

Activities of U.S. Multinational Enterprises in the United States and Abroad

Preliminary Results From the 2014 Benchmark Survey

Preliminary results from the 2014 Benchmark Survey of U.S. Direct Investment Abroad by the Bureau of Economic Analysis (BEA) indicate that the share of production of U.S. multinational enterprises (MNEs) accounted for by U.S. parents increased to 71.9 percent (with the remaining 28.1 percent accounted for by their foreign affiliates) from 69.4 percent in the previous benchmark survey (2009).¹ This was the first benchmark-to-benchmark increase in the U.S. parent share of production, as measured by value-added, since 1994–1999. In contrast to the parent share of value added, the U.S. parent share of U.S. MNE employment decreased to 65.8 percent in 2014 from 68.0 percent in 2009 (tables A1 and A2). These different patterns partly reflect the high labor productivity of U.S. parents, compared with their foreign affiliates.²

The preliminary results from the 2014 benchmark survey include statistics on the 2014 activities of U.S. MNEs—enterprises that are involved with outward direct investment. BEA has also updated statistics for 2013 that supersede the preliminary statistics from the 2013 Annual Survey of U.S. Direct Investment Abroad, which were published in August 2015. Both the preliminary 2014 statistics and the revised 2013 statistics cover the worldwide activities of U.S. MNEs and provide information on the finances and operations of U.S. MNEs—including value added, balance sheet and income statement details, employment and employee compensation, sales, capital expenditures, trade in goods, and expenditures for research and development. BEA also produces statistics that cover the activ-

ities of U.S. affiliates of foreign MNEs, that is, U.S. companies involved in inward direct investment.³ Jointly, these inward and outward statistics are referred

3. For information on inward direct investment, see, Sarah Stutzman, “Activities of U.S. Affiliates of Foreign Multinational Enterprises,” SURVEY OF CURRENT BUSINESS 96 (August 2016).

Table A1. Selected Statistics for U.S. Multinational Enterprises (MNEs), U.S. Parents, and Majority-Owned Foreign Affiliates (MOFAs) for Selected Years

	Millions of dollars				Percent change at annual rates		
	1999 ¹	2004	2009	2014 ^p	1999–2004	2004–2009	2009–2014
Value added²							
U.S. MNEs (Parents and MOFAs).....	2,644,739	3,220,723	3,740,733	5,297,303	4.0	3.0	7.2
Parents.....	2,064,343	2,366,467	2,595,776	3,810,265	2.8	1.9	8.0
MOFAs.....	580,396	854,256	1,144,957	1,487,038	8.0	6.0	5.4
Capital expenditures³							
U.S. MNEs (Parents and MOFAs).....	531,399	476,098	598,862	952,242	-2.2	4.7	9.7
Parents.....	416,795	350,919	431,796	713,545	-3.4	4.2	10.6
MOFAs.....	114,604	125,179	167,066	238,697	1.8	5.9	7.4
R&D expenditures⁴							
U.S. MNEs (Parents and MOFAs).....	144,435	190,029	246,502	320,961	5.6	5.3	5.4
Parents.....	126,291	164,189	207,297	268,787	5.4	4.8	5.3
MOFAs.....	18,144	25,840	39,205	52,174	7.3	8.7	5.9

^p Preliminary

1. For 1999 forward, BEA expanded the statistics to include data for “very small” foreign affiliates and for the parents of these affiliates. For details, see the technical note on page 121 of the December 2002 SURVEY OF CURRENT BUSINESS.

2. For 1999 and 2004, the data items needed to calculate value added for U.S. parents and their foreign affiliates were only collected for nonbank businesses. For these years, the value-added statistics for bank parents and their foreign affiliates are estimates.

3. For 1999 and 2004, the capital expenditures data for U.S. parents and their foreign affiliates were only collected for nonbank businesses. For these years, the statistics for bank parents and their foreign affiliates are estimates.

4. For 1999 and 2004, data on R&D expenditures for U.S. parents and their foreign affiliates were only collected for nonbank businesses. For these years, R&D expenditures for bank U.S. parents and their foreign affiliates are assumed to be zero.

MOFAs Majority-owned foreign affiliates

Table A2. Employment of U.S. Multinational Enterprises (MNEs), U.S. Parents, and Foreign Affiliates for Selected Years

	Employees						
	Thousands				Percent change at annual rates		
	1999 ¹	2004	2009	2014 ^p	1999–2004	2004–2009	2009–2014
U.S. MNEs							
Parents and all affiliates.....	33,397.6	32,891.6	35,962.0	42,396.4	-0.3	1.8	3.3
Parents and MOFAs.....	31,913.4	31,466.0	33,726.6	40,361.8	-0.3	1.4	3.7
Parents.....	23,985.3	22,445.6	22,932.7	26,559.7	-1.3	0.4	3.0
Affiliates							
Total.....	9,412.3	10,445.4	13,029.3	15,836.7	2.1	4.5	4.0
MOFAs.....	7,928.1	9,019.8	10,793.9	13,802.1	2.6	3.7	5.0
Other.....	1,484.2	1,425.6	2,235.3	2,034.6	-0.8	9.4	-1.9

1. For 1999 forward, BEA expanded the statistics to include data for “very small” foreign affiliates and for the parents of these affiliates. For details, see the technical note on page 121 of the December 2002 SURVEY OF CURRENT BUSINESS.

MOFAs Majority-owned foreign affiliates

1. In both surveys, the remainder of production was accounted for by U.S. parents’ foreign affiliates. Benchmark surveys of outward direct investment are conducted every 5 years. See the appendix for more information about benchmark surveys.

2. Carol Corrado, Paul Lengermann, and Larry Slifman, “The Contribution of Multinational Corporations to U.S. Productivity Growth, 1977–2000,” in *International Trade in Services and Intangibles in the Era of Globalization*, edited by Marshall Reinsdorf and Matthew J. Slaughter (Chicago: University of Chicago Press, 2009): 331–360

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to as statistics on the activities of multinational enterprises (AMNEs).⁴

Outward AMNE statistics on the worldwide operations of U.S. MNEs comprise statistics on domestic operations, represented by U.S. parent companies, and statistics on foreign operations, represented by foreign affiliates. Statistics for the foreign affiliates are presented for two categories—all affiliates, which are at least 10 percent owned by their U.S. parent, and majority-owned foreign affiliates (MOFAs), which are more than 50 percent owned by their U.S. parents. Most foreign affiliates are majority-owned. MOFAs accounted for 87.2 percent of the employment by all foreign affiliates in 2014. Statistics are available in greater detail for MOFAs because these affiliates are controlled by the U.S. parent and are of the most interest for analysis of MNE activities. The focus on MOFAs also allows the statistics on foreign affiliates to be placed on the same basis as the statistics on U.S. parents, which are defined to include all majority-owned domestic operations of the parent. In the following discussion, the worldwide activities of U.S. MNEs are the combined operations of U.S. parent companies and their MOFAs, except where otherwise noted. For ease of discussion, the term *foreign affiliate* will hereafter be used to denote MOFA, except where otherwise noted.

In 2014, the current-dollar value added of U.S. MNEs, a measure of their direct contribution to the gross domestic product (GDP) of the United States and foreign host countries, totaled \$5,297.3 billion (table A1). Value added grew at an average annual rate of 7.2 percent in 2009–2014, compared with 3.0 percent in 2004–2009.⁵ In 2009–2014, the value added of U.S. parents grew faster (8.0 percent) than that of their foreign affiliates (5.4 percent). U.S. parent value added also grew faster than overall U.S. GDP for private industries in 2009–2014 (4.1 percent). The share of U.S. private-industry GDP accounted for by U.S. parents was 21.9 percent in 2014, up from 21.0 percent in 2009.⁶ The growth in the parent share of private-industry GDP reflected several factors, one of which was more rapid growth by parents in industries such as finance and depository institutions, computers and electronic products, and broadcasting and telecommunications than by other U.S. companies in these industries.

4. These two sets of statistics partly overlap because some U.S. companies are both foreign-owned and own foreign affiliates; these U.S. companies are included in both the inward and outward AMNE statistics.

5. Part of this difference in growth rates may stem from the fact that the economic growth of the United States and much of the rest of the world was stalled in 2009 due to the financial crisis.

6. Statistics on U.S. private-industry GDP are from BEA's [industry economic accounts](#).

Another notable development in 2009–2014 was the relatively rapid growth in capital expenditures, as U.S. MNEs acquired or made upgrades to physical assets, both domestic and foreign. During that period, capital expenditures grew at an average annual rate of 9.7 percent, 2.5 percentage points higher than the average growth in value added of U.S. MNEs and higher than the 4.3 percent average growth in research and development (R&D) expenditures and the 3.7 percent average growth in employment.

Value added and other measures of the activities of U.S. parents and their foreign affiliates for 2014 partly reflects new reporting of many U.S. parents not previously known to BEA to be part of the direct investment universe. Although the new parents and affiliates were large in number, their operations were smaller than average for most measures of activity. The identification of these new parents was the result of BEA's efforts to identify and eliminate gaps in coverage through the benchmark survey. It is common for new parents to be identified in benchmark surveys, and for this reason, past articles presenting benchmark survey results have focused on benchmark survey-to-benchmark survey changes in the statistics and have de-emphasized comparisons with results from the preceding year's annual survey. This article follows that convention and does not analyze changes in MNE activities from 2013 to 2014. See the section *Improvements in Coverage* on page 12 for more information on the effects of this new reporting on the statistics.

Acknowledgments

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Additional highlights of the activities of U.S. MNEs in 2014 include the following:

- The activities of U.S. MNEs in 2014 remained concentrated in the United States; U.S. parents accounted for more than two-thirds of the worldwide value added, capital expenditures, and R&D expenditures. Foreign affiliates thus accounted for less than one-third of these measures. MNE employment was slightly less concentrated in the United States, with U.S. parents accounting for 65.8 percent and foreign affiliates accounting for 34.2 percent.
- Most foreign affiliates were located in high-income countries in 2014. Affiliates in these countries accounted for 75.9 percent of foreign affiliate value added.⁷
- The operations of U.S. MNEs are dominated by very large companies (greater than 10,000 employees). These companies accounted for 68.4 percent of MNE value added and 75.9 percent of MNE employment. However, almost half of U.S. MNEs were small (maximum of 500 employees) companies.
- Small U.S. parents accounted for less than 1 percent and large U.S. parents (1,000–10,000 employees) accounted for 15.4 percent, of all U.S. businesses in their employment size classes.⁸ Very large U.S. parents (more than 10,000 employees) accounted for over 45.0 percent of the total number of U.S. businesses in that employment size class.
- Worldwide R&D expenditures of U.S. MNEs were \$321.0 billion—\$268.8 billion (or 83.7 percent) by U.S. parents and \$52.2 billion (or 16.3 percent) by foreign affiliates.
- MNE-associated U.S. exports of goods were \$849.1 billion, representing 52.4 percent of total U.S. exports of goods. MNE-associated U.S. imports of goods were \$969.9 billion, representing 41.3 percent of total U.S. imports of goods.⁹

The first part of this article examines the country and industry distribution of production by U.S. MNEs in 2014 based on their value added. The second part examines selected aspects of the operations of U.S. MNEs, including aspects for which data are collected only in benchmark survey years. An appendix describes improvements in coverage for the 2014 benchmark survey.

Value Added

This section examines the value added of U.S. MNEs, U.S. parents, and foreign affiliates. Value added is a measure of the value of the goods and services produced by U.S. MNEs. MNE value added is expressed in current U.S. dollars and measures gross outputs less intermediate inputs (see the *Key Terms* box for more information).

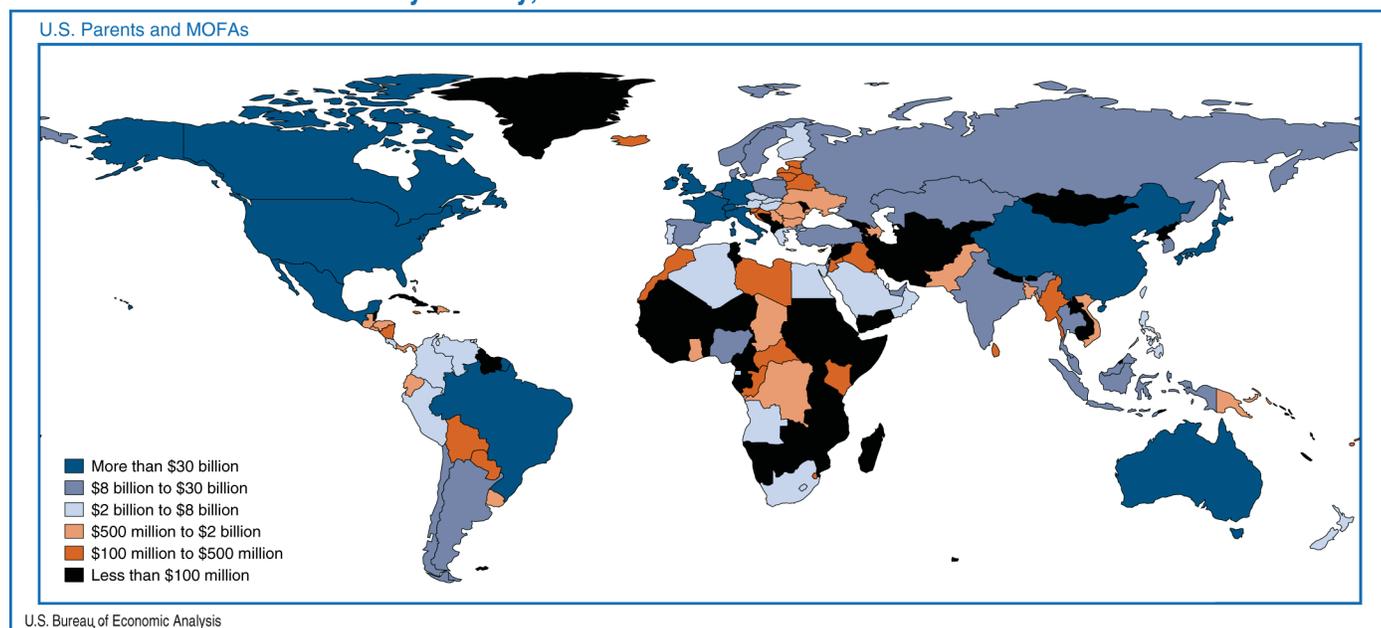
U.S. MNEs. The value added of U.S. MNEs was \$5,297.3 billion in 2014 compared with \$3,704.7 billion in 2009, representing an average annual growth rate of 7.2 percent (table A1 and chart 1). The value added of U.S. parents grew at an average annual rate of 8.0 percent to \$3,810.3 billion from \$2,595.8 billion,

7. Income group classifications are from the [World Bank](#).

8. Statistics on U.S. business employment are from the Census Bureau's [Statistics of U.S. Businesses](#) web portal.

9. The affiliate shares of U.S. exports and imports of goods are computed using data from the Census Bureau and are on a Census Bureau basis, which is the basis used on BEA's AMNE surveys.

Chart 1. Value Added of MNEs by Country, 2014



and the value added of foreign affiliates in grew at an average annual rate of 5.4 percent to \$1,487.0 billion from \$1,145.0 billion.¹⁰

The 7.2 percent average annual growth in U.S. MNE production, as measured by value added, exceeded growth in two measures of inputs to production: R&D expenditures—a measure of investment in intangible inputs to production—were up 5.4 percent per year at an annual rate, and employment was up 3.7 percent. A third measure of inputs to production—capital expenditures—grew faster (9.7 percent) than either production or the other two input measures. These patterns are consistent with above-average growth in U.S. MNE production in some capital-intensive industries, such as oil and gas extraction and information broadcasting. For example, for 2009–2014, value added for parents in all industries grew 46.8 percent, and value added for oil and gas extraction grew 84.2 percent during the same period.

By industry of U.S. parent, 41.2 percent of value added of U.S. MNEs in 2014 was accounted for by manufacturing, compared with 45.8 percent in 2009. The largest contributing subindustry in manufacturing value added in 2014 was petroleum and coal products followed by chemicals.

U.S. parents. The 8.0 percent average annual rate of growth in U.S. parent value added exceeded growth in two measures of inputs to parent production: R&D expenditures (5.3 percent annually) and employment (3.0 percent). Capital expenditures grew faster (10.6 percent) than either value added or the other two input measures.

Historically, U.S. parents have produced a larger share of MNE value added than foreign affiliates. In 2014, U.S. parents produced 71.9 percent of the value added of U.S. MNEs, up from 69.4 percent in 2009.

In 2014, total value added of U.S. parents was concentrated in tangible- and intangible-capital-intensive industries, but the largest share (35.8 percent) was in manufacturing (table B). Chemicals (mainly pharmaceuticals), transportation equipment, and computers and electronic products together accounted for over half of manufacturing value added.

Foreign affiliates. As with U.S. parent value added, the 5.4 percent average annual growth in foreign affiliate value added from 2009 to 2014 exceeded growth in employment (5.0 percent), but did not match growth in capital expenditures (7.4 percent). In 2014, foreign affiliates produced 28.1 percent of the value added of U.S. MNEs, down from 30.6 percent in 2009. As with

10. MNE percent change at annual rates (table A1) includes U.S. parents and their foreign affiliates. Table A2 includes percent change at annual rates separately for parents and all affiliates and parents and majority-owned foreign affiliates.

U.S. parent value added, much of 2014 foreign affiliate value added was in manufacturing (55.0 percent), led by chemicals (over half of which was in pharmaceuticals).

Foreign affiliate value added was concentrated in high-income countries in 2014 (table C).¹¹ Of total value added by foreign affiliates, 75.9 percent originated in high-income countries, mainly in Europe and in Asia and Pacific.

Affiliates in Europe accounted for 48.2 percent of worldwide foreign affiliate value added in 2014. Almost half of European affiliate value added occurred in three countries: the United Kingdom, Germany, and Ireland. European affiliates dominated affiliate value added in most major industries, including information (63.5 percent), wholesale trade (55.4 percent), and manufacturing (51.3 percent).

11. The World Bank defines income group classifications using gross national income, per capita as its basis.

Table B. Value Added by U.S. Parents Companies, by Industry Sector, 2014

	Value added (Millions of dollars)	Number of enterprises ¹
All industries	3,810,265	4,139
Mining	129,537	86
Manufacturing	1,363,602	1,331
Of which:		
Food	104,950	76
Chemicals	245,587	187
Primary and fabricated metals	54,727	136
Machinery	73,697	144
Computers and electronic products	215,415	215
Electrical equipment, appliances, and components	38,486	70
Transportation equipment	242,257	141
Wholesale trade	234,418	325
Retail trade	341,582	110
Information	446,453	229
Finance and insurance	481,417	691
Professional, scientific, and technical services	238,510	263
Other industries	574,746	1,104

1. Counts of affiliates or parents include only those with affiliates that have assets, sales, or net income (+/-) greater than \$25 million; value added data are on all parents.

Data Availability

Detailed preliminary statistics from the 2014 Benchmark Survey of U.S. Direct Investment Abroad (outward statistics on the activities of multinational enterprises) and historical statistics for 1977–2013 are available in electronic files that can be downloaded from BEA's Web site. The preliminary results from the benchmark survey incorporate BEA estimates for reports that were not received or could not be processed for publication. The final results, which will be released in 2017, will incorporate data from all reports submitted to BEA. Historically, revisions resulting from the incorporation of final results have been generally modest but could be sizable for some countries, industries, or items.

Affiliates in Asia and Pacific accounted for 24.4 percent of worldwide foreign affiliate value added in 2014. Together, affiliates in China, Australia, Japan, and Singapore accounted for over 60 percent of affiliate value added in the region. Affiliates in these four countries accounted for much of affiliate value added in the region in wholesale trade (70.9 percent), information (68.9 percent), retail trade (67.5 percent), and manufacturing (64.3 percent).

Affiliates in Latin America and Other Western Hemisphere accounted for 11.5 percent of foreign affiliate value added in 2014. Over half of foreign affiliate value added in the region was in Mexico and Brazil combined. Mexico's relatively large share of foreign affiliate value added reflects its proximity to the United States. By industry, affiliates in manufacturing accounted for 41.8 percent of foreign affiliate value added in the region. Brazilian and Mexican affiliates accounted for 75.2 percent of the foreign affiliate manufacturing in the region. Within manufacturing in Mexico, foreign affiliate value added was highest in transportation equipment; within manufacturing in Brazil, it was highest in chemicals.

Canada accounted for 10.2 percent of foreign affiliate value added in 2014. By industry, Canada accounted for 20.9 percent of foreign affiliate value added in retail trade and 10.3 percent in manufacturing. In Canada, the largest industry for foreign affiliate value added was manufacturing (39.5 percent of value added by Canadian affiliates), of which the largest industries were chemicals and transportation equipment.

Africa accounted for 3.5 percent of foreign affiliate value added in 2014. The largest industry in Africa was mining (22.3 percent), primarily oil and gas extraction. In oil and gas extraction, foreign affiliates in Nigeria, which is Africa's largest oil producer, generated the largest share of value added.

The Middle East accounted for 2.2 percent of foreign affiliate value added in 2014. Just under half (49.5 percent) of value added in the region was in mining, primarily oil and gas extraction. Almost half (46.6 percent) of this amount was accounted for by foreign affiliates in the United Arab Emirates (UAE). Together, affiliates in the UAE and Israel accounted for over half of all foreign affiliate value added in the Middle East. Affiliates in Israel accounted for 63.6 percent of the region's manufacturing value added, much of which was in computers and electronic products.

Share of host-country GDP

In 2014, foreign affiliate value added accounted for much smaller shares of the GDP of most host countries than the 22.0 percent parent share of U.S. GDP (table C). However, foreign affiliate value added repre-

sented more than 5 percent of host-country GDP in 10 countries: Barbados (44.3 percent), Ireland (31.8 percent), Singapore (15.2 percent), Canada (8.5 percent), Switzerland (7.9 percent), Hong Kong (6.8 percent),

Table C. Value Added for Majority-Owned Foreign Affiliates, by Country of Affiliate, 2014

	Millions of dollars	Percentage of host country's GDP
All countries	1,487,038	2.4
Canada	151,294	8.5
Europe	716,896	n.a.
Austria	5,856	1.3
Belgium	27,067	5.1
Czech Republic	5,509	2.7
Denmark	10,962	3.2
Finland	2,337	0.9
France	55,179	2.0
Germany	95,886	2.5
Greece	2,892	1.2
Hungary	3,718	2.7
Ireland	79,648	31.8
Italy	33,516	1.6
Luxembourg	4,004	6.2
Netherlands	34,642	3.9
Norway	28,661	5.7
Poland	14,229	2.6
Portugal	3,663	1.6
Russia	13,268	0.7
Spain	16,740	1.2
Sweden	10,616	1.9
Switzerland	55,527	7.9
Turkey	9,860	1.2
United Kingdom	172,466	5.8
Other	30,649	n.a.
Latin America and Other Western Hemisphere	170,441	n.a.
South America	87,577	n.a.
Argentina	17,938	3.4
Brazil	44,076	1.8
Chile	9,151	3.5
Colombia	6,402	1.7
Ecuador	1,102	1.1
Peru	4,688	2.3
Venezuela	2,875	n.a.
Other	1,345	n.a.
Central America	56,425	n.a.
Costa Rica	2,216	4.5
Honduras	524	2.7
Mexico	51,232	3.9
Panama	594	1.2
Other	1,859	n.a.
Other Western Hemisphere	26,440	n.a.
Barbados	1,929	44.3
Bermuda	9,922	n.a.
Dominican Republic	892	1.4
United Kingdom Islands, Caribbean	1,012	n.a.
Other	12,685	n.a.
Africa	52,088	n.a.
Egypt	5,311	1.8
Nigeria	(D)	n.a.
South Africa	6,708	1.9
Other	(D)	n.a.
Middle East	33,133	n.a.
Israel	9,971	3.3
Saudi Arabia	4,798	0.6
United Arab Emirates	11,364	2.8
Other	7,000	n.a.
Asia and Pacific	363,185	n.a.
Australia	59,569	4.1
China	66,144	0.6
Hong Kong	19,733	6.8
India	26,163	1.3
Indonesia	15,655	1.8
Japan	47,911	1.0
Korea, Republic of	15,124	1.1
Malaysia	12,429	3.7
New Zealand	5,268	2.6
Philippines	6,479	2.3
Singapore	46,423	15.2
Taiwan	7,856	n.a.
Thailand	15,305	3.8
Other	19,127	n.a.
Addenda:		
Income group:		
High income	1,129,046
Upper middle income	271,978
Lower middle income	84,102
Low income	1,911
European Union (28)	586,179	3.2
OPEC	53,665	n.a.

1. Statistics on GDP by country are from the World Bank.

NOTE: Size ranges are given in employment cells that are suppressed. The size ranges are: A—1 to 499; F—500 to 999; G—1,000 to 2,499; H—2,500 to 4,999; I—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.
n.a. Not available

Luxembourg (6.2 percent), United Kingdom (5.8 percent), Norway (5.7 percent), and Belgium (5.1 percent). Several of these countries are relatively small, and yet they attract substantial foreign direct investment partly as a consequence of business friendly policies, such as favorable tax policies.

The large foreign affiliate shares of Barbados' and Ireland's GDP reflect the relatively small size of these economies and their attractiveness to foreign direct investment, in part due to their relatively low corporate tax rates. By industry, value added by Irish affiliates was largest in computers and electronic products, chemicals, and information.

The ten largest host economies as measured by GDP—China, Japan, Germany, the UK, France, Brazil, Italy, India, Russia, and Canada—accounted for 47.5 percent of all foreign affiliate host country value added in 2014, compared with a 57.7-percent combined share

of world GDP outside the United States. Among these countries, the foreign affiliate share of host country GDP was largest in Canada (8.5 percent), reflecting its close economic ties with the United States, and smallest in China (0.6 percent). For these ten countries as a group, the foreign affiliate share of GDP was 2.0 percent, little different than in 2009.

Among other major industrial countries, Italy, and Japan had relatively small foreign affiliate shares of GDP. The average affiliate share of GDP for **G10 countries** (excluding the United States) was 4.3 percent. Italy's affiliate share of GDP was 1.6 percent, and Japan's affiliate share was 1.0 percent. The "BRIC" countries—Brazil, Russia, India, and China—generally had small foreign affiliate value added as a share of domestic GDP. The affiliate share of GDP for all countries was 2.4 percent, larger than the largest BRIC country share—Brazil (1.8 percent).

Key Terms

The following key terms are used to describe the activities of U.S. multinational enterprises (MNEs).

U.S. MNEs

U.S. multinational enterprise (U.S. MNE). The U.S. parent and its foreign affiliates. In this article, an MNE is usually defined as the U.S. parent and its majority-owned foreign affiliates (MOFAs).

U.S. parent. A person, resident in the United States, that owns or controls 10 percent or more of the voting securities, in an unincorporated foreign business enterprise. "Person" is broadly defined to include any individual, branch, partnership, associated group, association, estate, trust, corporation, or other organization (whether or not organized under the laws of any state), or any government entity. The U.S. parent is the fully consolidated U.S. domestic enterprise consisting of (1) the U.S. business enterprise whose voting securities are not owned more than 50 percent by another U.S. corporation and (2) proceeding down each ownership chain from that U.S. business enterprise, any U.S. business enterprise (including Foreign Sales Corporations located within the United States) whose voting securities are more than 50 percent owned by the U.S. business enterprise above it. A U.S. parent comprises the domestic (U.S.) operations of a U.S. multinational enterprise.

U.S. direct investment abroad. The ownership or control, directly or indirectly, by one U.S. person of 10 percent or more of the voting securities of an incorporated foreign business enterprise or the equivalent interest in an unincorporated business enterprise.

Foreign affiliate. A foreign business enterprise in which there is U.S. direct investment, that is, in which a U.S. person directly or indirectly owns or controls 10 percent of the voting securities or the equivalent. Foreign affiliates comprise the foreign operations of a U.S. multinational enterprise over which the U.S. parent is pre-

sumed to have a degree of managerial influence.

This article focuses on the operations of MOFAs; for these affiliates, the combined ownership of all U.S. parents exceeds 50 percent. In 2014, these affiliates accounted for 87.2 percent of employment of all foreign affiliates of U.S. MNEs (table A2).

Measures of MNE activities¹

Value added. The portion of the goods and services sold or added to inventory or fixed investment by a firm that reflects the production of the firm itself. It represents the firm's contribution to gross domestic product in its country of residence, which is the value of goods and services produced by labor and property located in that country. Compared with sales, value added is a preferable measure of production because it indicates the extent to which a firm's output results from its own production rather than from production that originates elsewhere. Sales data do not distinguish between these two sources of production. Value added can be measured as gross output minus intermediate inputs; alternatively, it can be measured as the sum of the costs incurred (except for intermediate inputs) and the profits earned in production. The value-added statistics presented in this article were prepared by summing the cost and profits data collected in the annual and benchmark surveys of U.S. direct investment abroad.

Employment. The number of full-time and part-time employees on the payroll at yearend. If the employment of a parent or an affiliate was unusually high or low because of temporary factors (such as a strike) or large seasonal variation, the number that reflects normal operations or an average for the year was requested.

1. Statistics on the activities of U.S. MNEs cover the survey respondent's fiscal year ending in the reference year of the data.

Selected Aspects of MNE Activities

This section analyzes selected aspects of the activities of U.S. MNEs, including some based on data collected only in benchmark survey years. Specifically, this analysis focuses on three main aspects of MNE operations—employment, R&D, and U.S. trade in goods.

Distribution by employment size class

U.S. MNEs. The great majority (94.0 percent) of U.S. MNE employment in 2014 was accounted for by MNEs with large and very large U.S. parent companies, as measured by U.S. parent employment (table D and chart 2).¹² Firms with advantages in intangible assets, such as product designs, marketing techniques, or production technologies, often leverage these advantages to become large and to expand internationally, overcoming the inherent disadvantage of operating outside their home country.¹³ As is the case for all U.S. businesses, however, the smallest employment size class accounted for the largest share (47.1 percent) of the count of 4,139 U.S. parent enterprises.

U.S. parents. In 2014, U.S. parents' employment totaled 26.6 million U.S. workers; very large parents accounted for 75.9 percent of the total, and large parents accounted for 20.6 percent. Small and medium parents accounted for the remaining 3.6 percent.

The size class shares of employment varied by industry. Very large parents accounted for 62.1 percent of

employment in manufacturing, the industry with the largest share of workers (27.2 percent). Retail trade accounted for about one-fifth of U.S. parent employment and 96.5 percent of this employment was in very

Table D. Employment by Size and Industry of U.S. Parents and MOFAs by Industry and by Employment Size of U.S. Parent, 2014

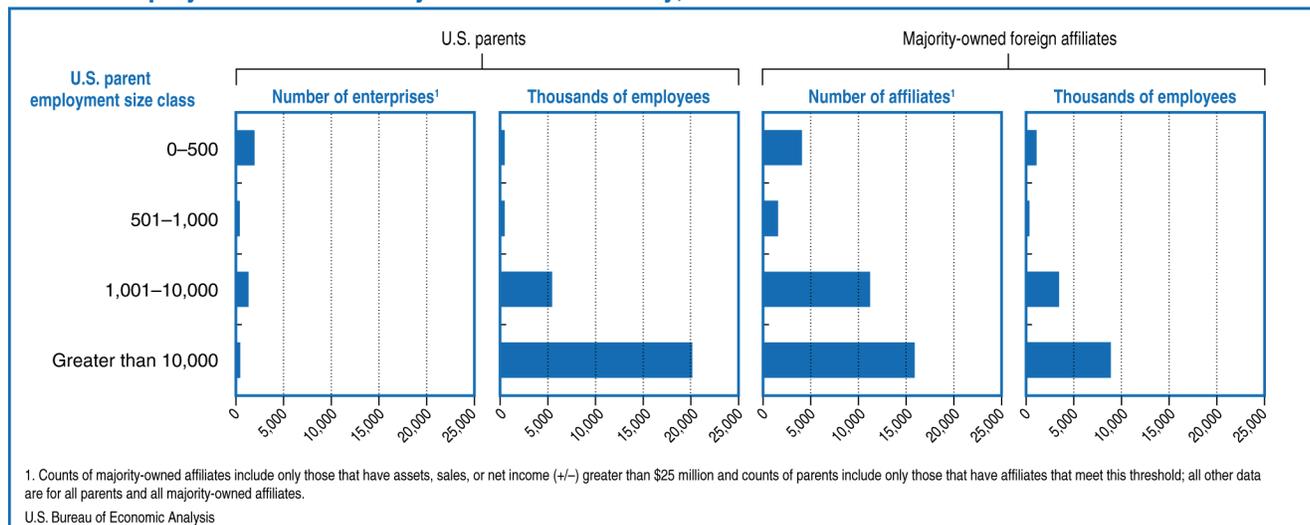
Employment size class	U.S. parents		MOFAs	
	Number of enterprises ¹	Thousands of employees	Number of affiliates ¹	Thousands of employees
All industries	4,139	26,560	32,763	13,802
0-500	1,948	476	4,084	1,091
501-1,000	404	472	1,564	368
1,001-10,000	1,324	5,460	11,229	3,450
Greater than 10,000	463	20,152	15,886	8,894
Mining	86	288	655	155
0-500	23	6	54	9
501-1,000	13	11	42	3
1,001-10,000	44	173	325	59
Greater than 10,000	6	98	234	85
Manufacturing	1,331	7,217	17,806	6,051
0-500	342	192	714	232
501-1,000	209	227	750	205
1,001-10,000	632	2,318	6,631	2,181
Greater than 10,000	148	4,479	9,711	3,433
Wholesale trade	325	1,705	1,878	533
0-500	134	50	219	41
501-1,000	42	36	134	23
1,001-10,000	118	507	1,028	279
Greater than 10,000	31	1,112	497	191
Retail Trade	110	5,395	613	1,269
0-500	13	10	33	10
501-1,000	7	10	57	14
1,001-10,000	30	168	115	25
Greater than 10,000	60	5,207	408	1,220
Information	229	1,878	1,553	520
0-500	57	49	98	35
501-1,000	26	39	73	27
1,001-10,000	117	464	798	180
Greater than 10,000	29	1,326	584	278
Finance and insurance	691	2,807	4,864	1,119
0-500	494	44	1,270	361
501-1,000	33	31	205	13
1,001-10,000	108	503	776	142
Greater than 10,000	56	2,228	2,613	604
Professional, scientific, and technical services	263	1,576	1,627	1,153
0-500	84	71	199	69
501-1,000	31	57	74	30
1,001-10,000	117	501	761	253
Greater than 10,000	31	947	593	800
All other industries	1,104	5,696	3,767	3,002
0-500	801	54	1,497	334
501-1,000	43	61	229	53
1,001-10,000	158	825	795	331
Greater than 10,000	102	4,755	1,246	2,284

1. Counts of majority-owned affiliates include only those that have assets, sales, or net income (+/-) greater than \$25 million, and counts of parents include only those that have affiliates, whether majority-owned or not, that meet this threshold; employment is for all parents and all majority-owned affiliates.
MOFAs: Majority-owned foreign affiliates

12. For this article, employment was broken into four size classes: small, medium, large, and very large. The small class consists of parents with a maximum of 500 employees. The medium class includes parents with employment between 501 and 1,000 employees, with the large class between 1,001 and 10,000 employees. The very large class consists of parents with more than 10,000 employees.

13. Mark E. Doms and J. Bradford Jensen, "Comparing Wages, Skills, and Productivity Between Domestically and Foreign-Owned Manufacturing Establishments in the United States," in *Geography and Ownership As Bases for Economic Accounting*, edited by Robert E. Baldwin, Robert E. Lipsey, and J. David Richardson (Chicago: University of Chicago Press, 1998): 235-258.

Chart 2. Employment Size Class by U.S. Parent Industry, 2014



large companies. In finance and insurance—which accounted about one-tenth of U.S. parent employment—79.4 percent of employment was in very large companies. In the remaining industries—which together accounted for over two-fifths of U.S. parent employment—73.9 percent of employment was in very large companies.

Foreign affiliates. In 2014, foreign affiliate’s employment totaled 13.8 million workers; affiliates of very large parents accounted for 64.4 percent of that total, and affiliates of large parents accounted for 25.0 percent. Affiliates of small parents accounted for 7.9 percent.

By industry of U.S. parent, affiliates of very large parents accounted for over half of foreign affiliate employment in all but one industry sector: wholesale trade. Affiliates of very large parents accounted for particularly high shares of foreign affiliate employment in retail trade (96.1) and in professional, scientific, and technical services (69.4 percent).

The industry with the largest share of foreign affiliate employment accounted for by affiliates of large parents was wholesale trade (52.3 percent). The industry with the largest share accounted for by affiliates of medium-sized parents was information (5.1 percent), and the industry with the largest share accounted for by affiliates of small parents was finance and insurance (32.2 percent). Many of the small parents in finance and insurance were funds and trusts.

R&D expenditures

U.S. MNEs. Multinational enterprises are major producers of technological knowledge in the world economy. U.S. parents accounted for more than three-quarters of the domestic R&D performed by all U.S.

businesses in 2014.¹⁴ R&D expenditures of U.S. MNEs were \$321.0 billion; R&D expenditures of U.S. parents were \$268.8 billion, and R&D expenditures of foreign affiliates were \$52.2 billion (tables A1 and E, chart 3).

The relatively large share of MNE R&D expenditures accounted for by parents could mean that it was more efficient for U.S. MNEs to concentrate their global R&D activities in the United States and then distribute their innovations to foreign affiliates.¹⁵ This may be due to economies of scale, past investments in knowledge, and the United States’ robust intellectual property protections relative to many other countries. Nonetheless, U.S. MNEs are also choosing to have their foreign affiliates perform some R&D so that the R&D is performed close to markets they serve. Such R&D both reflects and contributes to scientific and technological capabilities in some of the foreign affiliates’ host countries.

14. According to the National Science Foundation, R&D expenditures by U.S. businesses in 2014 were \$340.7 billion.

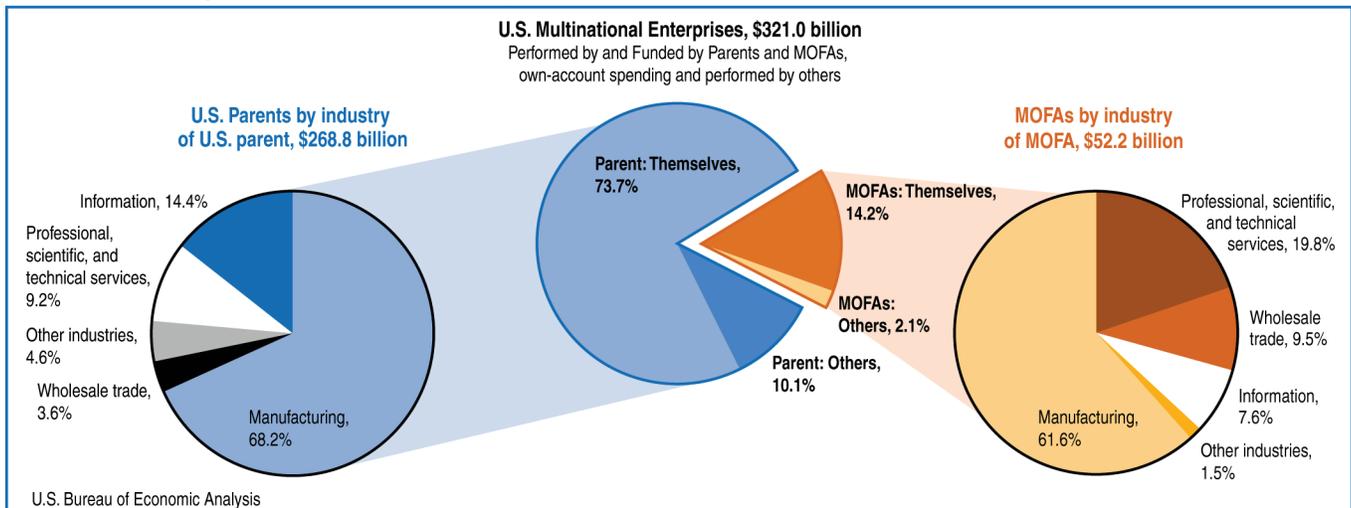
15. Stephen R. Yeaple, “Firm Heterogeneity and the Structure of U.S. Multinational Activity,” *Journal of International Economics* 78, no. 2 (July 2009): 206–215.

Table E. R&D Expenditures of U.S. Multinational Enterprises (MNEs), 2014
[Millions of dollars]

	MNE total	U.S. parents	MOFAs
Total	320,960	268,787	52,174
Type:			
For themselves	282,081	236,513	45,568
For others.....	38,879	32,274	6,605
Of which:			
For the federal government.....	n.a.	14,720	n.a.
Addenda:			
Capital expenditures	952,243	713,545	238,697
Ratio of capital expenditures to R&D expenditures.....	3.0	2.7	4.6

MOFAs Majority-owned foreign affiliates
R&D Research and development
n.a. Not available

Chart 3. R&D Expenditures of U.S. MNEs, 2014



U.S. parents. In 2014, of the \$268.8 billion spent on R&D by U.S. parents, \$236.5 billion (88.0 percent) was own-account spending, and \$32.3 billion (12.0 percent) was R&D performed for others (table E). Within R&D expenditures for others, projects funded by the federal government were \$14.7 billion or 5.5 percent of U.S. parents' total R&D expenditures. By comparison, projects funded by the federal government accounted for 15.1 percent of parent's R&D expenditures in 2009.¹⁶

R&D expenditures by U.S. parents were concentrated in three industry sectors—manufacturing (\$183.4 billion), information (\$38.7 billion), and professional, scientific, and technical services (\$24.7 billion). Together, these sectors accounted for 91.8 percent of total R&D by U.S. parents in 2014 (table F and chart 3). Expenditures in manufacturing accounted for 68.2 percent of parent R&D. Together, three subindustries within manufacturing—chemicals,

16. According to National Science Foundation, U.S. businesses' R&D expenditures funded by the federal government decreased to \$26.6 billion in 2014 from \$29.4 billion in 2009.

Updates to Statistics for 2013

The statistics on the activities of U.S. MNEs for 2014 are preliminary. The final statistics on U.S. MNEs in 2013 are also presented with this issue and supersede the preliminary statistics that were published in the August 2015 SURVEY OF CURRENT BUSINESS, reflecting incorporation of data from reports processed after the publication of the preliminary statistics.¹ These statistics are based on the results of the 2013 Annual Survey of U.S. Direct Investment Abroad and have not been adjusted to reflect the increase in coverage from the 2014 Benchmark Survey of U.S. Direct Investment Abroad.

1. See Sarah P. Scott, "Activities of U.S. Multinational Enterprises in 2013," SURVEY OF CURRENT BUSINESS 95 (August 2015).

Preliminary and Revised 2013 Statistics for U.S. Multinational Enterprises (Parents and MOFAs)

	Preliminary		Revised	
	Parents	MOFAs	Parents	MOFAs
	Millions of dollars			
Total assets	33,578.3	22,734.4	33,620.7	22,672.8
Sales	11,278.4	5,995.3	11,201.0	6,001.9
Value added	3,468.9	1,383.8	3,487.3	1,394.8
Capital expenditures	595.2	219.3	594.0	223.2
R&D expenditures	246.0	48.8	242.3	49.2
	Thousands of employees			
Employees	23,329.4	12,381.1	23,348.8	12,419.0

MOFAs Majority-owned foreign affiliates
R&D Research and development

computers and electronic products, and transportation equipment—accounted for 56.2 percent of total R&D expenditures. Expenditures in information accounted for 14.4 percent of parent R&D and were concentrated in publishing industries. Professional, scientific, and technical services accounted for 9.2 percent of R&D by U.S. parents, primarily in computer systems design and related services (table 1.2).

In 2014, U.S. parent capital expenditures (expenditures for property, plant, and equipment) totaled \$713.5 billion. One measure of the relationship between U.S. parent capital expenditures—which are related to the accumulation of tangible assets—and R&D expenditures—which are related to the accumulation of intangible assets—is the ratio of the two types of expenditures. This ratio was 2.7 in 2014—U.S. parents spent \$2.70 on capital for every \$1.00 spent on R&D. In 2009, the ratio was 2.1.

The ratio of parents' capital expenditures to their R&D expenditures varied by industry sector (table F). In manufacturing, the ratio was 1.2, compared with 0.9 in 2009. In information, the ratio was 2.2. In contrast, in professional, scientific, and technical services, the ratio was 0.4.

Table F. R&D Expenditures and Capital Expenditures of U.S. Parents and MOFAs by Industry

	2014		2014	2009
	R&D expenditures	Capital expenditures	Ratio ¹	
U.S. parents				
All industries	268,787	713,545	2.7	2.1
Mining	832	96,947	116.5	64.1
Manufacturing	183,435	229,034	1.2	0.9
Of which:				
Food	2,527	13,460	5.3	6.3
Chemicals	61,542	31,882	0.5	0.7
Primary and fabricated metals	1,271	6,538	5.1	1.5
Machinery	7,857	11,060	1.4	0.9
Computers and electronic products	51,312	21,938	0.4	0.4
Electrical equipment, appliances, and components	4,145	3,774	0.9	1.2
Transportation equipment	38,077	56,720	1.5	0.7
Wholesale trade	9,684	47,097	4.9	4.3
Retail trade	(D)	37,894	(D)	(D)
Information	38,655	86,310	2.2	2.7
Finance and insurance	460	58,513	127.2	314.6
Professional, scientific, and technical services	24,667	10,577	0.4	0.5
Other industries	(D)	147,173	(D)	(D)
MOFAs				
All industries	52,174	238,697	4.6	4.3
Mining	219	82,349	376.0	505.0
Manufacturing	32,128	70,908	2.2	2.0
Of which:				
Food	575	5,507	9.6	9.2
Chemicals	8,511	13,436	1.6	1.6
Primary and fabricated metals	356	2,426	6.8	12.0
Machinery	2,852	4,653	1.6	2.2
Computers and electronic products	8,376	16,750	2.0	1.0
Electrical equipment, appliances, and components	527	1,582	3.0	2.2
Transportation equipment	7,723	11,557	1.5	1.0
Wholesale trade	4,976	8,674	1.7	3.1
Retail trade	31	7,742	249.7	(D)
Information	3,952	12,516	3.2	4.2
Finance and insurance	242	5,908	24.4	6,273.0
Professional, scientific, and technical services	10,338	5,176	0.5	0.5
Other industries	287	45,424	158.3	(D)

1. Ratio of capital expenditures to R&D expenditures.

Note. Size ranges are given in employment cells that are suppressed. The size ranges are: A—1 to 499; F—500 to 999; G—1,000 to 2,499; H—2,500 to 4,999; I—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.

Foreign affiliates. R&D expenditures by foreign affiliates totaled \$52.2 billion in 2014. Of this total, \$45.6 billion (87.3 percent) was own-account spending, and \$6.6 billion (12.7 percent) was performed for others.

By industry, R&D expenditures by foreign affiliates were concentrated in two industry sectors—manufacturing (\$32.1 billion) and professional, scientific, and technical services (\$10.3 billion)—which together accounted for 81.4 percent of foreign affiliates' R&D in 2014. Three subindustries within manufacturing—chemicals, computers and electronic products, and transportation equipment—together accounted for 47.2 percent of total R&D expenditures.

In 2014, foreign affiliate capital expenditures totaled \$238.7 billion. The ratio of foreign affiliate's capital expenditures to R&D expenditures was 4.6—foreign affiliates spent \$4.60 on capital expenditures for every \$1.00 spent on R&D. Foreign affiliates' higher ratio of capital expenditures to R&D expenditures, compared with that of U.S. parents, might reflect foreign affiliates relying on R&D performed by their U.S. parent.

By industry sector, foreign affiliate's capital expenditures in 2014 exceeded their R&D expenditures in almost all of the major industry sectors. Professional, scientific, and technical services was the only industry sector in which R&D expenditures (\$10.3 billion) were greater than capital expenditures (\$5.2 billion).

By country, European countries accounted for 59.0 percent of R&D performed by foreign affiliates, and almost half (47.6 percent) of that was in Germany and the United Kingdom (table 3.2). Another 24.2 percent of worldwide foreign affiliate R&D was conducted in the Asia and Pacific region, led by China, India, and Japan.

Advanced Industries. MNE R&D expenditures are concentrated in industries identified by the Brookings Institution as “advanced.” A recent Brookings report focuses on 50 high-technology industries that spend more on R&D per worker than most other industries and employ more STEM—Science, Technology, Engineering, and Math—workers than the national average.¹⁷ These industries include manufacturing (such as motor vehicles), mining and utilities (such as oil and gas extraction and electric power generation), and service industries (such as computer system design).

In 2014, R&D expenditures by MNEs with parents in these advanced industries totaled \$278.5 billion, accounting for 86.8 percent of all MNE R&D expenditures. Of MNE R&D expenditures by MNEs in the

advanced industries, \$232.8 billion (83.6 percent) was by U.S. parents, and \$45.7 billion (16.4 percent) was by foreign affiliates. More than half of the MNE spending in these industries was in manufacturing; the largest share in that industry was in pharmaceuticals and medicine.

MNE-associated U.S. trade in goods

U.S. MNE-associated trade in goods consists of all U.S. exports and U.S. imports of goods that involve U.S. parents or their foreign affiliates (both majority- and minority-owned). This trade accounts for a significant share of total U.S. trade in goods.

In 2014, MNE-associated U.S. exports of goods were \$849.1 billion (52.4 percent of total U.S. exports of goods), and MNE-associated U.S. imports of goods were \$969.9 billion (41.3 percent of total U.S. imports of goods) (table G and chart 4). These shares are lower than those in 2009, when MNE-associated U.S. exports of goods were 54.7 percent of total U.S. exports of goods, and MNE-associated U.S. imports of goods were 45.1 percent of total U.S. imports of goods.

Table G. U.S. Trade in Goods Associated With U.S. Multinational Enterprises (MNEs)

	2014	2014 share of total	2009 share of total
Total MNE-associated U.S. exports	849,055	n.a.	n.a.
Intra-MNE trade	313,849	37.0	36.1
Shipped by U.S. parents to MOFAs	253,205	29.8	32.4
For further manufacture	132,988	15.7	19.2
For resale without further manufacture	97,144	11.4	12.5
Other	23,073	2.7	0.7
Shipped by U.S. parents to other foreign affiliates ¹	60,643	7.1	3.8
MNE trade with others	535,206	63.0	63.9
Shipped by U.S. parents to other foreigners	488,032	57.5	56.9
Of which:			
Shipped to foreign parent groups of U.S. parents ²	73,967	8.7	9.4
Shipped to foreign affiliates by other U.S. persons	47,174	5.6	7.0
To MOFAs	47,174	5.6	7.0
For further manufacture	30,870	3.6	5.1
For resale without further manufacture	13,143	1.5	1.6
Other	3,161	0.4	0.3
To other foreign affiliates ³	n.a.	n.a.	n.a.
Total MNE-associated U.S. imports	969,910	n.a.	n.a.
Intra-MNE trade	368,898	38.0	31.6
Shipped by MOFAs to U.S. parents	315,414	32.5	29.6
Shipped by other foreign affiliates to U.S. parents ¹	53,485	5.5	2.0
MNE trade with others	601,011	62.0	68.4
Shipped by other foreigners to U.S. parents	543,595	56.0	62.0
Of which:			
Shipped to foreign parent groups of U.S. parents ²	203,316	21.0	23.5
Shipped to foreign affiliates by other U.S. persons	57,417	5.9	6.4
By MOFAs	57,417	5.9	6.2
By other foreign affiliates ³	n.a.	n.a.	0.2
Addenda:			
All U.S. exports of goods ⁴	1,620,531	n.a.	n.a.
MNE-associated U.S. exports as a percentage of total	52.4	n.a.	n.a.
Intra-MNE exports as a percentage of total	19.4	n.a.	n.a.
All U.S. imports of goods ⁴	2,347,685	n.a.	n.a.
MNE-associated U.S. imports as a percentage of total	41.3	n.a.	n.a.
Intra-MNE imports as a percentage of total	15.7	n.a.	n.a.

MOFAs Majority-owned foreign affiliates

1. This number is calculated as total exports (imports) between U.S. parents and all of their foreign affiliates (as reported for U.S. parents) less exports (imports) between U.S. parents and MOFAs (as reported by MOFAs).

2. U.S. parents that are owned 10 percent or more by a foreign person. The foreign parent group consists of (1) the foreign parent of the U.S. parent, (2) any foreign person, proceeding up the foreign parent's ownership chain, that owns more than 50 percent of the person below it, 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.

3. This number is calculated as total exports (imports) associated with “other” (that is, minority-owned and 50-percent owned) foreign affiliates (as reported for affiliates) less the estimate of exports (imports) between U.S. parents and “other” foreign affiliates that are calculated as described in footnote 1. However, these estimates may be imprecise because of differences in the coverage of data reported for U.S. parents and for foreign affiliates.

4. The values for U.S. exports and imports of goods are computed from data from the U.S. Census Bureau and are on a Census Bureau basis, which is the basis used on BEAs AMNE surveys.
n.a. Not available

17. These high technology industries are categorized by the Brookings Institution's *Metropolitan Policy Program*. See for example, Mark Muro, Jonathan Rothwell, Scott Andes, Kenan Fikri, and Siddharth Kulkarni, “America's Advanced Industries: What They Are, Where They Are, and Why They Matter” (Washington, DC: The Brookings Institution, 2015).

Trade between U.S. parents and their foreign affiliates (intra-MNE trade) accounted for 37.0 percent of total MNE-associated U.S. exports in 2014, up from 36.1 percent in 2009, while MNE trade with “others” (trade between U.S. parent companies and foreigners other than their own affiliates and trade between foreign affiliates and U.S. residents other than their own parents) accounted for 63.0 percent in 2014, down from 63.9 percent in 2009. Intra-MNE trade accounted for 38.0 percent of MNE-associated U.S. imports in 2014 compared with 31.6 percent in 2009, while MNE trade with others accounted for 62.0 percent in 2014 compared with 68.4 percent in 2009.

Goods shipped to foreign affiliates by U.S. persons were \$361.0 billion in 2014. Almost half (\$163.9 billion) of these goods were intended for further manufacture, most of which (\$133.0 billion) were from their U.S. parents. Goods shipped to foreign affiliates for resale without further manufacture accounted for 30.5 percent (\$110.3 billion) of goods shipped to foreign affiliates; most of these goods (\$97.1 billion) were from their U.S. parents. In 2014, U.S. imports of goods that were shipped by foreign affiliates to their U.S. parents and to other U.S. persons were \$426.3 billion, most of which (\$368.9 billion) was intra-MNE trade.

U.S. trade in goods with majority-owned foreign affiliates. U.S. exports of goods to foreign affiliates were \$300.4 billion in 2014, accounting for 18.5 percent of total U.S. exports, down from 21.5 percent in 2009. U.S. imports of goods from foreign affiliates were \$372.8 billion in 2014, accounting for 15.9 percent of total U.S. imports, down from 16.2 percent in 2009. More than five-sixths of the 2014 trade with foreign affiliates—84.3 percent of exports and 84.6 per-

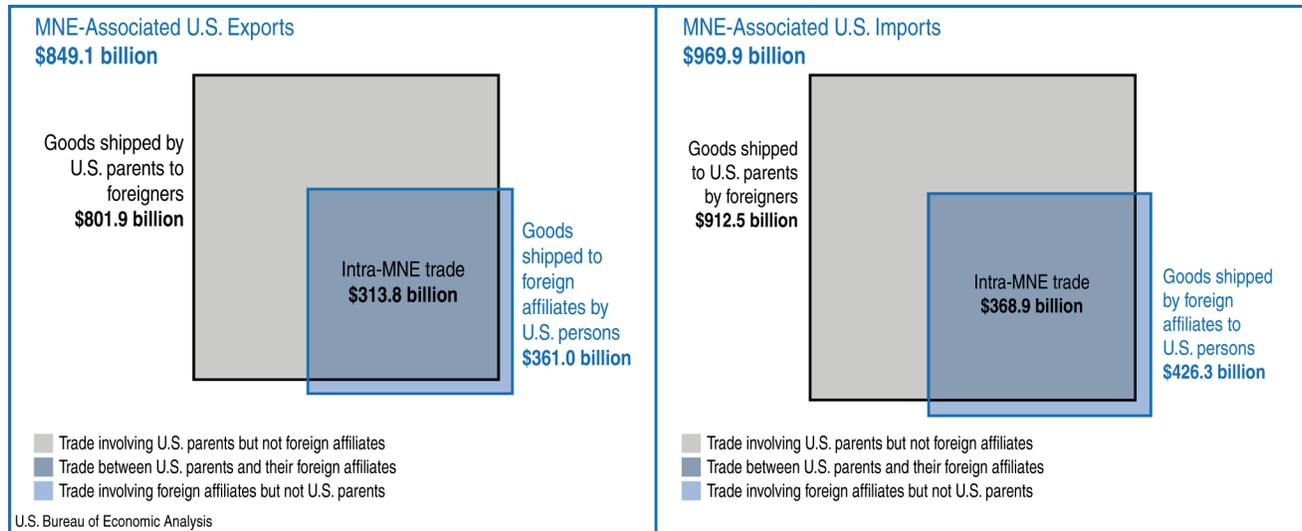
cent of imports—was intra-MNE trade. Imports shipped from foreign affiliates exceeded exports shipped to foreign affiliates by \$72.5 billion; the difference represented 10.0 percent of the U.S. deficit on trade in goods.

Exports. In 2014, \$300.4 billion in U.S. exports were shipped to foreign affiliates (table 3.2). By region, U. S. exports to foreign affiliates were largest for affiliates in Europe (27.7 percent), followed by Canada (27.2 percent), Asia and Pacific (23.5 percent), and Latin America and other Western Hemisphere (20.5 percent). In Europe, about half of U.S. exports to foreign affiliates were shipped to affiliates in Netherlands (17.9 percent), Switzerland (17.2 percent), and the United Kingdom (16.9 percent).

Over two-fifths the U.S. exports to foreign affiliates in Asia and Pacific were shipped to Singapore (25.1 percent) and China (20.1 percent). In Latin America and Other Western Hemisphere, over two-thirds of U.S. exports to foreign affiliates were shipped to Mexico (67.8 percent).

Imports. In 2014, \$372.8 billion in U.S. imports were shipped by foreign affiliates (table 3.2). By region, U.S. imports from affiliates were largest for affiliates in Europe (31.1 percent), followed by Canada (29.4 percent), Latin American and Other Western Hemisphere (21.2 percent), and Asia and Pacific (16.1 percent). In Europe, the largest share of U.S. imports from foreign affiliates was shipped from affiliates in Ireland (28.8 percent). Shipments from affiliates in Mexico represented 78.0 percent of U.S. imports from foreign affiliates in Latin American and Other Western Hemisphere. Just under one-third of U.S. imports from foreign affiliates in Asia and Pacific were from Singapore.

Chart 4. Distribution of U.S. Trade in Goods Associated with U.S. MNEs, 2014



Appendix: Improvements in Coverage

Statistics on the 2014 activities of U.S. multinational enterprises (MNEs) are based on the preliminary results from the 2014 Benchmark Survey of Direct Investment Abroad. Benchmark surveys are conducted every 5 years and are BEA's (Bureau of Economic Analysis) most comprehensive surveys of U.S. direct investment abroad, in terms of both the number of companies covered and the amount of information gathered. For this benchmark survey, there was an increase in the number of reporting enterprises that increased the measures of MNE activity.

For 2013 and 2014, the changes in the measures of the activities of MNEs, such as value added and employment, can be derived as the net effect of changes that result from several factors: (1) parents entering the MNE universe by acquiring or establishing their first foreign affiliate (parent births), (2) foreign affiliates entering the MNE universe by being newly acquired or established (foreign affiliate births), (3) changes in the existing operations of parents and affiliates, (4) parents

and affiliates leaving the MNE universe because they were sold or liquidated (parent and affiliate deaths), and (5) *other changes*, which primarily reflect improvements in coverage from the benchmark survey (table H and chart 5). *Other changes* more than accounted for the overall change in U.S. MNE value added and employment in 2014: there was a net decrease in these measures of MNE activities resulting from what might be called actual business activity (births, deaths, and changes in ongoing operations) in 2014.

Other changes occur in all years but are especially large in benchmark survey years because of BEA's concerted efforts to ensure complete coverage in benchmark years, including outreach to potential respondents, sharing survey sample frame information by other government agencies, and mining commercial datasets. The impact of other changes on the 2013–2014 change is large compared with the impact in previous benchmark survey years, but there is mixed evidence as to whether it is unusually large. To compare the impact of other changes in 2014 with the impact in

Statistics on U.S. Direct Investment Abroad

BEA collects two broad sets of statistics on U.S. direct investment abroad: (1) activities of multinational enterprises and (2) direct investment transactions and direct investment positions.¹ This article presents highlights of statistics derived from the first set of data; the statistics derived from the second set of data are usually published in the July and September issues of the *SURVEY OF CURRENT BUSINESS*.²

Activities of multinational enterprises (AMNE) statistics. The outward AMNE statistics cover the worldwide activities of U.S. MNEs and provide information on the finances and operations of U.S. parents and their foreign affiliates. The statistics on foreign affiliates cover the entire operations of the affiliate, regardless of the share of U.S. ownership. These statistics cover items that are used

to analyze the characteristics, performance, and economic impact of multinational enterprises, such as sales, value added, employment and employee compensation, capital expenditures, goods exports and imports, and research and development expenditures. Separate statistics are available for all affiliates and for affiliates that are majority-owned by their U.S. parents.

Direct investment transactions and positions statistics. The direct investment transactions statistics cover a foreign affiliate's transactions with its U.S. parent(s), so these statistics relate to the U.S. parent's share, or interest, in its affiliate rather than to the affiliate's size or level of operations. These statistics are key components of the U.S. international transactions accounts (ITAs), the international investment position accounts, and the national income and product accounts. The major items include financial transactions (recorded in the financial account of the ITAs), which measure the funds that U.S. parents provide to their foreign affiliates, and income, which measures the return on those funds. Direct investment position statistics are stocks and are cumulative; they measure the total outstanding level of U.S. direct investment abroad at the end of the period. Statistics are provided both at historical cost and at current-period prices for transactions and at market value, current-cost, and historical cost for positions. The historical-cost statistics are published by country and by industry.

1. For more detailed information, see *U.S. International Economic Accounts: Concepts and Methods*.

2. See Derrick T. Jenniges and James J. Fetzer, "Direct Investment Positions for 2015: Country and Industry Detail," *SURVEY OF CURRENT BUSINESS* 96 (July 2016) and Sarah Stutzman "U.S. Direct Investment Abroad for 2013-2015: Detailed Historical-Cost Positions and Related Financial and Income Flows," *SURVEY* 96 (September 2016). These statistics were published while BEA was processing the 2014 Benchmark Survey of U.S. Direct Investment Abroad. Some data collected on the 2014 benchmark survey will be incorporated into the direct investment position and financial transaction statistics with the annual revisions released in June 2017. In June 2018, BEA will release rebenchmarking direct investment series that fully incorporate the 2014 benchmark survey for statistics covering 2014 through 2017.

earlier years, the data can be normalized by dividing them over the prior year level for that measure of MNE activity. For example, in 2014, *other changes* represented 10.2 percent of the level of MNE value added in 2013, and 13.8 percent of the level of MNE employment in 2013 (table I).¹⁸ These impacts are larger than the mean impact for earlier benchmark survey years and larger than the impact for any earlier benchmark survey year. The 10.2 percent impact on value added is beyond two standard deviations of the historical impacts and is thus considered unusually large. The 13.8

18. For comparability with *other changes* in the preliminary 2014 statistics, *other changes* for the other benchmark surveys are calculated using preliminary data. Preceding-year levels are from revised statistics.

Table H. Sources of Change in the Value Added and Employment of U.S. Multinational Enterprises (MNEs), 2013–2014

Line		Value added (Millions of dollars)	Thousands of employees	Number of enterprises (or affiliates) ¹
U.S. MNEs				
1	Level for 2013 ^r	4,882,107.0	35,767.8	28,808
2	Total change	415,196.0	4,594.0	8,094
3	New parents or affiliates	21,631.2	284.6	998
4	Changes in existing operations ³	-45,746.9	-28.0	-155
5	Sales or liquidations	-59,163.3	-613.5	-2,290
6	Other changes, including benchmark revisions ⁵	498,475.0	4,950.9	9,541
7	Level for 2014 ^p	5,297,303.0	40,361.8	36,902
Parents				
8	Level for 2013 ^r	3,487,281.0	23,348.8	2,200
9	Total change	322,984.0	3,210.9	1,939
10	New parents ²	16,039.2	120.6	85
11	Changes in existing operations ³	-34,444.1	-134.1	-78
12	Parents departing the universe ⁴	-46,273.8	-389.2	-35
13	Other changes, including benchmark revisions ⁵	387,662.7	3,613.6	1,967
14	Level for 2014 ^p	3,810,265.0	26,559.7	4,139
MOFAs				
15	Level for 2013 ^r	1,394,826.0	12,419.0	26,608
16	Total change	92,212.0	1,383.1	6,155
17	New affiliates	5,591.9	163.9	913
<i>Of which:</i>				
18	Acquired by US parents	3,537.1	54.6	261
19	Established by US parents	2,054.8	109.3	652
20	Changes in existing operations ³	-11,302.8	106.1	-77
21	Sales or liquidations of foreign affiliates	-12,889.5	-224.3	-2,255
22	Other changes, including benchmark revisions ⁵	110,812.4	1,337.3	7,574
23	Level for 2014 ^p	1,487,038.0	13,802.1	32,763

MOFAs Majority-owned foreign affiliates

p Preliminary

r Revised

1. Counts of affiliates or parents include only those with affiliates that have assets, sales, or net income (+/-) greater than \$25 million; all other data are all parents.

2. Parents that established or acquired their first affiliate in 2014.

3. Includes changes resulting from parents or affiliates acquiring, establishing, selling, or liquidating parts of their consolidated operations. This also includes other changes in existing operations, such as changes in sales and employment. BEA generally requires survey respondents to fully consolidate their U.S. parent operations, but does not generally permit survey respondents to consolidate affiliate operations unless they are in the same country and the same industry or are integral parts of a single business operation.

4. Parents that sold or liquidated their last foreign affiliate and those that went out of business in 2014.

5. Changes that could not be allocated, such as the addition of parents and affiliates to the survey universe that were required to report on earlier surveys but did not. For example, line 6 is calculated as the difference between line 2 and the sum of lines 3–5.

percent impact on employment is within two standard deviations of the historical impacts and is thus not considered unusually large.

In principle, BEA could seek to anticipate benchmark improvements in coverage by scaling up statistics in annual survey years to reflect an estimate for U.S. parents and their foreign affiliates that will come to BEA's attention in the next benchmark year. BEA has not done this in the past, in part because it would be difficult to provide an accurate prediction of the effect and would be difficult to distribute the estimated activity across industry, country, and the various measures of MNE activity.

As in past articles describing the results of benchmark surveys, this article has de-emphasized comparisons across time in the levels of the statistics. Data users should be aware that the increase in most activities from 2013 to 2014 appears to largely reflect the influx of companies that were already in the direct investment universe into BEA's direct investment sampling frame. Rather than comparing 2014 activity levels with past nonbenchmark-year levels, comparisons of 2014 distributions of activities with past nonbenchmark-year distributions may prove to be more informative. For instance, a comparison of European affiliates' share of MOFA value added in 2014 with the same share in 2013 would be entirely legitimate to the extent that European affiliates are proportionately represented in the MNEs that were belatedly recognized to belong to the direct investment universe.

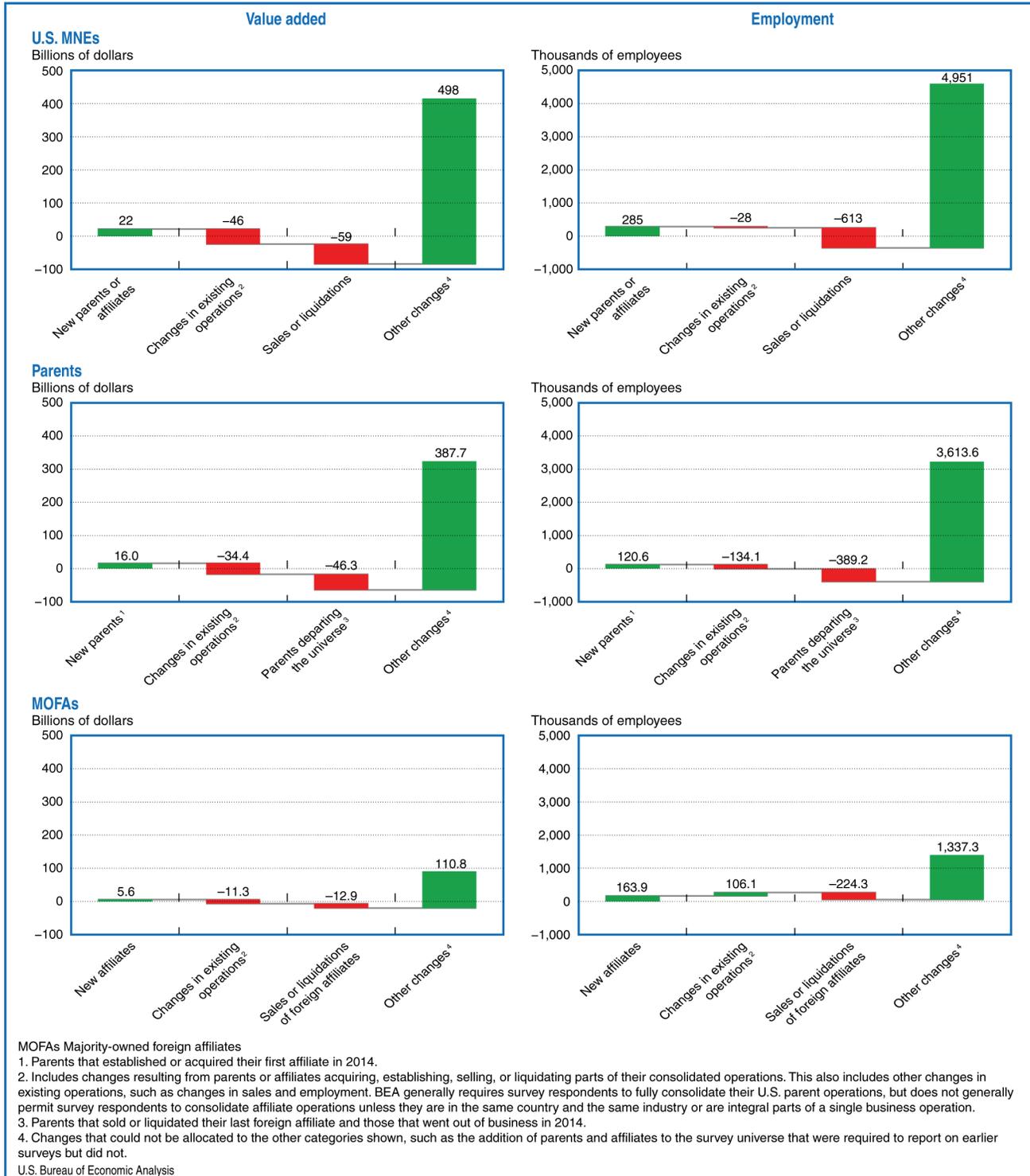
Table I. Improvements in Coverage: Value Added and Employment of U.S. Multinational Enterprises (MNEs), 1994–2014¹

Year	Other changes, current year ²	Level, prior year	Other changes as a percentage of prior-year level
U.S. MNE value added			
1994	n.a.	n.a.	n.a.
1999	149,329	2,100,773	7.1
2004	189,045	2,655,903	7.1
2009	316,838	3,740,989	8.5
2014	498,475	4,882,107	10.2
Mean			7.6
Standard deviation			0.8
U.S. MNE employment			
1994	1,796	24,222	7.4
1999	2,150	26,593	8.1
2004	n.a.	n.a.	n.a.
2009	3,623	32,737	11.1
2014	4,951	35,768	13.8
Mean			8.9
Standard deviation			1.9

1. For comparability, *other changes* are calculated using preliminary data. Prior-year levels are revised statistics.

2. See footnote 5 in table H.

Chart 5. Sources of Change in the Value Added and Employment of U.S. Multinational Enterprises (MNEs), 2013-2014



Benchmark Surveys

Benchmark surveys, which are conducted every 5 years, are BEA's most comprehensive surveys of U.S. direct investment abroad in terms of both the number of companies covered and the amount of information gathered. Statistics from the 2014 benchmark survey, like those from previous benchmark surveys and annual surveys, covered the entire universe of U.S. direct investment abroad. The preliminary results presented in this article are based on reported or estimated data for 4,139 U.S. parent companies and for 35,394 foreign affiliates—most of which (32,763) were majority owned by their U.S. parents.¹ The survey collected detailed information on the activities of U.S. parents and their foreign affiliates, which are covered in this publication, and on the transactions and positions between parents and their affiliates, which are not covered in this publication. A comprehensive final report on the 2014 benchmark survey will be published next year and will include statistics on transactions and positions between affiliates and parents as well as revised and more detailed statistics on the overall activities of affiliates and U.S. parents.

The statistics on the activities of multinational enterprises from the benchmark survey extend the time series that begins with 1982 and that are derived from data reported on both annual surveys and benchmark surveys. The concepts and definitions underlying the 2014 benchmark survey are similar to those underlying the previous (2009) benchmark survey.² One improvement introduced in the 2014 benchmark survey is the use of the industrial classifications based on the 2012 North American Industry Classification System (NAICS). BEA updates the industrial classifications used in its direct investment surveys in benchmark years.

Every U.S. parent and foreign affiliate was required to be reported in the benchmark survey. Benchmark survey reports that collected data on all of the major aspects of operations were required only for very large U.S. parents and their very large majority-owned foreign affiliates

(MOFAs). To minimize the burden on survey respondents, less detailed information was required for U.S. parents and MOFAs that met particular thresholds on assets, sales, or net income (or loss). For example, partial information was required for MOFAs with assets, sales, or net income (or loss) greater than \$80 million but not more than \$300 million. Even less detailed information was required for all MOFAs with assets, sales, or net income (or loss) greater than \$25 million but not more than \$80 million. For these affiliates, BEA estimated the items that are reported only for larger affiliates, so that the results are presented in the same detail for all MOFAs.

The same information required of MOFAs with assets, sales, or net income (or loss) greater than \$25 million but not more than \$80 million was also required for minority-owned foreign affiliates that had total assets, sales, or net income (or loss) greater than \$25 million. However, BEA did not estimate the items for minority-owned foreign affiliates that are reported only for large MOFAs. Therefore, results for all affiliates (majority-owned plus minority-owned affiliates) cover fewer items than those for MOFAs. Affiliates that were too small to meet one of these criteria were required to complete a highly abbreviated survey report that collected just a few major data items—including assets, sales, and employment—indicating the overall size of their operations. BEA estimated items not included on this report in accordance with the ownership status (majority- or minority-owned) of the affiliate.

The data collected in the 2014 benchmark survey provides the basis for other BEA estimates of U.S. direct investment abroad. For AMNE statistics, the benchmark survey data allow BEA to improve its estimates by providing a basis for the construction of estimates for affiliates too small to be reported on the annual survey and by identifying new U.S. parents to provide data in the annual survey. For the direct investment transactions and positions data, the survey will provide a basis for revising the estimates derived from BEA's quarterly surveys of U.S. direct investment abroad.

The preliminary results from the benchmark survey incorporate BEA estimates for reports that were not received or could not be processed for publication. The final results will incorporate data from all reports submitted to BEA.

1. Counts of foreign affiliates include only those that have assets, sales, or net income (+/-) greater than \$25 million. All foreign affiliates are included in the statistics.

2. See the "Introduction" in *Worldwide Activities of U.S. Multinational Enterprises: Preliminary Results From the Benchmark Survey* for additional details on the methodologies used to collect the 2014 benchmark survey data.

Tables 1.1 through 5.2 follow.