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## METHODOLOGY

## Introduction

The data in this volume cover the operations of establishments of U.S. affiliates of foreign companies in 1992. A U.S. affiliate is a U.S. business enterprise that is owned 10 percent or more, directly or indirectly, by a foreign person.<sup>1</sup>

The volume is divided into two parts. The first covers all industries and presents data on the number, employment, payroll, and shipments or sales of the establishments of U.S. affiliates (hereinafter referred to as "foreign-owned establishments"); it includes data by detailed industry for nonmanufacturing and totals for manufacturing as a whole. The second part presents these data items by detailed industry within manufacturing as well as additional items for manufacturing establishments, including value added, total compensation of employees, employee benefits, hourly wage rates of production workers, and expenditures for new plant and equipment. In addition to data by industry, both parts present data by State and by country of owner.<sup>2</sup>

The data for this volume were obtained from the Census Bureau's 1992 Economic Censuses and Standard Statistical Establishment List (SSEL).<sup>3</sup> They are the result of

2. The data are also available on diskette. In addition to the tables in this volume, the diskette includes tables with more detailed State-by-industry data than are shown here. See "Data Availability."

a project that links Bureau of Economic Analysis (BEA) enterprise, or company, data on foreign direct investment in the United States with Bureau of the Census establishment data for all U.S. businesses<sup>4</sup>. The project was authorized by the Foreign Direct Investment and International Financial Data Improvements Act of 1990.

This volume updates data for foreign-owned manufacturing and nonmanufacturing establishments published in *Foreign Direct Investment in the United States: Establishment Data for 1987* and data for foreign-owned manufacturing establishments for 1988–91 published in *Foreign Direct Investment in the United States: Establishment Data for Manufacturing*, in separate volumes for each year (see Data Availability).

To aid comparisons of the data in this publication with those in the publications for earlier years, tables A and B provide cross-references between the table numbers used in this publication and those used in the publications for 1987–91.

Analyses of the data from the link are available in three SURVEY OF CURRENT BUSINESS articles: "Foreign Direct Investment in the United States: Establishment Data for 1987," in the October 1992 issue of the SURVEY, gives an overview of the 1987 data and an analysis of the attributes of industries with substantial foreign direct investment activity; "Characteristics of Foreign-Owned U.S. Manufacturing Establishments," in the January 1994 SURVEY, presents a profile of foreign-owned manufacturing establishments using the 1990 data; and "Differences in Foreign-Owned U.S. Manufacturing Establishments by Country of Owner," in the March 1996 SURVEY, uses the 1991 data to examine whether industry-mix and operating characteristics of foreign-owned U.S. manufacturing establishments vary by country of owner. In addition, an article that will analyze the 1992 data from a regional perspective is planned.

<sup>1. &</sup>quot;Person" is broadly defined to include any individual, corporation, branch, partnership, associated group, association, estate, trust, or other organization and any government (including any corporation, institution, or other entity or instrumentality of a government). The data are not adjusted for percentage of foreign ownership. Thus, for example, the employment data shown here include all employees at the establishments of each U.S. affiliate, even though the foreign investor may own as little as 10 percent of the affiliate. However, most affiliates are majority owned; according to Bureau of Economic Analysis data, U.S. affiliates that are majority owned (that is, affiliates that are owned more than 50 percent by foreign direct investors) accounted for 83 percent of all employment by U.S. affiliates in 1992.

<sup>3.</sup> The Census Bureau's 1992 Economic Censuses include the Census of Mineral Industries, Census of Construction Industries, Census of Manufactures, Census of Transportation, Communication, and Utilities, Census of Retail Trade, Census of Wholesale Trade, Census of Financial, Insurance, and Real Estate Industries, and Census of Service Industries. Data for foreign-owned establishments in the following industries are from the SSEL: Agriculture services, forestry, and fishing; a few industries in transportation and public utilities; trusts in finance, insurance, and real estate; and private education and noncommercial.

Data for all U.S. establishments with which the data for foreign-owned establishments are compared are either from the Economic Censuses or from

the Census Bureau's County Business Patterns publications, which are compilations of data from the SSEL. Data from the economic censuses are published in a number of reports. For this publication, the 1992 Economic Censuses data for all U.S. establishments are from the *1992 Economic Census CD-ROM*, and the scope of the foreign-owned establishment data is consistent with the 1992 Economic Censuses geographic area series reports on CD-ROM.

<sup>4.</sup> An establishment is a single physical location where business is conducted or where services or industrial operations are performed. See the "Definitions" section.

The establishment data from the link project complement BEA's enterprise data for U.S. affiliates. BEA's enterprise data are needed for analyzing the overall significance of, and trends in, direct investment and for compiling the U.S. international transactions accounts, the international investment position of the United States, and the U.S. national income and product accounts. The data on positions and transactions between U.S. affiliates and their foreign parents used in compiling the national and international accounts exist only at the enterprise level. Analyses of some topics, such as profits and taxes, are meaningful only at that level. Furthermore, balance sheets and income statements containing the critical, nonduplicative financial and operating data needed for examining these topics exist only at the enterprise level.

The establishment data facilitate analyses of the activities and importance of foreign-owned U.S. companies in specific, detailed industries. Each establishment of an enterprise can be classified separately in the establishment data, while BEA's enterprise data classify the entire enterprise, however diversified, in one industry. Furthermore, the level of industry classification can be much more detailed for individual establishments than is appropriate for consolidated enterprises, whose operations may span many narrowly defined industries. As a result, foreign-owned establishments can be classified into over

#### Table A.—Comparison of Tables in Part A of This Publication With Those in Foreign Direct Investment in the United States: Establishment Data for 1987

Table in Part A of this publication	Comparable table in publication for 1987
Group 1. Overview by Industry, Cou	intry, and State
A 1.1 A 1.2 A 1.7 A 1.8 A 1.9 A 1.10 A 1.10 A 1.11 A 1.12 A 1.13 A 1.14 A 1.15 A 1.16 A 1.16 A 1.17 A 1.18 A 1.17 A 1.18 A 1.19 A 1.20	1.1 1.2 1.3 1.4 1.5 1.6 1.7 
A 1.21 A 1.22 A 1.23 A 1.24 A 1.25	1.16 1.18 1.19 1.21
Group 2. Individual States: Detailed	Industry Data
A 2.1	2.1
Group 3. Selected Countries: Indust	ry and State-by-Industry Tables
A 3.1–A 3.7 A 3.15–A 3.21	3.1 3.3

800 industries, while BEA's foreign-owned enterprises can be classified into only 135 industries.

The tables in each part of this volume are organized into three groups. The first group gives an overview of the data by industry, country, and State. The second group presents detailed industry tables for individual States. The third group presents detailed industry tables for selected major investor countries. Some of the tables in each part show totals for key items of all U.S. establishments and the share of the all-U.S. totals accounted for by foreign-owned establishments.

## How the Link Was Done

BEA and the Census Bureau exchanged their data in order to identify and obtain data for those U.S. establishments on the SSEL that are foreign-owned. The BEA data used for the link cover U.S. affiliates with total assets, sales, or net income greater than \$1 million; these affiliates account for virtually all of the foreign direct investment universe in terms of value. The SSEL is a computerized list of all U.S. companies and their establishments;

 Table B.—Comparison of Tables in Part M of This

 Publication With Those in the Publications That

 Present Establishment Data for Foreign-Owned

 Manufacturing Establishments for 1988–91

Table in Part M of this publication	Comparable table in publications for 1988–91
Group 1. Overview by Industry, Coun	try, and State
M 1.1	$\begin{array}{c} 1.1\\ 1.2\\ 1.3\\ 1.4\\ 1.5\\ 1.6\\ 1.7\\ 1.8\\ 1.9\\ 1.10\\ 1.11\\ 1.12\\ 1.13\\ 1.14\\ 1.15\\ 1.16\\ 1.17\\ 1.18\\ 1.19\\ 1.20\\ 1.21\\ 1.22\\ 1.23\\ 1.24\\ 1.25\end{array}$
Group 2. Individual States: Detailed In	ndustry Data
M 2.1	2.1
Group 3. Selected Countries: Industry	and State-by-Industry Tables
M 3.1–M 3.7 M 3.15–M 3.21	3.1–3.6

it includes names, addresses, and other identification information as well as key economic data obtained from Census Bureau surveys and from administrative records.

Foreign-owned establishments on the SSEL were identified primarily through a computer match of Employer Identification Numbers (EIN's) that are both reported on BEA's surveys of foreign direct investment in the United States and included on the Census Bureau's SSEL. EIN's are identification numbers that companies and their establishments are required to use when filing Federal and State payroll and income taxes. For enterprises that failed to link in the computer match of EIN's, other enterprise identification information, such as names and addresses, was used to match the BEA enterprises to Census Bureau establishments. The data items that are available on the SSEL in Economic Census years are the number of establishments, employment, payroll, and shipments or sales.

To gather the additional data items presented for the manufacturing establishments, the foreign-owned establishments were linked to the 1992 Census of Manufactures. Thus, the detailed data items, such as value added, capital expenditures, and the cost of materials, come from this link with the Census of Manufactures data set.

## **Estimation of Data for Manufacturing**

Some data in the Census of Manufactures, and therefore for foreign-owned manufacturing establishments, are estimated. Published statistics from the Census of Manufactures cover all manufacturing establishments in the United States. However, to reduce the reporting burden, small establishments are exempt from reporting, and data for them are estimated. In addition, estimates are made for reports not received in time for tabulation and publication and for data items that respondents are not able to complete. For establishments that require estimation, selected data items, including employment and payroll, are obtained from the administrative records of the Internal Revenue Service. Data items that are not available from administrative records are estimated using industry-average relationships. For foreign-owned manufacturing establishments, the percentage of the data that is estimated varies depending on the item, the industry, the country, and the State (tables C-E). For example, for manufacturing as a whole, 7 percent of the cost of materials and 10 percent of production worker wages is estimated. Among two-digit manufacturing industries, the percentage of cost of materials that is estimated ranges from less than 1 percent for leather and leather products

to 19 percent for printing and publishing and instruments and related products.

## **Evaluation of the Link**

The data for foreign-owned establishments cover only establishments with employment.<sup>5</sup> Based on BEA data for all industries, U.S. affiliates that linked had 4,701,200 employees and accounted for 97 percent of the employment of all U.S. affiliates in 1992. Virtually all of the large BEA affiliates linked to Census Bureau establishments. Affiliates that failed to link were generally small and together accounted for only 142,100 employees. In general, affiliates failed to link to a Census Bureau establishment because the two agencies had different EIN's or other identification information for a given company or because of the absence of valid EIN's or other identification information.

## BEA and Census Bureau Data Compared

In comparing BEA published data on the U.S. affiliates of foreign companies with the data on foreign-owned establishments in this publication, it should be noted that the two data sets differ in coverage, definition, and classification. These differences do not significantly affect comparisons of overall totals but may affect comparisons for specific industries. This section summarizes the key differences.

#### Coverage differences

The industry coverage of the Census Bureau's establishment data is somewhat narrower than that of BEA's enterprise data. The Census Bureau's SSEL data do not cover agricultural production of crops and livestock (SIC 01 and 02) and railroad transportation (SIC 40), whereas these industries are covered in the BEA data.<sup>6</sup> The BEA data indicate that employment of affiliates in these industries was relatively small in 1992—2,700 for affiliates in agricultural production of crops and livestock and 18,000 for affiliates in railroad transportation.

The geographic coverage of the Census Bureau's data for foreign-owned establishments is somewhat narrower

<sup>5.</sup> More specifically, the data cover any foreign-owned establishment that had one or more paid employees sometime during 1992.

<sup>6.</sup> In general, the Census Bureau's SSEL data cover establishments with employees subject to the Federal Insurance Contributions Act (FICA). Data for establishments with employees that are exempt from FICA, such as those in agricultural production of crops and livestock and railroad transportation, are excluded.

# Table C.—Percentage of the Data That Is Estimated for Foreign-Owned Manufacturing Establishments—Selected Items, by Industry

		Percent estimated							<u>.</u>
SIC code	Industry	Number of estab- lishments	Produc- tion workers	Produc- tion worker hours	Produc- tion worker wages	Cost of materials	Expendi- tures for new plant and equip- ment	Inven- tories (end of 1992)	Gross book value of depre- ciable assets
	Manufacturing	12,781	11	12	10	7	6	9	6
20 201 202 203 204 205 206 207 208 207 208 207 21 211 211 213 214 22 221 222	Food and kindred products         Meat products         Dairy products         Preserved fruits and vegetables         Grain mill products         Bakery products         Sugar and confectionery products         Fats and oils         Beverages         Miscellaneous food and kindred products         Cigarettes         Chewing and smoking tobacco         Tobacco stemming and redrying         Textile mill products         Broadwoven fabric mills, cotton         Broadwoven fabric mills, manmade fiber and silk	1,013 49 122 116 210 106 57 52 141 160 6 1 3 2 203 6 33	17 9 33 21 20 10 4 1 26 25 (P) 13 (P) 3 3	<b>18</b> 10 41 20 9 4 3 22 26 (P) <b>18</b> (P) <b>4</b> (P) 3 (P) <b>4</b> (P) 3 (P) <b>4</b>	<b>17</b> 11 39 19 8 2 1 25 21 (P) 12 (P) <b>5</b> (P) 4	<b>13</b> 16 40 2 17 3 4 2 12 10 ( <sup>D</sup> ) <b>3</b> ( <sup>D</sup> ) <b>3</b> ( <sup>D</sup> ) 0	<b>15</b> 26 27 23 14 3 5 1 14 18 (P) (P) (P) (P) <b>5</b> (P) 4	<b>16</b> 18 26 17 17 4 32 23 17 (P) (P) 10 (P) <b>5</b> (P) 3	<b>14</b> 10 29 12 10 7 17 5 16 14 ( <sup>D</sup> ) ( <sup>P</sup> ) <b>15</b> ( <sup>D</sup> ) <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b> <b>7</b>
223 224 225 226 227 228 229	Broadwoven fabric mills, wool Narrow fabric mills Knitting mills Textile finishing, except wool Carpets and rugs Yarn and thread mills Miscellaneous textile goods	1 8 30 14 11 38 62	( <sup>D</sup> ) 0 8 1 0 8	( <sup>D</sup> ) 9 1 0 2 9	( <sup>D</sup> ) 0 9 1 0 6 8	( <sup>D</sup> ) 2 0 2 0 2 6	( <sup>D</sup> ) 0 6 2 0 2 7	( <sup>D</sup> ) 0 6 1 8 1 9	( <sup>D</sup> ) 0 5 1 7 21 5
23 231 232 233 234 236 238 239	Apparel and other textile products         Men's and boys' suits and coats         Men's and boys' furnishings         Women's and misses' outerwear         Women's and children's undergarments         Girls' and children's outerwear         Miscellaneous apparel and accessories         Miscellaneous fabricated textile products	<b>118</b> 15 28 14 6 2 4 49	26 42 17 19 24 ( <sup>D</sup> ) ( <sup>D</sup> ) 22	26 42 20 18 24 ( <sup>D</sup> ) ( <sup>D</sup> ) 23	25 42 14 21 33 ( <sup>D</sup> ) ( <sup>D</sup> ) 21	15 1 17 4 ( <sup>D</sup> ) ( <sup>D</sup> ) ( <sup>D</sup> ) 19	18 ( <sup>D</sup> ) 28 14 ( <sup>D</sup> ) ( <sup>D</sup> ) ( <sup>D</sup> ) ( <sup>D</sup> ) 10	22 44 20 0 ( <sup>D</sup> ) ( <sup>D</sup> ) ( <sup>D</sup> ) ( <sup>D</sup> ) 15	<b>15</b> 41 18 5 ( <sup>D</sup> ) ( <sup>D</sup> ) ( <sup>D</sup> ) 8
24 241 242 243 244 245 249	Lumber and wood products Logging	<b>152</b> 15 37 47 4 7 42	5 ( <sup>D</sup> ) 11 4 ( <sup>D</sup> ) 0 3	7 ( <sup>D</sup> ) 18 4 ( <sup>D</sup> ) 4 2	6 ( <sup>D</sup> ) 14 4 ( <sup>D</sup> ) 0 2	4 ( <sup>D</sup> ) 10 4 ( <sup>D</sup> ) 0 1	13 0 10 5 ( <sup>D</sup> ) 0 ( <sup>D</sup> )	2 ( <sup>D</sup> ) 1 3 ( <sup>D</sup> ) 0 1	8 0 8 5 ( <sup>D</sup> ) 0 ( <sup>D</sup> )
25 251 252 253 254 259	Furniture and fixtures Household furniture Office furniture Public building and related furniture Partitions and fixtures Miscellaneous furniture and fixtures	<b>108</b> 46 21 20 8 13	( <sup>D</sup> ) 8 44 36 15 ( <sup>D</sup> )	( <sup>D</sup> ) 9 44 36 15 ( <sup>D</sup> )	( <sup>D</sup> ) 6 53 33 15 ( <sup>D</sup> )	( <sup>D</sup> ) 8 37 10 13 ( <sup>D</sup> )	45 ( <sup>D</sup> ) 57 68 13 ( <sup>D</sup> )	29 6 48 62 15 ( <sup>D</sup> )	21 6 28 35 ( <sup>D</sup> ) ( <sup>D</sup> )
26 261 262 263 265 267	Paper and allied products         Pulp mills         Paper mills         Paperboard mills         Paperboard containers and boxes         Miscellaneous converted paper products	289 1 27 27 150 84	4 ( <sup>D</sup> ) 3 2 6 3	<b>5</b> ( <sup>D</sup> ) 3 1 7 5	<b>3</b> ( <sup>D</sup> ) 2 1 6 3	<b>4</b> ( <sup>D</sup> ) 0 1 6 6	<b>4</b> ( <sup>D</sup> ) 5 3 4 3	<b>3</b> ( <sup>D</sup> ) 2 1 7 2	<b>1</b> ( <sup>D</sup> ) 0 1 5 3
27 271 272 273 274 275 276 278 279	Printing and publishing	836 290 115 93 48 171 37 52 30	12 27 46 15 28 9 ( <sup>D</sup> ) 2 ( <sup>D</sup> )	12 29 49 14 26 9 ( <sup>D</sup> ) 2 ( <sup>D</sup> )	<b>13</b> 25 70 10 35 8 ( <sup>D</sup> ) 1 ( <sup>D</sup> )	<b>19</b> 25 58 15 28 6 ( <sup>D</sup> ) 1 ( <sup>D</sup> )	10 25 42 6 10 5 ( <sup>D</sup> ) 3	12 26 51 8 18 7 ( <sup>D</sup> ) 2 4	8 ( <sup>D</sup> ) 31 16 16 4 ( <sup>D</sup> ) 2 6
28 281 282 283 284 285 286 287 289	Chemicals and allied products Industrial inorganic chemicals Plastics materials and synthetics Drugs Soap, cleaners, and toilet goods Paints and allied products Industrial organic chemicals Agricultural chemicals Miscellaneous chemical products	<b>1,635</b> 379 161 202 154 84 207 80 368	<b>10</b> 8 5 11 20 9 9 5 11	<b>11</b> 10 6 12 19 11 14 6 14	<b>10</b> 8 10 20 9 9 4 11	<b>4</b> 5 10 7 3 3 7	<b>3</b> 5 0 35 1 2 1 4	<b>5</b> 7 1 5 23 8 2 2 10	<b>5</b> 9 6 32 12 1 3 4 1
29 291 295 299	Petroleum and coal products Petroleum refining Asphalt paving and roofing materials Miscellaneous petroleum and coal products	<b>360</b> 43 251 66	<b>8</b> 5 13 22	<b>9</b> 6 13 24	<b>7</b> 5 11 21	<b>4</b> 4 5 5	<b>0</b> 0 7 2	5 4 11 14	0 0 3 0
30 301 302 305 306	Rubber and miscellaneous plastics products Tires and inner tubes Rubber and plastics footwear Hose and belting and gaskets and packing Fabricated rubber products, nec	<b>742</b> 26 4 54 90	<b>9</b> 1 0 9 6	<b>9</b> 1 0 8 6	7 1 0 9 7	<b>7</b> 1 0 6 5	5 1 ( <sup>D</sup> ) 7 3	<b>7</b> 1 0 7 6	5 0 ( <sup>D</sup> ) 7 4

## M-5

# Table C.—Percentage of the Data That Is Estimated for Foreign-Owned Manufacturing Establishments—Selected Items, by Industry—Continued

		-	Percent estimated								
SIC Industry	Industry	Number of estab- lishments	Produc- tion workers	Produc- tion worker hours	Produc- tion worker wages	Cost of materials	Expendi- tures for new plant and equip- ment	Inven- tories (end of 1992)	Gross book value of depre- ciable assets		
308 31 311 313 314 316 317 319 32 321 322 323 324 325 326 327 328 329	Miscellaneous plastics products, nec Leather and leather products Leather tanning and finishing Footwear cut stock Footwear, except rubber Luggage Handbags and personal leather goods Leather goods, nec Stone, clay, and glass products Flat glass Glass and glassware, pressed or blown Products of purchased glass Cement, hydraulic Structural clay products Pottery and related products Concrete, gypsum, and plaster products Cut stone and stone products Miscellaneous nonmetallic mineral products	568 27 8 1 1 3 1,484 10 43 74 89 88 16 1,027 6 1,027 6 131	13 <b>8</b> ව.ව. ව.ව ව ව ව ව ව ව ව ව ව ව ව ව ව ව ව	14 7 (P) (P) (P) (P) (P) (P) (P) 71 13 (P) 1 13 26 8 17 18 (P) 12	13 7 ( <sup>D</sup> ) ( <sup>D</sup> ) ( <sup>D</sup> ) ( <sup>D</sup> ) ( <sup>D</sup> ) 74 11 ( <sup>D</sup> ) ( <sup>D</sup> ) 74 11 25 9 9 15 ( <sup>D</sup> ) 10	11 <b>0</b> (P) (P) (P) (P) (P) (P) (P) (P)	7 (P) (P) (P) (P) (P) (P) (P) (P) (P) (P)	10 <b>13</b> වඩ ව ව ව ව ව ව ව ව ව ව ව ව ව ව ව ව ව ව	8 (P) (P) (P) (P) (P) (P) (P) (P) (P) (P)		
33 331 332 333 334 335 336 339	Primary metal industries Blast furnace and basic steel products Iron and steel foundries Primary nonferrous metals Secondary nonferrous metals Nonferrous rolling and drawing Nonferrous foundries (castings) Miscellaneous primary metal products	<b>413</b> 130 41 29 14 118 42 39	<b>5</b> 34 08 83 21	<b>5</b> 5 4 0 8 8 3 24	<b>4</b> 2 4 0 7 8 4 23	<b>3</b> 2 4 0 2 6 3 14	<b>3</b> 2 6 0 3 5 1 13	<b>4</b> 3 4 0 2 6 2 29	<b>3</b> 2 9 3 4 5 5 16		
34 341 342 343 344 345 346 347 348 349	Fabricated metal products         Metal cans and shipping containers         Cutlery, handtools, and hardware         Plumbing and heating, except electric         Fabricated structural metal products         Screw machine products, bolts, etc         Metal services, nec         Ordnance and accessories, nec         Miscellaneous fabricated metal products	<b>686</b> 51 61 14 186 28 84 59 18 185	8 ( <sup>D</sup> ) ( <sup>D</sup> ) 14 10 2 4 18 18 9	8 ( <sup>D</sup> ) ( <sup>D</sup> ) 2 10 3 8 26 1 9	7 ( <sup>D</sup> ) ( <sup>D</sup> ) 11 10 2 4 20 0 9	7 ( <sup>D</sup> ) 5 12 3 5 3 0 8	9 ( <sup>D</sup> ) ( <sup>D</sup> ) 7 21 2 8 9 2 10	7 ( <sup>D</sup> ) 9 5 12 1 14 4 0 8	8 ( <sup>D</sup> ) ( <sup>D</sup> ) 8 5 6 14 2 1 9		
35 351 352 353 354 355 356 357 358 359	Industrial machinery and equipment Engines and turbines	<b>1,094</b> 18 38 151 153 199 226 112 81 116	<b>10</b> 0 15 4 14 14 14 7 8	<b>11</b> 2 18 7 13 14 15 11 8	<b>10</b> 0 1 17 6 13 13 13 14 6 9	<b>8</b> 0 1 9 5 10 15 8 5 6	6 6 0 13 4 12 9 5 4 6	<b>9</b> 12 15 5 10 10 8 7 8	7 3 3 11 5 10 8 7 5 7		
36 361 362 363 364 365 366 367 369	Electronic and other electric equipment Electric distribution equipment Electrical industrial apparatus Household appliances Electric lighting and wiring equipment Household audio and video equipment Communications equipment Electronic components and accessories Miscellaneous electrical equipment and supplies	<b>812</b> 68 118 35 71 47 105 275 93	<b>14</b> 3 13 12 20 3 5 24 10	<b>16</b> 6 11 11 22 12 16 24 12	<b>14</b> 5 13 10 19 3 7 24 9	9 2 8 13 10 2 3 20 8	<b>12</b> 1 13 7 9 9 12 19 5	<b>14</b> 4 22 18 7 14 22 11	<b>8</b> 6 11 7 9 6 9 8 5		
37 371 372 373 374 375 376 379	Transportation equipment Motor vehicles and equipment Aircraft and parts Ship and boat building and repairing Railroad equipment Motorcycles, bicycles, and parts Guided missiles, space vehicles, parts Miscellaneous transportation equipment	<b>331</b> 207 75 22 14 3 4 6	8 6 17 10 33 ( <sup>D</sup> ) ( <sup>D</sup> ) 0	<b>10</b> 6 21 35 ( <sup>D</sup> ) ( <sup>D</sup> ) 1	7 4 19 17 28 ( <sup>D</sup> ) ( <sup>D</sup> ) 2	2 2 10 19 11 ( <sup>D</sup> ) ( <sup>D</sup> )	2 1 18 16 20 ( <sup>D</sup> ) 0 ( <sup>D</sup> )	8 2 17 9 16 ( <sup>D</sup> ) ( <sup>D</sup> ) ( <sup>D</sup> )	10 9 21 ( <sup>D</sup> ) 27 ( <sup>D</sup> ) 0 15		
38 381 382 384 385 386 387	Instruments and related products	<b>481</b> 30 235 148 13 47 8	<b>23</b> 18 23 30 4 20 0	<b>22</b> 15 23 31 4 20 0	22 14 22 31 4 16 0	<b>20</b> 16 16 27 4 19 0	<b>22</b> 12 23 29 5 13 15	<b>23</b> 15 26 28 4 14 0	<b>14</b> 12 16 18 2 10 19		
39 391 393 394 395 396 399	Miscellaneous manufacturing industries Jewelry, silverware, and plated ware Musical instruments Toys and sporting goods Pens, pencils, office, and art supplies Costume jewelry and notions Miscellaneous manufactures ressed to avoid disclosure of data of individual companies.	<b>162</b> 9 13 39 22 14 65	<b>11</b> 8 0 4 0 14 28	<b>15</b> 9 0 11 0 14 34	<b>12</b> 8 0 10 0 11 24	9 21 0 6 2 8 17	6 ( <sup>D</sup> ) 0 7 1 ( <sup>D</sup> ) 15	<b>11</b> 18 0 12 8 4 16	7 8 19 13 2 1 8		

 $^{\rm D}$  Suppressed to avoid disclosure of data of individual companies.

NOTE.-Values of less than 0.5 percent are rounded to zero.

## Table D.—Percentage of the Data That Is Estimated for Foreign-Owned Manufacturing Establishments—Selected Items, by Country of UBO

				Pe	rcent estimate	ed		
Country	Number of establish- ments	Production workers	Production worker hours	Production worker wages	Cost of materials	Expendi- tures for new plant and equip- ment	Inventories (end of 1992)	Gross book value of depre- ciable assets
All countries	12,781	11	12	10	7	6	9	6
Canada	1,488	9	11	9	6	3	5	2
Europe	8,368	12	13	11	8	8	11	8
Austria	37	14	14	22	6	5	24	4
Belgium Denmark		12	9	7	2	4	63	25
Finland	134	11	10	11	9	20	10	12
France		9	9	8	5	9		8
Germany Ireland		10	11	10	6 1	5	8	6
Italy	250	16	19	18	7	18	16	15
Liechtenstein		8	11	11	17 1	5	24	29
Netherlands		11	16	10	4	6	11	5
Norway		8	14	8	6	10	1	18
Spain Sweden		40 15	41	46 16	22 9	42	15	54
Switzerland		15 13	16 14	15 13	11 11	12	12 14	10   9
United Kingdom Other		5	14	5	1	3	2	9
Latin America and Other Western Hemisphere	292	12	14	8	5	5	7	8
South and Central America		11 ( <sup>D</sup> )	12	6	4 ( <sup>D</sup> )	4 ( <sup>D</sup> )	4 ( <sup>D</sup> )	6 ( <sup>D</sup> )
Brazil Mexico		22	27	14	26	16	17	15
Panama		( <sup>D</sup> )	( <sup>D</sup> )	(D)	( <sup>D</sup> )	( <sup>D</sup> )	(D)	( <sup>D</sup> )
Venezuela Other		0	1	2	0	12	10	3
Other Western Hemisphere		17	19	21	22	27	32	24
Bahamas Bermuda		(D) (D)	(D) (D)	(D) (D)	63 8	(D) (D)	28	(D) (D)
Netherlands Antilles	36	8	9	12	11	16	42	21
United Kingdom Islands, Caribbean		22	28	29	32	36	33	29
Africa		<b>5</b>	<b>5</b>	<b>5</b> 5	1	(D)	1	10 10 11
Other		9	9	11	2	(D)	5	4
Middle East		39	37	29	2	( <sup>D</sup> )	8	5
Israel Kuwait		32 33	31 38	28 47	18 0	28 43	32 16	31
Lebanon	15	11	11	13	13	(D)	16	4
Saudi Arabia United Arab Emirates								
Other		(D)	(D)	(D)	(ď)	(D)	(D)	(Þ)
Asia and Pacific		9	10	8	5	4	7	6
Australia China		13	14	13	11 9	11	12	11   46
Hong Kong Indonesia		19 ( <sup>D</sup> )	18 ( <sup>D</sup> )	25 ( <sup>D</sup> )	6 ( <sup>D</sup> )	13 ( <sup>D</sup> )	6 ( <sup>D</sup> )	13 ( <sup>D</sup> )
Japan	1,767	9	10	7	5	3	6	6
Korea, Republic of Malaysia		1 (D)	( <sup>D</sup> )	1 ( <sup>D</sup> )	0 ( <sup>D</sup> )	( <sup>D</sup> )	0 ( <sup>D</sup> )	
New Zealand	26	( <sup>D</sup> ) 2		1	1	4	Ó	1
Philippines Singapore		( <sup>D</sup> ) 11	( <sup>D</sup> ) 27	( <sup>D</sup> ) 9	( <sup>D</sup> ) 1	( <sup>D</sup> ) 15	( <sup>D</sup> ) 49	( <sup>D</sup> ) 13
Taiwan	56	2	7	5	1	( <sup>D</sup> )	1	1
Other	-	72	69	56	4 82	65	48	49
Addenda:								-3
European Communities (12)	7,092	11 25	12 22	11	7	7	11	7
OPEC	72	25	22	16	1	1	3	4

UBO Ultimate benefical owner  $^{\rm D}$  Suppressed to avoid disclosure of data for individual companies.

NOTE.-Values of less than 0.5 percent are rounded to zero.

than that of BEA's enterprise data. The former cover the 50 States and the District of Columbia. The latter also cover Puerto Rico, the Virgin Islands, Guam, American Samoa, and other outlying U.S. areas. In the BEA data, employment in the latter areas was 34,500 in 1992.

**Definitional differences** 

BEA data are reported on a fiscal year basis, whereas the Census Bureau data are generally on a calendar year basis.<sup>7</sup> As a result, for some industries, BEA totals for certain items, such as compensation of employees, can differ from the totals for similar items based on the Census Bureau data for foreign-owned establishments.

7. In BEA's surveys, a U.S. affiliate's fiscal year is the financial reporting year for the affiliate that ended in that calendar year. In BEA's 1992 benchmark survey of foreign direct investment in the United States, affiliates with fiscal years ending in the last quarter of the calendar year accounted for almost threefourths of total U.S. affiliate employment. See Foreign Direct Investment in the United States: 1992 Benchmark Survey, Final Results.

#### Table E.—Percentage of the Data That Is Estimated for Foreign-Owned Manufacturing Establishments—Selected Items, by State

	Percent estimated								
State	Number of establish- ments	Production workers	Production worker hours	Production worker wages	Cost of materials	Expendi- tures for new plant and equip- ment	Inventories (end of 1992)	Gross book value of depreciable assets	
Total	12,781	11	12	10	7	6	9	6	
Alabama Alaska Arizona Arkansas California	218 18 116 115 1,475	3 8 6 18	4 7 16 6 19	2 11 12 7 15	2 9 4 4 10	1 5 7 7 9	2 1 4 9 14	3 4 4 8 9	
Colorado Connecticut Delaware District of Columbia Florida	115 222 73 20 495	23 14 7 11 10	28 14 8 13 17	22 13 6 8 14	11 13 0 35 6	16 7 4 93 19	20 13 0 73 16	9 9 0 ( <sup>D</sup> ) 15	
Georgia Hawaii Idaho Illinois Indiana	531 27 25 713 385	7 26 19 14 5	8 40 16 14 5	6 34 14 13 4	5 6 3 7 3	4 ( <sup>D</sup> ) 29 8 4	5 17 19 11 5	6 ( <sup>D</sup> ) 10 8 4	
lowa Kansas Kentucky Louisiana Maine	109 99 242 132 59	11 2 9 2 8	9 3 11 5 12	9 2 8 2 7	14 0 3 0 9	14 3 3 0 6	11 1 12 1 7	10 6 5 1 6	
Maryland Massachusetts Michigan Minnesota Mississippi	188 351 443 189 109	11 18 8 12 12	12 18 9 12 13	12 18 7 11 8	5 8 7 5 8	22 16 4 6 9	11 14 7 9 9	9 17 5 5 5	
Missouri Montana Nebraska Nevada New Hampshire	273 16 62 36 91	18 1 3 22 10	19 8 3 20 9	18 7 2 15 7	13 0 1 19 6	27 ( <sup>D</sup> ) 0 12 5	11 1 33 7	9 7 1 10 7	
New Jersey New Mexico New York North Carolina North Dakota	588 33 620 549 13	18 11 22 6 42	21 10 23 9 41	19 11 23 5 32	14 13 19 3 13	7 2 12 4 16	8 12 14 4 20	10 3 12 5 10	
Ohio Oklahoma Oregon Pennsylvania Rhode Island	685 109 137 684 42	10 6 5 11 20	10 8 5 13 18	9 6 5 12 12	3 3 5 25 7	6 6 4 11 6	12 13 6 13 9	11 7 7 5	
South Carolina South Dakota Tennessee Texas Utah	287 17 305 858 47	8 11 11 12 2	9 10 12 14 2	8 10 12 10 2	3 16 5 3 2	4 43 3 2 2	5 22 9 7 4	3 3 5 5 1	
Vermont	31 255 227 69 268 10 ual companies.	41 7 14 3 8 13	47 8 13 3 8 13	38 6 9 2 7 6	28 4 3 0 12 2	22 3 6 2 7 1	22 8 7 0 7 4	18 8 4 2 8 39	

 $^{\rm D}$  Suppressed to avoid disclosure of data for individual companies.

NOTE.-Values of less than 0.5 percent are rounded to zero.

In cases where similar items are available from both agencies, the BEA definitions sometimes differ from those used by the Census Bureau. These differences are noted in the "Definitions" section.

### **Classification differences**

As noted earlier, most BEA data for U.S. affiliates are classified by primary industry of the consolidated enterprise, whereas the Census Bureau data are classified by the primary industry of each individual establishment within the enterprise. Affiliates are often highly diversified, and many of them are likely to have activities in industries other than the one that applies to the consolidated enterprise as a whole. As a result, totals for industries in the BEA data often differ significantly from totals for the same industries in the Census Bureau data.

#### **Country and Industry Classification**

In tables that show data by country, the data are classified by country of ultimate beneficial owner (UBO) of the U.S. affiliate to which the establishment belongs. A UBO is that person that ultimately owns or controls, and therefore ultimately derives the benefits from owning or controlling, a U.S. affiliate. More specifically, the UBO is that person, proceeding up a U.S. affiliate's ownership chain, beginning with and including the foreign parent, that is not owned more than 50 percent by another person. The foreign parent is the first person outside the United States in a U.S. affiliate's ownership chain that has a direct investment interest in the U.S. affiliate. (See "General Notes to Tables" for additional details.)

How an establishment is classified by industry depends on whether the establishment is an operating or an administrative and auxiliary establishment.

Operating establishments produce goods and services for sale or produce goods for use by other establishments of the same enterprise and are classified based on their primary activity. This activity is generally determined by the principal product or group of products produced or distributed or by the services rendered by the establishment. In *mining and manufacturing*, establishments are classified based on the products produced: These establishments are usually classified in the industry for which the value of shipments of products primary to that industry is largest. In *construction*, establishments are classified based on major activity, as measured by the dollar value of business done. In *transportation and services*, establishments are classified on the basis of either their self-designation or information on receipts by type of service provided. In *wholesale and retail trade*, establishments are classified on the basis of the commodity or commodity group that is the primary source of their receipts. In *finance, insurance and real estate*, establishments are classified on the basis of their self-designation, sources of revenue, or special inquiries.

Administrative and auxiliary establishments provide support services to the operating establishments of firms and are classified based on the industry classification of the operating establishments they serve. Because the administrative and auxiliary units of large companies typically serve establishments in more than one industry, they generally are not classified at the detailed industry level but rather are presented under a single, separate entry within each industry division.8 Exceptions are mining; transportation and public utilities; and finance, insurance, and real estate. In mining, as is the case in the Census of Mineral Industries, administrative and auxiliary establishments are included in the principal four-digit industry served. In transportation and public utilities, as is the case in the Census of Transportation, Communication, and Utilities, administrative and auxiliary establishments of firms classified in pipelines, except natural gas (SIC 46), telephone, telegraph, and other message communications (SIC 481 and 482), and electric and gas services (SIC 491, 492, and 493) are included in the principal industry served; the administrative and auxiliary establishments of firms classified in the other industries within this division are included in the administrative and auxiliary entry for the division. In finance, insurance, and real estate, as is the case in the Census of Financial, Insurance, and Real Estate Industries, administrative and auxiliary establishments of firms classified as commercial banks, savings institutions, and credit unions (SIC's 602, 603, and 606) or as life insurance carriers, accident and health and medical service plans, fire, marine, and casualty, and surety insurance carriers (SIC's 631, 632, 633, and 635) are included in the principal industry served; the administrative and auxiliary establishments of firms classified in the other industries within this division are included in the administrative and auxiliary entry for the division.

## **Comparability with Data for 1987–91**

In general, the 1992 data for foreign-owned establishments are comparable with the 1987–91 data published earlier. In some industries, the sources of the 1992 data differ from those for earlier years, but the differences do not materially affect the comparability of the data.

<sup>8.</sup> In the 1992 Economic Census, such establishments are called "auxiliaries."

One difference results because finance, insurance, real estate, communications, utilities, and certain transportation industries were covered for the first time in the 1992 Economic Censuses. The 1992 data were obtained from these censuses, whereas the 1987 data were obtained from the SSEL. An additional difference is that, for manufacturing, the 1992 data were obtained from the Census of Manufactures, whereas the 1988–91 data were obtained from the Annual Survey of Manufactures.<sup>9</sup>

## Definitions

The definitions used in this publication are the same as those used in the 1992 Economic Censuses. The definitions are summarized below; in some cases, more detailed definitions may be found in the 1992 Economic Census publications. Most of the definitions are for items presented only for establishments in manufacturing. The four exceptions are the definitions for employees, establishments, payroll, and value of shipments or sales, which apply to items available for establishments in all industries. Where significant differences exist, the definitions used here are compared with the definitions used for the corresponding items in the BEA data.

#### **Benefits**

Data on benefits are presented for manufacturing establishments. Benefits, together with payroll, compose compensation of employees. Benefits consist of "social security and other legally required payments" and "employer payments and other programs."

*Social security and other legally required payments.*— These payments consist of all legally required employee benefits, primarily Federal old age and survivors' insurance (social security), unemployment compensation, and workers' compensation.

*Employer payments and other programs*.—These benefits consist of employer payments for voluntary employee benefit programs not specifically required by legislation, whether they are employer-initiated or the result of collective bargaining. They include employer payments for life insurance premiums, supplemental accident and sickness insurance premiums, pension plans, supplemental unemployment compensation, welfare plans, stock purchase plans on which the employer payment is not subject to withholding tax, and deferred profit-sharing plans. They exclude employer costs for company-operated cafeterias, in-plant medical services, free parking, discounts on employee purchases, and uniforms and work clothing for employees.

#### Cost of materials

Data on cost of materials are presented for manufacturing establishments. Cost of materials consists of direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuel consumed, whether purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year. The major components of cost of materials are the following: (1) Raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies or for repair and maintenance during the year; (2) electric energy purchased; (3) fuels consumed for heat, power, or generation of electricity; (4) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (5) products bought and resold in the same condition. Cost of materials excludes purchased services. Like value of shipments, totals for cost of materials for major industry groups and for manufacturing as a whole include large amounts of duplication. (See definition of value of shipments.)

#### Cost of purchased fuels and electric energy

Data on cost of purchased fuels and electric energy are presented for manufacturing establishments. Cost of purchased fuels and electric energy consists of the cost of fuels consumed for heat, power, or generation of electricity whether purchased from the establishments of other companies, transferred from other establishments of the same company, or withdrawn from inventory during the year, and the cost of purchased electric energy. The cost and quantity of purchased electric energy represent the amounts actually used during the year.

<sup>9.</sup> The sources for the all-U.S. establishment data to which the data for foreign-owned establishments are compared also differed between 1992 and the earlier years. In the industries covered for the first time by the Economic Censuses, the 1992 data were taken from the censuses, whereas the 1987 data were taken from County Business Patterns. Additionally, the 1992 data for manufacturing were obtained from the Census of Manufactures, whereas the 1988–91 data were from the Annual Survey of Manufactures. For a discussion of how data for all U.S. establishments from these sources differ, see the publications that present the data; in particular, for an analysis of how the data from the 1992 Census of Manufactures compare with the sample-based 1988–91 data from the Annual Survey of Manufactures, see the Annual Survey of Manufactures publication that presents data for 1994.

#### **Employees**

In all industries except construction, mining, and manufacturing, the number of employees is the number of full-time and part-time employees who were on the payroll in the pay period including March 12.

For construction, the number of employees is the average number of full-time and part-time employees on the payroll for the four pay periods including the 12th of March, May, August, and November. For mining and manufacturing, the number of employees is the average number of all full-time and part-time production workers on the payroll for the four pay periods including the 12th of March, May, August, and November, plus the number of other full-time and part-time employees on the payroll for the pay period including March 12.

Employees include salaried officers and executives of corporations; they exclude proprietors and partners of unincorporated businesses.

The number of employees for foreign-owned establishments differs somewhat from that for U.S. affiliates in the BEA enterprise data because of differences in the date at which employment is measured. In the enterprise data, the number of employees is the number of full-time and part-time employees who were on the payroll at the end of the enterprise's fiscal year.<sup>10</sup>

#### Establishment

An establishment is a single physical location where business is conducted or where services or industrial operations are performed. The data cover every establishment having one or more paid employees sometime during 1992. The number of establishments is the number that were in business at any time during 1992 (regardless of their status at the beginning or end of the year).

An establishment may be either an operating establishment or an administrative or auxiliary establishment. Operating establishments produce goods and services for shipment or sale to others. Administrative and auxiliary establishments are central administrative offices and auxiliary units of companies with more than one establishment. A central administrative office is an establishment primarily engaged in management and general administrative functions performed centrally for other establishments in the same company. An auxiliary unit is an establishment primarily engaged in performing support services for other establishments in the same company rather than for the general public or for other business firms. Such support services include research, development, and testing; warehousing and storage; maintenance and repair; and other miscellaneous services.

### Expenditures for new plant and equipment

Data on expenditures for new plant and equipment are presented for manufacturing establishments. Expenditures for new plant and equipment consist of expenditures for (1) plants under construction, (2) permanent additions and major alterations to operating manufacturing establishments, and (3) new machinery and equipment used for replacement and for additions to plant capacity, if they were of the type for which depreciation accounts were ordinarily maintained. They include expenditures for assets acquired under capital leases. They exclude expenditures for facilities owned by the Federal Government but operated under contract by private companies and plant and equipment furnished at no cost to the manufacturer by communities and nonprofit organizations.

#### Gross book value of depreciable assets

Data on gross book value of depreciable assets are presented for manufacturing establishments. The gross book value of depreciable assets is the original-cost value of fixed assets (structures and machinery and equipment) in place at the end of the year. The values shown represent the actual cost of assets at the time they were acquired including all costs incurred in making the assets usable (such as transportation and installation). Included are all buildings, structures, machinery, and equipment (production, office, and transportation equipment) for which depreciable capital assets, including inventories and intangible assets, such as timber and mineral rights.

#### Other workers

Data on other workers are presented for manufacturing establishments. Other workers are nonproduction employees of the establishment, including those engaged in factory supervision above the line-supervisor level. Other workers include employees in the following activities: Sales (including drivers/salespersons), sales delivery (highway truck drivers and their helpers), advertising, credit, collection, installation and servicing, clerical and routine office functions, executive, purchasing, financial, legal, personnel (including cafeteria, medical, etc.), professional, and technical. All employees at administrative and auxiliary establishments are included. Also included are employees engaged in the construction of major addi-

<sup>10.</sup> In the enterprise data, a U.S. affiliate's 1992 fiscal year was defined to be the affiliate's financial reporting year that ended in calendar year 1992. If an affiliate's end-of-year employment was unusually high or low because of temporary factors, a number reflecting normal operations was obtained.

ed as a separate Shipments or sales

tions or alterations to the plant and utilized as a separate work force. (See definition of production workers.)

#### Payroll

Payroll and benefits compose compensation of employees. Payroll consists of the gross earnings, paid in the calendar year, of all employees on the payroll of the establishment. It includes salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees' social security contributions, withholding taxes, group insurance, union dues, and savings bonds. Salaries of officers and executives of corporations are included. Payments to proprietors and partners of unincorporated concerns, to members of the armed forces, and to pensioners carried on the active payrolls of establishments are excluded.

Payroll as shown for foreign-owned establishments is definitionally equivalent to "wages and salaries" as shown for U.S. affiliates in the BEA enterprise data. Totals for the two measures may differ because, among other things, the Census Bureau payroll data are measured on a calendar year basis, whereas the BEA wages and salaries data are measured on a fiscal year basis.<sup>11</sup>

#### Production worker hours

Data on production worker hours are presented for manufacturing establishments. Production worker hours consist of hours worked, including actual overtime hours (not straight-time-equivalent hours). They exclude hours paid for vacations, holidays, or sick leave.

#### **Production workers**

Data on production workers are presented for manufacturing establishments. Production workers are workers engaged in manual work and production operations or performing functions closely associated with production operations. They are workers up through the linesupervisor level at an operating establishment who are engaged in fabricating, processing, assembling, inspecting, receiving, storing, handling, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial and guard services, product development, auxiliary production for plant's own use (power plant, etc.), recordkeeping, and other services closely associated with these production operations at the establishment. (See definition of other workers.)

#### Data on shipments or sales are presented for operating establishments for all industries covered by the 1992 Economic Censuses, but such data are not available for the agricultural services, forestry, and fishing industries, which are not covered by the censuses.

The definition of shipments or sales varies by industry:

For *mining*, the item shown is the value of "shipments and receipts." Shipments include all products physically shipped from the establishment. Receipts include contract work done for others, except custom milling, and the value of products bought and sold without further processing.

For *construction*, the item shown is the "value of construction work." Construction work consists of the value of all work performed by general contractors, special trades contractors, and subcontractors and of land development and improvement work.

For *manufacturing*, the item shown is the value of "shipments." Shipments covers the net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped as well as miscellaneous receipts.

Totals for value of shipments for major industry groups within manufacturing and for manufacturing as a whole include large amounts of duplication because the products of some industries are used as materials by others. This duplication results, in part, from the combination of related industries that represent successive stages in the production of a finished manufactured product. Examples are the combination of flour mills and bakeries in the food group and of pulp mills and paper mills in the paper and allied products group.

For *wholesale or retail trade*, the item shown is "sales." Sales includes sales of merchandise plus receipts for delivery, installation, maintenance, repair, alteration, storage, equipment rental, and other services.

For *transportation and public utilities*, the item shown is "operating revenue." Operating revenue includes gross revenue from customers or clients for services rendered, from the use of facilities and from merchandise sold.

For *finance, insurance, and real estate*, the item shown is "revenue." Revenue includes net premiums earned by insurance carriers, commissions and fees from all sources, rents, net investment income, interest, dividends, service contracts, royalties, and dues and assessments from members.

For *services*, the item shown is "receipts." Receipts includes receipts for services rendered, for the leasing of facilities and equipment, and for the sale of merchandise by service establishments. It also includes the total value of service contracts, amounts received for work subcon-

<sup>11.</sup> See footnote 7.

tracted to others, and dues and assessments from members and affiliates.

The shipments or sales measure shown here for foreignowned establishments differs significantly in concept from the "sales" measure in the BEA enterprise data for U.S. affiliates. Because the shipments or sales data shown here are based on data reported at the establishment level, they include the value of shipments or sales between establishments within the same enterprise, as well as the shipments or sales of the establishment to outsiders. The BEA sales measure does not include shipments or sales between establishments within an enterprise, because the BEA data are reported on a consolidated enterprise basis, and, on this basis, only sales by the consolidated enterprise to outside individuals or firms are counted. As a result of this difference, the shipments or sales total for an enterprise obtained by summing across all establishments of the enterprise based on the Census Bureau data could be significantly higher than the sales total for the same enterprise based on the BEA data. Another difference is that, like payroll data, the Census Bureau measure is on a calendar year basis while the BEA measure is on a fiscal year basis.

#### Value added by manufacture

Value added by manufacture is derived by subtracting the cost of materials (including materials, supplies, containers, fuel, purchased electricity, and cost of contract work) from the value of shipments (products manufactured plus receipts for services rendered). The result of this calculation is adjusted by the addition of value added by merchandising operations (the difference between the sales value and the cost of merchandise sold without further manufacture, processing, or assembly) plus the net change between beginning- and end-of-year finished goods and work-in-process inventories.

Value added by manufacture avoids the duplication in the value of shipments that results when the products of one establishment are used as materials by another. Value added by manufacture is considered the best value measure available for assessing the relative economic importance of manufacturing among industries and geographic areas.

Although value added by manufacture and BEA's enterprise measure of gross product are similar measures, they differ in definition and in method of computation. BEA's gross product measure is calculated as the sum of (1) factor incomes (that is, compensation of employees, profits, and interest), (2) nonfactor income (that is, indirect business taxes), and (3) consumption of fixed capital (that is, depreciation). Value added by manufacture, on the other hand, is calculated as the difference between the value of output (value of shipments plus the change in finished goods and work-in-process inventories) and the cost of materials consumed. The two measures differ because purchased services are excluded from gross product but are included in value added by manufacture and because sales, excise, and other indirect taxes are included in gross product but are excluded from value added by manufacture. Additionally, gross product reflects inventory change valued at replacement cost, whereas value added by manufacture reflects inventory change valued at book value.

### Confidentiality

The Census Bureau and BEA are prohibited by law from publishing data that disclose the identity of, or information reported by, individual companies. In this publication, data in each cell were tested to determine whether they should be suppressed to maintain confidentiality. The data on numbers of establishments and their distribution by employment size class are not considered confidential, and these items are shown for countries, industries, or States in instances where other items are suppressed. For employment of foreign-owned establishments, cells that are suppressed contain letter symbols indicating the employment size range for the cell. For all other items, suppressed cells are indicated by a "(D)"; no size ranges are given.

The data in this publication are presented at a highly detailed industry level. In tables that present crossclassifications of the detailed industry data, such as by individual State or by investing country, many cells at the greatest levels of detail are suppressed. The large number of suppressed cells in this volume is an unavoidable consequence of distributing data for a relatively small number of companies among a large number of highly detailed categories while upholding the legal requirement to preserve the confidentiality of the data of individual companies.

## **Appendix: Data Tabulation**

## Treatment of Administrative and Auxiliary Establishments

Data for administrative and auxiliary establishments are available only for number of establishments, number of employees, and payroll. For these three items, the totals shown in this publication for industry divisions for both foreign-owned establishments and all U.S. establishments cover both administrative and auxiliary establishments and operating establishments.<sup>12</sup> For all U.S. establishments, this treatment differs from that in some 1992 Economic Census publications. In particular, division totals in the Economic Census publications for construction, wholesale trade, retail trade, and services exclude data for administrative and auxiliary establishments, and those for transportation and public utilities and for finance, insurance, and real estate exclude data for the administrative and auxiliary establishments of firms classified in certain industries within the divisions.<sup>13</sup>

For items other than number of establishments, number of employees, and payroll, totals shown for industry divisions for both foreign-owned and all U.S. establishments cover operating establishments only.

#### **Relation of Detail to Totals**

For both foreign-owned and all U.S. establishments, the "all industries" totals shown in the tables do not equal the sum of the data for the individual industry divisions, because the "land subdividers and developers, except cemeteries" industry (SIC 6552) is included in both the construction and the finance, insurance, and real estate divisions but is included only once in the "all industries" totals. Land subdividers and developers are included in

both divisions so that, for each division, the totals shown are consistent with the totals for all U.S. businesses in the Census of Construction Industries and the Census of Financial, Insurance and Real Estate Industries. The Census of Construction Industries includes "land subdividers and developers, except cemeteries" in construction, while the Census of Financial Insurance and Real Estate Industries includes it in finance, insurance, and real estate.

Subtotals for industry divisions and for two- and threedigit industries may not equal the sum across the more detailed industry data included in these subtotals. One reason is that the industry classifications of some establishments included on the SSEL are not known at the four-digit industry level. This happens when the Census Bureau receives reports for new establishments but does not receive the information needed to classify them at the detailed industry level. In such cases, data for the establishments may be included in the division or two- or three-digit industry subtotals but may not be included in the more detailed data below those subtotals.

In tables for individual States, industry subtotals may not equal the sum across the more detailed industries shown below those subtotals because some industries may not be shown. The industries not shown are those not shown in the 1992 Economic Censuses and County Business Patterns publications because employment in them is small. Also, in tables A2.1, M2.1, A3.15-A3.21, and M3.15-M3.21, industries in which foreign-owned establishments have fewer than 100 employees are not shown. Similarly, in tables A3.1-A3.7, industries in which foreign-owned establishments have fewer than 1,000 employees are not shown, and in tables M3.1-M3.6, industries in which foreign-owned establishments have fewer than 2,500 employees are not shown. Data for an unpublished industry are nevertheless included in the total shown for the broader industry group of which it is a part.

Because some industries may not be shown for individual States, the sum of the data across States for those industries may not equal the industry totals shown in tables that present data for the nation as a whole.

<sup>12.</sup> As noted in the Country and Industry Classification section, in most industry divisions, data for administrative and auxiliary establishments are not classified into detailed industries but are instead shown as a separate entry on an "administrative and auxiliary" line for the division.

<sup>13.</sup> For this publication, data on all-U.S. administrative and auxiliary establishments in these industries were obtained from the Enterprise Statistics report on the 1992 Economic Censuses CD-ROM, which provides information on establishments not available in the Economic Census publications for the individual industry divisions.