# Operations of U.S. Affiliates of Foreign Companies 

## Preliminary Results From the 2002 Benchmark Survey

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CONSISTENT with patterns in the overall U.S. economy, preliminary results from BEA's latest benchmark survey of foreign direct investment in the United States (FDIUS) reveal that production and employment by majority-owned nonbank U.S. affiliates of foreign companies moved in divergent directions in 2002. Their production, as measured by current-dollar value added, increased 9 percent, most of which likely represented an increase in real terms (table 1). ${ }^{1}$ In contrast, their employment decreased 3 percent. These movements were in the same direction, but they were somewhat sharper than the corresponding movements for all U.S. businesses in nonbank private industries. For current-dollar value added, the increase for affiliates substantially exceeded the 3-percent increase for all U.S. businesses. For employment, the decrease for affiliates exceeded the 1-percent decrease for all U.S. businesses.

The increase in value added by majority-owned U.S. affiliates ("U.S. affiliates") in 2002 represented a turnaround from 2001, when value added decreased 7 percent. ${ }^{2}$ In contrast, total value added in nonbank U.S. private industries (in current dollars) increased in both

[^0]2002 and 2001; in 2001, it increased 2 percent. For employment by U.S. affiliates, the 3-percent decrease in 2002 followed a decrease of 1 percent in 2001, a slightly larger rate of decrease than that for total employment in nonbank U.S. private industries.

In dollar terms, the value added of U.S. affiliates increased from $\$ 417$ billion in 2001 to $\$ 454$ billion in 2002; as a result, the affiliate share of U.S. value added in private industries increased from 5.4 percent to 5.7 percent (chart 1). The affiliate share in 2002 was less than the 5.9 -percent share reached in 2000, but it was higher than the share in earlier years; in 1997, the previous benchmark survey year, the share was less than 5 percent.

In contrast to the rapid increases in affiliate value added that occurred in 1998-2000-which were
Table 1. Value Added and Employment of Majority-Owned Nonbank U.S. Affiliates of Foreign Companies, 1988-2002

|  | Value added |  | Employment |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Millions of dollars | As a percentage of U.S. private industry value added | Thousands of workers | As a percentage of U.S. private industry employment |
| 1988... | 146,424 | 3.8 | 3,119 | 3.5 |
| 1989................... | 168,547 | 4.0 | 3,573 | 3.9 |
| 1990................... | 190,477 | 4.3 | 3,842 | 4.2 |
| 1991................... | 207,126 | 4.6 | 3,991 | 4.4 |
| 1992................... | 214,781 | 4.5 | 3,904 | 4.3 |
| 1993................... | 223,008 | 4.4 | 3,852 | 4.1 |
| 1994................... | 244,690 | 4.5 | 3,954 | 4.1 |
| 1995................. | 254,938 | 4.5 | 4,023 | 4.0 |
| 1996................... | 283,422 | 4.7 | 4,156 | 4.1 |
| 1997................... | 313,655 | 4.9 | 4,269 | 4.1 |
| 1998................... | 353,860 | 5.2 | 4,669 | 4.3 |
| 1999.................. | 397,295 | 5.6 | 5,064 | 4.6 |
| 2000................... | 447,287 | 5.9 | 5,657 | 5.0 |
| 2001'.................. | 417,122 | 5.4 | 5,594 | 4.9 |
| 2002p................... | 453,637 | 5.7 | 5,420 | 4.8 |
| Percent change from preceding year |  |  |  |  |
| 1989.................. | 15.1 | ................... | 14.6 | ..... |
| 1990.................... | 13.0 | ..... | 7.5 | ...................... |
| 1991................... | 8.7 | ........................ | 3.9 | .... |
| 1992................... | 3.7 | ....................... | -2.2 | .................... |
| 1993................... | 3.8 | ........ | -1.3 | ..................... |
| 1994................... | 9.7 | ..................... | 2.7 | ........ |
| 1995.................... | 4.2 | ....................... | 1.7 | .... |
| 1996................... | 11.2 | .................... | 3.3 | ..................... |
| 1997................... | 10.7 | .................... | 2.7 | ............ |
| 1998................... | 12.8 | ...................... | 9.4 | ..................... |
| 1999................... | 12.3 | ........................ | 8.5 | ..................... |
| 2000.................... | 12.6 | ........................ | 11.7 | ..................... |
| 2001'.................. | -6.7 | ........................ | -1.1 | .... |
| 2002p................... | 8.8 | ........................ | -3.1 | .................... |

${ }^{\rho}$ p Preliminary.
Revised.
Notes. For improved comparability with U.S.-affiliate value added, U.S. private industry value added was adjusted to exclude value added in depository institutions and private households, imputed rental income from
owner-occupied housing, and business transfer payments. owner-occupied housing, and business transfer payments.
For the latest estimates of U.S. private industry value added, see Brian C. Moyer, Mark A Planting, Paul V. Kern, and Abigail M. Kish, "Improved Annual Industry Accounts for 1998-2003: Integrated Annual Input-Output Accounts and Gross-Domestic-Product-by-Industry Accounts," Survey of Current Business 84 (June For :21-57.
For improved comparability with U.S.-affiliate employment, U.S. private industry employment was adjusted to data on U.S. private industry employment, U.S.-affiliate employment in Puerto Rico, in "other U.S. areas", and in data on U.S. private industry employment, U.S.-affiliate employment in Puerto Rico, in "other U.S. areas," and in
"foreign" was excluded from the U.S.-affiliate total when the employment shares were computed.
substantially boosted by foreign acquisitions of U.S. companies-the increase in affiliate value added in 2002 occurred in the face of a slump in new foreign investment. The increase in 2002 mainly reflected a recovery in ongoing affiliate operations from weak market conditions in 2001 rather than expansions due to new foreign ownership. ${ }^{3}$ In the manufacturing and information sectors in particular, affiliate value added increased substantially in 2002 after decreasing in 2001, reflecting rebounds in the ongoing operations of several large affiliates. In information, the rebounds for some affiliates reflected the shutdown of unprofitable business operations.

Employment by majority-owned nonbank U.S. affiliates decreased to 5.4 million employees in 2002 from 5.6 million employees in 2001 and from a peak of 5.7 million employees in 2000; the affiliate share of total U.S. employment in private industries dipped to 4.8 percent in 2002 from 4.9 percent in 2001 and 5.0 percent in 2000. ${ }^{4}$ In both 2001 and 2002, employment by affiliates decreased more than total U.S. employment in private industries, partly reflecting the relative concentration of affiliate employment in industrial sectors in which reductions in employment for all U.S. businesses were relatively large. For example, in 2002, employment in manufacturing, which decreased 7 percent for all U.S. businesses, accounted for 34 percent of total employment by U.S. affiliates, but it accounted for only 13 percent of total U.S. employment in private industries; in contrast, employment in health care and social assistance, which increased 3 percent for all U.S. businesses, accounted for less than 2 percent of employment by affiliates, but it accounted for about 12 percent of total U.S. private industry employment. In 2002, cutbacks in employment by several large affiliates in manufacturing were accompanied by increases in value added.

Despite these decreases, majority-owned nonbank U.S. affiliates in 2002 employed about 25 percent more workers than in 1997 ( 4.3 million) and about 75 percent more than in 1988 ( 3.1 million); these increases were mainly the result of foreign acquisitions of U.S. companies. Including employment by bank affiliates (which is collected only in benchmark surveys), U.S. affiliates employed 5.6 million workers in 2002, com-

[^1]Chart 1. Majority-Owned Nonbank U.S.-Affiliate Share of Value Added in Private Industries, 1988-2002

pared with 4.4 million workers in $1997 .{ }^{5}$
The following are additional highlights of the results from the 2002 benchmark survey.

- By country of ownership, the United Kingdom remained the largest investing country in terms of affiliate value added; Japan and Germany were the next largest investing countries.
- By industrial sector, the affiliate shares of U.S. employment were highest in mining (21 percent) and in manufacturing (13 percent). Since 1997, the affiliate share has increased substantially in mining and in utilities.
- By state, the affiliate shares of employment were highest in Hawaii, in South Carolina, and in Connecticut. The affiliate shares of manufacturing employment were highest in Delaware, in South Carolina, and in Kentucky.
- Affiliates accounted for 14 percent of the research and development (R\&D) performed by all U.S. businesses; in 1997, the affiliate share was 11 percent. Almost all of the R\&D performed by affiliates was funded either by the affiliates or by other private companies; only 2 percent was funded by the Federal Government.
-The share of affiliate employment covered by collective bargaining agreements was 15 percent, compared with 9 percent for all U.S. businesses. Affiliates accounted for 9 percent of the union-represented employment of all U.S. businesses in 2002, up from 6 percent in 1997.

5. Preliminary results for bank affiliates are being reported for the first time in this article. Previously, only the final results for these affiliates were published

- Affiliates accounted for 20 percent of U.S. exports of goods and for 28 percent of U.S. imports of goods. More than three-fourths of the imports by affiliates were shipped from the affiliates' parent companies or from other foreign companies with close ownership ties to the parents.
- By product, affiliates accounted for about 70 percent of U.S. exports of mineral fuels and lubricants and for about 65 percent of U.S. imports of road vehicles and parts; since 1997, both shares have increased, partly because of foreign acquisitions of U.S. companies.
- By major U.S. trading partner, affiliates accounted for more than 40 percent of U.S. exports of goods to Japan and Switzerland, and they accounted for more than 50 percent of U.S. imports of goods from Japan, Switzerland, the Republic of Korea, Saudi Arabia, and Germany.
- Bank affiliates had total assets of $\$ 2.2$ trillion; the total assets of nonbank affiliates were $\$ 4.6$ trillion. In terms of assets, the largest investing countries for bank affiliates were Germany and the United Kingdom.

In the rest of this article, trends and patterns in affiliate operations are discussed. The discussion of trends is based on data items that are collected in both the benchmark survey and the annual surveys of FDIUS. Findings from the data items that are collected only in benchmark surveys are then discussed. Several additional measures of U.S.-affiliate operations are presented in tables at the end of this article.

## Trends in Affiliate Operations

Two key measures-value added and employ-ment-are used in this discussion of the trends in U.S.affiliate operations to gauge the magnitude of these operations relative to the U.S. economy. Value added by affiliates is their contribution to U.S. gross domestic product; the contribution of affiliates to total private business activity in the United States is measured by their share of U.S. value added in private industries. At the industry and state level, the measure used to gauge the affiliate share of economic activity is employment, which is available at a more detailed level than the data on affiliate value added.

## Key Terms

The following key terms are used to describe U.S. affiliates of foreign companies and their operations.
U.S. affiliate. A U.S. business enterprise in which there is foreign direct investment-that is, in which a single foreign person owns or controls, directly or indirectly, 10 percent or more of the voting securities of an incorporated U.S. business enterprise or an equivalent interest in an unincorporated U.S. business enterprise. "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). A "foreign person" is any person that resides outside the United States-that is, outside the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, and all U.S. territories and possessions.

Majority-owned U.S. affiliate. A U.S. affiliate that is owned more than 50 percent by foreign direct investors.

Foreign parent. The first person outside the United States in a U.S. affiliate's ownership chain that has a direct investment interest in the affiliate.

Ulimate beneficial owner (UBO). 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. Unlike the foreign parent, the UBO of an affiliate may be located in the United States. The UBO of each U.S. affiliate is identified to ascertain the person that ultimately owns or controls
the U.S. affiliate and that therefore ultimately derives the benefits from ownership or control.

Foreign parent group. Consists of (1) the foreign parent, (2) any foreign person, proceeding up the foreign parent's ownership chain, that owns more than 50 percent of the person below it, up to and including the UBO, and (3) any foreign person, proceeding down the ownership chain(s) of each of these members, that is owned more than 50 percent by the person above it.

Value added (previously referred to as "gross product"). The contribution to U.S. gross domestic product, which is the market value of the goods and services produced by labor and property located in the United States. Value added can be measured as gross output (sales or receipts and other operating income plus inventory change) minus intermediate inputs (purchased goods and services). Alternatively, it can be measured as the sum of the costs incurred (except for intermediate inputs) and the profits earned in production. The valueadded estimates for U.S. affiliates were prepared by summing cost and profit data collected in the annual and benchmark surveys of foreign direct investment in the United States. The estimates are measures of gross value added rather than measures of net value added because they are calculated without the deduction for the consumption of fixed capital used in production.

The estimates of the value added of U.S. affiliates are conceptually consistent with BEA's estimates of U.S. value added by industry.

## The 2002 Benchmark Survey

Benchmark surveys are BEA's most comprehensive surveys of foreign direct investment, in terms of both coverage of companies and the amount of information collected. The 2002 survey covered all U.S. affiliates of foreign direct investors that had assets, sales, or net income of more than $\$ 10$ million. It collected detailed information on the financial structure and operations of U.S. affiliates and on the transactions and positions between the U.S. affiliates and their foreign parents.

The concepts and definitions underlying the 2002 survey are essentially the same as those underlying the previous benchmark survey, which covered 1997. The methodology of the 2002 survey will be published with the final survey results next year.

The financial and operating data from the benchmark survey extend the universe estimates that begin with the estimates for 1977 and that are derived from both annual and benchmark surveys. In addition, the benchmark survey data will be used in preparing annual estimates in subsequent nonbenchmark years; these annual estimates are derived by extrapolating forward the benchmark survey data by the sample data reported in BEA's annual surveys of foreign direct investment in the United States.

The 2002 benchmark survey initiates several important improvements in BEA's presentation of data on the operations of U.S. affiliates and on international services. Beginning with the 2002 data in this article, BEA is significantly expanding the information that will be presented on the operations of major-ity-owned U.S. affiliates; it will present more detailed information on value added, sales of goods and services, U.S. exports and imports of goods, research and development, taxes paid, employment, compensation of employees, and property, plant, and equipment. In addition, the analysis in this article and in future articles on the operations of U.S. affiliates will focus primarily on the activities of majority-owned affiliates. BEA will continue to provide information on the operations of majorityowned and minority-owned affiliates combined, but this information will not be as comprehensive or as detailed as that previously provided.

New data were collected in the 2002 benchmark survey, and these data will significantly improve the estimates of sales of services through U.S. affiliates, which are a major component of BEA's comprehensive estimates of U.S. international services. The new data will provide the basis for improved estimates of sales of insurance services, of sales of services through bank affiliates, and of services provided by wholesale and retail trade affiliates. BEA's annual estimates of U.S. international services are published regularly in the Survey of Current Business.

In addition, the industry classification system used in the 2002 benchmark survey is now based on the 2002 revision to the North American Industry Classification System. The revised industry classification system includes several new industries in the information sector. In conjunction with this change, BEA's standard presentations of data by industry (see table 19.2) have been modified to better reflect the industry distribution of the affiliate data. The standard presentations of U.S.-affiliate data by country of ultimate beneficial owner (UBO) have also been updated to reflect changes in the country-of-UBO pattern of
foreign direct investment in the United States (see table 20.2).
Many of the data items for nonbank affiliates that are collected in the benchmark surveys are also collected in annual surveys, but some items are collected only in benchmark surveys. These items include detailed data on research and development expenditures by source of funding, the number of employees covered by collective bargaining agreements, U.S. exports and imports of goods by product and by country of destination or origin, and U.S. imports of goods by intended use.

In addition, the 2002 benchmark survey collected data on the operations of bank affiliates, which are not covered in BEA's annual surveys of U.S.-affiliate operations. As a result of improvements in processing survey reports, data for bank affiliates are included for the first time in the preliminary results from the 2002 benchmark survey; in previous benchmark surveys, the data for bank affiliates were initially presented in the final results.

Affiliates with total assets, sales, or net income of more than $\$ 10$ million were required to complete a benchmark survey report for 2002. Affiliates that did not meet any of these criteria were exempt from reporting, but they had to file an exemption claim with information on their total assets, sales, and net income. The data on total assets, sales, and net income that were reported by exempt affiliates accounted for less than 0.5 percent of the total data for all affiliates. Estimates for exempt affiliates are included in the universe totals for all data items; however, because the exempt affiliates are very small, the overall contribution of these estimates to the tabulated data in terms of value is tiny.

In order to reduce the reporting burden of small enterprises, the exemption level for the 2002 benchmark survey was raised to $\$ 10$ million. The 1997 benchmark survey covered affiliates with assets, sales, or net income of more than $\$ 3$ million.

The preliminary results from the benchmark survey include estimates of data for reports that could not be fully processed in time for publication (these data account for less than 5 percent of the data for all reports received). The final results will incorporate data from the reports that are received and processed after the publication of the preliminary results. Revisions are generally expected to be small, but they could be sizable for some countries, industries, states, or items.

In order to reduce the burden on respondents to the 2002 benchmark survey, the long form that requested detailed information for nonbank affiliates was filed only by majority-owned affiliates with assets, sales, or net income of more than $\$ 125$ million. Smaller majority-owned affiliates filed the short form; for these affiliates, BEA estimated the items that are only on the long form, so that the published results are presented in the same detail for all majority-owned affiliates. The short form was also filed by all minority-owned nonbank affiliates (that is, by affiliates that were owned 50 percent or less by foreign direct investors); because the estimates of items that are only on the long form are not prepared for these affiliates, the published results for all affiliates cover only the items that are on the short form.

## Value added

In 2002, the value added of majority-owned nonbank U.S. affiliates in current dollars increased 9 percent, reversing a 7 -percent decrease in 2001; the increase was from $\$ 417$ billion in 2001 to $\$ 454$ billion in 2002. In comparison, total U.S. value added in private nonbank industries in current dollars increased 3 percent in 2002 after a 2-percent increase in 2001. ${ }^{6}$ The share of

[^2]U.S. value added in private industries accounted for by affiliates increased from 5.4 percent in 2001 to 5.7 percent in 2002. In 2001, the affiliate share dropped from 5.9 percent in 2000, following several years of increases associated with record levels of new foreign investment in the United States. ${ }^{7}$

By country of ownership. In 2002, more than 75 percent of the value added of nonbank U.S. affiliates was accounted for by affiliates with ultimate beneficial owners (UBOs) in seven major investing countries: Canada, France, Germany, Japan, the Netherlands,

[^3]
## Data on Foreign Direct Investment in the United States

BEA collects three broad sets of data on foreign direct investment in the United States (FDIUS): (1) Financial and operating data of U.S. affiliates, (2) data on U.S. businesses newly acquired or established by foreign direct investors (new investment data), and (3) international transactions (balance of payments) and direct investment position data. This article presents the financial and operating data. The new investment data were published in "Foreign Direct Investment in the United States: New Investment in 2003" in the June 2004 Survey of Current Business. The international transactions and direct investment position data were published in the articles "The International Investment Position of the United States at Yearend 2003," "U.S. International Transactions, First Quarter 2004," and "Direct Investment Positions for 2003: Country and Industry Detail," in the July 2004 Survey.
Each of the three data sets focuses on a distinct aspect of FDIUS. The financial and operating data provide a picture of the overall activities of the U.S. affiliates; the new investment data provide information about U.S. businesses that are newly acquired or established by foreign direct investors; and the international transactions and direct investment position data cover foreign investors' transactions with, and positions in, both new and existing U.S. affiliates. ${ }^{1}$

Financial and operating data of U.S. affiliates. The data on the overall operations of U.S. affiliates are col-

[^4]lected in BEA's annual and benchmark surveys of FDIUS. The data cover U.S. affiliates' balance sheets and income statements, employment and compensation of employees, trade in goods, research and development expenditures, sources of finance, and selected data by state. In addition, the value added of affiliates is estimated from data reported in these surveys.

In annual surveys, these data, unlike the new investment data, cover only nonbank affiliates. The financial and operating data for affiliates are on a fiscal year basis. The data cover the entire operations of the U.S. affiliate irrespective of the percentage of foreign ownership.

New investment data. The data on outlays by foreign direct investors to acquire or to establish affiliates in the United States are collected on a calendar year basis in BEA's annual surveys of new FDIUS. In addition, the surveys of new investment collect selected data on the operations of the newly acquired or established affiliates. For newly acquired affiliates, these data are for (or as of the end of) the most recent fiscal year preceding the acquisition, and for newly established businesses, they are projected for (or as of the end of) the first year of operation. The data cover the entire operations of the business irrespective of the percentage of foreign ownership.

International transactions and direct investment position data. These data are collected in the quarterly surveys of FDIUS. The data cover the U.S. affiliate's transactions and positions with its foreign parent and with other members of its foreign parent group, so these data focus on the foreign parent's share, or interest, in the affiliate rather than on the affiliate's size or level of operations. The major items included in the U.S. international transactions (balance of payments) accounts are direct investment financial flows, direct investment income, royalties and license fees, and other services transactions with the foreign parent group.

Switzerland, and the United Kingdom (table 2 and chart 2). Since 1977 (the initial year covered in BEA's annual surveys of U.S.-affiliate operations), the largest investing country in terms of affiliate value added has been the United Kingdom; in 2002, British-owned affiliates accounted for 20 percent of the value added of all U.S. affiliates and for 1 percent of total U.S. value added in private industries. ${ }^{8}$ The second-largest share of affiliate value added was accounted for by Japaneseowned affiliates ( 14 percent), and German-owned affiliates accounted for the third-largest share ( 13 percent). Japan also ranked as the second-largest investing country in 1990-97 and in 2000-2001. ${ }^{9}$ In 1998 and 1999, Germany ranked as the second-largest investing country.

In 2002, value added by German-owned affiliates increased $\$ 10$ billion, or 21 percent, after decreasing $\$ 5$ billion in 2001 and $\$ 10$ billion in 2000. Value added by French-owned affiliates increased $\$ 5$ billion (after decreasing $\$ 3$ billion in 2001), and value added by Cana-dian-owned affiliates increased $\$ 5$ billion (after

[^5]decreasing $\$ 5$ billion). For German-owned affiliates, much of the increase in 2002 was accounted for by expanded production by affiliates in the motor vehicle, machinery, telecommunications, and publishing industries. For French-owned affiliates, the increase largely reflected expansions by affiliates in the motion picture, pharmaceutical, and wholesale trade industries, including expansions associated with

Chart 2. Investing-Country Shares of Value Added of U.S. Affiliates, 2002


Table 2. Value Added of Majority-Owned Nonbank U.S. Affiliates by Country of Ultimate Beneficial Owner, 1997-2002

|  | Millions of dollars |  |  |  |  |  | Percentage of all-countries total |  |  |  |  |  | Addendum: <br> Percent <br> change in <br> affiliate value <br> added <br> $2001-2002$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |  |
| All countries.................... | 313,655 | 353,860 | 397,295 | 447,287 | 417,122 | 453,637 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 8.8 |
| Canada | 29,779 | 34,174 | 36,400 | 36,928 | 31,702 | 36,589 | 9.5 | 9.7 | 9.2 | 8.3 | 7.6 | 8.1 | 15.4 |
| Europe....... | 199,458 | 228,775 | 261,473 | 299,251 | 270,144 | 290,887 | 63.6 | 64.7 | 65.8 | 66.9 | 64.8 | 64.1 | 7.7 |
| Belgium ......................................................... |  |  | 5,177 | 5,526 | 5,925 | 6,194 | (D) | (D) | 1.3 | 1.2 | 1.4 | 1.4 | 4.5 |
| Denmark............................ | 1,192 | 931 | 884 | 1,282 | 1,188 | 2,427 | 0.4 | 0.3 | 0.2 | 0.3 | 0.3 | 0.5 | 104.3 |
| Finland............................... | 1,635 | 2,727 | (D) | 3,218 | (D) | 4,108 | 0.5 | 0.8 | (D) | 0.7 | (D) | 0.9 | (D) |
| France ................................. | 24,356 | 25,268 | 31,790 | 38,763 | 35,444 | 40,926 | 7.8 | 7.1 | 8.0 | 8.7 | 8.5 | 9.0 | 15.5 |
| Germany <br> Ireland | $\begin{array}{r} 36,914 \\ \text { (D) } \end{array}$ | $57,975$ | $\begin{array}{r} 61,569 \\ \text { (D) } \end{array}$ | $\begin{array}{r} 51,524 \\ \text { (D) } \end{array}$ | $\begin{array}{r} 46,882 \\ 3,109 \end{array}$ | $\begin{array}{r} 56,951 \\ 3,385 \end{array}$ | $11.8$ | $16.4$ | 15.5 (D) | 11.5 (D) | 11.2 0.7 | 12.6 0.7 | 21.5 8.9 |
| Italy......................................... | 3,180 | (D) | 4,149 | 4,765 | 4,665 | 5,070 | 1.0 | (D) | 1.0 | 1.1 | 1.1 | 1.1 | 8.7 |
| Netherlands............................ | 27,797 | 26,094 | 31,482 | 43,745 | 36,188 | 38,487 | 8.9 | 7.4 | 7.9 | 9.8 | 8.7 | 8.5 | 6.4 |
| Sweden ............................... | 6,443 | 8,680 | 10,559 | 10,678 | 10,803 | 11,891 | 2.1 | 2.5 | 2.7 | 2.4 | 2.6 | 2.6 | 10.1 |
| Switzerland.......................... | 22,268 | 22,798 | 25,996 | 35,225 | 29,097 | 27,596 | 7.1 | 6.4 | 6.5 | 7.9 | 7.0 | 6.1 | -5.2 |
| United Kingdom.................... | 66,112 | 70,602 | 80,391 | 98,282 | 89,151 | 89,658 | 21.1 | 20.0 | 20.2 | 22.0 | 21.4 | 19.8 | 0.6 |
| Other ................................. | 2,788 | 3,207 | 4,046 | (D) | (D) | 4,193 | 0.9 | 0.9 | 1.0 | (D) | (D) | 0.9 | (D) |
| Latin America and Other |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Hemisphere............. | 12,126 | 15,732 | 19,120 | 25,036 | 30,075 | 37,045 | 3.9 | 4.4 | 4.8 | 5.6 | 7.2 | 8.2 | 23.2 |
| Bermuda............................... | 3,166 | (D) | 8,566 | 11,697 | 14,949 | 22,154 | 1.0 | (D) | 2.2 | 2.6 | 3.6 | 4.9 | 48.2 |
| Mexico -.............................. | 1,229 | 1,488 | 1,447 | 2,746 | 2,660 | 3,496 | 0.4 | 0.4 | 0.4 | 0.6 | 0.6 | 0.8 | 31.4 |
| United Kingdom Islands, Caribbean. | 583 | 1,034 | 1,577 |  | 2,022 |  |  |  |  |  |  |  |  |
| Venezuela..................................... | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) |
| Other .................................. | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) |
| Africa ................. | (D) | (D) | 1,211 | 1,051 | (D) | 1,150 | (D) | (D) | 0.3 | 0.2 | (D) | 0.3 | (D) |
| Middle East ............................. | 2,619 | 2,460 | 2,131 | 2,402 | 8,308 | 7,275 | 0.8 | 0.7 | 0.5 | 0.5 | 2.0 | 1.6 | -12.4 |
| Saudi Arabia........................ | 600 | 346 | 500 | 328 | 6,307 | 4,993 | 0.2 | 0.1 | 0.1 | 0.1 | 1.5 | 1.1 | -20.8 |
| Other .................................. | 2,019 | 2,114 | 1,631 | 2,074 | 2,000 | 2,282 | 0.6 | 0.6 | 0.4 | 0.5 | 0.5 | 0.5 | 14.1 |
| Asia and Pacific ...................... | 65,069 | 68,005 | 71,836 | 77,594 | 69,960 | 75,627 | 20.7 | 19.2 | 18.1 | 17.3 | 16.8 | 16.7 | 8.1 |
| Australia............................... | 4,668 | 5,642 | 7,216 | 6,109 | 6,224 | 6,656 | 1.5 | 1.6 | 1.8 | 1.4 | 1.5 | 1.5 | 6.9 |
| Japan............................... | 55,280 | 56,291 | 57,622 | 63,622 | 57,735 | 61,976 | 17.6 | 15.9 | 14.5 | 14.2 | 13.8 | 13.7 | 7.3 |
| Korea, Republic of................... | 432 | 1,463 | 1,957 | 2,372 | 1,303 | 1,948 | 0.1 | 0.4 | 0.5 | 0.5 | 0.3 | 0.4 | 49.5 |
| Taiwan ............................... | 1,614 | 1,328 | 1,915 | 2,118 | 1,723 | 1,836 | 0.5 | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 6.5 |
| Other ......................................... | 3,075 | 3,281 | 3,126 | 3,373 | 2,975 | 3,211 | 1.0 | 0.9 | 0.8 | 0.8 | 0.7 | 0.7 | 7.9 |
| United States .......................... | (D) | (D) | 5,124 | 5,024 | (D) | 5,064 | (D) | (D) | 1.3 | 1.1 | (D) | 1.1 | (D) |

D Suppressed to avoid disclosure of data of individual companies.
acquisitions of U.S. companies. For Canadian-owned affiliates, the increase partly reflected improvements in affiliate operating performance that resulted from liquidations of unprofitable business units.

For affiliates of other investing countries, value added by affiliates with UBOs in Bermuda increased \$7 billion, or 48 percent, in 2002, after increasing $\$ 3$ billion in 2001. The increase in 2002 was mainly due to expanded value added for existing affiliates, but it also reflected inversions in ownership for multinational companies that previously had been headquartered in the United States or had been units of U.S.-headquartered companies. ${ }^{10}$ The increase in value added in 2001 was mainly due to inversions. Partly as a result of these inversions, Bermuda's ranking among investing countries in terms of affiliate value added jumped from 13th in 1997 to 8th in 2000-2002.

In 2002, value added for affiliates with UBOs in Denmark doubled. The increase, from $\$ 1.2$ billion to $\$ 2.4$ billion, was largely accounted for by new investments. Value added of Korean-owned affiliates increased 50 percent. The increase, from $\$ 1.3$ billion to $\$ 1.9$ billion, reflected increased sales by affiliates in wholesale trade. In contrast, value added by affiliates with UBOs in Saudi Arabia decreased 21 percent, from $\$ 6.3$ billion to $\$ 5.0$ billion, reflecting decreased sales by

[^6]affiliates in the petroleum industry.
By industry of affiliate. In 2002, affiliates classified in manufacturing accounted for 48 percent of the value added of all majority-owned nonbank affiliates (table 3). Affiliates in wholesale trade, which includes a number of large affiliates with substantial secondary operations in manufacturing, accounted for the next largest share of affiliate value added ( 17 percent).

In 1997-99, affiliates in manufacturing accounted for more than half of total affiliate value added. The share for manufacturing dropped, from 55 percent in 1999 to 48 percent in 2000, as a result of both reductions in value added by a number of large manufacturing affiliates and several foreign acquisitions in nonmanufacturing industries.

In 2002, value added by affiliates in manufacturing increased 9 percent, the same rate of increase as that for affiliates in all industries combined. In contrast, value added by affiliates in wholesale trade decreased 7 percent. For both sectors, the changes in affiliate value added partly reflected shifts in the industry classification of large affiliates that had sales in multiple industries. ${ }^{11}$

In manufacturing, value added by affiliates in plastics and rubber products increased 31 percent, reflecting improvements in affiliate operating performance.
11. Each U.S. affiliate is classified in the industry that accounts for the largest portion of its sales, but many U.S. affiliates are involved in a variety of business activities; as a result of changes in the mix of these activities, an affiliate's industry classification will change if the changes are expected to be sustained.

Table 3. Value Added of Majority-Owned Nonbank U.S. Affiliates by Industry of Affiliate, 1997-2002

|  | Millions of dollars |  |  |  |  |  | Percentage of all-industries total |  |  |  |  |  | Addendum: Percent change in affiliate value added2001-2002 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |  |
| All industries.. | 313,655 | 353,860 | 397,295 | 447,287 | 417,122 | 453,637 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 8.8 |
| Manufacturing........ | 169,279 | 201,116 | 219,141 | 215,684 | 200,506 | 217,552 | 54.0 | 56.8 | 55.2 | 48.2 | 48.1 | 48.0 | 8.5 |
| Food ................................................................ | 9,929 | 9,947 | 10,095 | 10,710 | 10,832 | 10,644 | 3.2 | 2.8 | 2.5 | 2.4 | 2.6 | 2.3 | -1.7 |
| Petroleum and coal products ........................ | (D) | 21,637 | (D) | (D) | (D) | (D) | (D) | 6.1 | (D) | (D) | (D) | (D) | (D) |
| Chemicals........................................... | 38,050 | 39,022 | 37,698 | 41,016 | 39,512 | 43,376 | 12.1 | 11.0 | 9.5 | 9.2 | 9.5 | 9.6 | 9.8 |
| Plastics and rubber products....................... | 7,136 | 8,506 | 9,326 | 8,727 | 7,636 | 9,984 | 2.3 | 2.4 | 2.3 | 2.0 | 1.8 | 2.2 | 30.7 |
| Nonmetallic mineral products ........................... | 11,472 | 11,265 | 12,805 | 14,952 | 14,367 | 15,391 | 3.7 | 3.2 | 3.2 | 3.3 | 3.4 | 3.4 | 7.1 |
| Primary metals ........................................ | 5,155 | 6,541 | 6,214 | 8,299 | 8,254 | 6,078 | 1.6 | 1.8 | 1.6 | 1.9 | 2.0 | 1.3 | -26.4 |
| Fabricated metal products .......................... | 6,506 | 6,333 | 6,561 | 7,279 | 6,382 | 5,924 | 2.1 | 1.8 | 1.7 | 1.6 | 1.5 | 1.3 | -7.2 |
| Machinery.............................................. | 12,778 | 13,342 | 13,803 | 18,382 | 19,077 | 22,323 | 4.1 | 3.8 | 3.5 | 4.1 | 4.6 | 4.9 | 17.0 |
| Computers and electronic products............... | 17,425 | 17,826 | 23,095 | 26,936 | 21,004 | 22,105 | 5.6 | 5.0 | 5.8 | 6.0 | 5.0 | 4.9 | 5.2 |
| Electrical equipment, appliances, and components. $\qquad$ | 9,020 | (D) | 10,011 | 16,359 | 12,536 | 4,419 | 2.9 | (D) | 2.5 | 3.7 | 3.0 | 1.0 | -64.7 |
| Transportation equipment........................... | 12,970 | 34,982 | 41,227 | 30,358 | 29,048 | 34,619 | 4.1 | 9.9 | 10.4 | 6.8 | 7.0 | 7.6 | 19.2 |
| Other .................................................. | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) | (D) |
| Wholesale trade............................................. | 44,489 | 47,877 | 55,536 | 81,413 | 81,462 | 76,122 | 14.2 | 13.5 | 14.0 | 18.2 | 19.5 | 16.8 | -6.6 |
| Retail trade ............................................... | 15,901 | 17,990 | 19,938 | 22,308 | 24,800 | 25,654 | 5.1 | 5.1 | 5.0 | 5.0 | 5.9 | 5.7 | 3.4 |
| Information... | 11,483 | 13,767 | 18,841 | 19,427 | 8,247 | 24,689 | 3.7 | 3.9 | 4.7 | 4.3 | 2.0 | 5.4 | 199.4 |
| Finance (except depository institutions) and insurance. | 23,550 | 19,808 | 21,029 | 34,730 | 17,305 | 19,487 | 7.5 | 5.6 | 5.3 | 7.8 | 4.1 | 4.3 | 12.6 |
| Real estate and rental and leasing................................................ | 7,027 | 7,604 | 9,302 | 9,323 | 9,502 | 9,072 | 2.2 | 2.1 | 2.3 | 2.1 | 2.3 | 2.0 | -4.5 |
| Professional, scientific, and technical services.... | 5,619 | 6,743 | 7,526 | 8,553 | 14,923 | 16,182 | 1.8 | 1.9 | 1.9 | 1.9 | 3.6 | 3.6 | 8.4 |
| Other industries ............................................ | 36,307 | 38,955 | 45,983 | 55,848 | 60,377 | 64,880 | 11.6 | 11.0 | 11.6 | 12.5 | 14.5 | 14.3 | 7.5 |

Affiliate value added in electrical equipment decreased 65 percent, and affiliate value added in primary metals decreased 26 percent; both decreases were mainly the result of shifts in the classification of affiliates to other industries in manufacturing.

In the information sector, value added by affiliates in 2002 tripled after decreasing more than 50 percent in 2001. Much of the increase in 2002 reflected a recovery in value added for affiliates in the telecommunications industry, which had been severely affected in 2001 by unfavorable market conditions. The increase also reflected expansions in value added by affiliates in the publishing and motion picture industries, including expansions resulting from acquisitions.

## Employment

In 2002, employment by majority-owned nonbank U.S. affiliates of foreign companies decreased 3 percent, from 5.6 million employees to 5.4 million employees, after decreasing 1 percent in 2001 (table 1). In both years, the decreases reflected both selloffs of affiliates and cutbacks in employment for ongoing affiliate operations. Increases in affiliate employment as a result of foreign acquisitions of U.S. companies were small compared with the increases in 1998-2000, reflecting a sharp falloff in new foreign investment after 2000.

Employment by affiliates decreased at a faster pace than employment by all U.S. businesses in both 2001 and 2002; as a result, the affiliate share of total U.S. employment in private industries decreased from 5.0 percent in 2000 to 4.9 percent in 2001 and 4.8 percent in 2002. The affiliate share in 2002 was still higher than the 4.1-percent share in 1997.

By industry. Since the introduction of industry classifications based on the North American Industry Classification System (NAICS) for U.S. affiliates in the 1997 benchmark survey, the affiliate share of U.S. employment among NAICS sectors has consistently been highest in mining and then in manufacturing. In 2002, majority-owned U.S. affiliates accounted for 21 percent of U.S. employment in mining and for 13 percent of U.S. employment in manufacturing (table 4). ${ }^{12}$ In the other sectors, the affiliate share of employment in 2002 was highest in wholesale trade ( 7 percent), transportation and warehousing ( 7 percent), and administration, support, waste management, and remediation services ( 6 percent).

In mining, the 21-percent affiliate share in 2002 was

[^7]
## Using Employment Data to Estimate Affiliate Shares of the U.S. Economy by Industry

The data on employment are used to estimate affiliate shares of the U.S. economy by industry on the basis of the North American Industry Classification System (NAICS) because these data can be disaggregated by industry of sales, a basis that approximates the disaggregation of the data for all U.S. businesses by industry of establishment. ${ }^{1}$ Thus, using the data on affiliate employment, the affiliate shares of the U.S. economy can be calculated at a greater level of industry detail than is possible using the valueadded estimates or other data, which can only be disaggregated by industry of affiliate. ${ }^{2}$

In the classification by industry of sales, the data on affiliate employment (and sales) are distributed among

[^8]all of the industries in which the affiliate reports sales. As a result, employment classified by industry of sales should approximate that classified by industry of establishment (or plant), because an affiliate that has an establishment in an industry usually also has sales in that industry. ${ }^{3}$

In contrast, in the classification by industry of affiliate, all of the operations data (including the employment data) for an affiliate are assigned to that affiliate's "primary" industry-that is, the industry in which it has the most sales. ${ }^{4}$ As a result, any affiliate operations that take place in secondary industries will be classified as operations in the primary industry.

[^9]much higher than the 15 percent share in 2001 . The jump in share in 2002 reflected a 38 -percent increase in affiliate employment that was more than accounted for by foreign acquisitions of U.S. companies with operations in mining support activities. In manufacturing, the affiliate share increased slightly in 2002 (from 12 percent to 13 percent) despite a 5 -percent reduction in affiliate employment, reflecting an even sharper decrease in manufacturing employment by all U.S. businesses.

Within manufacturing, the affiliate shares in 2002 were highest in chemicals ( 32 percent), in nonmetallic mineral products ( 24 percent), in beverages and tobacco products ( 22 percent), in electrical equipment (21 percent), and in transportation equipment (18 percent). Chemicals and nonmetallic mineral products also had the highest affiliate shares in 1997-2001. For beverages and tobacco, however, the affiliate share was much higher in 2002 than in earlier years, due to a substantial increase in employment associated with foreign acquisitions.

Since 1997, the affiliate share of employment at the NAICS sector level has increased substantially in utilities—from less than 1 percent in 1997 and 1998 to a little more than 4 percent in 2002. This increase from this very low base can be partly attributed to deregulation in regional markets for electric energy transmission and distribution. As a result of several foreign acquisitions in the electric power industry, employment by affiliates in utilities more than tripled in 2000, and then it increased by more than 50 percent in 2002. The affiliate share of employment also increased substantially in transportation and warehousing-from 4 percent in 1997 to 7 percent in 2002—partly because of acquisitions.

By state. The share of total U.S. employment in private industries that was accounted for by majorityowned nonbank U.S. affiliates in 2002 was largest in Hawaii ( 8.4 percent), in South Carolina ( 8.1 percent), and in Connecticut ( 7.7 percent) (table 5 ). Hawaii and South Carolina also had the largest affiliate shares in 1997-2001. In 2002, as in previous years, most of the employment by affiliates in Hawaii was accounted for by Japanese-owned affiliates, mainly affiliates in the accommodation, real estate, and travel service industries. In contrast, employment by affiliates in South Carolina was dominated by European-owned affiliates, mainly affiliates in manufacturing and retail trade. In Connecticut, European-owned affiliates also accounted for a dominant share of affiliate employment; much of this employment was by affiliates in retail trade, finance and insurance, and other service industries.

In manufacturing, the shares of employment ac-
counted for by affiliates in 2002 were largest in Delaware ( 22.9 percent), South Carolina ( 21.4 percent), Kentucky ( 19.2 percent), and New Hampshire (19.1 percent); these states also had the largest shares in 2001 (table 6). British- and German-owned affiliates accounted for most of the manufacturing employment of affiliates in both Delaware and New Hampshire. In South Carolina, most of the manufacturing employment of affiliates was accounted for by French-, Ger-man-, and Japanese-owned affiliates. In Kentucky, more than a third of the employment was accounted for by Japanese-owned affiliates; the rest was largely accounted for by Canadian- and European-owned affiliates.

In 42 of the 50 states, the manufacturing employment of affiliates decreased in 2002, reflecting reductions in manufacturing employment by all U.S. businesses. ${ }^{13}$ The largest reduction was in Texas, where manufacturing employment by affiliates decreased 22,000 , or 17 percent, after a decrease of 22,000 in 2001. For the other states, the largest reductions in manufacturing employment by affiliates were in California $(12,000)$ and in Massachusetts $(10,000)$.

## Expanded Information From the Benchmark Survey

The 2002 benchmark survey of foreign direct investment in the United States provides information on U.S.-affiliate research and development (R\&D), employment, and trade in goods that is collected only in benchmark survey years. The data on affiliate R\&D include expenditures broken down by source of funding; that is, whether the R\&D is funded by the affiliates, by the Federal Government, or by others. The data on affiliate employment include the number of employees
13. In 2002, manufacturing employment by U.S. businesses decreased in all 50 states.

## Data Availability

In this article, summaries of the preliminary estimates from the 2002 benchmark survey of foreign direct investment in the United States are presented. More detailed estimates will be posted this fall in files on BEA's Web site at <www.bea.gov>. These files can be downloaded at no charge. The revised estimates will be released next year.
Detailed estimates of U.S. affiliate operations for 1977-2001 are also available from BEA's Web site. For more information on these products and how to order them, see the International Investment Division Product Guide at <www.bea.gov/bea/ai/iidguide.htm>.

Table 5. Employment by Majority-Owned Nonbank U.S. Affiliates by State, 1997-2002

|  | Thousands of employees |  |  |  |  |  | Percentage of total private industry employment in the state ${ }^{1}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| Total ${ }^{2}$. | 4,269.1 | 4,669.5 | 5,064.3 | 5,656.5 | 5,594.3 | 5,420.3 | 4.0 | 4.2 | 4.5 | 4.9 | 4.9 | 4.8 |
| New England . | 302.0 | 327.9 | 349.2 | 420.9 | 435.3 | 409.2 | 5.1 | 5.4 | 5.7 | 6.7 | 7.0 | 6.7 |
| Connecticut. | 81.8 | 89.9 | 93.3 | 105.5 | 117.4 | 113.0 | 5.6 | 6.1 | 6.2 | 6.9 | 7.9 | 7.7 |
| Maine.. | 22.3 | 22.7 | 22.0 | 31.7 | 32.8 | 33.0 | 4.7 | 4.7 | 4.4 | 6.2 | 6.3 | 6.4 |
| Massachusetts.. | 145.7 | 156.9 | 175.9 | 207.7 | 209.9 | 191.0 | 5.2 | 5.4 | 6.0 | 6.9 | 7.0 | 6.5 |
| New Hampshire . | 26.9 | 29.8 | 29.9 | 43.8 | 41.0 | 38.4 | 5.3 | 5.7 | 5.5 | 7.9 | 7.4 | 7.0 |
| Rhode Island.. | 18.2 | 20.1 | 19.5 | 22.2 | 23.5 | 21.8 | 4.6 | 4.9 | 4.7 | 5.2 | 5.6 | 5.2 |
| Vermont ................................................... | 7.1 | 8.5 | 8.6 | 9.9 | 10.7 | 12.0 | 2.9 | 3.4 | 3.4 | 3.8 | 4.1 | 4.7 |
| Mideast | 774.2 | 841.9 | 917.5 | 1,051.2 | 1,042.2 | 1,003.2 | 4.4 | 4.7 | 5.0 | 5.6 | 5.6 | 5.4 |
| Delaware. | 14.9 | 19.9 | 24.0 | 27.7 | 24.4 | 23.3 | 4.3 | 5.6 | 6.5 | 7.4 | 6.6 | 6.4 |
| District of Columbia. | 7.3 | 10.2 | 13.9 | 14.7 | 17.7 | 17.0 | 1.8 | 2.5 | 3.2 | 3.2 | 3.9 | 3.7 |
| Maryland... | 62.6 | 67.7 | 88.7 | 104.6 | 106.4 | 106.3 | 3.3 | 3.5 | 4.4 | 5.1 | 5.1 | 5.1 |
| New Jersey . | 192.3 | 200.9 | 211.3 | 234.6 | 239.4 | 228.6 | 6.0 | 6.1 | 6.3 | 6.8 | 6.9 | 6.7 |
| New York................................................ | 297.4 | 328.0 | 348.3 | 415.8 | 415.5 | 394.7 | 4.3 | 4.7 | 4.8 | 5.6 | 5.7 | 5.5 |
| Pennsylvania............................................. | 199.7 | 215.2 | 231.3 | 253.9 | 238.7 | 233.4 | 4.1 | 4.4 | 4.6 | 5.0 | 4.7 | 4.6 |
| Great Lakes | 723.1 | 878.6 | 925.5 | 979.0 | 941.0 | 935.3 | 3.9 | 4.6 | 4.8 | 5.0 | 4.9 | 5.0 |
| Illinois.. | 193.7 | 223.9 | 241.2 | 277.2 | 274.2 | 268.4 | 3.8 | 4.3 | 4.6 | 5.2 | 5.2 | 5.2 |
| Indiana ................................................... | 113.0 | 140.1 | 144.3 | 143.8 | 142.0 | 137.4 | 4.5 | 5.4 | 5.5 | 5.4 | 5.5 | 5.4 |
| Michigan | 141.1 | 210.2 | 221.2 | 228.4 | 204.7 | 204.1 | 3.6 | 5.3 | 5.5 | 5.6 | 5.2 | 5.3 |
| Ohio ..................................................... | 204.5 | 223.5 | 228.7 | 228.3 | 220.8 | 212.8 | 4.3 | 4.6 | 4.6 | 4.6 | 4.5 | 4.5 |
| Wisconsin ............................................ | 70.8 | 80.9 | 90.1 | 101.3 | 99.3 | 112.5 | 3.0 | 3.4 | 3.7 | 4.1 | 4.1 | 4.7 |
| Plains .. | 222.2 | 237.8 | 257.9 | 285.3 | 300.1 | 295.7 | 2.8 | 2.9 | 3.1 | 3.3 | 3.8 | 3.8 |
| lowa | 32.1 | 31.8 | 35.5 | 36.5 | 38.8 | 37.4 | 2.7 | 2.6 | 2.8 | 2.9 | 3.1 | 3.0 |
| Kansas.. | 30.5 | 31.2 | 33.4 | 37.8 | 36.0 | 33.8 | 2.8 | 2.8 | 3.0 | 3.3 | 3.2 | 3.0 |
| Minnesota | 63.9 | 71.1 | 77.3 | 90.7 | 87.8 | 93.9 | 2.9 | 3.1 | 3.3 | 3.8 | 3.7 | 4.0 |
| Missouri . | 68.5 | 74.0 | 81.7 | 89.4 | 102.7 | 96.7 | 3.0 | 3.2 | 3.4 | 3.7 | 4.4 | 4.1 |
| Nebraska | 14.3 | 14.9 | 19.3 | 19.3 | 20.1 | 19.3 | 2.0 | 2.0 | 2.5 | 2.5 | 2.6 | 2.5 |
| North Dakota............................................. | 3.3 | 5.1 | 4.9 | 5.2 | 8.2 | 7.6 | 1.3 | 2.0 | 1.8 | 1.9 | 3.1 | 2.9 |
| South Dakota ............................................. | 9.6 | 9.7 | 5.8 | 6.4 | 6.6 | 7.1 | 3.2 | 3.2 | 1.9 | 2.0 | 2.1 | 2.3 |
| Southeast | 1,124.2 | 1,195.7 | 1,307.3 | 1,397.7 | 1,393.8 | 1,335.2 | 4.4 | 4.6 | 4.9 | 5.1 | 5.1 | 5.0 |
| Alabama. | 52.5 | 57.9 | 64.1 | 65.0 | 75.5 | 72.7 | 3.3 | 3.6 | 4.0 | 4.0 | 4.7 | 4.6 |
| Arkansas. | 29.6 | 31.1 | 31.6 | 34.7 | 35.8 | 32.9 | 3.1 | 3.2 | 3.2 | 3.5 | 3.6 | 3.3 |
| Florida... | 174.3 | 190.1 | 210.7 | 244.2 | 257.7 | 244.9 | 3.1 | 3.2 | 3.4 | 3.8 | 4.0 | 3.8 |
| Georgia. | 160.6 | 173.0 | 189.3 | 199.5 | 195.0 | 190.1 | 5.1 | 5.3 | 5.6 | 5.8 | 5.7 | 5.7 |
| Kentucky . | 71.9 | 75.0 | 82.2 | 94.1 | 90.9 | 87.7 | 4.9 | 5.0 | 5.4 | 6.0 | 6.0 | 5.8 |
| Louisiana. | 46.2 | 45.8 | 49.3 | 51.3 | 51.1 | 48.9 | 3.0 | 2.9 | 3.1 | 3.2 | 3.2 | 3.1 |
| Mississippi .. | 17.3 | 18.2 | 19.8 | 20.0 | 21.5 | 22.2 | 1.9 | 1.9 | 2.1 | 2.1 | 2.3 | 2.4 |
| North Carolina | 195.6 | 208.5 | 229.4 | 239.1 | 223.0 | 212.7 | 6.1 | 6.4 | 6.9 | 7.0 | 6.7 | 6.5 |
| South Carolina | 111.4 | 117.4 | 128.0 | 129.1 | 129.1 | 123.4 | 7.5 | 7.7 | 8.2 | 8.2 | 8.4 | 8.1 |
| Tennessee... | 127.1 | 128.3 | 132.8 | 137.7 | 134.2 | 131.0 | 5.6 | 5.5 | 5.6 | 5.7 | 5.7 | 5.6 |
| Virginia.................................................... | 117.5 | 126.5 | 146.5 | 158.0 | 154.5 | 146.4 | 4.3 | 4.5 | 5.1 | 5.4 | 5.3 | 5.0 |
| West Virginia. | 20.2 | 23.9 | 23.7 | 25.0 | 25.7 | 22.4 | 3.6 | 4.2 | 4.1 | 4.3 | 4.4 | 3.9 |
| Southwest. | 356.4 | 397.1 | 432.6 | 492.5 | 484.7 | 456.0 | 3.3 | 3.5 | 3.7 | 4.1 | 4.1 | 3.9 |
| Arizona.. | 43.0 | 46.4 | 53.6 | 60.8 | 57.0 | 55.4 | 2.5 | 2.5 | 2.8 | 3.1 | 2.9 | 2.9 |
| New Mexico ... | 11.3 | 11.2 | 10.2 | 12.0 | 13.5 | 12.7 | 2.0 | 2.0 | 1.8 | 2.1 | 2.3 | 2.2 |
| Oklahoma ... | 29.2 | 30.9 | 33.4 | 34.7 | 40.0 | 36.5 | 2.5 | 2.6 | 2.8 | 2.8 | 3.3 | 3.0 |
| Texas....................................................... | 272.9 | 308.6 | 335.3 | 384.9 | 374.2 | 351.4 | 3.7 | 4.0 | 4.3 | 4.7 | 4.6 | 4.4 |
| Rocky Mountain. | 95.4 | 97.2 | 124.8 | 143.4 | 136.2 | 134.2 | 2.7 | 2.7 | 3.3 | 3.7 | 3.5 | 3.5 |
| Colorado .......... | 56.1 | 56.1 | 73.7 | 88.2 | 81.3 | 76.7 | 3.2 | 3.1 | 3.9 | 4.5 | 4.2 | 4.1 |
| Idaho... | 7.1 | 7.8 | 11.0 | 10.8 | 11.3 | 12.5 | 1.7 | 1.8 | 2.4 | 2.3 | 2.3 | 2.6 |
| Montana | 2.8 | 4.8 | 9.7 | 5.0 | 5.7 | 5.8 | 0.9 | 1.6 | 3.1 | 1.6 | 1.8 | 1.8 |
| Utah ........................................................ | 24.2 | 22.6 | 25.1 | 32.2 | 30.4 | 31.1 | 2.8 | 2.6 | 2.8 | 3.5 | 3.3 | 3.4 |
| Wyoming .................................................. | 5.2 | 5.9 | 5.2 | 7.2 | 7.5 | 8.1 | 3.0 | 3.4 | 2.9 | 3.9 | 4.0 | 4.2 |
| Far West.................................................... | 648.5 | 671.7 | 726.4 | 862.5 | 832.4 | 825.4 | 3.9 | 3.9 | 4.1 | 4.8 | 4.6 | 4.6 |
| Alaska | 8.5 | 9.3 | 8.9 | 10.3 | 10.5 | 11.2 | 4.2 | 4.5 | 4.2 | 4.8 | 4.8 | 5.1 |
| California.................................................. | 467.7 | 487.0 | 529.6 | 638.9 | 615.2 | 616.4 | 4.0 | 4.0 | 4.3 | 5.0 | 4.8 | 4.9 |
| Hawaii ..................................................... | 43.5 | 38.9 | 39.4 | 40.6 | 38.9 | 38.3 | 9.9 | 8.9 | 8.9 | 8.9 | 8.5 | 8.4 |
| Nevada..................................................... | 19.7 | 21.3 | 26.2 | 30.7 | 28.2 | 26.5 | 2.4 | 2.5 | 2.9 | 3.3 | 3.0 | 2.8 |
| Oregon.................................................... | 41.8 | 43.4 | 46.9 | 56.0 | 51.5 | 48.8 | 3.2 | 3.2 | 3.4 | 4.0 | 3.8 | 3.6 |
| Washington ................................................. | 67.3 | 71.8 | 75.4 | 86.0 | 88.1 | 84.1 | 3.1 | 3.2 | 3.3 | 3.7 | 3.8 | 3.7 |
| Puerto Rico.................................................. | 13.8 | 14.4 | 15.2 | 16.0 | 16.4 | 15.6 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Other U.S. areas ${ }^{3}$.......................................... | 7.5 | 6.8 | 7.6 | 7.5 | 11.9 | 10.1 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
|  | 1.9 | (*) | 0.3 | 0.5 | 0.4 | 0.4 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| * Fewer than 50 employees. <br> n.a. Not available. |  |  |  |  | because employed | include oad by U.S. | sitory inst inesses. | ons, and also may | definition, from the | y exclude A estimate | residen cause of | emporarily rent defini |
| 1. The data on employment in private industries us | calculate | shares sh | $n$ in this tab | are from | tions and rever | ion schedu |  | - | 促 |  |  |  |
| BEA's Regional Economic Information System. The to employment of private households. The U.S. employm differ from those used for table 1 and the all-industries the "National Income and Product Accounts (NIPA) Tab | are equal to totals used of table 4, They differ | employment calculate ich are from m the NIPA | private in ate shares ables 6.4C timates of | ries less this table 6.4D of oloyment | 2. For C Puerto Rico the percent <br> 3. Cons <br> 4. Consi | istency with in "other U.S shares on of the U.S. of employe | e coverag reas," and s line were gin Islands of U.S. affi | the private oreign" wa mputed. uam, Amer working | dustry employ cluded from <br> Samoa, and oad. | ment data, he U.S.-aff <br> all other ou | .-affiliate employm <br> g U.S. are | loyment in total when |

Table 6. Manufacturing Employment by Majority-Owned Nonbank U.S. Affiliates by State, 1997-2002

|  | Thousands of employees |  |  |  |  |  | Percentage of total manufacturing employment in the state ${ }^{1}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
| Total ${ }^{2}$......................................... | 1,846.3 | 2,030.3 | 2,036.5 | 2,118.8 | 1,934.9 | 1,824.0 | 10.5 | 11.5 | 11.7 | 12.2 | 11.7 | 11.8 |
| New England.. | 100.1 | 109.2 | 115.3 | 127.7 | 125.6 | 109.7 | 10.3 | 11.2 | 12.2 | 13.6 | 13.9 | 13.4 |
| Connecticut......................................... | 24.2 | 28.9 | 28.7 | 32.2 | 35.7 | 34.2 | 9.8 | 11.7 | 11.9 | 13.7 | 15.7 | 16.1 |
| Maine .............................................. | 11.5 | 11.3 | 11.0 | 11.4 | 11.4 | 10.2 | 14.0 | 13.8 | 13.6 | 14.3 | 15.1 | 14.8 |
| Massachusetts .................................. | 40.3 | 42.4 | 50.0 | 53.3 | 51.2 | 41.5 | 9.7 | 10.2 | 12.4 | 13.1 | 13.1 | 11.9 |
| New Hampshire........................... | 13.9 | 16.4 | 16.4 | 20.8 | 18.2 | 16.3 | 13.5 | 15.7 | 16.0 | 20.4 | 18.6 | 19.1 |
| Rhode Island.................................... | 7.0 | 7.7 | 6.3 | 6.1 | 5.2 | 4.2 | 9.0 | 10.1 | 8.6 | 8.6 | 7.6 | 6.6 |
| Vermont................................................................... | 3.2 | 2.5 | 2.8 | 3.9 | 3.9 | 3.3 | 7.2 | 5.6 | 6.2 | 8.4 | 8.5 | 8.1 |
| Mideast. | M | M | 267.8 | M | 261.3 | 251.5 | (D) | (D) | 11.9 | (D) | 12.1 | (D) |
| Delaware. | 1 | 1 | 7.2 | I | 9.4 | 8.4 | (D) | (D) | 16.9 | (D) | 23.7 | 22.9 |
| District of Columbia ............................ | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 | 13.2 | 13.0 | 10.5 | 11.5 | 11.0 | (D) |
| Maryland ......................................... | 19.9 | 20.9 | 18.5 | 21.8 | 20.1 | 17.0 | 11.8 | 12.3 | 10.9 | 12.6 | 11.8 | 10.7 |
| New Jersey...................................... | 72.2 | 74.8 | 65.4 | 64.0 | 64.9 | 64.9 | 16.9 | 17.6 | 15.8 | 15.2 | 16.1 | 17.6 |
| New York.. | 68.2 | 74.9 | 66.5 | 77.9 | 74.7 | 72.7 | 8.8 | 9.7 | 8.8 | 10.5 | 10.6 | 11.1 |
| Pennsylvania .................................... | 96.8 | 109.9 | 109.9 | 111.7 | 91.9 | 88.1 | 11.1 | 12.5 | 12.6 | 13.0 | 11.1 | 11.5 |
| Great Lakes. | 408.7 | 496.3 | 498.0 | 516.4 | 455.8 | 444.8 | 10.1 | 12.2 | 12.3 | 12.8 | 12.0 | 12.6 |
| Illinois .. | 95.3 | 104.2 | 101.5 | 109.7 | 97.4 | 89.3 | 10.7 | 11.7 | 11.6 | 12.7 | 11.9 | 11.7 |
| Indiana | 79.0 | 104.2 | 102.0 | 99.9 | 96.0 | 91.2 | 12.1 | 15.8 | 15.3 | 15.1 | 15.5 | 15.4 |
| Michigan......................................... | 72.1 | 111.3 | 113.9 | 133.9 | 102.2 | 95.8 | 8.2 | 12.6 | 12.8 | 15.0 | 12.3 | 12.6 |
| Ohio............................................... | 120.8 | 127.4 | 129.0 | 118.7 | 111.4 | 110.1 | 11.8 | 12.4 | 12.6 | 11.7 | 11.6 | 12.4 |
| Wisconsin........................................ | 41.5 | 49.2 | 51.6 | 54.2 | 48.7 | 58.4 | 7.1 | 8.2 | 8.7 | 9.1 | 8.6 | 11.0 |
| Plains... | 116.5 | 127.4 | 132.3 | 132.8 | 135.8 | 132.5 | 8.4 | 9.0 | 9.4 | 9.5 | 10.1 | 10.5 |
| lowa.... | 21.1 | 20.8 | 21.9 | 22.4 | 22.1 | 20.7 | 8.6 | 8.3 | 8.7 | 8.9 | 9.1 | 9.0 |
| Kansas .. | 15.3 | 16.9 | 18.1 | 18.3 | 14.0 | 14.1 | 7.8 | 8.3 | 8.9 | 9.2 | 7.2 | 7.7 |
| Minnesota. | 28.8 | 30.8 | 31.0 | 32.2 | 31.2 | 32.3 | 7.4 | 7.8 | 7.9 | 8.2 | 8.2 | 9.0 |
| Missouri.. | 37.9 | 44.0 | 45.1 | 46.2 | 51.8 | 48.0 | 10.0 | 11.6 | 12.1 | 12.7 | 15.1 | 14.7 |
| Nebraska... | 8.4 | 8.9 | 10.1 | 8.2 | 8.2 | 9.2 | 7.6 | 7.8 | 9.0 | 7.2 | 7.4 | 8.6 |
| North Dakota................................... | 1.5 | 2.0 | 2.3 | 2.0 | 4.5 | 3.9 | 6.7 | 8.7 | 10.0 | 8.2 | 18.4 | 16.2 |
| South Dakota ................................... | 3.5 | 4.0 | 3.7 | 3.5 | 4.0 | 4.4 | 8.1 | 9.2 | 8.4 | 8.0 | 9.6 | 11.2 |
| Southeast. | 562.4 | 580.8 | 593.7 | 596.8 | 543.9 | 517.4 | 12.7 | 13.1 | 13.6 | 13.9 | 13.4 | 13.6 |
| Alabama. | 36.2 | 41.4 | 42.7 | 41.1 | 36.7 | 34.3 | 9.8 | 11.3 | 12.0 | 11.8 | 11.2 | 11.1 |
| Arkansas | 21.6 | 22.7 | 22.1 | 23.7 | 22.8 | 19.9 | 9.0 | 9.4 | 9.2 | 9.9 | 10.0 | 9.2 |
| Florida .... | 41.2 | 43.9 | 41.4 | 49.2 | 46.0 | 43.7 | 9.0 | 9.6 | 9.1 | 10.9 | 10.5 | 10.7 |
| Georgia . | 75.4 | 81.1 | 76.4 | 79.0 | 70.4 | 66.7 | 13.9 | 14.9 | 14.0 | 14.6 | 13.9 | 14.1 |
| Kentucky.......................................... | 50.1 | 53.2 | 57.3 | 60.7 | 55.8 | 53.3 | 16.4 | 17.3 | 18.5 | 19.6 | 18.9 | 19.2 |
| Louisiana......................................... | 18.9 | 18.9 | 22.0 | 22.0 | 19.5 | 17.4 | 10.3 | 10.3 | 12.2 | 12.4 | 11.3 | 10.7 |
| Mississippi....................................... | 10.5 | 10.7 | 11.8 | 9.6 | 9.9 | 10.7 | 4.6 | 4.6 | 5.1 | 4.3 | 4.9 | 5.7 |
| North Carolina.................................. | 107.7 | 107.3 | 116.4 | 113.6 | 96.6 | 91.4 | 13.3 | 13.4 | 15.0 | 15.0 | 13.6 | 14.1 |
| South Carolina | 65.1 | 66.4 | 69.4 | 70.0 | 65.9 | 62.4 | 18.5 | 19.0 | 20.8 | 21.0 | 20.9 | 21.4 |
| Tennessee........ | 80.0 | 78.3 | 75.6 | 72.7 | 70.0 | 67.7 | 16.1 | 15.8 | 15.3 | 14.9 | 15.3 | 15.7 |
| Virginia ........................................... | 44.3 | 45.8 | 46.8 | 42.4 | 38.2 | 37.5 | 11.8 | 12.3 | 12.8 | 11.8 | 11.1 | 11.6 |
| West Virginia .................................... | 11.4 | 11.1 | 11.7 | 12.9 | 12.1 | 12.4 | 14.9 | 14.4 | 15.3 | 17.1 | 16.6 | 18.0 |
| Southwest | 150.9 | 171.9 | 169.8 | 184.7 | 160.8 | 135.2 | 10.2 | 11.4 | 11.4 | 12.4 | 11.1 | 10.1 |
| Arizona. | 13.4 | 14.1 | 15.0 | 16.2 | 15.1 | 13.3 | 6.7 | 6.8 | 7.3 | 7.8 | 7.5 | 7.2 |
| New Mexico... | 3.8 | 2.8 | 2.7 | 3.8 | 2.7 | 1.9 | 8.6 | 6.5 | 6.7 | 9.2 | 6.6 | 4.9 |
| Oklahoma........................................ | 15.1 | 14.9 | 15.3 | 15.5 | 15.5 | 14.7 | 8.6 | 8.3 | 8.6 | 8.8 | 9.1 | 9.6 |
| Texas .............................................. | 118.6 | 140.1 | 136.8 | 149.2 | 127.5 | 105.3 | 11.3 | 13.0 | 12.9 | 14.0 | 12.3 | 11.0 |
| Rocky Mountain .................................. | K | K | 33.7 | K | 35.9 | 35.4 | (D) | (D) | 8.1 | (D) | 8.8 | (D) |
| Colorado......................................... | 16.7 | 14.8 | 16.3 | 24.4 | 19.0 | 18.7 | 8.9 | 7.8 | 8.7 | 12.9 | 10.4 | 11.1 |
| Idaho | 3.5 | 4.1 | 4.8 | H | 3.8 | 3.9 | 5.1 | 5.9 | 6.9 | (D) | 5.5 | 5.9 |
| Montana .......................................... | F | F | 2.1 | 0.9 | 2.1 | 1.9 | (D) | (D) | 9.4 | 4.1 | 9.9 | 9.5 |
| Utah................................................ | 8.2 | 9.3 | 9.4 | 10.1 | 10.0 | 10.1 | 6.4 | 7.3 | 7.4 | 8.0 | 8.2 | 8.8 |
| Wyoming ......................................... | 1.4 | 1.4 | 1.1 | 1.0 | 0.9 | 0.8 | 14.4 | 14.1 | 10.6 | 9.8 | 9.2 | (D) |
| Far West ............................................. | 206.3 | 218.3 | 218.1 | 226.2 | 206.7 | 189.3 | 8.4 | 8.7 | 8.8 | 9.1 | 8.6 | 8.6 |
| Alaska ............................................ | 1.5 | 1.5 | 1.3 | 1.5 | 1.7 | 1.7 | 10.7 | 11.7 | 10.7 | 11.6 | 13.6 | 14.7 |
| California ......................................... | 154.4 | 164.5 | 168.4 | 175.0 | 161.3 | 149.5 | 8.5 | 8.8 | 9.2 | 9.4 | 9.0 | 9.1 |
| Hawaii ............................................ | 1.3 | 1.2 | 1.2 | 1.2 | 0.9 | 0.8 | 8.5 | 8.0 | 7.8 | 7.7 | 5.5 | 5.4 |
| Nevada ........................................... | 5.0 | 4.9 | 4.6 | 4.7 | 4.8 | 4.5 | 13.0 | 12.4 | 11.4 | 11.2 | 10.9 | 10.3 |
| Oregon ........................................... | 19.0 | 18.3 | 18.0 | 19.3 | 15.6 | 11.6 | 8.4 | 8.1 | 8.1 | 8.6 | 7.2 | 5.7 |
| Washington ....................................... | 25.1 | 27.9 | 24.5 | 24.5 | 22.3 | 21.3 | 7.2 | 7.9 | 7.2 | 7.4 | 7.0 | 7.4 |
| Puerto Rico ......................................... | 7.5 | 7.3 | 7.5 | 8.4 | 8.1 | 7.7 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Other U.S. areas $^{3}$................................. | 0.2 | 0.2 | 0.3 | 0.3 | 1.0 | 0.6 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Foreign ${ }^{4}$............................................... | 0.0 | 0.0 | 0.0 | 0.0 | (*) | 0.0 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |

[^10]tency with the coverage of the employment data for all U.S. manufacturing plants, U.S. affiliate employment in Puerto Rico, in "other U.S. areas," and in "foreign" was excluded from the U.S.-affiliate total when the percentage shares on this line were computed
3. Consists of the U.S. Virgin Islands, Guam, American Samoa, and all other outlying U.S. areas. 4. Consists of employees of U.S. affiliates working abroad.
$99 \cdot G-T h e ~ f o l l o w i n g ~ r a n g e s ~ a r e ~ g i v e n ~ i n ~ e m p l o y m e n t ~ c e l l s ~ t h a t ~ a r e ~ s u p p r e s s e d: ~ A-1 ~ t o ~ 499 ; ~ F-500 ~ t o ~$ L-50,000 to 99,999; M-100,000 or more.
that are covered by collective bargaining agreements (and thus are represented by unions). The data on U.S. trade in goods of affiliates include exports and imports by product and by country of destination or origin; they also include imports of goods by intended use-that is, whether the goods are intended for further manufacture, for resale without further processing, or as additions to the affiliates' capital stock. ${ }^{14}$ In addition, the benchmark survey provides some information on the operations of bank affiliates, which are not covered in BEA's annual surveys of U.S.-affiliate operations. ${ }^{15}$

## Research and development

In 2002, expenditures on R\&D performed by majorityowned U.S. affiliates totaled $\$ 27.5$ billion; these expenditures accounted for 14 percent of the R\&D performed by all U.S. businesses (table 7). The affiliate share in 2002 was substantially larger than the 11 percent share in 1997. In 1998, the share increased to 13 percent as a result of several foreign acquisitions of U.S. companies with large R\&D expenditures. The share increased again in 2002 as a result of a 4 -percent increase in affiliate R\&D, partly due to acquisitions, in the face of a 4 -percent reduction in R\&D by all U.S. businesses.

About 75 percent of the total R\&D performed by U.S. affiliates in 2002 was accounted for by affiliates in

[^11]Table 7. Research and Development Performed by Majority-Owned Nonbank U.S. Affiliates and by All U.S. Businesses, 1997-2002

|  | R\&D performed by affiliates |  |  | R\&D performed by all U.S. businesses ${ }^{1}$ |  |  | R\&D by affiliates as a percentage of R\&D by all U.S. businesses |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { All } \\ \text { indus- } \\ \text { tries } \end{gathered}$ | Manufacturing | Other | All industries | Manufacturing | Other | All industries | Manufacturing | Other |
| Millions of dollars |  |  |  |  |  |  |  |  |  |
| 1997 ....... | 17,216 | 14,270 | 2,946 | 157,539 | n.a. | n.a. | 10.9 | n.a. | n.a. |
| 1998 ..... | 22,375 | 18,788 | 3,587 | 169,180 | n.a. | n.a. | 13.2 | n.a. | n.a. |
| 1999 ....... | 24,027 | 19,991 | 4,036 | 182,711 | 116,921 | 65,790 | 13.2 | 17.1 | 6.1 |
| 2000 ....... | 26,180 | 20,990 | 5,190 | 199,539 | 124,078 | 75,461 | 13.1 | 16.9 | 6.9 |
| 2001 ....... | 26,463 | 20,054 | 6,409 | 198,505 | 120,705 | 77,800 | 13.3 | 16.6 | 8.2 |
| 2002 ....... | 27,508 | 20,228 | 7,280 | 190,809 | 108,985 | 81,824 | 14.4 | 18.6 | 8.9 |
| Percent distribution |  |  |  |  |  |  |  |  |  |
| 1997 ....... | 100.0 | 82.9 | 17.1 | 100.0 | n.a. | n.a. |  | ... |  |
| 1998 ....... | 100.0 | 84.0 | 16.0 | 100.0 | n.a. | n.a. | ............ |  |  |
| 1999 ....... | 100.0 | 83.2 | 16.8 | 100.0 | 64.0 | 36.0 |  |  |  |
| 2000 ..... | 100.0 | 80.2 | 19.8 | 100.0 | 62.2 | 37.8 | ......... | .... |  |
| 2001 ....... | 100.0 | 75.8 | 24.2 | 100.0 | 60.8 | 39.2 | ........ | ............ |  |
| 2002 ....... | 100.0 | 73.5 | 26.5 | 100.0 | 57.1 | 42.9 |  |  |  |

n.a. Not available.

R\&D Research and development.

1. Data are from the National Science Foundation.
manufacturing-mainly those in the pharmaceutical, motor vehicle, communications equipment, and electronic instrument industries. In other industries, most of the R\&D was performed by affiliates classified in wholesale trade, many of which had secondary operations in manufacturing or in professional, scientific, and technical services. In 2002, affiliates in manufacturing accounted for 19 percent of the R\&D of all U.S. manufacturing companies, and affiliates in other industries accounted for 9 percent of the R\&D of all other companies. Both shares were up from the shares in 1999-2001.

In 2002, 90 percent of the total R\&D performed by U.S. affiliates was performed by the affiliates for themselves, and 8 percent was performed under contract for other private companies (table 8). The share of affiliate R\&D that was funded by the Federal Government was 2 percent, much smaller than the 9-percent federally funded share for all U.S. businesses. U.S. affiliates accounted for 15 percent of the privately funded R\&D, but they accounted for only 3 percent of all federally funded R\&D. The affiliate share of federally funded $R \& D$ may be low because much of this research is military related.

The amount of R\&D performed by affiliates (\$27.5 billion) was larger than the amount of R\&D funded by affiliates ( $\$ 25.5$ billion). R\&D funded by affiliates includes $R \& D$ performed for affiliates by others under contract and excludes R\&D performed by affiliates for others. ${ }^{16}$ Of the total R\&D funded by affiliates, 98 percent was performed by the affiliates, and 2 percent was

\footnotetext{
16. $\mathrm{R} \& \mathrm{D}$ funded by affiliates is the basis on which data on affiliate $\mathrm{R} \& \mathrm{D}$ expenditures were collected in BEA's annual surveys before 1997. Since the 1997 benchmark survey, the basis for annual data collection has been R\&D performed by affiliates, which is the main basis used by the National Science Foundation to present data on U.S. industrial R\&D.

Table 8. Research and Development Performed by Majority-Owned Nonbank U.S. Affiliates and by All U.S. Businesses by Source of Funding, 2002

performed by others under contract.

## Union-represented employment

In 2002, 15 percent of the employees of majorityowned nonbank U.S. affiliates were covered by collective bargaining agreements (table 9). Union-represented employees of affiliates accounted for 8.5 percent of the union-represented employment of all U.S. businesses, a share considerably higher than the shares in the last two benchmark survey years; in 1992, the affiliate share was 6.9 percent, and in 1997, it was 5.8 percent.

Table 9.Union-Represented Employment of Majority-Owned Nonbank U.S. Affiliates and of All U.S. Businesses for 1992, 1997, and 2002

|  | Union-represented employees (thousands) |  |  | Union-represented employment as a percentage of total employment |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1992 | 1997 | 2002 | 1992 | 1997 | 2002 |
| Majority-owned nonbank affiliates .... | 741 | 600 | 809 | 19.0 | 14.0 | 14.9 |
| All U.S. businesses ${ }^{1}$....................... | 10,702 | 10,255 | 9,535 | 12.5 | 10.6 | 9.3 |
| Addendum: <br> Union-represented employment of affiliates as a percentage of that of all U.S. businesses. | 6.9 | 5.8 | 8.5 |  | ............ | ............. |

Despite the downward trend in the union-represented employment of all U.S. businesses, the number of union-represented employees for affiliates increased from 600,000 in 1997 to 809,000 in 2002. This increase reflected several foreign acquisitions of U.S. companies with large numbers of union-represented employees, particularly companies in such industries as motor vehicle manufacturing, food and beverage retail trade, electrical utilities, and food services and drinking places.

The union-represented share of affiliate employment varied considerably across sectors, ranging from 50 percent in utilities to zero percent in "finance (except depository institutions) and insurance" (table 10). The shares were also relatively large in retail trade, at 30 percent, and in transportation and warehousing, at 24 percent. The share in manufacturing was 18 percent. In manufacturing, the largest share was in transportation equipment (31 percent), reflecting a high share in the motor vehicle industry ( 34 percent). The shares were also relatively high in paper ( 29 percent), in primary metals ( 29 percent), and in food products (27 percent). The smallest shares were in two re-search-intensive industries-chemicals (8 percent) and computers and electronic products ( 7 percent).

In 2002, the union-represented share of employment of U.S. affiliates continued to be substantially
larger than that of all U.S. businesses. At the all-industries level, the larger affiliate share reflected the concentration of affiliate employment in industrial sectors with relatively high union representation, such as manufacturing. ${ }^{17}$ In addition, within sectors, the union-represented share for affiliates differed from
17. In 2002, manufacturing accounted for more than a third of the employment of majority-owned nonbank affiliates but for less than a sixth of the employment of all U.S. businesses.

Table 10. Union-Represented Employment of Majority-Owned Nonbank U.S. Affiliates by Industry of Affiliate, 2002

|  | Thousands |  | Unionrepresented employment as a percentage of total employment | Addendum: Unionrepresented employment of all U.S. businesses as a percentage of their total employment ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Unionrepresented employment | $\begin{aligned} & \text { Total } \\ & \text { employ- } \\ & \text { ment } \end{aligned}$ |  |  |
| All industries ${ }^{2}$. | 809.2 | 5,420.3 | 14.9 | 9.3 |
| Mining | 6.2 | 66.7 | 9.3 | 10.1 |
| Utilities. | 15.2 | 30.6 | 49.6 | 26.6 |
| Construction | 5.7 | 75.4 | 7.5 | 17.3 |
| Manufacturing. | 410.5 | 2,227.6 | 18.4 | 15.4 |
| Food... | 32.3 | 121.1 | 26.7 | n.a. |
| Beverages and tobacco products . | 5.1 | 53.5 | 9.6 | n.a. |
| Textiles, apparel, and leather products ................... | 2.4 | 24.0 | 10.0 | n.a. |
| Paper | 12.2 | 41.8 | 29.1 | n.a. |
| Printing and related support activities .................... | 10.4 | 56.9 | 18.3 | n.a. |
| Petroleum and coal products ................................ | 1 | K | (D) | n.a. |
| Chemicals....................................................... | 26.4 | 329.4 | 8.0 | n.a. |
| Plastics and rubber products ............................... | 23.6 | 130.7 | 18.1 | n.a. |
| Nonmetallic mineral products ............................... | 32.8 | 155.4 | 21.1 | n.a. |
| Primary metals ................................................. | 17.6 | 61.4 | 28.6 | n.a. |
| Fabricated metal products. | 14.4 | 76.5 | 18.9 | n.a. |
| Machinery.. | 41.2 | 284.7 | 14.5 | n.a. |
| Computers and electronic products....................... | 16.5 | 246.2 | 6.7 | n.a. |
| Electrical equipment, appliances, and components | 14.6 | 80.1 | 18.2 | n.a. |
| Transportation equipment.................................... | 115.3 | 367.4 | 31.4 | n.a. |
| Motor vehicles, bodies and trailers, and parts...... | 110.4 | 327.6 | 33.7 | n.a. |
| Other .......................................................... | 5.0 | 39.8 | 12.4 | n.a. |
| Other .............................................................. | K | M | (D) | n.a. |
| Wholesale trade. | 27.4 | 516.3 | 5.3 | 5.3 |
| Retail trade ......................................................... | 172.3 | 583.3 | 29.5 | 5.3 |
| Food and beverage stores.................................. | 169.8 | 431.8 | 39.3 | n.a. |
| Other ............................................................. | 2.5 | 151.5 | 1.7 | n.a. |
| Transportation and warehousing.......................... | 63.6 | 262.4 | 24.3 | 25.8 |
| Information......................................................... | 13.1 | 245.8 | 5.3 | 16.0 |
| Publishing industries ........................................... | 4.5 | 127.4 | 3.5 | 10.4 |
| Motion picture and sound recording industries......... | 4.8 | 34.1 | 14.2 | 16.9 |
| Telecommunications ........................................... | 1.6 | 37.4 | 4.3 | 24.3 |
| Other ............................................................. | 2.2 | 46.9 | 4.7 | 7.0 |
| Finance (except depository institutions) and insurance ${ }^{2}$ | 0.0 | 233.3 | 0.0 | 2.5 |
| Real estate and rental and leasing......................... | 0.2 | 33.8 | 0.5 | 3.9 |
| Professional, scientific, and technical services ...... | 15.6 | 162.5 | 9.6 | 2.0 |
| Administration, support, and waste management ${ }^{3}$... | 17.5 | 513.3 | 3.4 | 5.1 |
| Health care and social assistance........................ | 6.5 | 85.8 | 7.6 | 8.2 |
| Accommodation and food services ....................... | 47.5 | 328.2 | 14.5 | 2.8 |
| Other industries ................................................... | 8.0 | 55.3 | 14.5 | 7.9 |
| D Suppressed to avoid disclosure of data of individual | 3. For all U.S. businesses, includes management of companies and enterprises (NAICS code 55). <br> Note. The following ranges are given in employment cells that are suppressed: A-1 to 499; F-500 to 999; G-1,000 to 2,499 ; $\mathrm{H}-2,500$ to 4,999 ; $-5,000$ to 9,$999 ; \mathrm{J}-10,000$ to 24,$999 ; \mathrm{K}-25,000$ to 49,999 ; L-50,000 to 99,999; M-100,000 or more. |  |  |  |
|  |  |  |  |  |  |  |
| 1. Estimates by the Bureau of Labor Statistics based on |  |  |  |  |  |  |
| household survey data. |  |  |  |  |  |  |
| 2. For all U.S. businesses, includes depository institutions. |  |  |  |  |  |  |

that for all U.S. businesses. Among the sectors for which comparative data are available, the union-represented employment share of affiliates was much larger than that of all U.S. businesses in retail trade, in utilities, in accommodation and food services, and in professional, scientific, and technical services. In retail trade and in accommodation and food services, the larger affiliate shares partly reflect a tendency for foreign direct investment to be concentrated in large-scale enterprises (such as grocery store chains or large food catering companies), which generally have higher rates of unionization than small businesses. The union-represented shares of affiliates were substantially lower than the shares of all U.S. businesses in two sectors-construction and information.

## Trade in goods

In 2002, majority-owned U.S. affiliates accounted for 20 percent of total U.S. exports of goods and for 28 percent of total U.S. imports of goods (table 11). These shares are much larger than the affiliate shares of either value added or employment, reflecting both the general international orientation of foreign-owned companies and their specific production and distribution ties to their foreign parents. Much of the trade in goods by U.S. affiliates-about 45 percent of exports and about 80 percent of imports-is accounted for by intrafirm transactions between the affiliates and their foreign parents or other member companies of their foreign parent groups. Since 1997, the intrafirm trade of majority-owned U.S. affiliates has accounted for 8-9

Table 11. U.S. Trade in Goods by Majority-Owned Nonbank U.S. Affiliates, 1987-2002

|  | Millions of dollars |  |  |  | U.S. exports of goods shipped by affiliates as a percentage of total U.S. exports of goods |  | U.S. imports of goods shipped to affiliates as a percentage of total U.S. imports of goods |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | U.S. exports of goods shipped by affiliates |  | U.S. imports of goods shipped to affiliates |  |  |  |  |  |
|  | Total | Of which: To the foreign parent group | Total | Of which: From the foreign parent group | Total | Of which: To the foreign parent group | Total | Of which: From the foreign parent group |
| 1987......... | 39,497 | 18,677 | 133,620 | 102,167 | 15.5 | 7.3 | 32.9 | 25.1 |
| 1988.......... | 57,209 | 26,001 | 144,896 | 112,012 | 17.7 | 8.1 | 32.9 | 25.4 |
| 1989.......... | 72,413 | 33,778 | 158,792 | 122,899 | 19.9 | 9.3 | 33.6 | 26.0 |
| 1990.......... | 79,368 | 37,177 | 170,677 | 131,665 | 20.2 | 9.4 | 34.5 | 26.6 |
| 1991............ | 85,254 | 41,373 | 169,362 | 128,143 | 20.2 | 9.8 | 34.7 | 26.2 |
| 1992.......... | 91,686 | 47,567 | 172,260 | 132,217 | 20.5 | 10.6 | 32.3 | 24.8 |
| 1993.......... | 94,329 | 46,241 | 186,369 | 144,698 | 20.3 | 9.9 | 32.1 | 24.9 |
| 1994.......... | 107,057 | 49,864 | 214,485 | 166,085 | 20.9 | 9.7 | 32.3 | 25.0 |
| 1995.......... | 121,277 | 55,842 | 232,250 | 182,148 | 20.7 | 9.5 | 31.2 | 24.5 |
| 1996.......... | 125,897 | 59,544 | 248,562 | 187,889 | 20.1 | 9.5 | 31.3 | 23.6 |
| 1997.......... | 128,394 | 61,288 | 249,310 | 193,969 | 18.6 | 8.9 | 28.6 | 22.3 |
| 1998.......... | 136,949 | 56,115 | 277,909 | 199,524 | 20.1 | 8.2 | 30.5 | 21.9 |
| 1999.......... | 140,808 | 58,385 | 312,895 | 225,132 | 20.2 | 8.4 | 30.5 | 22.0 |
| 2000.......... | 150,911 | 64,785 | 354,613 | 267,187 | 19.3 | 8.3 | 29.1 | 21.9 |
| 2001.......... | 145,525 | 64,442 | 333,855 | 260,633 | 20.0 | 8.8 | 29.3 | 22.8 |
| 2002.......... | 137,037 | 61,530 | 324,578 | 256,691 | 19.8 | 8.9 | 27.9 | 22.1 |

[^12]percent of U.S. exports and for 20-23 percent of U.S. imports. ${ }^{18}$

Since the late 1980s, imports by U.S. affiliates have generally exceeded their exports by 90 percent to 140 percent, a gap that is substantially larger than the gap between total U.S. imports and exports. The relatively large gap for affiliates is accounted for by the trade of wholesale trade affiliates, many of which were established to facilitate the importation of goods manufactured abroad by their foreign parents. Since the late 1980s, the imports of wholesale trade affiliates have been two to four times as large as their exports, and these affiliates have consistently accounted for more than two-thirds of the total import-export gap for U.S. affiliates.

## By product

Exports. In 2002, majority-owned U.S. affiliates accounted for 71 percent of U.S. exports of mineral fuels and lubricants and for 42 percent of U.S. exports of road vehicles and parts (table 12, column 6 , and chart 3). For both product categories, the affiliate shares of U.S. exports were much larger in 2002 than in 1997, mainly reflecting foreign acquisitions of U.S. companies in the petroleum and motor vehicle industries.

[^13]
## Chart 3. Affiliate Shares of U.S. Exports of Selected Products, 2002



For road vehicles and parts, exports by affiliates almost tripled, from $\$ 9$ billion in 1997 to $\$ 25$ billion in 2002.

Relative to their share in 1997, intrafirm exports to foreign parent groups accounted for a substantially reduced share of affiliate exports of the two product categories in 2002: For mineral fuels and lubricants, the share was 22 percent (down from 48 percent in 1997), and for road vehicles and parts, the share was 38 percent (down from 52 percent) (table 12, columns 9 and 10). ${ }^{19}$ Affiliate exports to their foreign parent groups accounted for 16 percent of total U.S. exports of mineral fuels and lubricants (down from 19 percent in 1997) and for 16 percent of total U.S. exports of road vehicles and parts (up from 8 percent) (table 12, columns 7 and 8).

For other product categories, affiliate exports of food, beverages, and tobacco (which were mainly shipped to companies in the affiliates' foreign parent groups) dropped from $\$ 20$ billion in 1997 to $\$ 14$ billion in 2002, largely as a result of reduced exports by Japanese-owned affiliates in wholesale trade. The affiliate share of the total U.S. exports of this product cate-

[^14]gory decreased from 41 percent to 31 percent. The affiliate shares of U.S. exports of crude materials, chemicals, and industrial machinery and equipment also decreased significantly. Affiliates continued to account for less than 10 percent of U.S. exports of office and automatic data processing machines and of other transport equipment.

Affiliate exports of chemicals and most products in the various machinery and transport equipment categories were mainly shipped by manufacturing affiliates in 2002 (table 13). In contrast, affiliates in wholesale trade accounted for a dominant share of affiliate exports of such primary commodities as food, crude materials, and mineral fuels.

Imports. In 2002, majority-owned U.S. affiliates accounted for a particularly large share of U.S. imports of road vehicles and parts- 64 percent, up from 54 percent in 1997 (table 12, columns 5 and 6, and chart 4). The increase reflected both foreign acquisitions of U.S. companies and substantial increases in imports by existing U.S. affiliates. Affiliate imports of road vehicles and parts amounted to $\$ 108$ billion in 2002, or onethird of the $\$ 325$ billion total for affiliate imports of all products. In contrast to affiliate exports, more than 80 percent of the total affiliate imports of road vehicles and parts was accounted for by trade with the affiliates' foreign parent groups (table 12, column 10). Most of these intrafirm imports were by manufacturing and wholesale trade affiliates of Japanese, German, and Korean automobile firms.

Table 12. U.S. Trade in Goods by Majority-Owned Nonbank U.S. Affiliates by Product, 1997 and 2002


For other product categories, affiliates accounted for 36 percent of U.S. imports of "telecommunications, sound equipment, and other electrical machinery" in 2002 (down from 41 percent in 1997); these imports were predominantly intrafirm imports by Japanese-, Korean-, and Canadian-owned affiliates in both manufacturing and wholesale trade. Affiliates accounted for 22 percent of U.S. imports of office and automatic data processing machines (up from 18 percent); these imports were largely intrafirm imports by wholesale trade affiliates of Japanese manufacturing companies.

## Imports by intended use

In 2002, almost three-fourths of the imports by major-ity-owned affiliates were goods for resale without further processing, assembly, or manufacture by the affiliates. Goods for resale without further manufacture accounted for 90 percent of the imports by wholesale trade affiliates (table 13).

Most of the remaining imports by affiliates were goods for further manufacture by the affiliates; a dominant share-about 80 percent-of these imports were by manufacturing affiliates. More than half of the imports by manufacturing affiliates were goods for further manufacture, but several of these affiliates also had substantial imports of goods for resale, reflecting their secondary activities in wholesale trade. Within manufacturing, imports for resale were particularly large for affiliates in transportation equipment, in computers and electronic products, and in plastics and rubber products.

Imports of capital equipment for use in affiliate production accounted for a very small share of the total imports of affiliates. Over half of these imports were by

Chart 4. Affiliate Shares of U.S. Imports of Selected Products, 2002

affiliates in industries other than manufacturing or wholesale trade.

## Exports by country of destination

For the 28 largest U.S. trading partners in 2002, the shares of U.S. exports of goods accounted for by ma-jority-owned U.S. affiliates were largest for Japan (44 percent), Switzerland (44 percent), and Sweden (31 percent) (table 14, column 8). For exports to Switzerland, the affiliate share in 2002 was substantially larger than the share in 1997 (24 percent), partly reflecting exports by companies that became foreign owned after 1997. In contrast, the affiliate share of exports to Sweden was substantially smaller in 2002 than the 47 percent share in 1997, partly due to foreign selloffs of affiliates. For Japan, the share declined modestly, from 49 percent in 1997.

For both Japan and Sweden, more than 80 percent of the exports by U.S. affiliates in 2002 were intrafirm shipments from the affiliates to their foreign parent groups. Intrafirm exports by U.S. affiliates accounted for 36 percent of U.S. exports to Japan and for 27 percent of U.S. exports to Sweden (table 14, column 10). Most of the intrafirm exports to Japan were shipments by Japanese-owned wholesale trade affiliates, including affiliates of Japan's large general trading companies. The intrafirm exports to Sweden were predominantly shipments by manufacturing and wholesale trade affiliates of European manufacturing companies.

Table 13. Exports by Product and Imports by Product and by Intended Use of Majority-Owned Nonbank Affiliates by Industry of Affiliate, 2002 [Millions of dollars]

|  | All industries | Manufacturing | Wholesale trade | Other |
| :---: | :---: | :---: | :---: | :---: |
| U.S. exports of goods, total . | 137,037 | 86,839 | 45,412 | 4,787 |
| By product: |  |  |  |  |
| Food, beverages, and tobacco products. | 13,834 | 3,805 | 9,697 | 2 |
| Crude materials, inedible, except fuels ........................... | 4,628 | 1,378 | 2,633 | 617 |
| Mineral fuels and lubricants .......................................... | 8,339 | 970 | 7,042 | 326 |
| Chemicals.. | 17,589 | 14,967 | (D) | (D) |
| Industrial machinery and equipment. | 13,534 | 8,505 | 4,545 | 484 |
| Office machines and automatic data processing machines | 3,384 | 743 | (D) | (D) |
| Telecommunications, sound equipment, and other electrical machinery. | 20,557 | 12,872 | 7,681 | 3 |
| Road vehicles and parts ............................................... | 25,218 | 22,711 | 2,331 | 177 |
| Other transport equipment........................................... | 3,294 | 2,920 | 341 | 33 |
| Other....................................................................... | 26,661 | 17,968 | 6,132 | 2,561 |
| U.S. imports of goods, total .............................................. | 324,578 | 132,928 | 183,396 | 8,254 |
| By product: |  |  |  |  |
| Food, beverages, and tobacco products.......................... | 11,743 | 4,605 | (D) | (D) |
| Crude materials, inedible, except fuels ............................ | 6,387 | (D) | (D) | 143 |
| Mineral fuels and lubricants | 29,254 | (D) | 19,717 | (D) |
| Chemicals. | 23,875 | 18,711 | 5,161 | 3 |
| Industrial machinery and equipment. | 15,527 | 7,806 | 7,501 | 219 |
| Office machines and automatic data processing machines | 17,155 | (D) | 15,826 | (D) |
| Telecommunications, sound equipment, and other electrical machinery | 53,090 | (D) | 28,598 | (D) |
| Road vehicles and parts ............................................. | 108,262 | 44,493 | 63,701 | 68 |
| Other transport equipment.......................................... | 3,340 | (D) | (D) | 0 |
| Other....................................................................... | 55,946 | 20,536 | 30,939 | 4,470 |
| By intended use: |  |  |  |  |
| Capital equipment...................................................... | 891 | 377 | 49 | 466 |
| Goods for resale without further manufacture................... | 239,193 | 64,380 | 167,736 | 7,076 |
| Goods for further manufacture.. | 84,494 | 68,171 | 15,612 | 711 |

[^15]For trade with Japan and Sweden, about threefourths of the exports by U.S. affiliates in 2002 were shipped by affiliates with UBOs in the respective countries (table 14, column 11). For Switzerland, the share of affiliate exports accounted for by Swiss-owned affiliates was 42 percent. Among the other leading trading partners, affiliates with UBOs in the country of destination accounted for a dominant share of affiliate exports to Germany ( 64 percent), Korea ( 56 percent), and France ( 55 percent). In contrast, Canadian-owned affiliates accounted for only 10 percent of affiliate exports to Canada, and Mexican-owned affiliates ac-
counted for only 4 percent of affiliate exports to Mexico. Most of the exports by affiliates to both Canada and Mexico were shipped by affiliates with UBOs in Germany or Japan.

Although German-owned affiliates accounted for almost two-thirds of all U.S.-affiliate exports to Germany, exports to Germany accounted for only 15 percent of the total exports by German-owned affiliates (table 15). The largest export markets for Germanowned affiliates were Canada (which accounted for 30 percent of their exports) and Mexico (which accounted for 20 percent of their exports). For Japanese-owned

Table 14. Total U.S. Exports of Goods and Exports of Goods by Majority-Owned Nonbank U.S. Affiliates by Country of Destination, 1997 and 2002

|  | Millions of dollars |  |  |  |  |  | Percentage of total U.S. exports accounted for by: |  |  |  | Addenda: <br> Percentage of U.S.-affiliate total and intrafirm exports to country that are accounted for by affiliates with UBOs in the country |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total ${ }^{1}$ |  | Exports by majority-owned nonbank U.S. affiliates |  |  |  |  |  |  |  |  |  |
|  |  |  | Total |  | Of which: Intrafirm exports ${ }^{2}$ |  | Total exports by affiliates |  | Intrafirm exports by affiliates |  |  |  |
|  |  |  | Total | Intrafirm |  |  |  |  |  |  |  |  |
|  | 1997 | 2002 |  |  | 1997 | 2002 | 1997 | 2002 | 1997 | 2002 | 1997 | 2002 | 2002 |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| All countries .................. | 689,182 | 693,103 | 128,394 | 137,037 | 61,288 | 61,530 | 18.6 | 19.8 | 8.9 | 8.9 | ................. | ............... |
| Canada .................................... | 151,767 | 160,923 | 21,047 | 23,089 | 8,696 | 8,013 | 13.9 | 14.3 | 5.7 | 5.0 | 10.2 | 23.5 |
| Europe..................................... | 163,273 | 163,625 | 28,018 | 29,980 | 13,451 | 19,304 | 17.2 | 18.3 | 8.2 | 11.8 |  |  |
| Belgium ................................. | 13,420 | 13,326 | (D) | 1,211 | (D) | 964 | A | 9.1 | A | 7.2 | 24.9 | B |
| France .................................. | 15,965 | 19,016 | 2,851 | 3,115 | 1,589 | 2,384 | 17.9 | 16.4 | 10.0 | 12.5 | 55.1 | 64.7 |
| Germany ............................... | 24,458 | 26,630 | 5,881 | 6,686 | 3,446 | 5,069 | 24.0 | 25.1 | 14.1 | 19.0 | 63.5 | 63.8 |
| Ireland .................................. | 4,642 | 6,745 | (D) | 413 | (D) | 191 | A | 6.1 | A | 2.8 | 3.1 | A |
| Italy........................................ | 8,995 | 10,057 | 2,058 | 1,464 | 786 | 1,242 | 22.9 | 14.6 | 8.7 | 12.4 | 22.5 | 26.5 |
| Netherlands.......................... | 19,827 | 18,311 | 3,025 | 4,178 | 855 | 1,797 | 15.3 | 22.8 | 4.3 | 9.8 | 32.6 | E |
| Spain................................... | 5,539 | 5,298 | 694 | 662 | 149 | 255 | 12.5 | 12.5 | 2.7 | 4.8 | 12.8 | 33.2 |
| Sweden ................................ | 3,314 | 3,153 | 1,546 | 990 | 1,027 | 845 | 46.7 | 31.4 | 31.0 | 26.8 | 76.1 | F |
| Switzerland............................ | 8,307 | 7,783 | 2,012 | 3,399 | 1,238 | 1,772 | 24.2 | 43.7 | 14.9 | 22.8 | 42.4 | 74.1 |
| United Kingdom...................... | 36,425 | 33,204 | 5,881 | 5,364 | 2,821 | 3,640 | 16.1 | 16.2 | 7.7 | 11.0 | 45.8 | 53.0 |
| Other .................................... | 22,381 | 20,102 | (D) | 2,498 | (D) | 1,145 | A | 12.4 | A | 5.7 |  | ............... |
| Latin America and Other |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Hemisphere.............. | 134,416 | 149,053 | 15,323 | 18,228 | 4,922 | 5,827 | 11.4 | 12.2 | 3.7 | 3.9 |  |  |
| Brazil ................................... | 15,915 | 12,376 | 3,838 | 3,029 | 1,677 | 1,723 | 24.1 | 24.5 | 10.5 | 13.9 | B | E |
| Mexico.................................. | 71,388 | 97,470 | 6,520 | 12,686 | 1,759 | 3,415 | 9.1 | 13.0 | 2.5 | 3.5 | 3.7 | A |
| Venezuela ............................. | 6,602 | 4,430 | 603 | 204 | 148 | 67 | 9.1 | 4.6 | 2.2 | 1.5 | 0.7 | 2.1 |
| Other ................................... | 40,511 | 34,777 | 4,362 | 2,309 | 1,338 | 621 | 10.8 | 6.6 | 3.3 | 1.8 | ................. | ...... |
| Africa ...................................... | 11,390 | 10,663 | 1,257 | 677 | 285 | 435 | 11.0 | 6.3 | 2.5 | 4.1 | ................. | ................. |
| Middle East .............................. | 20,928 | 18,930 | 1,281 | 1,056 | 369 | 479 | 6.1 | 5.6 | 1.8 | 2.5 |  |  |
| Israel .................................... | 5,995 | 7,027 | 364 | 194 | 103 | 65 | 6.1 | 2.8 | 1.7 | 0.9 | 14.9 | 44.3 |
| Saudi Arabia.......................... | 8,438 | 4,781 | 649 | 421 | 172 | 179 | 7.7 | 8.8 | 2.0 | 3.7 | B | F |
| Other ..................................... | 6,495 | 7,122 | 268 | 441 | 94 | 235 | 4.1 | 6.2 | 1.4 | 3.3 | ..... | ................. |
| Asia and Pacific....................... | 207,069 | 189,748 | 53,240 | 38,752 | 32,946 | 25,571 | 25.7 | 20.4 | 15.9 | 13.5 |  |  |
| Australia ............................... | 12,063 | 13,085 | 1,462 | 1,199 | 735 | 801 | 12.1 | 9.2 | 6.1 | 6.1 | 3.7 | 5.5 |
| China.................................... | 12,862 | 22,128 | 3,043 | 2,401 | 1,348 | 705 | 23.7 | 10.9 | 10.5 | 3.2 | A | B |
| Hong Kong | 15,117 | 12,594 | 1,746 | 905 | 727 | 522 | 11.5 | 7.2 | 4.8 | 4.1 | A | B |
| India | 3,608 | 4,101 | 753 | 110 | 146 | 23 | 20.9 | 2.7 | 4.0 | 0.6 | 2.5 | 11.9 |
| Indonesia............................... | 4,522 | 2,556 | 722 | 384 | 180 | 129 | 16.0 | 15.0 | 4.0 | 5.1 | A | A |
| Japan ................................... | 65,549 | 51,449 | 31,932 | 22,583 | 24,062 | 18,458 | 48.7 | 43.9 | 36.7 | 35.9 | 76.1 | 85.6 |
| Korea, Republic of................... | 25,046 | 22,576 | 6,868 | 5,554 | 3,213 | 2,962 | 27.4 | 24.6 | 12.8 | 13.1 | 56.0 | C |
| Malaysia ............................... | 10,780 | 10,344 | 445 | 701 | 146 | 155 | 4.1 | 6.8 | 1.4 | 1.5 | 1.5 | 6.9 |
| Philippines............................. | 7,417 | 7,276 | 421 | 333 | 163 | 96 | 5.7 | 4.6 | 2.2 | 1.3 | A | A |
| Singapore.............................. | 17,696 | 16,218 | 1,885 | 1,945 | 957 | 988 | 10.7 | 12.0 | 5.4 | 6.1 | 0.9 | 1.7 |
| Taiwan .................................. | 20,366 | 18,382 | 2,931 | 1,943 | 807 | 544 | 14.4 | 10.6 | 4.0 | 3.0 | 8.0 | B |
| Thailand ................................ | 7,349 | 4,860 | 746 | 506 | 413 | 115 | 10.2 | 10.4 | 5.6 | 2.4 | A | A |
| Other .................................... | 4,694 | 4,179 | 286 | 187 | 49 | 72 | 6.1 | 4.5 | 1.0 | 1.7 | ................. | ............. |
| Unallocated.............................. | .... | ................. | 8,228 | 25,257 | 619 | 1,902 | $\ldots$ | ....... | ..... | ....... | .................. | ................. |

D Suppressed to avoid the disclosure of data of individual companies.

1. Data on total U.S. exports of goods are from the U.S. Census Bureau.
.
Notes. The countries shown in this table are the 28 U.S. trading partners for which the sum of total U.S.
exports and total U.S. imports was at least $\$ 10$ billion in 2002.
The following ranges are given in the percentage cells that are suppressed: A-0.01 to 19.9; B-20.0 to . 0 to 79.9; F-80.0 to 100.
UBO Ultimate beneficial owner
affiliates, the largest export market was Japan (which accounted for 47 percent of their exports); the next largest export markets were Canada and Mexico.

## Imports by country of origin

In 2002, majority-owned U.S. affiliates accounted for more than 50 percent of U.S. imports of goods from five countries: Japan ( 87 percent), Switzerland ( 62 percent), the Republic of Korea ( 55 percent), Saudi Arabia ( 55 percent), and Germany ( 54 percent) (table 16 , column 8). For Saudi Arabia, the affiliate share in 2002 was much larger than that in 1997 as a result of foreign acquisitions of U.S. companies with large petroleum imports. The affiliate shares in 2002 were also larger for U.S. imports from Japan, Switzerland, and Korea, but the affiliate share was slightly smaller for U.S. imports from Germany.

In 2002, imports by affiliates from their foreign parent groups accounted for more than 95 percent of the U.S.-affiliate imports from Japan, Korea, and Germany. For all three countries, these intrafirm imports were predominantly shipments from parent companies in manufacturing. Intrafirm imports by U.S. affiliates accounted for 85 percent of U.S. imports from Japan, for 54 percent of U.S. imports from Korea, and for 51 percent of U.S. imports from Germany (table 16, column 10).

Affiliates with UBOs in the country of origin accounted for virtually all of the imports by U.S. affiliates from Japan and for more than 90 percent of affiliate imports from Korea and Germany (table 16, column 11). Affiliates with UBOs in the country of origin also
accounted for a dominant share of U.S.-affiliate imports from several other European countries; however, they accounted for only a small share of affiliate imports from most of the other major trading partners in Asia and Pacific. Canadian-owned affiliates accounted for 36 percent of affiliate imports from Canada, and Mexican-owned affiliates accounted for about 10 percent of affiliate imports from Mexico; most of the affiliate imports from these two countries were by affiliates with UBOs in Europe or Japan.

In contrast to their diverse geographic pattern of exports, more than half of the imports by Germanowned affiliates originated in Germany, and more than 80 percent of the imports by Japanese-owned affiliates originated in Japan (table 15). Imports from the country of UBO also accounted for a dominant share of the imports by Korean-, Canadian-, and French-owned affiliates.

## Data for bank affiliates

In 2002, majority-owned bank affiliates of foreign direct investors had total assets of $\$ 2.2$ trillion, and they employed 140,000 workers (table 17 on page 212). In comparison, majority-owned nonbank affiliates had total assets of $\$ 4.6$ trillion, and they employed 5.4 million workers. In contrast to nonbank affiliates, almost all of the assets of bank affiliates were financial assets: Nonfinancial assets-as measured by their gross property, plant, and equipment-totaled only $\$ 11.2$ billion (compared with $\$ 1.0$ trillion in nonfinancial assets of nonbank affiliates). Interest income received by bank affiliates totaled $\$ 98$ billion (compared with $\$ 99$ billion

Table 15. U.S. Trade in Goods by Majority-Owned Nonbank U.S. Affiliates by Selected Country of Ultimate Beneficial Owner (UBO)

|  | Millions of dollars |  |  |  |  |  | Trade with the country of UBO as a percentage of total exports or imports by affiliates of the UBO country |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Exports or imports by affiliates of the UBO country |  |  |  |  |  |  |  |  |
|  | Total | Trade with the foreign parent group | Trade with others | Of which: Trade with the country of UBO |  |  |  |  |  |
|  |  |  |  | Total | Trade with the foreign parent group | Trade with others | Total | Trade with the foreign parent group | Trade with others |
| Exports: |  |  |  |  |  |  |  |  |  |
| Canada. <br> France <br> Germany <br> Netherlands | 5,678 | 2,146 | 3,532 | 2,353 | 1,879 | 473 | 41.4 | 87.6 | 13.4 |
|  | 10,065 | 5,188 | 4,876 | 1,717 | 1,543 | 174 | 17.1 | 29.7 | 3.6 |
|  | 28,241 | 9,198 | 19,043 | 4,248 | 3,232 | 1,016 | 15.0 | 35.1 | 5.3 |
|  | 5,328 | 2,746 | 2,581 | 1,360 | (D) | (D) | 25.5 | C | A |
| Switzerland...... | 6,105 | 3,155 | 2,950 | 1,440 | 1,313 | 127 | 23.6 | 41.6 | 4.3 |
| United Kingdom.................................................. | 14,978 | 4,203 | 10,775 | 2,457 | 1,930 | 526 | 16.4 | 45.9 | 4.9 |
| Japan................................................................... | 36,778 | 22,768 | 14,010 | 17,184 | 15,793 | 1,390 | 46.7 | 69.4 | 9.9 |
| Korea, Republic of.................................................... | 4,464 | 2,394 | 2,071 | 3,108 | (D) | (D) | 69.6 | E | E |
| Imports: |  |  |  |  |  |  |  |  |  |
| Canada............................................................ | 16,406 | 14,507 | 1,898 | 13,326 | 12,680 | 646 | 81.2 | 87.4 | 34.0 |
| France ............................................................. | 14,895 | 11,208 | 3,687 | 7,946 | 7,936 | 9 | 53.3 | 70.8 | 0.3 |
|  | 54,439 | 34,364 | 20,075 | 30,672 | 29,894 | 778 | 56.3 | 87.0 | 3.9 |
| Netherlands........................................................... | 14,290 | 9,727 | 4,563 | 4,424 | (D) | (D) | 31.0 | C | A |
| Switzerland..................................................... | 8,111 | 6,320 | 1,791 | 3,779 | 3,709 | 70 | 46.6 | 58.7 | 3.9 |
| United Kingdom...................................................... | 22,254 | 13,205 | 9,050 | 10,310 | (D) | (D) | 46.3 | E | A |
| Japan.................................................................................. | 125,242 | 114,677 | 10,564 | 104,739 | 102,334 | 2,404 | 83.6 | 89.2 | 22.8 |
| Korea, Republic of.................................................. | 19,912 | 19,400 | 512 | 18,036 | 17,930 | 106 | 90.6 | 92.4 | 20.7 |
| D Suppressed to avoid disclosure of data of individual companies. <br> Notes. The countries shown in this table are the eight UBO countries for which the sum of exports and imports by majority-owned U.S. affiliates exceeded $\$ 10$ billion in 2002. |  |  |  | The following ranges are given in the percentage cells that are suppressed: $\mathrm{A}-0.01$ to $19.9 ; \mathrm{B}-20.0$ to 39.9; C-40.0 to 59.9; E-60.0 to 79.9; F-80.0 to 100. <br> UBO Ultimate beneficial owner |  |  |  |  |  |

received by nonbank affiliates), and interest paid by bank affiliates totaled $\$ 76$ billion (compared with $\$ 96$ billion paid by nonbank affiliates).

In terms of assets, the largest investing countries for bank affiliates were Germany, the United Kingdom, the Netherlands, Japan, and Switzerland. In terms of gross operating revenues (sales), the largest investing countries were Japan, France, the United Kingdom, and Germany. British-owned bank affiliates had the highest employment; bank affiliates with UBOs in the Netherlands and Canada had the next highest employment.

By state, more than three-fourths of the employment by bank affiliates was in six states-New York, California, Illinois, Michigan, Pennsylvania, and Florida. Their employment in New York alone was 50,000, which was more than a third of their total employment for the United States.

## Revisions

The estimates of U.S.-affiliate operations in 2002 presented in this article are preliminary. The estimates of employment, sales, and expenditures for property,

Table 16. Total U.S. Imports of Goods and Imports of Goods by Majority-Owned Nonbank U.S. Affiliates by Country of Origin, 1997 and 2002

|  | Millions of dollars |  |  |  |  |  | Percentage of total U.S. imports accounted for by: |  |  |  | Addenda: <br> Percentage of U.S.-affiliate total and intrafirm imports from country that are accounted for by affiliates with UBOs in the country |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total ${ }^{1}$ |  | Imports by majority-owned nonbank U.S. affiliates |  |  |  |  |  |  |  |  |  |
|  |  |  | Total |  | Of which: Intrafirm imports ${ }^{2}$ |  | Total imports by affiliates |  | Intrafirm imports by affiliates |  |  |  |
|  |  |  | Total | Intrafirm |  |  |  |  |  |  |  |  |
|  | 1997 | 2002 |  |  | 1997 | 2002 | 1997 | 2002 | 1997 | 2002 | 1997 | 2002 | 2002 |  |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| All countries .................. | 870,671 | 1,161,366 | 249,310 | 324,578 | 193,969 | 256,691 | 28.6 | 27.9 | 22.3 | 22.1 |  |  |
| Canada................................... | 167,234 | 209,088 | 24,723 | 37,033 | 18,581 | 24,619 | 14.8 | 17.7 | 11.1 | 11.8 | 36.0 | 51.5 |
| Europe..................................... | 181,441 | 260,813 | 65,405 | 85,709 | 57,476 | 75,706 | 36.0 | 32.9 | 31.7 | 29.0 |  |  |
| Belgium................................ | 7,912 | 9,807 | 3,658 | 2,994 | 3,519 | 1,733 | 46.2 | 30.5 | 44.5 | 17.7 | 20.9 | B |
| France.................................. | 20,636 | 28,240 | 6,687 | 9,680 | 5,863 | 9,209 | 32.4 | 34.3 | 28.4 | 32.6 | 82.1 | 86.2 |
| Germany ............................. | 43,122 | 62,506 | 23,341 | 33,339 | 21,579 | 31,773 | 54.1 | 53.3 | 50.0 | 50.8 | 92.0 | 94.1 |
| Ireland | 5,867 | 22,388 | 601 | 629 | 478 | 520 | 10.2 | 2.8 | 8.1 | 2.3 | 18.5 | 22.4 |
| Italy ...................................... | 19,408 | 24,220 | 3,122 | 3,535 | 2,367 | 3,044 | 16.1 | 14.6 | 12.2 | 12.6 | 66.9 | E |
| Netherlands ........................... | 7,293 | 9,849 | 2,664 | 4,774 | 2,399 | 4,317 | 36.5 | 48.5 | 32.9 | 43.8 | 92.7 | F |
| Spain.................................... | 4,606 | 5,733 | 787 | 598 | 622 | 489 | 17.1 | 10.4 | 13.5 | 8.5 | 43.8 | C |
| Sweden............................... | 7,299 | 9,216 | 4,096 | 4,062 | 3,816 | 3,503 | 56.1 | 44.1 | 52.3 | 38.0 | 56.9 | 64.5 |
| Switzerland ........................... | 8,405 | 9,382 | 4,904 | 5,822 | 4,331 | 5,274 | 58.3 | 62.1 | 51.5 | 56.2 | 64.9 | 70.3 |
| United Kingdom ...................... | 32,659 | 40,745 | 10,581 | 13,438 | 8,884 | 10,402 | 32.4 | 33.0 | 27.2 | 25.5 | 76.7 | F |
| Other................................... | 24,234 | 38,727 | 4,964 | 6,839 | 3,618 | 5,442 | 20.5 | 17.7 | 14.9 | 14.1 | ....... | ............... |
| Latin America and Other Western Hemisphere | 139,644 | 204,145 | 19,821 | 32,224 | 9,498 | 15,597 | 14.2 | 15.8 | 6.8 | 7.6 |  |  |
| Brazil..................................... | 19,626 | 15,781 | 2,019 | +3,577 | 1,205 | 3,799 | 21.0 | 29.0 | 12.5 | 24.1 | 57.8 | E |
| Mexico.. | 85,938 | 134,616 | 10,984 | 17,436 | 5,093 | 6,973 | 12.8 | 13.0 | 5.9 | 5.2 | 10.5 | B |
| Venezuela ............................ | 13,477 | 15,094 | 2,526 | 4,264 | 1,643 | 3,264 | 18.7 | 28.2 | 12.2 | 21.6 | E | F |
| Other................................... | 30,603 | 38,655 | 4,292 | 5,947 | 1,557 | 1,561 | 14.0 | 15.4 | 5.1 | 4.0 |  | ...... |
| Africa...................................... | 19,925 | 22,100 | (D) | 1,802 | (D) | 184 | A | 8.2 | A | 0.8 | ..... | ............... |
| Middle East. | 20,403 | 34,302 | (D) | 8,651 | (D) | 6,041 | A | 25.2 | A | 17.6 |  |  |
| Israel.................................... | 7,326 | 12,416 | 545 | 635 | 502 | 562 | 7.4 | 5.1 | 6.9 | 4.5 | 77.9 | 87.9 |
| Saudi Arabia .......................... | 9,365 | 13,150 | (D) | 7,237 | (D) | 5,137 | A | 55.0 | A | 39.1 | E | F |
| Other................................... | 3,712 | 8,736 | (D) | 780 | (D) | 341 | A | 8.9 | A | 3.9 |  | .......... |
| Asia and Pacific ....................... | 341,059 | 430,918 | 130,485 | 142,872 | 106,094 | 132,291 | 38.3 | 33.2 | 31.1 | 30.7 |  |  |
| Australia.... | 4,602 | 6,479 | 635 | 655 | 423 | 479 | 13.8 | 10.1 | 9.2 | 7.4 | 22.4 | 30.7 |
| China ................................... | 62,558 | 125,193 | 2,536 | 4,179 | 954 | 2,455 | 4.1 | 3.3 | 1.5 | 2.0 | 2.2 | A |
| Hong Kong............................ | 10,288 | 9,328 | 4,780 | 2,706 | 2,706 | 1,780 | 46.5 | 29.0 | 26.3 | 19.1 | 19.5 | B |
| India .................................... | 7,322 | 11,818 | 228 | 300 | 27 | 55 | 3.1 | 2.5 | 0.4 | 0.5 | 2.8 | 15.4 |
| Indonesia .............................. | 9,188 | 9,643 | (D) | 693 | 747 | 357 | A | 7.2 | 8.1 | 3.7 | A | A |
| Japan ................................... | 121,663 | 121,429 | 97,076 | 105,974 | 85,337 | 102,843 | 79.8 | 87.3 | 70.1 | 84.7 | 98.8 | 99.5 |
| Korea, Republic of ................... | 23,173 | 35,572 | 10,470 | 19,603 | 7,598 | 19,223 | 45.2 | 55.1 | 32.8 | 54.0 | 92.0 | 93.3 |
| Malaysia................................ | 18,027 | 24,009 | 2,175 | 589 | 1,056 | 466 | 12.1 | 2.5 | 5.9 | 1.9 | 1.1 | 1.4 |
| Philippines ............................ | 10,445 | 10,980 | 900 | 342 | 418 | 152 | 8.6 | 3.1 | 4.0 | 1.4 | A | B |
| Singapore ............................. | 20,075 | 14,802 | (D) | 3,191 | 2,152 | 1,250 | A | 21.6 | 10.7 | 8.4 | 6.3 | 16.0 |
| Taiwan.................................. | 32,629 | 32,199 | 4,318 | 3,014 | 3,207 | 2,157 | 13.2 | 9.4 | 9.8 | 6.7 | 39.5 | C |
| Thailand ........................................................... | 12,602 | 14,793 | 1,863 | , 541 | 1,006 | 234 | 14.8 | 3.7 | 8.0 | 1.6 | 0.0 | 0.0 |
| Other...................................... | 8,487 | 14,673 | 604 | 1,087 | 463 | 840 | 7.1 | 7.4 | 5.5 | 5.7 | .................. | ............ |
| Unallocated ............................. | ................. | ................. | 4,909 | 16,287 | 684 | 2,254 | ...... | .......... | ............ |  | .................. | .................. |

exports and total U.S. imports was at least $\$ 10$ billion in 2002.
The following ranges are given in the percentage cells that are suppressed: A-0.01 to 19.9; B-20.0 to 39.9; C-40.0 to 59.9; E-60.0 to 79.9; F-80.0 to 100. UBO Ultimate Beneficial Owner
plant, and equipment supercede the advance summary estimates for majority-owned affiliates that were released on April 16 (BEA news release $04-16$ ). From the advance estimates to the preliminary estimates, the estimates of employment were revised down 0.5 percent, the estimates of sales were revised down 0.4 percent, and the estimates of expenditures were revised down 2.8 percent.

The final estimates of U.S.-affiliate operations in 2001 are also presented. The final estimates of employment, sales, and expenditures for property, plant, and equipment supersede the summary estimates in the April news release and the preliminary estimates that were released in the late summer and early fall of

Table 17. Selected Data of Majority-Owned Bank Affiliates by Country of Ultimate Beneficial Owner, 2002

|  | Millions of dollars |  |  | Thousands of employees |
| :---: | :---: | :---: | :---: | :---: |
|  | Total assets | Gross property, plant, and equipment | Gross operating revenues (sales) |  |
| All countries ......................... | 2,162,810 | 11,225 | 149,267 | 140.3 |
| Canada ........................................... | 205,981 | 1,676 | 9,801 | 20.2 |
| Europe........................................... | 1,617,842 | 7,402 | 101,607 | 95.1 |
| Belgium | 19,358 | (D) | (D) | 0.2 |
| Finland ........................................ | (D) | 5 | (D) | 0.1 |
| France ......................................... | 202,773 | 1,015 | 32,217 | 11.7 |
| Germany ...................................... | 434,511 | 1,028 | 20,311 | 16.3 |
| Ireland ............................................ | (D) | (D) | (D) | I |
| Italy............................................. | 25,456 | 97 | 1,312 | 0.7 |
| Netherlands.................................. | 274,216 | (D) | 13,704 | J |
| Spain.......................................... | 31,929 | 295 | 1,478 | 3.5 |
| Sweden ....................................... | (D) | 5 | (D) | 0.1 |
| Switzerland................................... | 220,173 | (D) | (D) | 2.6 |
| United Kingdom............................. | 309,289 | 2,273 | 23,601 | 31.2 |
| Other ............................................ | 23,598 | 94 | 670 | 0.7 |
| Latin America and Other Western |  |  |  |  |
| Hemisphere................................. | 25,704 | 202 | 1,297 | 2.9 |
| Brazil .......................................... | 10,639 | 40 | (D) | 0.6 |
| Other .......................................... | 15,065 | 162 | (D) | 2.3 |
| Africa | (D) | (D) | (D) | 0.1 |
| Middle East ..................................... | 26,741 | 135 | 1,102 | 1.7 |
| Israel .......................................... | 23,292 | 112 | 977 | 1.5 |
| Other ........................................... | 3,448 | 23 | 125 | 0.2 |
| Asia and Pacific.............................. | 283,508 | 1,795 | 35,316 | 20.1 |
| Australia ...................................... | 12,571 | (D) | 401 | 0.3 |
| Japan.......................................... | 235,524 | 1,467 | 33,444 | 16.2 |
| Taiwan ......................................... | 17,960 | 128 | 647 | 1.4 |
| Other .......................................... | 17,453 | (D) | 824 | 2.2 |
| United States .................................. | (D) | (D) | (D) | 0.2 |

D Suppressed to avoid disclosure of data of individual companies.
Notes. The countries shown in this table are the UBO countries whose majority-owned U.S.bank affiliates had assets of at least $\$ 10$ billion in 2002.
The following ranges are given in employment cells that are suppressed: A-1 to 499; F-500 to 999; G-1,000 to 2,499; H-2,500 to 4,999; l-5,000 to 9,999; J-10,000 to 24,999; K-25,000 to 49,999; L-50,000 to 99,999; M-100,000 or more.
2003. ${ }^{20}$ From the summary estimates to the final estimates, the estimates of employment were revised down 0.4 percent, the estimates of sales were revised down less than 0.1 percent, and the estimates of expenditures were revised down less than 0.1 percent. From the preliminary estimates to the final estimates, the estimates of employment were revised down 1.4 percent, the estimates of sales were revised down 0.7 percent, and the estimates of expenditures were revised down 0.5 percent.

## Appendix: Comparison of Data on Majority-Owned and All Nonbank Affiliates

This article focuses on the operations of U.S. affiliates that are majority-owned by foreign direct investors (see footnote 2 and the box "Key Terms"). BEA also collects data on the operations of U.S. affiliates that are owned 50 percent or less by foreign direct investors; however, beginning with the 2002 benchmark survey,

[^16]
## Acknowledgments

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the data collected for these affiliates are less extensive than the data for majority-owned affiliates (see the box "The 2002 Benchmark Survey").

For most of the key data items collected in the benchmark and annual surveys of nonbank U.S. affiliates, majority-owned affiliates have consistently accounted for more than 80 percent of the totals for all affiliates (table 18). In addition, the shares of the totals
that are accounted for by majority-owned affiliates have tended to increase over time. In 2002, majorityowned affiliates accounted for more than 90 percent of the total employment, sales, and exports and imports of goods of all affiliates, and these affiliates accounted for more than 85 percent of the total assets and gross property, plant, and equipment.

Tables 19.1 to 20.2 follow.

Table 18. Selected Data of All Nonbank and Majority-Owned Nonbank U.S. Affiliates of Foreign Direct Investors, 1987-2002

|  | Millions of dollars |  |  | Thousands of employees | Millions of dollars |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Total } \\ \text { assets } \end{gathered}$ | Gross property, plant, and equipment | Sales |  | U.S. exports of goods shipped by affiliates | U.S. imports of goods shipped to affiliates |
| All nonbank affiliates: |  |  |  |  |  |  |
| 1987. | 943,654 | 353,278 | 744,617 | 3,224.3 | 48,091 | 143,537 |
| 1988..................................................... | 1,200,823 | 418,069 | 886,407 | 3,844.2 | 69,541 | 155,533 |
| 1989...................................................... | 1,431,315 | 489,461 | 1,056,645 | 4,511.5 | 86,316 | 171,847 |
| 1990 ..................................................... | 1,550,238 | 578,355 | 1,175,857 | 4,734.5 | 92,308 | 182,936 |
| 1991 .................................................................. | 1,752,628 | 640,140 | 1,185,858 | 4,871.9 | 96,933 | 178,702 |
| 1992..................................................... | 1,825,219 | 660,826 | 1,231,972 | 4,715.4 | 103,925 | 184,464 |
| 1993..................................................... | 2,065,804 | 705,665 | 1,329,435 | 4,765.6 | 106,615 | 200,599 |
| 1994 ...................................................... | 2,206,701 | 754,383 | 1,443,489 | 4,840.5 | 120,683 | 232,362 |
| 1995.................................................... | 2,388,724 | 769,491 | 1,544,603 | 4,941.8 | 135,153 | 250,824 |
| 1996 .............................................................. | 2,681,746 | 825,695 | 1,667,619 | 5,105.0 | 140,886 | 268,673 |
| 1997 ..................................................... | 3,071,483 | 877,568 | 1,726,344 | 5,201.9 | 141,305 | 264,924 |
| 1998 .................................................... | 3,534,509 | 990,332 | 1,875,489 | 5,646.1 | 151,005 | 292,046 |
| 1999...................................................... | 4,177,211 | 1,075,364 | 2,044,359 | 6,027.6 | 153,572 | 324,994 |
| 2000 ...................................................... | 4,893,942 | 1,175,628 | 2,334,692 | 6,524.6 | 164,673 | 372,164 |
| 2001 .................................................... | 5,436,996 | 1,181,091 | 2,327,091 | 6,268.3 | 157,459 | 347,823 |
| 2002 ......................................................... | 5,213,336 | 1,180,629 | 2,225,352 | 5,932.2 | 146,186 | 337,406 |
| Majority-owned nonbank affiliates: |  |  |  |  |  |  |
| 1987 ...................................................... | 649,735 | 270,567 | 628,494 | 2,602.7 | 39,497 | 133,620 |
| 1988 .......................................................... | 878,491 | 313,902 | 739,128 | 3,119.0 | 57,209 | 144,896 |
| 1989 ........................................................... | 1,039,568 | 365,733 | 863,538 | 3,573.4 | 72,413 | 158,792 |
| 1990 ...................................................... | 1,269,876 | 438,182 | 995,013 | 3,841.7 | 79,368 | 170,677 |
| 1991 ........................................................... | 1,396,153 | 489,904 | 1,008,388 | 3,991.3 | 85,254 | 169,362 |
| 1992 ......................................................... | 1,459,492 | 520,731 | 1,049,942 | 3,903.9 | 91,686 | 172,260 |
|  | 1,625,086 | 550,185 | 1,112,693 | 3,851.7 | 94,329 | 186,369 |
| 1994 ......................................................... | 1,861,758 | 589,833 | 1,210,837 | 3,954.0 | 107,057 | 214,485 |
| 1995 ..................................................... | 2,039,300 | 619,275 | 1,311,210 | 4,022.6 | 121,277 | 232,250 |
| 1996........................................................ | 2,316,850 | 652,668 | 1,423,715 | 4,155.6 | 125,897 | 248,562 |
|  | 2,661,025 | 678,350 | 1,478,221 | 4,269.1 | 128,394 | 249,310 |
| 1998..................................................... | 3,053,805 | 786,596 | 1,622,946 | 4,669.5 | 136,949 | 277,909 |
| 1999...................................................... | 3,637,321 | 868,923 | 1,792,520 | 5,064.3 | 140,808 | 312,895 |
| 2000 .................................................... | 4,216,349 | 954,414 | 2,051,878 | 5,656.5 | 150,911 | 354,613 |
| 2001 ........................................................ | 4,760,642 | 1,004,981 | 2,070,234 | 5,594.3 | 145,525 | 333,855 |
| 2002 .......................................................... | 4,556,582 | 1,016,004 | 2,043,500 | 5,420.3 | 137,037 | 324,578 |
| Majority-owned nonbank affiliates as a percentage of all nonbank affiliates: |  |  |  |  |  |  |
| 1987 ..................................................... | 68.9 | 76.6 | 84.4 | 80.7 | 82.1 | 93.1 |
| 1988 ..................................................... | 73.2 | 75.1 | 83.4 | 81.1 | 82.3 | 93.2 |
| 1989..................................................... | 72.6 | 74.7 | 81.7 | 79.2 | 83.9 | 92.4 |
| 1990 ...................................................... | 81.9 | 75.8 | 84.6 | 81.1 | 86.0 | 93.3 |
| 1991 ........................................................... | 79.7 | 76.5 | 85.0 | 81.9 | 88.0 | 94.8 |
| 1992 ........................................................ | 80.0 | 78.8 | 85.2 | 82.8 | 88.2 | 93.4 |
| 1993...................................................... | 78.7 | 78.0 | 83.7 | 80.8 | 88.5 | 92.9 |
|  | 84.4 | 78.2 | 83.9 | 81.7 | 88.7 | 92.3 |
| 1995..................................................... | 85.4 | 80.5 | 84.9 | 81.4 | 89.7 | 92.6 |
| 1996....................................................... | 86.4 | 79.0 | 85.4 | 81.4 | 89.4 | 92.5 |
| 1997 ...................................................... | 86.6 | 77.3 | 85.6 | 82.1 | 90.9 | 94.1 |
| 1998..................................................... | 86.4 | 79.4 | 86.5 | 82.7 | 90.7 | 95.2 |
| 1999..................................................... | 87.1 | 80.8 | 87.7 | 84.0 | 91.7 | 96.3 |
| 2000 ......................................................... | 86.2 | 81.2 | 87.9 | 86.7 | 91.6 | 95.3 |
| 2001 ..................................................... | 87.6 | 85.1 | 89.0 | 89.2 | 92.4 | 96.0 |
| 2002 ......................................................... | 87.4 | 86.1 | 91.8 | 91.4 | 93.7 | 96.2 |

Table 19.1. Selected Data of Majority-Owned Nonbank U.S. Affiliates by Industry of Affiliate, 2001

|  | Millions of dollars |  |  |  |  |  |  | Thousands of employees | Millions of dollars |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total assets | Gross property, plant, and equipment | Expenditures for property, plant, and equipment | Sales | Net income | Value added | Compensation of employees |  | U.S. exports of goods shipped by affiliates | U.S. imports of goods shipped to affiliates | Research and development performed by affiliates |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| All industries.. | 4,760,642 | 1,004,981 | 121,665 | 2,070,234 | -51,774 | 417,122 | 310,015 | 5,594.3 | 145,525 | 333,855 | 26,463 |
| Manufacturing. | 1,048,468 | 479,209 | 51,559 | 817,244 | -27,177 | 200,506 | 145,302 | 2,330.2 | 89,759 | 128,041 | 20,054 |
| Food ............. | 58,970 | 23,038 | 1,831 | 49,807 | 202 | 10,832 | 6,408 | 146.6 | 4,063 | 3,444 | 197 |
| Beverages and tobacco products. | 16,512 | 5,337 | 584 | (D) | (D) | (D) | (D) | K | (D) | 798 | 35 |
| Textiles, apparel, and leather products......... | 6,582 | 4,543 | 339 | 6,202 | -232 | 1,866 | 1,327 | 32.3 | 903 | (D) | 35 |
| Wood products .................................... | 2,159 | 919 | 61 | 2,067 | -25 | 594 | 488 | 16.4 | 275 | 664 | 7 |
| Paper. | 19,873 | 14,543 | 1,251 | 13,472 | -632 | 3,630 | 2,598 | 44.7 | 1,099 | 825 | 81 |
| Printing and related support activities Petroleum and coal products. | 9,145 | (D) | 356 (D) | $\begin{array}{r} 10,956 \\ \text { (D) } \end{array}$ | -49 | 4,162 | 3,263 | 61.3 J | 376 (D) | 676 (D) | (D) |
| Chemicals.. | 235,025 | 107,912 | 8,690 | 151,084 | -1,132 | 39,512 | 27,315 | 340.2 | 14,901 | 17,290 | 7,563 |
| Basic chemicals.... | 51,504 | 42,146 | 2,574 | 33,449 | -1,498 | 9,197 | 6,012 | 73.1 | 5,437 | (D) | (D) |
| Resins and synthetic rubber, fibers, and filaments........ | 24,715 | 16,957 | 1,324 | 21,069 | -632 | 3,435 | 2,049 | 31.8 | 1,634 | 2,150 | 272 |
| Pharmaceuticals and medicines .......................... | 97,555 | 31,101 | 3,734 | 62,995 | 2,130 | 18,885 | 13,292 | 146.5 | (D) | 9,605 | 6,124 |
| Soap, cleaning compounds, and toilet preparations...... | (D) | (D) | (D) | (D) | (D) | (D) | (D) | K | (D) | 620 | (D) |
| Other ................................................................... | (D) | (D) | (D) | (D) | (D) | (D) | (D) | K | 1,691 | (D) | 219 |
| Plastics and rubber products... | 30,340 | 21,233 | 1,340 | 30,978 | -2,293 | 7,636 | 7,478 | 142.4 | 2,777 | 4,322 | 305 |
| Nonmetallic mineral products ................................... | 53,937 | 41,753 | 3,212 | 40,398 | 1,112 | 14,367 | 8,717 | 156.2 | 1,417 | 1,823 | 206 |
| Primary and fabricated metals...................................... | 50,176 | 32,888 | 2,200 | 51,638 | -143 | 14,637 | 10,791 | 180.1 | 4,219 | 7,701 | 232 |
| Primary metals ...................................................................... | 31,301 | 23,345 | 1,435 | 32,563 | -768 | 8,254 | 6,239 | 90.8 | 2,516 | 5,779 | (D) |
| Fabricated metal products....................................... | 18,875 | 9,543 | 764 | 19,075 | 625 | 6,382 | 4,552 | 89.3 | 1,703 | 1,921 | (D) |
| Machinery.... | 89,805 | 23,146 | (D) | 67,088 | -1,475 | 19,077 | 17,224 | 281.3 | 8,365 | 7,591 | (D) |
| Agriculture, construction, and mining machinery .......... | 17,803 | (D) | 456 | 10,306 | -533 | 1,626 | 1,739 | 26.7 | 1,906 | (D) | 201 |
| Industrial machinery ........................................... | 8,137 | (D) | (D) | 7,882 | -484 | 1,737 | 1,975 | 29.9 | (D) | (D) | (D) |
| Other ................................................................................................. | 63,865 | 16,416 | 1,907 | 48,899 | -458 | 15,715 | 13,510 | 224.7 | (D) | 4,426 | 1,408 |
| Computers and electronic products.... | 102,463 | 35,119 | 5,502 | 85,027 | -19,394 | 21,004 | 18,150 | 257.1 | 12,733 | (D) | 4,867 |
| Computers and peripheral equipment.......................... | 4,836 | 1,979 | 302 | 10,011 | -451 | 1,283 | 1,366 | 24.6 | 867 | 3,542 | 104 |
| Communications equipment..................................... | 41,152 | 9,066 | 1,534 | 29,482 | -12,121 | 4,823 | 7,608 | 65.2 | 4,453 | (D) | 2,998 |
| Audio and video equipment..................................... | (D) | 168 | 15 | (D) | (D) | (D) | (D) | G | 28 | 214 | (D) |
| Semiconductors and other electronic components ....... | 30,081 | 14,004 | 1,749 | 29,641 | -7,541 | 7,740 | 4,499 | 71.1 | 5,396 | 8,247 | 1,077 |
| Navigational, measuring, and other instruments .......... | 23,303 | 8,743 | 1,719 | 12,887 | 307 | 6,413 | 4,190 | 83.2 | 1,959 | 831 | 675 |
| Magnetic and optical media.................................... | (D) | 1,159 | 183 | (D) | (D) | (D) | (D) | J | 28 | (D) | (D) |
| Electrical equipment, appliances, and components .......... | 114,766 | 24,187 | 3,979 | 47,328 | -2,604 | 12,536 | 11,241 | 190.1 | 5,639 | 2,611 | 875 |
| Transportation equipment........................................ | 201,467 | 102,551 | 15,996 | 190,602 | -3,835 | 29,048 | 23,453 | 370.7 | (D) | (D) | 3,193 |
| Motor vehicles, bodies and trailers, and parts .............. | 185,891 | 99,706 | 15,657 | 177,610 | -3,688 | 25,977 | 20,697 | 322.7 | 26,016 | 46,335 | 2,910 |
| Other ............................................................. | 15,576 | 2,846 | 339 | 12,992 | -147 | 3,071 | 2,756 | 48.0 | (D) | (D) | 283 |
| Furniture and related products ..................................... | 1,212 | 679 | 78 | 1,886 | 90 | 506 | 299 | 14.9 | 97 | 130 | (D) |
| Miscellaneous manufacturing ....................................... | (D) | 4,221 | 414 | 10,683 | -798 | 3,373 | 2,634 | 50.7 | 1,244 | 1,004 | 300 |
| Wholesale trade. | 398,773 | 181,292 | 23,763 | 623,807 | 8,057 | 81,462 | 39,201 | 557.3 | 50,735 | 194,959 | (D) |
| Motor vehicles and motor vehicle parts and supplies........ |  |  | (D) | 128,793 | 2,474 | 9,904 | 4,551 | 54.1 | (D) | 62,295 | (D) |
| Professional and commercial equipment and supplies ..... | 29,242 | 9,334 | 1,253 | 44,155 | -410 | 6,856 | 5,071 | 82.1 | 4,796 | 20,389 | 184 |
| Electrical goods ..................................................... | 49,960 | 16,310 | 1,719 | 88,080 | -1,580 | 10,701 | 8,604 | 102.2 | 9,027 | 39,266 | 1,148 |
| Other durable goods... | 47,633 | 10,649 | 1,222 | 80,484 | -101 | 9,002 | 6,629 | 117.1 | 9,808 | 26,850 | 271 |
| Petroleum and petroleum products ............................. | 112,321 | (D) | (D) | 171,630 | 5,661 | (D) | (D) | L | (D) | 24,107 | (D) |
| Other nondurable goods.......................................... | (D) | 18,813 | 4,229 | 110,665 | 2,013 | (D) | (D) | M | 13,841 | 22,051 | (D) |
| Retail trade | 61,018 | 34,900 | 4,879 | 114,794 | -572 | 24,800 | 15,523 | 610.9 | 1,240 | 4,668 | (D) |
| Food and beverage stores...................................... | 37,099 | 25,208 | 3,516 | 77,095 | 816 | 18,133 | 10,784 | 447.1 | 3 | (D) | 0 |
| Other ..................................................................... | 23,919 | 9,691 | 1,363 | 37,699 | -1,387 | 6,667 | 4,739 | 163.8 | 1,237 | (D) | (D) |
| Information... | 253,903 | 44,358 | (D) | 71,445 | -21,838 | 8,247 | 16,299 | 238.3 | 625 | (D) | (D) |
| Publishing industries .............................................. |  | 5,686 | 809 | 25,134 | -3,356 | 6,403 | 6,608 | 95.2 | 451 | 126 | (D) |
| Motion picture and sound recording industries................ | 51,336 | 3,942 | 477 | 10,287 | -528 | 1,704 | 1,391 | 28.9 | 100 | (D) | (*) |
| Broadcasting and telecommunications.......................... | (D) | (D) | (D) | (D) | (D) | -4,293 | 3,891 | 54.3 | (D) | (D) | 13 |
| Broadcasting, cable networks, and program distribution Telecommunications. | (D) | 3,123 | (D) | (D) | (D) |  | (D) | J | (D) | (D) | 13 |
| Information services and data processing services .......... | 33,734 | (D) | 1,297 | (D) | (D) | 4,433 | 4,409 | 59.9 | (D) | ( | 180 |
| Finance (except depository institutions) and insurance | 2,498,811 |  |  |  |  | 17,305 |  | 272.5 |  | 4 |  |
| Finance, except depository institutions. Insurance carriers and related activities | $1,629,181$ 869,630 | 17,664 | 4,432 | 95,142 | -5,869 | (D) | (D) |  | (*) | 4 0 | (D) |
| Real estate and rental and leasing.............................. | 104,758 | 81,526 | 7,703 | 20,953 | 1,112 | 9,502 | 2,399 | 38.6 | 223 | 453 | (D) |
| Real estate ....................................................... | 86,966 | 73,862 | 6,307 | 14,498 | 1,202 | (D) | (D) | , | 4 | (D) | (*) |
| Rental and leasing (except real estate) .......................... | 17,792 | 7,664 | 1,395 | 6,454 | -90 | (D) | (D) | J | 220 | (D) | (D) |
| Professional, scientific, and technical services ............. | 49,304 | (D) | 1,239 | 41,297 | -2,124 | 14,923 | 12,627 | 171.1 | 197 | (D) | 804 |
| Architectural, engineering, and related services .............. |  | (D) | (D) | 6,210 | -462 | 2,067 | 2,163 | 34.7 | (D) | (D) | 13 |
| Computer systems design and related services............. | 10,884 | (D) | (D) | 7,646 | -1,163 | 3,239 | 3,493 | 36.3 | (D) | 102 | 204 |
| Management, scientific, and technical consulting ............ | 3,024 | 397 | 65 | 7,428 | 364 | 5,162 | 2,529 | 39.0 | 1 | (D) | (D) |
| Other ................................................................................ | (D) | 3,437 | 459 | 20,014 | -862 | 4,455 | 4,443 | 61.1 | 29 | (D) | (D) |
| Other industries...................................... | 345,605 | 143,806 | 15,070 | (D) | (D) | 60,377 | 45,015 | 1,375.5 | 2,745 | 4,388 | 426 |
| Agriculture, forestry, fishing, and hunting....................... | 5,169 |  | 301 | 2,556 | -70 | 810 | 459 | 11.3 | (D) | 162 | 91 |
| Mining.................................................................... | 55,053 | 37,591 | 3,260 | 19,111 | 178 | 9,075 | 4,744 | 59.1 | 2,033 | 567 | (D) |
| Utilities... | 49,901 | 33,108 | 3,972 | 33,965 | 350 | 4,652 | 1,725 | 22.6 | 173 | 3,474 | (D) |
| Construction. | 23,392 | 12,674 | 2,945 | 32,589 | 295 | 6,458 | 5,013 | 74.4 | 82 | 62 | (D) |
| Transportation and warehousing ... | 36,081 | 22,661 | 1,589 | 27,780 | -282 | 10,375 | 8,344 | 241.6 | (D) | (D) | 6 |
| Management of nonbank companies and enterprises ...... | 85,744 | 513 | (D) | (D) | (D) | -177 | 275 | 2.4 | (*) | 1 | (D) |
| Administration, support, and waste management ............. | 23,716 | 3,107 | 400 | 19,975 | -53 | 13,054 | 12,160 | 507.3 | 0 | 0 | 30 |
| Health care and social assistance............................... |  | (D) | (D) | (D) | (D) | (D) | (D) | L | (D) | (D) | (D) |
| Accommodation and food services ............................ | 42,425 | 20,787 | 1,726 | 20,183 | 303 | 10,037 | 7,428 | 314.3 | (*) | 3 | (*) |
| Accommodation............................................... | 33,662 | 18,147 | 1,443 | 8,410 | 207 | 4,300 | 2,516 | 85.2 | (*) | 3 | (*) |
| Food services and drinking places........................... | 8,763 | 2,640 | 283 | 11,772 | 95 | 5,737 | 4,912 | 229.1 | 0 | 0 | (*) |
| Miscellaneous services .............................................. | (D) | 6,772 | 428 | 6,195 | -401 | (D) | (D) | L | 20 |  | (D) |

D Suppressed to avoid disclosure of data of individual companies.
Less than $\$ 500,000$.
Notes. The following ranges are given in employment cells that are suppressed: A-1 to 499; F-500 to 999; G-1,000
to 2,499 ; H-2,500 to 4,999 ; $-5,000$ to 9,999 ; J-10,000 to 24,$999 ; \mathrm{K}-25,000$ to 49,999 ; L-50,000 to 99,999 ; -100,000 or more.

Table 19.2. Selected Data of Majority-Owned Nonbank U.S. Affiliates by Industry of Affiliate, 2002

|  | Millions of dollars |  |  |  |  |  |  | Thousands employees | Millions of dollars |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total assets |  | Expenditures for property, plant, and equipment | Sales | Net income | Value added | Compensation of employees |  | U.S. exports of goods shipped by affiliates | U.S. imports of goods shipped to affiliates | Research and development performed by affiliates |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| All industries | 4,556,582 | 1,016,004 | 111,864 | 2,043,500 | -51,250 | 453,637 | 307,133 | 5,420.3 | 137,037 | 324,578 | 27,508 |
| Manufacturing... | 1,009,551 | 482,408 | 45,817 | 855,354 | -13,107 | 217,552 | 145,242 | 2,227.6 | 86,839 | 132,928 | 20,228 |
| Food... | 45,779 | 20,210 | 1,682 | 44,815 | -58 | 10,644 | 6,634 | 121.1 | 3,425 | 1,897 | 117 |
| Beverages and tobacco products. | 28,016 | 7,985 | 772 | 24,903 | -1,026 | 4,999 | 2,804 | 53.5 | 1,496 | 2,591 | 80 |
| Textiles, apparel, and leather products ......................... | 4,287 | 3,639 | 225 | 4,006 | -312 | 1,416 | 1,066 | 24.0 | 379 | 320 | (D) |
| Paper....................................................... | 18,699 | 15,454 | 1,144 | 14,638 | -1,210 | 4,153 | 2,668 | 41.8 | 1,067 | 925 | 81 |
| Printing and related support activities ......................... | 10,122 | 6,104 | 277 | 10,683 | 270 | 4,529 | 3,289 | 56.9 | 398 | 692 | 38 |
| Petroleum and coal products...................................... | (D) | (D) | (D) | (D) | (D) | (D) | (D) | K | 1,104 | (D) | (D) |
| Chemicals... | 238,898 | 109,155 | (D) | 153,073 | 2,192 | 43,376 | 27,824 | 329.4 | 15,470 | 18,315 | 7,997 |
| Basic chemicals.......................................... | 47,564 | 39,951 | 2,194 | 31,297 | -730 | 9,337 | 5,698 | 66.6 | 5,286 | 2,956 | 491 |
| Resins and synthetic rubber, fibers, and filaments........ | 21,991 | 16,286 | (D) | 17,982 | -152 | 3,377 | 1,886 | 28.4 | 1,510 | 2,621 | 261 |
| Pharmaceuticals and medicines ...................... | 107,088 | 34,706 | 2,820 | 69,253 | 3,377 | 21,791 | 14,182 | 148.7 | 5,781 | 10,334 | 6,703 |
| Soap, cleaning compounds, and toilet preparations...... | 41,381 | 6,645 | 347 | 20,262 | -226 | 4,927 | 3,153 | 44.3 | 901 | 877 | 321 |
| Other ............................................................ | 20,875 | 11,567 | 736 | 14,280 | 77 | 3,943 | 2,904 | 41.5 | 1,992 | 1,526 | 221 |
| Plastics and rubber products..... | 25,977 | 18,311 | 1,053 | 28,968 | 225 | 9,984 | 7,156 | 130.7 | 2,672 | 4,495 | 285 |
| Nonmetallic mineral products ................................... | 60,190 | 44,942 | 2,789 | 41,249 | 1,292 | 15,391 | 9,205 | 155.4 | 1,507 | 1,402 | 214 |
| Primary and fabricated metals .................................. | 42,704 | 30,689 | 1,572 | 43,703 | 168 | 12,003 | 8,401 | 137.9 | 3,383 | 7,216 | 204 |
| Primary metals ................ | 25,754 | 21,133 | 970 | 26,822 | -100 | 6,078 | 4,194 | 61.4 | 2,146 | 5,601 | 50 |
| Fabricated metal products....................................... | 16,951 | 9,557 | 601 | 16,882 | 268 | 5,924 | 4,207 | 76.5 | 1,237 | 1,615 | 154 |
| Machinery.... | 91,345 | 25,069 | 3,357 | 72,660 | -140 | 22,323 | 18,532 | 284.7 | 8,773 | 7,792 | 1,872 |
| Agriculture, construction, and mining machinery .......... | 16,222 | 3,324 | 382 | 9,528 | -658 | 1,186 | 1,582 | 23.5 | 1,820 | 1,542 | 189 |
| Industrial machinery.......................................... | 7,132 | 2,737 | 233 | 7,175 | -505 | 1,581 | 1,899 | 26.9 | 1,039 | 1,172 | 333 |
| Other ................................................................. | 67,991 | 19,009 | 2,742 | 55,958 | 1,022 | 19,556 | 15,051 | 234.3 | 5,914 | 5,078 | 1,351 |
| Computers and electronic products... | 94,273 | 33,522 | 2,765 | 90,738 | -8,399 | 22,105 | 18,960 | 246.2 | 12,265 | 24,426 | 4,885 |
| Computers and peripheral equipment....................... | 5,648 | 2,387 | 509 | 10,941 | -429 | 2,044 | 1,987 | 29.8 | 2,733 | 5,311 | 675 |
| Communications equipment................................. | 28,336 | 8,367 | 532 | 19,612 | -4,640 | 4,750 | 4,867 | 49.9 | 2,137 | 4,099 | 2,087 |
| Semiconductors and other electronic components ....... | 15,651 | 7,638 | 587 | 15,115 | -1,799 | 3,549 | 1,865 | 32.6 | 3,464 | 3,805 | 351 |
| Navigational, measuring, and other instruments .......... | 27,607 | 8,845 | 621 | 22,388 | -958 | 7,980 | 7,010 | 98.0 | 2,806 | (D) | 1,730 |
| Other ............................................................ | 17,031 | 6,285 | 515 | 22,681 | -572 | 3,783 | 3,231 | 35.9 | 1,125 | (D) | 42 |
| Electrical equipment, appliances, and components .... | 25,967 | 8,460 | 1,354 | 19,310 | -747 | 4,419 | 4,070 | 80.1 | 3,004 | 1,780 | 396 |
| Transportation equipment....................................... | 209,892 | 101,670 | 14,462 | 192,516 | 2,077 | 34,619 | 22,744 | 367.4 | 27,957 | 50,326 | 3,183 |
| Motor vehicles, bodies and trailers, and parts.............. | 195,614 | 99,182 | 14,126 | 181,120 | 2,075 | 31,682 | 20,279 | 327.6 | 25,834 | 47,818 | 2,956 |
| Other ............................................................ | 14,279 | 2,488 | 336 | 11,397 | 3 | 2,937 | 2,465 | 39.8 | 2,124 | 2,508 | 227 |
| Other ................................................................................... | (D) | (D) | 3,146 | (D) | (D) | (D) | (D) | M | 3,940 | (D) | 704 |
| Wholesale trade.. | 409,360 | 187,058 | 23,773 | 583,646 | 9,743 | 76,122 | 36,542 | 516.3 | 45,412 | 183,396 | 4,973 |
| Motor vehicles and motor vehicle parts and supplies........ | 86,686 | 37,198 | 10,435 | 129,931 | 2,169 | 8,668 | 4,710 | 54.4 | 2,591 | 64,305 | 334 |
| Electrical goods .................................................... | 33,301 | 10,460 | 779 | 62,222 | -220 | 6,920 | 5,535 | 72.4 | 6,456 | 29,310 | 1,137 |
| Petroleum and petroleum products .................................... | 126,928 | (D) | 8,473 | 157,577 | 4,021 | 27,539 | 4,911 | 54.2 | 9,221 | 24,434 | 206 |
| Other .............................................................. | 162,445 | (D) | 4,087 | 233,916 | 3,774 | 32,995 | 21,386 | 335.3 | 27,144 | 65,348 | 3,296 |
| Retail trade.. | 60,095 | 35,594 | 4,968 | 111,580 | -561 | 25,654 | 15,348 | 583.3 | 711 | 4,037 | 53 |
| Food and beverage stores........................................... | 37,491 | 26,222 | 3,579 | 77,141 | 532 | 18,808 | 10,901 | 431.8 | 3 | (D) | (*) |
| Other ..................................................................... | 22,604 | 9,372 | 1,389 | 34,439 | -1,094 | 6,846 | 4,447 | 151.5 | 708 | (D) | 53 |
| Information... | 248,147 | 44,269 | 6,765 | 75,109 | -38,095 | 24,689 | 16,728 | 245.8 | 1,046 | 853 | 723 |
| Publishing industries ..... | 88,925 | 8,289 | 1,143 | 31,672 | -709 | 14,026 | 9,460 | 127.4 | 762 | 163 | 679 |
| Motion picture and sound recording industries................ | 46,548 | 3,524 | 335 | 12,647 | -3,294 | 4,535 | 1,751 | 34.1 | 284 | (D) | 3 |
| Telecommunications .................................................... | 72,877 | 27,189 | 4,792 | 15,116 | -26,372 | 1,937 | 2,215 | 37.4 | ${ }_{(*)}^{1}$ | (D) | 11 |
| Other ...................................................................... | 39,797 | 5,268 | 495 | 15,673 | -7,720 | 4,191 | 3,302 | 46.9 | ${ }^{*}$ ) | 0 | 30 |
| Finance (except depository institutions) and insurance | 2,293,786 | 29,788 | 5,833 | 185,248 | -10,118 | 19,487 | 30,735 | 233.3 | (*) | 4 | (D) |
| Finance, except depository institutions ...................... | 1,338,167 | 15,563 | 4,789 | 59,166 | -3,229 | 13,573 | 17,752 | 88.7 | (*) | 4 | (D) |
| Insurance carriers and related activities........................ | 955,619 | 14,225 | 1,044 | 126,082 | -6,890 | 5,914 | 12,983 | 144.6 | 0 | 0 | 6 |
| Real estate and rental and leasing ................................ | 88,670 | 68,306 | 6,943 | 17,709 | 414 | 9,072 | 2,122 | 33.8 | 215 | 467 | 21 |
| Real estate ............................................................ | 72,152 | 60,313 | 5,633 | 12,192 | 1,195 | 6,832 | 1,110 | 15.7 | 4 | 18 | (*) |
| Rental and leasing (except real estate).......................... | 16,519 | 7,992 | 1,310 | 5,517 | 782 | 2,240 | 1,012 | 18.2 | 212 | 449 | 21 |
| Professional, scientific, and technical services .............. | 54,932 | 8,671 | 984 | 41,620 | 677 | 16,182 | 12,281 | 162.5 | 384 | 234 | 964 |
| Architectural, engineering, and related services .............. | 7,964 | 2,011 | 231 | 6,767 | -800 | 1,875 | 2,325 | 33.4 | 305 | 45 | (D) |
| Computer systems design and related services .............. | 8,468 | 2,298 | 352 | 6,474 | -780 | 2,969 | 2,946 | 30.9 | 8 | 44 | 125 |
| Management, scientific, and technical consulting ............ | 10,439 | 501 | 60 | 7,737 | 1,470 | 5,527 | 2,455 | 38.8 | ${ }^{*}$ ) | 8 | 12 |
| Other .................................................................... | 28,061 | 3,861 | 341 | 20,643 | 787 | 5,811 | 4,554 | 59.4 | 70 | 136 | (D) |
| Other industries.................................................. | 392,039 | 159,910 | 16,779 | 173,234 | -201 | 64,880 | 48,134 | 1,417.6 | 2,430 | 2,658 | (D) |
| Agriculture, forestry, fishing, and hunting ....................... | 4,298 | 2,739 | 241 | 2,090 | -1 | 607 | 398 | 9.2 | 330 | 181 | 77 |
| Mining............................................................... | 62,931 | 41,459 | 3,477 | 20,313 | -747 | 9,030 | 5,309 | 66.7 | 1,713 | 43 | (D) |
| Utilities................................................................... | 68,271 | 44,517 | 5,241 | 31,630 | 858 | 5,285 | 1,801 | 30.6 | 174 | 2,203 | 13 |
| Construction ...................................................... | 24,472 | 13,857 | 3,183 | 31,573 | 222 | 6,480 | 5,097 | 75.4 | 72 | (D) | (D) |
| Transportation and warehousing ............................... | 41,729 | 25,789 | 1,866 | 30,405 | -297 | 11,930 | 9,766 | 262.4 | 58 | 14 | 3 |
| Management of nonbank companies and enterprises ...... | 107,252 | 573 | 163 | 715 | -1,025 | -14 | 305 | 2.9 | 0 | 0 | 7 |
| Administration, support, and waste management............ | 25,064 | 3,479 | 510 | 22,440 | 772 | 15,196 | 13,257 | 513.3 | (*) | 0 | 30 |
| Health care and social assistance.............................. | 12,792 | 3,259 | 281 | 7,697 | 334 | 4,046 | 3,054 | 85.8 | (D) | (D) | (D) |
| Accommodation and food services .............................. | 37,981 | 18,725 | 1,431 | 21,737 | -177 | 10,296 | 7,837 | 328.2 | (*) | 3 | (*) |
| Miscellaneous services ............................................ | 7,249 | 5,514 | 385 | 4,634 | -138 | 2,026 | 1,308 | 43.2 | (D) | 13 | (D) |

[^17]Table 20.1. Selected Data of Majority-Owned Nonbank U.S. Affiliates by Country of Ultimate Beneficial Owner, 2001


D Suppressed to avoid disclosure of data of individual companies.

1. The European Union (15) comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.
2. OPEC is the Organization of Petroleum Exporting Countries. Its members are Algeria, Indonesia, Iran, Iraq, Kuwait,

Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.
Notes. The following ranges are given in employment cells that are suppressed: A-1 to 499; F-500 to 999; G-1,000 to 2,499; H-2,500 to 4,999; l-5,000 to 9,999; J-10,000 to 24,999; K-25,000 to 49,999; L-50,000 to 99,$999 ; \mathrm{M}-100,000$ or more.
he estimates for 2001 are revised

Table 20.2. Selected Data of Majority-Owned Nonbank U.S. Affiliates by Country of Ultimate Beneficial Owner, 2002

|  | Millions of dollars |  |  |  |  |  |  | Thousands of employees | Millions of dollars |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total assets | Gross property, plant, and equipment | Expenditures for property, plant, and equipment | Sales | Net income | Value added | Compensation of employees |  | U.S. exports of goods shipped by affiliates | U.S. imports of goods shipped to affiliates | Research and development performed by affiliates |
|  | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) |
| All countries ........ | 4,556,582 | 1,016,004 | 111,864 | 2,043,500 | -51,250 | 453,637 | 307,133 | 5,420.3 | 137,037 | 324,578 | 27,508 |
| Canada .. | 325,469 | 84,674 | 6,670 | 128,411 | -4,732 | 36,589 | 24,817 | 470.5 | 5,678 | 16,406 | 1,583 |
| Europe ...................................................... | 3,418,922 | 639,160 | 69,533 | 1,246,557 | $-30,801$ -348 | 290,887 | 209,724 | 3,751.9 | 73,806 | 132,322 | 20,735 |
| Austria ....................................................... | 3,459 | 1,352 | 110 | 2,993 | -348 | 483 | 646 | 10.4 | 322 | (D) | 15 |
| Belgium ..................................... | 41,275 | 10,513 | 757 | 23,252 | 264 | 6,194 | 3,758 | 132.6 | 615 | 976 | 88 |
| Denmark............................................. | 15,881 | 3,070 | 502 | 9,411 | -27 | 2,427 | 2,027 | 44.7 | 424 | 1,063 | 97 |
| Finland.................................................. | 13,909 | 7,946 | 480 | 16,672 | -998 | 4,108 | 2,836 | 38.5 | 1,253 | 4,365 | 544 |
| France ................................................. | 447,432 | 69,059 | 7,071 | 150,885 | -1,461 | 40,926 | 28,904 | 468.0 | 10,065 | 14,895 | 2,620 |
| Germany......... | 534,078 | 176,956 | 24,918 | 290,353 | -24,598 | 56,951 | 46,275 | 676.4 | 28,241 | 54,439 | 5,659 |
|  | 12,179 | 5,831 | 385 | 10,714 | 183 | 3,385 | 2,137 | 36.1 | 98 | 207 | 368 |
| Italy...................................................... | 38,212 | 11,698 | 1,088 | 22,134 | -412 | 5,070 | 3,783 | 87.7 | 1,572 | 3,347 | 245 |
| Luxembourg................................................ | 7,721 | 3,331 | 634 | 3,515 | 170 | 1,029 | 467 | 13.6 | 302 | (D) | 22 |
| Netherlands............................................... | 529,883 | 80,285 | 8,877 | 226,982 | -2,213 | 38,487 | 25,783 | 547.3 | 5,328 | 14,290 | 1,773 |
| Norway .... | 7,020 | 2,411 | 336 | 8,956 | -441 | 979 | 1,232 | 17.7 | 204 | 834 | 64 |
| Spain....... | 7,932 | 2,835 | 277 | 5,464 | -216 | 927 | 813 | 18.0 | 191 | 725 | 27 |
| Sweden ................................................ | 58,142 | 15,476 | 1,288 | 43,049 | -830 | 11,891 | 9,646 | 225.7 | 3,976 | 3,904 | 454 |
| Switzerland................................................ | 878,483 | 35,898 | 3,612 | 111,395 | -4,439 | 27,596 | 28,422 | 429.9 | 6,105 | 8,111 | 3,295 |
| United Kingdom.......................................... | 819,758 | 210,411 | 18,837 | 314,944 | 4,518 | 89,658 | 52,516 | 995.8 | 14,978 | 22,254 | 5,459 |
| Other .......................................................... | 3,559 | 2,089 | 360 | 5,841 | 46 | 775 | 481 | 9.4 | 133 | 739 | 5 |
| Latin America and Other Western Hemisphere | 222,161 | 65,316 | 8,208 | 122,170 | -11,817 | 37,045 | 21,757 | 352.3 | 9,104 | 15,509 | 1,035 |
| South and Central America .......................... | 33,109 | 15,894 | 1,800 | 44,126 | -732 | 10,167 | 3,638 | 65.7 | 2,544 | 11,715 | 103 |
| Brazil ...................... | 3,873 | 1,946 | 180 | (D) | (D) | 675 | 340 | 5.3 | (D) | (D) | 0 |
| Mexico .............................................. | 18,132 | 6,500 | 802 | 15,769 | -828 | 3,496 | 2,317 | 47.1 | (D) | 2,571 | 45 |
| Panama ............................................. | (D) | (D) | (D) | 1,312 | -134 | 513 | 492 | 6.5 | 142 | 161 | 59 |
| Venezuela................................................ | (D) | (D) | (D) | (D) | (D) | (D) | (D) | H | 466 | (D) | 0 |
| Other .................................................. | 798 | 295 | 33 | 1,053 | -16 | (D) | (D) | G | 99 | 421 | 0 |
| Other Western Hemisphere.......................... | 189,052 | 49,422 | 6,408 | 78,044 | -11,085 | 26,877 | 18,119 | 286.7 | 6,560 | 3,793 | 931 |
| Bahamas ............................................ | 1,032 | 398 | 20 | 346 | -35 | 120 | 83 | 2.6 | 19 | 27 | 0 |
| Bermuda......................................................... | 121,159 | 35,152 | 4,525 | 62,552 | -10,495 | 22,154 | 14,177 | 223.4 | 6,454 | 2,842 | 780 |
| Netherlands Antilles ............................... | (D) | (D) | (D) | (D) | (D) | (D) | (D) | J | 6 | 21 | (D) |
| United Kingdom Islands, Caribbean............. | 55,661 | 7,306 | 1,237 | 9,714 | -174 | 2,147 | 1,911 | 36.5 | 66 15 | 895 | (D) |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Africa .... | 6,073 | 3,306 | 273 | 5,387 | -28 | 1,150 | 794 | 10.3 | 513 | 362 | 35 |
| South Africa................................................. | 4,984 | 2,931 | 259 | 5,009 | -48 | 1,069 | 764 | 9.7 | 513 | (D) | 35 |
| Other .......................................................... | 1,089 | 375 | 15 | 378 | 20 | 81 | 30 | 0.6 | ${ }^{*}$ ) | (D) | 0 |
| Middle East ............................................ | 22,888 | 17,667 | 1,523 | 30,331 | -617 | 7,275 | 2,231 | 40.7 | 748 | 7,510 | (D) |
| Israel................................................ | 3,779 | 1,038 | 277 | (D) | -168 | 634 | 510 | 9.6 | 277 | (D) | 106 |
| Kuwait....................................................... | 1,661 | 1,330 | 83 | 499 | 47 | 190 | 28 | 0.9 | 126 | ${ }^{*}$ * | 0 |
| Lebanon .............................................. | 674 | 738 | 47 | 422 | 38 | 218 | 96 | 2.3 | ${ }^{8}$ | 4 | (*) |
| Saudi Arabia............................................ | 11,542 | 10,594 | 759 | (D) | -546 | 4,993 | 737 | 9.8 | 199 | (D) | (D) |
| United Arab Emirates .................................. | 2,723 | 2,778 | 203 | 521 | -4 | 244 | 55 | 1.6 | (D) | 26 | 0 |
| Other ......................................................... | 2,509 | 1,189 | 153 | 2,245 | 16 | 997 | 806 | 16.6 | (D) | (D) | (D) |
| Asia and Pacific ........................................... | 540,946 | 198,098 | 24,907 | 492,116 | -2,342 | 75,627 | 45,039 | 754.3 | 43,164 | 149,093 | 3,263 |
| Australia.................................................. | 67,658 | 18,659 | 2,037 | 22,642 | -5,824 | 6,656 | 3,472 | 55.0 | 303 | 360 | 22 |
| China................................................... | 1,096 | 546 | 15 | 1,427 | -26 | 251 | 202 | 3.4 | 454 | 110 | 18 |
| Hong Kong................................................... | 6,521 | 4,738 | 406 | 4,461 | 147 | 1,231 | 479 | 11.3 | (D) | 631 | (D) |
| India............................................................ | 390 | 129 | 9 | 489 | -20 | 91 | 95 | 1.7 | 8 | 11 | 0 |
| Japan............................................................... | 430,565 | 150,705 | 20,275 | 414,472 | 3,833 | 61,976 | 37,656 | 628.2 | 36,778 | 125,242 | (D) |
| Korea, Republic of ....................................... | 12,760 | 5,876 | 691 | 30,576 | 137 | 1,948 | 803 | 11.9 | 4,464 | 19,912 | (D) |
| Malaysia ............. | 1,687 | 1,064 | 64 | 879 | -45 | 334 | 270 | 5.4 | (D) | 13 | 13 |
| New Zealand ............................................ | 351 | 67 | 4 | 1,031 | -48 | 19 | 24 | 0.3 | 15 | 802 | 1 |
| Singapore ....................................................... | 5,800 | 4,393 | 401 | 4,841 | -280 | 1,131 | 874 | 15.2 | 168 | 526 | 1 |
| Taiwan .................................................. | 13,004 | 10,894 | 876 | 10,734 | -237 | 1,836 | 1,070 | 18.6 | 781 | 1,406 | 36 |
| Other ........................................................ | 1,115 | 1,027 | 129 | 565 | 20 | 154 | 94 | 3.2 | 7 | 79 | 0 |
| United States . | 20,122 | 7,783 | 751 | 18,529 | -913 | 5,064 | 2,770 | 40.1 | 4,024 | 3,377 | (D) |
| Addenda: ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |
| European Union (15) ${ }^{1}$ <br> OPEC² | $\begin{array}{r} 2,531,643 \\ \text { (D) } \end{array}$ | $\begin{array}{r} 600,017 \\ \text { (D) } \end{array}$ | $\begin{array}{r} 65,496 \\ 1,881 \end{array}$ | $\begin{array}{r} 1,122,436 \\ \text { (D) } \end{array}$ | $\begin{array}{r} -25,886 \\ \text { (D) } \end{array}$ | $\begin{array}{r} 261,881 \\ \text { (D) } \end{array}$ | $\begin{array}{r} 179,740 \\ \text { (D) } \end{array}$ | 3,298.3 | $\begin{array}{r} 67,370 \\ \text { (D) } \end{array}$ | $\begin{array}{r} 122,648 \\ \text { (D) } \end{array}$ | 17,371 16 |

[^18]Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela.
Notes. The following ranges are given in employment cells that are suppressed: A-1 to 499; F-500 to 999; G-1,000 to 2,499; H-2,500 to 4,999; $-5,000$ to 9,999 ; J-10,000 to 24,999 ; K-25,000 to 49,999 ; L-50,000 to 9,999, M-100,000 or more
The estimates for 2002 are preliminary


[^0]:    1. A price index specifically applicable to foreign-owned companies is not available, but the chain-type index for value added in U.S. private industries increased only 1.3 percent in 2002, well below the rate of increase in U.S.affiliate value added; see table 7A in Brian C. Moyer, Mark A. Planting, Paul V. Kern, and Abigail M. Kish, "Improved Annual Industry Accounts for 1998-2003: Integrated Annual Input-Output Accounts and Gross-Domes-tic-Product-by-Industry Accounts," Survey of Current Business 84 (June 2004): 44. This article is also the source of data on value added in U.S. private industries. Data on U.S. employment in U.S. private industries were obtained from table 6.4D of the "National Income and Product Tables."
    Previously, value added was referred to as "gross product." The change in terms conforms with the changes that were initiated as part of the recent comprehensive revision of the national income and product accounts. See Nicole Mayerhauser, Shelly Smith, and David F. Sullivan, "Preview of the 2003 Comprehensive Revision of the National Income and Product Accounts: New and Redesigned Tables," Survey 83 (August 2003): 20.
    2. In this article, the focus is on U.S. affiliates that are majority-owned by foreign parent companies and thus are unambiguously under their control. Because of the presumption of foreign control, majority ownership is viewed by many as the preferred basis for selecting firms for the analysis of the role of foreign multinational enterprises in host-country production, employment, and trade. It is also recommended as the primary basis for the compilation of statistics on the operations of foreign-owned firms by the Organisation for Economic Co-operation and Development's forthcoming Handbook of Globalisation Indicators and by the international Manual on Statistics of International Trade in Services. See also Robert E. Lipsey, "Foreign Direct Investment and the Operations of Multinational Firms: Concepts, History, and Data," in Handbook of International Trade, ed. Kwan Choi and James Harrigan (Oxford, United Kingdom: Basil Blackwell, 2003). Financial and operating data for all nonbank U.S. affiliates-including those that are owned 50 percent or less by foreign investors-are presented in the appendix.
[^1]:    3. According to data from BEA's survey of new foreign investments, outlays by foreign direct investors to acquire or to establish businesses in the United States dropped in 2002 to $\$ 55$ billion, the lowest level since 1994. Outlays for new investment had also dropped in 2001, from a record \$336 billion in 2000 to $\$ 147$ billion in 2001; see Thomas W. Anderson, "Foreign Direct Investment in the United States: New Investment in 2003," Survey 84 (June 2004): 59-66.
    4. Because U.S. affiliates tend to be concentrated in industrial sectors with relatively high value added per worker (such as manufacturing and wholesale trade), their share of U.S. employment has consistently been less than their share of U.S. value added.
[^2]:    6. The rate of change in U.S. value added in private industries serves as a convenient benchmark against which the increase in U.S.-affiliate value added can be evaluated. However, the two growth rates are not strictly comparable, because the growth rate of U.S.-affiliate value added partly reflects transfers in ownership that do not represent increased production for the whole economy. Similarly, year-to-year changes in U.S.-affiliate employment reflect changes in ownership, so these changes are not strictly comparable with the corresponding changes for the whole economy.
[^3]:    7. In each year in 1998-2000, outlays by foreign direct investors to acquire or to establish businesses in the United States were more than twice as high as the outlays in any year in 1980-97; see chart 1 in "New Investment in 2003," 59.
[^4]:    1. For a more detailed discussion of the differences between these three sets of data, see Alicia M. Quijano, "A Guide to BEA Statistics on Foreign Direct Investment in the United States," Survey 70 (February 1990): 29-37; <www.bea.gov/bea/ail.htm>.

    For a comparison of the data on affiliate operations with the data on new investment, see the appendix "Sources of Data" in Mahnaz FahimNader and William J. Zeile, "Foreign Direct Investment in the United States: New Investment in 1994 and Affiliate Operations in 1993," Survey 75 (May 1995): 68-70; <www.bea.gov/bea/pubs.htm>.

[^5]:    8. British-owned affiliates also accounted for 20 percent or more of the value added of U.S. affiliates in 1988-2001. For earlier years, available estimates of value added for all nonbank affiliates (including affiliates that are not majority-owned by foreign direct investors) indicate that Britishowned affiliates have consistently accounted for the largest share of affiliate value added among investing countries.
    9. Before 1990, Canada was the second-largest investing country.
[^6]:    10. A corporate inversion occurs when a U.S. multinational corporation forms a corporation, typically in a foreign low-tax or no-tax country, and simultaneously "inverts" the corporate chain of ownership, so that the new foreign corporation becomes the parent company and the U.S.-based company becomes its affiliate.
[^7]:    12. These shares are based on U.S.-affiliate employment data that are disaggregated by industry of sales; this basis approximates the establishmentbased disaggregation of the data for all U.S. businesses. See the box "Using Employment Data to Estimate Affiliate Shares of the U.S. Economy by Industry."
[^8]:    1. The data for all U.S. businesses used to compute the shares by industry are from the Census Bureau (see table 4, footnote 1).
    2. Establishment-level data from a joint project of BEA and the Census Bureau can be used to calculate affiliate shares at an even greater level of detail. For affiliate shares based on establishment data for sixdigit manufacturing and five-digit nonmanufacturing NAICS industries for 1997, see Foreign Direct Investment in the United States: Establishment Data for 1997 (Washington, DC: U.S. Government Printing Office, March 2003); <www.bea.gov>. Similar data on a Standard Industrial Classification basis are available for 1987 and 1992 and data only for manufacturing industries for 1988-91. The data for foreignowned establishments are analyzed in Survey articles at <www.bea.gov/ bea/ai/iidguide.htm $>$.
[^9]:    3. However, this is not the case if one establishment of an affiliate provides all of its output to another establishment of that affiliate. For example, if an affiliate operates both a metal mine and a metal-manufacturing plant and if the entire output of the mine is used by the manufacturing plant, all of the affiliate's sales would be in metal manufacturing, and none, in metal mining. Thus, when the mining employment is distributed by industry of sales, all of it would be classified in manufacturing even though the industry of one of the establishments involved is mining.
    4. An affiliate's primary industry is based on a breakdown of the affiliate's sales by BEA's NAICS-based International Surveys Industry classification.
[^10]:    D Suppressed to avoid disclosure of data of individual companies.

    * Fewer than 50 employees.
    .a. Not available.

    1. The data on employment in manufacturing used to calculate the shares shown in this table are from BEA's Regional Economic Information System. The U.S. manufacturing employment totals used to calculate shares in Regional Economic Information System. The U.S. manufacturing employment totals used to calculate shares 2. Total affiliate manufacturing employment and the shares of all-U.S.-business manufacturing employmen accounted for by affiliates in this table differ from those shown in table 4 (see footnote 3 to table 4). For consis-
[^11]:    14. Since 1993, data on imports intended for further manufacture by affiliates have also been collected for total affiliate imports (without a breakdown by transactor) in BEA's annual surveys of affiliate operations.
    15. As noted earlier (see footnote 5), preliminary results for bank affiliates are being reported for the first time in this article.
[^12]:    Note. The data on U.S. exports and imports of goods used to compute the affiliate shares in this table are Note. The data on U.S. exp
    from the U.S. Census Bureau.

[^13]:    18. A portion of the remaining trade, trade between U.S. parent companies and their majority-owned foreign affiliates, is also intrafirm trade; together the intrafirm trade of foreign-owned U.S. affiliates and the intrafirm trade of U.S. multinational companies have accounted for 30-36 percent of U.S. exports and for 36-40 percent of U.S. imports. See William J. Zeile, "Trade in Goods Within Multinational Companies: Survey-Based Data and Findings for the United States of America" (paper prepared for the Organisation for Economic Co-operation and Development Committee on Industry and Business Environment Working Party on Statistics, Session on Globalisation, Paris, November 3-4, 2003); <www.bea.gov/bea/ papers.htm>.
[^14]:    19. For U.S. affiliates that have direct investment abroad, exports to companies outside the affiliate's foreign parent group include any exports to foreign affiliates of the U.S. affiliate. In the benchmark survey, data on U.S. affiliate exports to their own foreign affiliates were collected for the affiliates' total exports, but not for exports broken down by product group. Among U.S. affiliates in 2002, some of the largest exporters of road vehicles and equipment exported mainly to their foreign affiliates rather than to companies in the foreign parent group or to companies with no ownership ties to the U.S. affiliate.
[^15]:    D Suppressed to avoid disclosure of data of individual companies

[^16]:    20. For the 2001 preliminary estimates of employment by majorityowned nonbank U.S. affiliates, see William J. Zeile, "U.S. Affiliates of Foreign Companies: Operations in 2001," Surver 83 (August 2003): 38-56. The preliminary estimates of sales and of expenditures for property, plant, and equipment by majority-owned nonbank U.S. affiliates were included in detailed tables on U.S.-affiliate operations that were posted on BEA's Web site in October 2003.
[^17]:    D Suppressed to avoid disclosure of data of individual companies.
    Less than \$500,000.
    Notes. The following ranges are given in employment cells that are suppressed: A-1 to 499; F-500 to 999;

[^18]:    D Suppressed to avoid disclosure of data of individual companies.
    Less than \$500,000.

    1. The European Union (15) comprises Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy uxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.
    2. OPEC is the Organization of Petroleum Exporting Countries. Its members are Algeria, Indonesia, Iran, Iraq, Kuwait,
