Nonferrous Castings* annual summaries, series MA33E from the Bureau of the Census.

6. Not directly comparable with earlier data; see paragraphs 1 and 2 of note 2 for this page.

7. Beginning in 1990, monthly data have been discontinued.

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1. Source: U.S. Department of the Interior, Bureau of Mines. Mine production data are in terms of recoverable metal from mines in the United States. The monthly figures are estimates reflecting 100-percent coverage and are adjusted to final annual totals of mine production.

Primary refinery production figures represent the total refined copper produced from domestic, foreign, and electrowon primary materials. (The electrowinning process differs from traditional methods of refining copper in that the copper ore is not smelted. Instead, copper is leached from the ore with a solvent. The copper is then separated from the solvent by electrolysis).

Production of copper refined from scrap includes electrotype, casting grade, and copper billets. Excluded are black copper, electrotype plates, and copper castings from remelted materials.

Annual data prior to 1963 and monthly data for 1941-87 for mine production, 1953-87 for all other series (except as noted below) are shown in earlier editions of BUSINESS STATISTICS. No monthly data for electrowon copper are available prior to 1985.

2. Source: U.S. Department of the Interior, Bureau of Mines, compiled from Bureau of the Census foreign trade data. Total copper imports and exports include the copper content of copper in all forms—refined; ores and concentrates; precipitates and matte; blister and anode copper; unalloyed and alloyed scrap and other metal-bearing waste, and residues and materials. Prior to 1989, imports are general (imports for immediate consumption plus material entering the country under bond). Beginning with January 1989, data are imports for consumption, and are not directly comparable with earlier data. Exports prior to 1989 represent gross metal weight. Beginning with January 1989, export data represent copper content.

As of January 1, 1989, exports and imports are from the Bureau of Mines' *Mineral Industry Surveys* as well as based upon the Harmonized Commodity Classification System. Because of these changes, 1989 data may not be directly comparable with those of earlier periods. For a general explanation of foreign trade data, see note 1 for p. 76.

Annual data prior to 1963 and monthly data for 1953-87 are in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Interior, Bureau of Mines. The data, representing the total industry, are based on a monthly survey of brass mills, copper wire mills, and secondary smelters.

Monthly stocks of refined copper include copper refined at refineries, wire rod mills, brass mills, secondary smelters, chemical plants, foundries, miscellaneous manufacturers, and the Commodity Exchange, Inc., New York.

Monthly data for 1953-87 are in earlier editions of BUSINESS STATISTICS.

4. Sources: U.S. Department of the Interior, Bureau of Mines; *Metals Week*, and *American Metal Market*. Prices are U.S. producers' weighted average cathode, delivered U.S. destination basis. In the trade, copper prices are quoted on a delivered basis by producers, i.e., delivered to consumer's plant.

Monthly data for 1978-87 (cathode price) are available upon request.

5. Figures for 1970 include reexports of foreign refined copper, including remelted copper.

6. Not directly comparable with earlier data; see paragraphs 1 and 2 of note 2 for this page.

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1. Source: U.S. Department of the Interior, Bureau of Mines. Mine production data represent actual mine output (in terms of recoverable metal) from domestic mines. Data shown in monthly reports for mine production represent greater than 99-percent coverage. Monthly data are estimated totals based on reports from most of the known secondary smelters and others using scrap and

from consumers of lead. Annual totals are derived from the sum of the monthly data and from reports from additional companies that report on an annual basis only. All data are in terms of lead content. Beginning 1964, data reflect sales of Government stockpile surplus lead to commercial users and for Government use.

Production recovered from lead-, tin-, and copper-base scrap may include lead recovered by smelters that treat ore with scrap, as well as by smelters that treat only scrap and drosses.

Consumption is shown in the original monthly reports distributed by use (i.e., by type of metal products, and miscellaneous uses).

Annual data prior to 1963 and monthly data for 1953-87 (1941-87 for mine production) are in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of the Interior, Bureau of Mines, compiled from Bureau of the Census foreign trade data. Imports of lead comprise the dutiable lead content of all lead-bearing ores, lead bullion, and other unwrought lead (alloyed and unalloyed) plus the lead content of alloys of bismuth. Not included are imports of lead waste and scrap and wrought or semifabricated shapes. Prior to 1989, data are general imports (imports for immediate consumption plus material entering the country under bond). Beginning with January 1989, data are imports for consumption, and are not directly comparable with earlier data. As of January 1, 1989, U.S. trade data are from the Bureau of Mines' *Mineral Industry Surveys* as well as based upon the Harmonized Commodity Classification System. Because of these changes, 1989 data may not be directly comparable with those for earlier periods. For a general explanation of foreign trade data, see note 1 for p. 76. Figures for recovery from scrap, shown in the adjacent column, include production from imported scrap.

Annual data prior to 1963 and monthly data for 1953-87 are in earlier editions of BUSINESS STATISTICS.

3. Sources: American Bureau of Metal Statistics (for producers' and primary refiners' stocks) and U.S. Department of the Interior, Bureau of Mines. Effective January 1979, producers' stocks exclude stocks of lead base bullion in transit. Effective January 1978, data represent stocks of ore matte scrap in process and base bullion. Yearend data for 1953-77 comprise lead in raw material and in base bullion at smelters, in transit, at refineries, and in process.

Primary refiners' stocks refer to inventories at plants and do not include material in process or in transit.

Consumers' and secondary smelters' stocks of lead in refinery shapes and lead in copper-base scrap are shown in the original reports by type of material consumed. Data reflect the inclusion of reports from additional respondents; see also note 1 for this page. Consumers' stocks also include secondary smelters' stocks of refinery shapes.

Stocks of purchased lead-base scrap held by smelter-refineries are shown in terms of gross weight.

Annual data prior to 1963 and monthly data for 1929-87 are in earlier editions of BUSINESS STATISTICS.

4. Source: *Metals Week* (prior to 1967, *Engineering and Mining Journal, Metal and Mineral Markets*). The data represent arithmetic averages of daily prices of common grade lead. Prices are weighted averages of fixed-price sales of domestically refined lead sold by domestic producers to consumers. Data through November 1971 are prices at New York, on sales for both prompt and future deliveries; December 1971-September 1986, data refer to one nationwide price, delivered basis; October 1986-December 1990, data represent North American primary producer mean quotations and beginning January 1991, prices are weighted quotation averages, including secondaries, relative to production share.

Annual data prior to 1963 and monthly data for 1929-87 are in earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of the Interior, Bureau of Mines, compiled from Bureau of the Census foreign trade data. Imports for consumption comprise the tin content of tin ore and black oxide of tin, and unwrought tin, other than alloys of tin. Exports refer to unwrought tin and tin alloys—annually, beginning 1963, and monthly, beginning January 1973. Data through 1988 include reexports of metallic tin, but represent only domestic exports beginning January 1989. As of January 1, 1989, exports and imports are from the Bureau of Mines' *Mineral Industry Surveys* as well as based upon the Harmonized Commodity Classification System. Because of these changes, 1989 data may not be directly comparable with those of earlier periods. For a general explanation of foreign trade data, see note 1 for p. 76.

Annual totals prior to 1963 and monthly data for imports of ore (1938-87), imports of metal (1929-87), and exports (1951-87) are shown in earlier editions of BUSINESS STATISTICS.

6. Source: U.S. Department of the Interior, Bureau of Mines. The monthly consumption and secondary production data are as reported by companies that account for over 90 percent of primary tin consumption and over 80 percent of secondary tin consumption. The annual totals include adjustments not distributed to the monthly series.

Tin recovered from scrap processed in the United States comprises tin recovered in all forms (alloys, solder, type metal, babbitt, etc.), as well as

recovered metal (secondary pig tin and remelt tin), which is shown separately. Domestic mine production of tin is virtually nil.

Industrial stocks held by private smelters, fabricators, and distributors exclude data for tin in process and tin in transit to the United States. Small stocks of secondary pig tin are included. The data reflect national stockpile surplus tin sales to industry or for government use.

Annual data prior to 1963 and monthly data for 1951-87 (1958-87 for secondary production) and for 1942-50 (as compiled by the U.S. Department of Commerce and the Civilian Production Administration) are in earlier editions of BUSINESS STATISTICS. It should be noted that data are shown in long tons in the 1975 and earlier editions of BUSINESS STATISTICS.

7. For the period September 1963-April 1964, tin ore imports were expressed in terms of gross weight in the original Census reports; for other periods, in terms of tin content. Figures shown for 1963 and 1964 are from the *1967 Minerals Yearbook* (U.S. Department of the Interior, Bureau of Mines) and represent tin ore imports for consumption (tin content basis).

8. Data are not strictly comparable with earlier periods because of the exclusion of stocks of lead base bullion in transit to refineries.

9. Beginning with 1979, yearend stocks reflect reports from additional companies that report on an annual basis only and differ from those reported as of December 31 each year.

10. Not directly comparable with earlier data; see note 2 for this page.

11. Not directly comparable with earlier data; see note 5 for this page.

12. Data withheld.

13. Data are no longer available.

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1. See note 5 for p. 115.

2. See note 6 for p. 115.

3. Sources: *Metals Week* for prices beginning January 1976; *American Metal Market* for prices prior to January 1976.

The *Metals Week* composite monthly price (calculated using U.S. dollars per metric ton) is based on average daily prices at two markets, the Penang, Malaysia, settlement and the London Metal Exchange for 3-month high grade tin (99.85 percent). The composite includes charges for freight, commissions, insurance, etc., plus the dealer's financing costs during a 70-day export period and the consumer's financing costs during a 70-day period. For consumers, this 70-day cost adjustment is for the period between receipt of the tin by the consumer and the time the tin (in its finished form) leaves the consumer. The composite thus represents the replacement cost for tin for the month (but not necessarily the monthly spot price). No earlier comparable prices are available.

The *American Metal Market* price prior to January 1976 represents averages of daily prices of Straits tin, Grade A, 99.8 percent or higher, for prompt delivery in New York.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of the Interior, Bureau of Mines. Data represent actual mine production of recoverable zinc (including that made into zinc pigments and salts) in the United States. Monthly data are on an estimated 100-percent coverage basis and are adjusted to final annual figures.

Annual data prior to 1963 and monthly data for 1929-87 are shown in earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of the Interior, Bureau of Mines, compiled from Bureau of the Census foreign trade data. As of January 1, 1989, exports and imports are from the Bureau of Mines' *Mineral Industry Surveys* as well as based upon the Harmonized Commodity Classification System. Because of these changes, 1989 data may not be directly comparable with those of earlier periods. For a general explanation of foreign trade data, see note 1 for p. 76.

Imports cover all zinc-bearing ores and unwrought, unalloyed zinc in basic shapes and forms. Excluded are imports of unwrought alloys of zinc in basic shapes, wrought (semifabricated) shapes, waste, scrap, wire, powders, and flakes. Prior to 1989, data are general imports (imports for immediate consumption plus merchandise entered into Customs bonded storage warehouses and Customs bonded smelting and refining warehouses). Beginning with January 1989, data are imports for consumption, and are not directly comparable with earlier data.

Exports refer to unwrought, unalloyed zinc that is cast in slabs, blocks, or pigs. Excluded are unwrought zinc alloys, wrought zinc, and wrought zinc alloys.

Annual totals prior to 1963 and monthly data for 1953-87 are in earlier editions of BUSINESS STATISTICS.

6. Sources: U.S. Department of the Interior, Bureau of Mines; and American Bureau of Metal Statistics (ABMS). Consumption of ores includes ore used directly in galvanizing. Consumption of scrap excludes redistilled slab and remelt zinc.

Beginning with annual data for 1982 and monthly data for 1986, data for consumption of slab zinc reflect apparent consumption as estimated by Bureau of Mines by adding total smelter production *plus* imports, *minus* exports, *plus* stocks at the beginning of the period, *minus* stocks at the end of the period.

Production of slab zinc is reported monthly by the ABMS and does not include all the companies that report monthly and annually to the Bureau of Mines.

Consumers' stocks represent slab zinc at plants and exclude metal in transit. Data for producers stocks are compiled by the ABMS and refer to zinc held at primary and secondary zinc reduction plants.

Annual data prior to 1963 and monthly data for 1953-87 (for consumption of ores and scrap, 1956-87) are in earlier editions of BUSINESS STATISTICS.

7. Source: *Metals Week* (prior to 1967, *Engineering and Mining Journal, Metal and Mineral Markets*). As of January 1, 1991, prices are *Metals Week* North American Special High Grade based on the London Metal Exchange (LME) cash price plus a premium, depending on market conditions. Between September 1980 and January 1, 1991, the *Metals Week* weighted average price basis was U.S. High Grade (delivered). Earlier prices include the *Metals Week* weighted average Prime Western grade zinc (delivered), from January 1971-September 1980, and the East St. Louis base price shown through 1970.

Annual data prior to 1963 and monthly data for 1929-87 are in earlier editions of BUSINESS STATISTICS.

8. Data not strictly comparable with earlier periods because of the price basis change. See note 7 for this page.

9. See note 6 for this page.

10. Not directly comparable with earlier data; see note 5 for p. 115.

11. Not directly comparable with earlier data; see note 5 for this page.

12. Less than 50 metric tons.

13. See note 3 for this page.

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1. Source: Industrial Heating Equipment Association, Inc. (IHEA). Data represent domestic new orders (less cancellations) for industrial heating equipment, industrial combustion equipment, atmosphere generating equipment, replacement parts, etc. Beginning 1971, data for industrial ovens are reported with data for fuel-fired and electric processing equipment. The figures are based on reports of member companies of IHEA.

Annual data prior to 1963 and monthly data prior to 1988 are in earlier editions of BUSINESS STATISTICS.

2. Source: Cahners Economics. This index is developed by Cahners Economics from dollar value bookings. Included are bookings (new orders) for automatic guided vehicles, automated storage and retrieval systems, below hook lifters, cranes, hoists, monorails, racks, shelving, caster and floor trucks, conveyors, and industrial trucks.

The following associations cooperate by supplying Cahners Economics with reported figures from their companies: the Materials Handling Institute and its product sections, the Industrial Truck Association, the Conveyor Equipment Manufacturers Association, and the Institute of Caster Manufacturers.

Monthly data for 1982-87 are available upon request.

3. Source: American Supply & Machinery Manufacturers' Association, Inc. (ASMMMA). The new orders index is based on the total new orders received by a cross section of ASMMMA members. These are orders for supplies, machinery, and equipment that are placed with industrial hardware manufacturers who sell their products through industrial distributors.

A 2-month moving average (current and preceding month) is used to develop the index. The index is adjusted for seasonality and the number of working days.

Monthly indexes for 1986-87 are available upon request. Indexes with a base of 1977=100 and 1967-69=100 appear in earlier editions of BUSINESS STATISTICS.

4. Source: The Industrial Distribution Association. The sales index is compiled from unadjusted monthly dollar sales of selected members of the association.

5. Source: The Industrial Distribution Association. The inflation index measures manufacturers' prices of industrial supply-type products, using data from the U.S. Bureau of Labor Statistics. The following 10 products are in the index: Fasteners, miscellaneous metal products, power-driven hand tools, valves and fittings, hand tools, rubber belts and belting, material handling equipment, mechanical power transmission equipment, abrasives, and cutting tools.

Monthly indexes for 1979-91 appear in the 1982 and subsequent editions of BUSINESS STATISTICS. Monthly indexes for 1978 are available upon request. Indexes on a base of 1967=100 appear in the 1979 and earlier editions of the BUSINESS STATISTICS.

6. Source: National Fluid Power Association (NFPA). Indexes for shipments and orders are published monthly. The indexes are based on current dollar data, and are not seasonally adjusted.

Fluid power products include hydraulic and pneumatic valves, cylinders, pumps, motors, filters, hoses, and connectors. These products are used in industrial and mobile applications to provide machinery with motive force. Economic activity in the fluid power industry is a good indicator of activity in the U.S. manufacturing sector in general.

Annual and monthly data beginning 1960 are available from the NFPA.

7. Source: The Association for Manufacturing Technology. The data represent total industry volume based on reports from members of the association. The reporting companies produce about 75 percent of the U.S. machine tool output.

Machine tools of the metal cutting and metal forming types (see p. 118) are defined as power driven, complete metal-working machines, not portable by hand, used for progressively removing metal in the form of chips or for the forming of metal.

Monthly data for 1963-87 for total new orders and total shipments of metal cutting and metal forming tools appear in appendix I. Monthly figures for 1956-87 for all series appear in earlier editions of BUSINESS STATISTICS. For metal cutting tools, monthly averages for years prior to 1947 for total shipments only and monthly data for 1953-55 for the cutting tool series (except backlog) are in the 1957 edition; monthly data for 1945-52 are available upon request. No data for the forming tools are available prior to 1956.

8. New orders for electric processing heating equipment are included with those for fuel-fired processing heating equipment.

9. Data beginning 1971 include new orders for ovens; such data are not included in earlier figures.

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1. See note 7 for p. 117.

2. Source: U.S. Department of Commerce, Bureau of the Census. The statistics are taken from the quarterly Current Industrial Report, *Construction Machinery*, series MQ35D through 1989, and beginning 1990 from the annual series MA35D. The survey panel includes all companies engaged in the manufacture of the types of construction and surface mining machinery and equipment covered on the survey, except the very small firms. Approximately 270 companies are included.

3. Source: Battery Council International. The data, compiled for the council by Smith, Bucklin & Associates, Inc. (beginning 1975) represent the industry's total civilian shipments by U.S. manufacturers to jobbers, dealers, mail-order houses, and chain stores. Shipments for export and for military and other government use (such as post offices) are not included. Shipments refer to automotive type replacement batteries for use in automobiles, trucks, buses, truck-tractors, tractors, golf carts, etc., and those for marine and general use, but do not cover batteries used in industrial trucks and tractors.

Annual data prior to 1963 and monthly data prior to 1987 are in earlier editions of BUSINESS STATISTICS.

4. Source: Electronic Industries Association, Marketing Services Department. Data are for the domestic market; i.e., units produced or sold in the United States regardless of brand name or country of origin. Intracompany transfers are excluded.

Radio sets refer to table, portable, automobile (through December 1979), and clock models.

Television sets refer to console, portable and table models for monochrome receivers through 1964. Color receivers are included beginning with production for 1965 (color sets produced in 1964 totaled 1,463,000 units).

The monthly data for all years represent 4- and 5-week periods as follows: March, June, September, and December cover 5 weeks (except for December 1974 when the data cover 6 weeks); other months cover 4 weeks.

Annual data for radio sets prior to 1963 and monthly data for 1951-87 for both series are in earlier editions of BUSINESS STATISTICS.

5. Annual data for 1973 and 1974 and quarterly data for all years exclude shipments of rubber-tired dozers to avoid disclosure of operations of individual firms.

6. Effective 1965, the production of color sets is included; see note 4 for this page.

7. Beginning with May 1991 data, monochrome production numbers are no longer available. The 1991 annual includes monochrome production numbers through April.

8. Beginning in 1990, monthly data have been discontinued.

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1. Sources: Association of Home Appliance Manufacturers (beginning July 1966), National Electrical Manufacturers Association (1955-June 1966), and American Home Laundry Manufacturers' Association (prior to July 1966).

Data are based on reports from manufacturers and represent total industry sales of all major appliances manufactured in the U.S., including exports and sales of products manufactured outside the U.S. and imported into the country for sale in the U.S. market. Totals through 1973 include figures for dehumidifiers, not shown separately, and exclude figures for water heaters and compactors. Beginning 1976, products do not sum to the total, because the total includes data for dehumidifiers and compactors, which are not shown separately.

Microwave ovens/ranges (first shown in the 1984 BUSINESS STATISTICS) include microwave ovens and combination microwave ovens/ranges.

Annual data prior to 1963 for ranges and washers and monthly data for ranges (1956-87), refrigerators (1965-87), air conditioners (1965-87), microwave ovens/ranges (1981-87), washers (1946-87), and dryers (1959-87) are in earlier editions of BUSINESS STATISTICS. Monthly data for 1976-80 for microwave ovens/ranges are available upon request. Revision: Refrigerators—December 1966, 309,000 units.

2. Source: Vacuum Cleaner Manufacturers Association (VCMA). Data are based on reports of members of VCMA and several nonmember companies and cover practically the entire industry. The data represent manufacturers' domestic sales to all outlets. The figures refer to home portable, upright, canister, and cylinder-type electric vacuum cleaners only.

Annual data prior to 1963 and monthly data prior to 1988 are in earlier editions of BUSINESS STATISTICS.

3. Sources: Gas Appliance Manufacturers Association, Inc. and Association of Home Appliance Manufacturers (for ranges, beginning 1988). Data are estimates of total industry shipments. Gas ranges cover freestanding (standard, apartment, and combination), high oven, set-in and built-in (oven-broiler unit) types. Excluded are standard type ranges used in travel trailers and recreational vehicles. Water heaters refer to gas-fired automatic storage units, and they exclude boosters and side arm types. Water heaters and warm air furnaces cover single, multiresidence, and mobile home and travel trailer units. Not included are furnaces and water heaters of a size for commercial establishments and the following gas-fired central heating equipment: Conversion burners, boilers, and floor and wall furnaces.

Annual data prior to 1963 and monthly data prior to 1988 are in earlier editions of BUSINESS STATISTICS. Revisions: Gas ranges—December 1970; 205,000 units; Water heaters—May 1970, 231,000 units.

4. Beginning January 1976, ranges include two oven models (one conventional and one microwave); not included are table top or portable units.

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1. Source: U.S. Department of Energy, Energy Information Administration. Data represent the total output of anthracite in the United States, which is mined almost exclusively in northeastern Pennsylvania. Anthracite, or hard coal, is the highest rank of economically usable coal and has a moisture content generally of less than 15 percent. It is used mostly for space heating and generating electricity. Figures are derived from weekly data on carloadings of anthracite as reported by the Association of American Railroads, prorated to a monthly basis. A census of mine operators is taken annually, and the monthly data are then adjusted to the reported total.

Coal is mined by using either the underground or surface mining method (as recently as 1987, over 80 percent of anthracite coal was mined by using surface mining). For a definition of these two methods, see 5th paragraph of note 4 for this page.

Anthracite is cleaned and sized at preparation plants ("breakers"), most of which are affiliated with mining companies. Data include output of small independent producers.

Prepared anthracite is shipped to the consumer either by rail or truck. Rail shipments are primarily sold to consumers by wholesalers, dock operators, and exporters, whereas truck shipments are usually sold to local retail dealers.

Annual data prior to 1963 and monthly data for 1929-87 (except revised 1978 data, which are available upon request) appear in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of Commerce, Bureau of the Census. Exports of anthracite coal exclude bunker coal on vessels engaged in foreign trade. Exports of bituminous coal exclude lignite but include subbituminous coal. For a general explanation of foreign trade data, see note 1 for p. 76.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying thousands of short tons by .907185.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Labor, Bureau of Labor Statistics. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

Annual indexes for 1947-62 and monthly indexes for 1947-87 are available upon request.

4. Source: U.S. Department of Energy, Energy Information Administration. Bituminous coal, or soft coal, is the most common coal, it is dense, black, often with well defined bands of bright and dull material, and has a moisture content usually of less than 20 percent.

Bituminous coal is mined chiefly in the Appalachian and Interior coal fields. It is used for generating electricity, making coke, space heating, and supplying heat for industrial use.

Lignite, the lowest rank of coal, is brownish black and has a high moisture content, sometimes as high as 45 percent. It tends to disintegrate when exposed to the weather. Lignite is mined in California, Louisiana, Montana, North Dakota, and Texas, and is used mainly to generate electricity in power plants that are relatively close to mines.

The monthly figures are estimates based on carloadings of coal reported weekly by railroads, river shipments reported by the U.S. Army Corps of Engineers, reports from mining companies, and monthly production statements compiled by local operators' associations and State mine departments. Allowance has been made for commercial truck shipments, local sales, colliery fuel, and for small truck mines, which produce over 1,000 tons a year. These estimates are later revised to agree with the results of the annual statistical reports from the coal producers. Data comprise bituminous (including subbituminous) coal and lignite as well as coal used at collieries for power and heat.

Bituminous coal is mined by using either the underground or surface mining method, whereas lignite is produced only by using the surface mining method. The *underground method* is used by tunneling into the earth to the coalbed which is then mined using such equipment as cutting machines and continuous, longwall and shortwall mining machines. The *surface method* is used when coal can usually be found within a few hundred feet of the surface by using surface excavation equipment such as draglines, power shovels, bulldozers, loaders and augers. This method also may be known as area, contour, open-pit, strip, or auger mining.

Data exclude production from small mines that have an output of less than 1,000 tons a year and sell their product by truck.

Monthly data for 1963-87 appear in appendix I; annual and monthly data for 1947-62 appear in appendix I of earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Energy, Energy Information Administration. Data for both consumption and stocks cover bituminous (including subbituminous) coal and lignite. For a discussion on the type of surveys and procedures used over the years in the collection of coal data, see "Explanatory Notes" in the *Quarterly Coal Report*, published by the Energy Information Administration, U.S. Department of Energy.

Total consumption includes amounts not shown separately for bunker fuel but excludes amounts for class I railroads, and approximates total consumption of bituminous coal and lignite. Stocks on lake and tidewater docks, those at other intermediate storage piles between mine and consumer, and coal in transit are omitted from data presented here. Because of these omissions from stocks, a reliable consumption figure cannot be calculated on the basis of production, imports, exports, and changes in stocks.

Figures for electric power utilities (originally compiled by the Federal Power Commission) pertain to consumption and stocks held by public utility power plants. They exclude fuel consumed in generating plants of electric railways and railroads and manufacturing plants generating electric energy for public sales.

Annual data prior to 1963 and monthly data prior to 1988 (except as noted below) appear in earlier editions of BUSINESS STATISTICS. Monthly and end-of-year industrial stocks for 1970 are not available.

6. In addition to coke plants, data for steel and rolling mills, cement mills, other manufacturing, and mining industries are included.

7. Through 1979, data include stocks for residential and commercial, which were shown separately in the 1979 and earlier editions of BUSINESS STATISTICS as "retail dealers" stocks. Beginning 1980, these stocks are no longer available from the source.

8. Source: U.S. Department of Labor, Bureau of Labor Statistics. Beginning July 1976, indexes reflect coal sold in contract sales transactions (excluding captive production) in various domestic mining regions. Through June 1976, indexes are based on prices (relating to eastern coal production only) f.o.b. mine, reported by coal producers or sales agents covering movements within primary markets, such as, electric utilities, industries, coking plants, and coal used for domestic purposes. Adjustments are made for discounts, allowances, and taxes. For a general explanation of Producer Price Indexes, see note 1, for p. 27.

Annual data for 1947-62 and monthly data for 1947-87 are available upon request.

9. Revised total; revisions not distributed to the components.

10. Reported annual total; monthly revisions are not available.

11. Beginning 1978, data include small amounts for bunker fuel; prior to 1978, these amounts were included only in the total consumption figure.

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1. Source: U.S. Department of Energy, Energy Information Administration. Data are based on reports from plants accounting for practically the entire output of beehive and oven coke, including public utility plants having coke ovens. However, since 1979, no beehive coke has been produced. The figures exclude screenings, coke produced by medium- and low-temperature carbonization plants and by coal-gas retorts, and coke made from coal-tar pitch. Data for production of beehive and oven coke, which were published separately in the 1979 and earlier editions of BUSINESS STATISTICS, should be combined for comparison with production data shown in the 1982 and subsequent editions.

Data for petroleum coke (the residue from the petroleum refining process) are given here, since this product has some importance as a petroleum refinery fuel, as a household fuel, and for industrial uses. Over the years an appreciable amount of nonmarketable catalyst coke has been included in the production of petroleum coke.

Data shown here for stocks at plants are restricted to oven (by-product) and petroleum coke. Stocks of oven coke at furnace plants are coke plants whose coke production is used primarily by the producing company. Merchant plants, as the name implies, refer to those plants producing coke for sale on the commercial (open) market. Included are a few plants that are affiliated with local iron furnaces and produce more coke than the furnaces can absorb and, therefore, sell in competitive markets; plants affiliated with alkali and chemical works; and a number of plants (though constructed primarily to supply city gas) that must dispose of their coke through the usual trade channels.

Annual data prior to 1963 and monthly data for 1932-87 appear in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of Commerce, Bureau of the Census. For a general explanation of foreign trade data, see note 1 for p. 76.

Effective with the 1988 edition of BUSINESS STATISTICS, data are shown in thousands of metric tons. Data shown in the 1986 and earlier editions may be converted by multiplying thousands of short tons by .907185.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Labor, Bureau of Labor Statistics. Indexes are based on buyers' posted prices (obtained from the petroleum companies) of crude petroleum produced in thirteen areas (the Illinois Basin, Pennsylvania, Kansas, Oklahoma, West Texas, Texas Gulf Coast, East Texas, South Louisiana, North Louisiana, Wyoming, California, Colorado, and Alaska). For a general explanation of Producer Price Indexes, see note 1, for p. 27.

Monthly data for 1963-87 appear in appendix I.

4. Source: U.S. Department of Energy, Energy Information Administration. Data for gross input to crude oil distillation units (known as crude runs to stills, prior to January 1974) include both domestic and foreign crude oils and, beginning January 1974, include all crude oil, lease condensate, natural gas plant liquids, unfinished oils, liquefied refinery gases, slop oils, and other liquid hydrocarbons (such as tar sands oils, gilsonite, etc.). Because of these inclusions, the data are not comparable with those for 1973 and earlier periods.

The refinery operating ratio represents the utilization of the atmospheric crude oil distillation units. The rate is calculated by dividing the gross input to these units by the operable refining capacity of the units.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Energy, Energy Information Administration. Imports of refined products and exports (crude and refined), shown on p. 122, are from the U.S. Department of Commerce, whereas, imports of crude are those obtained by the Energy Information Administration from petroleum companies to balance refinery reports and differ from totals reported by the U.S. Department of Commerce. Data are for the United States, excluding U.S. territories and possessions.

In 1981, the Energy Information Agency changed some definitions and concepts to reflect changes in refining and blending practices. These changes include adding gasohol production to motor gasoline production and accounting more precisely for distillate and residual fuel oil processed further after initial distillation. Because of these changes, comparability of data for 1980 and earlier years with 1981 may have been affected. A description of these changes appears in the May 1981 issue of *Monthly Energy Review*, U.S. Department of Energy, Energy Information Administration.

Some of the principal terms used and their meanings are explained below:

All oils.—Crude petroleum, natural gas liquids, and their derivatives.

New supply of all oils.—Beginning 1980, a derived figure representing total field production and imports (including imports into the strategic petroleum

reserve) of crude oil (including lease condensate); total field production and net imports of natural gas plant liquids; imports of unfinished oils and gasoline blending components; other hydrocarbons and alcohol new supply (field production); and imports of refined products. Prior to 1980, a reported figure representing crude oil (including lease condensate) production, plus production of natural gas plant liquids, plus other hydrocarbons and alcohol new supply (field production), plus imports of crude oil (including imports into the strategic petroleum reserve, beginning January 1977) and other imports of petroleum products.

Total product demand.—Beginning 1980, a derived figure representing total petroleum products supplied for domestic use plus exports of crude petroleum (including lease condensate) and refined products. Prior to 1980, a derived figure representing total new supply, plus unaccounted for crude oil and processing gain, plus decreases or minus increases in change in stocks of all oils, less crude losses. Because there were substantial secondary and consumers' stocks that were not reported to the Energy Information Administration, this figure varied considerably from consumption.

Domestic product demand.—Total product demand less exports.

Imports.—Receipts of goods into the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Exports.—Shipments of goods from the 50 States and the District of Columbia from foreign countries, Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Stocks.—Crude petroleum stocks comprise those on leases (producers' stocks), at tank farms, in pipelines, and at refineries. Stocks of unfinished oils, natural gasoline, etc. (prior to 1967, shown as natural gas liquids) are those at plants and terminals and at refineries. Stocks of refined products comprise those held at refineries, as well as those at bulk terminals and in pipelines, if any (for liquefied petroleum gases, also stocks underground).

Beginning January 1963, certain oils have been reclassified and reported separately as "petrochemical feedstocks." As a result, the data for demand, production, and stocks for various refined products (i.e., gasoline, kerosene, fuel oils, and liquefied petroleum gases) shown on pp. 122-125 are not comparable with those for earlier periods. However, the total product demand and total domestic product demand figures on p. 122 are comparable.

Annual data prior to 1963 and monthly data for 1955-87 (except as indicated in note 6 for this page) appear in the earlier editions of BUSINESS STATISTICS.

6. Crude petroleum production includes amounts of lease condensate, which is a natural gas liquid recovered from gas well gas (associated and non-associated) in lease separators or natural gas field facilities. Leased condensate consists primarily of pentanes and heavier hydrocarbons.

Monthly data for 1963-87 appear in appendix I. For annual and monthly data prior to 1963 see appendix I of earlier editions of BUSINESS STATISTICS.

7. Barrels of 42 gallons.

8. See note 4 for this page regarding change in comparability of data.

9. Reported annual total; revisions not distributed to the months.

10. Based on new 1981 stock level; not comparable with earlier periods. See 2d paragraph of note 5 for this page.

PAGE 122

1. Source: U.S. Department of Energy, Energy Information Administration. See note 5 for p. 121.

2. Beginning with the 1975 edition of BUSINESS STATISTICS, data account for processing gain and crude losses and are not comparable with data shown in earlier editions.

Total domestic product demand includes data for items not shown separately.

Monthly data for 1963-87 appear in appendix I. For annual and monthly data prior to 1963 see appendix I of earlier editions of BUSINESS STATISTICS.

3. Annual data prior to 1963 and monthly data prior to 1988 appear in earlier editions of BUSINESS STATISTICS. See separate notes regarding changes affecting comparability.

4. Beginning January 1983, data include small amounts of road oil. See note 4 for p. 125 for definitions of asphalt and road oil.

5. Barrels of 42 gallons.

6. Beginning January 1963, data are not comparable with those for earlier periods because of the reclassification and separate reporting of certain oils as "petrochemical feedstocks." See next to last paragraph of note 5 for p. 121.

7. Beginning January 1964, data for gasoline exclude special naphthas.

8. Effective 1964, data for jet fuel used in commercial aircraft are excluded from kerosene and included in the jet fuel total. Data for these two items, for earlier periods, are not comparable.

9. Beginning January 1975, data reflect an increase in coverage and are not comparable with earlier periods; see 2d paragraph of note 1 for p. 123.

10. Beginning January 1979, data reflect coverage of additional processing facilities; not strictly comparable with data shown for earlier periods.

11. Based on new 1981 stock level; not comparable with earlier periods. See 2d paragraph of note 5 for p. 121.

12. See 4th paragraph of note 1 for p. 123 regarding change in coverage.

PAGE 123

1. Source: U.S. Department of Energy, Energy Information Administration. See also note 5 for p. 121. Beginning January 1967, data reflect change in reporting to show all stocks of unfinished oils, natural gasoline, plant condensate, and isopentane as one item, and stocks of refined products as another (both items include stocks at refineries, natural gas processing plants, terminals, and bulk stations). Also, as a result of increased coverage in certain bulk terminals, stocks (shown here and on p. 124 for distillate and residual fuel oils) for 1967 are on a new basis. See methodological notes in earlier editions of BUSINESS STATISTICS for comparable end of year stocks for 1966.

Beginning January 1975, primary stock coverage for the refined petroleum products has been increased to include approximately 100 additional bulk terminals. See methodological notes in earlier editions of BUSINESS STATISTICS for comparable end of year stocks for 1974.

Beginning January 1979, data include coverage of additional processing facilities. See methodological notes in earlier editions of BUSINESS STATISTICS for comparable end of year stocks for 1978.

In January 1983, respondents to bulk terminal and pipeline surveys were increased, thereby affecting the amount of stocks reported, beginning January 1983. See methodological notes in earlier editions of BUSINESS STATISTICS for comparable end of year stocks for 1982 and 1983.

Annual data prior to 1963 and monthly data prior to 1988 appear in earlier editions of BUSINESS STATISTICS.

2. Data include jet fuel held by pipeline companies and bulk terminal stocks of lubricants, asphalt, and miscellaneous oils.

3. Source: U.S. Department of Energy, Energy Information Administration for all data except prices; see note 5 for p. 121 for pertinent explanations.

4. Annual data prior to 1963 and monthly data prior to 1988 appear in earlier editions of BUSINESS STATISTICS. Also, see separate notes regarding changes affecting comparability of the data.

5. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). Data are price indexes of monthly sales of regular grade leaded gasoline to jobbers, commercial consumers, and retail outlets. They are developed from revenue and volume data collected directly from the petroleum companies. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

Indexes through May 1985 reflect a 1-month lag in pricing because of the time required to collect the data; e.g., May index reflects changes in prices between March and April. When the Energy Information Agency of the Department of Energy began publishing more timely price data for petroleum products, it became possible for BLS to eliminate the 1-month lag. Effective with the revised index for June 1985 (available once the July 1985 index was published), indexes reflect price movements through the middle of the month for which they are shown. It should be noted that the "revised" June index differs from that originally published with the index change between May and June actually reflecting 2 months of price movements.

Monthly indexes for February 1973-December 1987 are available upon request. Indexes prior to February 1973 are not available.

6. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). These two series, first shown in the 1984 edition of BUSINESS STATISTICS, are compiled from data collected by the BLS at the pump from a sample of full-service, mini-service, and self-serve gas stations and in conjunction with the Consumer Price Index.

Effective May 1991, the leaded gasoline is not statistically valid for publication.

Monthly data for 1974-87 are available upon request.

7. See p. 125 for production and stocks of jet fuel.

Annual data prior to 1963 and monthly data for 1941-87 appear in earlier editions of BUSINESS STATISTICS.

8. Barrels of 42 gallons.

9. Beginning January 1963, data are not comparable with those for earlier periods because of the reclassification and separate reporting of certain oils as "petrochemical feedstocks."

10. Beginning January 1964, data exclude special naphthas formerly included.

11. Beginning January 1964, data exclude alkylate, formerly included.

12. See 1st paragraph of note 1 for this page regarding change affecting comparability of data.

13. Average based on quotations for fewer than 12 months.

14. Beginning January 1975, data are not comparable with earlier periods; see 2d paragraph of note 1 for this page.

15. Beginning 1979, data include coverage of additional processing facilities. See 3d paragraph of note 1 for this page.

16. Based on new 1981 stock level and (except for strategic petroleum reserve stocks) are not comparable with earlier periods.

17. See 4th paragraph of note 1 for this page regarding change in coverage.

18. See 2d paragraph of note 5 for this page regarding change in coverage.

19. Effective with the January 1985 price, gasoline that contains alcohol as an additive is included.

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1. Source: U.S. Department of Energy, Energy Information Administration for all data except price indexes; see note 5 for p. 121.

2. Data for production of kerosene and distillate fuel oil include small amounts of natural gas liquids produced at natural gas processing plants.

Annual data prior to 1963 and monthly data prior to 1988 appear in earlier editions of BUSINESS STATISTICS. Also, see separate notes regarding changes affecting comparability of the data.

3. Source: U.S. Department of Labor, Bureau of Labor Statistics (BLS). Data are indexes developed from revenue and volume data collected directly from petroleum companies; they are based on the following specifications:

Kerosene (Light distillate).—Monthly sales to resellers for regular grade kerosene, stove oil, PS-100, or No. 1 fuel (excluding jet fuel) and for jet fuel, kerosene base, commercial type to the airline industry (excluding bonded fuel).

Distillate fuel oil (Middle distillate).—Monthly sales fuel oil, No. 2 to resellers, f.o.b. refinery or terminal, and diesel fuel, No. 2 or standard diesel, to large consumers.

Residual fuel oil.—For No. 6 fuel, monthly cargo sales, to resellers.

Indexes through May 1985 reflect a 1-month lag in pricing because of the time required to collect the data; e.g., May index reflects changes in prices between March and April. When the Energy Information Agency of the Department of Energy began publishing more timely price data for petroleum products, it became possible for BLS to eliminate the 1-month lag. Effective with the revised index for June 1985 (available once the July 1985 index was published), indexes reflect price movements through the middle of the month for which they are shown. It should be noted that the "revised" June index differs from that originally published with the index change between May and June actually reflecting 2 months of price movements. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

Annual data for 1947-62 and monthly data for 1947-87 are available upon request.

4. Data include all refinery and bulk terminal stocks of distillate/residual fuel oil. See separate notes regarding changes affecting comparability of the data.

Annual data prior to 1963 and monthly data for 1938-87 appear in earlier editions of BUSINESS STATISTICS.

5. Barrels of 42 gallons.

6. Beginning January 1963, data are not comparable with those for earlier periods because of the reclassification and separate reporting of certain oils as "petrochemical feedstocks."

7. Beginning January 1965, data exclude commercial grade jet fuel and are not comparable with earlier periods. For comparable 1964 data excluding these amounts see methodological notes in earlier editions of BUSINESS STATISTICS.

8. See 1st paragraph of note 1 for p. 123 regarding increase in coverage.

9. Beginning 1972, data include small amounts of crude to be burned as fuel; comparability of data with earlier periods not greatly affected.

10. See 2d paragraph of note 1 for p. 123 regarding increase in coverage.

11. Beginning 1979, data include coverage of additional processing facilities.

12. Based on new 1981 stock level; not comparable with 1979 and earlier periods.

13. See 4th paragraph of note 1 for p. 123 regarding change in coverage.

14. See 5th paragraph of note 3 for this page regarding change in coverage.

PAGE 125

1. Source: U.S. Department of Energy, Energy Information Administration; see note 5 for p. 121 for pertinent explanations.

2. Through 1964, data are for military jet fuel only. Beginning January 1965, data include commercial jet fuel (formerly shown with kerosene). See earlier editions of BUSINESS STATISTICS for comparable 1964 data.

Annual data prior to 1963 and monthly data for 1952-87 appear in earlier editions of BUSINESS STATISTICS.

3. Annual data prior to 1963 and monthly data prior to 1988 appear in earlier editions of BUSINESS STATISTICS.

4. Through 1982, data cover asphalt, a dark-brown-to-black cement-like material containing bitumens as the predominant constituents obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: Cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

Beginning 1983, data include small amounts of road oil, which is defined as any heavy petroleum oil including residual asphaltic oil. It is generally produced in six grades from 0 (the most liquid) to 5 (the most viscous).

Production includes amounts produced from both domestic and imported petroleum. Stocks represent amounts held at petroleum refineries only.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS.

5. Stocks exclude nonrecoverable amounts of liquefied petroleum gases in underground storage.

6. Barrels of 42 gallons.

7. Beginning January 1963, data are not comparable with those for earlier periods because of the reclassification and separate reporting of certain oils as "petrochemical feedstocks."

8. Data beginning 1964 include production and stocks of liquefied refinery gases for chemical use.

9. See note 2 for this page.

10. See 2d paragraph of note 1 for p. 123.

11. Beginning 1979, data include coverage of additional processing facilities. Comparable end of year stocks for 1978 for liquefied petroleum gases are 136.1 millions of barrels.

12. Based on new 1981 stock level. See 2d paragraph of note 5 for p. 121.

13. See 4th paragraph of note 1 for p. 123 regarding change in coverage.

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1. Source: American Paper Institute. Data include both domestic and imported pulpwood, and represent total receipts, consumption, and stocks at all woodpulp mills in the United States with estimates for a few mills that do not report regularly.

Annual data prior to 1963 and monthly data for 1977-87 appear in earlier editions of BUSINESS STATISTICS. Minor revisions, which are not distributed by the months, are made in the annual totals for most of the years.

2. Source: American Paper Institute. Data cover all mills in the United States producing paper and paperboard; in order to raise totals to an industry basis, estimates are included for a few mills not reporting in some months or years.

Only the annual data shown in this publication are available, monthly data back to 1981 are available upon request. For earlier periods of data supplied by the Census Bureau, see the 1982 and earlier editions of BUSINESS STATISTICS. In most instances the sum of the monthly data will not agree with the annual total, because of revisions that are not available by months.

3. Source: American Paper Institute. Data represent practically complete coverage of all known pulp mills operating in the United States. All tonnages are on a 2,000-pound air-dry weight basis (10 percent moisture).

Data for stocks cover, in addition to pulp mills, all known producers of paper and board as well as mills outside the paper and board industry that consume woodpulp. It should be noted that pulp stocks included for paper and board mills cover, through 1962, stocks of both "own" pulp and "purchased" pulp. However, beginning with data for January 1963, stocks of "own" pulp at paper and board mills are not included. For mills outside the paper and board industry (i.e., plants classified in industries such as pulp products, pressed or molded; explosives; synthetic fibers; and plastics materials) the coverage is not complete.

Only annual data shown are available; monthly data for 1977-87 are available upon request. In most instances the sum of the monthly data will not equal the annual totals, because of revisions that are not available by months.

4. Source: U.S. Department of Commerce, Bureau of the Census. For a general explanation of foreign trade data, see note 1 for p. 76. Data cover imports, and exports of all grades of woodpulp. Pulpwood, rags and rag pulp, and other paper-base stocks are not included. Import data relate to imports for consumption. Tonnages are air-dry weights.

Annual data prior to 1963, monthly data for 1934-87 for total exports and imports, monthly data for 1949-87 for dissolving and special alpha imports, and pertinent notes for these periods appear in earlier editions of BUSINESS STATISTICS.

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1. See note 4 for p. 126.

2. Source: American Paper Institute. Figures for most periods are estimates of total industry output based on reports from all known operating mills and include estimates for nonreporting mills.

Production data pertain to primary operations; i.e., paper and board as it leaves the cutting, reeling, trimming, sorting, or supercalendering operations directly behind the machine. Patent and clay-coated boards and paper coated on the paper machine are considered primary products, as are building papers and flexible paper insulation. All measurements cover finished production or machine production less machine and finishing-room waste.

The paper total covers such major items as newsprint, uncoated groundwood, coated papers, uncoated free sheet papers, thin cotton fiber, bleached bristols, tissue papers, and packaging and industrial converting papers. The paperboard total includes unbleached kraft, semichemical, bleached kraft and recycled grades. Wet-machine board comprises binders' board, shoe board, and other wet-machine board. The construction paper and board total covers construction paper and insulating board.

No annual data are available prior to 1971. Monthly data for 1977-87 are available upon request. The annual totals contain revisions not distributed to the monthly figures.

3. Source: U.S. Department of Labor, Bureau of Labor Statistics. Indexes are computed from price quotations for 1 day of each month (usually the Tuesday of the week containing the 13th).

Specifications for the paper prices used in deriving the indexes are as follows: (1) Paperboard—a composite for the group comprising container board, folding boxboard, and set-up boxboard; (2) building paper and board—a composite for the group comprising insulation board (vegetable fiber and roof and ceiling tile) and hardboard.

Annual indexes prior to 1963 and monthly indexes for 1959-87 appear in the 1963 and subsequent editions of BUSINESS STATISTICS; monthly indexes for 1947-58 (for paperboard, 1946-58) are available upon request.

4. Source: American Paper Institute (API). Data are estimated industry totals based on monthly reports from affiliated divisions. They are based on a new set of definitions, established in 1968, and have been regrouped, so that it is not always possible to make direct comparisons between the new and the old data. The figures have been adjusted to 100 percent industry levels on the basis of percentages of total capacity covered by the reporting members for each grade as computed from the API's annual capacity survey. Data for the current month as published in the SURVEY OF CURRENT BUSINESS represent preliminary estimates of the API. Annual data back to 1934 and monthly data for 1947-68 on the old basis (except as indicated in note 2 for p. 173 of the 1969 volume) appear in the 1969 and earlier editions of BUSINESS STATISTICS. Monthly data for 1969-87 are available upon request. Annual totals may contain revisions not distributed to the months.

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1. Source: American Paper Institute (API), Newsprint Division. The reported data cover virtually the entire industry in both Canada and the United States. Judged by the comparison of newsprint production data for the United States with figures published by the Bureau of the Census, the API's data cover virtually 100 percent of total U.S. newsprint output for the years shown. Shipment data include tonnage invoiced (whether or not shipped), and stocks at mills include supplies at destination warehouses not yet invoiced to customers.

Annual data prior to 1963 and monthly data for 1939-87 appear in earlier editions of BUSINESS STATISTICS.

2. Source: American Paper Institute, Newsprint Division (based on a survey by the American Newspaper Publishers Association). Data for consumption by publishers in the 1979 and earlier editions of the BUSINESS STATISTICS represent American Newspaper Publishers Association 525 users, in short tons. Beginning with the 1982 edition, data represent total U.S. users, in metric tons. Publishers' stocks are those on hand in city of publication plus those in transit to the publishers. Annual data prior to 1963 and monthly data for 1939-87 appear in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Commerce, Bureau of the Census. Data cover "Imports for consumption" of standard newsprint paper. For a general explanation of foreign trade data, see note 1 for p. 76.

Annual data prior to 1963 and monthly data for 1939-87 appear in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Labor, Bureau of Labor Statistics. The index is for a ton of standard newsprint, rolls, contract, manufacturer to newspaper publisher, f.o.b. mill, freight allowed or delivered. Monthly data for earlier

periods are available from the source agency. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

5. See note 4 for p. 127.

6. Source: Fibre Box Association. Beginning July 1978, all biweekly statistics were replaced with monthly data from reports of member companies covering almost 90 percent of the industry and estimates of nonreporting companies; these preliminary data are subsequently adjusted to final figures obtained by the Fibre Box Association in an annual survey and are supplemented by estimates for nonreporting companies. The data are measurements of the surface area of corrugated and solid fiber containers, including the area of interior packings.

Annual data prior to 1963 and monthly data for 1941-87 appear in earlier editions of BUSINESS STATISTICS.

7. Source: American Paper Institute. Unbleached kraft paper contains more than 80 percent unbleached sulphate woodpulp. Wrapping paper, shipping sack, grocers sack and other bag and converting papers—18 pounds and over (24 x 36-500).

8. Beginning January 1974, data for production, shipments, stocks, and consumption for Canada and the United States reflect reduction in basis weight of newsprint from 32 to 30 pounds for 500 sheets measuring 24 inches x 36 inches.

9. Average for 11 months; no price for August 1980 or June 1981.

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1. Source: The Rubber Manufacturers Association beginning January 1973; U.S. Department of Commerce, Bureau of the Census for January 1966-December 1972; Bureau of the Census and Business and Defense Services Administration for June 1957-December 1965. The data include natural rubber (dry, in all forms including guayule) and the dry weight of natural latex.

Consumption figures represent consumption by all rubber users.

Stock figures relate to total industry stocks on hand. The figures for natural rubber stocks beginning July 1947 represent the total available to industry and do not include quantities held for the Government stockpile.

Annual data prior to 1963 and monthly data prior to 1988, appear in earlier editions of BUSINESS STATISTICS. Data in editions prior to 1982 are in long tons, data in editions thereafter are in metric tons. Also see earlier editions for previous revisions and other pertinent information.

2. Source: U.S. Department of Commerce, Bureau of the Census. The import statistics are imports for consumption. (For a general explanation of foreign trade data see note 1 for p. 76.) Data for imports of natural rubber cover crude rubber and milk of rubber, or latex (dry rubber content), including guayule rubber.

Some annual totals include revisions not distributed to the months.

Annual data prior to 1963 and monthly data for 1936-87 for imports of natural rubber and for 1943-87 for exports of synthetic rubber, with other pertinent information, appear in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Labor, Bureau of Labor Statistics. This index is from the Bureau of Labor Statistics International Price Program and provides a measure of price change for natural rubber purchased from other countries by U.S. residents. The data gathered refer to prices that are "free on board" (f.o.b.) foreign port. The price indexes refer to the month shown. No data are available prior to 1983.

4. Sources: The Rubber Manufacturers Association beginning January 1973; U.S. Department of Commerce, Bureau of the Census for January 1966-December 1972; Bureau of the Census and Business and Defense Services Administration for June 1957-December 1965. Production is based on complete reports; consumption and stocks are based on samples representing almost the entire industry and are adjusted to complete coverage. Stock figures include Government and industry stocks for the entire period.

Some annual totals include revisions not distributed to the months.

Monthly figures for 1941-87 and annual figures prior to 1963 appear in earlier editions of BUSINESS STATISTICS.

5. Source: Rubber Manufacturers Association, Inc. Prior to 1977, and beginning January 1981 data represent 100-percent of the domestic U.S. tire market totals, based on reports from manufacturers accounting for a large proportion of the industry; and adjustments are made to include estimates for non-participating companies. Figures through 1957 for tires apply to automotive tires only; motorcycle tires are included for the period 1958-78, mobile home tires for 1972-76. The figures do not include data for any inner tubes.

Total shipments include all shipments to purchasers from factories, regional branches, and sectional warehouses (except shipments to other tire manufacturers, i.e., intermanufacturer purchases) and also transfers to company-owned stores. Shipments to factory warehouses are not included.

Export shipments are those reported by manufacturers and cover new tires only. Inconsistencies in data for export shipments have a bearing on the accuracy of the figures for replacement sales, which represent total shipments less shipments for export and for original equipment. Export shipments as reported by the Association differ from export statistics of the U.S. Department of Commerce shown in the 15th column of this page. Data from the Department of Commerce cover exports of domestic merchandise to foreign countries based on declarations of all exporters.

Stocks include quantities held at factories, regional branches, and sectional warehouses; stocks in transit between such points; consigned stock; and stocks purchased from other manufacturers.

Some annual totals include revisions not distributed to the months.

Annual data prior to 1963 and monthly data prior to 1988 for some series and notes for other series that are available upon request, together with pertinent qualifications appear in earlier editions of BUSINESS STATISTICS.

6. Source: U.S. Department of Commerce, Bureau of the Census. For a general explanation of foreign trade data see note 1 for p. 76.

Coverage of data for exports of tires for the time periods shown herein varies as follows: Beginning January 1965 data cover exports of pneumatic tires, including passenger car, truck, bus, and motorcycle (also motor scooter) tires; for the period January 1958-December 1964 data include new automotive tires (passenger car, truck, and bus), but exclude motorcycle tires.

The figures do not include exports of solid and cushion tires; airplane, bicycle, tractor, and farm implement tires (see preceding paragraph for coverage of motorcycle tires).

Data for exports of inner tubes for the years shown cover types as follows: Beginning January 1965, all types of inner tubes for vehicles, including aircraft; those for January 1958-December 1964, all types, new and used, excluding aircraft.

Some annual totals include revisions not distributed to the months.

Annual data prior to 1963, monthly data for 1941-87 and other information for years not shown, appear in earlier editions of BUSINESS STATISTICS.

7. Data for motorcycle tires are included for the period January 1958-December 1976.

8. Data for motorcycle tires are included beginning January 1965.

9. Data beginning January 1965 include all types of inner tubes for vehicles, including aircraft.

10. Data beginning January 1972 include mobile home tires.

11. Data beginning January 1977 exclude motorcycle tires and tires for mobile homes.

12. No data are available prior to December 1983.

13. The Bureau of the Census discontinued publication of monthly data effective with the December 1972 report. Beginning 1973, data on an annual basis only will be published by the Census Bureau. Data beginning January 1973 are from the Rubber Manufacturers Association.

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1. Source: U.S. Department of the Interior, Bureau of Mines. Data cover operations in the United States and Puerto Rico and represent shipments of portland cement, high-early-strength cement and, through 1964, finished cement used in the manufacture of prepared masonry cement. Monthly data are considered practically complete with annual figures reflecting late revisions, which are not reflected in the monthly data.

Annual data for 1962-72 are from the Bureau of Mines *Minerals Yearbook*. Annual data, beginning 1973, and monthly data are from the Bureau of Mines "Mineral Industry Surveys—Cement."

Beginning January 1972, data are reported in "short tons" by the Bureau of Mines but, for comparability with earlier periods, data are converted and shown here in "barrels" by multiplying by 5.31915.

Annual data prior to 1963 and monthly data for 1929-87 appear in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of Commerce, Bureau of the Census. Data cover total shipments of all known producers of the specified products.

Data for shipments of brick represent building or common brick (made primarily for building purposes; not especially treated for texture or color) and facing brick (often treated to produce surface texture and made of selected clays or otherwise treated to produce desired color). Data for floor and wall tile include both glazed and unglazed types, and also quarry tile.

Annual data prior to 1963 and monthly data for 1955-87 appear in earlier editions of BUSINESS STATISTICS.

Beginning in 1991, data are available only on a quarterly basis.

3. Source: U.S. Department of Labor, Bureau of Labor Statistics. This index, first shown in the 1986 edition of BUSINESS STATISTICS, is not comparable

with that published in the 1984 and earlier editions of BUSINESS STATISTICS. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

Data prior to December 1984 are not available.

4. Source: U.S. Department of Commerce, Bureau of the Census. Data represent the net sales price, f.o.b. plant; net discounts, allowances, freight charges, and returns. Products bought and resold without further manufacture are excluded. Data cover sheet glass (flat glass made by continuous drawing), plate glass (flat glass formed by a rolling process, ground and polished on both sides, with surfaces essentially plane and parallel), float glass (flat glass, identical in appearance to plate glass, but formed by a process in which thickness is controlled by floating the glass on a molten bed of tin), and, through 1984, rolled and wire glass (includes glass, one or both surfaces of which are roughed, figured, ribbed, or otherwise impressed, and wire glass, polished or otherwise). Laminated glass or otherwise fabricated flat glass products and, beginning first quarter 1985, rolled and wire glass are not included.

Annual data prior to 1963 and quarterly data for 1957-87 appear in earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Commerce, Bureau of the Census. (Glass Container Manufacturers' Institute, Inc. for 1968 annual data.) Data cover all known manufacturers of glass containers. Through 1981, shipments of glass containers represent those for domestic use only. Beginning 1982, shipments for direct export are included, which amounted to an overall total of 1,333,000 gross in 1982. Data for beverage and beer cover both refillable and nonrefillable containers.

Reports from the Bureau of the Census furnish a breakdown of production and stocks by type of container similar to the classes shown here for shipments.

Because of a strike in the glass industry in 1968, annual data for shipments shown here are based on data from the Glass Container Manufacturers' Institute, Inc.

In the 1977 and earlier editions of BUSINESS STATISTICS, data for "food (including fruit jars, jelly glasses, and packers' tumblers) and dairy products" are shown separately. For comparability with figures shown in the 1979 and subsequent editions, such data should be combined.

Annual data prior to 1963 and monthly data for 1941-87 appear in earlier editions of BUSINESS STATISTICS.

6. Annual total reflects revisions not distributed to the months.

7. See 3d paragraph of note 5 for this page.

8. Annual data have been adjusted to reflect shipments being removed from food containers and included in beverage containers. Comparable monthly data reflecting this adjustment are not available.

9. See 1st paragraph of note 5 for this page.

10. See 1st paragraph of note 4 for this page.

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1. See note 5 for p. 130.

2. Source: U.S. Department of the Interior, Bureau of Mines, except for crude gypsum imports, which are from the U.S. Department of Commerce, Bureau of the Census. Imports represent those for consumption. The Bureau of Mines data are industry totals based on reports covering all major gypsum producing and processing companies. Annual totals reflect revisions not distributed to the monthly data.

Data for production of crude gypsum exclude gypsum recovered as a byproduct of chemical plants. Calcined production includes gypsum processed from both domestic and foreign sources. Data for sales of gypsum products cover amounts made from domestic, imported, and byproduct gypsum.

Sales of uncalcined gypsum products include portland-cement retarder, agricultural (including byproduct) gypsum, as well as gypsum for use as filler and for unspecified minor uses.

Annual data prior to 1963, quarterly data for 1939-75, and monthly data for 1976-87 (except as noted in notes 4 and 5 this page) appear in earlier editions of BUSINESS STATISTICS. Quarterly data for 1939-68 for total sales of board products are available upon request; however, comparable data for the components are not available prior to 1971.

Imports crude gypsum for 1989, are based on a 10 month average.

3. See 3d paragraph of note 5 for p. 130.

4. Data for this series (formerly included in regular gypsum board) are shown separately, beginning with the 1982 edition of BUSINESS STATISTICS. Separate data, prior to January 1980, are not available. Average based on quotations for fewer than 12 months

5. Data for this series, first shown in the 1986 edition of BUSINESS STATISTICS, are not available prior to January 1985.

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1. Sources: U.S. Department of Commerce, Bureau of the Census, and U.S. Department of Agriculture, National Agricultural Statistics Service, Agricultural Statistics Board. Estimates of the total crop are published by the Agricultural Statistics Board monthly as of August 1 through January 1. These total crop estimates (in net weight bales of 480 pounds) are shown in the monthly SURVEY OF CURRENT BUSINESS. Effective with the 1991 crop year, the Agricultural Statistics Board began collecting and reporting cotton ginnings. Prior to the 1991 crop year, data were published by the Bureau of the Census. The ginnings are reported in running bales for cotton ginned prior to specified dates during the cotton year. Effective with the crop of 1972, certain of the specified dates were changed. The monthly ginnings figures represent cumulative ginnings for the crop year through the end of the month. In order to measure accurately the size of the cotton crop, it is necessary to convert running bales, which vary in weight, into bales of uniform weight. Bale weights are collected on a sample basis from the ginners several times during the season. On the basis of these reports, the number of equivalent 480-pound net-weight bales were computed.

Annual figures beginning 1913 and monthly data prior to 1987 for ginnings in running bales for selected reporting dates appear in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of Commerce, Bureau of the Census. The data are derived from the survey *Consumption on the Cotton System and Stocks*, monthly series M22P through 1990, and quarterly series MQ22P for 1991. The data are compiled from reports received from consumers of cotton accounting for over 95 percent of total commercial stocks and consumption in the United States. Monthly data for very small companies are estimated based on data reported annually and the trend of those reporting monthly. Domestic cotton consumption is expressed in running bales and foreign cotton in net-weight bales. Consumption (on the cotton system) refers to materials that have passed through the opener, or have otherwise been removed from inventory and put into process for spinning, bleaching, etc. The monthly data represent production for 4 or 5 weeks. The months shown in this edition that represent 5-week reporting periods are as follows: March, June, September, and December for 1988, 1989, and 1990. Quarterly data shown for 1991 represent calendar quarters.

The monthly reports of the Bureau of the Census show total consumption and stocks by area and State, by type, and by origin (domestic or foreign); and world supply and distribution of cotton. Consumption is also shown in thousands of pounds, net trading-weight basis.

Annual data prior to 1963 and monthly data for 1923-87 are in earlier editions of BUSINESS STATISTICS.

3. Source: New York Cotton Exchange. Total stocks include ginned stocks in all hands, both private and Government controlled, and also, for dates in harvesting periods, the unpicked portions of the current crop. Cotton stocks are for the end of the period covered, which is generally the Saturday falling nearest the end of the month. Figures are in running bales, and are reported for 4- and 5-week periods through 1990, and quarterly for 1991.

Annual data prior to 1963 and monthly data for 1941-87 for all series and 1936-40 for domestic cotton stocks are in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Commerce, Bureau of the Census. Exports and imports relate to raw cotton (not carded, combined, or processed). Imports represent imports for consumption; exports relate to domestic cotton (i.e., exclusive of reexports). Beginning with January 1989, exports and imports are classified by the Harmonized Commodity Classification System and are not directly comparable with data for earlier periods. For definitions and other pertinent foreign trade information, see note 1 for p. 76.

Annual data prior to 1963 and monthly data for 1929-87 are in earlier editions of BUSINESS STATISTICS.

5. Source: U.S. Department of Agriculture, National Agricultural Statistics Service, Agricultural Statistics Board. Prices received by farmers are for American upland (short staple) cotton. With the use of a probability sample, the total quantity purchased from farmers and the dollars paid for that quantity are obtained. These prices (based on 480-pound net-weight bale reflect actual purchases and include discounts and premiums paid during the month. The most current (preliminary) price shown in each issue of the SURVEY OF CURRENT BUSINESS refers to an estimated mid-month price that excludes discounts and premiums.

Annual averages are weighted crop-year average prices; e.g., 1990 annual is the average for August 1990 through July 1991.

See note 8 for this page regarding change from gross-weight bales to net-weight bales.

Annual data prior to 1963 (as noted below) and monthly data for 1934-July 1937 and for 1941-87 are in earlier editions of BUSINESS STATISTICS. Revised averages: April 1964, 31.6; August 1960, 32.3 cents per pound. Annual averages as shown in the 1961 and earlier editions of BUSINESS STATISTICS are simple averages of prices for calendar months.

6. Source: U.S. Department of Agriculture, Agricultural Marketing Service. The calendar-month price represents the average price of Strict Low Middling 1 1/16 inch, American white cotton computed from official daily quotations of cotton exchanges in designated markets. Annual averages are weighted crop-year average prices; e.g., 1990 annual is the average for August 1990 through July 1991.

See note 8 for this page regarding change from gross-weight bales to net-weight bales.

Effective August 1, 1973 (beginning of crop year), the base quality grade used in spot market price quotations was changed to grade 41 staple 34 from grade 31 staple 32 (Middling 1 inch).

Market prices prior to 1963 (annually), 1988 (monthly) and shown in earlier editions of BUSINESS STATISTICS cover the base quality in effect.

7. Running bales are loosely bound bales of varied weight. Net-weight bales are bales of uniform weight.

8. Effective August 1971 (beginning of crop year), the averages are net; i.e., in terms of 480-pound net-weight bales, and are not directly comparable with earlier prices of 500-pound gross-weight bales. To convert prices on a gross-weight bale basis to a net-weight bale basis, multiply the farm price by the factor 1.04167 and the market price by 1.0438.

9. See 3d paragraph of note 6 for this page.

10. Less than 500 bales.

11. Effective with 1991, reporting frequency has been changed to quarterly.

12. Preliminary weighted marketing year average price for Aug.-Nov. 1991.

13. Preliminary marketing year average price for Aug. 1991-Feb. 1992.

4. Source: Fiber Economics Bureau, Inc.; published in *Fiber Organon* (formerly *Textile Organon*). Data represent industry totals, as specified.

The rayon and acetate yarn and monofilaments group covers, through 1973, industrial rayon yarn and textile rayon yarn and monofilaments, and acetate, including diacetate and triacetate. Beginning 1974, the rayon yarn is excluded (see note 5 for this page), but included again beginning 1985. The noncellulosic (except glass) category covers—for yarns and monofilaments—nylon and aramid, olefin (polyethylene and polypropylene) yarn and monofilaments and film fiber, polyester, saran, spandex (and small quantities of other types for some years) through 1973. Beginning 1974, production of saran and spandex is excluded (see note 6 for this page). The noncellulosic staple, tow and fiberfill covers nylon, aramid, acrylic, modacrylic, polyester, and other types. Waste is not included in any of the series shown.

The *Fiber Organon* provides a quarterly supply account: production, shipments (domestic and export), stocks, imports, etc., for yarns and filaments and for staple by major fibers.

Annual data prior to 1963 and quarterly data prior to 1987 appear in earlier editions of BUSINESS STATISTICS.

5. Beginning 1974, data cover acetate yarn only. Production of rayon yarn and monofilaments for 1974, 1975, and 1976 totaled 171.8; 64.8; and 67.6 million pounds respectively.

6. Beginning 1974, data omit saran and spandex yarn. For 1974, 1975, and 1976, production of these types totaled 11.9; 11.7; and 12.0 million pounds respectively.

7. Beginning 1985, data include both rayon and acetate yarn.

8. Effective with 1991, reporting frequency has been changed to quarterly.

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1. Source: U.S. Department of Commerce, Bureau of the Census. The data are derived from the survey *Consumption on the Cotton System and Stocks*, monthly series M22P through 1990, and quarterly series MQ22P for 1991. Data relate to cotton-system spinning spindles, which include ring spindles and rotors operating (open-end spinning). It does not include spindles for spinning uncut top. The cotton spinning system is also used extensively for manmade fiber and other fibers and blends.

Figures for active spindles refer to the number active for the shift during which the largest number of spindles was operated on the last day of the period covered. Spindle hour data reflect the total spindle hours operated during the period. The Bureau's monthly cotton statistics represent operations for 4 and 5 weeks. The months shown in this edition that represent 5-week periods are as follows: March, June, September, and December for 1988, 1989, and 1990; Quarterly data shown for 1991 represent calendar quarters.

Annual data prior to 1963 and monthly data for August 1945-December 1987 (and data prior to August 1945 relating to spindles consuming 100 percent cotton only) are in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of Commerce, Bureau of the Census. The data are derived from the Bureau's quarterly survey, *Broadwoven Fabrics (Gray)*, series MQ22T. The figures represent total production of cotton fabrics, over 12 inches in width, by all known weaving mills regardless of their primary activity. Production of tire cord and fabric (shown separately in the original report) is not included in the present series.

Production of broadwoven mixed goods is classified according to chief fiber content by weight. Therefore, cotton fabrics are wholly or chiefly by weight of cotton. Fabrics made from more than one fiber are classified in the same way as other fabrics, i.e., according to whether the fabric is chiefly cotton, wool, or manmade fiber. As examples, a fabric which is 55 percent cotton and 45 percent rayon is classified as cotton; a fabric which is 40 percent cotton, 30 percent rayon, and 30 percent acetate is classified as manmade. Blends and mixtures, by weight 50 percent of one fiber and 50 percent of another fiber, are classified according to the fiber of greatest value (a fabric 50 percent polyester and 50 percent cotton, is a manmade fiber fabric). A fabric containing 5 percent or less of a second fiber is classified as being 100 percent of the first fiber (a wool fabric containing 5 percent or less silk fiber is classified as a 100 percent wool fabric).

The original reports show the number of looms operating on the specific fabrics and production (in thousands of linear yards) by type of goods for duck and allied fabrics; sheeting and allied coarse and medium yarn fabrics; print cloth yarn fabrics; carded colored yarn fabrics; toweling, washcloth, and dishcloth fabrics; blanketing and other napped fabrics; fine cotton fabrics; and all other woven cotton fabrics and specialties.

Annual data prior to 1963 and quarterly data for 1942-87 are in earlier editions of BUSINESS STATISTICS.

3. Source: U.S. Department of Labor, Bureau of Labor Statistics. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

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1. See note 4 for p. 133.

2. Source: U.S. Department of Labor, Bureau of Labor Statistics. For a general explanation of Producer Price Indexes, see note 1 for p. 27.

3. Source: U.S. Department of Commerce, Bureau of the Census. The data are derived from the Bureau's survey, *Consumption on the Woolen System and Worsted Combing*, monthly series M22D through 1989, and quarterly series MQ22D, beginning with 1990. Data are based on a survey that covers all manufacturing establishments consuming fibers in woolen spinning and in production of tops, noils, and scoured wool. The apparel class covers domestic and duty-paid foreign wool of the sheep (shorn and pulled) consumed on the woolen spinning system and top and noil production consumed in worsted combing. The carpet class refers to consumption of duty-free foreign shorn and pulled wool of the sheep. Not covered are all other fibers consumed in the woolen spinning and worsted combing systems, raw wool and tops consumed in the cotton system spinning, and reprocessed and reused wool.

The monthly consumption figures contain 4- and 5-week reporting periods. The 5-week reporting periods shown in this edition are as follows: March, June, September, and December for the years 1988 and 1989.

Annual data prior to 1963 and monthly data for 1934-87 are in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Agriculture, Economic Research Service, compiled from records of the Bureau of the Census. Data are imports for consumption. The total covers unmanufactured (raw) wool of the sheep, regardless of condition (on the skin, in the grease or washed, scoured or carbonized), converted to a clean-yield basis. Animal hairs (except hair of the camel) are excluded. Beginning with January 1989, the imports are based upon the Harmonized Commodity Classification System. For a general explanation of foreign trade data, see note 1 for p. 76.

Annual totals prior to 1963 and monthly data for 1963-87 are in earlier editions of BUSINESS STATISTICS; monthly data for 1948-62 are in the U.S. Department of Agriculture report, *Wool Statistics and Related Data, 1920-64*, Statistical Bulletin No. 363 (July 1965).

5. Source: U.S. Department of Agriculture (USDA), Economic Research Service (based on weekly prices published by the Livestock Division, Agricultural Marketing Service, USDA). The prices refer to fine wool, clean basis, delivered to mills in the United States. Prior to 1976 the domestic wool price was described as for fine wool, Good French combing and staple. Effective January 1976, descriptions were changed to define more closely the average diameter of the fiber in a lot of wool. Therefore, specifications for this price are 64's (ranging from 20.60 to 22.04 microns), staple 2 3/4 inches and up. The prices are directly comparable. The Australian wool prices include the import duty. Prices for this series as shown in the 1975 and earlier editions of BUSINESS STATISTICS exclude the duty.

Annual data prior to 1963 and monthly data for 1941-87 (for the domestic series) and monthly data for 1970-87 (for Australian wool) are in earlier editions of BUSINESS STATISTICS.

6. Source: U.S. Department of Commerce, Bureau of the Census. Woolen and worsted broadwoven fabrics (except woven felts) represent production by all known mills and are derived from the quarterly survey, *Broadwoven Fabrics (Gray)*, series MQ22T. Data are for fabrics wholly or chiefly wool; i.e., fabrics 36 percent or more by weight of wool, reprocessed wool, or reused wool.

The original report, series MQ22T, provides detailed figures for woolen and for worsted apparel fabrics (for men's and boys' and for women's and children's goods) and nonapparel fabrics, as well as for woven felts.

The 1979 and earlier editions of BUSINESS STATISTICS showed data for the production of woolen and worsted broadwoven fabrics in millions of linear yards; blanketing in 72-inch width or equivalent; other fabrics, 54- to 60-inch widths or equivalent 54-inch width.

Annual data prior to 1963 and quarterly data for 1942-87 appear in earlier editions of BUSINESS STATISTICS.

7. Yardage is in millions of finished square yards.

8. See note 5 for p. 133.

9. See note 6 for p. 133.

10. Average for 10 months; March and April 1976 prices are not available.

11. Beginning 1985, data include both rayon and acetate yarn.

12. Effective with 1990, reporting frequency has been changed to quarterly.

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1. Source: U.S. Department of Commerce, Bureau of the Census. Quarterly data, beginning 1986, are estimated by American Textile Manufacturers Institute, Inc. The data represent the entire U.S. shipment of woven, tufted, needle-punched, knitted, braided, hooked, and other types of rugs and carpeting shipped during the period, including transfers to other divisions of the reporting company; estimates are included for nonreporting firms. Excluded are products fabricated from carpeting or roll goods not manufactured in the reporting establishments.

Quarterly shipments for 1968-87 are in earlier editions of BUSINESS STATISTICS.

2. Source: U.S. Department of Commerce, Bureau of the Census. Data cover manufacturers, government contractors, and jobbers of apparel. Garments that are cut in the United States and sent outside the country to be sewn are included. These finished garments are then imported into the United States under the provision of the Harmonized Tariff Schedule of the United States.

Data are derived from the quarterly survey, *Apparel*, series MQ23A, based on a sample of approximately 1,700 firms accounting for 95 percent of total cuttings of apparel items. The universe for the latest survey was the 1988 annual surveys: MA23E, *Men's and Boys' Outerwear*, MA23F, *Women's and Children's Outerwear*, and MA23G, *Underwear and Nightwear*. Data for small firms (included in annual surveys but not selected for the quarterly samples) are estimated based on their reported or derived annual level and the quarter-to-quarter trends of reporting firms.

Effective 1st Quarter 1987, data are not comparable with those of earlier periods. Girls' apparel are included with women's, misses' and juniors', and boys' apparel are included with men's.

Beginning first quarter 1990, fiber breakout was expanded to include manmade/wool blends that are chiefly manmade. In addition, the quarterly *Apparel* report's presentation was expanded to include additional product lines, making it comparable to the annual summary. The following is a description of the classifications currently used:

Women's and girls':

"Coats" exclude suit-type jackets but include coat and capes; down and feather filled coats, jackets and vests; nontailored jackets, except ski; raincoats; and separate vests.

"Dresses" include suit-type dresses, formal, work, and house dresses.

"Suits" include tailored suits and uniforms, and pant suits, but exclude jumpsuits and coordinate suit sets sold as separate units. Nurses', maids' and medical uniforms are also excluded.

"Skirts" include gauchos, uniform skirts, and divided skirts.

"Blouses" include woven blouses and shirts, knit T-shirts and tank tops, and all other knit shirts including sweatshirts.

"Pants" include slacks, pants, and jeans, including jean-cut casual slacks, and sweatpants.

Men's and boys':

"Suits" include uniform suits, casual suits, formal wear, and tailored leisure suits. Ski and snow suits are excluded.

"Coats" include tailored suit-type coats, leisure and casual sport coats, formal jackets, and tailored uniform jackets. Excluded are: down and feather filled coats, jackets and vests; heavy outerwear coats and jackets; lightweight coats and jackets; overcoats and top coats; raincoats; and separate vests.

"Shirts" include knit T-shirts and tank tops, woven dress and business shirts, woven sport shirts, work shirts, and all other knit shirts including sweatshirts.

"Slacks, trousers, jeans, pants, etc." include all trousers and slacks sold separately, such as dress and sport trousers, jean and jean-cut casual slacks, work pants, and sweatpants. Jogging and warm-up suits, and ski pants are reported separately. In the 1986 and earlier editions of BUSINESS STATISTICS and with data beginning 1975, men's "Trousers (separate), dress" and "Slacks (jean-cut), casual" were shown as two separate series.

Monthly data prior to 1988 (although not comparable with data beginning 1987) appear in earlier editions of BUSINESS STATISTICS. For all women's apparel items, no monthly data are available for 1974 and 1982.

3. Source: National Association of Hosiery Manufacturers, Inc. (NAHM). Data are estimated industry totals for all types of men's, women's, children's and infants' hosiery. Estimates are based primarily on reports received regularly from knitting mills that produce a majority of all types of hosiery made in the United States.

The annual reports of NAHM provide monthly shipments by type, fiber content, and size.

Annual data prior to 1963 and monthly data for 1934-87 are in earlier editions of BUSINESS STATISTICS.

4. Beginning 1975, data include "slacks (jean-cut), casual" and are not comparable with earlier periods.

5. Data are not available.

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1. Source: U.S. Department of Commerce, Bureau of the Census. Data are based on reports from companies whose principal business is the development and/or production of aircraft, aircraft engines, missiles and/or spacecraft engines. Also included are reports from aerospace plants or divisions of companies whose principal business is other than aerospace. The survey covers those companies producing, assembling, developing, or having prime system responsibility for complete missiles, space vehicles, and engines or propulsion units for missiles and space vehicles. The reporting panel for the survey consists of all known producers of the products covered.

Data for new orders reflect an unduplicated total since all companies report separately their net new orders received from prime contracts and subcontracts. All series for U.S. Government represent prime contracts only. Net new orders represent net new orders received during the period less terminations during the period.

Backlog of orders for "other related operations, products, and services" includes all conversions, modifications, site activation, other aerospace products (including drones) and services, and (through 1979) receipts for applied research and development of items such as drones, etc. Also, through 1979, receipts for other applied research are included within their respective reporting categories.

Beginning 1980, backlog of orders for all applied research, nonrelated products and services and all research and development (under contract) are no longer shown within their respective reporting categories but included in "total" backlog of orders only.

Annual data prior to 1963 and quarterly data for 1948-83 appear in earlier editions of BUSINESS STATISTICS. Effective with 1984, quarterly data are no longer available.

Annual data for 1982 and 1983 for new orders and sales reflect revisions not distributed to the quarters.

2. Data for U.S. Government new orders and sales (1948-60) and backlog (1948-59), as shown in the 1979 and earlier editions of BUSINESS STATISTICS, cover complete aircraft, engines, propellers, and parts but exclude "other products and services"; for these periods, the value of "other products and services" for U.S. Government is included in the respective totals shown for new orders, sales, and backlog.

3. Source: U.S. Department of Commerce, Bureau of the Census. Data represent complete coverage of companies reporting shipments of complete civilian aircraft; i.e., including engines, but excluding aircraft shipped to U.S. military customers. Military-type planes shipped to foreign governments are included. The value of shipments does not include value of spare parts that are shipped with the aircraft.

As of September 1990, data being withheld to avoid disclosing figures for individual companies.

Annual data prior to 1963 and monthly data for 1953-87 (except as noted below) appear in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Commerce, Bureau of the Census. For a general explanation of foreign trade data, see note 1 for p. 76. Effective January 1965, exports are in accordance with the export Schedule B and cover the following types of nonmilitary aircraft: Commercial and civilian aircraft including passenger, cargo, and combination transports, personal and utility types, rotary wing, rebuilt, used, modified, converted, and demilitarized planes. However, data for all periods exclude gliders, trainers, seaplanes, and lighter-than-air aircraft.

Annual data prior to 1963 and monthly data for 1951-87 (except as noted below) appear in earlier editions of BUSINESS STATISTICS (see also note 3 for p. 193 of the 1957 volume). Exports for January 1978, as shown in the 1979 edition, should read \$103 million.

5. Beginning 1965, data may not be strictly comparable with figures for earlier years; see 1st paragraph of note 4 for this page.

6. See 4th paragraph of note 1 for this page.

7. As of September 1990 data withheld to avoid disclosing figures for individual companies.

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1. Source: Motor Vehicle Manufacturers Association of the United States, Inc. Factory sales (from plants located in the United States) represent almost complete coverage of the industry. Although sometimes interpreted as being identical with production, factory sales data generally refer to vehicles shipped and sold, or billed to customers, dealers, or allied divisions, whereas production data refer to number of units leaving the assembly lines and are counted whether ready to ship or not. (Monthly production data, which include tactical vehicles, are available a month earlier than figures for factory sales and are shown for the most current month in a footnote of each issue of the SURVEY OF CURRENT BUSINESS.) Export sales (not shown here) account for the difference between domestic and total sales. Sales of vehicles to Federal Government agencies are included; however, beginning July 1964, all tactical vehicles are excluded.

Passenger cars include factory sales of taxicabs, station wagons, ambulances, funeral cars as well as passenger carriers used as school buses, which are made on passenger car chassis, (through 1979) passenger vans, and (beginning January 1979) Volkswagens. Beginning January 1980, sales of passenger vans are excluded.

Trucks and buses—see p. 138—include sales of trucks, truck tractors, all buses (primarily those of the integral type) sold to for-hire transportation companies for city or intercity service, and (beginning January 1980) passenger vans formerly reported as passenger cars. Also included are special types of coaches; e.g., integral school buses if made with coach chassis or truck chassis. Station wagons and fire apparatus made with truck chassis are included; fire apparatus made by companies specializing in that line are excluded. Data for trucks and buses include figures for chassis only, without bodies.

Annual data prior to 1963 and monthly data for 1941 and 1946-87 are in earlier editions of BUSINESS STATISTICS.

2. Sources: Motor Vehicle Manufacturers Association of the United States, Inc. (MVMA), *Ward's Automotive Reports*, and U.S. Department of Commerce, Bureau of Economic Analysis (BEA). Retail sales and inventories of franchised dealers of all domestic new passenger cars in the United States are derived from data as reported by MVMA. Retail sales of all imported passenger cars are from the *Ward's Automotive Reports*. Retail sales are broadly defined as units reported by dealers as being delivered to consumers based on receipt of retail sales cards. Figures for domestics comprise all cars assembled in the United, cars assembled in Canada and imported into the United States under the provisions of the U.S.-Canadian Automotive Products Trade Act of 1965, and beginning in 1984, cars assembled in Mexico by U.S. manufacturers and imported into the United States. Imports comprise all other cars.

The ratios of end-of-month inventories to total monthly sales are calculated by BEA from seasonally adjusted data.

For series marked with a star, monthly data for 1963-87 (where available) appear in appendix I.

3. Source: U.S. Department of Commerce, Bureau of the Census. For a general explanation of foreign trade data, see note 1 for p. 76.

Comparability of the data for the period shown is affected by the various export classification schedules in effect over the years.

Prior to 1965, export data include unassembled passenger cars.

For 1965-77, export data represent new, nonmilitary passenger cars (including station wagons), assembled (including units originally assembled but disassembled solely for shipping purposes), and chassis with engines mounted.

In 1978, the export classification system was completely restructured, based on the organizational framework of the Tariff Schedules of the United States. Because of this restructuring, export data, beginning January 1978, represent new, on-highway, four-wheeled passenger automobiles including ambulances and hearses, all cylinders, and passenger automobile chassis. No distinction is made between vehicles for military and nonmilitary use, between assembled and unassembled vehicles, or chassis with and without engines mounted.

Data for all periods shown here exclude used vehicles and automobile bodies.

The increase in exports to Canada, beginning 1965-66, reflects the implementation of the U.S.-Canadian Automotive Products Trade Act (APTA) of 1965, which permits duty-free entry into Canada of specified U.S. vehicles.

Annual data prior to 1963 and monthly data for 1963-87 (for total exports) and 1965-87 (for exports to Canada) appear in earlier editions of BUSINESS STATISTICS.

4. Sources: U.S. Department of Commerce, Bureau of the Census and (beginning 1981, for total imports) U.S. International Trade Commission. For a general explanation of foreign trade data, see note 1 for p. 76. Comparability of the data for the period shown is affected by the various import classification schedules in effect. Effective 1963, data are in accordance with the *Tariff Schedules of the United States, Annotated*. For the period 1963-April 1966, data include units not specifically identified; for the period January-April 1966 data include new and used cars. Comparability also is affected by the inclusion of data covered under the U.S.-Canadian Automotive Products Trade Act (APTA) of 1965 (effective October 22, 1965). Under this Act, specified Canadian vehicles are permitted duty-free entry into the United States. However, imports as shown here for 1965 omit fragmentary data available under this Act for November and December. Imports from Canada include small quantities of duty-paid cars not covered by the APTA.

Beginning May 1966, data represent complete units of new, four-wheeled, on-highway passenger automobiles.

Beginning January 1981, data for total imports are those as published by the U.S. International Trade Commission, which exclude estimated quantities of passenger cars assembled in foreign trade zones. A *foreign trade zone* can be statistically considered as a "plant" that imports parts that are duty free at the time of entry and places these parts in U.S.-built passenger cars. The manufacturer may elect (based on different duty rates) to pay duty on: (1) The individual part as it is used, or (2) the automobile that contains the foreign part(s). If the manufacturer elects to pay duty on the automobile rather than the foreign part(s) used, the automobile is counted as one unit imported into the United States.

Beginning July 1981, imports of Jeep-type vehicles and other passenger vehicles considered to be cargo or utility vehicles in the country of origin are included. For the period July-December 1981, such imports amounted to 35,100 units.

Annual data prior to 1963 and monthly data for 1936-76 and 1979-87 (for total imports) and 1966-87 (for imports from Canada) are in earlier editions of BUSINESS STATISTICS. Monthly data for 1977-78 for total imports have been revised and are available upon request.

Data shown in the 1965 and earlier editions of BUSINESS STATISTICS cover complete units and chassis, separate bodies for assembly or replacement, and used cars.

5. Source: R. L. Polk & Company. Data represent the number of new passenger cars and trucks—see p. 138—registered in the United States. Data for some months do not include registrations for all the states. The annual totals may reflect some revisions not distributed to the monthly data.

Coverage includes all municipal, State, and nontactical Federal Government vehicles; not included are vehicles for which the Government takes delivery overseas and are not reported to R. L. Polk.

Imports cover all foreign cars, including domestically sponsored cars manufactured overseas and cars assembled in the United States by foreign firms. Cars manufactured or assembled in Canada and imported into the United States free of duty are counted as domestic car registrations.

Annual data prior to 1963 and monthly data for 1932-87 (for total registrations) and 1959-87 (for imports), are in earlier editions of BUSINESS STATISTICS.

6. See note 3 for this page regarding a change in coverage.

7. See 1st and 2d paragraphs of note 4 for this page.

8. Reported annual total; revisions not distributed to the months.

9. See 2d paragraph of note 1 for this page regarding change affecting comparability of the data.

10. See 3d and 4th paragraphs of note 4 for this page.

11. BEA has temporarily suspended publishing domestic auto inventories and inventory/sales ratios because of inconsistencies in the source data used to derive these estimates. BEA is reviewing the source data and methodology, and will issue improved estimates. Write to the address at the beginning of these notes for information on revised estimates.

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1. See note 1 for p. 137.

2. Sources: Motor Vehicle Manufacturers Association of the United States, Inc. and (for data seasonally adjusted) U.S. Department of Commerce, Bureau of Economic Analysis.

The series for retail sales of trucks and buses (first shown in the 1986 edition of BUSINESS STATISTICS) include, as did the series shown in the 1984 and earlier editions of BUSINESS STATISTICS, unit sales of U.S.-built Mercedes-Benz trucks,

19,501-30,000 pounds GVW (beginning January 1982) and U.S.-built Nissan trucks (beginning January 1984) but differ from those shown in earlier editions as follows: (1) Captive imports (vehicles manufactured overseas by U.S. affiliates) are excluded; thus the sales data relate more closely to domestic production, domestic includes vehicles assembled in Canada and Mexico and imported into the United States, (2) passenger vans are included beginning January 1971; whereas, under the old series, sales of passenger vans were excluded prior to January 1980, and (3) the weight classes have been changed to coincide with the weight classes used by the Bureau of Labor Statistics for the Producer Price Indexes and the Bureau of Economic Analysis in the estimates of GDP.

The series for retail inventories of trucks and buses (first shown in this edition of BUSINESS STATISTICS) include, as did the series shown in the 1986 and earlier editions of BUSINESS STATISTICS, inventories of U.S.-built Mercedes-Benz trucks (beginning August 1982) and U.S.-built Nissan trucks (beginning January 1984) but differ from those shown in earlier editions because of the exclusion of captive imports (vehicles manufactured overseas by U.S. affiliates).

Units are classified on the basis of gross vehicle weight (GVW), which is the weight of the vehicle with a full load.

Seasonally adjusted monthly data for 1967-87 (for retail sales) and 1966-87 (for retail inventories) appear in appendix I. Unadjusted monthly data for 1967-87 (for retail sales) and 1966-87 (for retail inventories) are available upon request. Data for earlier periods are not available.

3. Source: U.S. Department of Commerce, Bureau of the Census. For a general explanation of foreign trade data, see note 1 for p. 76. Comparability of the data for the period shown is affected by the various export classification schedules in effect over the years.

Prior to 1965, data include exports of unassembled vehicles.

For the period 1965-77, data cover new, nonmilitary trucks, assembled (including units originally assembled but disassembled solely for shipping purposes), truck chassis with engines mounted, truck tractors, motor buses, and special-purpose vehicles (gasoline and diesel).

Beginning with annual data for 1966 and monthly data for 1971, off-highway trucks and trucks with derrick assembly, winches, etc. are included.

Beginning 1969, exports of special-purpose vehicles that operate in whole or in part on runners or skis are excluded.

In 1978, the export classification system was completely restructured, based on the organizational framework of the Tariff Schedules of the United States. Beginning January 1978, export data cover new, all fuels, nonmilitary automobile trucks (including off-highway trucks), truck chassis, truck tractors (excluding truck trailers), motor buses, and trucks mounted with derrick assemblies and similar drilling equipment. No distinction is made between assembled and unassembled vehicles, or between chassis with and without engines mounted.

It should be noted annual data for 1978-82 include a small amount of exports representing auto truck tractors, gasoline fueled, new, over 44,000 lbs. GVW, which are not included in the monthly data.

Annual data prior to 1963 and monthly data for 1963-87 appear in earlier editions of BUSINESS STATISTICS.

4. Source: U.S. Department of Commerce, Bureau of the Census. For a general explanation of foreign trade data, see note 1 for p. 76. Effective 1963, data are in accordance with the *Tariff Schedule of the United States, Annotated*; the latest being 1987. Comparability of the data shown here is affected by the various import classification schedules in effect over the years.

Data cover imports of automobile trucks and motor buses, truck tractors (with their trailers), fire engines, separate truck bodies (including cabs) and chassis and, beginning 1972, automobile trucks valued less than \$1,000. Not covered in the data are truck tractors imported separately from their trailers, and vehicles constructed and equipped to perform special services, such as mobile cranes, wreckers, concrete mixers, mobile clinics, etc.

Annual data prior to 1963 and monthly data for 1963-87 appear in earlier editions of BUSINESS STATISTICS. Monthly data for 1966-71, as shown in the 1975 and earlier editions, do not include import data of separate chassis and bodies.

5. R. L. Polk & Company. Data exclude registrations of buses not produced on a truck chassis. Beginning 1980, data include registrations of passenger vans. See also 1st and 2d paragraphs of note 5 for p. 137.

Annual data prior to 1963 and monthly data for 1932-87, appear in earlier editions of BUSINESS STATISTICS.

6. For the period 1963-65, data include imports of other units not specifically identified.

7. See note 3 for this page regarding coverage effective January 1, 1965.

8. See 7th paragraph of note 3 for this page.

9. See 3d paragraph of note 1 for p. 137 regarding change affecting comparability of the data.

10. See 1st paragraph of note 5 for this page.

1. Source: U.S. Department of Commerce, Bureau of the Census. Derived from a monthly survey, the data represent coverage of all known firms engaged in the manufacture of truck trailers and refer to trailers (drawn by a truck or truck-tractor) having one or more axles with a rating of 10,000 pounds or more per axle.

Complete trailers and chassis are defined as trailers in which the body is permanently attached to the chassis; not included are new trailer chassis shipped with detachable trailers. Shipments include complete trailers reported by manufacturers who purchase the chassis and add the body.

Detachables trailer bodies refer to all trailer bodies manufactured with or without detachable chassis or running gear, including those for use on ships or rail cars (minimum size 8 feet x 8 feet x 10 feet).

Beginning January 1989, shipments of trailer bodies are included with trailer chassis to avoid disclosure of data from individual firms.

Detachables trailer chassis (and running gear), manufactured for use with detachable trailer bodies, cover all detachable chassis, whether shipped with detachable bodies or not.

The Highway Traffic Safety Administration Regulation, "Truck Air Brakes Standards," requires that the braking system for these vehicles meet the same standards as other vehicles effective 1975. Shipments were high through 1974 as buyers anticipated the additional cost of the new systems beginning 1975.

The total for complete trailers and chassis includes the following types: Van (open and closed tops), shown separately here; tank; bulk commodity and dry materials (except van); pole, logging, and pipe; platform; low-bed heavy haulers; dump trailers and dump chassis; automobile transport; all other trailers and chassis, except detachable trailers and detachable trailer chassis.

Monthly data for 1971-87 (1963-87 for van type trailers and chassis), appear in earlier editions of BUSINESS STATISTICS. Monthly data for 1964-70 for complete trailers and chassis (excluding dollies and converter gear), for detachable trailer bodies and for detachable trailer chassis sold separately are available upon request.

2. Sources: Beginning 1966, published jointly by the Association of American Railroads and the American Railway Car Institute; prior to 1966, by the Institute. The data cover all car builders (both equipment manufacturers and railroad and private-line shops). The figures cover new freight cars for domestic use only and pertain to all types of cars for railroads, private car lines and industries, and governmental customers; excluded are rebuilt cars and cars for export.

New orders represent net new orders; i.e., adjusted for cancellations; end-of-period backlog figures are not similarly adjusted.

Annual data for shipments and new orders may reflect revisions not distributed to the monthly figures.

Annual data prior to 1963 and monthly data for 1967-87 are in earlier editions of BUSINESS STATISTICS.

3. Source: Association of American Railroads (AAR), beginning 1971; Interstate Commerce Commission (ICC), through 1970.

The data cover class I railroads, which account for about 95 percent of the total U.S. mileage operated by all line-haul railroads. Effective December 1955, December 1965, January 1976, January 1978, and January 1982, the data reflect changes in the definition of class I railroads. Beginning 1982, a procedure was adopted to adjust the class I threshold for inflation by restating current revenues in 1978 constant dollars. Thus the current basis for class I carriers is about \$82 million (from 1978 to 1982, \$50 million or more; from 1976 to 1978, \$10 million or more; from 1965 to 1976, \$5 million or more; from 1955 to 1965, \$3 million or more; for earlier periods, \$1 million or more).

The AAR's data cover revenue freight cars as reported to AAR by class I railroads; excluding cars on private lines and railroad owned and controlled refrigerator car lines.

Data through 1970 are from ICC and refer to the total number of freight-carrying cars and average car-carrying capacity available for service at end of year; the aggregate capacity measures total carrying capacity for units owned and used plus cars leased from others. According to the ICC, these data, for the periods through 1970, are not strictly comparable with each other because of changes in accounting and reporting.

Annual data prior to 1963 and monthly data for 1929-87 (1963-87 for car capacity) are in earlier editions of BUSINESS STATISTICS. Monthly data prior to 1963 for car capacity are available from the AAR. As of July 1990, data have been temporarily suspended.

4. Figures for trailer bodies also include shipments of trailer chassis, sold separately.

5. Beginning January 1989, shipments of trailer bodies are included with trailer chassis to avoid disclosure of data from individual firms.