# Benchmark Input-Output Accounts for the U.S. Economy, 1987

This article presents the 1987 benchmark input-output (I-O) accounts for the U.S. economy. The first part of the article addresses the 1987 benchmark; it discusses the steps taken to speed up the benchmark's completion and then describes some improvements that have been made in the tables. The second part describes the concepts and methods underlying the U.S. I-O accounts and illustrates how the I-O tables are used.

The 1987 I-O estimates presented here are in summary form; that is, they are aggregated to 95 1-0 industries from 480-industry The make (production) of commodities by industries is shown in table 1, the use (consumption) of commodities by industries in table 2.1, and the components of value added by industries in table 2.2. The following summary 1-0 tables will be presented in the May Survey of Current Business: Commodityby-industry direct requirements per dollar of industry output; commodity-by-commodity total requirements, direct and indirect, per dollar of delivery to final use; and industry-by-commodity total requirements, direct and indirect, per dollar of delivery to final use. All of the summary tables, as well as the detailed tables, are available on diskette (see the box on page 90).

This article includes supplementary tables that relate the I-O accounts to the national income and product accounts (NIPA's); these tables permit more extensive analyses of the I-O estimates. The article also contains two appendixes: Appendix A provides a list of selected Survey articles about the I-O accounts; appendix B provides a concordance between the industry codes used in the I-O accounts and the 1987 Standard Industrial Classification (SIC) codes.

The 1987 benchmark I-O estimates will be incorporated into the NIPA's during the next comprehensive NIPA revision, which is tentatively scheduled for release in late 1995.

### The 1987 Benchmark Accounts

In recognition of user needs—expressed, for example, by the interagency Working Group on the Quality of Economic Statistics—the Bureau of Economic Analysis (BEA) has developed a program to speed up the availability of 1-0 accounts. For 1-0 benchmarks, which are prepared primarily from the Census Bureau's quinquennial economic censuses, the long-term goal is to make the 1-0 tables available within 5 years of a census year and within 1 year after release of all economic census data.

For the 1987 benchmark, BEA devised a set of procedures that captured the most important parts of the 1987 economic census data, but that abbreviated the normal time-consuming process of assembling a wide variety of other data for constructing components not based on economic census data. These procedures enabled BEA to complete the 1987 tables faster than otherwise would have been the case and to turn its re-

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<sup>1.</sup> Earlier benchmarks covered 1947, 1958, 1963, 1967, 1972, 1977, and 1982. BEA also has produced annual 1-0 accounts based on less comprehensive source data. The most recent annual accounts, for 1987, were presented in the April 1992 Survey of Current Business.

<sup>2.</sup> See "Improving the Quality of Economic Statistics: The 1992 Economic Statistics Initiative," Survey 71 (March 1991): 4–5.

sources toward the 1992 benchmark at the earliest possible time.

### Procedures for the 1987 benchmark

In preparing benchmark I-O accounts, BEA relies heavily on economic census data covering mining, construction, manufacturing, wholesale trade, retail trade, transportation, and selected services. The data are released by the Census Bureau as they are completed, over a period of

time that usually begins about 1 year after the end of the census year and continues for about 30 months. (For example, the planned release dates for the 1992 census year extend from early 1994 through late 1996.) To estimate outputs and inputs and to allocate commodities across industries and final users, BEA must augment the economic census data with data from hundreds of other sources, such as the U.S. Department of Agriculture, U.S. Department of Transportation,

Table A.—Principal Data Sources for Industry or Commodity Outputs, 1987 Benchmark

Industry or Commodity	Source
Agriculture, forestry, and fisheries	U.S. Department of Agriculture farm statistics
Mining	Census Bureau 1987 Census of Mineral Industries
Construction	Census Bureau 1987 Census of Construction Industries, Census of Service Industries, and value of construction put-in-place series
Manufacturing	Census Bureau 1987 Census of Manufactures
Transportation	Interstate Commerce Commission Transportation Statistics Association of American Railroads Freight Commodity Statistics Census Bureau 1987 Census of Transportation, Motor Freight Transportation and Warehousing Survey, and Services Annual Survey U.S. Army Corps of Engineers 1987 Waterborne Commerce of the U.S. Department of Transportation Air Carrier Financial Statistics and National Transportation Statistics
Communications	Trade sources annual reports Federal Communications Commission Statistics of Communication Common Carriers
Utilities	Department of Energy—Energy Information Administration Natural Gas Annual, Electric Sales and Revenue, and Financial Statistics of Selected Electric Utilities American Gas Association Gas Facts Census Bureau 1987 Census of Mineral Industries Trade sources financial statements
Wholesale and retail trade	Census Bureau 1987 Census of Retail Trade and 1987 Census of Wholesale Trade
Finance	Federal Deposit Insurance Corporation Statistics on Banking Federal Reserve Board Annual Report Federal Home Loan Bank Board financial reports Office of Thrift Supervision Saving and Home Financing Source Book National Credit Union Administration Yearend Statistics for Federally Insured Credit Unions HSN Consultants, Inc. The Nilson Report Federally sponsored credit agencies annual reports State and Federal regulatory agencies annual reports
Insurance	Trade sources financial statements Health Care Financing Administration private health insurance data A. M. Best and Company Best's Aggregates and Averages Mortgage Insurance Companies of America Factbook
Real estate	National Association of Realtors 1987 Home Sales Yearbook Census Bureau 1987 Census of Housing, 1987 Census of Construction Industries, 1987 Census of Agriculture, and 1987 Enterprise Statistics Internal Revenue Service tabulations of tax returns
Services	Census Bureau 1987 Census of Service Industries Internal Revenue Service tabulations of tax returns Bureau of Labor Statistics tabulations of wages and salaries covered by State unemployment insurance U.S. Department of Education Digest of Educational Statistics
Government enterprises	Federal and State and local government agency reports Office of Management and Budget Federal budget data Census Bureau 1987 Census of Governments
Noncomparable imports	Census Bureau general imports and imports for consumption data Estimated as part of the balance of payments accounts
Scrap	Census Bureau 1987 Census of Manufactures
General government	Estimated as part of the national income and product accounts
Household	Estimated as part of the national income and product accounts
Inventory valuation adjustment	Estimated as part of the national income and product accounts
	1

U.S. Department of Treasury, Office of Management and Budget, and other government agencies and private organizations.

In preparing the 1987 benchmark 1-0 accounts, BEA used standard 1-0 procedures for the estimates of industry and commodity output, except for new construction (see table A). For previous benchmarks, approximately 50 construction industries were analyzed and estimated separately. For the 1987 benchmark, the economic census total for construction output was distributed among only five industries—four related to mining and one "all other" category, which covers the remaining industries within new construction and maintenance and repair construction.

BEA also used standard I-O procedures for the estimates of industry intermediate inputs where hard data were readily available—primarily for material inputs from the economic censuses. In previous benchmarks, the standard procedure has been to supplement these economic census data with estimates of other intermediate inputs from hundreds of other information sources. For the 1987 benchmark, BEA estimated these intermediate inputs by first extrapolating 1982 benchmark estimates to 1987 based on the change in industry output, and then by adjusting the extrapolated estimates to be consistent with—or to balance—commodity and industry outputs (see table B).

Value added components were prepared using the same procedures as in the past.<sup>3</sup> Data

for compensation of employees and for indirect business tax and nontax liability are from the U.S. Department of Treasury, Office of Management and Budget, Bureau of Labor Statistics, and Census Bureau; NIPA estimates are also used.

For most final use components—personal consumption expenditures, gross private fixed investment, change in business inventories, exports of goods and services, and imports of goods and services—BEA used the same data and procedures as in the past.<sup>4</sup> Most estimates of personal consumption expenditures and gross private fixed investment were prepared with the commodity-flow method.<sup>5</sup> Inventories held by industries were based on economic census and Internal Revenue Service data. Exports and imports of goods and services were based on data from the Census Bureau and the U.S. balance of payments accounts.

For Federal Government and State and local government final use components, a combination of new and old procedures was used. Total expenditures by type of purchase, for Federal Government and for State and local governments, were obtained from the NIPA's, as in the past. Government purchases by I-O commodity were

Table B.—Principal Data Sources and Methods for Estimating Intermediate Inputs and Components of Value Added, 1987 Benchmark

Component	Source or method
Intermediate inputs	For census-covered industries, selected purchased services; in addition, for manufacturing and mining, materials consumed from 1987 economic censuses.  For gas and electric utility industries, selected inputs from trade sources; for agriculture industries, inputs from U.S. Department of Agriculture.  For most remaining industries, 1982 estimate extrapolated by change in industry output and adjusted to balance commodity and industry outputs.
Compensation of employees	For census-covered industries, payroll and benefits from Census Bureau 1987 economic censuses.  For noncensus-covered industries, Bureau of Labor Statistics tabulations of wages and salaries covered by State unemployment insurance; other labor income estimated as part of the national income and product accounts.
Indirect business tax and nontax liability.	For Federal excise taxes, collections from Internal Revenue Service; for customs duties, receipts from Monthly Treasury Statement, and for nontaxes (such as fines), receipts from the Budget of the United States, prepared by the Office of Management and Budget.  For State and local governments, receipts from Census Bureau 1987 economic census and annual and quarterly surveys.
Other value added	For most industries, residual method: Total industry output less total intermediate inputs, compensation of employees, and indirect business tax and nontax liability.

<sup>3.</sup> Value added equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported). It includes compensation of employees, indirect business tax and nontax liability, and other value added.

<sup>4.</sup> In the I-O accounts, change in business inventories covers commodities wherever held; capital purchases—producers' durable equipment and structures—are included in gross private fixed investment; and imported commodities are included with domestically produced commodities in both final use and intermediate use.

<sup>5.</sup> The commodity-flow method generally begins with an estimate of the total supply of a commodity available for domestic uses; it then either attributes a fixed percentage of supply to final users, or it adjusts for intermediate purchases and attributes the residual to final users. For more information, see U.S. Department of Commerce, Bureau of Economic Analysis, *Personal Consumption Expenditures*, Methodology Paper Series MP-6 (Washington, DC: U.S. Government Printing Office, June 1990): 31–34.

estimated using 1982 benchmark 1-0 estimates as weights, a new procedure for the 1987 estimates.

Some procedures used to prepare the 1987 benchmark 1-0 accounts suggest certain caveats. First, the technology represented by the relationships of commodity inputs to industry outputs in the use table (as well as in the commodityby-commodity and industry-by-commodity total requirements tables) is a hybrid of that in 1987 and that represented in the 1982 benchmark 1-0 accounts. Second. other value added was derived as a residual for most industries after subtracting total intermediate inputs, compensation of employees, and indirect business tax and nontax liability from total industry output.6 (For a few industries, estimates of other value added were available from other data sources; for example, other value added estimates for agriculture are from the U.S. Department of Agriculture.) As a result, the other value added component includes estimating errors from other parts of the 1-0 accounts. For studies requiring comparisons of value added components, users may find BEA's estimates of gross product originating by industry more useful.

### Improvements and other changes

The 1987 benchmark 1-0 tables differ from previous tables in several respects. The summary 1987 benchmark tables, which begin on page 98, cover 95 1-0 industries instead of the 85 1-0 industries used previously. For the new summary tables, 14 1-0 industries were aggregated into 7, and 12 1-0 industries were disaggregated into 30.8 With one exception, the aggregations involved small, declining industries; new construction and repair and maintenance construction were aggregated because of the abbreviated procedures used for the 1987 benchmark. The disaggregations involved large, growing industries. Appendix B shows the new aggregations and disaggregations of 1-0 industries. (The disaggregated industries

are designated with an alphabetical suffix to the 1982 benchmark 1-0 industry number.)

The industry classification of the 1-0 accounts is now based on the 1987 SIC; the 1982 benchmark tables and subsequent annual tables were based on the 1972 SIC. In addition, the 1987 benchmark tables incorporate all of the 1991 comprehensive NIPA revisions, including the change from gross national product to gross domestic product (GDP).9

### Introduction to the U.S. 1-0 Accounts

The I-O accounts for the U.S. economy show the production of commodities by each of nearly 500 industries, in the "make" table, and the consumption of commodities by these industries, in the "use" table. Chart 1 illustrates the make and use tables in matrix form in, respectively, the upper and lower panels. The commodity composition of GDP and the industry distribution of value added are also shown in the use table.

BEA prepares benchmark 1-0 accounts primarily from data that the Census Bureau collects every 5 years in its economic censuses for mining, construction, manufacturing, wholesale trade, retail trade, transportation, and selected services, as well as in its census of governments. Data from the U.S. Department of Agriculture, U.S. Department of Transportation, U.S. Department of Treasury, and other government agencies and private sources are also used.

The I-O accounts show compactly the relationships between all industries in the economy and all the commodities they produce and use. Estimates for commodities are typically shown at producers' prices. When producers' prices are used, transportation costs and wholesale and retail trade margins are treated as commodities that are separately produced and used by industries (see the section "Definitions and conventions for valuation").

The I-O accounts consist of five basic sets of tables: (1) Make, (2) use, (3) commodity-by-industry direct requirements, (4) commodity-by-commodity total requirements, and (5) industry-

<sup>6.</sup> For most 1-0 industries, other value added includes consumption of fixed capital, proprietors' income, corporate profits, and business transfer payments. For banking and for credit agencies other than banks, other value added also includes net interest. For owner-occupied dwellings and for real estate agents, managers, operators, and lessors, it also includes rental income. For the six industries covering the Federal Government and State and local government enterprises, it also includes current surplus less government subsidy payments.

<sup>7.</sup> See Robert P. Parker, "Gross Product by Industry, 1977–90," Survey 73 (May 1993): 33–54; and Robert E. Yuskavage, "Gross Product by Industry, 1988–91," Survey 73 (November 1993): 33–44.

<sup>8.</sup> The net addition of industries resulting from the aggregations and disaggregations of 1982 1-0 industries is 11. In addition, the rest of the world is no longer technically considered to be an industry because of the change from GNP to GDP as the primary measure of final demand. Thus, there is a net increase of 10 industries in the 1987 benchmark.

<sup>9.</sup> The 1991 NIPA revision was described in the following Survey articles: "A Preview of the Comprehensive Revision of the National Income and Product Accounts: Definitional and Classificational Changes," September 1991; "A Preview of the Comprehensive Revision of the National Income and Product Accounts: New and Redesigned Tables," October 1991; and "The Comprehensive Revision of the U.S. National Income and Product Accounts: A Review of Revisions and Major Statistical Changes," December 1991.

<sup>10.</sup> Estimates for commodities in purchasers' prices can be derived by adjusting for transportation costs and for wholesale and retail trade margins; these costs and margins are included on the diskettes that can be ordered for the 1987 benchmark 1-0 (see the the box on page 90).

### CHART 1

### The U.S. Input-Output Accounts

### MAKE TABLE: INDUSTRIES PRODUCING COMMODITIES

					COMMODITIES	3					TOTAL
		Agricultural products	Minerals	Construction	Manufactured products	Transpor- tation	Trade	Finance	Services	Other*	TOTAL INDUSTRY OUTPUT
	Agriculture										
	Mining										
	Construction										
	Manufacturing										
INDUSTRIES	Transpotation										
	Trade										
	Finance										
	Services										
	Other*										
TOTAL COMM	MODITY OUTPUT										

### USE TABLE: COMMODITIES USED BY INDUSTRIES AND FINAL USES

OSL IADE	E. COMMINIC	ווטי		JOED	וו ום	וטטט	INIL	S AIN	ווין טו	AL C	JOEO								
						INDUSTR	IES							FINAL US	,	,			TOTAL
		Agricul ture	Mining	Construc- tion	Manufac- turing	Transpor- tation	Trade	Finance	Services	Other*	Total inter- mediate use	Personal consumption expenditures	Gross private fixed investment	Change in business inventories	Exports of goods and services	Imports of goods and services	Government purchases	GDP	TOTAL COMMODITY OUTPUT
	Agricultural products																		
	Minerals																		
	Construction																		
	Manufactured products																		
	Transpotation																		
COMMODITIES	Trade																		
	Finance																		
	Services																		
	Other*																		
	Noncomparabe imports																		
	Total inter- mediate inputs																		
	Compensation of employees																		
VALUE ADDED	Indirect business tax and nontax liability	}														ITY OUT			
	Other value added**													•		JCT OF T Y OUTPU	THE INDUST T	RY	
	Total																		
TOTAL INDUS	STRY OUTPUT																		

<sup>\*</sup> The I-O accounts use two classification systemale for industries and another for commoditibet both geneally use the same I-O numbers and titles Other\* includes general enterprises and I-O special industries; for more of industries; for more of industries; for more of industries in the same I-O numbers and titles Other includes general enterprises and I-O special industries; for more of industries in the same I-O numbers and titles Other includes generally use the same I-O numbers and titles Other includes generall

<sup>\*\*</sup> For most industries, this item includes consumption ed tapital, proprietors' income, quarate profitsand business tansfer payments. For banking and or credit agencies other than banks, it also includes net interest. OF owner-occupied dallings and or real estate agents, managersoperators and lessors, it also includes rental incomfor the six industries certing the Fedeal Government and State and local government enterprises, it also includes current subsidies.

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

by-commodity total requirements.<sup>11</sup> For the 1987 benchmark, details for the value added components of the use table and of the commodity-by-industry direct requirements table are contained in separate tables. Only the make and use tables are presented in this article. The remaining three tables and their descriptions will be published in the May Survey.

#### The make table

The make table (table 1), in the upper panel of chart 1, shows the dollar value, in producers' prices, of each commodity produced by each industry. In each row, there is one "diagonal" cell that shows the value of production of the commodity for which the corresponding industry has been designated the "primary" producer. Entries in the other cells in the row show the value of production of commodities for which the industry is a "secondary" producer.12 For example, the newspapers and periodicals industry (row 26A) is the primary producer of the newspapers and periodicals commodity (column 26A). It is also a secondary producer of the following commodities: Paper and allied products, except containers (column 24); other printing and publishing (column 26B); rubber and miscellaneous plastics products (column 32); miscellaneous manufacturing products (column 64); and advertising (column 73D). The sum of all entries in a row is the total output by the industry.

The entries in each column of the make table represent the production by both primary and secondary producers of the commodity named at the head of the column. For example, computer and data processing services (column 73A) includes the output by the primary producer—the computer and data processing services industry (row 73A)—and by the following secondary producers: Computer and office equipment (row 51); audio, video, and communication equipment (row 56); scientific and controlling instruments (row 62); finance (row 70A); and other business and professional services, except medical (row 73C). The sum of all entries in a column is the total output of the commodity.

An industry's share of the production of a commodity can be calculated from the values in

the make table by expressing the entries in a given column as a percentage of the column total. From the 1987 benchmark, for example, column 62 in table 1 shows that the production of scientific and controlling instruments (commodity I-O 62) totaled \$86 billion, of which the scientific and controlling instruments industry (industry I-O 62) produced \$80 billion, or about 93 percent of the total.

The industry and commodity output totals for this table are estimated primarily from the quinquennial economic censuses, conducted by the Census Bureau (see table A). The economic census data, which are on an SIC basis, cover most establishments with payrolls. Information from other government and private sources is used for I-O industries not covered by the economic census data, such as finance, insurance, real estate, utilities, and schools and religious organizations. Data from other government agencies are also used to supplement the economic census data for some industries.

BEA makes two adjustments to the economic census data. First, it adds estimates of the output for establishments without payrolls that are not covered by the economic census data. Second, BEA adjusts for misreported tax return information; this adjustment is necessary because in some cases, the Census Bureau data for expenses and receipts reflect tax return records rather than information collected directly from survey reports.<sup>13</sup>

BEA also adjusts the economic census data based on the SIC to the I-O industry classification system to attain greater homogeneity in the input structures for commodities produced by an I-O industry. This type of adjustment is discussed in the section "Definitions and conventions for classification."

#### The use table

The use table (table 2) is presented in two parts: Table 2.1 shows the dollar value, in producers' prices, of each commodity used by each industry and by each final user; table 2.2 shows detail, in producers' prices, on the value added components used by each industry in table 2.1 to produce its output. In table 2.1, entries in a row show the use of the commodity named at the beginning of the row by each industry or final user named at the head of the column. For example, the *commodity* radio and TV broadcasting services

<sup>11.</sup> In the designation of 1-0 tables, the row is referred to first and the column second. Thus, tables in which commodities appear in the rows and industries in the columns are designated "commodity-by-industry" tables, and tables in which industries appear in the rows and commodities in the columns are designated "industry-by-commodity" tables.

<sup>12.</sup> Primary and secondary products and the classification of industries are discussed further in the section "Definitions and conventions for classification."

<sup>13.</sup> See Robert P. Parker, "Improved Adjustments for Misreporting of Tax Return Information Used to Estimate the National Income and Product Accounts, 1977," Survey 64 (June 1984): 17–25.

(row 67) is used by the *industries* radio and TV broadcasting (column 67) and advertising (column 73D), as well as by persons—that is, as part of personal consumption expenditures (column 91).

In table 2.2, industries are shown in the rows, and total output, total intermediate inputs, and the components of value added are shown in the columns. For example, the total output for the radio and TV broadcasting industry (row 67) was \$29 billion, of which \$10 billion was labor compensation, \$1 billion was indirect business tax and nontax liability, \$3 billion was other value added, and \$16 billion was intermediate inputs. The column totals for industries in table 2.1 equal the right-hand row totals in table 2.2. For example, the column total for the radio and TV broadcasting industry in table 2.1 equals the row total for that industry in table 2.2, or \$29 billion. (The relationship between value added and other parts of the use table is depicted in the bottom panel of chart 1.)

In table 2.1, industry uses sum to total intermediate use, shown in the right-hand column of the industries portion, and the final uses sum to gdp, shown in the right-hand column of the final uses portion. The total output of each commodity is the sum of all intermediate uses of the commodity by industries and all sales to final users. The total output of each industry is the sum of all intermediate inputs consumed by the industry—that is, the raw materials, semifinished products, and services that the industry purchases—and of the value added by the industry. For the economy as a whole, the total of all final uses of commodities equals the total value added by all industries, or gdp.

The rows in table 2.1 show the wide variation in the proportion of commodity output that is sold directly to final users. For example, the 1987 use table shows that some commodities, such as apparel (the primary product of industry 1-0 18), were sold almost entirely to final users; therefore, the demand for these commodities is affected primarily by changes in the buying patterns of final users. Other commodities, such as industrial and other chemicals (1-0 27A), were used almost entirely as intermediate inputs. For these commodities, the connection between production and final uses is primarily indirect and can be traced mainly through industrial users' sales of commodities to final users.

The rows also show the wide variation in the direct usage of commodities by industries. For example, the 1987 use table shows that paper and

allied products, except containers (1-0 24), with \$81 billion of commodity output, were used by nearly all industries. The largest user was other printing and publishing (1-0 26B), which used \$15 billion, or 18 percent of total commodity output. In contrast, metal containers (1-0 39), with \$12 billion of commodity output, were used by only 20 industries. The largest user was food and kindred products (1-0 14), which used \$9 billion, or 74 percent of total commodity output.

The rows in table 2.2 show the wide variation in the use of value added inputs by industries to produce their outputs. For example, the real estate and royalties industry (I-O 71B) required \$280 billion of value added inputs, or 74 percent of its total output; of this, \$27 billion was for labor compensation, \$53 billion was for indirect business tax and nontax liability, and \$200 billion was for other value added. In contrast, the livestock and livestock products industry (I-O 1) required \$15 billion of value added inputs, or 17 percent of its total output; of this, \$3 billion was for labor compensation, \$1 billion was for indirect business tax and nontax liability, and \$11 billion was for other value added.

BEA estimates intermediate inputs in the use table through a number of processes. economic censuses are the primary source for data on intermediate inputs; however, BEA must supplement these data to cover establishments without payrolls and industries not covered by the economic censuses. BEA also separates information for some broader categories of purchases into 1-0 commodities; for example, BEA separates data on purchases of office supplies into purchases of postal service, paper, envelopes, etc., using commodity-shipment proportions and other available information. BEA also uses related information that is available to make 1-0 estimates of inputs for which there is little hard data. For example, fees paid by industries for accounting services are estimated on the basis of industry employment. (Table B shows the principal methods and sources used for the 1987 benchmark.)

BEA estimates the final uses of commodities either by incorporating data into the I-O accounts directly from other sources after minor adjustment, or—for personal consumption expenditures and producers' durable equipment—by employing the commodity-flow method. An example of source data incorporated directly with only minor adjustments is exports of goods, which is obtained from the balance of payments accounts.

In the commodity-flow method, an estimate is first developed for the total supply of a commodity for domestic use. Then either a fixed percentage of total supply is attributed to final users, or the total supply is adjusted for intermediate purchases and the residual is attributed to final users. <sup>14</sup>

An example of commodity flow using the fixed percentage method can be illustrated by examining its use in estimating personal consumption expenditures for polishes and sanitation goods; in this case, approximately 40 percent of total output is allocated to personal consumption expenditures. An example of commodity flow using the residual method can be illustrated by examining its use in estimating personal consumption expenditures for wheat flour. First, an estimate is made for the total domestic supply of wheat flour: Total wheat flour sales by domestic firms, minus wheat flour exports, plus wheat flour imports. Next, an estimate is made for total consumption of wheat flour by intermediate users, including food manufacturers—of bread, cookies, crackers, and frozen bakery productsand restaurants. The wheat flour consumed by all intermediate users is then subtracted from domestic supply; government purchases of wheat flour are also subtracted. The residual is then assumed to be the wheat flour purchased by persons and is included in personal consumption expenditures.

The components of value added (see footnotes 3 and 6) are estimated using different methods. Compensation of employees by industry is estimated directly from source data. Indirect business tax and nontax liability by industry is either estimated directly from source data or is extrapolated based on the 1982 benchmark. For most industries, other value added is derived as a residual after subtracting total intermediate inputs, compensation of employees, and indirect business tax and nontax liability from total industry output (that is, industry sales receipts). For a few industries, estimates of other value added were available from other data sources: for example, other value added estimates for agriculture are from the U.S. Department of Agriculture.

#### Uses of the 1-0 accounts

The 1-0 accounts have a variety of statistical and analytical uses. For example, they can provide an economic framework to assess data quality and completeness, and they can be used as an

analytical economic tool to study industry production. This section describes some uses of the I-O accounts in preparing economic statistics and in studying interindustry relationships within the economy, as well as some of the assumptions analysts must make when they use I-O accounts as an economic tool.

The use of 1-0 accounts requires certain simplifying assumptions. Among these is the assumption that interindustry relationships established in the 1-0 accounts for a benchmark year will remain stable over time and through a range of output levels. Users of 1-0 tables generally must make the assumption that changes in interindustry relationships occur only gradually for example, that the interindustry relationships represented in the 1987 benchmark are applicable for a band of years surrounding 1987. Also, 1-0 accounts implicitly assume that all adjustments to a change in final demand are achieved instantly and without price changes. For analyses that require different assumptions, other economic tools may be more appropriate.

Statistical uses.—The 1-0 accounts are used in several ways to prepare economic statistics. For NIPA comprehensive revisions, they are the single most important regular source for estimating the expenditure components of gdp and for parts of several income components. Because the 1-0 accounts have an internally consistent framework that tracks the input and output flows in the economy, any estimating weaknesses in the national economic accounts become readily apparent when they are compared with the 1-0 accounts. For the NIPA revision, the NIPA estimates of personal consumption expenditures and producers' durable equipment are based on the final use components of the 1-0 benchmark accounts, with additional adjustments to reflect the definitional, classificational, and statistical changes incorporated into the NIPA's since completion of the 1-0 accounts.<sup>15</sup>

The I-O benchmark accounts are also used as a framework to weight and calculate index numbers for price, volume, and value. For example, BEA uses the I-O-based detailed estimates of producers' durable equipment to weight producer price indexes for calculating the constant-dollar NIPA estimates of producers' durable equipment.

Analytical uses.—The 1-0 accounts are an important analytical tool because they show the interdependence among various producers and

<sup>15.</sup> For more information on the 1-0 accounts and their relationship to the NIPA's, see *Personal Consumption Expenditures*, pages 17 and 31-34.

consumers in the economy. Because of their industry detail, the 1-0 accounts can be used for analyzing a wide range of related empirical issues.

The main contribution of the 1-0 accounts to economic analysis is that they permit analysts to measure the repercussions that changes in final uses have on industries and commodities, both directly and indirectly. For example, an increase in consumer demand for motor vehicles will initially have a direct effect that will increase the production of cars, which in turn will have indirect effects, including increased steel production. Increased steel production will in turn require more chemicals, more iron ore, more limestone, and more coal. Increased car production will also require more upholstery fabrics, and the increased production of these fabrics will require more natural fibers, more synthetic fibers, and more plastics. Further, increased production of synthetic fibers will require more electricity and containers, and so on.

These repercussions are only a few in the continuing chain resulting from the initial increase in consumer demand for motor vehicles. Through 1-0 analysis, it is possible to trace this chain throughout the economy, measuring the direct and indirect effects on the output of each industry and commodity. Within the 1-0 accounts, these effects are quantified in coefficient tables. These tables can be used, for example, to determine the impact of a disaster on the economy or, when supplemented with additional information, to compute the effect on employment of an increased demand for U.S. exports. The Federal Emergency Management Agency, the U.S. Department of Defense, and the Census Bureau, among others, have found the 1-0 accounts to be useful for such studies.

When the U.S. I-O accounts are augmented with regional data, they can show economic impacts by region. For example, a State Government agency has used regional I-O accounts to estimate the economic effects of a high-speed intercity rail project on the State's economy, and a private consulting group has used regional I-O accounts to analyze the impact of a sports stadium on the local economy. BEA'S Regional Economic Analysis Division helps planners and analysts estimate the regional impacts of project and program expenditures by industries.<sup>16</sup>

#### Definitions and conventions for classification

The 1-0 accounts use two classification systems, one for industries and another for commodities. but both classification systems generally use the same 1-0 numbers and titles. In the 1-0 industry classification system, output typically represents the total output of all establishments in each industry, regardless of whether the commodities produced are primary to the industry (that is, make up the largest proportion of the establishment's output) or are secondary (that is, primary to another industry). In the 1-0 commodity classification system, output represents the total output of the product or service, regardless of the classification of the establishments that produce it. This section discusses first the 1-0 industry classification system and then the 1-0 commodity classification system.

The *1-o* industry classification system is based on the sic system, which classifies establishments into industries based on their primary products or services. <sup>17</sup> Establishments are defined as economic units that are generally at a single physical location where business is conducted or where services or industrial operations are performed. Establishments are classified into an sic industry on the basis of their primary products or services. <sup>18</sup>

The I-O industry classification system adjusts the SIC system primarily to attain a greater degree of homogeneity in the structure of inputs to the commodities produced by an I-O industry. The adjustments, which affect I-O-defined primary and secondary production, are called, in I-O terminology, redefinitions and reclassifications. <sup>19</sup> The I-O system also provides for other industries and "special" industries that the SIC does not; these are discussed later in this section.

In a redefinition, the input purchases and the output sales receipts for a particular secondary product or service are moved from the sic-defined industry to the i-o-defined industry. The input structure of the redefined product or service is assumed to be the same as that for the i-o industry in which the product or serv-

<sup>16.</sup> A typical 1-0 table in the Regional Input-Output Modeling System is derived mainly from two data sources: (1) The U.S. benchmark 1-0 accounts and (2) BEA'S four-digit sic county wage-and-salary data. For more information, see U.S. Department of Commerce, Bureau of Economic Analysis, Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS 11), Second Edition (Washington, DC: U.S. Government Printing Office, 1992).

 $_{17}.$  The  $_{1\text{-}0}$  two-digit and six-digit industry categories and their composition in terms of the  $_{1987}$  s1c codes are given in appendix B.

<sup>18.</sup> For a discussion of the SIC system, see Office of Management and Budget, Executive Office of the President, *Standard Industrial Classification Manual:* 1987, (Springfield, Virginia: National Technical Information Service, 1987): 11–18.

<sup>19.</sup> Fewer I-O adjustments to SIC-defined industries may be necessary for the 1997 and Subsequent benchmark I-O accounts when the North American Industry Classification System (NAICS) is completed. The proposed NAICS is expected to be a common international system—covering the United States, Canada, and Mexico—for grouping establishments by similarity of production process. For a discussion, see Jack E. Triplett, "Economic Concepts for Economic Classifications," Survey 73 (November 1993): 45–56.

ice is primary; this assumption is called, in 1-0 terminology, the commodity-based technology assumption.  $^{20}$ 

An example of a redefinition involves restaurants located in hotels. Both inputs and outputs of these restaurants are moved from the hotels and lodging places industry (the industry of the establishment where the product or service occurs) to the eating and drinking places industry (the industry where the product or service is primary). The input structure related to the output of restaurants located in hotels is assumed to be similar to that for the eating and drinking places industry.

Redefinitions are used in the following cases:

- Construction work (both new construction and maintenance and repair) performed by all industries is redefined to the construction industries. Construction work performed by and for nonconstruction industries is referred to as "force-account construction."
- Manufacturing in trade and service industries is redefined to the appropriate manufacturing industries.
- Retail trade in service industries is redefined to the retail trade industry. Services in the trade industries are redefined to service industries. Some services are also redefined within service industries.
- Manufacturers' wholesale sales of purchased goods (resales) are redefined to the wholesale trade industry.
- Rental activities of all industries are redefined to the real estate and rental industries.
- The preparation of meals and beverages in most industries is redefined to the eating and drinking industry.

Redefinitions affect a number of industries; however, for most industries, the total output involved is small. Examples of industries with large dollar amounts of redefinitions of secondary products or services out of or into the industry are automobile and repair services (I-O 75), with \$131 billion of total industry output, of which \$40 billion has been redefined out to a number of other industries and \$1 billion has been redefined

in from a number of other industries; eating and drinking places (1-0 74), with \$209 billion of total industry output, \$34 billion out and \$½ billion in; wholesale trade (1-0 69A), with \$424 billion of total output, \$7 billion out and \$69 billion in; and retail trade (1-0 69B), with \$421 billion of total output, \$25 billion out and \$46 billion in.

In a reclassification, the I-O system creates a secondary product or service from an SIC-defined primary product or service. For these reclassified products and services and for all other SIC-defined secondary products and services that are not redefinitions, the I-O system moves the output receipts from the SIC-defined product or service class to the I-O-defined primary product or service class within the same I-O industry. In this case, total output for the affected industry remains unchanged; however, output for each affected commodity group changes.

An example of a reclassification involves the newspaper industry. The sic defines the primary product or service classes of this industry as newspaper subscriptions and sales and newspaper advertising. The i-o system considers the primary product or service of the newspaper industry to consist of newspaper subscriptions and sales. It considers the advertising component to be secondary and, therefore, moves advertising receipts or output to the advertising commodity group. Total output for the i-o newspaper *industry* remains unchanged, but output for the newspaper *commodity* is reduced, and output for the advertising *commodity* is increased.

Reclassifications affect about 70 commodities; however, for the most part, the dollar values involved are not very large. Examples of industries with large dollar amounts of reclassified sales receipts are the newspapers and periodicals industry (1-0 26A), for which \$20 billion of its \$36 billion total commodity output is moved to the advertising commodity (1-0 73D); and the crude petroleum and natural gas industry (1-0 8), for which \$12 billion of its \$80 billion total commodity output is moved to the gas production and distribution (utilities) commodity (1-0 68B).

When the total requirements tables are calculated, inputs and outputs of each 1-0-defined secondary product or service are moved to their particular 1-0-defined commodity groups. The input structures of secondary products or services are assumed to be similar to those for the industries in which the products or services are primary; this assumption, in 1-0 terminology, is called the industry-based technology assumption (see footnote 20).

<sup>20.</sup> The 1-0 commodity-based and 1-0 industry-based technology assumptions are important when estimating the total-requirements tables. The significance of the assumptions is discussed elsewhere in the economic 1-0 literature. See, for example, United Nations, System of National Accounts, 1993, prepared under the auspices of the Inter-Secretariat Working Group on National Accounts (New York: United Nations, 1993): chapter 15, in particular pages 367–70; and Ronald E. Miller and Peter D. Blair, Input-Output Analysis: Foundations and Extensions (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1985): 149–99.

As mentioned earlier, the I-O system also provides for other industries and "special" industries that the SIC does not. The I-O system replaces the SIC-defined government-owned establishments with two industries to cover government enterprises as defined in the NIPA's—Federal Government enterprises (I-O 78) and State and local government enterprises (I-O 78) and State and local government enterprises (I-O 79). The I-O system also provides "special" industries, such as general government (I-O 82), in which output and value added are defined as general government compensation of employees, and the inventory valuation adjustment (I-O 85), which is a NIPA adjustment to derive GDP (see appendix B for a complete listing of I-O special industries).

The *1-O* commodity classification system is closely related to that for industries. Each commodity receives the code of the industry in which the commodity is the primary product. This code is then used to group production of the commodity in the industry in which it is the primary product with its production in other industries in which it is a secondary product.

In several cases, the 1-0 commodity classification differs from that specified by the industry classification. If the same commodity is the primary product of more than one sic industry, all of the 1-0 commodity is assigned the 1-0 commodity number that corresponds to the 1-0 industry that is the largest producer of the commodity. This results in there being no commodity output for the following 1-0 commodity groups: Forest products (commodity 2.0701); knit outerwear mills (commodity 18.0201); knit underwear and nightwear mills (commodity 18.0202); knitting mills, not elsewhere classified (commodity 18.0203); fertilizers, mixing only (commodity 27.0202); cold-rolled steel sheet, strip, and bars (commodity 37.0104); steel pipe and tubes (commodity 37.0105); secondary nonferrous metals (commodity 38.0600); Federal electric utilities (78.0200); State and local government passenger transit (commodity 79.0100); and State and local government electric utilities (commodity 79.0200).

#### Definitions and conventions for valuation

Transactions in commodities are typically valued in 1-0 accounts at producers' prices, which exclude distribution costs (transportation costs and wholesale and retail trade margins), but include excise taxes collected and paid by producers. Transportation costs and trade margins are shown as separate purchases by the users of the commodities. The sum of the producers' value,

transportation costs, and trade margins equals the purchasers' value.

The 1-0 tables do not trace actual flows of commodities to and from wholesale trade and retail trade. If trade were shown as buying and reselling commodities, industrial and final users would make most of their purchases from a single source—trade. To show the relationship between the production of commodities and their purchase by intermediate and final users, commodities are shown as if they move directly to users, bypassing trade. The margin associated with a commodity is shown as a separate purchase of the commodity from wholesale trade and retail trade by users. Transportation costs are the freight charges paid to bring the commodity from the producer to the user, either intermediate or final. All transportation costs are included in the transportation rows (rows 65A-E) of the use table.

Wholesale trade has one primary product—distributive services for the sale of goods to final users other than for personal consumption expenditures. Examples of distributive services provided by wholesalers include merchandise handling, stocking, selling, and billing.

Wholesale trade output is measured one way for merchant wholesalers, agents, and brokers and another way for manufacturers' sales branches. For merchant wholesalers, agents, and brokers (on own account), wholesale margin is measured as wholesale sales receipts less the cost of goods sold plus taxes collected by the distributor. For manufacturers' sales branches, it is measured as expenses plus taxes collected by the sales branches.

Nonmargin output occurs when the whole-sale trade service is purchased separately from the commodity. Nonmargin output includes, for example, a sales commission paid to a whole-saler acting as a broker. Nonmargin output is measured as the sum of expenses on goods sold by manufacturers' sales offices, commissions on goods sold by agents and brokers, and customs duties. Wholesale trade output—both margin and nonmargin—is included in the wholesale trade row (row 69A) of the use table.

Retail trade has one primary product—distributive services for the sale of goods to persons. Retail output is defined as the retail margin, which is measured as retail sales less the

### Table C.—Input-Output Commodity Composition of Final Demand, in Producers'

									Table	. O. I	прис-О	utput	50111110	uity Oc	mposi	tion or	i iliai D	omana		oducers s of dollars]
	Person	nal consum	otion expend	ditures	Gros	s private f	ixed invest	ment	Chan	ge in busir	ness inven	tories	Expo	rts of good	ls and ser	vices	Imp	orts of goo	ods and se	rvices
Commodity number	Producers' prices	Transpor- tation costs	Whole- sale and retail trade margins	Purchas- ers' prices	Produc- ers' prices	Trans- porta- tion costs	Whole- sale and re- tail trade margins	Purchas- ers' prices	Produc- ers' prices	Trans- porta- tion costs	Whole- sale and re- tail trade margins	Pur- chasers' prices	Produc- ers' prices	Trans- porta- tion costs	Whole- sale and re- tail trade margins	Purchas- ers' prices	Produc- ers' prices	Trans- porta- tion costs	Whole- sale and re- tail trade margins	Purchasers' prices
1	3,090 15,682 3,763 647 15,882 3,763 36 0 0 1,099 201,153 20,774 1,947 1,947 1,	96 3,215 52 00 41 0333 00 41 1333 00 05 5,019 121 1313 3600 1434 132 357 7 400 267 134 131 132 357 134 132 20 144 15 102 22 20 00 144 15 102 22 21 40 2626 108 11 82 166 2626 108 11 82 166 108 11 82 166 108 11 82 166 108 11 82 106 108 11 82 106 108 109 109 109 109 109 109 109 109 109 109	1,034 13,806 1,652 0 0 21 1 0 0 1,078 100,843 13,651 1,024 4,173 60,712 1,488 4,808 9,177 7,712 1,488 4,808 9,177 16,865 89 33,098 12,647 13,745 1,646 1,551 3,626 247 13,745 1,1922 13,017 11 57 0 404 1,551 3,626 247 13,745 1,922 13,017 11 57 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	4,219 32,703 5,466 647 0 241 0 0 0 0 89 0 0 2,182 307,016 34,546 2,084 2,278 132,225 19,381 3,568 62,940 1,506 2,040 1,506 2,040 2,542 2,747 3,826 2,747 3,826 2,747 3,826 3,131 0 0 40,738 42,770 0 40,738 42,770 1,713 3,030 7,240 2,040 4,738 42,770 1,713 420,780 4,738 42,770 1,713 1,713 1,713 1,713 1,713 1,713 1,714 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,716 1,717 1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-719 -4.261 101 109 1,100 -1,758 -8 0 0 457 1,771 1,749 5916 1,333 1,157 5916 11,292 1,449 1,188 515 138 515 1,598 1,745 1,145 1,1745 1	4911001342566614823911625023761286872534651314212117111714311227744452252766122700000000000000000000000000000000	3 246 0 0 0 1 1 2 3 9 1 0 0 0 0 1 1 2 3 9 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-711 -3,896 13,896 14,468 -1,735 20,353 14,343 1,575 367 1,352 277 483 3,588 403 3,588 403 3,588 403 3,588 403 3,588 403 3,588 403 3,588 403 3,588 403 2,127 227 483 3,588 403 6,127 227 483 3,588 403 6,127 227 483 566 655 204 169 113 3,588 403 6,127 227 483 6,127 227 4	12,747 122,247 12,747 12,259 1,693 1,594 1,197 1	17	14	515 15,946 3,503 1,558 880 155 163 3,503 1,558 880 1,551 863 1,318 863 1,318 6,548 286 6,601 1,213 1,657 1,213 1,657 1,402 2,064 3,876 7,199 402 2,064 3,876 7,199 1,205 1,641 1,265 1,243 1,3876 7,648 1,243 1,255 1,348 1,348 1,408 1,243 1,408 1,243 1,408 1,243 1,408 1,508 1,50	-808 -2.353	000000000000000000000000000000000000000	000000000000000000000000000000000000000	-808

costs associated with all purchases by each industry or category of final uses.

<sup>\*</sup> Less than \$500,000 in absolute value.

1. The values shown in the producers' prices columns for I-O's 65 and 69 are for direct purchases of trade and transportation services. The corresponding values in the use table include the trade margins and transportation

### and Purchasers' Prices, 1987 Benchmark $^{\rm 1}$

Federal	Government		national	Federal G	overnment p	ourchases, n	ondefense	State a	nd local gov	ernment pur	rchases,	State and	local govern	nment purcha	ases, other	
Produc- ers' prices	Trans- portation costs	Whole- sale and retail trade margins	Purchas- ers' prices	Produc- ers' prices	Trans- portation costs	Whole- sale and retail trade margins	Purchas- ers' prices	Produc- ers' prices	Trans- portation costs	Whole- sale and retail trade margins	Purchasers' prices	Produc- ers' prices	Trans- portation costs	Whole- sale and retail trade margins	Purchas- ers' prices	Com- modity number
2 2 0 0 0 3 3 6 6 6 6 6 7 5 4 9 1 1 1 0 1 4 9 6 4 1 5 7 7 4 9 1 1 1 0 1 1 1 1 1 2 1 1 2 1 1 1 1 1 1 1	(†) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	(*) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 0 0 38	10	(*) 0000(*) 944000011000(*) 16011601160110(*) 222(*) 3211(*) (*) 00227022(*) 151522000000000000000000000000000000000	(°) 0 0 0 0 1 1 20 0 0 0 0 1 1 20 0 0 0 0 1 1 2 26 (°) 1 1 1 2 26 (°) 1 1 2 26 (°) 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	111	200 200 201 201 201 201 201 201 201 201	(*) 555 (*) 0 0 0 4 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 655 61 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	320 3400 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	544 3688 -419 756 3688 -419 756 11 10 11 61,020 19,816 116 2,114 43 8388 347 555 755 154 1,463 1,263 1,278 321 1 2,778 321 32 1 34 1 373 368 94 12,265 1,274 189 990 0 7,180 9,366 1661 11 2,732 2,732 1,589 990 0 7,180 9,366 1661 10 0 5,850 0 0 9,366 161 10 1 2,732 1,589 990 0 7,180 9,366 161 1 2,732 1,589 990 0 7,180 9,366 161 10 1 2,732 1,589 181 1,400 1,585 1,400	11 61 61 70 00 00 00 00 00 00 00 00 00 00 00 00	3 3 999 3 3 0 0 (°) 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	577 528 -416 756 756 756 756 756 756 756 756 756 75	1 1 2 3 3 4 4 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6

Table D.—Input-Output Commodity Composition of Personal Consumption Expenditures, in Producers' and Purchasers' Prices, 1987 Benchmark [Millions of dollars]

						[IVIIII	ons of dolla	rsj						
NIPA code/ I-O number	Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchasers' prices
3. Food p	urchased for	off-premise	consumpti	on (n.d.)	17. Cleaning	, storage, and	d repair of	clothing and	d shoes (s.)	41	1,350	12	1,431	2,793
Total	<b>211,016</b> 1,722 11,383 2,584	<b>7,811</b> 19 2,585 48	111,975 644 9,323 1,346	330,802 2,385 23,291 3,978	Total 72A 72B	<b>8,328</b> 62 8,266	<b>0</b> 0 0	<b>0</b> 0 0	<b>8,328</b> 62 8,266	42 64 69B 81	600 415 27 8	28 1 0 0	791 498 0 114	1,419 914 27 122
9+10 14	2 194,576	4,863	1 100,017	4 299,456		18. Jewelr	y and watc	hes (d.)		32	. Other durab	le house fu	rnishings (d	i.)
27A 69B 80 81	60 5 1,201 –516	9 0 285 0	43 0 603 0	112 5 2,089 –516	Total	<b>12,698</b> 1,599 11,624 –525	27 4 23 0	<b>13,505</b> 1,463 11,926 116	<b>26,230</b> 3,065 23,573 -409	Total	<b>17,946</b> 4,776 1,371 1,357	<b>566</b> 108 6 32	<b>17,748</b> 4,006 1,095 1,107	<b>36,260</b> 8,891 2,472 2,495
4. F	Purchased me	eals and be	verages (n.o	d.)	19. Other mi	sc. personal,	clothing a	nd jewelry s	ervices (s.)	22+23 26B	1,569 72	23 0	995 48	2,587 119
Total	172,236 36 93 169,638 2,434	<b>0</b> 0 0 0	<b>0</b> 0 0 0	172,236 36 93 169,638 2,434	Total 72B 73C	<b>9,443</b> 9,428 15	<b>0</b> 0 0	<b>0</b> 0 0	<b>9,443</b> 9,428 15	32 33+34 35 36 40	203 127 358 1,146 80 1,495	5 3 12 17 (*) 32	202 109 375 917 53 1,827	410 239 745 2,080 133 3,354
77B	35	0	0	35	21.	Toilet article	s and prep	arations (n.c	i.)	44+45 47	248 583	2	247 523	497 1,108
5. Food fur	nished to em	ployees (in	cluding mili	tary) (n.d.)	Total	<b>17,370</b>	<b>405</b>	12,203 66	<b>29,979</b> 135	48 50	176 88	2	113 80	291 170
Total	<b>6,464</b> 158 174 25 6,107	200 2 42 (*) 156	899 8 61 4 827	<b>7,563</b> 167 276 30 7,090	29B 32 42 54 58 64	15,497 20 589 427 221 549	309 1 25 12 13 45	10,795 17 347 256 175 548	26,601 37 960 695 408 1,142	51 52 53 54 55 56	237 16 81 104 1,035 793	3 (*) 1 3 34 3	311 17 56 72 1,033 535	551 32 138 179 2,102 1,331
6. Food	d produced a	nd consume	ed on farms	(n.d.)		rshops, beau	ty narlors	and health o	luhe (e )	61	35 481	3	32 377	69 860
Total	714	0	0	714	Total	16,078	ty pariors,	o l	16,078	64 69B	1,268 200	98 0	1,508 0	2,874 200
1 2 14	107 138 470	0 0	0 0 0	107 138 470	72A 72B 76	311 13,513 2,254	0 0	0 0 0	311 13,513 2,254	80	725 -677 Semidurable	173 0 house furr	673 1,439 nishings (n.o	1,571 763 d.)
	7. Tobac	co products	(n.d.)		24. Owner	-occupied no	onfarm dwe	llings-space	rent (s.)	Total	9,749	154	9,427	19,330
Total 15	<b>20,774</b> 20,774	<b>121</b> 121	<b>13,651</b> 13,651	<b>34,546</b> 34,546	<b>Total</b> 71A	<b>321,380</b> 321,380	<b>0</b> 0	<b>0</b> 0	<b>321,380</b> 321,380	16 17 18 19	267 81 3 7,768	5 2 0 35	265 81 3 7,187	536 165 6 14,990
1	12. Shoes an	d other foot	wear (n.d.)			nant-occupied			• •	26B 31	79 2	0	63 2	142 3
Total	<b>12,264</b> 2,801	<b>60</b> 34	<b>13,703</b> 3,465	<b>26,027</b> 6,299	<b>Total</b> 71B	<b>120,032</b> 120,032	<b>0</b> 0	<b>0</b>	<b>120,032</b> 120,032	32 35	435 150	9	431 155	875 308
33+34 81	9,463 (*)	26 0	10,213 25	19,703 25	26	6. Rental valu	e of farm o	lwellings (s.	)	37 41 64	11 114 675	3 58	11 121 919	25 237 1,651
14. Wome	en's and child excep	lren's clothi ot shoes (n.		essories,	Total 71A 71B	<b>4,888</b> 3,764 1,124	<b>0</b> 0 0	<b>0</b> 0 0	<b>4,888</b> 3,764 1,124	69B 80 81	3 161 (*)	0 38 0	0 170 21	3 369 20
<b>Total</b>	<b>50,938</b> 660	<b>358</b> 7	<b>47,121</b> 666	<b>98,416</b> 1,333		27. Oth	ner housing	(s.)			and polishin ehold supplie			
18 19	43,726 98	200	40,297 121	84,223 220	Total	16,808	0	0	16,808	Total	20,022	950	12,123	33,095
24 26B 32	3,141 166 84	92 20 3	2,651 184 97	5,883 369 184	72A	16,808	0	0	16,808	3 9+10	56 35	2 32	18 20	76 86
33+34 64	2,997 222	21 14	2,642 261	5,661 496		ire, including	mattresses	· ·	- , ,	17 19	94 84	1	40 39	135 124
69B 81	2 -158	0	0 203	2 45	Total	<b>18,091</b> 17,882 208	<b>108</b> 108 0	<b>16,270</b> 16,011 259	<b>34,469</b> 34,001 468	24 25 26B 27A	5,919 292 23 178	180 7 0 21	2,864 148 11 125	8,963 447 34 324
15. Men's and	d boys' cloth	ing and acc (n.d.)	essories, e	xcept shoes	30. Kit	chen and oth	er househo	ld appliance	es (d.)	27B 29B 30	784 9,358 194	31 561 10	691 5,904 89	1,506 15,823 294
Total	28,267 95 27,345 69 34 750 101	177 1 159 1 1 8 7	21,310 92 20,404 73 33 514 105	49,754 188 47,908 142 68 1,271 212	Total	12,837 18 54 445 712 11,380 222 6	324 (*) 1 14 7 301 2 0	8,620 9 36 351 651 7,408 120 45	21,781 27 91 809 1,370 19,089 344 50	32 36 42 53 55 58 64	237 237 327 431 74 807 823 305	5 52 3 2 8 11 23	119 154 185 51 777 577 312	361 534 620 127 1,592 1,411 641
81	-126	0	90	-36	31. Chi	na, glassware	, tableware	, and utensi	ils (d.)	35.	Stationery a	nd writing s	supplies (n.	d.)
	rd clothing is	sued to mil		· , ,	Total	6,520	121	8,090	14,732	Total 24	<b>3,882</b> 1,086	<b>135</b> 36	<b>6,005</b> 1,378	<b>10,022</b> 2,500
Total	133 25 80 28	(*) (*) (*) (*)	13 2 9 2	146 27 89 30	20+21 32 35 36 38	381 1,956 1,000 765 18	9 34 24 14 1	506 2,484 1,382 864	896 4,473 2,406 1,643 40	26B 27A 32 64	2,220 240 6 331	55 39 (*)	3,658 309 10 650	5,932 588 16

## Table D.—Input-Output Commodity Composition of Personal Consumption Expenditures, in Producers' and Purchasers' Prices, 1987 Benchmark— Continued

[Millions of dollars]

							ons or donar	~]						
NIPA code/ I-O number	Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchasers' prices
	37. I	Electricity (s	.)		49. (	Other profess	ional medic	al services	(s.)	7	71. Net purcha	ases of use	d autos (d.)	
Total 68A	<b>63,318</b> 63,318	<b>0</b> 0	<b>0</b>	<b>63,318</b> 63,318	Total 73C 77A	<b>38,652</b> 495 38,158	<b>0</b> 0 0	<b>0</b> 0 0	<b>38,652</b> 495 38,158	<b>Total</b>	<b>14,070</b> 14,070	<b>0</b>	<b>14,209</b> 14,209	<b>28,280</b> 28,280
	3	8. Gas (s.)			//A	,			30,130		72. Other	motor vehic	cles (d.)	
Total 68B	<b>25,544</b> 25,544	<b>0</b> 0	<b>0</b>	<b>25,544</b> 25,544		51.	Hospitals (s	.)		Total 59A	<b>33,839</b> 28,232	<b>747</b> 728	<b>10,453</b> 6,382	<b>45,039</b> 35,342
	Water and of	ther sanitary	services (s	s.)	<b>Total</b>	<b>165,479</b> 165,479	<b>0</b> 0	<b>0</b> 0	<b>165,479</b> 165,479	61 81	3,982 1,625	19	1,315 2,756	5,317 4,381
Total 68C	<b>20,800</b> 14,672	<b>0</b> 0	<b>0</b>	<b>20,800</b> 14,672		55. Nu	sing homes	s (s.)		73. Tire	es, tubes, acc	essories, ar	nd other pa	rts (d.)
79	6,128	Ö	0	6,128	Total	<b>29,510</b> 29,510	<b>0</b> 0	<b>0</b> 0	<b>29,510</b> 29,510	Total	<b>12,029</b> 120	2,174	<b>11,036</b> 117	<b>25,238</b> 238
		oil and coal			777	,			20,010	29B 32	164 5,419	16 1,936	166 5,364	346 12,719
Total 7 20+21	<b>6,102</b> 138	<b>305</b> 41	<b>4,794</b> 62	<b>11,201</b> 241		56. Hea	th insuranc	e (s.)		35 42	11 279	(*)	10 279	21 563
27A	83 192	2 23	33 79	118 294	<b>Total</b> 70B	<b>21,305</b> 21,305	<b>0</b> 0	<b>0</b> 0	<b>21,305</b> 21,305	50 52	29 155	3 1	18 154	50 310
31 68C	5,498 192	239 0	4,620 0	10,356 192	C4 Brake		and invest		alina (a.)	55 56	330 646 38	4 (*)	290 625 26	622 1,275 65
	41. Telepho	ne and teleg	raph (s.)			rage charges				57 58 59B	2,186 3,133	97 108	1,857 2,107	4,139 5,348
Total	51,879	0	0	51,879	<b>Total</b> 70A	<b>23,398</b> 23,398	<b>0</b> 0	<b>0</b> 0	<b>23,398</b> 23,398	81	-479	0	22,107	-457
66 72A	51,049 830	0	0	51,049 830	62. Bank se	rvice charges	s, trust serv	ices, and s	afe deposit	74. Repair,	greasing, was	hing, parkir easing (s.)	ng, storage,	rental, and
	42. Dom	estic servic	e (s.)				x rental (s.)			Total	67,759	0	202	67,961
<b>Total</b>	<b>8,242</b> 533 7,709	<b>0</b> 0 0	<b>0</b> 0 0	<b>8,242</b> 533 7,709	<b>Total</b>	<b>18,349</b> 18,349	<b>0</b> 0	<b>0</b> 0	<b>18,349</b> 18,349	75 76 77B	67,684 57 18	0 0	202 0 0	67,886 57 18
	43. Other ho	usehold ope	eration (s.)	·		ices furnished ries except li					75. Gaso	line and oil	(n.d.)	
Total	24,691	2	20	24,714			d pension p		. ,	Total	54,666	2,229	28,460	85,355
54 65B 65C	44 5,996 114	2 0 0	16 0 0	63 5,996 114	<b>Total</b> 70A	<b>93,475</b> 93,475	<b>0</b> 0	<b>0</b> 0	<b>93,475</b> 93,475	31	54,666 Bridge, tunne	2,229	28,460	85,355
65D 69B	36 12	0 0 0	0	36 12	64.	Expense of h	andling life	insurance	(s.)	Total	2,016	0	0	2,016
70B 72B 73B	3,275 4,131 92	0	0 0 0	3,275 4,131 92	Total	<b>41,459</b> 41,459	<b>0</b>	<b>0</b> 0	<b>41,459</b> 41,459	79	2,016	0	0	2,016
73C 78	4,712 6,269 10	0 0 0	0 0 4	4,712 6,269 14	700	,			41,400		77. Motor v			
81	Drug prepara						gal services	. ,		<b>Total</b>	<b>15,522</b> 15,522	<b>0</b>	<b>0</b> 0	<b>15,522</b> 15,522
Total	27,762	232	19,012	47,006	<b>Total</b>	<b>31,069</b> 31,069	<b>0</b> 0	<b>0</b> 0	<b>31,069</b> 31,069		79. Mass	transit syste	ems (s.)	
24 27A 29A	1,620 74 23,958	43 4 164	682 35 16,617	2,345 112 40,738	(	66. Funeral a	nd burial ex	penses (s.)		Total 65A	<b>4,583</b> 4,583	<b>0</b>	<b>0</b> 0	<b>4,583</b> 4,583
31 32	24 323	1 12	17 227	41 561	Total	<b>6,259</b> 466	<b>23</b> 21	<b>1,105</b> 1,081 24	<b>7,387</b> 1,569		80.	Taxicab (s.	)	
54 55 62	41 7 1,718	1 0 7	18   5   1,413	60 12 3,137	42 65D	11 90	21 2 0	24	36 90	Total	2,359	0	0	2,359
	Imic product		·		71B 72B	1,022 4,670	0	0	1,022 4,670	65A	2,359	0	0	2,359
Total	2,688	13	5,337	8,038		67. Other po	ersonal bus	iness (s.)		Total	I	Railway (s.		F70
58 62	194 548	3 2	284 1,014	480 1,564	Total	12,087	0	0	12,087	<b>Total</b> 65A	<b>576</b> 576	0	<b>0</b> 0	<b>576</b> 576
63 81	1,940 6	8 0	4,040	5,988 6	66 70A 70B	203 568 37	0 0 0	0 0 0	203 568 37			3. Bus (s.)		
	47. P	hysicians (s	s.)		72B 73B	1,230 295	0	0	1,230 295	Total 65A	<b>1,364</b> 1,364	<b>0</b> 0	<b>0</b> 0	<b>1,364</b> 1,364
<b>Total</b> 77A	<b>99,923</b> 99,923	<b>0</b> 0	<b>0</b>	<b>99,923</b> 99,923	73C 73D 77B	1,331 661 7,541	0 0 0	0 0 0	1,331 661 7,541			. Airline (s.)		
		Dentists (s.)	)		78 80	161 62	0	0	7,341 161 62	Total	19,935	0	0	19,935
Total	26,416	0	0	26,416		70 N	lew autos (	4.)		65D	19,935	0	0	19,935
77A	26,416	0	0	26,416	Total	73,642	1,898	•	93 474		35. Other inte			
					59A	73,642	1,898	<b>17,934</b> 17,934	<b>93,474</b> 93,474	Total	2,061	0	0	2,061

Table D.—Input-Output Commodity Composition of Personal Consumption Expenditures, in Producers' and Purchasers' Prices, 1987 Benchmark—
Continued

[Millions of dollars]

					[IVIIII	ulis ul uuliai	ગ						
Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchasers' prices
177	0	0	177		92. Radio an	d television	repair (s.)		79	6,007	0	0	6,007
133	Ö	Ö	133	Total	3,510	0	0	3,510	81	214	0	401	3 615
			1,000	72B	3,168	0	0	3,168		103. Hig	her education	on (s.)	
			40.004				. 1 . 1 4 . 4		Total	33,788	0	0	33,788
7,875	149	4,924	12,948				. `	,			Ĭ		33,788
-1	ő	44	43	2	3,988	588	4,423	8,998			· ·		
azines, newsp	papers, and	sheet mus	ic (n.d.)	80	10	2	9	21	77B	<b>14,496</b> 14,496	<b>0</b>	<b>0</b> 0	<b>14,496</b> 14,496
12,020 11,741	<b>444</b> 400	<b>5,039</b>	17,503 16 949		95. Motion	picture the	aters (s.)		105. (	Other private	education a	nd research	n (s.)
421 –142	44	231	695 -142	Total	<b>3,443</b>	<b>0</b>	<b>0</b>	<b>3,443</b>	Total	13,692	0	0	13,692
ondurable to	e and enor	t cunnline i	(n d )	76 77B	3,362 70	0	0	3,362 70	76 77B	365 13,328	0	0	365 13,328
				96. Legitim	ate theaters a	and opera.	and entertai	nments of	10	6. Religious a	and welfare	activities (s	i.)
134 319	9	19 257	162 576						Total	75,284	0	0	75,284
406 41	4	397 46	88	Total 76	<b>4,087</b> 3,938	<b>0</b> 0	<b>0</b> 0	<b>4,087</b> 3,938	//B	75,284	0	0	75,284
67	0	60	127	77B	149	0	0	149		8. Foreign tra	vel by U.S.	residents (	s.)
62	2	79	143		97. Spe	ctator sport	s (s.)		Total 65C	<b>33,932</b> 1,741	<b>0</b> 0	<b>0</b> 0	<b>33,932</b> 1,741
100	1	128	229	Total 76	<b>3,366</b> 1,942	<b>0</b> 0	<b>0</b> 0	<b>3,366</b> 1,942	65D 80	9,058 23,134	0	0	9,058 23,134
1,472 8,339	7 89	2,146 9,892	3,624 18,320	77B	1,424	0	0	1,424	109. Ex	penditures al	broad by U.	S. residents	s (n.d.)
11 -1	0	1	(*)	98.	Clubs and fr	aternal orga	anizations (	s.)	Total	3,888	0	0	3,888
			ment, boats,	<b>Total</b>	<b>7,098</b> 5,056	<b>0</b> 0	<b>0</b> 0	<b>7,098</b> 5,056	80	3,888	0	0	3,888
			05.575	77B	2,041	0	0	2,041	· ·				
693	1	681	1,376	99. (	Commercial p	articipant a	musements	(s.)	83	- <b>30,323</b> -30,323	<b>0</b> 0	<b>0</b> 0	<b>−30,323</b> <b>−</b> 30,323
91	30	121	242	Total 65C	<b>6,051</b> 1,171	<b>0</b> 0	<b>0</b>	<b>6,051</b> 1,171	111. Perso	nal remittanc	es in kind t	o nonreside	ents (n.d.)
194 461	8 5	173 228	375 693	76	4,880	0	0	4,880	Total	-813	0	0	-813
316	1	88	405		100. Pari-mu	ituel net red	ceipts (s.)		83	_813	0	0	_813 
111	(*)	129	241	<b>Total</b>	<b>3,010</b> 3,010	<b>0</b> 0	<b>0</b> 0	<b>3,010</b> 3,010		Personal cons	sumption ex	penditures	
2,490	27	3,270	5,787	10	l. Other recre	eational exp	enditures (s	s.)	Total	2,566,099	20,949	485,204	3,072,252
159	0	427	586				1,105	57,982		Durable	commoditie	es (d.)	
nd audio pro	ducts, comp	outing equip	oment, and	1 3	778	1	28	806	Total	249,778	6,528	158,931	415,237
		. ,	43.118	65A	896	0	Ö	896		Nondurable	commoditi	ies (n.d.)	
37 3,052	(*) 43	20 1,911	58 5,006	65D 66	126	0	0 0	126	Total	673,095	14,328	323,840	1,011,264
212	1	118	331	67 70B	1,326 39	0	0	1,326 39		S	ervices (s.)		
861	12	568	1,441	72A 72B	2,170 3,614	0	0	2,170 3,614	Total	1,643,226	93	2,433	1,645,752
115 22	27 0	87 78	229 100	76	20,114	0	0	20,114					
				77B	802	0	0	3,529 802					
	7,887 7,875 133 1,596  87. Boo 7,887 7,875 13 11,741 421 -142 -142 -142 -142 -142 -142 -14	Troduces   Costs	Producers' prices   Talisputation costs   and retail trade margins    177	Producers   Prices   Talisportation costs   and retail trade margins   Purchasers' prices   notes	Producers   Italisput   tation   costs   tation   tatio	Producers   Transportation   Costs   and retail trade margins   Purchasers   prices     Purchasers   prices     Purchasers   prices     Purchasers   prices     Purchasers   prices     Purchasers   prices   Purchasers   Purchasers   prices   Purchasers   Purchas	Producers   Transportation costs   And retail rade and retai	Produces   Producers   Produ	Producers' tation freal tation freal tation freal tation freal fr	Produces   Transpor		Producers   Transport	Producer   Tarsgor   Producer   Tarsgor   Producer   Tarsgor   T

\*Less than \$500,000.

NOTE.—The identifying numbers for the personal consumption categories are those used in table 2.4 in the National Income and Product Accounts of the United States, Volume 2, 1959-88.

Personal consumption expenditures of scrap, used and secondhand goods (I-O 81) from other final demand components are shown net of corresponding sales. (Sales among persons cancel.) However, the trade margin has been measured on all sales of used goods—both among persons

and between personal consumption expenditures and other final demand categories—to the extent that such sales pass through trade channels. The trade margin is usually the largest part of the value of used goods in purchasers prices.

Table E.—Input-Output Commodity Composition of Producers' Durable Equipment Expenditures, in Producers' and Purchasers' Prices, 1987 Benchmark

[Millions of dollars]

								•						
NIPA code/ I-O number	Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchas- ers' prices	NIPA code/ I-O number	Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchas- ers' prices	NIPA code/ I-O number	Producers' prices	Transpor- tation costs	Wholesale and retail trade margins	Purchas- ers' prices
5.	Computers	and peripher	al equipmen	t	52	2	0	0	2	26.	Agricultural	machinery,	except tracto	rs
Total 51 81	<b>29,802</b> 29,809 -7	<b>74</b> 74 0	<b>6,652</b> 5,878 774	<b>36,528</b> 35,761 767	58 73B 81	10 640 2	(*) 0 0	1 0 160	11 640 162	Total	<b>3,281</b> 3,134 11	<b>92</b> 92 (*)	<b>1,739</b> 1,169	<b>5,112</b> 4,395 12
6.	. Office equi	oment excep	t computers		15. Gen	eral industria	ll, including equipment	materials ha	ndling,	73B 81	168 -32	`Ó 0	0 570	168 537
Total	<b>4,259</b> 517	<b>52</b> 7	<b>1,820</b> 105	<b>6,131</b> 628	Total 44+45	<b>16,167</b> 36	189	1,855	18,211 44	27.	Construction	machinery,	except tracto	ors
51 73A 73B	3,455 10 232	45 0 0	1,605 0 0	5,106 10 232	46 48 49	5,029 2 10,238	97 0 90	1,033 (*) 683	6,159 2 11,011	Total	<b>7,116</b> 6,847	<b>261</b> 261	<b>1,430</b> 1,247	<b>8,807</b> 8,354
81	46	0	109	155	50 73B 81	197 667 —1	1 0	17 0 116	214 667 114	73B 81	313 -43	0	0 183	313 140
		unication eq									28. Mining	and oilfield	machinery	
Total	<b>40,319</b>	<b>168</b> 0	<b>1,562</b>	<b>42,050</b> 198	16. Electr	ical transmis	ssion, distrib apparatus	ution, and in	dustrial	Total	924	29	279	1,232
38 51 56	36 213 21,663	1 2 132	5 41 1,319	42 256 23,113	Total	<b>11,794</b> 788	<b>147</b> 16	<b>1,263</b> 123	<b>13,203</b> 927	8 44+45	84 801	0 29	123	84 952
58 62	2,643 9,546 4,389	22 12 0	137 61 0	2,801 9,619 4,389	53 62	5,878 4,719	106 25	820 320 0	6,803 5,064	49 73B 81	14 45 –20	(*) 0 0	1 0 156	15 45 136
66 73B 81	1,585 47	0	0	1,585 47	73B	410 18. Trucks, b	ا ا		410		29. Service	e industry m	achinery	
	8.	Instruments	<b>.</b>		Total	26,585	614	2,696	29,895	Total	7,581	76	2,544	10,201
Total	11,669	58	2,129	13,856	59A 59B	21,685 6,591	559 55	2,104 323	24,347 6,969	50 52	7,184	1 75	2,543	35 9,802
62 73B 81	11,137 502 30	58 0 0	2,129 0 0	13,324 502 30	81	-1,690	0	270	-1,421	73B 81	346 18	0	0	346 18
	9. Photocopy	and related	l equinment				19. Autos	0.404	00.000		30. Electri	cal equipme	nt, n.e.c.	
Total	8,635	30	2,520	11,185	<b>Total</b> 59A 81	<b>24,652</b> 41,248 –16,596	<b>1,063</b> 1,063	<b>3,121</b> 2,775 346	<b>28,836</b> 45,086 -16,250	Total	<b>6,294</b> 208	<b>51</b>	<b>958</b> 42	<b>7,302</b> 252
62 63 73B	2,635 5,653 304	6 24 0	427 2,093 0	3,067 7,770 304	<u> </u>	,	20. Aircraft	0.0	.0,200	54 55	391 435	11 4	40 110	441 549
81	44	0	0	44	Total	9,144	11	564	9,718	58 62 73B	91 4,901 270	5 28 0	16 750 0	113 5,679 270
	11. Fabric	ated metal p	oroducts		22+23 60 62	179 8,843 876	2 7 2	32 135 6	213 8,985 883	81	-2 -2	0	0	-2
Total 5+6	<b>6,285</b> 446	148 23	<b>696</b> 21	<b>7,129</b> 489	81	-754	0	391	<del>-363</del>		31. Other no	nresidential	equipment	
27A 37 39	795 13 21	0 0 1	0 0 1	795 13 23		21. S	hips and bo	ats		Total	<b>8,163</b> 1,087	<b>353</b> 24	<b>3,529</b> 442	<b>12,044</b> 1,554
40 42	2,811 1,931	20 106	296 378	3,127 2,414	Total	<b>1,657</b> 1,301	<b>2</b> 2	<b>165</b> 153	<b>1,824</b> 1,456	20+21 32	5 62	(*) 1	1 10	6 73
46 73B	264	0	0 0	4 264	81	356	0	13	369	44+45 61	2,167 598	32 40	1,808 217	4,007 855
	12. Eng	ines and tur	rbines				ilroad equipi			64 73B 81	3,876 445 –77	255 0 0	1,052 0 0	5,183 445 -77
Total	<b>1,811</b> 2,302	<b>27</b> 27	<b>171</b> 171	<b>2,009</b> 2,500	Total	<b>1,311</b> 1,285 33	<b>31</b> 31 0	<b>20</b> 7 0	<b>1,361</b> 1,322		ale of equip	mont scran	excluding a	itos
73B 81	64 -556	0	0	64 -556	73B 81	-7	0	13	33 6	Total	-2,520	0	0	-2,520
	13. Meta	working made	chinery			24. Furi	niture and fix	ctures		81	-2,520	Ö	0	-2,520
Total	13,442	168	2,137	15,747	Total	<b>15,756</b> 15,109	<b>125</b> 125	<b>2,701</b> 2,631	<b>18,582</b> 17,865		33. Residen	tial (landlord	durables)	
47 48 73B	12,651 228 558	165 3 0	1,977 46 0	14,793 278 558	73B 81	664 -16	0	0 69	664 53	Total	<b>3,807</b> 1,282	<b>92</b> 29	<b>1,966</b> 521	<b>5,864</b> 1,832
81	4	0	114	118			25. Tractors			22+23 32	179 15	1 (*)	9 8	189 23
	4. Special in	dustry mach	ninery, n.e.c.		Total	<b>3,913</b> 3,925	<b>99</b> 99	<b>2,400</b> 2,347	<b>6,411</b> 6,371	54 56	2,266 65	61 (*)	1,409 19	3,736 85
Total	16,182 78	187 3	<b>2,683</b> 18	<b>19,052</b>	81	-12	0	52	41		Producers	durable ed	uipment	·
42 48 49	14 14,615 821	(*) 179 6	11 2,463 30	26 17,257 856						Total	278,028	4,144	47,598	329,771
	L				II					<u> </u>				

Text continues from page 83.

cost of goods sold plus the taxes collected—if any—by retail trade establishments.

Retail trade margins also apply to some purchases of goods by other final users; for example, retail trade margins apply to some purchases of personal computers by business and are included in gross private fixed investment. All retail trade margins are included in the retail trade row (row 69B) of the use table.

Imports of goods and services, a component of final uses, are treated in one of two ways, depending on whether or not they are comparable to U.S. commercially produced goods and serv-Those that are comparable are included in the use table along with the distribution of the output of their domestic counterparts. The U.S. domestic port values of imported commodities are shown as negative entries in the imports of goods and services column of final use (column 95), so that the row total for a commodity equals the domestic output of that commodity. Other imported goods and services—those not comparable to U.S. commercially produced goods and services, and those purchased and used abroad by U.S. residents—are shown in the use table row for noncomparable imports (row 80).

Examples of noncomparable imports are coffee beans and parakeets; an example of goods purchased and used abroad by U.S. residents is food purchased by U.S. military personnel stationed abroad. The total value of all noncomparable imports is shown as a single negative entry in the imports of goods and services column (column 95).

Imports of goods by commodity (the entries in column 95) are valued at U.S. domestic port values plus duties. Imports of services are valued at producers' values. The entries for transportation imports and for trade imports include adjustments that convert the total of all commodity imports of goods and services to a foreign port value equivalent. This adjustment is made for conceptual consistency between the 1-0 accounts and the NIPA's and the balance of payments accounts.

Exports of goods and services—both by commodity and as a total—are valued in U.S. producers' prices, which are considered to be equivalent to U.S. domestic port values. Exports are also a component of final uses.

Inventory change, another component of final uses, represents the change in inventory of each commodity, wherever held, over the benchmark year. It is stated at book value—that is, at its

### **Data Availability**

The estimates from the 1987 benchmark I-O accounts are available on diskette at two-digit (95 I-O industries) and six-digit (480 I-O industries) levels. They can be ordered for "transactions," for "total requirements," or for "all." "Transactions" includes the six-digit make table, use table, direct requirements coefficients table, and estimates by commodity of transportation costs and of wholesale and retail trade margins. "Total requirements" includes six-digit industry-by-commodity or commodity-by-commodity coefficients. Products specifying "all" contain all above data, but for the two-digit I-O industry level only. Each product includes information on the mathematical derivation of the coefficients tables. The BEA accession numbers and the prices for these products are listed below.

For further information about 1-0 products or when ordering by MasterCard or Visa, call the Interindustry Economics Division at (202) 606–5585. To order by mail, write to the Public Information Office, Order Desk, Be-53, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230. Specify the item, accession number, and price of the product(s) being ordered. For foreign shipment, add 25 percent to the total amount of the order. A check or money order payable to "Bureau of Economic Analysis" must accompany all written orders. Be sure to include a return address.

вел accession number	Price
51-94-40-001	\$40
51-94-40-002	40
51-94-40-003	40
	20
51-94-40-005	20
	20
	number 51-94-40-001 51-94-40-002 51-94-40-003 51-94-40-004

BEA'S 1987 benchmark I-O accounts, at both the two-digit and six-digit levels, will also be available on CD-ROM through the Commerce Department's National Economic, Social, and Environmental Data Bank (NESE-DB) CD-ROM. The NESE-DB is produced quarterly in February, May, August, and November. Call the Office of Business Analysis at (202) 482–1986 for more information or to place an order. The NESE-DB is also available for public use at over 900 Federal Depository Libraries.

original cost—in the use table. The inventory valuation adjustment, which converts inventory change from book value to replacement cost, is shown as a single entry for the total of all commodities (row 85, column 93).

### Supplementary tables

Four supplementary tables, which can be used with the five basic sets of 1-0 tables, are provided with this article. Three tables (tables C–E) cover the 1-0 commodity composition of NIPA final demand, of NIPA personal consumption expenditures, and of NIPA producers' durable equipment; a fourth table (table F) reconciles 1-0 exports of goods and services and imports of goods and services with NIPA estimates.

The commodity composition tables are necessary as bridges between the 1-0 accounts and the NIPA's because the two sets of accounts are based on different valuations and definitions. In the 1-0 accounts, final use categories are expressed in producers' prices; in the NIPA's, final demand categories are expressed in purchasers' prices. Also, the definitions of 1-0 final use categories differ from those of the NIPA final demand categories. Before the 1-0 total requirements tables can be used to measure and analyze the changes in commodity or industry output requirements arising from changes in the level or composition of NIPA final demand, NIPA final demand categories must be converted to equivalent 1-0 final use categories. That is to say, the analysis should be consistent with 1-0 final use commodities that are valued at producers' prices for the 1-0 year, with separate entries for transportation costs and trade margins.

Table C shows the 1-0 commodity composition in 1987 of each NIPA category of final demand

Table F.—Relation of Exports and Imports in the Input-Output Accounts to the National Income and Product Accounts, 1987 Benchmark

[Millions of dollars]

	1987
Exports of goods and services, NIPA	363,952 6,781 8.875
Plus: Statistical revisions, BPA Equals: Exports of goods and services, I-O	276
Imports of goods and services, NIPA Less: U.S. merchandise returned Reexports Plus: Statistical revisions, BPA Equals: Imports of goods and services, I-O	507,050 6,781 8,875 -952 490,442

NIPA National income and product accounts

in producers' and purchasers' prices. It provides a bridge between I-O commodities in producers' prices and NIPA final demand categories in purchasers' prices. For each I-O commodity within a category of NIPA final demand, the table shows the transportation costs and trade margins included in the purchasers' prices.

Table D shows the I-O commodity composition in 1987 of each NIPA category of personal consumption expenditures (NIPA table 2.4) in producers' and purchasers' prices. It provides a bridge between I-O commodities in producers' prices and NIPA personal consumption categories in purchasers' prices. For each I-O commodity within a NIPA category, the table shows the transportation costs and trade margins included in the purchasers' prices.

Table E shows the I-O commodity composition in 1987 of each NIPA category of producers' durable equipment purchases (NIPA table 5.8) in producers' and purchasers' prices. It provides a bridge between I-O commodities in producers' prices and NIPA producers' durable equipment categories in purchasers' prices. For each commodity, the table shows the transportation costs and trade margins included in the purchasers' prices. This table is useful for analyses relating the effects of changes in investment on industry and commodity output.

Table F reconciles the I-O estimates of exports and imports of goods and services with those in the NIPA's. The same adjustments are made for both exports and imports; therefore, there is no net effect on total GDP. The adjustments are necessary because the NIPA's—unlike the I-O accounts—include in imports the U.S. merchandise that is returned to the United States from other countries and in exports the foreign merchandise that is reexported from the United States to other countries. The NIPA's also exclude definitional and statistical revisions to the balance of payments accounts between NIPA comprehensive revisions.

Appendixes A and B and tables 1 and 2 follow.

BPA Balance of payments accounts

I-O Input-output accounts

<sup>21.</sup> U.S. merchandise returned consists of domestically produced goods that were previously exported to other countries for processing or assembly, or both, and then returned to the United States. An example would be articles of metal that are manufactured in the United States, then exported for further processing abroad, and then returned to the United States for more processing. Reexports consists of commodities of foreign origin that were previously imported into the United States and then exported from the United States in substantially the same condition as when imported. An example would be imported foreign-made monitors that are purchased by U.S. personal computer manufacturers, joined with U.S.-made consoles, and then exported to a third foreign country.

# Appendix A.—Chronological List of Selected Survey of Current Business Input-Output Articles

- Morris R. Goldman, Martin L. Marimont, and Beatrice N. Vaccara, "The Interindustry Structure of the United States: A Report on the 1958 Input-Output Study," November 1964.
- 2. "Industrial Impact of the 1966 Housing and Commercial Building Decline," November 1966.
- 3. "Input-Output Structure of the U.S. Economy: 1963," November 1969.
- 4. Allan H. Young and Claiborne M. Ball, "Industrial Impacts of Residential Construction and Mobile Home Production," October 1970.
- 5. Beatrice N. Vaccara, "An Input-Output Method for Long-Range Economic Projections," July 1971, Part I.
- 6. Philip M. Ritz and Eugene P. Roberts, "Industry Inventory Requirements: An Input-Output Analysis," November 1973.

- 7. "The Input-Output Structure of the U.S. Economy: 1967," February 1974.
- 8. Irving Stern, "Industry Effects of Government Expenditures: An Input-Output Analysis," May 1975.
- 9. Philip M. Ritz, "The Input-Output Structure of the U.S. Economy, 1972," February 1979.
- 10. Philip M. Ritz, Eugene P. Roberts, and Paula C. Young, "Dollar-Value Tables for the 1972 Input-Output Study," April 1979.
- 11. "The Input-Output Structure of the U.S. Economy, 1977," May 1984.
- 12. "Benchmark Input-Output Accounts for the U.S. Economy, 1982," July 1991.
- 13. "Annual Input-Output Accounts of the U.S. Economy, 1987," April 1992.

[The titles in boldface represent the industries used for the summary version of the 1987 tables. An asterisk preceding an sic code indicates that the sic industry is included in more than one 1-0 industry. For a description of the systems used in the 1-0 accounts, see the section "Definitions and conventions for classification."]

	I-O industry number and title	Related 1987 SIC codes			I-O industry number and title	Related 1987 SIC codes
	AGRICULTURE, FORESTRY, AND FISHERIES		14		d kindred products:	2011
1	Livestock and livestock products:			14.0101 14.0102	Meat packing plantsSausages and other prepared meat products	
-	1.0100 Dairy farm products	024,*019, *0259, *029		14.0105	Poultry slaughtering and processing	2015
	1.0200 Poultry and eggs	0251-3, *0259, *019, *0219, *029		14.0200	Creamery butter	2021
	1.0301 Meat animals	0211-4, *0219, *019,		14.0300 14.0400	Natural, processed, and imitation cheese	
	1.0302 Miscellaneous livestock	*0259, *029 0271-3, *0279, *019,		14.0500	Ice cream and frozen desserts	2024
	1.0502 IVIISCEIIAIIEOUS IIVESLOCK	*0219, *0259, *029		14.0600 14.0700	Fluid milk  Canned and cured fish and seafoods	
2	Other agricultural products:			14.0800	Canned specialties	2032
_	2.0100 Cotton	0131, *019, *0219,		14.0900 14.1000	Canned fruits, vegetables, preserves, jams, and jellies . Dehydrated fruits, vegetables, and soups	2033
	2.0201 Food grains	*0259, *029 *011, *019, *0219,		14.1100	Pickles, sauces, and salad dressings	2035
	•	*0259, *029		14.1200 14.1301	Prepared fresh or frozen fish and seafoods Frozen fruits, fruit juices, and vegetables	
	2.0202 Feed grains	*011, *0139, *019, *0219, *0259, *029		14.1302	Frozen specialties, n.e.c.	2038
	2.0203 Grass seeds	*0139, *019, *0219,		14.1401 14.1402	Flour and other grain mill products Cereal breakfast foods	2041 2043
	2.0200 Tahasas	*0259, *029		14.1403	Prepared flour mixes and doughs	2045
	2.0300 Tobacco	0132, *019, *0219, *0259, *029		14.1501 14.1502	Dog and cat food Prepared feeds, n.e.c.	2047 2048
	2.0401 Fruits	0171-2, 0174-5,		14.1600	Rice milling	2044
		*0179, *019, *0219, *0259, *029		14.1700	Wet corn milling	2046 2051. *546
	2.0402 Tree nuts	0173, *0179, *019,		14.1801 14.1802	Bread, cake, and related products	2052
	2.0501 Vegetables	*0219, *0259, *029 0134, *0139, 016,		14.1803	Frozen bakery products, except bread	2053
		*019, *0219, *0259,		14.1900 14.2001	Sugar  Candy and other confectionery products	
	2.0502 Sugar crops	*029, *0119 0133, *019, *0219,		14.2002	Chocolate and cocoa products	2066
		*0259. *029		14.2003 14.2004	Chewing gumSalted and roasted nuts and seeds	
	2.0503 Miscellaneous crops	*0119, *0139, *019, *0219, *0259, *029		14.2101	Malt beverages	2082
	2.0600 Oil bearing crops	0116, *0119, *0139,		14.2102 14.2103	MaltWines, brandy, and brandy spirits	
	2.0701 Forest products	*0219, *0259, *029 *018, *019, *0219,		14.2104	Distilled and blended liquors	2085
	·	*0259, *029		14.2200 14.2300	Bottled and canned soft drinksFlavoring extracts and flavoring syrups, n.e.c.	2087
	2.0702 Greenhouse and nursery products	*018, *019, *0219, *0259, *029		14.2400 14.2500	Cottonseed oil mills	2074 2075
3	Forestry and fishery products:	004 000 007		14.2600 14.2700	Vegetable oil mills, n.e.c	
	3.0001 Forestry products	081, 083, 097 091		14.2800	Roasted coffee	2095
4	Agricultural, forestry, and fishery services:			14.2900 14.3000	Edible fats and oils, n.e.c	
•	4.0001 Agricultural, forestry, and fishery services	0254, *0279, 071-2,		14.3100	Macaroni, spaghetti, vermicelli, and noodles	2098
	4.0002 Landscape and horticultural services	075-6, 085, 092 078		14.3201 14.3202	Potato chips and similar snacksFood preparations, n.e.c.	2096
	MINING	0.0	15		products:	
5+6	Metallic ores mining:		r	15.0101 15.0102	Cigarettes	
310	5.0000 Iron and ferroalloy ores	101, 106		15.0103	Chewing and smoking tobacco and snuff	213
	6.0100 Copper ore	102 103-4, 109, *108		15.0200	Tobacco stemming and redrying	214
		103-4, 103, 100	16	Broad ar	nd narrow fabrics, yarn and thread mills:	004.0.0004.0
7	Coal mining: 7.0000 Coal	122-3, *124		16.0100	Broadwoven fabric mills and fabric finishing plants Narrow fabric mills	221-3, 2261-2 224
•		122 0, 121		16.0300	Yarn mills and finishing of textiles, n.e.c	2269, 2281-2
8	Crude petroleum and natural gas: 8.0000 Crude petroleum and natural gas	131-2, *138	∥	16.0400	Thread mills	2284
9+10	Nonmetallic minerals mining:		17	Miscellar 17.0100	neous textile goods and floor coverings:  Carpets and rugs	227
	9.0001 Dimension, crushed and broken stone	141-2		17.0600	Coated fabrics, not rubberized	2295
	9.0002 Sand and gravel	144   145		17.0700 17.0900	Tire cord and fabrics  Cordage and twine	
	9.0004 Nonmetallic mineral services and miscellaneous minerals	*148, 149		17.1001	Nonwoven fabrics	2297
	10.0000 Chemical and fertilizer minerals	147		17.1100	Textile goods, n.e.c.	2299
	CONSTRUCTION		18	Apparel: 18.0101		2251
11+12	Construction:			18.0101	Women's hosiery, except socks Hosiery, n.e.c.	
	11.0000 New and maintenance and repair	15-17, 6552 *138		18.0201 18.0202	Knit outerwear mills	
	11.0602 Petroleum, natural gas, and solid mineral exploration	*138. *108. *124. *148		18.0203	Knit underwear and nightwear mills Knitting mills, n.e.c	2259
	11.0603 Access structures for solid mineral development	*108, *124, *148 *138		18.0300 18.0400	Knit fabric millsApparel made from purchased materials	
	wells.					2010, 0000
	MANUFACTURING		19	Miscellar 19.0100	neous fabricated textile products:  Curtains and draperies	2391
12	Ordnance and accessories:		H	19.0200	Housefurnishings, n.e.c.	2392
13	Ordnance and accessories: 13.0100 Guided missiles and space vehicles	3761		19.0301 19.0302	Textile bags Canvas and related products	
	13.0200 Ammunition, except for small arms, n.e.c	3483		19.0303	Pleating and stitching	2395
	13.0300 Tanks and tank components	3795 3484		19.0304 19.0305	Automotive and apparel trimmings	
	13.0600 Small arms ammunition	3482		19.0306	Fabricated textile products, n.e.c.	2399
	13.0700 Ordnance and accessories, n.e.c	1 3489	Ш		•	

	I-O industry number and title	Related 1987 SIC codes		I-O industry number and title	Related 1987 SI codes
20+21	Lumber and wood products:		31	Petroleum refining and related products:	
	20.0100 Logging	241 2421		31.0101 Petroleum refining	
	20.0300 Hardwood dimension and flooring mills			31.0103 Products of petroleum and coal, n.e.c.	2992
	20.0400 Special product sawmills, n.e.c.	2429		31.0200 Asphalt paving mixtures and blocks	2951
	20.0501 Millwork	2431		31.0300 Asphalt felts and coatings	2952
	20.0502 Wood kitchen cabinets		1	Bubbas and missallaneous planting and dusts	
	20.0600 Veneer and plywood		32	Rubber and miscellaneous plastics products: 32.0100 Tires and inner tubes	301
	20.0701 Structural wood members, n.e.c	2439		32.0200 Rubber and plastics footwear	302
	20.0703 Mobile homes	2451		32.0300 Fabricated rubber products, n.e.c.	306
	20.0800 Wood preserving	2491		32.0400 Miscellaneous plastics products, n.e.c	308
	20.0901 Wood pallets and skids	2448		32.0500 Rubber and plastics hose and belting	3052
	20.0903 Wood products, n.e.c.			32.0600 Gaskets, packing, and sealing devices	3053
	20.0904 Reconstituted wood products		33+34	Footwear, leather, and leather products:	
	21.0000 Wood containers, n.e.c.	2441, 2443		33.0001 Leather tanning and finishing	311
2+23	Furniture and fixtures:			34.0100 Boot and shoe cut stock and findings	313 3143-4, 3149
	22.0101 Wood household furniture, except upholstered			34.0201 Shoes, except rubber	
	22.0102 Household furniture, n.e.c.			34.0301 Leather gloves and mittens	315
	22.0103 Wood television and radio cabinets			34.0302 Luggage	316
	22.0300 Metal household furniture			34 0303 Women's handbags and purses	3171
	22.0400 Mattresses and bedsprings			34.0304 Personal leather goods, n.e.c.	3172
	23.0100 Wood office furniture	2521		34.0305 Leather goods, n.e.c	319
	23.0200 Office furniture, except wood		35	Glass and glass products:	
	23.0300 Public building and related furniture		""	35.0100 Glass and glass products, except containers	321, 3229, 323
	23.0400 Wood partitions and fixtures			35.0200 Glass containers	
	23.0600 Drapery hardware and window blinds and shades		26	Stone and alay products:	
	23.0700 Furniture and fixtures, n.e.c	2599	36	Stone and clay products: 36.0100 Cement, hydraulic	324
				36.0200 Brick and structural clay tile	3251
4	Paper and allied products, except containers:	004		36.0300 Ceramic wall and floor tile	3253
	24.0100 Pulp mills	261		36.0400 Clay retractories	3255
	24.0500 Sanitary paper products			36.0500 Structural clay products, n.e.c.	
	24.0701 Paper coating and glazing			36.0600 Vitreous china plumbing fixtures	
	24.0702 Bags, except textile	2673-4		36.0702 Fine earthenware table and kitchenware	3263
	24.0703 Die-cut paper and paperboard and cardboard	2675		36.0800 Porcelain electrical supplies	3264
	24.0705 Stationery, tablets, and related products	2678		36.0900 Pottery products, n.e.c.	3269
	24.0706 Converted paper products, n.e.c			36.1000 Concrete block and brick	3271
	2 1.0000 Tapor and paporboard mile	202 0		36.1100 Concrete products, except block and brick	
5	Paperboard containers and boxes:			36.1300 Lime	
	25.0000 Paperboard containers and boxes	265		36.1400 Gypsum products	
c A	Newspapers and neviadicals.			36.1500 Cut stone and stone products	328
6A	Newspapers and periodicals: 26.0100 Newspapers	271		36.1600 Abrasive products	
	26.0200 Periodicals			36.1700 Asbestos products	
	20.0200 1 0.104.0410			36.2000 Mineral wool	3296
6B	Other printing and publishing:			36.2100 Nonclay refractories	
	26.0301 Book publishing	2731		36.2200 Nonmetallic mineral products, n.e.c	
	26.0302 Book printing		II		
	26.0501 Commercial printing	275	37	Primary iron and steel manufacturing: 37.0101 Blast furnaces and steel mills	3312
	26.0601 Manifold business forms	276		37.0102 Electrometallurgical products, except steel	
	26.0602 Blankbooks, looseleaf binders and devices			37.0103 Steel wiredrawing and steel nails and spikes	3315
	26.0700 Greeting cards	277		37.0104 Cold-rolled steel sheet, strip, and bars	
	26.0802 Bookbinding and related work			37.0105 Steel pipe and tubes	
	26.0806 Platemaking and related services			37.0200 Iron and steel foundries	
	20.0000 Tratemaking and related 30171003	2730		37.0300 Iron and steel forgings	
'Α	Industrial and other chemicals:			37.0402 Primary metal products, n.e.c.	
	27.0100 Industrial inorganic and organic chemicals	281 (excl. *2819),	1		
	27.0401 Gum and wood chemicals	2865, 2869 2861	38	Primary nonferrous metals manufacturing:	0004
	27.0401 Gum and wood chemicals			38.0100 Primary smelting and refining of copper	
	27.0402 Auriesives and sealants			38.0400 Primary aluminum	
	27.0404 Printing ink			38.0600 Secondary nonferrous metals	
	27.0405 Carbon black	2895		38.0700 Rolling, drawing, and extruding of copper	
	27.0406 Chemicals and chemical preparations, n.e.c	2899		38.0800 Aluminum rolling and drawing	3353-5
7D	Agricultural fortilizara and abamicala.			38.0900 Nonferrous rolling and drawing, n.e.c.	3356
7B	Agricultural fertilizers and chemicals: 27.0201 Nitrogenous and phosphatic fertilizers	2873-4		38.1000 Nonferrous wiredrawing and insulating	3357
	27.0207 Nitrogenous and phosphatic fertilizers			38.1100 Aluminum castings	
	27.0300 Pesticides and agricultural chemicals, n.e.c.			38.1300 Nonferrous castings, n.e.c.	3364, 3369
	,,,			38.1400 Nonferrous forgings	
3	Plastics and synthetic materials:	0004	1	3 0	
	28.0100 Plastics materials and resins		39	Metal containers:	0444
	28.0200 Synthetic rubber			39.0100 Metal cans	
	28.0300 Cellulosic manmade fibers			39.0200 Metal shipping barrels, drums, kegs, and pails	3412
	20.0.00 maimado organio nocio, execpt ecitateste		40	Heating, plumbing, and fabricated structural metal products:	
Α	Drugs:			40.0100 Enameled iron and metal sanitary ware	
	29.0100 Drugs	283		40.0200 Plumbing fixture fittings and trim	3432
	Oleanian and fallet assumentia			40.0300 Heating equipment, except electric and warm air	3433
В	Cleaning and toilet preparations:	2044		furnaces.	2444
	29.0201 Soap and other detergents			40.0400 Fabricated structural metal	3441 3442
	29.0202 Polishes and sanitation goods			40.0600 Fabricated plate work (boiler shops)	
	29.0300 Toilet preparations			40.0700 Sheet metal work	
	LLL	1		40.0800 Architectural and ornamental metal work	
	Paints and allied products:	1		40.0901 Prefabricated metal buildings and components	3448
)	30.0000 Paints and allied products			40.0902 Miscellaneous structural metal work	3449

	I-O industry number and title	Related 1987 SIC codes		I-O industry number and title	Related 1987 SI codes
11	Screw machine products and stampings:			54.0400 Electric housewares and fans	
	41.0100 Screw machine products, bolts, etc.			54.0500 Household vacuum cleaners	
	41.0201 Automotive stampings	3465 3466		54.0700 Household appliances, n.e.c	3639
	41.0203 Metal stampings, n.e.c.		55	Electric lighting and wiring equipment:	
1				55.0100 Electric lamp bulbs and tubes	3641
2	Other fabricated metal products: 42.0100 Cutlery	3421		55.0200 Lighting fixtures and equipment	
	42.0201 Hand and edge tools, except machine tools and	3423			00101
	handsaws.	0.405	56	Audio, video, and communication equipment: 56.0100 Household audio and video equipment	3651
	42.0202 Saw blades and handsaws			56.0200 Prerecorded records and tapes	
	42.0401 Plating and polishing	3471		56.0300 Telephone and telegraph apparatus	3661
	42.0402 Coating, engraving, and allied services, n.e.c	3479		56.0500 Communication equipment	3663, 3669
	42.0500 Miscellaneous fabricated wire products		57	Electronic components and accessories:	
	42.0700 Steel springs, except wire	3491-2, 3494, 3498		57.0100 Electron tubes	
	42.1000 Metal toil and leaf	3497		57.0200 Semiconductors and related devices	
	42.1100 Fabricated metal products, n.e.c	3499		'	3072, 3073-9
3	Engines and turbines:		58	Miscellaneous electrical machinery and supplies:	0004
-	43.0100 Turbines and turbine generator sets	3511		58.0100 Storage batteries	
	43.0200 Internal combustion engines, n.e.c	3519		58.0400 Electrical equipment for internal combustion engines	3694
4+45	Farm, construction, and mining machinery:			58.0600 Magnetic and optical recording media	3695
	44.0001 Farm machinery and equipment	3523		58.0700 Electrical machinery, equipment, and supplies, n.e.c	3699
	44.0002 Lawn and garden equipment	3524	59A	Motor vehicles (passenger cars and trucks):	
	45.0100 Construction machinery and equipment	3531 3532		59.0301 Motor vehicles and passenger car bodies	3711
	45.0300 Oil and gas field machinery and equipment		59B	Truck and bus bodies, trailers, and motor vehicles parts:	
ie.	, , , , ,		""	59.0100 Truck and bus bodies	
6	Materials handling machinery and equipment: 46.0100 Elevators and moving stairways	3534		59.0200 Truck trailers	
	46.0200 Conveyors and conveying equipment	3535		59.0302 Motor vehicle parts and accessories	3714
	46.0300 Hoists, cranes, and monorails	3536	60	Aircraft and parts:	
	46.0400 Industrial trucks and tractors	3537		60.0100 Aircraft	3721
7	Metalworking machinery and equipment:			60.0200 Aircraft and missile engines and engine parts	
	47.0100 Machine tools, metal cutting types	3541			0720, 0700
	47.0200 Machine tools, metal forming types		61	Other transportation equipment: 61.0100 Ship building and repairing	3731
	47.0300 Special dies and tools and machine tool accessories 47.0401 Power-driven handtools			61.0100 Ship building and repairing	3732
	47.0402 Rolling mill machinery and equipment			61.0300 Railroad equipment	374
	47.0404 Electric and gas welding and soldering equipment	3548		61.0500 Motorcycles, bicycles, and parts	
	47.0405 Industrial patterns	3543		61.0601 Travel trailers and campers	
	47.0500 Metalworking machinery, n.e.c.	3549		61.0700 Transportation equipment, n.e.c.	
8	Special industry machinery and equipment:	1		1 11 /	
	48.0100 Food products machinery		62	Scientific and controlling instruments: 62.0101 Search and navigation equipment	381
	48.0300 Woodworking machinery			62.0102 Laboratory apparatus and furniture	
	48.0400 Paper industries machinery	3554		62.0200 Mechanical measuring devices	3823-4, 3829
	48.0500 Printing trades machinery and equipment			62.0300 Environmental controls	3822
	48.0600 Special industry machinery, n.e.c.	3559		62.0400 Surgical and medical instruments and apparatus	
9	General industrial machinery and equipment:			62.0600 Dental equipment and supplies	3843
	49.0100 Pumps and compressors			62.0700 Watches, clocks, watchcases, and parts	387
	49.0200 Ball and roller bearings			62.0800 X-ray apparatus and tubes	3844 3845
	49.0500 Mechanical power transmission equipment	0500 0500		62.1000 Laboratory and optical instruments	3826-7
	49.0600 Industrial process furnaces and ovens	3567		62.1100 Instruments to measure electricity	
	49.0700 General industrial machinery and equipment, n.e.c		63	Ophthalmic and photographic equipment:	
	49.0800 Packaging machinery	3565	"	63.0200 Ophthalmic goods	385
0	Miscellaneous machinery, except electrical:			63.0300 Photographic equipment and supplies	
	50.0100 Carburetors, pistons, rings, and valves		64	Miscellaneous manufacturing:	
	50.0200 Fluid power equipment	3593-4 3596	"	64.0101 Jewelry, precious metal	3911
	50.0400 Industrial and commercial machinery and equipment,	3599		64.0102 Jewelers' materials and lapidary work	3915
	n.e.c.			64.0104 Silverware and plated ware	
1	Computer and office equipment:			64.0105 Costume jewelry	
1	Computer and office equipment: 51.0102 Calculating and accounting machines	3578		64.0301 Games, toys, and children's vehicles	3944
	51.0103 Electronic computers	3571		64.0302 Dolls and stuffed toys	3942
	51.0104 Computer peripheral equipment	3572, 3575, 3577		64.0400 Sporting and athletic goods, n.e.c.	
	51.0400 Office machines, n.e.c.	3579		64.0501 Pens, mechanical pencils, and parts	3951 3952
2	Service industry machinery:			64.0503 Marking devices	3953
	52.0100 Automatic vending machines			64.0504 Carbon paper and inked ribbons	3955
	52.0200 Commercial laundry equipment			64.0700 Fasteners, buttons, needles, and pins	
	52.0400 Measuring and dispensing pumps			64.0900 Hard surface floor coverings, n.e.c.	
	52.0500 Service industry machinery, n.e.c.			64.1000 Burial caskets	3995
2				64.1100 Signs and advertising specialties	
3	Electrical industrial equipment and apparatus: 53.0200 Power, distribution, and specialty transformers	3612	11	64.1200 Manufacturing industries, n.e.c	*3999
	53.0300 Switchgear and switchboard apparatus	3613		TRANSPORTATION, COMMUNICATIONS, AND UTILITIES	
	53.0400 Motors and generators	3621	1	·	
	53.0500 Relays and industrial controls		65A	Railroads and related services; passenger ground	
	53.0700 Carbon and graphite products			transportation: 65.0100 Railroads and related services	40, 474, *4789
	11 ,	1		65.0200 Local and suburban transit and interurban highway	40, 474, 4769
ļ	Household appliances:	3631		passenger transportation.	
	54.0100 Household cooking equipment		65B	Motor freight transportation and warehousing:	

	J			tilliark input-Output Accounts—Co.	
	I-O industry number and title	Related 1987 SIC codes		I-O industry number and title	Related 1987 SIC codes
65C	Water transportation: 65.0400 Water transportation	44	75	Automotive repair and services: 75.0001 Automotive rental and leasing, without drivers	751
65D	Air transportation: 65.0500 Air transportation	45		75.0002 Automotive repair shops and services	753, 7549 752, 7542
65E 66	Pipelines, freight forwarders, and related services: 65.0600 Pipelines, except natural gas	46 473, 4783, 4785, *4789 472 481-2, 484, 489	76	Amusements: 76.0101 Motion picture services and theaters	781-3 784 792 793 7941 7948 7991, 7997
67	Radio and TV broadcasting: 67.0000 Radio and TV broadcasting	483		recreation clubs. 76.0206 Other amusement and recreation services	791, 7992-3, 7996, 7999
68A	Electric services (utilities): 68.0100 Electric services (utilities)	491, *493	77A	Health services:	1999
68B	Gas production and distribution (utilities): 68.0200 Gas production and distribution (utilities)			77.0100 Doctors and dentists	801-3, 8041 806 805
68C	Water and sanitary services: 68.0301 Water supply and sewerage systems 68.0302 Sanitary services, steam supply, and irrigation systems	494, 4952 4953, 4959, 496-7, *493	77B	77.0302 Other medical and health services, including veterinarians.  Educational and social services, and membership organizations: 77.0401 Elementary and secondary schools	074, 8043, 8049, 807-9
	WHOLESALE AND RETAIL TRADE		ri	77.0402 Colleges, universities, and professional schools	822 823-4, 829
69A	Wholesale trade: 69.0100 Wholesale trade	50, 51		77.0501 Business associations and professional membership organizations. 77.0502 Labor organizations, civic, social, and fraternal	861-2 863-4
69B	Retail trade: 69.0200 Retail trade, except eating and drinking	52-7 (excl. *546), 59, *7389, 8042		associations. 77.0504 Other membership organizations	866 84, 865, 869, 8733,
	FINANCE, INSURANCE, AND REAL ESTATE		ll ri	77.0600 Job training and related services	6732 833
70A	Finance: 70.0100 Banking 70.0200 Credit agencies other than banks	61, 67 (excl. 6732)		77.0700 Child day care services 77.0800 Residential care	835 836 832, 839
70D	70.0300 Security and commodity brokers	62		GOVERNMENT ENTERPRISES	
70B	Insurance:       70.0400 Insurance carriers       70.0500 Insurance agents, brokers, and services		78	Federal Government enterprises: 78.0100 U.S. Postal Service 78.0200 Federal electric utilities	43 (¹) (¹)
71A	Owner-occupied dwellings: 71.0100 Owner-occupied dwellings		79	78.0500 Other Federal Government enterprises	(1)
71B	Real estate and royalties: 71.0201 Real estate agents, managers, operators, and lessors 71.0202 Royalties	65 (excl. 6552)	'	79.0100 State and local government electric utilities	(1) (1) (1)
	SERVICES			SPECIAL INDUSTRIES	
72A	Hotels and lodging places: 72.0100 Hotels and lodging places	70	80	Noncomparable imports: 80.0000 Noncomparable imports	(2)
72B	Personal and repair services (except auto): 72.0201 Laundry, cleaning, garment services, and shoe repair 72.0202 Funeral service and crematories 72.0203 Portrait photographic studios, and other miscellaneous personal services. 72.0204 Electrical repair shops	726 722, 729 762 763-4	81 82 83	Scrap, used and secondhand goods: 81.0001 Scrap 81.0002 Used and secondhand goods  General government industry: 82.0000 General government industry  Rest of the world adjustment to final uses:	(3) (3) (4)
73A	72.0300 Beauty and barber shops  Computer and data processing services:	723-4	84	83.0001 Rest of the world adjustment to final uses	(5)
73B	73.0104 Computer and data processing services		85	84.0000 Household industry	(6)
	73.0301 Legal services	81 871 872, 89	65	85.0000 Inventory valuation adjustment	(7)
	miscellaneous services, n.e.c.	0.2, 00		VALUE ADDED	/8\
73C	Other business and professional services, except medical: 73.0101 Miscellaneous repair shops	769 734 736 874, 8731-2, 8734		88.0000 Compensation of employees 89.0000 Indirect business tax and nontax liability 90.0000 Other value added FINAL USES	(8) (8) (8)
	research labs. 73.0106 Detective and protective services	7381-2 735 7384, 7335-6 732, 7383, *7389, 7331, 7334, 7338		91.0000 Personal consumption expenditures 92.0000 Gross private fixed investment	(9) (9) (9) (9) (9) (9) (9)
73D	Advertising: 73.0200 Advertising	731		97.0000 Federal Government purchases, nondefense 98.0001 State and local government purchases, elementary and	(9)
74	Eating and drinking places: 74.0000 Eating and drinking places	58		secondary public school systems.  98.0002 State and local government purchases, public educational facilities beyond high school.	(9)

	•				• •	
	I-O industry number and title	Related 1987 SIC codes			I-O industry number and title	Related 1987 SIC codes
	98.0003 State and local government purchases, other education	(9)		11.0204	Garages and service stations	
	and libraries.  99.1001 State and local government purchases, hospitals and	(9)		11.0205 11.0206	Stores and restaurants	
	categorical health programs.			11.0200	Educational buildings	
	99.1002 State and local government purchases, public welfare	(9)		11.0231	Hospitals	
	institutions and activities.	(0)		11.0232	Residential institutions and other health-related facilities	
	99.1003 State and local government purchases, public sewerage systems, capital account only.	(9)		11.0241 11.0250	Amusement and recreation buildings	
	99.1004 State and local government purchases, sanitation	(9)		11.0230	Other nonfarm buildings Telephone and telegraph facilities	
	99.2001 State and local government purchases, police	(9) (9) (9)		11.0302	Railroads	
	99.2002 State and local government purchases, fire fighting	(9)		11.0303	Electric utility facilities	
	organizations and auxiliary services. 99.2003 State and local government purchases, correctional	(9)		11.0304	Gas utility facilities	
	institutions.	( )		11.0305 11.0306	Petroleum pipelines	
	99.3001 State and local government purchases, public highways	(9)		11.0300	Sewer system facilities	
	(excluding non-capital expenditures of toll roads).	(0)		11.0308	Local transit facilities	
	99.3002 State and local government purchases, waterports and airports, capital account only.	(9)		11.0400	Highways and streets	
	99.3003 State and local government purchases, government-	(9)		11.0501	Farm housing units and additions and alterations	
	operated transit systems, capital account only.	' '		11.0502 11.0601	Farm service facilities  Petroleum and natural gas well drilling	
	99.3004 State and local government purchases, other commerce	(9)		11.0602	Petroleum, natural gas, and solid mineral exploration	
	activities n.e.c., capital account only. 99.3005 State and local government purchases, gas and electric	(9)		11.0603	Access structures for solid mineral development	
	utilities, capital account only.	()		11.0701	Military facilities	
	99.3006 State and local government purchases, government-	(9)		11.0702 11.0703	Dams and reservoirs  Other conservation and development facilities	
	operated water supply facilities, capital account only.	(0)		11.0703	Other nonbuilding facilities	
	99.3007 State and local government purchases, redevelopment projects, capital account only.	(9)	۱.,		-	
	99.3008 State and local government purchases, natural and	(9)	12	Maintena 12.0100	ance and repair construction:  Nonfarm residential structures	
	agricultural resources and recreation facilities.	( )		12.0100	Other nonfarm buildings	
	99.3009 State and local government purchases, other general	(9)		12.0202	Farm residential buildings	
	government activities, n.e.c.			12.0203	Farm service facilities	
	ADDENDUM: Special commodity groupings			12.0204 12.0205	Telephone and telegraph facilities	
		ŀ		12.0205	Electric utility facilities	
11	New construction:			12.0207	Gas utility facilities	
	11.0101 Residential 1-unit structures, nonfarm			12.0208	Petroleum pipelines	
	11.0102 Residential 2-4 unit structures, nonfarm			12.0209	Water supply facilities	
	11.0104 Residential high-rise apartments			12.0210 12.0211	Sewer facilities	
	11.0105 Residential additions and alterations, nonfarm			12.0211	Military facilities	
	11.0106 Hotels and motels			12.0213	Conservation and development facilities	
	11.0107 Dormitories and other group housing			12.0214	Highways and streets	
	11.0202 Office buildings			12.0215 12.0216	Petroleum and natural gas wells Other nonbuilding facilities	
	11.0203 Warehouses			12.0210	Other nonbuilding lacillies	
		1	1			l

Although the SIC assigns the same codes to activities of both private firms and government agencies, SIC codes in the I-O accounts are used only for classifying private activities.

 Noncomparable imports include imported goods and services that are not commercially produced in the United States, and goods and services that are produced abroad and used abroad by U.S. residents—for example, defense spending abroad.

 Industry output is zero because there is no primary producing industry. Scrap is a secondary product of many industries, and used goods are sales and purchases typically between final uses. The sales are shown as negative values in the use table.

 Industry output is defined as the compensation of general government employees except for those engaged

in construction work; their compensation is included in the construction industry. It also excludes the compensation in construction work; their compensation is included in the construction industry. It also excludes the compensation of employees of government enterprises.

5. The commodity entries include adjustments to personal consumption expenditures and government purchases that eliminate items that are actually exports.

6. Industry output is defined as the compensation of domestic household workers.

7. The inventory valuation adjustment converts the inventory changes based on withdrawals valued primarily at historical cost as reported by most businesses to replacement cost, the valuation used in the I-O accounts.

8. There are no related SIC codes since these categories are not industries, but are categories of final uses.

### Table 1.—The Make of Commodities

		[Millions of dollars								ns of dollars	
umber	For the distribution of industries producing a commodity, read the column for that commodity  For the distribution of commodities produced by an industry, read the row for that industry	Livestock and livestock	Other agri- cultural	Forestry and fishery	Agri- cultural, forestry,	Metallic ores	Coal mining	Crude petroleum and natural	Non- metallic minerals	New con- struction	Maintenance and repair
ndustry number		products	products	products	and fishery services	mining	, , , , , , , , , , , , , , , , , , ,	gas	mining		construction
Pul —	Commodity number	1	2	3	4	5+6	7	8	9+10	11	12
1 2	Livestock and livestock products Other agricultural products	83,609	82.183	243 1.788	494 974						
3	Forestry and fishery products Agricultural, forestry, and fishery services			7,456	22,201						
5+6	Metallic ores mining					6,800	(*)		6		
7 8	Coal mining Crude petroleum and natural gas						25,447	67,947	1		
9+10 11+12	Nonmetallic minerals mining					3	4		11,321	445,347	173,466
13 14	Ordnance and accessories										
15 16	Tobacco products										
17 18	Miscellaneous textile goods and floor coverings  Apparel										
19 20+21	Miscellaneous fabricated textile products										
22+23	Lumber and wood products										
24 25	Paper and allied products, except containers Paperboard containers and boxes										
26A 26B	Newspapers and periodicals										
27A 27B	Industrial and other chemicals							2	8		
28 29A	Plastics and synthetic materials Drugs										
29B	Cleaning and toilet preparations										
30 31	Paints and allied products							1	140		
32 33+34	Rubber and miscellaneous plastics products										
35 36	Glass and glass products								402		
37 38	Primary iron and steel manufacturing								1		
39 40	Metal containers										
41	Screw machine products and stampings										
42 43	Other fabricated metal products										
44+45 46	Farm, construction, and mining machinery										
47 48	Metalworking machinery and equipment										
49 50	General industrial machinery and equipment  Miscellaneous machinery, except electrical										
51 52	Computer and office equipment Service industry machinery										
53 54 55	Electrical industrial equipment and apparatus Household appliances										
55	Electric lighting and wiring equipment										
56 57	Audio, video, and communication equipment										
58 59A	Miscellaneous electrical machinery and supplies										
59B 60	Truck and bus bodies, trailers, and motor vehicles parts										
61 62	Other transportation equipment										
63 64	Ophthalmic and photographic equipment Miscellaneous manufacturing										
65A	Railroads and related services; passenger ground transportation										
65B 65C	Motor freight transportation and warehousing										
65D 65E	Air transportation										
66 67	Communications, except radio and TV										
68A 68B	Electric services (utilities)  Gas production and distribution (utilities)							59			
68C 69A	Water and sanitary services										
69B 70A	Retail trade Finance										
70B	Insurance										
71A 71B	Owner-occupied dwellings										
72A 72B	Hotels and lodging places										
73A 73B 73C 73D	Computer and data processing services Legal, engineering, accounting, and related services										
73C 73D	Other business and professional services, except medical Advertising										
74 75	Eating and drinking places Automotive repair and services										
76	Amusements										
77A 77B	Health services										
78 79 82	Federal Government enterprises										
84	General government industry										
85 T	Inventory valuation adjustment  Total commodity output	83,609	82,183	9,488	23,668	6,802	25,451	68,008	11,884	445,347	173,466
	The standary surput	05,003	02,103	3,400	25,000	0,002	20,401	00,000	11,004	170,041	. 7 3,700

### by Industries, 1987 Benchmark

at producers' prices]

Ordnance and accessories	Food and kindred products	Tobacco products	Broad and narrow fabrics, yarn and thread mills	Miscel- laneous textile goods and floor coverings	Apparel	Miscel- laneous fabricated textile products	Lumber and wood products	Furniture and fixtures	Paper and allied products, except containers	Paperboard containers and boxes	Newspapers and periodicals	Other printing and publishing	Industrial and other chemicals	Agricultural fertilizers and chemicals	stry number
13	14	15	16	17	18	19	20+21	22+23	24	25	26A	26B	27A	27B	npul
accessories	kindred products	products	narrow fabrics, yarn and thread mills	laneous textile goods and floor coverings		laneous fabricated textile products	wood products  20+21  131  (*)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22+23  22+23	and allied products, except containers	containers and boxes	and periodicals	printing and publishing	and other chemicals	fertilizers and chemicals	Jequinu Alisippi Jequin
1 1 38 656 16 1,002 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1	26,381	1 1 6 5 5	43 1 2 2	14 2 132 339	11 11 11 11 11 11 11 11 11 11 11 11 11	29 	155 11 14 14 12 3 10 58 2 48	111 112 100 20 	10 10		13 26 92	4 4 4 4 8 18 8 11 1 7 13 20 223 58 8 8 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-5-

### Table 1.—The Make of Commodities

							ıaı	л <b>с</b> 1.—1	ne make		nodities as of dollars
ndustry number	For the distribution of industries producing a commodity, read the column for that commodity  For the distribution of commodities produced by an industry, read the row for that industry	Plastics and synthetic materials	Drugs	Cleaning and toilet preparations	Paints and allied products	Petroleum refining and related products	Rubber and miscel- laneous plastics products	Footwear, leather, and leather products	Glass and glass products	Stone and clay products	Primary iron and steel manu- facturing
Indust	Commodity number	28	29A	29B	30	31	32	33+34	35	36	37
1 2	Livestock and livestock products										
3 4	Forestry and fishery products Agricultural, forestry, and fishery services										
5+6 7	Metallic ores mining  Coal mining									1	
8 9+10	Crude petroleum and natural gas Nonmetallic minerals mining					4,162 72				299	4
11+12 13	Construction										1
14 15	Food and kindred products		136	39	2	4	37	84			
16 17	Broad and narrow fabrics, yarn and thread mills	1,663 110					15 132	(*)		3 1	
18 19	Apparel Miscellaneous fabricated textile products Lumber and wood products			1 2			17 17	42 10	(*) 43	1	
20+21 22+23	Furniture and fixtures						76 76	1 3	43 87	29 2	2 14
24 25	Paper and allied products, except containers	4		123	9	1	850 275	1		5	
26A 26B 27A	Newspapers and periodicals Other printing and publishing			1 769	143	922	1 31 297	24	1	4 135	26
27A 27B 28	Industrial and other chemicals All structural fertilizers and chemicals Plastics and synthetic materials	4,851 213 36,104	489 181 71	80 72	31	3 3	1 686			133	
29A 29B	Prestice and synthetic interestals Drugs Cleaning and toilet preparations	16	34,447 286	719 30,826	37	44	21			1	
30 31	Paints and allied products Petroleum refining and related products	115		21	11,832	7 132,214	7		1	12 100	
32 33+34	Rubber and miscellaneous plastics products Footwear, leather, and leather products	232	7	11	21	132,214	82,604	23 8.563	39	43	5
35 36 37	Glass and glass products Stone and clay products	4	11	50	2	115	18 99		15,893 49	38 42,323	10
37 38 39	Primary iron and steel manufacturing				1 1	1 1	7 48		1 65	15 38	65,015 494
39 40	Metal containers	7					45 229		18	37	81
41 42	Screw machine products and stampings	3	1	3	1 1	2	97 237	3 12	18 7	2 42	10 109
43 44+45	Engines and turbines					1	11		1	4	14 104
46 47	Materials handling machinery and equipment Metalworking machinery and equipment Special industry machinery and equipment General industrial machinery and equipment	1		1	1		4 53			1 42	3 28
48 49	Special industry machinery and equipment	1	1	3 1	2 3	1	34 56		1	6 12	16 27
50 51	Computer and office equipment				1	1	33 2			4 2	49 17
51 52 53 54 55 56 57	Service industry machinery Electrical industrial equipment and apparatus	9		13		8	68 14 8		1	19	
55 56	Household appliances Electric lighting and wiring equipment	6			27	3	72		25	8	133
57 58	Recomponents and accessories  Miscellaneous electrical machinery and supplies	21					66		1	5	2
59A 59B	Motor vehicles (passenger cars and trucks) Truck and bus bodies, trailers, and motor vehicles parts	1			6	13	90		1	11	20
60 61	Aircraft and parts Other transportation equipment	4				1	15			1	2
62 63	Scientific and controlling instruments	3	204 28	84 3	59		132 78	2	41 1	13 2	1
64 65A	Miscellaneous manufacturing			31	2	1	111	14	29	22	7
65B 65C	Motor freight transportation and warehousing										
65D 65E	Air transportation										
66 67	Communications, except radio and TV										
68A 68B	Electric services (utilities)  Gas production and distribution (utilities)					20					
68C 69A	Water and sanitary services Wholesale trade										
69B 70A 70B	Retail trade										
71A 71B	Insurance Owner-occupied dwellings Real estate and royalties										
72A 72B	Neal estate and royalies Hotels and lodging places Personal and repair services (except auto)										
73A 73B	Computer and data processing services Legal, engineering, accounting, and related services										
73C 73D	Other business and professional services, except medical Advertising										
74 75	Eating and drinking places Automotive repair and services										
76 77A	Amusements Health services										
77B	Educational and social services, and membership organizations Federal Government enterprises										
78 79 82	State and local government enterprises									33	
84 85	Household industry										
Т	Total commodity output	43,407	35,862	32,872	12,183	137,599	86,851	8,787	16,335	43,340	66,201

### by Industries, 1987 Benchmark—Continued

at producers' prices]

Primary nonferrous metals manufacturing	Metal containers	Heating, plumbing, and fabri- cated struc- tural metal products	Screw machine products and stampings	Other fabricated metal products	Engines and turbines	Farm, con- struction, and mining machinery	Materials handling machinery and equipment	Metalworking machinery and equipment	Special industry machinery and equipment	General industrial machinery and equipment	Miscellaneous machinery, except electrical	Computer and office equipment	Service industry machinery	Industry number
38	39	40	41	42	43	44+45	46	47	48	49	50	51	52	Indi
														2
														3
											(*)			5+6
4														9+10 11+12
10	3	12	6	8	4	10	2	7	7	18	7		2 2	1:
				3					1					15
			1	12 2		1 2 (*)	1	13					1	11
(*) 2 1	(*) 6	5 74 71	2 5	24 23 71		1 1	11	1 1 2	2 2		2	1 3	1 14	20+2 22+2
	39		1	173 3				1	9 2	3 2	2 1	18	2	24
	74	1	6	91				2 10	4	13		47		26/ 26/
78		29	12	3	1	1		10	24	4	1		3	271
				1				2		1 1			1 9	9+1.11+1.1
				2		1				1			1	3
62	14	108	83	164 2		17	1	329 1 1	23 1	26	9	6	33	33+3
(*) 384 54,561		53 42 81	10 26	14 1,818		11 30	1	62 176	4 2	7 51	1 4	5 37	5	3
	11,544	1 76	26 55 9	173 2				180 1	2 4	10	2		13	3
19 11	15 30	42,018 111	169 30,298	410 162	4	68 7	35 2 18	68 616	32 23	101 41	46 36	3 4	76 4	4
94 31	2	229 3	159 1	41,845 3	12,864	62 31		147 42	33 5	164 35	159 64	10	36 1	4
1 21	1	40 19	71 4 78	80 23 131	202 1 1	25,219 35 118	6,839	108 19 19,849	57 171	55 138	20 144	1 2 8 7	33 13 7	44+4
4 17		3 62 40 19 44 126 47	5 28	90 152	4 106	33 147	136 6,839 23 64 54 21	112	32 23 33 5 30 57 171 15,331 208 29 47 33 24	164 35 106 55 138 188 21,625 68 30 138 94	46 36 159 64 93 20 144 51 182 18,546 29 21 13	7 2	110 127	4
11		1	29 1	90 152 399 24 58 35 15	7	16		55 106 13 5 8 1	29 47	68 30	18,546 29	11 51,717	12	5
18 2 5 21	 7	164 8	60 23	58 35	40	6 3 1	16 7 1	5 8	33 24	138 94 18	13	6 30	20,906 15 222	5
21 15		10	78 5 28 29 1 1 60 23 36 20 3 3 22 8	109		1 4	3 6	9	8	1	3 68 3	19 127	1	5
15 54 253		8 28 28 10 10 5 7 7 4 4 8 54 51 52 27 22 14	22 8	12 95 10		2		1 11 5	94 4	3 6	3 6 15	1,711 81	2 3	5
44		8 54	438 105 17	371	9 609 440 70	12 79 2 77	1 57	5 29 19 19	7	1 152	234	1	62 1	59. 59
9		51 52 27	17 2 12 2	110 9 180	70 35	77 3	57 47 3 26	3 14	60 2 70	16 84	234 45 14 32 1	11 1 260	7 14	6
5	1	2	2 18	2				2 6	41 5	8 7	1 4	303 1	3 2	6
														65 65
														65 65
														6
														68
														680 69
														69 70
														701 71.
														72
														73.
														656 651 668. 688. 688. 699. 700. 701 711 711 711 733. 733 737 77. 77. 77. 77. 77. 77. 77
														7 7 7
														77,
														7
														8 8
55,746	11,739	43,686	31,826	47,022	14,394	26,005	7,376	22,051	16,411	23,221	19,855	54,431	21,746	8

### Table 1.—The Make of Commodities

								JIO 11 1	iie wake		s of dollars
try number	For the distribution of industries producing a commodity, read the column for that commodity  For the distribution of commodities produced by an industry, read the row for that industry	Electrical industrial equipment and apparatus	Household appliances	Electric lighting and wiring equipment	Audio, video, and communi- cation equipment	Electronic components and accessories	Miscel- laneous electrical machinery and supplies	Motor vehicles (passenger cars and trucks)	Truck and bus bodies, trailers, and motor vehicles parts	Aircraft and parts	Other transpor- tation equipment
snpul	Commodity number	53	54	55	56	57	58	59A	59B	60	61
ледшили Ацятри	Livestock and livestock products Other agricultural products Forestry and fishery products Agricultural products Forestry and fishery products Metallic ores mining Crude petroleum and natural gas Nonmetallic minerals mining Construction Ordrance and accessories Food and kindred products Tobacco products Turniture and fixtures Paper and alield products except containers Paper and alield products except containers Paper and alield products. Paper and alield products Industrial and other chemicals Agricultural fertilizers and chemicals Plastics and synthetic materials Drugs Cleaning and tollet preparations Paints and alield products Rubber and miscellaneous plastics products Stone and day products Stone and day products Stone and day products Stone and day products Tobacco and day products	equipment and apparatus  53	appliances	and wiring equipment	communication equipment 56	3nd accessories  57	machinery and supplies	(passenger cars and trucks)	motor vehicles parts	and parts	tation equipment
73C 73D 74	Other business and professional services, except medical Advertising Eating and drinking places										
75 76 77A	Automotive repair and services Amusements Health services										
77B 78 79	Educational and social services, and membership organizations Federal Government enterprises State and local government enterprises										
82 84 85	General government industry Household industry Inventory valuation adjustment										
Т	Total commodity output	23,277	15,670	17,421	41,037	48,203	20,987	133,509	68,327	84,421	24,074

### by Industries, 1987 Benchmark—Continued

at producers' prices]

Scientific and controlling instruments	Ophthalmic and photo- graphic equipment	Miscel- laneous manufac- turing	Railroads and related services; passenger ground transportation	Motor freight transportation and warehousing	Water transportation	Air transportation	Pipelines, freight forwarders, and related services	Communications, except radio and TV	Radio and TV broadcasting	Electric services (utilities)	Gas production and distribution (utilities)	Water and sanitary services	Wholesale trade	Industry number
62	63	64	65A	65B	65C	65D	65E	66	67	68A	68B	68C	69A	lu dr
				807										1 2
														3 4
											44.000			5+6
											11,968			9+10 11+12
1,254		2 2												13
1		2 9												15 16
74 6 5 6 55 221		5 24 40												17
6 55		13 28												20+21
221 1	71	103 26												24
1	21	6 146												26A 26B
1 7	14	8 5												27A 27B
1 281		2												2 2 3 4 5 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1
53		36 10 (*)												30
72 9	11	126 6												32
72 9 15 44 79 16	65	5 20												35 36
79 16		1									26			37
93	3	8 13												40
168	1	42												42
3 2		2												44+45 46
45 24	3 1	10 6												47 48
57 16	1	7												49 50
93 28 168 2 3 2 45 24 57 16 58 24 152 12 33 1,140 343 307	2	11 7 2												52
12	1 32	35 10												54
1,140 343	9	19 16												56 57
1		13 8												59A
141 671 3	2	13 14												60
80,003 239 96	53 18,402	23 13												62
96	16	30,178	43,271	162 113,492										64 65A
				113,492	24,053							2,603		65E 65C
			302	733	108	76,253 1,465	23,301	400 404						65D 65E
								160,164	2,250	132,335		36		67
										132,333	67,248	10,971		68E
													423,751	69A 69B
														65C
														71A 71B
														72E
														73E
														73D
														75
										7 240				77A
			4,822		37	1,342				7,216 16,902	2,938	14,859		79
														84
85,858	18,707	31,083	48,394	115,194	24,198	79,060	23,301	160,164	2,250	156,453	82,180	28,469	423,751	1

### Table 1.—The Make of Commodities [Millions of dollars

									[Milli	ons of dollars
nber	For the distribution of industries producing a commodity, read the column for that commodity  For the distribution of commodities produced by an industry, read the row for that industry	Retail trade	Finance	Insurance	Owner- occupied	Real estate and	Hotels and lodging	Personal and repair services	Computer and data	Legal, engi- neering, accounting,
ndustry number	To the distribution of commodities produced by an industry, read the low to that industry	Netall trade	Tillance	mourance	dwellings	royalties	places	(except auto)	processing services	and related services
Indi	Commodity number	69B	70A	70B	71A	71B	72A	72B	73A	73B
1	Livestock and livestock products									
3	Other agricultural products									
4 5+6	Agricultural, forestry, and fishery services									
7	Coal mining									
9+10	Nonmetallic minerals mining									
11+12 13	Construction									
14 15	Food and kindred products  Tobacco products									
16	Broad and narrow fabrics, yarn and thread mills									
17 18	Miscellaneous textile goods and floor coverings									
19 20+21	Miscellaneous fabricated textile products  Lumber and wood products									
22+23	Furniture and fixtures									
24 25	Paper and allied products, except containers Paperboard containers and boxes									
26A 26B	Newspapers and periodicals									
27A	Industrial and other chemicals									
27B 28	Agricultural fertilizers and chemicals									
29A 29B	Drugs									
30 31	Paints and allied products  Petroleum refining and related products									
32	Rubber and miscellaneous plastics products									
33+34 35	Footwear, leather, and leather products									
36 37	Stone and člay products									
38	Primary nonferrous metals manufacturing									
39 40	Metal containers									
41 42	Screw machine products and stampings									
43	Engines and turbines									
44+45 46	Farm, construction, and mining machinery									
47 48	Metalworking machinery and equipment									
49	General industrial machinery and equipment									
50 51	Miscellaneous machinery, except electrical  Computer and office equipment								2,083	
52 53	Service industry machinery									
54 55	Household appliances									
56	Electric lighting and wiring equipment								13	
57 58	Electronic components and accessories									
59A 59B	Motor vehicles (passenger cars and trucks)									
60	Aircraft and parts									
61 62	Other transportation equipment								51	51
63 64	Ophthalmic and photographic equipment									
65A	Railroads and related services; passenger ground transportation									
65B 65C	Motor freight transportation and warehousing									
65D 65E	Air transportation Pipelines, freight forwarders, and related services									
66	Communications, except radio and TV									
67 68A	Radio and TV broadcasting									
68B 68C	Gas production and distribution (utilities) Water and sanitary services									
69A	Wholesale trade									
69B 70A	Retail trade	420,693	280,874	4,020		79			1,640	
70B 71A	Insurance			172,850	325,144					
71B	Real estate and royalties				320,144	380,275	40.004			
72A 72B	Hotels and lodging places					934	40,064	66,233		
73A 73B	Computer and data processing services								60,821	177.931
73C 73D	Other business and professional services, except medical							35	79	,001
74	Advertising Eating and drinking places									
75 76	Automotive repair and services									
77A 77B	Health services Educational and social services, and membership organizations									
78	Federal Government enterprises	1,301		751		737		3		
79 82	State and local government enterprises	966	76			7,596				
84 85	Household industry Inventory valuation adjustment									
T	Total commodity output	422,960	280,950	177,621	325,144	389,620	40,064	66,271	64,687	177,982
					1					

### by Industries, 1987 Benchmark—Continued

at producers' prices]

73C 73D	74	75	76	77A	77B	78	79	81	82	84	85	99 87,484 86,742 7,456 22,201 6,807 25,452 84,228 12,964 618,813	1 2 3 4 6 7 5+6 7
93								3				86,742 7,456 22,201 6,807 25,452 84,228 12,964 618,813	2 3 4 5+6
93								3				7,456 22,201 6,807 25,452 84,228 12,964 618,813	3 4 5+6
93								3				6,807 25,452 84,228 12,964 618,813	5+6
93								3				84,228 12,964 618,813	' '
93								3				618,813	8
93								3					9+10 11+12
93												31,438 325,972	13 14
93												26,383 38,244	15 16
93												15,982 64,184	17 18
93								108				16,987 72,875	19
93								1				36,777	22+23
93								80 191				81,982 25,511	24
1,949												49,727 87,378	26A 26B
1,949								121				84,375 13,512	27A 27B
1,949												40,672 36,012	28 29A
1,949												33,229 12,072	9+10 11+12 13 14 15 16 177 18 19 20+21 22+23 25 26A 27B 28 29A 29B 30 30 31 31 35 36 37 38 39 40 41 42 43 44+45 46 47 48 49 50 51 51 55 55 55 55 56 57 58 59A 59B 60 61 61 63 65A 665B
1,949												137,871	31
1,949												85,572 8,700	33+34
1,949								6				16,085 43,732	35 36
1,949								116 166				68,091 56,376	37 38
1,949								256 83				11,904 43,930	39 40
1,949								309 37				31,973 44,424	41
1,949								52				14,096	43
963								15 5				26,753 7,194	44+45 46
963								9				21,227 16,254	47 48
963								36 15				23,236 20,003	49 50
963								12 38				55,819 22,409	51 52
963								25 27				22,665 15,361	53
963								8				17,615	55
963			27									40,700 48,654	56 57
963								26				20,823 134,115	58 59A
963								146 155				68,991 82,128	59B 60
963								11 8				24,082 85,463	61 62
963								14				19,725 33,089	63
								26				43,458	65A
												116,095 24,053	65C
												76,253 25,908	65E
												161,127 29,396	66 67
												132,371 67,549	68A 68B
							291					11,262 423,751	68C 69A
												420,694 286,613	69B 70A
. I												172,850	70B
												325,144 380,275	71B
70												40,997 66,302	72A 72B
												60,821 177,931	65D 65E 66E 67E 68A 68B 68B 68B 68B 69A 70A 70B 71A 72B 72A 73B 73B 73C 73D 74 75 76 76 76 88 88 85 5
211,165 9,333 15,884		92	22									220,728 15,884	73C 73D
313								217				209,394 130,704	74 75
45 118	209,177		78,148	338,393								78,192 338,511	76 774
408	209,177		75		152,270	33 460						152,678	77B
			416			33,469	18,754		400 70-			45,396 69,484	79
	209,177	344 744							466,785	7,709		466,785 7,709	82 84
211,758 109,406		344		l	152,270	33,469	19,045	2,321			-17,817	-17,817 <b>8,175,016</b>	8 <u>5</u>

### Table 2.1.—The Use of Commodities

	For the distribution of output of a commodity, read the row for that commodity	Livestock	Other	Forestry	Agri- cultural,	Metallic	0.1	Crude	Non-	•	Ordnance
Commodity number	For the composition of inputs to an industry, read the column for that industry	and livestock products	agricultural products	and fishery products	forestry, and fishery services	ores mining	Coal mining	petroleum and natural gas	metallic minerals mining	Con- struction	and accessories
- Co	Industry number	1	2	3	4	5+6	7	8	9+10	11+12	13
1 2	Livestock and livestock products Other agricultural products	16,818 23,778	1,584 3,855	27	1,251 2,089					241	
3 4	Forestry and fishery products			168 1,288	32	/*\					
5+ <u>6</u>	Agricultural, forestry, and fishery services	4,003	6,542			519				3,250	2
8	Coal mining					11	2,730	3,149	61	1	4
9+10 11	Nonmetallic minerals mining	6	254		2	7	32		452	4,834 44	
12 13	Maintenance and repair construction	458	710	83 29	288	88	195	1,844	116	338 13	208 899
14 15	Food and kindred products	11,566		305	33	1	(*)	3	2	(*)	(*)
16 17	Broad and narrow fabrics, yarn and thread mills	25	44 26	72	114	1	18		4	1,760	4
18 19	Apparel Miscellaneous fabricated textile products		88	31	79	(*)	8	4	4	120 223	12 (*) 27
20+21 22+23	Lumber and wood products Furniture and fixtures	36	295			38	62	(*) (*)	3	33,521 1,271	27
24	Paper and allied products, except containers	110	139	1	10	1	8	8	38	1,184	7
25 26A	Paperboard containers and boxes	5 9	333 10	1	185	(*) (*) 3	1	2	4 24	45 52	22 3 22 127
26B 27A	Other printing and publishing	9 102	10 64	40 14	24 7	204	12 138	32 837	8 220	204 1,310	127
27B 28	Agricultural fertilizers and chemicals	142	4,607	40	2,972	1	2		(*)	8	6 31
29A 29B	Drugs	198 54			1			7	2	10	2
30 31	Paints and allied products	335	1,175	4 294	215	127	390	6 289	194	4,688 11,220	4 31
32 33+34	Rubber and miscellaneous plastics products Footwear, leather, and leather products	162 25	357 (*)	2	36	82	247	26	122	6,677 29	198
35 36	Class and glass products Stone and clay products	6	100	2	10 12	1 23	(*) (*) 80	8 265	4 2	993 31,054	3 50
37	Primary iron and steel manufacturing	14	15			134	19	260	43 70	10,023	473 562
38 39	Primary nonferrous metals manufacturing			18		15	13			6,194	502
40 41	Heating, plumbing, and fabricated structural metal products	17 27	19			43 35	66 146	46	61 33 37	31,335 280	189
42 43	Other fabricated metal products	68	153	53 14	26 44 78	35 9 37	82 111	383 22	l 57 l	8,090	462 28
44+45 46	Farm, construction, and mining machinery	249	663	21		129 35 8	1,084 95	239	253 142	1,419 1,416	
47 48	Metalworking machinery and equipment	83	92	(*)	2	8	8	77	8	200	87
49 50	General industrial machinery and equipment	27 47	50 123	8	4 4	78 12	428 78	157 36	164 19	1,513 126	235 119
50 51 52	Computer and office equipment				2					6,638	
53 54	Electrical industrial equipment and apparatus	10	27			27	90	166	64	2,743 1,505	25
52 53 54 55 56 57	Electric lighting and wiring equipment	19	43	1	8 (*)	4	28 (*)	19 1	8	9,894 2,011	2 874
57 58	Electronic components and accessories	152	404	1	10	6	2	2	5	845	870 19
59A 59B	Motor vehicles (passenger cars and trucks)  Truck and bus bodies, trailers, and motor vehicles parts	90	217	5	40	13			3	414	1
60 61	Aircraft and parts Other transportation equipment			156	1 12	5					3,195
62 63	Scientific and controlling instruments  Ophthalmic and photographic equipment			15 (*)	1 8	5	3	3 10	1 2	1,421 116	398 19
64 65 A	Miscellaneous manufacturing Railroads and related services; passenger ground transportation	15 824	16 249	1	14 92	2 20	4 652	5 45	6 36	878 1,557	7
65B	Motor freight transportation and warehousing	1,914	1,290	24	208	52 7	159 54 19	154	182	8,274	153
65C 65D	Water transportation	107 20	46 100	24 24 7 2	208 33 418 3	25 2	19	103 86	12 48 3	302 853	2 145
65E 66	Pipelines, freight forwarders, and related services Communications, except radio and TV	222	15 246	4	1	9	6 21	120	22	37 2,315	145
67 68A	Radio and TV broadcasting	972	515	3	59	647	611	1,292	651	1,047	260
68B 68C	Gas production and distribution (utilities)	111	164 368	1	2	74 15	11 60	556 131	218 135	322 252	89 31
69A 69B	Wholesale trade	3,861 75	3,567 228	186 8 77	1,452 67	15 133 8	720 9	523 6	260 3	26,466 24,114	585 4
70A 70B	Finance	796 438	849 1,797	77 102	103 80	69 23	169 31	223 18	231 6	7,098 1,966	58 32
71A 71B	Owner-occupied dwellings	3,000	7,097		179	85	622	14,641	154	2,711	264
72A 72B	Hotels and lodging places	49 26	54 70	14 7	24 182	12 2	5 4	27 10	106 20	707 139	27 12
73A 73B	Computer and data processing services  Legal, engineering, accounting, and related services	108	121	16 252 132	90 243	33 113	3 207	5 801	115	6 36,297	15
73C 73D	Other business and professional services, except medical Advertising	362 19	954 21	3	206	38 5 8	82 46	144 853	96 112 19	14,948 244	325 346 615
74 75	Eating and drinking places Automotive repair and services	16 50	17 179	11 131	92 80 588	8 187	19 197	69 191	23 17	1,440 6,117	88 28
76 77A	Amusements Health services	744			282		1	2	3	42	2
77B 78	Educational and social services, and membership organizations Federal Government enterprises	12	13	21 6	40 50	14 10	42	29	15 17	25 243	9
79 80	State and local government enterprises Noncomparable imports	15	32 17	5	17 37	6 31	4 18	3 792	3	121 5	6 18
81 82	Scrap, used and secondhand goods General government industry									14	
83 84	Rest of the world adjustment to final uses Household industry										
85 I	Inventory valuation adjustment Total intermediate inputs	72,410	40,021	3,748	12,253	3,331	9,964	28,744	4,751	327,813	12,510
VA	Value added Total industry output	15,074 <b>87,484</b>	46,721 <b>86,742</b>	3,748 3,708 <b>7,456</b>	9,948 <b>22,201</b>	3,476 <b>6,807</b>	15,488 <b>25,452</b>	55,484 <b>84,228</b>	8,213 <b>12,964</b>	291,000 <b>618,813</b>	18,928 <b>31,438</b>
		07,404	00,742	1,430	22,201	0,007	20,402	07,220	12,304	510,013	J 1,430

# by Industries, 1987 Benchmark at producers' prices]

Food and kindred products	Tobacco products	Broad and narrow fabrics, yarn and thread mills	Miscellane- ous textile goods and floor coverings	Apparel	Miscellane- ous fabricated textile products	Lumber and wood products	Furniture and fixtures	Paper and allied products, except containers	Paperboard containers and boxes	Newspapers and periodicals	Other printing and publishing	Industrial and other chemicals	Agricultural fertilizers and chemicals	Plastics and synthetic materials	
14	15	16	17	18	19	20+21	22+23	24	25	26A	26B	27A	27B	28	L
60,821 22,262	1,707	262 3,192	34	13 31								86			
2,033 8	(*)	3	1	295		5,874 22	1	108 6 15	(*)	1	2	68 2 636	1	1 6	
105	15	28	10	4	4	21	7	428	2	1	13	273 1,043	5 552	132 4	
810	39	179	48	129	42	423	289	303 397	88	187	238	576 575	926 55	158	
54,695	1	(*) 1	22	(*) 1	4	1 7	15	344	3	3	9	348	92	53	
13	3,664	9,897 346	3,621 683	13,040 19	3,875 1,264	5 136	1,236 973	677 356		5	94 54			123	
11 72	2	2	11 17	12,117 1,506	161 552 52	12 17	13 58 3,229	11 1	1	1 1 2	5 1	(*) 23 48	(*) 1	5 (*)	
3,142	(*)	24	1 94	111	39	20,956 71 64	146 51	4,804 1 13,139	11,548	6,485	14,631	721	48	463	
5,856 10 1,880	952 2 377	131 2 11	99 1 7	200 4 54	200 2 30	279 7 38	555 4 33	1,088 4 110	53 1 13	12 443 3,358	336 206 7,054	409 7 52	55 1 190	269 2 15	
1,505 187	51	852	594	78	103	848 186	33 215	3,444 205	491	379	2,389	18,226 366	1,371 2,533	13,509 95	
121 890 154	18	5,251 88	3,825 78	1,526 294	509	329 1	114	2,005 386	557		129	757 136 104	25	1,470 230	
369 5,261	35 71	1 104 198	1 31 117	(*) 112	13 496	386 446 690	376 84 1,197	19 565 1,999	66 182	81 33	39 238 1,616	408 1,012	69 115	89 103	
1 3,923	1	2 207	6	302 313	230	9 211	104 137	1 5	73 3 (*)	2	13 1	994 2 133	39	1,685 (*) 26	
19 5	1 1	4 2	2 4	1 (*)	1	409 31 53	131 1,528 469	90 2 47	68 54	1 1	9 7 178	68 177 59	26 (*)	(*) 26 14 (*) 2	
8,683	2					479						462	55	3	
662 1,020	185	2	1	7	1	1,007 1,505	372 1,378	502	123	1	53	10 650	1 40	13	
(*)	1 6	12 14	5	1 9	6	39 147		1 44	18			35	2	21	
(*) 38 90 220	7	109	224	160 7	18	83 113	79 13 71	368 55 95	100 100 27	77 2 13	23 359 2 40	410 21	16	9 83	
90 7	14	31	10	20	8	190 22	38	95	27	13 7	40 47	77 21	5	48	
(*) 7		(*)		1	(*)	44 147	59				(*)	41			
1	(*)	(*) 2	(*) (*)		(*)	114 1	6 1	5 1	(*)	1	3	3 1	(*)	(*)	
4 19	1	1	(*)	(*) 5		12	1 9	4 30	1 8	38 13	29 35	(*) 4	(*)		
						6									
31 19 18	5 2 1	5 3	1 2 2	4 6 305	3 2 105	12 14 43	14 10 62	38 12 9	7 3 3	43 121 13	172 527 141	84 20 5	6 1 (*)	5 5 3 475	
1,842 5,132	10 110	75 277	43 238	18 280 7	15 123 7	663 1,026 111	160 369	828 1,627 107	287 570 17	174 327	430 1,005 30	908 1,494	(*) 281 781	1 570	1
498 484 3	3 29 (*) 28	9 29 1	27 9 1	114 1	21	81 5	15 83 1	387 9	48 1	5 940 2	368 4	156 232 42	49 15 1	131 59 12 91	
2,750	28 87	48 1.088	28 216	95  519	29  105	125 1.044	89 344	152  2.292	72 277	206	241 725	207 2,850	39 304	l	
1,336 442	20 9	1,088 152 114	112	96 34	105 40 52	1,044 344 182	82 66 2,039	2,292 994 1,074	80 29	21	95 77	2,389 318	466 113	964 771 149	
16,850 53 937	536 8 131	1,807 11 106	26 433 2 60	2,171 19 281	951 1 129	3,806 73 446	16 379	3,637 80 303	999 16 41	21 782 27 256	3,080 69 449	3,141 37 274	747 3 226	1,743 10 104	
355 866	37 78	41 71	24	76 385	102	196	58 257	216 221	47 118	70 722	191	159 441	26 37	77	
209 192	8 7	3 191	57 2 52 10 36 99	16 144	16 69	22 32 22 230	19 27	167 127	2 11	86 53	347 48	41 41 38 66	3 4	30 81	
123 866 1,802	11 61 97	30 91 466	10 36 99	13 175 342	4 46 136	22 230 546	16 421 749	184 205 450	29 69 184	451 897 1,945	266 616 1,064	66 1,701 1,164	6 83 335	17 1,038 358 479	
8,657 358	783 19	227 76	343 32 20	992 191	202 51	987 218	730 160	857 132	40 53	869 201	1,061 533 879	1,135 220	335 194 17	57	
477 5	101	113 1	1	292 2	4 (*)	502 5	178 15	732 3	184 1	327 5	16	116 5	30 (*)	91 1	
80 235 288	12 54 8	22 38 18 25	3 24 7	25 149 12	97 38	175 71 25	63 63 14 32	62 72 153	4 22 8	78 586 8	124 594 21	25 85 67	10 5 7	53 19 19	
5,056	47	25	166 5	12 59	88	13	32	84 828	8 2	55	234	636	101 33	147	
225,473	9,588 16,795	26,104	11,628	37,181	10,072	46,952	19,518	47,704	16,705	20,689	42,232	47,098	10,148	26,308	
100,498 <b>325,972</b>	16,795 <b>26,383</b>	12,140 <b>38,244</b>	11,628 4,354 <b>15,982</b>	37,181 27,003 <b>64,184</b>	6,915 <b>16,987</b>	46,952 25,923 <b>72,875</b>	19,518 17,259 <b>36,777</b>	47,704 34,278 <b>81,982</b>	8,806 <b>25,511</b>	29,037 <b>49,727</b>	42,232 45,145 <b>87,378</b>	37,277 <b>84,375</b>	3,364 <b>13,512</b>	26,308 14,365 <b>40,672</b>	

### Table 2.1.—The Use of Commodities

_											
lagu	For the distribution of output of a commodity, $$ read the row for that commodity		Cleaning	Paints and	Petroleum refining	Rubber and mis-	Footwear, leather,	Glass and	Stone and	Primary iron	Primary
Commodity number	For the composition of inputs to an industry, read the column for that industry	Drugs	and toilet prepara- tions	allied products	and related products	cellaneous plastics products	and leather products	glass products	clay	and steel manufacturing	nonferrous metals manufacturing
Comm	Industry number	29A	29B	30	31	32	33+34	35	36	37	38
1	Livestock and livestock products	86	15								
2 3	Other agricultural products  Forestry and fishery products	27 6		15							
4	Agricultural, forestry, and fishery services	Ĭ	(*)		2	3		1	2	2	2
5+6 7	Metallic ores mining	9	5	43	21	25	1	2	33 399	1,969 1,449	3,933 34
8   9+10	Crude petroleum and natural gas  Nonmetallic minerals mining		9	13 17	75,971 490	75 35	2	184	3,513	10 231	18
11 12	New construction Maintenance and repair construction	131	75	46	952	392	28	130	328	1,294	273
13	Ordnance and accessories					1			57	20	
14 15	Food and kindred products  Tobacco products	61	558	160	42	17	893	1	25	ь	6
16 17	Broad and narrow fabrics, yarn and thread mills		18		39	812 894	239 197		126 2		43 1
18 19	Apparel Miscellaneous fabricated textile products	(*) (*)	1 2	(*)	1	12 24	4	3	6 2	8	4 (*)
20+21	Lumber and wood products		6		(*) 59	189	24	(*) 237	95	136	151
22+23 24	Furniture and fixtures	161	61	2	9	789	6	15	551	28 15 79	17
25 26A	Paperboard containers and boxes	314	1,146	(*)	191	987 9	66 1	707 1	142 5	79 3	103
26B 27A	Other printing and publishing Industrial and other chemicals	182 697	345 2,971	(*) 26 2,334	2 17 1,758	99 3,905	5 271	25 982	5 25 1,269	35 1,723	25 715
27B	Agricultural fertilizers and chemicals	54									
28 29A	Plastics and synthetic materials	3,758	468	1,441	60	15,955	109		189		784
29B 30	Cleaning and toilet preparations Paints and allied products	21	1,535 63	5 252	417 6	29 65	33	20	98 70	1 23	1 31
31 32	Petroleum refining and related products Rubber and miscellaneous plastics products	39 749	329 1,713	80 1	9,933 620	235 4,074	10 250	45 173	238 125	332 139	364 647
33+34	Footwear, leather, and leather products	(*)			3	5	1,601	2	1	2	
35 36	Glass and glass products	233	231	8 132	277 51	450 247	7	1,309 320	71 5,111	5 996	48 263
37 38	Primary iron and steel manufacturing		2	16	42	300 115	1	6	277 23	10,233 1,470	515 17,261
39	Metal containers	138	433	534	167				(*) 7	1,470	(*)
40 41	Heating, plumbing, and fabricated structural metal products  Screw machine products and stampings	12 64	16 196	6		44 439	9	35	100	275	90
42 43	Other fabricated metal products	65	390	21	397	860 15	43	2	219 2	772 11	528
44+45 46	Farm, construction, and mining machinery Materials handling machinery and equipment						/*\		13	17	10
47	Metalworking machinery and equipment	3	6	1	19	161	4	87	25	524	488
48 49	Special industry machinery and equipment	17	59	(*) 2	1	233 29	1 (*)	11 4	32	868	556
50 51	Miscellaneous machinery, except electrical	10 8	25	`Ź	41	255	`9	49	48	207	114
50 51 52 53 54 55 56 57	Service industry machinery									4	329
54	Electrical industrial equipment and apparatus					13 (*) 120	1	34 5	12	434 (*) 10	
55   56	Electric lighting and wiring equipment	1 (*)	(*)	(*)	13 (*)	120	(*)	3 (*)	32 (*)	10 (*)	2 (*)
57 58	Electronic components and accessories		(*)		1	55 23		1	1 1		1
59A	Motor vehicles (passenger cars and trucks)  Truck and bus bodies, trailers, and motor vehicles parts	5			54	13			9		12
59B 60	Aircraft and parts			(*)			(*)	4	9		
61 62	Other transportation equipment	28	6	2	24	43	1	16	16	4 21	14
63 64	Ophthalmic and photographic equipment	5 3	5 45	1	6 3	19 19	1 83	3 2	10 40	11 11	8 5
65A 65B	Railroads and related services; passenger ground transportation  Motor freight transportation and warehousing	27	112 369	158 280	153 563	603 2,331	18	185	644	1,149 916	336
65C	Water transportation	119 12	38 80	19	889	115	88	222 12 67	2,527 154	319	1,707 57
65D 65E	Air transportation	56 1	2	11 2	67 5,485	127 6	24 (*)	2	61	78 5	102 2
66 67	Communications, except radio and TV Radio and TV broadcasting	126	79	40	187	249	22	122	295	150	111
68A 68B	Electric services (utilities)	288 167	189 167	74 43	1,653	1,829 511	68	478 580	1,159 789	2,813 1,898	2,501
68C	Gas production and distribution (utilities) Water and sanitary services	34	48	8	1,260 209	202	19 10	580 34	120	489	807 95
69A 69B	Wholesale trade	1,439 9	1,583 5	343 (*)	6,367 19	4,238 32	369 (*)	682 6	1,269 28	4,274 23	3,417 27
70A 70B	Finance Insurance	186 32	88 52	(*) 16 6	1,232 361	386 181	(*) 50 10	69 26	286 91	247 138	267 112
71A 71B	Owner-occupied dwellings	211	150	58			45			157	
72A	Real estate and royalties	13	25	58 7	614 27	538 23	43	86 15	218 17	10	184 36
72B 73A	Personal and repair services (except auto)	48 5	21 7	1 1	54 126	118 265	12 5	12 23	55 89	76 108	85 35
73B 73C	Legal, engineering, accounting, and related services	1,568 1,071	169 395	54 62	376 1,156	580 685	30 90	23 53 93	168 408	191 1,246	140 561
73D 74	Advertising	366 66	853 61	54 62 55 18	321 51	704 246	130 28	375 37	864 122	2,010 119	537 91
75	Eating and drinking places	111	55	7	128	318	11	37 88	223	103	285
76 77A	Amusements Health services	2	2	(*)	3	7	(*)	1	2	2	2
77B 78	Educational and social services, and membership organizations Federal Government enterprises	172 26	38 51	4 8	145 72	297 86	2 31	8 19	39 49	13 87	37 46
79	State and local government enterprises	17 777	19 187	1 65	16 392	31	8	7	11	43 84	25
80 81	Noncomparable imports					1,155	2	87 72	130	2,583	789 2,376
82 83	General government industry										
84 85	Household industry Inventory valuation adjustment										
VA VA	Total infermediate inputs	13,840 22,172	15,583	6,504	113,613	47,948 37,624	5,018	7,875	23,169	42,721	42,163
T	Value added Total industry output	36,012	17,646 <b>33,229</b>	5,568 <b>12,072</b>	24,258 <b>137,871</b>	85,572	3,681 <b>8,700</b>	8,210 <b>16,085</b>	20,563 <b>43,732</b>	25,370 <b>68,091</b>	14,213 <b>56,376</b>

# **by Industries, 1987 Benchmark—**Continued at producers' prices]

Metal containers	Heating, plumbing, and fabricated structural metal products	Screw machine products and stampings	Other fabricated metal products	Engines and turbines	Farm, construction, and mining machinery	Materials handling machinery and equipment	Metalworking machinery and equipment	Special industry machinery and equipment	General industrial machinery and equipment	Miscellane- ous machinery, except electrical	Computer and office equipment	Service industry machinery	Electrical industrial equipment and apparatus	Household appliances	
39	40	41	42	43	44+45	46	47	48	49	50	51	52	53	54	
(*)	1 13	(*)	1	1	2	(*)	1	(*)	1	1	1	(*)	1	(*)	
1	5	12	21	4	12	(*)	6	(*)	1	1		2	6	4	
33	5  518	324	552	92	223	74	127	123	156	192	434	18	185	73	
(*)	6	2	4	1	3	2	4	3	2	1	1	2	3	2	
			1						136				4	34	
1 1	2 (*) 138	2 103 32	10 177	2	1	(*) 11	2 (*) 26	1 27	3 (*) 25	1 (*) 5	(*)	(*) 107	29	2 98	
4	33	31	10	7 24	(*) 7 64	1 2 5	6	4	26	7	(*) 78 90	11	120	98 17 35 308	
28 (*) 220	231 5 27	132 2 15	329 4 29	1 7	2 18	1 34	83 3 20	29 2 12	83 2 17	64 2 15	6 71	130 2 12	132 2 19	1 12	
61 17	119	242 49	742 169	4	35	10	168	193	18 41	19 36	13 56	86 96	43 89	96 366	
6	15	15 79	 17		70				4	1					
196 17 19	243 104 425	40 97	342 118 859	5 13 139	73 43 727	7 18 101	23 66 151	33 257	44 325	3 34 85 (*)	21 57 1,045	66 24 435	69 147 468	112 15 642	
(*) 13	1 325 125	55 76	114 171	(*) 48	3 (*) 57	13	(*) (*) 235	42 46	1 99	(*) 1 147	2 3 13	(*) 20 98	(*) 1 222	166 70	
2,571 3,008 199	8,294 3,194	7,905 980 4	5,190 2,049 8	1,938 652	2,988 225	607 95	1,467 427	1,017 365	2,135 639	1,338 910	335 709	1,229 1,140	1,117 1,214	1,144 312	
15	996 1,209	476	4 729	175 233	997 394	193 134	307 179	247 103	157 189	214 189	174 194	192 486	110 400	243	
159	1,475 1	585	2,453 33	213 1,306	440 1,249 971	260 66	170	216 60	215 83	253 12	302	389 30	220 104	567	
17	401	952	256	91	22 122	383 37	847	6 150 372	146	283	35	122	61	37	
3 20	202 115	2 63 370	30 187	188 451	709 682	225 165	130 612	380 427	1,559 382	210 1,076	27 42	398 242	89 127	101 23	
1	34 110	50	216	476	117	287	601	3 2 979	8 1 976	1 80	11,591  1,398	1,322 1,456	3  843	320 592	
(*) (*)	4	1 13 (*)	3	3 (*)	7 (*)	1	6	1 1	1 1	17	206 913	142	64	80 190	
(*)	 1		(*) 11 16	155	129	48	(*) 12 10	(*) 30 11	44 16	(*) 46 9	4,063 63	(*) 6	584 20	137 2	
2	9 11	21	11	22	9 72	1	9	2	4	2 22	9	1	4 27		
1 1	96 11	5 5	13 10	2 3	5 7	1 2	4 7	3 5	11 7	3 7	17 15	396 4	40 6	303	
1 41	96 11 22 137	4 107	15 107	1 8	11 38	4 7	7 27	2 21	4 22 132	2 22	24 26	4 32 30	17 61	108 31	
190 3 50 (*) 11	680 13 128 2 117	433 13 27 (*) 85	551 21 156	105 3 30	306 15 120	58 2 20 (*) 29	151 5 91	84 3 91	6 123	100 4 64	109 6 740	156 8 120	156 5 220	166 3 78	
(*) 11	2 117	(*) 85	2 173	39	1 80	(*) 29	1 86	1 76	1 101	(*) 72	192	(*) 76	1 126	36	
139 70	378 159	423 165	685 262 54	139 44	267 116	54 20	269 57	154 40	290 81	253 43 8	338 30	186 51 37	289 81	135 69 18	
139 70 26 796 3 38 20	34 2,479 30	165 79 1,639	2,302 21	14 707 2 50	29 1,742 8	11 460 3 32	16 784 15	16 929 6	18 1,153 8	565 7	45 4,147 18	1,526 4	20 1,407 8	1,114	
	186 84	205 57	306 85	50 22	104 58	14	108 46	106 28	110 40	166 28	361 76	59 31	246 41	110 23	
54 10	285 207	139 11 40	221 30	//1	79 25	38 5 9	177 40	127 29	130 38 29 58	188 20	521 337	84 36	120 128	41 33 17	
5 10 23 47	20 23 179	81 717	30 49 104 231 481 821	52 45	25 34 80 171	13 44	22 41 135	15 22 112	58 142	188 20 22 56 150 485 318	22 52 414	14 27 110	25 42 128 221 775	20 42 118	
241	409 278 139	225 265 69	481 821 134	52 45 90 104 22 26	198 612 74	64 149 24	135 205 355 91	150 272 57	142 222 291 76	485 318 84	473 151 199	132 346 56	221 775 77	118 318 35	
14 37 (*)	246 5	93 1	134 227 2	26 2	35 1	12	184	63	78 5	114 2	229 5	26 1	101	318 35 16 (*)	
9	38 46	97 36 11	40 52	5 11	6 43	2 12 (*) 12	19 22	6 29	19 33	20 16	29 22	20 8	9 26 7	25 50 8 52	
6 7	46 14 20 41	11 20	52 29 65 34	5 26	7 168 12	(*) 12	22 7 76 11	2 67	6 58 11	4 43 7	1,066	5 8	142	52 	
8,483	24,930	17,787	22,155	7,870	14,902	3,884	8,756	7,659	10,836	8,164	31,625	11,987	11,056	8,767	
3,421 <b>11,904</b>	19,001 <b>43,930</b>	17,787 14,187 <b>31,973</b>	22,155 22,269 <b>44,424</b>	6,226 <b>14,096</b>	14,902 11,852 <b>26,753</b>	3,309 <b>7,194</b>	8,756 12,470 <b>21,227</b>	7,659 8,595 <b>16,254</b>	10,836 12,400 <b>23,236</b>	11,839 <b>20,003</b>	31,625 24,195 <b>55,819</b>	10,422 <b>22,409</b>	11,609 <b>22,665</b>	8,767 6,594 <b>15,361</b>	

### Table 2.1.—The Use of Commodities

							•	abic 2.1	. 1110 0	Millio	ns of dollars
umber	For the distribution of output of a commodity, read the row for that commodity	Electric lighting and	Audio, video, and	Electronic components	Miscellane- ous electrical	Motor vehicles	Truck and bus bodies,	Aircraft and	Other trans-	Scientific and	Ophthalmic and photo-
Commodity number	For the composition of inputs to an industry, read the column for that industry	wiring equipment	communi- cation equipment	and accessories	machinery and supplies	(passenger cars and trucks)	trailers, and motor vehi- cles parts	parts	portation equipment	controlling instruments	graphic equipment
Com	Industry number	55	56	57	58	59A	59B	60	61	62	63
1	Livestock and livestock products										
2	Other agricultural products										
4 5+6	Agricultural, forestry, and fishery services	1	2	2	1 89	4	3	3	(*)	4 13	1
7 8	Coal mining	2	3	1	2	63	18	8	3	6	20
9+10	Crude petroleum and natural gas						1			(*)	
11 12	New construction	107	153	493	111	431	469	495	471	407	91
13 14	Ordnance and accessories	2	1	5	1	1 (*)	1 2	38 5	(*) 2	(*) 77	1
15	Tobacco products								11		
16 17	Broad and narrow fabrics, yarn and thread mills	11			8	117 328	112	84 96	122	312 394	18
18 19	Apparel	1	10 (*)	12 (*)	3 (*) 1	14 3,520	3 48	6 163	3 182	32 (*)	1 (*)
20+21 22+23	Lumber and wood products	29	(*) 27 446	11	1	4 1,678	199 4	31 25	471 60	173 62	
24	Paper and allied products, except containers	5	101	34	13 140	99	28	13	9	262	1,197
25 26A	Paperboard containers and boxes  Newspapers and periodicals	239 2	137 3	80 4	140 4	57 5 43	115 3	4	1	343 11	158 2
26B 27A	Other printing and publishing	15 99	102 107	32 789	25 390	43 606	32 216	53 36	9 55	145 298	18 470
27B 28	Agricultural fertilizers and chemicals Plastics and synthetic materials	409	105	169	111	55	365	96	184	574	123
29A	Drugs	409						30		3/4	
29B 30	Cleaning and toilet preparations	30	26	1	1	1,615	8 222	140	144	3 45	1
31 32	Petroleum refining and related products	30 372	24 1,418	42 2,539	47 898	236 8,393	145 2,158	114 703	47 289	126 1,444	31 402
33+34	Footwear, leather, and leather products		1	1	(*)	5	1	1	(*) 236	4 194	(*) 99
35 36	Glass and glass products	641 24	23 14	403 53	19	1,291 247	85 366	15 203	58	117	9
37 38	Primary iron and steel manufacturing	747 806	117 420	130 1,956	244 1,205	717 85	4,421 3,046	1,349 3,539	934 437	1,291 1,357	29 125
39 40	Metal containers		81	187	86	2	1,278	183	853	20 439	
41	Screw machine products and stampings	558	324	443	213	9,934	2,280	957	181	1,032	72
42 43	Other fabricated metal products	278	411	1,743	475	1,645 2,371	1,384 58	928	478 1,057	1,312	235
44+45 46	Farm, construction, and mining machinery					13	8		110		
47 48	Metalworking machinery and equipment	53	38	88	48	1,105	209	1,145	50	178	23
49	Special industry machinery and equipment	(*) 42	38	126 12	47	68	1,411	164	503	155	19
50 51	Miscellaneous machinery, except electrical	42	42 108	108 170	59 21	863	2,658	772 41	71	191 757	37 10
52	Service industry machinery	413	5 237	155	203	2,773 212	176 90	93	80 402	1,295	66
53 54 55 56	Household appliances					(*)	(*) 28		148		
56	Electric lighting and wiring equipment	485 (*) 98	272 1,472	78 36	163 13	495 1,347	14	962	90 13	206 20	32 (*)
57 58	Electronic components and accessories	98 16	8,193 156	4,625 26	1,304 1,025	856 3,740	381 871	1,211 77	7 129	7,877 217	1,573 28
59A 59B	Motor vehicles (passenger cars and trucks)	3	2	3	6	1,548 40,005	184 6,259	5	602 313	16	2
60	Aircraft and parts					51 21		15,912	40		
61 62	Other transportation equipment	3	54	195	9	1,234	14 27	2,217	626 70	2,295	186
63 64	Ophthalmic and photographic equipment	6 37	10 13	13 11	9	17 59	14 11	18 15	3 5	29 46	269 5
65A 65B	Railroads and related services; passenger ground transportation	l 31	21 138	46 214	36 151	572 2,168	173 936	39 220	50 202	85 362	37 115
65C	Water transportation	146 2	3	10	7	43	936 26	12	8	16	16
65D 65E	Air transportation	148	220 (*)	297 2	241 1	685 3	194 2	1,182	62 (*) 92	338 2	101
66 67	Communications, except radio and TV	65	159	187	82	159	310	359		432	42
68A 68B	Electric services (utilities)	185 54	247 52	789 99	231 51	491 342	731 261	660 144	191 26	758 132	122 40
68C 69A	Water and sanitary services Wholesale trade	54 18 1 138	21 1,970	34 2,125	41 1,379	113 10,545	59	47 1,552	28 1,328	98 3,212	35 720
69B	Retail trade	1,138 5	1,970 5 163	7	11	124	3,688 43	27	10	30	6
70A 70B	Finance	163 27	163 59	450 70	222 45	493 345	159 142	883 113	50 29	452 158	208 50
71A 71B	Owner-occupied dwellings	105	326	389	144	117	159	459	346	774	87
72A 72B	Hotels and lodging places Personal and repair services (except auto)	87	30 178	150 39	134 20	79 103	24 80	766 46	9	72 90	38
73A	Computer and data processing services	18 30	96	86	37	106	92	103	14	100	19
73B 73C	Legal, engineering, accounting, and related services  Other business and professional services, except medical	109 166	235 449	317 586	189 244	220 543	212 484	508 1,016	90 194	803 1,030	117 273
73D 74	Advertising Eating and drinking places	268	782 93	464 157	602 118	2,434 193	1,807 150	1,929 148	183 37	2,115 308	489
75 76	Automotive repair and services	66 69 2	50	71	137	482	2,196	101	100	487	59 72
77Å	Amusements		4	23	24	23	4	21	12	28	12
77B 78	Educational and social services, and membership organizations	8 21	49 79	123 34	16 20	254 148	81 172	122 120	8 15	155 175	111 18
79 80	State and local government enterprises  Noncomparable imports	6 32	8 233	19 195	10 74	64 291	42 918	17 99	4 16	24 340	306
81	Scrap, used and secondhand goods	2			108		155				
82 83	General government industry Rest of the world adjustment to final uses										
84 85	Household industry										
I VA	Total infermediate inputs Value added	8,532 9,083	20,363 20,337	21,758 26,895	11,371 9,452	109,111 25,004	42,721 26,270	42,620 39,508	12,687 11,396	36,349 49,114	8,462 11,264
Ť	Total industry output	17,615	40,700	48,654	20,823	134,115	68,991	82,128	24,082	85,463	19,725

### by Industries, 1987 Benchmark—Continued

at producers'	prices]													
Miscellaneous manufacturing	Railroads and related services; passenger ground trans- portation	Motor freight transportation and warehousing	Water trans- portation	Air trans- portation	Pipelines, freight forwarders, and related services	Communications, except radio and TV	Radio and TV broad- casting	Electric services (utilities)	Gas production and distribution (utilities)	Water and sanitary services	Wholesale trade	Retail trade	Finance	Commodity number
64	65A	65B	65C	65D	65E	66	67	68A	68B	68C	69A	69B	70A	S
2 20			1 3											1 2
3	3	5	3 3	6	2	4	4	20	2	6	145	82	28	3 4
3	(*)		9		93			13,284	16,417	5	24	9		5+6 7 8
17														9+10 11
189 65	4,213 (*) 9	438 (*) 1	128 (*) 65	470 1 279	441 4 8	6,678 1 2	285	8,764 (*) (*)	(*)	878 4	2,816 15 69	5,741 1 949	1,966 1 3	9+10 111 12 13 144 15 166 167 17 18 19 20+21 22+23 24 255 26A 27B 28B 29A 29B 331 31 33+34 355 36 37 33 39 40 40 41 42 44 45 50 51 51 55 55 55 56 57 58 59A 59B 611 62 63 644
324 43 18	1 15	5 7	63 95	(*) 14	(*)	73	(*)				58 63	26 23		16 17 18
126 724	(*)	13 15	74	9	116 35	1	(*)	(*)	(*)	142	163 1,335	48 56	128	19 20+21
9 289 434	19 7	52 67	7 13	56 1	35 29	80 43	14	36 12	5	68	5 1,746 4,237	2,948 526	832 3	22+23 24 25
434 7 88	7 115	25 268	3 48	14 149	8 154	18 689	6 53	6 122	2 17	2 20	92 3,792	86 181	304 3,667	26A 26B
337 692	86 33	80	18 21	17	8	93	30	423	4	509 2	70	27	11	27A 27B
1	1	3 17		4		52			5		36	29	29	29A 29B
143 90 947	2 2,132 144	17 5,794 1,117	42 731 76	8,583 19	89 66	109 117 394	9	3,078 118	338	260 253	2,759 1,174	2,112 421	418 80	30 31 32
90 947 101 28	1 37	. 7 5	1	2 (*)	6 8	5 15	(*)	1 11	1 1	(*) 35	61 164	421 22 8	80 20 43	33+34 35
144 548 1,839	8 83 7	9 1	8 (*) 195	3 2	2	1 1 44		9 2 110	(*) 1	12	109 32	18 7	10 1	36 37
1,039								15			631 39			39 40
131 288	9 267 44	263 42	499 163	48 55	36 24	329 181 242	1	98 20 625	2	312	236	596	14	41 42
3		3						12			27 262	2		44+45 46
76 25	72 291	16 76	178 573	20 4	1	301	1	81	2	2 5	98 4 9	33 9 12	3 64	47 48
124 5 26	155	26 8 20	157 1 1	43 2	18 12	7 58	2 20	73 47 4	5 5 47	5	217 49	71 38 87	6 48	50 51
26 90	1 148	20 98 (*) 48	1 12 13	2 10 (*)	27	264	22	198	(*)	3	121 1 1	87 (*) 8	9	52 53
22 4	22	4	36 (*)	(*) 9 7	1 7	(*) 55 2,179	(*) 51	(*) 130 1	9 (*)	24 (*)	36 21	37 33	41 37	55 56
397 12	11 55	6 69 19	33	90 25	8 45	1,683 206	778 46	213	100	18	22 214	4 130	211 368	57 58
10	132	397	1	13 3,336	12	14	2	13	5	726	348	238	50	59B 60
4 8 14	856 2 10	5 4 45	364 32 5 49	30 14	11 1 16	14 9 68	2 22 191	8 93 26	2 17 6	398 5	66 190	23 116	66 8 1,047	61 62 63
1,218 83	14 2,322	45 31 260	49 15	37 65	16 24 78	68 94 72	11 34	26 22 3,550	6 10	10 36	387 498	413 724	410 561	64 65A
494 23 77	122 38 82 720	18,968 91 242	74 2,472 69	174 155 4,158	96 31 579	142 15 234	62 2 210	408 415 336	16 25 108	73 14 28	967 110 4,336	1,150 56 777	5,272 23 2,087	65B 65C 65D
1 71	720 47	242 3,543 1,425	1,425 113	4,821 926	1,086 477	2 33,184	1 190 471	15 191	290 25	4 74	396 5,573	33 4,574	10 5,192	65E 66
293 64	99	964 43	570 4	244 14	973 37	480 22	471 24 3	27 5,812	165 20,956	37 498	3,277 1,831	9,939 1,011	1,702 104	67 68A 68B
109 1,731	33 788 200	42 1.789	100 565	36 2,266	130 131	1,136 883	33 154	202 1,342	24 291	610 360	311 9,954 764	687 1,696	293 1,246	68C 69A
19 260 71	200 336 189	3,230 489 957	1,303 8	67 2,110 371	26 1,026 531	41 1,898 65	293 4	48 1,545 952	20 445 51	58 159 1,068	764 5,778 494	902 3,679 532	293 1,246 135 48,309 3,280	69B 70A 70B
			794	1,005 38		2,806	1,568 33	507	140	80	9,905 2,978			65B 65C 65D 65E 66 66 67 68A 68B 68C 69A 69B 70A 70B 71B 72B 73A 73C 73C 73C 73C 73C 73B 80 81 82 83 84 885 5
242 24 31 14	301 69 36 349 172 617	2,165 166 91 342 547	14 23 270 73	421 717	936 86 50 452 440 329 644 476 271	81 403 1,647	33 346 123	42 268 909 508	8 37 239	38 142 89	1,761	24,309 599 1,982 1,961 14,163 7,477	9,486 804 427 12,499	72A 72B 73A
332 362	172 617	547 1,353	73 1,501	351	440 329	710	346 123 401 470 82	519	239 98 171	142 89 137 134 18 54	4,900 20,686	14,163 7,477	12,499 7,237 13,020	73B 73C
14 332 362 1,683 236 240	34 179 589	1,353 238 555 4,401	1,501 246 56 34	1,741 2,288 286	644 476 271	1,058 1,176 503 523	39	79 135 474	20 36 218	18 54 4	4,900 20,686 8,482 5,786 9,026	20,898 5,504 6,870	3,548 3,357 1,554	73D 74 75
11	4	15	1	43	11	699	9,383	5	1	1	1,033	199	119	76 77A
124 91 8	133 58 62	56 147 135	62 7 (*)	7 7 22	115 58 7	231 251 34	130 22 26	346 325 19	23 129 8	10 43 1	658 871 379	424 1,455 427	774 7,115 42	77B 78 79
968	180	10	2,880	4,262	61	3,758	35	7	14	1	2,710	134	3,898	80 81
														82 83 84
17,347 15,742 <b>33,089</b>	16,774 26,684 <b>43,458</b>	51,373 64,722 <b>116,095</b>	16,406 7,647 <b>24,053</b>	41,048 35,205 <b>76,253</b>	10,599 15,309 <b>25,908</b>	66,178 94,949 <b>161,127</b>	15,936 13,460 <b>29,396</b>	46,665 85,706 <b>132,371</b>	41,224 26,325 <b>67,549</b>	7,477 3,786 <b>11,262</b>	125,804 297,947 <b>423,751</b>	127,371 293,322 <b>420,694</b>	142,016 144,596 <b>286,613</b>	85 I VA T

### Table 2.1.—The Use of Commodities

[Millions of dollars

									[Milli	ions of dollars
Commodity number	For the distribution of output of a commodity, read the row for that commodity  For the composition of inputs to an industry, read the column for that industry	Insurance	Owner- occupied dwellings	Real estate and royalties	Hotels and lodging places	Personal and repair services (except auto)	Computer and data processing services	Legal, engi- neering, accounting, and related services	Other business and professional services, except medical	Advertising
Com	Industry number	70B	71A	71B	72A	72B	73A	73B	73C	73D
1	Livestock and livestock products				2 3				27	
2 3	Other agricultural products			19	3 1					
4 5+6	Agricultural, forestry, and fishery services	6	2,584	2,002	217	10	4	11	57	1
7 8	Coal mining			1	7	4			4	
9+10 11	Nonmetallic minerals mining									
12 13	Maintenance and repair construction	517 (*)	15,921	21,677 (*)	1,483 (*)	646	165	313 7	1,466 205	89
14 15	Food and kindred products	2			104	20	1	9	140	(*)
16 17	Broad and narrow fabrics, yarn and thread mills			(*)	48 8	189 15	(*)	1	1 7	
18 19	Apparel	11		1 5	97 53 <u>1</u>	339 359	1	1	77 10	(*) 18
20+21 22+23	Lumber and wood products			34	5 (*)	25 1	9	31 3	28 3	1 (*) 52
24 25	Paper and allied products, except containers Paperboard containers and boxes	143		452 22	295 6	304 22 22	365 11	639 36	898 34	9
26A 26B	Newspapers and periodicals Other printing and publishing	24 1,389		16 1,284	34 332	689	17 2,067	31 1,518	78 2,955	3 688
27A 27B	Industrial and other chemicals Agricultural fertilizers and chemicals Plastics and synthetic materials	5	269	24 111	5 212	234	3	14	774 291	
28 29A	Drugs			36		34	9		47	4
29B 30 31	Cleaning and toilet preparations Paints and allied products Petroleum refining and related products	98		389	242	898 1 310	121	37	717 137 690	1 46
32 33+34	Rubber and miscellaneous plastics products  Footwear, leather, and leather products	21 16	73	540 10	242 772 9	1,107 691	991	458 282 37	1,753 20	19
35 36	Glass and glass products Stone and clay products	1		9	479 30	246	3	34 1	181 60	(*)
37 38	Primary inon and steel manufacturing Primary nonferrous metals manufacturing			2	1	4 29	1	4	18	(*)
39 40	Metal containers Heating, plumbing, and fabricated structural metal products		100	61					246	
41 42	Screw machine products and stampings Other fabricated metal products	2		71	26	61 184	26	106	152 214	4
43 44+45	Engines and turbines Farm, construction, and mining machinery		195	4					101 510	
46 47	Materials handling machinery and equipment  Metalworking machinery and equipment	1			2	13		7	258 584	1
48 49	Special industry machinery and equipment General industrial machinery and equipment			2 24	(*)	1	1	3	274 724	(*)
50 51	Miscellaneous machinery, except electrical Computer and office equipment	10		3 21	3	53 464	5 972	44 259	262 354	1 9
52 53	Service industry machinery Electrical industrial equipment and apparatus	(*)				157 39	88	1	253 559	
54 55	Household appliances	(*) 6		59 64	7 123	658 27	6	66	29 180	1
56 57	Audio, video, and communication equipment	24 8		22	4	24 1,608	11 1,746	17 15	95 3,335	1
58 59A	Miscellaneous electrical machinery and supplies	170		138	3	28	441	339	636	17
59B 60	Truck and bus bodies, trailers, and motor vehicles parts	42		48	16	31	15	178	113	10
61 62	Other transportation equipment	2 5		3	6 34	26	37	6	264 136	2
63 64	Ophthalmic and photographic equipment	254 141		91 134	18 116	600 1,412	29 25 62	718 378	1,397 353	10 20
65A 65B	Railroads and related services; passenger ground transportation  Motor freight transportation and warehousing  Water transportation	325 406	8 12	445 595	106 173	78 303	62 113	130 224	366 683	28 37
65C 65D	Air transportation	7 502	3 1	14 424	10 46	21 187	551 551	22 1,673	126 3,276	43
65E 66	Pipelines, freight forwarders, and related services  Communications, except radio and TV	69 2,405		115 1,539	49 587	981	1,571	2,204	15 3,403	210
67 68A 68B	Radio and TV broadcasting Electric services (utilities) Gas production and distribution (utilities)	98		308 60	1,278 604	1,192 476	295 39	467 85	1,274 418	453 43 10
68C 69A	Water and sanitary services Wholesale trade	298 277	144	75 493	372 558	144 1,517	14 904	169 1,199	84 3,037	3 70
69B 70A	Retail trade Finance	46 5,832	256 1,619	229 6,294	50 1,931	83 844	41 543	223 1,412	258 2,512	18 154
70B 71A	Insurance Owner-occupied dwellings	54,111	9,705	6,322	47	72	36	316	748	19
71B 72A	Real estate and royalties Hotels and lodging places	4,830 1,047	12,218	32,320 910	1,523 28	3,767 84	2,051 87	8,826 3,128	6,374 1,050	1,069 191
72B 73A	Personal and repair services (except auto)  Computer and data processing services	192 1,153		763 74	684 18	1,436 356	56 7,058	557 8,284	277 6,035	46 21
73B 73C	Legal, engineering, accounting, and related services  Other business and professional services, except medical	2,823 1,963	1,657 1,347	2,190 7,363	630 2,690	2,765 2,246	491 1,674	15,381 16,011	5,285 14,020	200 437
73D 74	Advertising Eating and drinking places	2,025 2,856		6,263 3,338	658 50	1,492 462	533 473	493 1,142	2,320 2,537	92 199
75 76	Automotive repair and services Amusements	799 66		1,381 72	541 17	870 19	464 11	2,717 121	2,412 152	318 123
77A 77B	Health services  Educational and social services, and membership organizations	63		194	130	898	344	921	1,339	37
78 79	Federal Government enterprises	688 25		467 112	189 233	305 122	259 20	1,357 114	1,559 118	63 23
80 81	Noncomparable imports	618		56	60	10	179	465	928	24
82 83	General government industry									
84 85	Household industry							70.055		
V <u>A</u>	Total intermediate inputs	86,428 86,422	46,111 279,033	99,839 280,436	18,787 22,211	32,319 33,983	25,051 35,770	73,250 104,682	82,309 138,418	4,941 10,942
T	Total industry output	172,850	325,144	380,275	40,997	66,302	60,821	177,931	220,728	15,884

### by Industries, 1987 Benchmark—Continued

at producers	' prices]													
Eating and drinking places	Automotive repair and services	Amusements	Health services	Educational and social services, and membership organizations	Federal Government enterprises	State and local government enterprises	General government industry	Household industry	Inventory valuation adjustment	Total intermediate use	Personal consumption expenditures	Gross private fixed investment	Change in business inventories	Commodity number
74	75	76	77A	77B	78	79	82	84	85		91	92	93	S
391 1,446 1,673 9		20 8 4 571	62 121 26 158	83 95 31 485	4 14 16 3	1 1 125				81,465 59,031 10,351 21,754	3,090 15,682 3,763 647		-719 -4,261 101	1 2 3 4
5	6	2	6	8	1,061	1,062				7,268 21,498 97,326 11,974 44	138	84	19 1,100 -1,758 -8	5+6 7 8 9+10
1,836 47,037	654	1,017 (*) 655	2,742 2 3,035	7,154 5 2,970	571 (*) 393	16,093 1 4				124,100 1,304 125,260 3,664	1,099 201,153 20,774	358,627 17,300 198	457 1,771 242	11 12 13 14 15 16 17 18
25 17 27	16 169 (*) 9	69 9 138 91 209	16 374 776 46	46 10 243 69 200	14 4 1 78	10 30 6				35,123 8,549 14,438 9,369 68,635	1,047 4,992 71,153 10,088 1,820	2,369	599 412 1,446 333 1,157	16 17 18 19 20+21
(*) 735 869 6	1 189 16 43	10 152 6 28	4 1,542 124 180	1 1,529 120 578	32 15 3	50 (*) 6				3,867 69,529 24,501 2,547	19,469 11,902 292 11,741	15,467	596 916 127 449	20+21 22+23 24 25 26A 26B 27A
294 62	80 58	387 167 9	2,619 6,516 11 6,464	9,745 226 62 127	383 8	162 1,137 119				49,322 79,565 12,543 39,534 11,676	10,923 978 784 23,958	795	1,188 515 138 502 1,199	27 5
117 128 1,461	10 785 3,663 1,331	11 3 104 386	839 922 7,834	189 39 984 1,035	(*) 29 641 49	52 1 4,249 115				6,952 11,365 70,488 78,219	25,019 194 60,189 11,669	155	558 197 3,001 1,292	29B 30 31 32
66 339 37 1 21	5 847 37 (*)	53 3 2 1 28	12 789 289 5	36 252 5 18 (*)	14 3 	2 9 142 (*)				3,578 15,366 43,245 74,182 57,761	13,619 1,518 2,705 11 72	13 36	467 179 606 1,204 864	33+34 35 36 37 38
9 52	3,331 4,815	30 59	244 176	4 167 289	1 90 8	2 3 31				11,619 39,226 29,847 43,780	525 1,464 3,600	21 2,811  1,945	24 557 237 604	39 40 41 42
1 53	245 18 13	1 1 18 1	 8 3	(*) 1 11	4 6	61 211 15				8,316 6,177 2,749 10,100 3,126	461 248  583 176	2,302 16,909 5,032 13,439 15,053	208 333 42 50 198	43 44+45 46 47 48
92 115 3 15	53 1,252 11 675 173	1 14 7 55 (*)	1 19 43 9	32 107 11 8	17 14 3 22 2	13 429 2 19 504				14,038 14,927 15,346 12,881 17,719	117 3,290 883 161	11,072 747 33,476 7,186 5,878	153 101 331 306 110	49 50 51 52
1 87 7	955 181	1 66 4 7	8 308 7 22	13 202 122 190	3 26 6 6	50 105 1 39				2,743 15,549 10,561 42,174	11,997 2,278 18,387 263	2,657 435 21,728	3 608 446 787	54 55 56 57
23	9,976 	36 10 103	310  108 5	167 119 10	267 33	113 194 129				12,838 2,370 61,127 22,583 2,763	5,277 101,875 3,133 316 11,043	2,755 62,933 6,591 8,843 3,183	361 8,115 1,745 2,132 1,070	298A 298B 298B 310 311 313 355 355 355 355 355 355 355 355
7 293 385 1,541	36 41 47 294 802	13 186 183 93 188	6,698 683 261 337 842	124 498 767 237 791	4 13 53 724 1,616	17 15 43 440 309				17,485 7,770 9,277 27,231 80,137	4,456 4,625 27,179 13,080 20,258	33,814 5,653 3,876 827 2,343	1,285 398 2,181 553 755	65A
62 171 2 804	112 486 92 1,021	41 234 2 658	842 84 955 20 2,774	41 2,603 22 1,762	77 926 10 146	200 98 75 234				8,029 36,314 18,525 81,923	4,177 31,439 2,553 61,963	167 819 4,389	755 49 97 39	65C 65D 65E 66 67
4,445 364 329 9,302	1,006 520 82 4,700	1,100 220 125 498	3,172 1,499 289 6,618	2,038 964 255 2,462	281 83 83 376	4,483 3,082 303 1,566				924 79,596 55,987 12,350 210,780	1,326 63,318 25,544 14,864 111,741	39,161	4,929	67 68A 68B 68C 69A 69B 70A 70B
27 2,236 33 8,898	4,855 4,201 2,263	45 718 77	288 1,449 1,223 21,791	131 2,085 715	10 45 43 529	23 403 492 686				37,597 121,959 93,582 225,105	373,725 135,789 81,638 325,144 122,178	11,178		69B 70A 70B 71A 71B
28 569 216 2,226	4,643 153 1,790 18 764	4,145 230 412 327 2,138	466 986 4,764 2,169	16,283 1,052 409 1,402 2,319	26 9 30 79	51 17 260 2,202				18,052 17,186 53,578 127,255	20,180 48,030 855 31,456	23,701  10 7,509	39	72A 72B 73A 73B
4,140 4,629 790 404 965	4,027 1,517 865 2,503 18	3,869 2,605 578 476 15,940	9,636 912 1,939 3,374 87	5,121 3,256 1,163 1,300 969	451 3 77 520 38	856 104 113 180 4				165,951 107,841 43,381 61,098 30,722	12,602 661 169,638 67,684 47,411		59 7	73C 73D 74 75 76
299 118 187 73	168 528 374 12	379 365 85 154	6,761 718 1,866 226 45	355 2,088 227 855	13 381 25 1,085	81 70 5				7,505 12,086 24,980 4,424 39,151	363,015 148,974 6,430 14,152 29,295			72A 72B 73A 73B 73C 73D 74 75 76 76 77A 77B 80 80 81 83 83 84
	169	134	45	000						6,460	29,295 13,705  -31,136 7,709	-24,960	1,969	81 82 83 84
100,603 108,791 <b>209,394</b>	68,309 62,395 <b>130,704</b>	40,640 37,552 <b>78,192</b>	119,710 218,801 <b>338,511</b>	80,088 72,590 <b>152,678</b>	11,636 33,760 <b>45,396</b>	41,734 27,750 <b>69,484</b>	466,785 <b>466,785</b>	7,709 <b>7,709</b>	-17,817 - <b>17,817</b>	3,602,186	3,072,252	732,891	-17,817 	85 I VA T

### Table 2.1.—The Use of Commodities by Industries, 1987 Benchmark—Continued

[Millions of dollars at producers' prices]

	[Millions	of dollars a	at producers	' prices]							
mber	For the distribution of output of a commodity, read the row for that commodity	Exports of	Imports of	Federal (	Government p	urchases	State a	ind local gover	rnment		Total
Commodity number	For the composition of inputs to an industry, read the column for that industry	goods and services	goods and services	Total	National defense	Non- defense	Total	Education	Other	GDP	commodity output
Comu	Industry number	94	95		96	97		98	99		
1 2	Livestock and livestock products Other agricultural products	485 12,747	-808 -2,353	12 750	2	10 750	84 587	30 220	54 368	2,144 23,152	83,609 82,183
3 4	Forestry and fishery products	544 122	-3,747 -16	-1,112 121	38	-1,112 84	-413 1,040	6 284	-419 756	-864 1,914	9,488 23,668
5+6	Metallic ores mining	559	-1,349	-141	-142	1				-466	6,802
8	Coal mining	2,663 1,494	-65 -28,965	86 -173	56 5	29 -177	32	21	11	3,953 -29,318	25,451 68,008
9+10 11	Nonmetallic minerals mining New construction	633 15	-734	2 15,550	-2 7,495	8,055	–19 71,111	10,091	-19 61.020	-90 445,303	11,884 445,347
12	Maintenance and repair construction	81	_467	6,258 22,745	4,358 20,365	1,900 2,380	25,728 117	5,912	19,816	49,367	173,466
13 14	Ordnance and accessories Food and kindred products	2,725 12,111	-18,538	2,025	189	1,836	5,854	3,739	116 2,114	26,873 204,376	28,177 329,636
15 16	Tobacco products	2,591 1,407	-879 -3,601	115	105	10	-11 142	-1 58	-10 84	22,717 -291	26,381 34,832
17 18	Miscellaneous textile goods and floor coverings	782 1,197	-919 -25,395	30 567	3	27 1	51 853	8 15	43 838	7,717 49,821	16,266 64,259
19 20+21	Miscellaneous fabricated textile products	362	-1,772	185	566 140	45 13	441 113	95 59	347 55	9,637 4,301	19,006 72,936
22+23	Lumber and wood products	3,645 684	-6,399 -5,287	45 129	32 39 124	90	1,775	992	784	32,833	36,700
24 25	Paper and allied products, except containers	5,922 262	-9,914 -126	366 74	124 42	243 31	2,240 158	1,183 32	1,057 125	11,432 786	80,961 25,288
26A 26B	Newspapers and periodicals Other printing and publishing	555 1,062	-226 -1,335	153 1,097	42 15 428	138 669	456 4,870	302 3,403	154 1,466	13,128 17,804	15,674 67,126
27A	Industrial and other chemicals	14,630	-10,727	1,893	1,793	100	2,203	567	1,635	10,286	89,852
27B 28	Agricultural fertilizers and chemicals	542 5,364	-990 -2,009	25 13	9	15 1	324 2	111	213 1	823 3,872	13,365 43,407
29A 29B	Drugs	2,959 983	-7,590 -1,281	795 202	472 160	324 42	2,865 439	86 119	2,778 321	24,186 25,920	35,862 32,872
30 31	Paints and allied products	342 6,128	-214 -13,332	6 3,193	1 2,649	5	294 7,931	228 3,789	66 4,142	818 67,111	12,183 137,599
32	Rubber and miscellaneous plastics products	3,233	-9,702	636	480	545 157	1,348	88	1,260	8,631	86,851
33+34 35	Footwear, leather, and leather products	666 777	-9,700 -1,837	50 59	22	37	106 273	(*) 66	105 207	5,209 968	8,787 16,335
36 37	Stone and clay products	1,019 1,407	-4,513 -10,824	108 151	47 22 51 78 395	57 72	170 57	66 6	104 51	95 -7,982	43,340 66,201
38 39	Primary nonferrous metals manufacturing	3,303 166	-6,992 -155	644 57	395 57	250	58	4	54 3	-2,014 120	55,746 11,739
40	Heating, plumbing, and fabricated structural metal products	869	-961	658	491	168			1	4,460	43,686
41 42	Screw machine products and stampings  Other fabricated metal products	2,123 2,634	-2,261 -6,573	138 481	110 407	28 75 167	277 550	216 177	61 373	1,978 3,241	31,826 47,022
43 44+45	Engines and turbines	2,899 6,063	-2,102 -5,402	2,045 321	1,879 303	167 18	265 1,358	84	265 1,274	6,078 19,829	14,394 26,005
46	Materials handling machinery and equipment	540	-1,321	321	312	9	13	4	9	4,627	7,376
47 48	Metalworking machinery and equipment	2,335 2,696	-4,911 -4,993	220 82	180 76	40 6	236 74	134 69	102 5	11,951 13,285	22,051 16,411
49 50	General industrial machinery and equipment	4,182 1,660	-6,947 -604	560 2,657	542 2,573	18 84	162 251	(*) 116	162 135	9,183 4,929	23,221 19,855
51 52	Computer and office equipment	13,167 1,217	-17,329 -1,504	4,168 123	3,493 101	675 21	1,982 655	1,196 476	786 179	39,085 8,865	54,431 21,746
53	Electrical industrial equipment and apparatus	1,847 943	-3,346 -2,950	636	467	168 4	273	140 101	132	5,557 12,927	23,277 15,670
54 55	Household appliances	1,358	-3,341	42 62	38 41	21	235 472	284	134 189	1,871	17,421
56 57	Audio, video, and communication equipment	4,137 12,596	-20,190 -13,704	5,265 5,912	4,964 5,884	301 28	703 174	335 81	368 94	30,476 6,029	41,037 48,203
58 59A	Miscellaneous electrical machinery and supplies	2,404 12,918	-4,511 -61,157	1,671 740	1,577 609	95 131	191 5,714	71 1,288	120 4,426	8,149 131,139	20,987 133,509
59B	Truck and bus bodies, trailers, and motor vehicles parts	10,874	-16,950	1,093	1,050	43	716	294	422	7,200	68,327
60 61	Aircraft and parts	22,891 1,278	-6,875 -2,937	34,512 7,160	33,306 6,754	1,206 405	20 515	103	20 411	61,838 21,311	84,421 24,074
62 63	Scientific and controlling instruments	10,311 2,224	-9,990 -5,696	25,249 1,129	23,710 704	1,540 425	3,249 2,604	517 1,015	2,732 1,589	68,373 10,937	85,858 18,707
64 65A	Miscellaneous manufacturing	2,831 3,377	-15,769 -135	-424 810	123 320	-547 490	1,932 2,653	1,184 2,256	747 397	21,805 21,164	31,083 48,394
65B	Motor freight transportation and warehousing	4,606		5,150	2,729	2,421	1,944	897	1,048	35,056	115,194
65C 65D	Water transportation	7,512 11,216	3,264 -5,711	834 2,837	697 2,159	137 678	167 2,048	35 956	133 1,093	16,169 42,745	24,198 79,060
65E 66	Pipelines, freight forwarders, and related services	1,958 2,496		80 3,853	42 1,954	38 1,899	146 5,540	40 2,519	106 3,021	4,776 78,241	23,301 160,164
67 68A	Radio and TV broadcasting	134	-986	2,671	1,734	937	11,720	4,541	7,180	1,326 76,857	2,250 156,453
68B 68C	Gas production and distribution (utilities) Water and sanitary services	161	-1,763	579 236	465 184	114	1,672 983	685 1,018	987 -35	26,192 16,120	82,180 28,469
69A	Wholesale trade	26,294	15,533	5,860	5,039	53 821	9,454	3,940	5,514	212,971	423,751
69B 70A	Retail trade	85 12,598	-161	114 1,400	92	22 1,400	263 9,366	-41	304 9,366	385,364 158,991	422,960 280,950
70B 71A	Insurance	2,906	-3,078	1,746	36	1,710	827	666	161	84,039 325,144	177,621 325,144
71B 72A	Real estate and royalties Hotels and lodging places	10,830 49		1,243 947	547 692	696 254	6,563 836	713 -1,237	5,850 2,073	164,515 22,012	389,620 40,064
72B	Personal and repair services (except auto)	31		125	65	60	898	301	597	49,085	66,271
73A 73B	Computer and data processing services	928 2,398	-104 -391	4,133 8,099	2,833 7,561	1,300 538	5,248 1,656	1,402 1,729	3,845 -73	11,110 50,727	64,687 177,982
73C 73D	Other business and professional services, except medical	1,546 475	-740 -253	20,907 85	15,944 79	4,963 5	11,433 597	4,136 416	7,298 181	45,807 1,564	211,758 109,406
73D 74 75	Eating and drinking places Automotive repair and services	271		1,139 185	79 371 94	768 92	-3,409 2,223	-5,546 823	2,138 1,400	167,639 70,129	211,021 131,228
76	Amusements	1,222	-64	1,001	823	179	-1,452	189	-1,641	48,119	78,841
77A 77B	Health services  Educational and social services, and membership organizations	16 144	-9	613 7,326	-352 1,127	965 6,199	-32,757 -16,252	-10 -15,934	-32,747 -318	330,888 140,184	338,393 152,270
78 79	Federal Government enterprises	169		409 111	312 80	97 31	1,482 359	128 171	1,354 187	8,490 14,621	33,469 19,045
80 81	Noncomparable imports Scrap, used and secondhand goods	4,267	-78,696 -2,068	10,116 675	8,673 -104	1,443 778	49 2,272	43 683	6 1,589	-39,151 -4,139	2,321
82	General government industry			150,627	108,244	42,383	316,158	173,286	142,873	466,785	466,785
83 84	Rest of the world adjustment to final uses	31,653		-517 	-161	-356				7,709	7,709
85 I	Inventory valuation adjustment									-17,817	-17,817
VA T	Value added Total industry output	348,572		384,927	292,052	92,875	496,592	218,272	278,320	4,572,829	8,175,016
	Total madely output	340,372	+30,442	304,327	292,002	92,013	+30,332	210,212	210,320		0,173,010

\*Less than \$500,000.

# Table 2.2.—Input Components of Total Industry Output, 1987 Benchmark [Millions of dollars at producers' prices]

	·		<u> </u>					
		Value added  Compensation of Indirect business Other value						
Industry				Indianat husinaan		Total intermediate	Total industry	Industry
number		Total		tax and nontax	Other value	inputs	output	number
		rotai	employees	liability	added			
				,				
1	Livestock and livestock products	15,074	3,284	1,091	10,700	72,410	87,484	1
2 3	Other agricultural products	46,721 3,708	5,619 779	2,536 158	38,566 2,771	40,021 3,748	86,742 7,456	2
4	Agricultural, forestry, and fishery services	9,948	9,941	130	7	12,253	22,201	4
5+6	Metallic ores mining	3,476	1,836	501	1,139	3,331	6,807	5+ <u>6</u>
7 8	Coal mining	15,488 55,484	8,383 11,699	2,033 3,939	5,072 39,847	9,964 28,744	25,452 84,228	7 8
9+10	Nonmetallic minerals mining	8,213	4,008	688	3,518	4,751	12,964	9+10
11+12	Construction	291,000	189,998	4,487	96,515	327,813	618,813	11+12
13 14	Ordnance and accessories	18,928 100,498	12,370 43,805	235 7,225	6,323 49,468	12,510 225,473	31,438 325,972	13 14
15	Tobacco products	16,795	2,853	4,701	9,242	9,588	26,383	15
16	Broad and narrow fabrics, yarn and thread mills	12,140	8,413	235	3,491	26,104	38,244	15 16 17
17 18	Miscellaneous textile goods and floor coverings	4,354 27,003	2,729 17,503	102 239	1,523 9,262	11,628 37,181	15,982 64,184	17 18
19	Miscellaneous fabricated textile products	6,915	4,048	83	2,784	10,072	16,987	19
20+21	Lumber and wood products	25,923	16,168	1,251	8,503	46,952	72,875	20+21
22+23	Furniture and fixtures	17,259 34,278	11,412	230	5,617	19,518	36,777	22+23
24 25	Paper and allied products, except containers	34,278 8,806	16,521 6,370	1,345 205	16,412 2,231	47,704 16,705	81,982 25,511	24 25
26A	Newspapers and periodicals	29,037	15,391	255	13,392	20,689	49,727	26A
26B	Other printing and publishing	45,145	27,499	957	16,689	42,232	87,378	26B
27A 27B	Industrial and other chemicals	37,277 3,364	15,582 1,950	1,824 226	19,871 1,188	47,098 10,148	84,375 13,512	27A 27B
28	Plastics and synthetic materials	14,365	6,560	766	7,040	26,308	40,672	28
29A	Drugs	22,172	8,292	152	13,728	13,840	36,012	29A
29B 30	Cleaning and toilet preparations	17,646 5,568	5,308 2,505	184 32	12,155 3,031	15,583 6,504	33,229 12,072	29B 30
31	Petroleum refining and related products	24,258	6,857	10,590	6,812	113,613	137,871	31
32	Rubber and miscellaneous plastics products	37,624	23,433	1,672	12,519	47,948	85,572	32
33+34 35	Footwear, leather, and leather products	3,681 8,210	2,362 4,875	28 218	1,292 3,117	5,018 7,875	8,700 16,085	33+34 35
36	Stone and clay products	20,563	11,952	803	7,807	23,169	43,732	36
37	Primary iron and steel manufacturing	25,370	17,894	1,183	6,293	42,721	68,091	36 37
38 39	Primary nonferrous metals manufacturing	14,213 3,421	10,442 2,019	590 85	3,182 1,318	42,163 8,483	56,376 11,904	38 39 40 41 42
40	Metal containers Heating, plumbing, and fabricated structural metal products	19,001	12,772	492	5,737	24,930	43,930	40
41	Screw machine products and stampings	14,187	11,245	512	2,430	17,787	31,973	41
42 43	Other fabricated metal products	22,269	14,716	501	7,053	22,155	44,424	42
44+45	Engines and turbines	6,226 11,852	3,973 7,478	175 449	2,077 3,925	7,870 14,902	14,096 26,753	43 44+45
46	Materials handling machinery and equipment	3,309	2,409	66	835	3,884	7,194	46 47
47	Metalworking machinery and equipment	12,470	9,843	275	2,353	8,756	21,227	47
48 49	Special industry machinery and equipment	8,595 12,400	6,147 8,544	163 262	2,285 3,595	7,659 10,836	16,254 23,236	48 49 50 51
50	Miscellaneous machinery, except electrical	11,839	9,391	250	2,198	8,164	20,003	50
51	Computer and office equipment	24,195	13,585	440 151	10,170	31,625	55,819	51
52 53	Service industry machinery	10,422 11,609	6,580 7,919	151 243	3,691 3,447	11,987 11,056	22,409 22,665	52 53
54	Household appliances	6,594	3,660	127	2,807	8,767	15,361	54
55	Electric lighting and wiring equipment	9,083	5,249	158	3,675	8,532	17,615	52 53 54 55 56 57
56 57	Audio, video, and communication equipment	20,337 26,895	11,383 18,527	358 852	8,596 7,517	20,363 21,758	40,700 48,654	56 57
58	Miscellaneous electrical machinery and supplies	9,452	6,579	235	2,639	11,371	20,823	58
59A	Motor vehicles (passenger cars and trucks)	25,004	15,227	2,108	7,669	109,111	134,115	59A
59B 60	Truck and bus bodies, trailers, and motor vehicles parts	26,270 39,508	19,067 30,002	1,597 614	5,607 8,892	42,721 42,620	68,991 82,128	59B 60
61	Other transportation equipment	11,396	8,713	117	2,566	12,687	24,082	61
62	Scientific and controlling instruments	49,114	33,494	955	14,665	36,349	85,463	62
63 64	Ophthalmic and photographic equipment	11,264 15,742	4,276 8,637	220 309	6,768 6,796	8,462 17,347	19,725 33,089	63 64
65A	Railroads and related services; passenger ground transportation	26,684	18,648	1,581	6,456	16,774	43,458	65A
65B	Motor freight transportation and warehousing	64,722	40,701	3,083	20,938	51,373	116,095	65B
65C	Water transportation	7,647	5,732	687	1,229	16,406	24,053	65C
65D 65E	Air transportation	35,205 15,309	23,231 7,945	5,749 642	6,225 6,722	41,048 10,599	76,253 25,908	65D 65E
66	Communications, except radio and TV	94,949	36,761	11,910	46,278	66,178	161,127	66
67	Radio and TV broadcasting	13,460	9,886	600	2,975	15,936	29,396	67
68A 68B	Electric services (utilities)	85,706 26,325	19,453 8,626	9,242 3,151	57,012 14,548	46,665 41,224	132,371 67,549	68A 68B
68C	Water and sanitary services	3,786	3,510	584	-309	7,477	11,262	68C
69A	Wholesale trade	297,947	174,697	57,724	65,525	125,804	423,751	69A
69B 70A	Retail trade	293,322 144,596	187,889 109,452	53,073 8,317	52,360 26,827	127,371 142,016	420,694 286,613	69B 70A
70A 70B	Insurance	86,422	62,328	12,429	11,666	86,428	172,850	70B
71A	Owner-occupied dwellings	279,033		50,971	228,062	46,111	325,144	71A
71B 72A	Real estate and royalties	280,436	27,230 10,663	53,227 3,698	199,979 7,850	99,839	380,275	71B 72A
72A 72B	Personal and repair services (except auto)	22,211 33,983	21,130	3,698 1,187	7,850 11,666	18,787 32,319	40,997 66,302	72A 72B
73A	Computer and data processing services	35,770	25,443	655	9,673	25,051	60,821	73A
73B	Legal, engineering, accounting, and related services	104,682	79,014 92,121	818	24,850 42,345	73,250 82,309	177,931	73B
73C 73D	Other business and professional services, except medical	138,418 10,942	92,121 7,404	3,952 126	42,345 3,412	82,309 4,941	220,728 15,884	73C 73D
74	Eating and drinking places	108,791	81,909	9,606	17,276	100,603	209,394	74
75	Automotive repair and services	62,395	28,995	4,301	29,099	68,309	130,704	74 75 76
76 77A	Amusements Health services	37,552 218,801	24,710 178,143	2,857 1,901	9,986 38,757	40,640 119,710	78,192 338,511	76 77A
77B	Educational and social services, and membership organizations	72,590	68,100	418	4,072	80,088	152,678	77B
78	Federal Government enterprises	33,760	31,077		2,683	11,636	45,396	78 79 82
79 82	State and local government enterprises	27,750 466,785	19,296 466,785	26	8,428	41,734	69,484 466,785	79 82
84	Household industry	7,709	7,709				7,709	84
85	Inventory valuation adjustment	-17,817			-17,817	2 002 400	-17,817	85
	Total	4,572,829	2,698,657	364,986	1,509,186	3,602,186	8,175,016	T

\* Less than \$500,000.