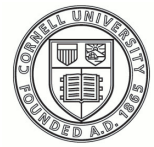



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# Outsourcing and Insourcing Jobs in the U.S. Economy: Evidence Based on Foreign Investment Data

James K. Jackson
*Congressional Research Service*

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## Abstract

The impact of foreign direct investment on U.S. employment continues to attract national attention. While local communities compete with one another for investment projects, many of the residents of those communities fear losing their jobs as U.S. companies seek out foreign locations and foreign workers to perform work that traditionally has been done in the United States, generally referred to as outsourcing. Some observers suggest that current U.S. experiences with outsourcing are different from those that have preceded them and that this merits legislative actions by Congress to blunt the economic impact of these activities. Other observers argue that investing abroad by U.S. multinational companies impedes the growth of new jobs in the economy and thwarts the nation's investments in high technology sectors. Some opponents also argue that mid-career workers who lose good-paying manufacturing and service-sector jobs likely will never recover their standard of living.

Economists and others generally argue that free and unimpeded international flows of capital ultimately have a positive impact on both domestic and foreign economies. Direct investment is unique among international capital flows because it adds permanently to the capital stock and skill set of a nation, but it also challenges the general theory of capital flows because of the presence of strong cross-border and intra-industry investment. Supporters contend that to the extent that foreign investment shifts jobs abroad, it is a minor component of the overall economic picture and that it is offset somewhat by the investment of foreign firms in the U.S. economy (referred to as insourcing), which supports existing jobs and creates new jobs in the economy.

Broad, comprehensive data on U.S. multinational companies generally lag behind current events by two years and were not developed to address the issue of jobs outsourcing. Many economists argue, however, that there is little evidence to date to support the notion that the overseas investment activities of U.S. multinational companies play a significant role in the rate at which jobs are created in the U.S. economy. Instead, they argue that the source of job creation in the economy is rooted in the combination of macroeconomic policies the nation has chosen, the rate of productivity growth, and the availability of resources. This report addresses these issues by analyzing the extent of direct investment into and out of the economy, the role such investment plays in U.S. trade, jobs, and production, and the relationship between direct investment and the broader economic changes that are occurring in the U.S. economy.



## Keywords

outsourcing, insourcing, employment, labor market


## Comments


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# Outsourcing and Insourcing Jobs in the U.S. Economy: Evidence Based on Foreign Investment Data

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June 21, 2013

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# Summary

The impact of foreign direct investment on U.S. employment continues to attract national attention. While local communities compete with one another for investment projects, many of the residents of those communities fear losing their jobs as U.S. companies seek out foreign locations and foreign workers to perform work that traditionally has been done in the United States, generally referred to as outsourcing. Some observers suggest that current U.S. experiences with outsourcing are different from those that have preceded them and that this merits legislative actions by Congress to blunt the economic impact of these activities. Other observers argue that investing abroad by U.S. multinational companies impedes the growth of new jobs in the economy and thwarts the nation's investments in high technology sectors. Some opponents also argue that mid-career workers who lose good-paying manufacturing and service-sector jobs likely will never recover their standard of living.

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# Contents



## Figures

## Tables



## Contacts

# Overview

The United States is the largest foreign direct investor in the world and the largest recipient of such investment funds.[1] This active role in foreign investment continues to drive a national debate over various aspects of foreign investment, including the impact on employment; the implications for national security of foreign direct investment in U.S. industrial firms; the effect on corporate research and development; and the implications for high-technology jobs, especially on science and engineering activities that are deemed to be important for continuing economic advancement. In 2004, Congress awarded a grant through P.L. 108-447 to the National Academy of Public Administration (NAPA) to conduct a comprehensive study on outsourcing, or off-shoring, and its major economic effects, particularly on any "associated shifts in employment."[2] The NAPA study distinguished between outsourcing, or the contracting of services or activities to unaffiliated firms located either domestically or internationally, and off-shoring, or the shifting of services or activities abroad to unaffiliated firms or to affiliated firms. The data used in this report, however, do not distinguish between outsourcing and off-shoring or among a broad range of other activities that may be associated with foreign investment.

In addition to foreign direct investment, the focus of this report, in which firms take a direct equity stake in an investment project, multinational corporations are engaging in an increasingly complex array of activities to build interdependent networks of operations in global value chains. The United Nations refers to these mechanisms, or alternative forms of governance of global value chains by multinational companies, as non-equity modes (NEM) of investment, that include partial ownership, joint ventures, contract manufacturing, services outsourcing, contract farming, franchising and licensing, and other forms of contractual relationships through which firms coordinate and control the activities of partner firms.[3] As a result of these mechanisms, firms no longer must choose between full control of a foreign affiliate through direct investment or no control, but among a range of modes in which control is exercised in various configurations and to various degrees. Evidence to date suggests that such forms of control are not specific to any particular part of the value chain or type of activity, but are prevalent in shaping global trade patterns in such industries as automotive components, consumer electronics, garments, hotels, and information technology and business process services.[4] The United Nations estimates that NEM investment generated $2 trillion in sales in 2010. While NEM investments can enhance the productive capacities of developing countries through integration into global value chains, employment in the affected industries can be highly cyclical and easily displaced.[5]

Currently, foreign investment spans all countries, industrial sectors, industries, and economic activities and has become a major conduit for goods, capital, and technology flows between the developed and the developing economies. Foreign direct investment often is a much-needed

[1] This is true on a historical cost, or *cumulative* position basis, but the sharp drop in foreign direct inflows after 2000 has meant that other countries have occasionally displaced the United States as the largest recipient of annual foreign direct inflows.

[2] This study was completed in three parts, with associated publications. See *Off-shoring: An Elusive Phenomenon*, National Academy of Public Administration, January 2006; *Off-Shoring: How Big is it?,* October 2006; and *Off-Shoring: What Are Its Effects?*, National Academy of Public Administration, January 2007.

[3] Non-Equity Modes of International Production and Development, *World Investment Report 2011*, United Nations Council on Trade and Development, 2011, pp. 123-176.

[4] *Ibid*, p. 129.

[5] *Ibid,* p. 123.

source of funds for capital formation in developing countries and foreign investment accounts for important shares of employment, sales, income, and R&D spending in developing countries.[6] On a historical cost basis, or book value basis, the Department of Commerce estimates that by the end of 2011, U.S. firms had accumulated $4.1 trillion worth of direct investment abroad, compared with the $2.6 trillion foreign investors had spent to acquire or establish businesses in the United States, when direct investment is measured at historical cost.[7] As **Figure 1** shows, direct foreign investment flows generally have increased since 2003, while U.S. direct investment abroad dropped sharply in 2005 as a result of one-time tax provisions, but then rebounded sharply in 2006.[8]

New spending by U.S. firms on businesses and real estate abroad, or U.S. direct investment abroad, rose by 27% in nominal terms in 2011 over the amount invested in 2010, reflecting improvements in the rate of economic growth in Europe and elsewhere. Net investments rose from $328 billion in 2010 to $419 billion in 2011, including adjustments for changes in the value of some components, according to the Department of Commerce.[9] According to preliminary data, U.S. direct investment abroad in 2012 was about $350 billion, a drop of 16% from the amount invested in 2011.[10] Similarly, foreign direct investment in the United States in 2012 dropped by 25% from the amount invested in 2011. U.S. direct investment abroad slowed due to reductions in reinvested earnings, intercompany debt investment, and net equity investment. Despite increases in income and earnings in 2012 compared with 2011, foreign direct investment in the United States fell by $60 billion to $175 billion in 2012, a drop of 25% compared with the $234 billion invested in 2011, due to a sharp reduction in net equity investment and in intercompany debt.

[6] *World Investment Report 2012*, United Nations Council on Trade and Development, 2012, p. 173.

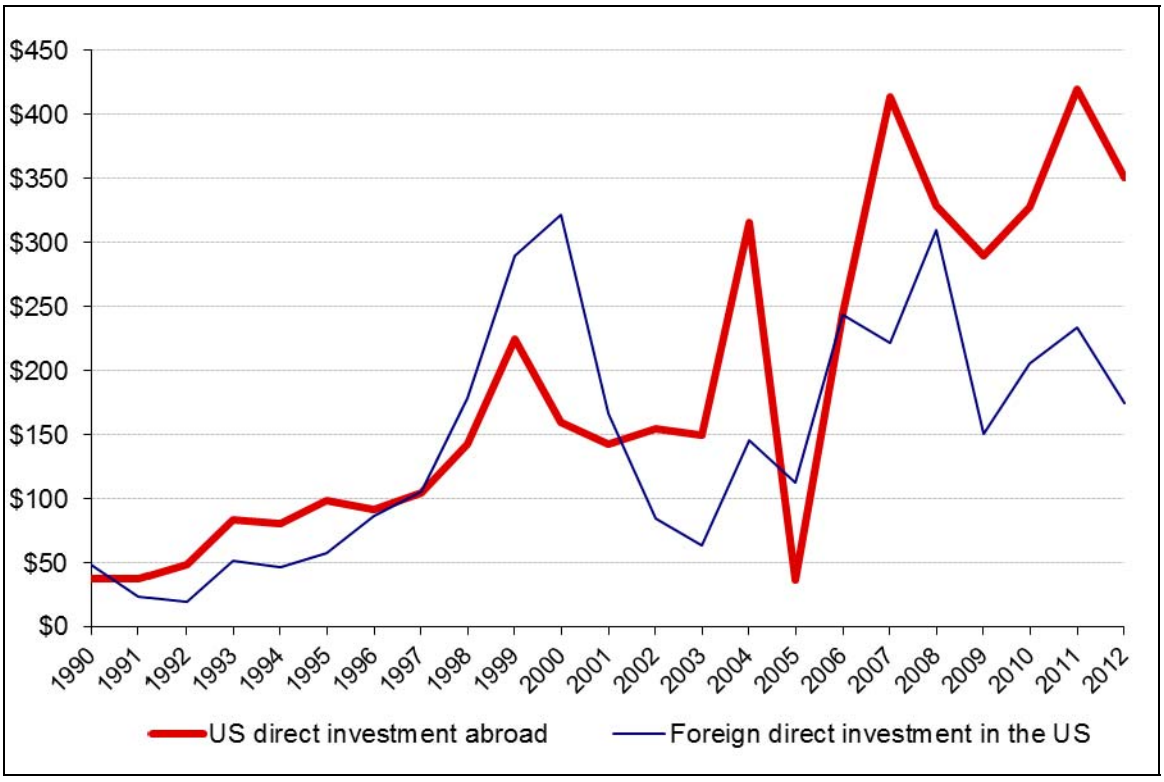
[7] Barefoot, Kevin B., Marilyn Ibarra-Caton, Direct Investment Positions for 2011: Country and Industry Detail, *Survey of Current Business*, July, 2012. p. 20. The position, or stock, is the net book value of U.S. parent company's equity in, and outstanding loans to, their affiliates abroad. A change in the position in a given year consists of three components: equity and intercompany inflows, reinvested earnings of incorporated affiliates, and valuation adjustments to account for changes in the value of financial assets. The Commerce Department also publishes data on the U.S. direct investment position valued on a current-cost and market value bases. These estimates indicate that in 2011 U.S. direct investment abroad measured at current cost increased by $375 billion and fell by $267 billion when measured by market value, to reach $4.7 trillion and $4.5 trillion, respectively. Nguyen, Elena L., "The International Investment Position of the United States at Yearend 2011," *Survey of Current Business*, July 2012, p. 18.

[8] The United States defines foreign direct investment as the ownership or control, directly or indirectly, by one foreign person (individual, branch, partnership, association, government, etc.) of 10% or more of the voting securities of an incorporated U.S. business enterprise or an equivalent interest in an unincorporated U.S. business enterprise. 15 CFR § 806.15 (a)(1). Similarly, the United States defines direct investment abroad as the ownership or control, directly or indirectly, by one person (individual, branch, partnership, association, government, etc.) of 10% or more of the voting securities of an incorporated business enterprise or an equivalent interest in an unincorporated business enterprise. 15 CFR § 806.15 (a)(1).

[9] Scott, Sarah P., U.S. International Transactions: First Quarter of 2012. *Survey of Current Business*, July 2012, p. 59. Direct investment data reported in the balance of payments differ from capital flow data reported elsewhere, because the balance of payments data have not been adjusted for current cost adjustments to earnings.

[10] Scott, Sarah P., U.S. International Transactions: Fourth Quarter and Year 2012. *Survey of Current Business*, April 2013, p. 28.

**Figure 1. Foreign Direct Investment in the United States and U.S. Investment Abroad, Annual Flows 1990-2012**

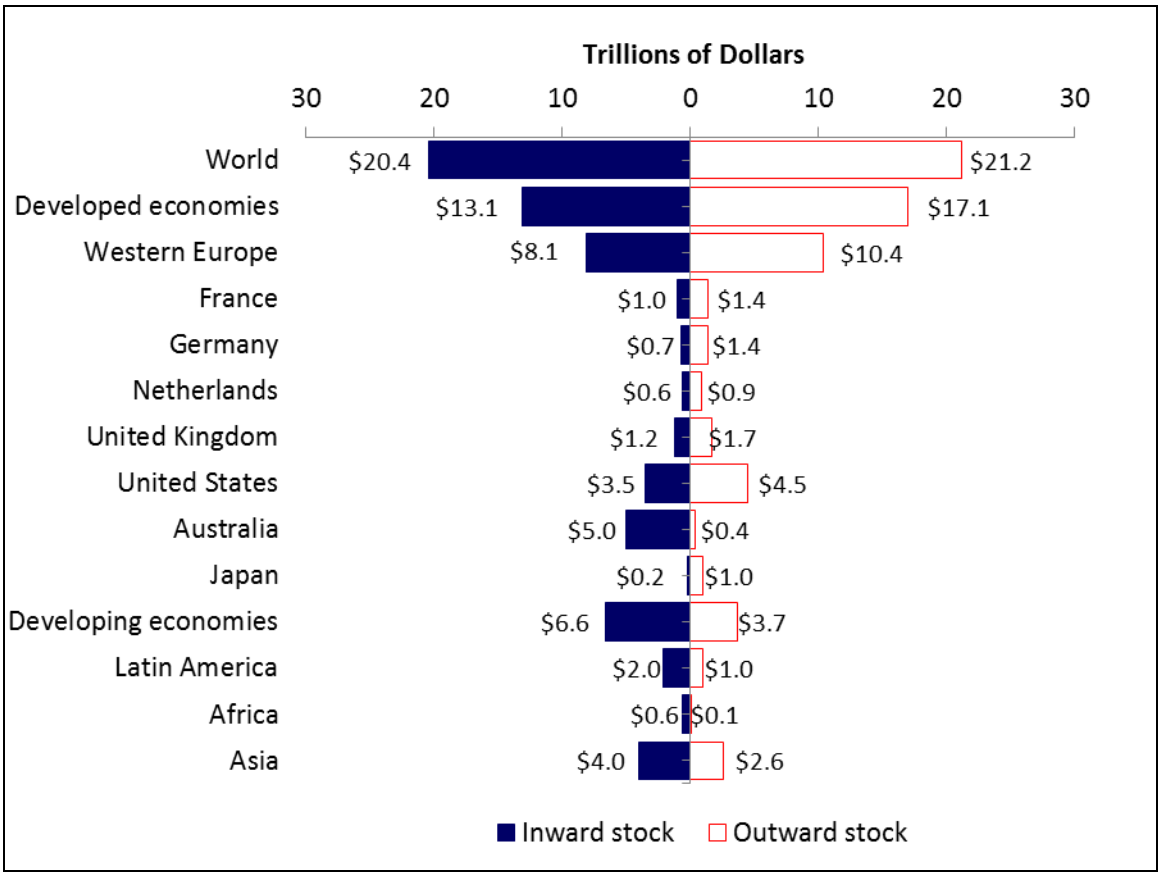



**Source:** U.S. Department of Commerce.

**Note:** The drop in U.S. direct investment abroad in 2005 reflects actions by U.S. parent companies to take advantage of a one-time tax provision.

Globally, the total, or cumulative, amount of foreign direct investment exceeded $21 trillion in 2011 (the latest year for which detailed data are available), as indicated in **Figure 2**. Nearly three-fourths of this amount is invested in the most economically advanced developed economies. The developed economies not only are the greatest recipient of investment funds, but they are also the greatest source of those funds. Similar to the United States, those countries that are the largest overseas investors also tend to be the most attractive destinations for foreign investments. The clear exception to this general observation is Japan, which had invested over $900 billion abroad through 2011, but had received over $225 billion in investment inflows. Among the developing economies, Asia, which includes China, has accumulated $4 trillion in direct investment, followed by Latin America ($2 trillion) and Africa ($600 billion).

**Figure 2. Inward and Outward Global Direct Investment Position, By Major Area, 2011**




**Source:** United Nations.

Global direct investment flows picked up sharply after 2004, following three years of reduced flows. According to the United Nations' *World Investment Report*,[11] the largest 100 multinational corporations in the world experienced a stagnation of their sales, employment, and growth in assets from 2000 to 2003, but global foreign direct investment flows picked up in the 2006-2007 period before falling in 2008, as indicated in **Table 1**. In 2006 and 2007 global direct investment flows grew by 38% and 18%, respectively, to reach nearly $2 trillion. The rise in global direct investment flows was driven by an increase in corporate profits worldwide and resulting higher stock prices that raised the value of cross-border mergers and acquisitions. In 2008, global direct investment flows fell by 14% to total $1.7 trillion, due in part to the tightening up of credit markets and slowing economic growth. Furthermore, the global financial crisis sharply reduced global investment flows in 2009 to $1.1 trillion as capital markets reduced funds available for mergers and acquisitions. The developed economies generally absorb about two-thirds of global direct investment flows, with the developing economies sharing the rest. Africa continues to receive the smallest share, generally less than 3%, with Latin America receiving about 8% and Asia getting between 18% and 22%. These shares changed abruptly in 2009 as the financial crisis tightened credit and reduced merger and acquisition activity, a major factor in direct investment in the developed economies. In 2011, however, global direct investment flows increased to all major

[11] *World Investment Report 2010*, United Nations, July 2010. P. 5.

geographic regions, but particularly to developed economies, which experienced a 21% increase in direct investment from the amount received in 2010.

**Table 1. Global Annual Inflows of Foreign Direct Investment, By Major Area**

(in billions of dollars; percent shares)

| | 2009 | 2010 | 2011 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|---|
| | Inflows of foreign direct investment (in billions of dollars) | | | Share of annual foreign direct investment inflows (in percent) | | |
| **World** | $1,197.8 | $1,309.0 | $1,524.4 | 100.0% | 100.0% | 100.0% |
| **Developed economies** | 606.2 | 618.6 | 747.9 | 50.6 | 47.3 | 49.1 |
| Western Europe | 398.9 | 256.6 | 425.3 | 33.3 | 27.2 | 27.9 |
| European Union | 356.6 | 318.3 | 420.7 | 29.8 | 24.3 | 27.6 |
| Other Western Europe | 42.3 | 28.3 | 4.6 | 3.5 | 2.9 | 0.3 |
| North America | 165.0 | 221.3 | 267.9 | 13.8 | 16.9 | 17.6 |
| United States | 143.6 | 197.9 | 226.9 | 12.0 | 15.1 | 14.9 |
| Other developed econ. | 42.3 | 40.7 | 54.7 | 3.5 | 3.1 | 3.6 |
| **Developing economies** | 519.2 | 616.7 | 684.4 | 43.3 | 47.1 | 44.9 |
| Africa | 52.6 | 43.1 | 42.7 | 4.4 | 3.3 | 2.8 |
| Latin America | 149.4 | 187.4 | 217.0 | 12.5 | 14.3 | 14.2 |
| Asia | 315.2 | 384.1 | 423.2 | 26.3 | 29.3 | 27.8 |
| Other Europe | 72.4 | 73.8 | 92.2 | 6.0 | 5.6 | 6.0 |

**Source:** *World Investment Report, 2012*, United Nations, 2012, Annex table B.1.

# U.S. and Foreign Multinational Companies

By the end of 2010, there were more than 2,300 U.S. parent companies with nearly 27,000 affiliates operating abroad, as **Table 2** indicates. In comparison, foreign firms had over 6,000 affiliates operating in the United States. U.S. parent companies employed nearly 23 million workers in the United States, compared with the 13.3 million workers employed abroad by U.S. firms and slightly less than 6 million persons employed in the United States by foreign firms. Although the U.S.-based affiliates of foreign firms employ fewer workers than do the foreign affiliates of U.S. firms, they paid almost as much in aggregate employee compensation in the United States as did the U.S. affiliates operating abroad. The data also suggest that U.S. parent companies are more efficient than either the U.S. affiliates of U.S. firms or foreign firms operating in the United States with higher output per employee. Foreign firms operating in the United States are more capital intensive relative to employment than U.S. parent firms or U.S. affiliates, likely reflecting the newer age of the capital stock of the foreign firms. The U.S. affiliates of foreign companies, however, had one-quarter higher value of gross product than did the foreign affiliates of U.S. firms operating abroad. The foreign affiliates of U.S. firms, however, had total sales that were nearly twice as high as that of the U.S. affiliates of foreign firms, likely reflecting the slowdown in economic growth that had begun in the United States. The foreign affiliates of U.S. firms, however, paid considerably more in taxes to foreign governments than did

the affiliates of foreign firms operating in the United States. The overseas affiliates of U.S. parent companies also paid nearly twice as much in taxes relative to their sales as did U.S. parent companies and as did foreign-owned affiliates operating in the United States.

**Table 2. Select Data on U.S. Multinational Companies and on Foreign Firms Operating in the United States, 2010**

(dollar amounts in millions of dollars)

| | U.S. Multinational Companies | | U.S. Affiliates of Foreign Firms |
|---|---|---|---|
| | Parent Companies | Foreign Affiliates | |
| Number of firms | 2,302 | 26,791 | 6,062 |
| Employment (thousands) | 22,820 | 13,256 | 5,802 |
| Employee compensation | $1,612,953 | $552,627 | $440,756 |
| Gross product | $2,885,927 | $1,241,272 | $1,780,699 |
| Total assets | $29,508,242 | $23,277,276 | $12,337,290 |
| Sales | $9,772,683 | $6,034,813 | $3,400,736 |
| Taxes | $203,011 | $209,605 | $15,419 |
| R&D Expenditures | $212,513 | $39,470 | $45,251 |

**Source:** *U.S. Direct Investment Abroad: Operations of U.S. Parent Companies and Their Foreign Affiliates, Preliminary 2010 Estimates;* and *Foreign Direct Investment in the United States: Operations of U.S. Affiliates of Foreign Companies, Preliminary 2010 Estimates,* Bureau of Economic Analysis, 2012.

U.S. multinational companies also play an important role in the U.S. economy, as indicated in **Table 3**. According to the total output of U.S. parent companies, or gross product, they produced $2.9 trillion in goods and services in 2010, up slightly from the $2.4 trillion dollars they produced in 2009. This amount represented about 23% of total U.S. private industry gross product, a share of total gross product of U.S. parent companies that was the highest since 2000. The data also demonstrate the impact the improvement in the U.S. economy in 2010 had on the operations of U.S. multinational companies, as those companies grew slightly faster than the economy as a whole and increased their share of private gross product.

The manufacturing sector presents a similar picture. During the decades of the 1990s and the 2000s, manufacturing production experienced a slow decline as a share of U.S. parent company gross product, falling from 53% of total output in 1994, to 39.2% in 2010, reflecting the slowdown in the rate of growth in the U.S. economy and the decline overall in the share of the U.S. economy devoted to the manufacturing sector. After the turnaround in U.S. economic growth in 2003, the share of output arising from the manufacturing sector rose to 45.7% in 2005 among U.S. parent companies, although the manufacturing sector continued to slide as a share of overall U.S. gross product and as a share of gross product of multinational firms.

Within the U.S. economy, U.S. multinational corporations (MNCs) rank among the largest U.S. firms. According to data collected by the Commerce Department's Bureau of Economic Analysis (BEA), when American parent companies and their foreign affiliates are compared by the size structure of employment classes, 40% of the more than 2,000 U.S. parent companies employ more than 2,499 persons each. These large parent firms account for 95% of the total number of people employed by U.S. MNCs. Employment abroad is even more concentrated among the

largest foreign affiliates of U.S. parent firms: the largest 2% of the affiliates account for 90% of affiliate employment.[12]

**Table 3. Gross Product and Manufacturing Gross Product by U.S. Multinational Companies, 1994-2010**

(in billions of dollars and percent share)

| | Gross Product | | | Manufacturing Gross Product | |
|---|---|---|---|---|---|
| | U.S. Parent Companies<br>Billions of dollars | U.S. Private Industries | Parent Company Share of U.S. Private Gross Product | Share of Parent Company Gross Product | Share of U.S. Private Gross Product |
| 1994 | $1,313.8 | $6,013.5 | 21.8% | 53.1% | 18.3% |
| 1995 | 1,365.5 | 6,306.9 | 21.7% | 53.0% | 18.4% |
| 1996 | 1,480.6 | 6,667.9 | 22.2% | 51.6% | 17.8% |
| 1997 | 1,573.5 | 7,253.6 | 21.7% | 49.0% | 17.7% |
| 1998 | 1,594.5 | 7,678.2 | 20.8% | 49.0% | 17.6% |
| 1999 | 1,914.3 | 8,123.0 | 23.6% | 48.6% | 16.9% |
| 2000 | 2,141.5 | 8,614.3 | 24.9% | 46.5% | 16.6% |
| 2001 | 1,892.4 | 8,869.7 | 21.3% | 43.8% | 15.1% |
| 2002 | 1,858.8 | 9,131.2 | 20.4% | 44.6% | 14.8% |
| 2003 | 1,958.1 | 9,542.3 | 20.5% | 44.2% | 14.2% |
| 2004 | 2,215.8 | 10,345.6 | 21.4% | 45.6% | 14.3% |
| 2005 | 2,303.1 | 11,037.1 | 20.9% | 43.6% | 14.2% |
| 2006 | 2,536.9 | 11,709.4 | 21.7% | 39.6% | 14.1% |
| 2007 | 2,588.8 | 12,268.8 | 21.1% | 41.1% | 13.8% |
| 2008 | 2,396.3 | 12,437.1 | 19.3% | 40.9% | 13.1% |
| 2009 | 2,453.4 | 12,056.7 | 20.3% | 39.1% | 12.8% |
| 2010 | 2,885.9 | 12,532.3 | 23.0% | 39.2% | 13.0% |

**Source:** Shares developed by CRS from Bureau of Economic Analysis data.

## Employment

A major source of contention in the United States regarding foreign investment focuses on the impact such investment is having on U.S. employment.[13] Some observers argue that actions by U.S. parent companies over the past two decades are different from previous experiences with foreign investment, because the parent companies are shifting jobs, capital, and technology

[12] Mataloni, Raymond J. Jr. U.S. Multinational Companies: Operations in 1998. *Survey of Current Business*, July 2000. pp. 26-45.

[13] For a comprehensive look at how offshore outsourcing has affected U.S. workers, see CRS Report RL32292, *Offshoring (or Offshore Outsourcing) and Job Loss Among U.S. Workers*, by Linda Levine. Also, see Drezner, Daniel W., The Outsourcing Bogeyman, *Foreign Affairs,* May/June, 2004; and Engardio, Pete, Aaron Berstein, and Manjeet Kripalani, Is Your Job Next? *Business Week,* February 3, 2003. P. 50-60.

offshore to their foreign affiliates in ways that are distinctly different from previous periods, and thereby are reducing employment in the United States. The Department of Commerce's Bureau of Economic Analysis provides the most comprehensive set of data on U.S. direct investment abroad and on foreign direct investment in the United States. These data, however, were not designed to link employment gains or losses in the United States, either for individual jobs, individual companies, or in the aggregate, with the gains and losses of jobs abroad. The data also do not capture the extent to which firms may outsource such services as legal, payroll, accounting, and advertising to other firms, both domestic and foreign. While estimates of this effect span a wide range, studies by the National Association of Public Administrators (NAPA) concluded that outsourcing services to domestic firms was substantially larger than other types of business restructuring.[14] The data in **Table 4** indicate that the employment trends of U.S. parent companies also are sensitive to economic conditions in the U.S. economy, particularly during periods in which economic growth slows down, as it did in the early 1980s, 1990s, in the early 2000s, and again in 2008.

Foreign investment data seem to indicate that, despite, or perhaps because of, the growing international linkages between economies, an expansion or a contraction in the rate of growth in the U.S. economy affects employment among U.S. parent companies more than it affects employment among the overseas affiliates of these parent companies. Nevertheless, changes in jobs among U.S. parent companies that are related to the overall rate of growth of the economy also affect the rate of growth in other countries and, therefore, in employment among the foreign affiliates, though not necessarily by the same magnitude, as indicated in **Figure 3**. Between 2002 and 2008, job gains were greater among the foreign affiliates of U.S. firms than among the parent companies, which is especially apparent when expressed in index number terms. Employment among the parent companies declined in 2008, but rebounded in 2009 and 2010, while employment among the foreign affiliates of those U.S. firms fell in 2009 and 2010, reflecting the impact of the economic recession and the sovereign debt crisis in Europe on the operations of the European affiliates of U.S. parent companies.

The historical data generally indicate that the number of employees in the parent companies and in the affiliates tend to rise and fall in a broadly similar pattern. While international linkages between U.S. and foreign economies mean that economic conditions in the United States have an impact on economic conditions abroad, there appears to be no distinct pattern between the creation or loss of jobs within U.S. multinational companies and a commensurate loss or creation of jobs among the foreign affiliates of those companies. Indeed, within most of the major developed countries, those economic forces that spur direct investment inflows also boost direct investment outflows. As a result, foreign direct investment may create jobs in the foreign affiliate that substitute for jobs in the parent company, but foreign investment may also positively affect job creation in both the parent company and the foreign affiliates, which makes it difficult to identify any broad trend regarding the employment effects of direct investment.

[14] *Off-Shoring: How Big Is It?,* National Academy of Public Administrators, October 2006, p. 4.

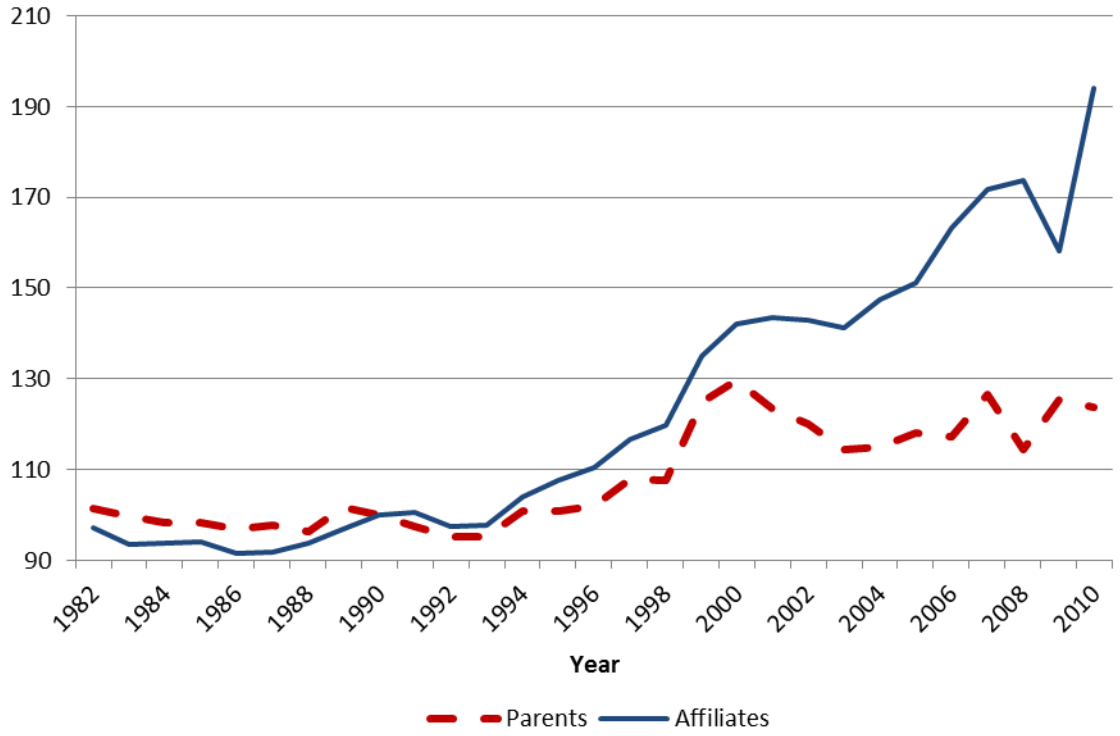
**Table 4. Employment of U.S. Multinational Companies and the Affiliates of Foreign Firms, 1992-2010**

(in thousands, and percent share)

| | U.S. Multinational Companies | | | U.S. Affiliates of Foreign Firms | U.S. Civilian Employment | Shares of U.S. Civilian Employment | | |
|---|---|---|---|---|---|---|---|---|
| | Total | Parents | Affiliates | | | U.S. Parent Companies | Affiliates of U.S. Parent Companies | U.S. Affiliates of Foreign Companies |
| 1992 | 24,189.7 | 17,529.6 | 6,660.1 | 4,715.4 | 118,492 | 14.79% | 5.62% | 3.98% |
| 1993 | 24,221.5 | 17,536.9 | 6,684.6 | 4,765.6 | 120,259 | 14.58% | 5.56% | 3.96% |
| 1994 | 25,670.0 | 18,565.4 | 7,104.6 | 4,840.5 | 123,060 | 15.09% | 5.77% | 3.93% |
| 1995 | 25,921.1 | 18,576.2 | 7,344.9 | 4,941.8 | 124,900 | 14.87% | 5.88% | 3.96% |
| 1996 | 26,334.0 | 18,790.0 | 7,544.0 | 5,105.0 | 126,708 | 14.83% | 5.95% | 4.03% |
| 1997 | 27,851.0 | 19,878.0 | 7,973.0 | 5,201.9 | 129,558 | 15.34% | 6.15% | 4.02% |
| 1998 | 28,003.6 | 19,819.8 | 8,183.8 | 5,646.1 | 131,463 | 15.08% | 6.23% | 4.29% |
| 1999 | 32,227.0 | 23,006.8 | 9,220.2 | 6,027.6 | 133,488 | 17.24% | 6.91% | 4.52% |
| 2000 | 33,598.2 | 23,885.2 | 9,713.0 | 6,429.2 | 136,891 | 17.45% | 7.10% | 4.70% |
| 2001 | 33,226.0 | 22,735.1 | 9,803.6 | 6,371.9 | 136,933 | 16.60% | 7.16% | 4.65% |
| 2002 | 30,597.3 | 22,117.6 | 9,776.0 | 5,420.3 | 136,485 | 16.21% | 7.16% | 3.97% |
| 2003 | 30,762.3 | 21,104.8 | 9,657.5 | 5,253.0 | 137,736 | 15.32% | 7.01% | 3.81% |
| 2004 | 31,405.5 | 21,377.5 | 10,028.0 | 5,562.3 | 139,252 | 15.21% | 7.23% | 4.03% |
| 2005 | 32,101.8 | 21,768.5 | 10,333.3 | 5,530.1 | 141,730 | 15.36% | 7.29% | 3.90% |
| 2006 | 32,765.7 | 21,615.8 | 11,149.9 | 5,800.6 | 144,427 | 14.97% | 7.72% | 4.02$ |
| 2007 | 35,075.1 | 23,337.6 | 11,737.5 | 6,015.9 | 146,047 | 15.98% | 8.04% | 4.12% |
| 2008 | 32,982.8 | 21,103.4 | 11,879..4 | 6,279.2 | 145,362 | 14.52% | 8.17% | 4.32% |
| 2009 | 33,922.1 | 23,120.7 | 10,801.4 | 5,970.1 | 139,877 | 16.53% | 7.72% | 4.27% |
| 2010 | 36,075.6 | 22,819.8 | 13,255.8 | 5,802.2 | 139,064 | 16.41% | 9.53% | 4.17% |

**Source:** Data developed by CRS from data published by the Department of Commerce and the Department of Labor.

**Figure 3. Index of Employment of U.S. Parent Companies and Their Foreign Affiliates, 1992-2010 (1990 = 100)**




**Source:** U.S. Department of Commerce.

The apparent lack of a direct linkage between job gains and losses among parent companies and their foreign affiliates likely arises from the many factors that can affect job gains and losses both within individual companies and within the economy as a whole. Economists typically categorize unemployment as cyclical, structural, seasonal, and frictional. Only the first two types are relevant to the current discussion and are likely to account for the largest share of unwanted job changes during any given year. Cyclical changes in employment arise from changes in the economy associated with an economic expansion or contraction; structural changes in employment are associated with the long-term changes in the economy that arise from technological advances or other factors that alter the basic make-up of the economy. When cyclical and structural unemployment coincide it often is difficult to distinguish between them.

Long-term changes in the basic structure of the economy, especially in such dynamic economies as the U.S. economy, alter the composition of jobs in the economy. Such changes occurred during the Industrial Revolution, when large numbers of workers migrated from farms to the rapidly developing manufacturing industries in northern cities. These structural changes represent the contraction and expansion of individual industries within the economy that arise from changes in technology and productivity that also direct changes in the composition of the nation's trade activities and foreign investment patterns. Other job changes are related to the impact of the business cycle on the economy. Such a cycle is characterized by a general slowdown or expansion in the rate of growth in the economy due to broad macroeconomic factors and generally affects large segments of the economy.

## Employment Trends

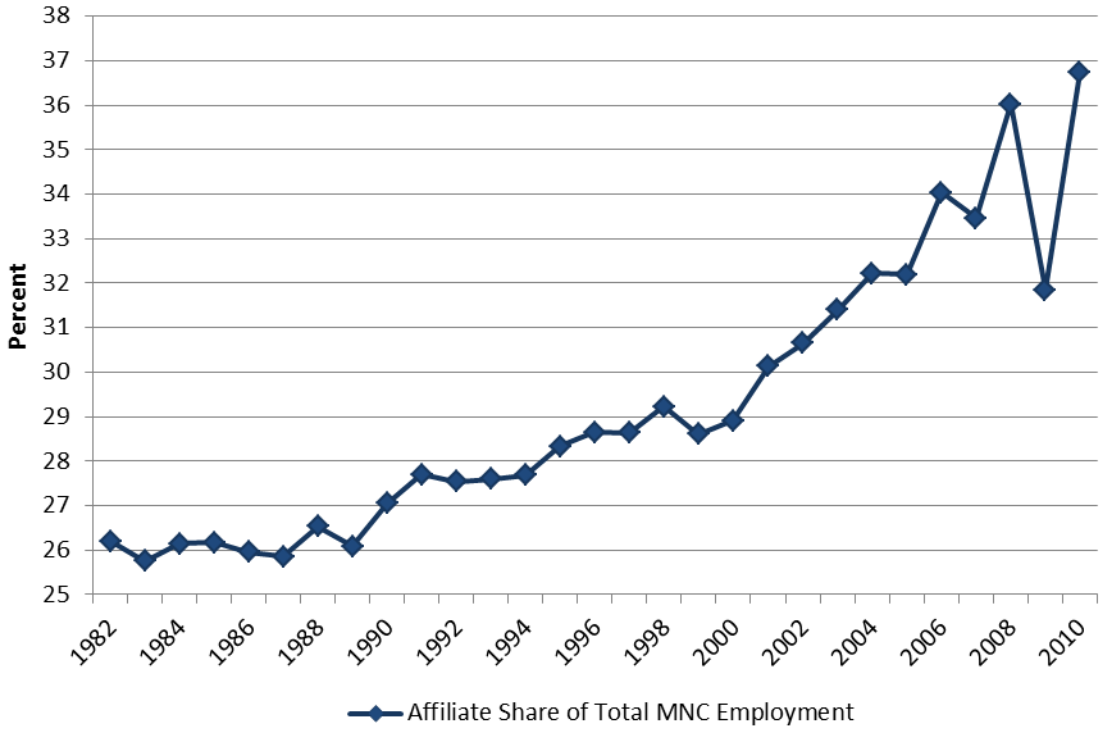
Both U.S. parent companies and their foreign affiliates lost employment during the economic contraction of the early 2000s and again in the 2008-2009 period, although employment by the foreign affiliates increased sharply in 2010, as is indicated in **Table 3**. These multinational companies apparently are affected at times more by the cyclical changes in the economy than are purely domestic firms. As a result, the parent companies' share of total U.S. civilian employment (the relative share of U.S. employment represented by the U.S. foreign affiliates is provided only for comparison purposes) declined from 2000 until 2008, when it began to increase, largely as a result of losses in U.S. civilian employment that were greater in relative terms than those among the parent companies. The affiliates of foreign firms operating in the United States followed a similar and experienced a declining share of total U.S. civilian employment between 2000 and 2005. The foreign affiliates' share of U.S. civilian employment rose between 2005 and 2008, before declining in 2009 and 2010. During the entire period most of the workers added by the affiliates were added through acquisitions of existing U.S. firms, rather than by establishing new enterprises.[15] Merger and acquisition activity dropped sharply in 2008 as a result of the global financial crisis, which made it difficult for firms to access lines of credit for acquisitions. While acquisitions do not necessarily add to the total number of firms in the economy, they do support existing jobs and may even add to the overall demand for workers.

Employment among U.S. parent companies dipped between 2001 and 2004 in response to an economic downturn that occurred during this period. Employment among U.S. parent companies and their foreign affiliates rose after 2004 as economic growth in the United States and abroad rebounded. During each U.S. economic downturn, the level of employment of U.S. parent companies declined more sharply than it did among their foreign affiliates and the decline in employment lasted longer than it did among the employment of the foreign affiliates. As a result, the share of employment represented by the foreign affiliates increased from 26% in the 1980s to 34% in 2005 as a share of total U.S. multinational company employment, as indicated in **Figure 4**. Between 2005 and 2010, U.S. civilian employment declined from 136 million to 139 million as the financial crisis and the economic recession exacted steep cuts in jobs available in the economy. Parent company share of total U.S. civilian employment apparently increased in the 2009 to 2010 period as parent companies have lost employment at a slower rate than the economy as a whole.

[15] Anderson, Thomas, "Foreign Direct Investment in the United States: New Investment in 2008." *Survey of Current Business*, June 2009, p. 54-61.

**Figure 4. Employment of the Foreign Affiliates of U.S. Parent Companies as a Share of the Total Employment of U.S. Multinational Companies, 1985-2010**

(in percent shares)




**Source:** U.S. Department of Commerce

## Employment by Sector and Area

Despite various concerns about the nature of recent foreign investment, Department of Commerce data indicate that recent foreign investment activity offers no evidence of a major deviation from well-established long-term trends. These trends indicate that about half of the employment of the foreign affiliates in 2010 was in the manufacturing sector, as indicated in **Table 5**. (Data in this table are for the non-bank U.S. affiliates rather than for the more inclusive category used elsewhere in order to provide detailed industry-level data.) Within the manufacturing sector, employment by the foreign affiliates of U.S. firms was concentrated most heavily in the transportation equipment sector, including automobile production, chemicals, and computers and equipment. Employment in the services sectors, finance and insurance, wholesale trade, and retail trade grew most rapidly from 2008 to 2010 among the U.S. foreign affiliates. Employment in most sectors increased or remained constant through the 2008-2010 period, but declines were experienced in the mining sector, computers and electronic products, broadcasting and communications, and a broad grouping of other industries.

**Table 5. Employment of Non-Bank U.S. Foreign Affiliates by Major Sector and Area, 2008-2010**

(in thousands)

| Industries | 2008 | 2009 | 2010 |
|---|---|---|---|
| **All industries** | **11,801.2** | **12,961.5** | **13,255.8** |
| **Mining** | **137.7** | **136.2** | **126.1** |
| **Utilities** | **26.6** | **29.0** | **30.7** |
| **Manufacturing** | **6,011.8** | **6,118.1** | **6,074.9** |
| Food | 612.1 | 622.9 | 717.3 |
| Beverages | 503.3 | 492.2 | 502.6 |
| Textiles | 68.1 | 85.1 | 92.1 |
| Petroleum | | | 220.7 |
| Chemicals | 806.5 | 816.3 | 827.9 |
| Pharmaceuticals | 365.2 | 358.6 | 363.3 |
| Metal products | 265.6 | 239.0 | 237.6 |
| Machinery | 353.9 | 383.2 | 358.1 |
| Computers and electronic products | 903.7 | 886.6 | 870.2 |
| Semiconductors, electronic components | 332.4 | 328.6 | 390.6 |
| Transportation equipment | 1,282.7 | 1,303.5 | 1,311.3 |
| **Wholesale trade** | **427.5** | **435.6** | **432.1** |
| **Information** | **393.1** | **450.1** | **422.4** |
| Broadcasting and telecommunications | | 169.5 | 159.2 |
| **Finance and insurance** | **479.3** | **1,249.7** | **1,416.2** |
| **Professional, scientific, and technical services** | **674.9** | **767.4** | **843.4** |
| Computer systems | | 458.0 | 518.7 |
| **Other industries** | **3,650.4** | **3,775.3** | **2,701.0** |
| Retail trade | 1,035.2 | 1,139.3 | 1,239.7 |
| Accommodation | 917.8 | 894.6 | 925.4 |
| **Countries** | | | |
| **All countries** | **11,801.2** | **12,961.5** | **13,255.8** |
| **Canada** | **1,072.3** | **1,094.3** | **1,093.7** |
| **Europe** | **4,775.8** | **4,774.9** | **4,593.5** |
| France | 635.4 | 566.8 | 569.8 |
| Germany | 665.5 | 677.5 | 645.8 |
| Italy | 265.9 | 259.8 | 239.5 |
| Netherlands | 246.4 | 239.2 | 232.3 |
| Spain | 209.0 | 210.7 | 198.1 |
| United Kingdom | 1,304.9 | 1,336.6 | 1,382.2 |

| Industries | 2008 | 2009 | 2010 |
|---|---|---|---|
| **Latin America** | **2,299.7** | **2,518.5** | **2,751.2** |
| Brazil | 501.2 | 546.4 | 590.7 |
| Mexico | 1,106.7 | 1,185.6 | 1,296.3 |
| **Africa** | **211.3** | **227.6** | **243.8** |
| **Middle East** | **119.9** | **127.1** | **135.5** |
| **Asia and Pacific** | **3,322.1** | **4,219.1** | **4,438.1** |
| Australia | 318.3 | 344.0 | 351.8 |
| China | 952.5 | 1,433.2 | 1,541.2 |
| Japan | 581.9 | 611.6 | 552.3 |
| Malaysia | 107.3 | 135.4 | 152.4 |
| Singapore | 133.2 | 153.9 | 157.0 |

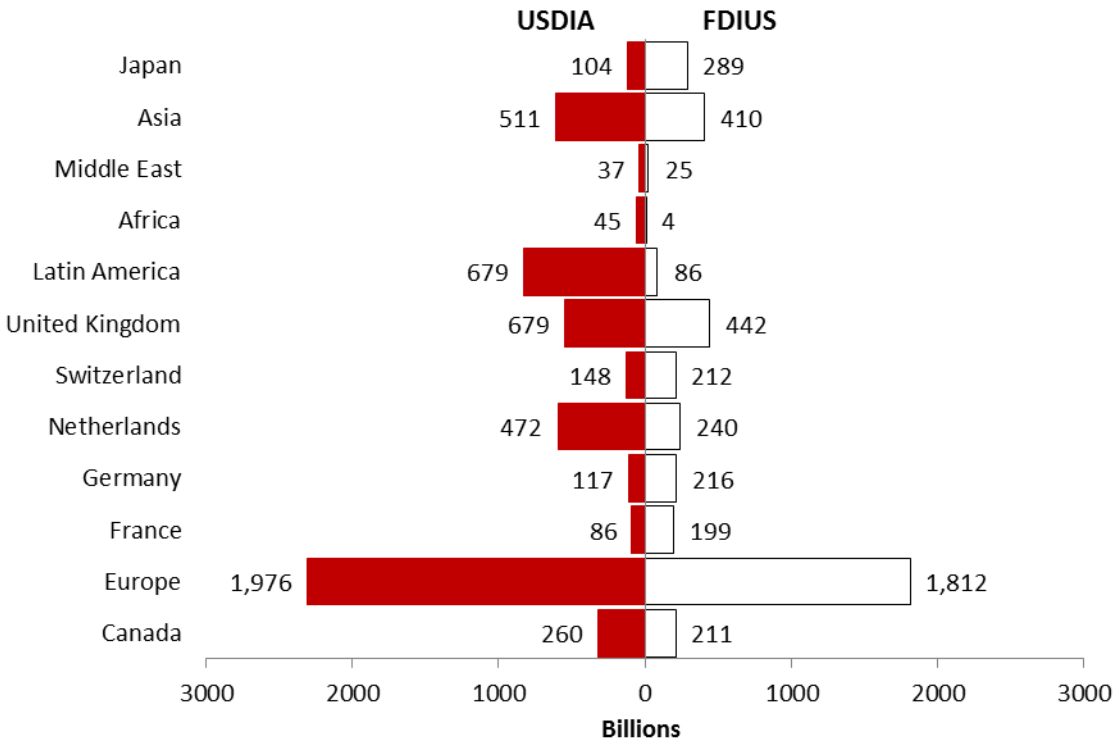
**Source:** Department of Commerce.

By country, over two-thirds of the investments and the employees of U.S. overseas investors are in the most highly developed economies where labor compensation, standards of living, and consumer tastes are most closely comparable to those in the United States. These countries are also the largest foreign direct investors and the largest foreign employers in the United States, as indicated in **Figure 5** and **Figure 6**. U.S. direct investment abroad and employment have been heavily concentrated in Europe since the end of World War II. This investment coincided with the rapid expansion in economic activity that followed WWII and the formation of the European Economic Community (EEC), now the European Union. Initially, U.S. firms wanted to establish a foothold inside the tariff protection created by the formation of the EEC. Access to the European market continues to draw U.S. direct investment. Moreover, with the enlargement of the European Union,[16] the largest share of U.S. direct investment abroad likely will remain focused on this region for some time to come. Nevertheless, from 2008 to 2010, employment by U.S. firms in Europe broadly fell, reflecting the economic recession and sovereign debt crisis. In Asia, particularly in China, Malaysia, and Singapore, affiliate employment grew especially rapidly. In China, for instance, employment over the 2008-2010 period grew by 61% to reach 1.5 million. As a whole, employment by U.S. firms in Asia accounts for one-third of the total employment by U.S. firms abroad.

[16] For additional information, see CRS Report RS21344, *European Union Enlargement*, by Kristin Archick.

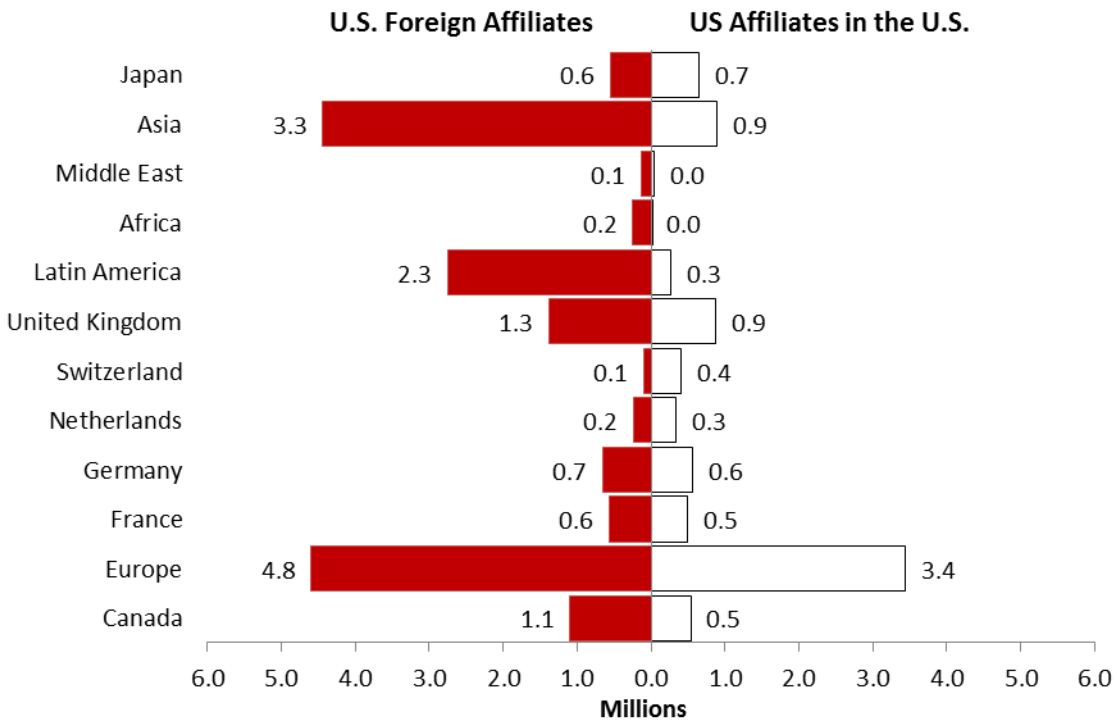
**Figure 5. U.S. Direct Investment Position Abroad and Foreign Direct Investment Position in the United States, Cumulative Position by Country, 2011**

(in billions of dollars)




**Source:** U.S. Department of Commerce

**Figure 6. Employment of U.S. Foreign Affiliates Abroad and Affiliates of Foreign Firms in the U.S., by Country or Region, 2010**




**Source:** U.S. Department of Commerce

Some U.S. observers are concerned that the U.S. economy is losing jobs to developing countries, because U.S. firms are closing plants in the United States and opening plants in countries where wage rates and environmental standards are considerably below those in the United States. The data, however, show no appreciable change in the underlying trend that favors investment and jobs in developed economies. In addition, U.S. foreign affiliates as a whole lost employment in the early 2000s, similar to U.S. parent companies, counter to the concept of firms shifting jobs abroad. Employment losses were mostly concentrated among the highly developed economies of Europe, because their close ties with the U.S. economy made them highly susceptible to the financial crisis and the subsequent slowdown in the U.S. economy. Among the developing countries, U.S. investors have long been attracted to Latin America, likely because of its close proximity to the United States. In 2010 U.S. affiliates in Mexico had 1.3 million employees, third behind affiliates in the China with 1.5 million employees and the United Kingdom with nearly 1.4 million employees. At times, employment associated with U.S. direct investment in Latin America and Asia has increased, while employment in Africa and the Middle East has dropped, leading some observers to conclude that investment and employment among the developed and developing countries represent two relatively independent groups and that little employment is exchanged between them. This proposition would mean that employment shifts occur primarily between affiliated in such areas as Latin American and Asia, and among affiliates in developed countries, primarily within Europe and between Europe and Japan and Canada.

On average, the U.S. economy created about 2 million civilian jobs per year from 1982 to 1992 and about 1.7 million jobs per year from 1992 to 2002. From 2003 to 2007, the economy created an average of more than 2 million jobs per year. In 2008, the economy lost more about 5 million

jobs as a result of the economic recession. From 2009 to 2010, the economy lost about another 800,000 jobs. The foreign affiliates of U.S. parent companies created an average of about 24,000 jobs per year from 1982 to 1992 and about 300,000 jobs per year from 1992 to 2002. From 2005 to 2007, these affiliates created more than 300,000 jobs per year, reflecting the increase in economic activity abroad. This amount dropped to about 100 thousand jobs in 2008, again reflecting the economic recession and financial crisis. These affiliates lost about 100 thousand jobs in 2009, but gained about 2.5 million jobs in 2010. In part, this gain in jobs could be attributed to the stimulus efforts governments in Europe and elsewhere adopted in response to the economic recession that followed the financial crisis. There is no indication from the data, however, how many, if any at all, of the jobs created abroad by U.S. affiliates may have come at the expense of jobs created in the United States by U.S. parent companies.[17] Over both periods, about two-thirds of the jobs that were added were in developed countries. As a result, U.S. foreign affiliates created on average about 100,000 jobs per year in low-cost developing countries during the 1992 to 2007 period, or about 6% of the average number of jobs created by the U.S. economy in a year. The 2008-2010 period, however, brakes from past trends. The financial crisis and the economic recession were centered in the most highly developed economies that had the most highly developed financial markets. As a result, employment among affiliates in Europe dropped, while employment increased among affiliates in Latin America, Africa, the Middle East, and Asia.

# Gross Product

Another concern some observers have expressed about U.S. direct investment abroad is that as U.S. parent companies shift jobs abroad, they also transfer economic production abroad, thereby permanently replacing U.S. domestic production with foreign production. This effect would be partially muted by foreigners investing in the United States. A large share of foreign direct investment in the United States reflects foreign acquisitions of existing U.S. firms. In general, such acquisitions are not characterized as creating new jobs, but they may well sustain U.S. employment and production and potentially prevent job losses.

Over time, there is bound to be some shifting of jobs and economic activities within the U.S. economy and between economies as part of the overall structural changes that occur within such dynamic economies as the U.S. economy. Such shifts in employment would continue to occur even in the absence of foreign investment. In addition, such shifting occurs as a result of greater economic specialization both within countries and between countries. As **Table 6** indicates, U.S. parent companies had a gross product, or total U.S. output, of $2.9 trillion in 2010, representing 68% of the total output of U.S. multinational companies, compared with a gross product of their majority-owned foreign affiliates of $1.2 trillion. As the U.S. economy expanded rapidly in the last half of the 1990s through 2001, U.S. parent companies performed better than their overseas affiliates and increased their share of total multinational company gross product from 74.6% in 1995 to 76% in 2001. Since then, however, output among U.S. parent companies grew at a slower pace than did that of their majority-owned foreign affiliates, which had grown to account for nearly 30% of total output of the U.S. multinational companies in 2007. Since then, the foreign affiliates' share of total firm output has remained fairly stable at 33.6%.

[17] See the following for availability of information on job loss associated with outsourcing: CRS Report RL30799, *Unemployment Through Layoffs and Offshore Outsourcing*, by Linda Levine.

**Table 6. Gross Product of U.S. Parent Companies and Their Majority-Owned Foreign Affiliates**

| | Total Gross Product | Parent Companies | Majority-Owned Foreign Affiliates | Parent Companies | Majority-Owned Foreign Affiliates |
|---|---|---|---|---|---|
| | (billions of dollars) | | | (percent shares) | |
| 1994 | $1,717.5 | $1,313.8 | $403.7 | 76.5% | 23.5% |
| 1995 | 1,831.0 | 1,365.5 | 465.6 | 74.6% | 25.4% |
| 1996 | 1,978.9 | 1,480.6 | 498.3 | 74.8% | 25.2% |
| 1997 | 2,094.3 | 1,573.5 | 520.9 | 75.1% | 24.9% |
| 1998 | 2,100.8 | 1,594.5 | 506.3 | 75.9% | 24.1% |
| 1999 | 2,480.7 | 1,914.3 | 566.4 | 77.2% | 22.8% |
| 2000 | 2,748.1 | 2,141.5 | 606.6 | 77.9% | 22.1% |
| 2001 | 2,478.1 | 1,892.4 | 585.7 | 76.4% | 23.6% |
| 2002 | 2,460.4 | 1,858.8 | 601.6 | 75.5% | 24.5% |
| 2003 | 2,655.9 | 1,958.1 | 667.8 | 73.7% | 26.3% |
| 2004 | 2,991.7 | 2,173.5 | 818.3 | 72.6% | 27.4% |
| 2005 | 3,185.2 | 2,303.1 | 882.1 | 72.3% | 27.7% |
| 2006 | 3,538.1 | 2,536.9 | 1,001.2 | 71.7% | 28.3% |
| 2007 | 3,706.4 | 2,588.8 | 1,117.6 | 69.8% | 30.2% |
| 2008 | 3,608.1 | 2,396.3 | 1,211.9 | 66.4% | 33.6% |
| 2009 | 3,593.0 | 2,453.4 | 1,139.6 | 68.3% | 33.6% |
| 2010 | 4,127.2 | 2,885.9 | 1,241.3 | 68.3% | 33.6% |

**Source:** Department of Commerce.

## U.S. Multinational Companies

While U.S. MNCs used their economic strengths to expand abroad during the 1980s and 1990s, the U.S.-based parent firms lost market shares at home, in large part due to corporate downsizing efforts to improve profits.[18] U.S. MNC parent companies' share of all U.S. business gross domestic product (GDP)—the broadest measure of economic activity—declined from 32% to 25% from 1977 to 1989.[19] This share stayed fairly constant at about 22% through much of the 1990s until 1998, when the parent companies experienced a short boost in their share of U.S. GDP as they benefitted from the rapidly growing U.S. economy. The economic slowdown in 2002 affected the parent companies disproportionately, as they lost shares of GDP. During the period from 1989 to 1998, these MNC parent companies increased their share of all U.S. business GDP in the services sector, which rose from 6% to 8% of U.S. GDP. The MNC share of all other industries rose from 16% to 18% during the 10-year period, but they lost shares in the

[18] Mataloni, Raymond J. Jr., and Lee Goldberg. "Gross Product of U.S. Multinational Companies, 1977-91." *Survey of Current Business*, February 1994. P. 42-63.

[19] Mataloni, Operations of U.S. Multinational Companies. p. 31.

manufacturing sector (from 62% to 58%) at a time when the U.S. manufacturing sector as a whole was shrinking as a share of national GDP (from 20% to 16%).[20]

U.S. parent companies continue to place the largest share of their annual investments in developed countries, primarily in Western Europe, as indicated in **Table 7**. This tendency increased from 1999 to 2003 when U.S. direct investment shifted even more in favor of the richest developed economies: the share of U.S. direct investment going to developing countries fell from 28% in 1999 to 25% in 2003. In the 2005 through 2009 period, investment flows were somewhat erratic due to a one-time tax provisions in 2005 that sharply reduced U.S. direct investment abroad that year and the following year as flows returned to their historical trend, and the economic recession in 2008 and 2009.[21] Investment outflows increased again in 2010 and in 2011, when U.S. direct investment abroad increased by 30% over the amount invested in 2010. In particular, U.S. direct investment abroad increased in Latin America, where economies were not directly affected by the financial crisis, and in Canada and Western Europe.

During the five-year period from 2005 to 2010, flows to Asia increased as a share of total U.S. direct investment abroad, primarily due to a large increase in direct investment in China. Shifts in U.S. direct investment abroad over the last decade reflect fundamental changes that occurred in the U.S. economy during the period. As investment within the U.S. economy shifted from extractive, processing, and manufacturing industries toward high technology services and financial industries, U.S. investment abroad mirrored those changes. Consequently, U.S. direct investment abroad focused less on the extractive, processing, and basic manufacturing industries in developing countries and more on high technology, finance, and services industries located mostly in highly developed countries with advanced infrastructure and communications systems.[22] Investments in the finance and services sectors grew twice as fast, on the whole, as direct investment abroad overall during the 1996-2000 period. Within the manufacturing sector, food processing, chemicals, and metals lagged in growth behind the industrial machinery, electronic, and transportation sectors.

**Table 7. U.S. Direct Investment Abroad; Investment Outflows for Selected Regions and Countries, 2007-2011**

(millions of dollars)

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| **All Countries** | $393,518 | $308,296 | $266,955 | $304,399 | $396,656 |
| **Canada** | 22,331 | 12,293 | 10,170 | 28,398 | 40,410 |
| **Europe** | 239,803 | 178,415 | 159,387 | 186,857 | 224,295 |
| France | 12,010 | -341 | 1,753 | 2,417 | 77 |
| Germany | 9,569 | 775 | 7,037 | 5,084 | 8,347 |
| Ireland | 15,506 | 31,795 | 23,025 | 27,946 | 30,539 |
| Italy | 3,704 | 2,241 | 2,001 | 81 | 450 |

[20] Ibid., p. 31.

[21] A drop in U.S. direct investment abroad in 2005 reflected actions by U.S. parent firms to reduce the amount of reinvested earnings going to their foreign affiliates for distribution to the U.S. parent firms in order to take advantage of one-time tax provisions in the American Jobs Creation Act of 2004 (P.L. 108-357).

[22] CRS Report RS21118, *U.S. Direct Investment Abroad: Trends and Current Issues*, by James K. Jackson.

| | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---|---|---|---|---|
| Luxembourg | 24,535 | 27,079 | 23,074 | 48,833 | 49,804 |
| Netherlands | 109,097 | 38,639 | 59,475 | 47,300 | 55,685 |
| Spain | 8,758 | 4,749 | 359 | 2,027 | 5,976 |
| Sweden | 2,364 | 4,056 | -10,128 | -6,337 | 2,405 |
| Switzerland | 7,365 | 25,168 | 16,413 | -817 | 11,866 |
| United Kingdom | 21,978 | 29,615 | 27,638 | 47,087 | 36,799 |
| **Latin America** | 55324 | 63213 | 60,596 | 44,533 | 84,540 |
| Mexico | 9,798 | 4,571 | 8,191 | 414 | 8,310 |
| Bermuda | 14,785 | 7,824 | 29,963 | 16,359 | 26,332 |
| U.K. Islands | 12,640 | 25,914 | 7,020 | 9,013 | 16,147 |
| **Africa** | 4,490 | 3,837 | 9,447 | 9,281 | 5,127 |
| Egypt | 996 | 1,617 | 1,525 | 1,802 | 2,335 |
| South Africa | 1,000 | 306 | 410 | 779 | 722 |
| Other | 3,090 | 142 | 2,510 | 6,588 | 2,106 |
| **Middle East** | 4,070 | 3,716 | 4,870 | -276 | 846 |
| Israel | 554 | 536 | -440 | 301 | -46 |
| Saudi Arabia | 560 | 341 | 3,084 | -159 | 792 |
| United Arab Emirates | 255 | 286 | 1,022 | 279 | 1,104 |
| Qatar | 2,701 | 2,554 | 1,204 | -697 | -1,004 |
| **Asia and Pacific** | 67,500 | 46,821 | 22,484 | 35,606 | 41,439 |
| Australia | 10,122 | 10,158 | 2,779 | 18,285 | 13,684 |
| China | 5,243 | 15,971 | -8,526 | 7,089 | -1,663 |
| Hong Kong | 11,533 | -325 | 8,091 | -21,467 | 4,834 |
| India | 3,915 | 4,310 | 2,017 | 5,735 | 2,455 |
| Japan | 15,721 | -1,656 | 9,602 | 1,386 | 5,062 |
| Korea | 821 | 2,157 | 3,010 | 2,678 | 4,305 |
| Singapore | 14,003 | 8,572 | 4,314 | 13,091 | 7,571 |

**Source:** Department of Commerce.

**Note:** A negative value can arise from a number of sources, primarily as a result of the repatriation of profits to the parent company.

## Foreign-Owned Firms

The performance of foreign-owned establishments, on average, presents a mixed picture when compared with their U.S.-owned counterparts. Historically, foreign-owned firms operating in the United States have had lower rates of return, as measured by return on assets, than U.S.-owned firms, although the gap between the two groups appears to have narrowed over time. According to the Bureau of Economic Analysis, this narrowing of the gap in the rate of return appears to be related to age effects, or the costs associated with acquiring or establishing a new business that

can entail startup costs that disappear over time and market share.[23] By other measures, foreign-owned manufacturing firms appear to be outperforming their U.S. counterparts.[24]Although foreign-owned firms account for less than 3% of all U.S. manufacturing establishments, they have had six times more value added on average and seven times higher value of shipments than other manufacturing establishments. The average plant size for foreign-owned firms is much larger—six times—than for other U.S. firms, on average, in similar industries. This difference in plant size apparently rises from an absence of small plants among those that are foreign-owned. As a result of the larger plant scale and newer plant age, foreign-owned firms paid wages on average that were 60% higher than other U.S. manufacturing firms, had 40% higher productivity per worker, and 58% greater output per worker than the average of comparable U.S.-owned manufacturing plants. Foreign-owned firms also display higher capital intensity in a larger number of industries than all U.S. establishments.

Differences between foreign-owned firms and all U.S. firms should be viewed with some caution. First, the two groups of firms are not strictly comparable: the group of foreign-owned firms comprises a subset of all foreign firms, which includes primarily very large firms; the group of U.S. firms includes all firms, spanning a broader range of sizes. Secondly, the differences reflect a range of additional factors, including the prospect that foreign firms which invest in the United States likely are large firms with proven technologies or techniques they have successfully transferred to the United States. Small foreign ventures, experimenting with unproven technologies, are unlikely to want the added risk of investing overseas. Foreign investors also tend to opt for larger scale and higher capital-intensity plants than the average U.S. firm to offset the risks inherent in investing abroad and to generate higher profits to make it economical to manage an operation far removed from the parent firm.

# Cyclical vs. Structural Changes

Some observers are concerned that U.S. direct investment abroad is an outlet for U.S. multinational companies that are outsourcing jobs overseas, or that they are shuttering plants in the United States and shifting plants and jobs to their affiliates abroad. Indeed, selected anecdotal evidence suggests that there are instances in which some firms may have shifted part of their operations abroad, but it is not clear if these incidences represent isolated activities or are part of a general pattern of behavior. It also is not clear if U.S. firms have invested abroad in order to shift their operations from the United States to a foreign location for export back to the United States, or if they have invested abroad primarily to serve the foreign market. The Bureau of Economic analysis (BEA) of the Department of Commerce collects and publishes an extensive amount of data on U.S. parent companies and their foreign affiliates. These data, however, are not collected in order to capture the outsourcing phenomenon. Indeed, no data are collected specifically to capture the closing of a production facility in the United States and the offsetting opening of a facility abroad.

Given the lack of data that tie directly the closure of a plant in the United States with the opening of a plant abroad, one approach to capturing indirectly the outsourcing phenomenon is by

[23] Mataloni, Raymond J. Jr., An Examination of the Low Rates of Return of Foreign-Owned U.S. Companies, *Survey of Current Business*, March 2000, p. 55.

[24] *Foreign Direct Investment in the United States, Establishment Data for 2002*, Bureau of Economic Analysis, June 2007.

examining other data, such as trade, output, and employment of U.S. multinational firms across various industries and different time periods for evidence of outsourcing. If U.S. multinational firms are shifting parts of their activities abroad to foreign affiliates, such outsourcing activities would be expected to appear as a direct substitute for U.S. domestic output and employment by the foreign affiliates, or there would be some direct relationship between a decrease in the domestic activities of the parent company and an increase in the activities of foreign affiliates. Such shifts in economic activity between parent firms and foreign affiliates would be expected to signal competitive weaknesses in the location of the parent firm and, therefore, favor a change in production location. In addition, such shifts in production between parent firms and foreign affiliates would be expected to occur during periods of economic downturn, when parent firms would be expected to reduce output and employment, and during periods of economic growth, when firms in growing industries would be expected to increase output and employment.

During periods of economic recession, or a slowdown in the rate of economic growth, firms across a broad range of industrial sectors generally reduce output and employment. On the other hand, firms that reduce their operations and employment at home during periods of healthy economic growth may well do so as a result of competitive pressures that reflect long-term decline of the sector and structural changes in the underlying fundamentals of the economy. In particular, the U.S. economy has been shifting away from labor-intensive activities toward capital-intensive activities, including higher-wage knowledge-intensive activities. As a result of these structural changes, firms can respond to the economic pressures in a number of different ways in order to remain competitive; some firms may respond by shifting part or all of their operations abroad. To the extent that firms respond to competitive or structural changes in the economy by outsourcing abroad, it seems reasonable to expect that an expansion in the operations of a foreign affiliate would occur simultaneously with a contraction in the operations of the parent company, or that economic activity in the foreign affiliate would be a substitute for economic activity by the parent company.

In an advanced economy such as the U.S. economy, there is always some amount of churning that occurs as some industries grow and others decline. Indeed, most economists agree that in order for some sectors of the economy to expand, other areas of the economy must shrink as capital and labor are shifted from declining to growing sectors of the economy. Such structural changes are different from cyclical changes in the economy that represent short-term expansions and contractions in the economy. Structural changes can occur in industries that are maturing and experiencing economies of scale and improvements due to technological improvements, or in declining industries that are shedding jobs and capital.

It is not always possible to tell which stage of economic change specific sectors are experiencing, but such a distinction is important in order to understand how direct investment is affecting the economy, and for determining what, if any, legislative prescription would be appropriate. In general, industrial sectors in decline as a result of structural changes in the economy would be expected to experience a persistently lower annual rate of growth and overall decline in employment on average compared with the average of industries in the economy through periods of economic expansion and contraction, whereas industries not in structural decline would experience such losses only during periods of economic contraction.

To assess this general proposition, detailed data published by the BEA on a broad range of industries represented by U.S. parent companies and their foreign affiliates are used to compare differences in performance between U.S. parent companies and their foreign affiliates during periods of economic expansion and contraction. The data in **Table 8** represent average annual

rates of change in gross production and employment across a range of industrial sectors during three time periods, representing one period of a relatively faster rate of growth and two periods of relatively slower rate of growth, including the economic recession that followed the 2008-2009 financial crisis. The data are compared to determine if there is a discernible pattern in the way U.S. parent companies have shifted production or jobs to their foreign affiliates in the 2000 to 2002 period and the 2006-2010 period, when economic growth slowed in the United States, that is different from what occurred during the 2002-2006 period when the rate of growth in the U.S. economy was relatively strong. The data are then reviewed to determine if there are perceived trends in the shifting of production and employment from parent companies to foreign affiliates that can be attributed to a broad outsourcing phenomenon that is arising from structural changes in the economy or to cyclical changes that are associated with the business cycle. During periods of cyclical change, such as an economic recession, a large number of firms in various industrial sectors can be expected to experience a slower rate of economic growth and a loss of employment. In contrast, firms experiencing structural changes would be expected to experience a mixed performance, with some firms gaining in output and employment while others lose output and employment.

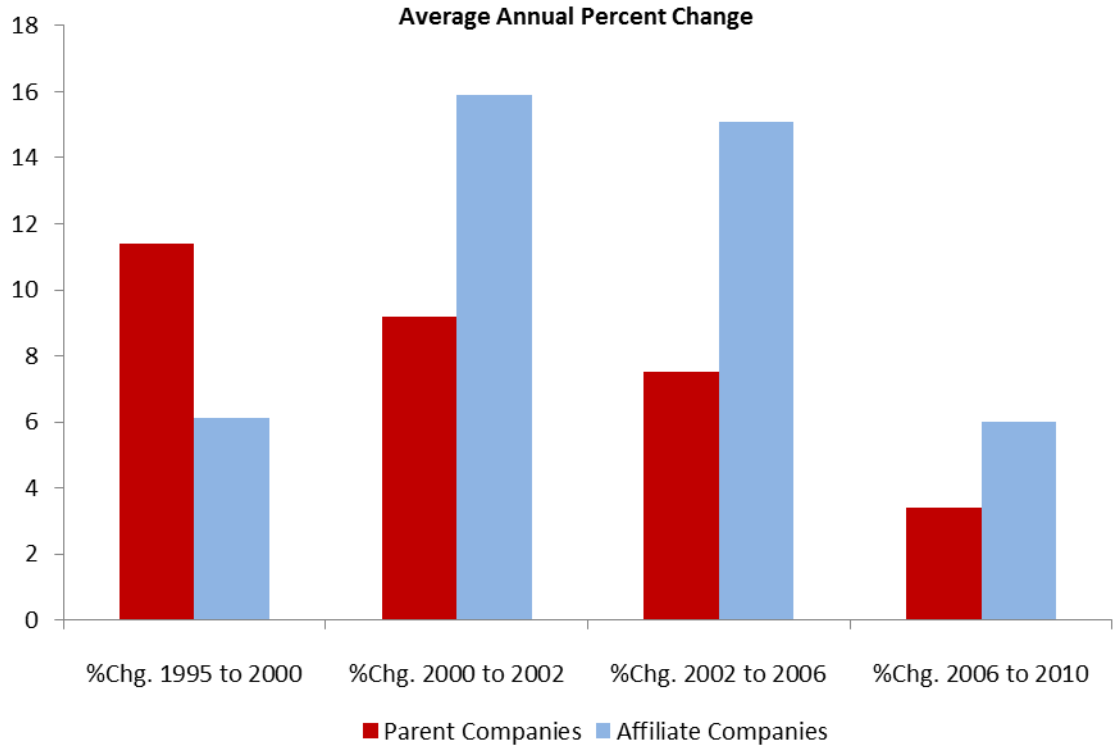
The data in **Table 8** compare two periods of slow economic growth—2000-2002 and 2006-2010—with the economic expansion in the 2002-2006 period. In the first and third periods, the U.S. economy grew at an average annual rate of 1.4% per year and 0.2%, respectively and at an average annual rate of growth of 3.0% during the second period. Economic sectors that are experiencing long-term structural changes would be expected to perform at lower rates during all three periods, while sectors not subject to structural change would be expected to resume a relatively higher rate of growth during periods of economic expansion. During the period between 2000 and 2002, the U.S. economy grew at an average annual rate of 1.4% and employment grew at an average annual rate of 0.8%. At the same time, output by U.S. parent companies outpaced the performance of the U.S. economy as a whole and increased by an average annual rate of 9%; output among the foreign affiliates increased by an average annual rate of 16%. Despite this strong growth performance, employment among the parent companies grew by an average annual rate of only 1.0% and by an average annual rate of 0.2% among the affiliates, marking the jobless recovery of the early 2000s. Most of the sectors that experienced negative rates of growth were in the manufacturing, retail trade, and wholesale trade industries.

In the next phase, the U.S. economy grew at an annual average rate of 3.0% in the 2002-2006 period and employment grew at an average annual rate of 1.5%. U.S. parent companies, however, increased their output by an average annual rate of 7.5%, more than double the rate for the economy as a whole, but lower than during the 2000-2002 period, and their foreign affiliates increased output by an average annual rate of 15.5% as indicated in **Figure 7** and **Figure 8**. During the same four-year period, parent companies expanded their employment by an average annual rate of 0.5%, while their foreign affiliates expanded employment by an average annual rate of 5.4%. Employment among the parent companies continued to fall in most manufacturing sectors, while the foreign affiliates fared somewhat better, but experienced similar declines in employment in the manufacturing sector. Above average increases in the average annual rate of growth in employment in oil and gas extraction and in wholesale trade were among the few bright spots for parent companies during this period. By contrast, the foreign affiliates experienced strong growth in employment in the real estate, retail trade, and services sectors.

In the 2006-2010 period, when the U.S. economy barely managed a positive average annual rate of growth, parent companies and their foreign affiliates experienced positive average annual rates of growth of 3.4% and 6.0%, respectively. Moreover, both parent firms and their foreign affiliates

posted positive rates of growth in employment over the period, in contrast to the drop in civilian employment in the United States. Even in the electronic equipment sector, where output among U.S. parents and their foreign affiliates increased by 26.0% and 24.2%, respectively, during the 2006-2010 period, employment among parent firms fell at an average annual rate of -1.8% and increased at an average annual rate of 5.4% among the foreign affiliates. These trends make it difficult to detect a general shift of jobs abroad by U.S. parent companies. U.S. parent firms, or the parent firms of multinational corporations, outperformed the U.S. economy as a whole, but also experienced the negative effects of the economic slowdown during the 2006-2010 period. During the three periods examined, multinational firms outperformed the U.S. economy as a whole in terms of average annual rates of growth. In contradiction to the expected behavior of firms engaging in outsourcing, both employment and output of the parent firms and the foreign affiliates generally seem to follow the same pattern. This partial synchronization may reflect the overwhelming impact the U.S. economy has on the global economy due to a growing network of economic and financial ties. It also makes it difficult to observe a general, or broad-based, outsourcing effect from parent firms to foreign affiliates. Parent firms that are active in industrial sectors that perform poorly during economic expansions or contractions also seem to have foreign affiliates that perform generally the same, indicating that structural changes in the U.S. economy may mirror similar changes that are taking place in other advanced economies where much of U.S. direct investment abroad is concentrated.

**Figure 7. Average Annual Percent Change in Gross Product of U.S. Parent Companies and Their Foreign Affiliates, Selected Periods**



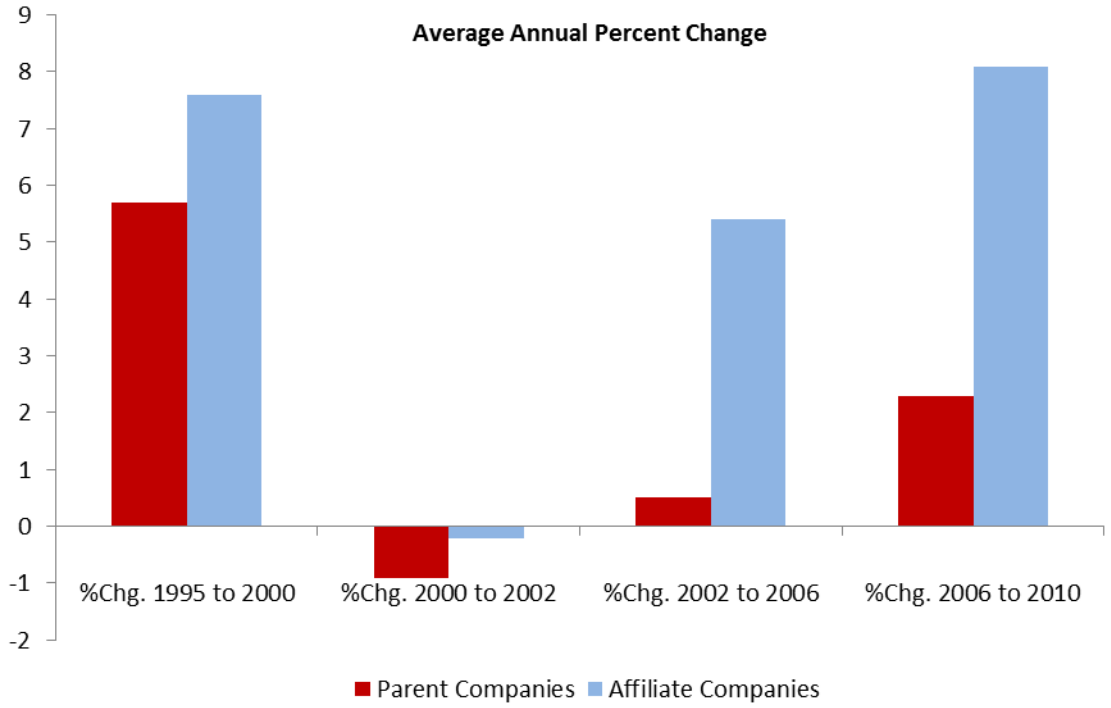

**Source:** U.S. Department of Commerce

**Table 8. Average Annual Percent Change in Gross Product and Employment of U.S. Parent Companies and Their Foreign Affiliates, Selected Industries, Selected Periods**

| | Average Annual Percent Change 2000 to 2002 | | | | Average Annual Percent Change 2002 to 2006 | | | | Average Annual Percent Change 2006 to 2010 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Gross Product | | Employment | | Gross Product | | Employment | | Gross Product | | Employment | |
| | Parents | Affiliates | Parents | Affiliates | Parents | Affiliates | Parents | Affiliates | Parents | Affiliates | Parents | Affiliates |
| **All industries** | 9.2 | 15.9 | -0.9 | -0.2 | 7.5 | 15.1 | 0.5 | 5.4 | 3.4 | 6.0 | 2.3 | 8.1 |
| Oil and gas extraction | 50.6 | 378.0 | 11.0 | -4.0 | 17.3 | 30.9 | 13.5 | 1.9 | 2.0 | 7.5 | 2.2 | -0.4 |
| **Manufacturing** | 6.8 | 2.3 | -2.7 | -2.3 | 5.2 | 11.6 | -2.5 | 2.5 | 1.8 | 4.0 | -0.3 | 5.3 |
| Food and kindred products | 11.4 | 29.8 | -2.0 | -0.8 | 4.2 | 9.2 | -2.9 | 3.0 | 10.0 | 6.9 | 6.3 | 5.3 |
| Chemicals and allied products | 6.5 | 1.8 | -1.9 | -2.7 | 7.3 | 9.7 | 0.0 | 0.9 | 1.2 | 6.8 | -1.8 | 3.9 |
| Primary and fabricated metals | 5.9 | 13.6 | -3.1 | -1.7 | 3.7 | 14.8 | -5.1 | -1.3 | -6.9 | -2.4 | -2.3 | 0.3 |
| Computer and office equipment | 4.6 | 0.2 | -4.5 | -0.8 | 0.9 | 11.4 | -2.1 | 4.7 | 10.1 | 6.3 | -0.9 | 1.5 |
| Electronic equipment | -2.1 | -9.5 | -4.7 | -5.1 | 15.5 | 7.5 | 2.5 | 0.5 | 26.0 | 24.2 | -1.8 | 5.4 |
| Transportation equipment | 3.0 | 19.5 | -3.8 | 0.3 | 5.7 | 9.7 | -1.8 | 0.6 | 0.0 | -2.6 | -2.7 | 2.0 |
| Motor vehicles and equipment | 7.7 | 4.7 | 0.8 | -2.7 | -1.6 | 8.2 | -5.4 | 0.1 | 5.2 | -2.6 | 0.1 | 1.4 |
| **Wholesale trade** | -6.9 | 7.4 | -3.7 | NA | 12.5 | 9.0 | 10.4 | 0.6 | 7.1 | -3.8 | -1.3 | 0.9 |
| **Information** | 13.8 | 110.7 | 3.8 | -2.1 | 5.5 | 15.9 | 1.7 | 2.5 | 1.4 | 2.9 | 1.3 | 2.1 |
| **Finance and Insurance** | 8.8 | 19.2 | -0.4 | -11.8 | 11.7 | 14.9 | -4.1 | 3.1 | 1.6 | 6.4 | -2.8 | 13.8 |
| **Real estate** | 6.4 | 29.7 | -0.3 | 13.0 | 10.4 | 71.3 | 0.0 | 18.7 | 5.7 | 4.3 | 1.7 | 7.8 |
| **Retail trade** | 8.0 | 2.3 | -3.2 | 1.8 | 5.0 | 18.5 | 1.4 | 11.8 | 10.1 | 5.0 | 0.1 | NA |
| **Services** | 50.2 | 29.6 | 17.5 | 1.9 | 11.6 | 19.0 | 1.5 | 14.8 | 4.4 | 34.6 | -2.4 | NA |

**Source:** Data are from the U.S. Department of Commerce; percent changes developed by CRS.

**Figure 8. Average Annual Percent Change in Employment of U.S. Parent Companies and Their Foreign Affiliates, Selected Periods**




**Source:** U.S. Department of Commerce

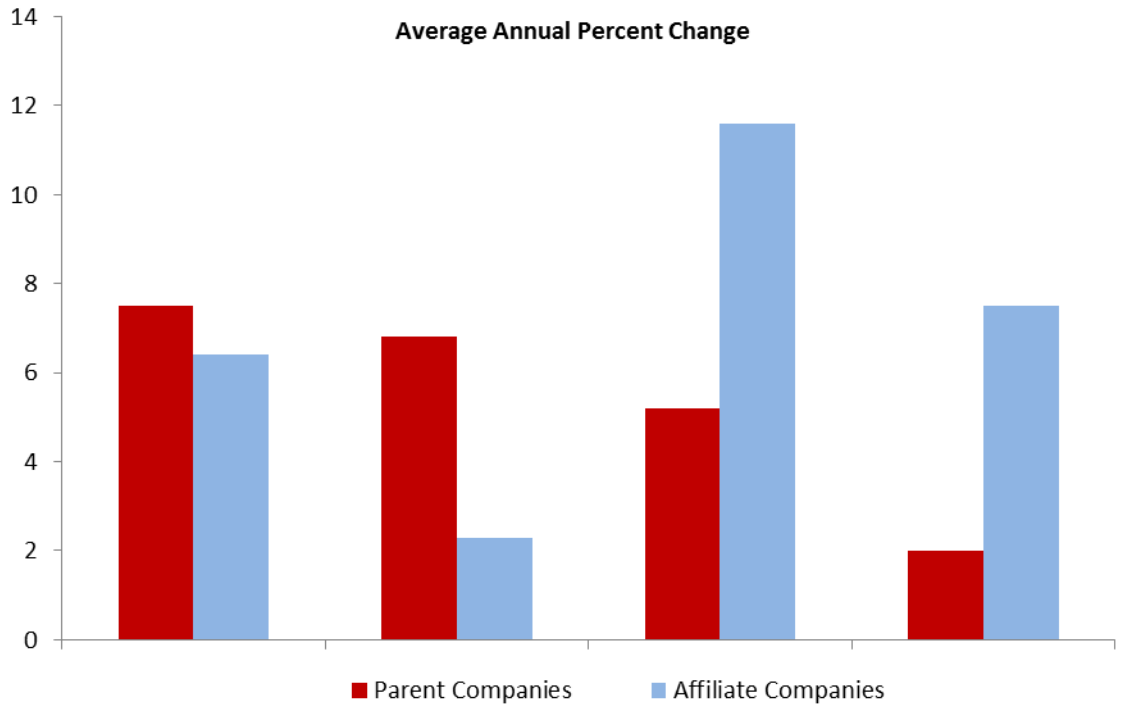
The average annual rate of growth in output in the manufacturing sector was positive for both parent companies and their foreign affiliates over all three periods, although the foreign affiliates outperformed their parent companies with a faster average annual rate of growth in the second and third periods as indicated in **Figure 9** and **Figure 10.** Over the three periods, however, the U.S. parent companies experienced an overall decline in employment in manufacturing from 9.2 million in 2000 to 6.9 million in 2010. During the same 10-year period, employment in the manufacturing sector among the foreign affiliates increased from 4.4 million to 5.5 million. The financial crisis and economic recession not only reduced consumer spending, but caused a tightening in credit for consumers and firms and had a noticeable negative impact on the output of parent firms in the manufacturing sector.

During the 2006-2010 period, output among the parent companies increased by an average annual rate of 1.8%, about half that of their foreign affiliates and more than half that experienced in the 2002-2006 period of relatively stronger growth in output. The decline in manufacturing employment among parent companies reflects the overall loss in employment in the U.S. manufacturing sector, which continued to experience structural changes and losses in employment, despite a robust increase in productivity. In contrast, employment among the foreign affiliates increased at an average annual rate of 1%, commensurate with their average annual rate of growth in output.

During the 2000-2002 period, when the pace of U.S. economic growth quickened, gross product in the manufacturing sector among parent companies grew at an average annual rate of 6.8%,

while employment fell at an average annual rate of 2.7%, likely reflecting the effects of the advanced stages of structural retrenchment that had already occurred. In comparison, U.S.-owned foreign manufacturing affiliates experienced a 2.7% increase in average annual gross product, but an average annual decrease in employment of 2.3%. During the recovery of 2002 to 2006, however, gross product among U.S. parent manufacturing companies increased at an average annual rate of 5.2%, while the foreign affiliates experienced an average annual increase of 11.6%. Despite this recovery in output, U.S. parent companies continued to experience a loss of manufacturing jobs, while the foreign affiliates expanded their employment rolls by an average annual rate of 2.5%.

**Figure 9. Average Annual Percent Change in Manufacturing Gross Product of U.S. Parent Companies and Their Foreign Affiliates, Selected Periods**

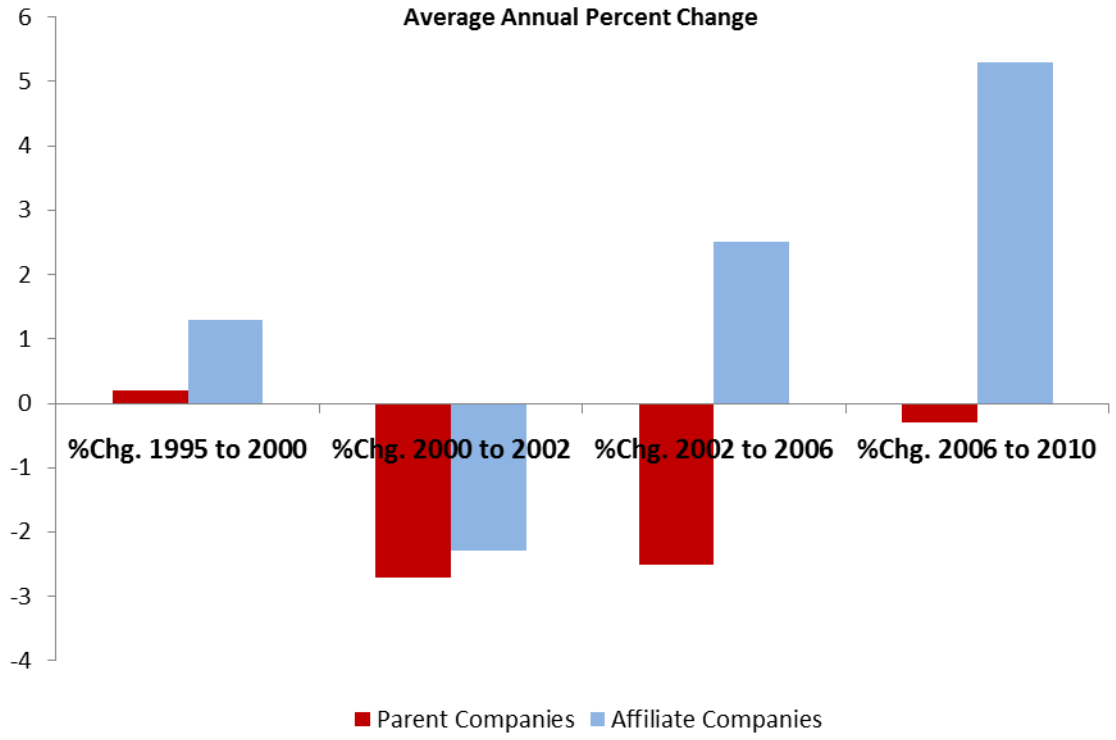



**Source:** U.S. Department of Commerce

In other major industries, the results are mixed. The impact on wholesale trade shows the impact of the economic slowdown in the 2000 to 2002 period. In the 1995 to 1998 period, as the U.S. economy expanded, gross product in the wholesale trade sector among parent companies grew at an average annual rate of 26.6% and employment grew at an average annual rate of 16.6%. Among the foreign affiliates in the wholesale trade sector, gross product increased at an average annual rate of 1.2%, but employment increased at an average annual rate of 32.9%. In the 2000 to 2002 period, when the rate of economic growth had slowed, gross product among parent companies fell at an average annual rate of 6.9%, while employment also fell. Among the foreign affiliates, gross product increased at an average annual rate of 7.4. In the 2002 to 2006 period, however, both U.S. parent companies and their foreign affiliates experienced a resurgence in the average annual rate of growth in the wholesale trade sector (12.5% and 9.0%, respectively); employment grew at a much slower average annual rate among the parent companies (10.4%) than among the foreign affiliates (0.6%). In the 2006-2010 period, output increased at a far more

robust pace for parent firms than foreign affiliates (7.1% to-3.8%, respectively), but employment fell among the parent firms and increased among the foreign affiliates (-1.3% and 0.9%, respectively).

**Figure 10. Average Annual Percent Change in Manufacturing Employment of U.S. Parent Companies and Their Foreign Affiliates, Selected Periods**




**Source:** U.S. Department of Commerce

Finance, a sector where the United States is generally believed to have a competitive edge, shows the impact of the financial crisis on the industry. In the 1995-1998 period, gross product among U.S. parents in finance grew at an average annual rate of 16.7% and employment expanded by 3.9%. Affiliates in finance experienced similarly robust growth: gross product increased at an average annual rate of 20.4% and employment grew at an average annual rate of 9.58% as U.S. finance firms used their expertise to capture market shares abroad. The finance sector was affected by the slower growth in the economy in the 2000 to 2002 period, as average annual gross product among parent companies grew by 8.8%, compared with an increase of 19.2% for foreign affiliates. During the same period, employment among U.S. parent firms in the finance sector fell at an average annual rate of -0.4%, while employment among the affiliates fell at an average annual rate of -11.8%. The response during the recovery period, 2002 to 2006, by both the U.S. parents and the foreign affiliates is unique: gross product among U.S. parents rose at an average annual rate of 11.7% and employment fell at an average annual rate of -4.1%; gross product among the foreign affiliates grew at an average rate of 14.9% and employment grew by 3.1%, likely reflecting the differential effects of the financial crisis on American, European, and Asian finance firms. During the latest period, 2006-2010, the output in the finance sector by parent companies increased at an annual average rate of 1.6%, compared with the foreign affiliates, where output grew at an average annual rate of 6.4%. At the same time, employment among U.S. parent companies fell at an average annual rate of -2.8%, but increased among the foreign

affiliates at a rate of 13.8%. This difference in the impact of the financial crisis reflects the impact of the crisis, which initially affected U.S.-based firms disproportionately.

In 1999, the Bureau of Economic Analysis changed the composition of industries in its survey to include more high-tech and service sectors. Twenty of these sectors are listed in **Table 9**, with data for the 2002 to 2006 period and for the 2006 to 2010 period. During the first period, average annual gross product by parent companies rose in 13 of the sectors, reflecting the higher overall rate of economic growth during the period. In comparison, the foreign affiliates experienced positive average annual rates of growth in 17 sectors. During the same period, the parent companies experienced a negative average annual rate of growth in employment in 12 sectors, while the foreign affiliates experienced negative average annual rates of growth in five sectors. In the 2006-2010 period, when the rate of economic growth slowed generally, U.S. parent companies and their foreign affiliates experienced a negative average annual rate of growth in only two sectors. In addition, both the parent companies and their foreign affiliates experienced negative rates of growth in employment in few of the high-tech and services sectors.

These and the preceding data offer little support for the concept that there is a broad rush by U.S. multinational firms to close down plants in the United States and replace them with plants operated abroad by a foreign affiliate. In part this lack of a discernible pattern may reflect the growth in value chains where non-equity investments offer alternatives to traditional equity investments and, thereby, blunt the outsourcing phenomenon. The data also indicate that U.S. parent companies and their foreign affiliates often experience economic events in similar ways, rather than as substitutes so that outsourcing abroad by a parent firms is not always the first option.

**Table 9. Changes in Gross Product and Employment Among U.S. Parent Companies and Their Foreign Affiliates for Selected Industries**

| | 2002 to 2006 | | | | 2006 to 2010 | | | |
|---|---|---|---|---|---|---|---|---|
| | Average Annual Percent Change | | | | Average Annual Percent Change | | | |
| | Gross Product | | Employment | | Gross Product | | Employment | |
| | Par. | Affl. | Par. | Affl. | Par. | Affl. | Par | Affl. |
| Computers and electronic products | 4.6% | 0.2% | -4.4% | -0.8% | 14.5% | 9.3% | -1.8% | 3.0% |
| Computers and equipment | -2.1 | -9.5 | -4.7 | -5.1 | 14.8 | 38.1 | -3.5 | 10.9 |
| Communications equipment | -5.8 | -0.2 | -7.7 | 5.1 | 9.0 | -7.1 | -15.2 | NA |
| Audio and video equipment | -1.6 | 27.7 | -6.4 | NA | NA | 3.3 | NA | NA |
| Semiconductors and components | 32.0 | 12.6 | -4.2 | -1.1 | 24.5 | -1.7 | -1.4 | 4.1 |
| Navigational and other instruments | 3.2 | 0.4 | -1.1 | 5.3 | 9.0 | 6.3 | 8.0 | 12.2 |
| Magnetic and optical media | -12.7 | 52.9 | -12.7 | NA | NA | -8.5 | NA | NA |
| Professional services | 12.0 | 11.5 | 4.4 | 8.1 | 18.2 | 5.9 | 7.2 | 14.8 |
| Architectural and engineering serv. | 20.6 | 30.5 | 10.7 | 2.9 | 27.4 | 9.8 | 13.6 | 23.2 |
| Computer systems design | 11.3 | 4.5 | 2.4 | 16.0 | 12.6 | 4.5 | 5.8 | 17.5 |
| Management and consulting | -5.2 | 21.9 | -10.0 | 12.2 | 10.7 | 8.6 | 9.7 | NA |
| Advertising and related services | 0.2 | 10.0 | -2.4 | -7.1 | 9.1 | -9.5 | 0.5 | 1.1 |
| Other | 23.1 | 56.9 | 12.8 | 6.1 | 26.7 | 18.1 | 7.4 | NA |
| Mang. of nonbank companies | 412.4 | -82.3 | 113.9 | -9.8 | -2.7 | 18.3 | -41.3 | -10.6 |
| Administrative support | 15.8 | 40.1 | 5.5 | 13.4 | 6.5 | 0.3 | -0.4 | NA |
| Health care and social assistance | -1.9 | 11.4 | -8.8 | 0.7 | 12.7 | 62.4 | 19.6 | 76.9 |
| Accommodation and food services | 4.2 | 22.4 | -1.5 | 6.0 | 18.7 | 10.1 | 7.3 | 15.3 |
| Accommodation | -6.2 | 78.5 | -9.9 | 2.8 | NA | NA | NA | NA |
| Food services | 11.9 | 13.5 | 2.9 | 6.4 | NA | NA | NA | NA |
| Miscellaneous services | 50.2 | 29.6 | 17.5 | 1.9 | -6.7 | 9.5 | -4.7 | NA |

**Source:** Department of Commerce.

**Note**: NA indicates that the data are not available.

# Trade

Another aspect of foreign direct investment that causes concern is the impact foreign direct investment has on the amount of foreign trade associated with those investments. Some observers argue that U.S. direct investment abroad supplants U.S. exports, jobs, and research and development funds, thereby reducing employment and wages in the U.S. economy. Others are concerned that outward direct investment alters the industrial composition of domestic production and trade flows, which can affect the sectoral and regional distribution of employment and the relative demand for skilled and unskilled labor.[25] According to this scenario, as firms invest

[25] *International Investment Perspectives: 2006 Edition*, the Organization for Economic Cooperation and Development. (continued...)

abroad, they shift production abroad and replace U.S.-based production with exports back to the United States, thereby eliminating jobs in the United States. As production shifts abroad, jobs are lost in the United States and goods that once were produced in the United States are now imported from abroad. However, most studies indicate that, on balance, direct investment abroad does not substitute directly for investment or production at home and that it generally increases U.S. exports and helps sustain employment and wages at home.[26]

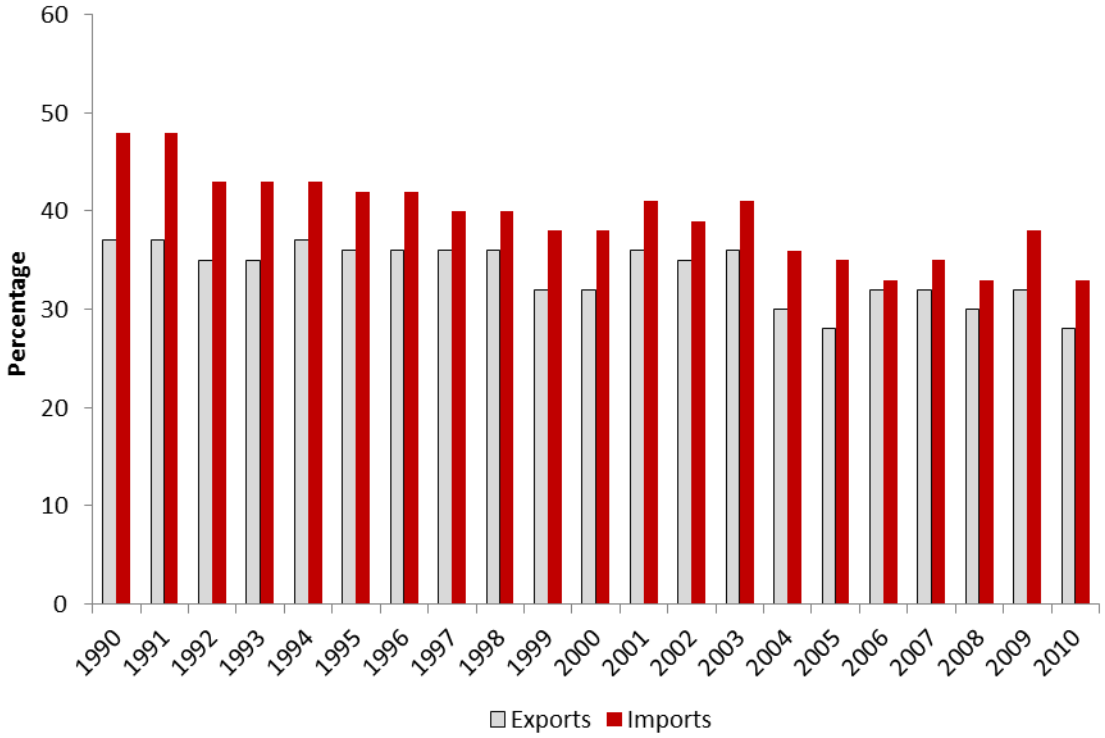
If a large number of firms engaged in outsourcing, or used foreign direct investment as a substitute for trade and replacement jobs in the parent company, it would be reasonable to expect the share of intra-firm trade to increase over time along with the flow of foreign investment. Such intra-firm trade represents trade between U.S. parent companies and their foreign affiliates and the U.S. affiliates of foreign firms and their foreign parent company. In particular, if firms used foreign investment to displace jobs and domestic production, or outsourcing jobs, it would be reasonable to expect that imports from U.S. foreign affiliates to the U.S. parent company would increase over time as a share of total trade among parent firms. There is little doubt that some firms do indeed replace domestic production with production from abroad, which would shift trade patterns, but the share of U.S. trade represented by U.S. parent companies and their affiliates since the 1990s has not increased as would be expected. Instead, as indicated in **Figure 11**, intra-firm exports and imports fell as a share of total U.S. exports and imports during the 1990s. From 2000 to 2003, intra-firm trade, both exports and imports, increased as a share of total U.S. exports and imports respectively, but intrafirm trade in exports and imports since 2003 has trended lower as a share of total U.S. exports and imports.

(...continued)

p. 99.

[26] Ibid., p. 101; Brainard, S. Lael, and David A. Riker, *Are U.S. Multinationals Exporting U.S. Jobs?* NBER Working Paper 5958, National Bureau of Economic Research, March 1997.

**Figure 11. Intra-Firm MNC Trade as a Share of Total U.S. Exports and Imports, 1990-2010**




**Source:** U.S. Department of Commerce

As **Table 10** indicates, the share of U.S. exports shipped by U.S. parent companies peaked at 67% in 1994, but dropped to 47% in 2010, when U.S. parent companies exported $600 billion of total U.S. merchandise exports of $1,289 billion. Similarly, the share of U.S. exports shipped by the U.S. affiliates of foreign parent companies fell from 23% in 1992 to 18% of total U.S. merchandise exports in 2010. In addition to the decline in the overall share of U.S. exports, intra-firm trade, or exports from U.S. parent companies to their foreign affiliates, fell from 25% of U.S. exports in 1992 to 21% in 2008, as exports to firms not associated with the parent firm increased. The exports of U.S. affiliates of foreign firms to their foreign parent companies have remained steady at about 9% from 1992 to 2008. Similarly, total intra-firm exports fell from 35% of U.S. exports in 1992 to 30% in 2008. The intra-firm share of U.S. exports remained relatively stable during the economic downturn in the early 2000s, suggesting that such intra-firm trade is more stable than exports as a whole, so that its share rises or falls as U.S. exports fall or rise, respectively, with business cycle conditions.

**Table 10. Multinational Corporations' Intra-Firm Exports of U.S. Goods, 1992-2010**

(in billions of dollars)

| | Total U.S. Exports of Goods | Exports By U.S. Parent Companies | | | Exports By Affiliates of Foreign Parent Companies | | | | Intra-MNC Exports | Intra-MNC Exports as Share of Total U.S. Exports |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Share of Total U.S. Exports | To Foreign Affiliates | Total | Share of Total U.S. Exports | To Foreign Parent Group | By Others | | |
| 1992 | 448.2 | 265.9 | 59% | 106.0 | 103.9 | 23% | 48.8 | 78.3 | 154.8 | 35% |
| 1993 | 465.1 | 274.7 | 59% | 113.8 | 106.6 | 23% | 47.4 | 83.8 | 161.1 | 35% |
| 1994 | 512.6 | 344.5 | 67% | 136.1 | 120.7 | 24% | 51.7 | 47.4 | 187.3 | 37% |
| 1995 | 584.7 | 374.0 | 64% | 152.6 | 135.2 | 23% | 57.2 | 75.6 | 209.9 | 36% |
| 1996 | 625.1 | 405.7 | 65% | 161.8 | 140.9 | 23% | 60.8 | 78.5 | 222.6 | 36% |
| 1997 | 689.2 | 441.3 | 64% | 186.5 | 141.3 | 21% | 63.0 | 106.6 | 249.6 | 36% |
| 1998 | 682.1 | 438.3 | 64% | 185.4 | 151.0 | 22% | 57.6 | 92.8 | 242.9 | 36% |
| 1999 | 695.8 | 435.2 | 63% | 162.5 | 153.6 | 22% | 59.9 | 107.0 | 222.4 | 32% |
| 2000 | 772.0 | 448.8 | 58% | 182.7 | 165.3 | 21% | 65.3 | 157.9 | 248.1 | 32% |
| 2001 | 718.7 | 419.0 | 58% | 198.0 | 157.5 | 21% | 65.9 | 142.2 | 263.9 | 36% |
| 2002 | 682.4 | 399.8 | 59% | 184.8 | 137.0 | 20% | 61.5 | 145.6 | 246.3 | 36% |
| 2003 | 729.8 | 408.6 | 56% | 184.0 | 147.6 | 21% | 71.2 | 173.6 | 255.2 | 36% |
| 2004 | 822.0 | 438.2 | 53% | 164.3 | 155.5 | 19% | 74.8 | 228.3 | 239.1 | 30% |
| 2005 | 911.7 | 485.6 | 53% | 174.7 | 169.2 | 19% | 78.8 | 256.8 | 253.5 | 28% |
| 2006 | 1,039.4 | 532.0 | 51% | 237.6 | 195.3 | 19% | 88.6 | 312.2 | 326.2 | 32% |
| 2007 | 1,164.0 | 558.6 | 48% | 257.7 | 215.6 | 19% | 106.1 | 389.8 | 363.7 | 32% |
| 2008 | 1,307.5 | 593.0 | 45% | 269.8 | 232.4 | 18% | 116.6 | 482.1 | 386.3 | 30% |
| 2009 | 1,069.7 | 566.8 | 53% | 237.9 | 217.2 | 20% | 104.4 | 285.8 | 342.4 | 32% |
| 2010 | 1,288.9 | 600.4 | 47% | 256.8 | 229.3 | 18% | 109.8 | 459.2 | 366.7 | 28% |

**Source:** Department of Commerce.

A different view of U.S. exports associated with U.S. multinational companies is offered by the data in **Table 11**, which show the intended use of exports shipped to the foreign affiliates of U.S. parent companies by foreign country and industry. According to the data, which were collected as part of the 2009 benchmark survey on U.S. direct investment abroad,[27] of the $227.5 billion in exports shipped by all U.S. persons to the foreign affiliates of U.S. parent companies, which represents about 21% of total U.S. exports, $187 billion was shipped by U.S. parent companies to their foreign affiliates, of which 59% was intended for further manufacture, or was not a final end-product. Similarly, exports shipped by U.S. persons that were not the U.S. parent company

[27] Benchmark surveys are conducted in five-year intervals and provide a more comprehensive survey of the activities of U.S. parent companies and their foreign affiliates than do the annual reports. *U.S. Direct Investment Abroad: Results From the 2009 Benchmark Survey*, Bureau of Economic Analysis, November 2011.

had 73% of their total products exported for further manufacturing. Well over 90% of the exports shipped to the foreign affiliates were manufactured goods, representing a broad range of manufacturing sectors. In terms of destination, exports shipped to Canada and Latin America had the highest share of goods that were exported for further manufacturing, while exports shipped to Africa and Asia had the lowest shares of goods that were shipped for further manufacturing.

**Table 11. Exports Shipped by U.S. Parent Companies to Their Foreign Affiliates: Intended Use, 2009**

(in billions of U.S. dollars)

| | Shipped by all U.S. persons | | | Shipped by U.S. parent companies | | | Shipped by other U.S. persons | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | For resale without further manu-facture | For further manu-facture | Total | For resale without further manu-facture | For further manu-facture | Total | For resale without further manu-facture | For further manu-facture |
| Total | $227.5 | $81.6 | $140.1 | $187.1 | $72.2 | $110.8 | $40.4 | $9.4 | $29.4 |
| Share | | 35.9% | 61.6% | 82.2% | 38.6% | 59.2% | 17.8% | 23.2% | 72.7% |
| Countries | | | | | | | | | |
| Canada | $65.6 | 28.8% | 70.0% | 81.7% | 31.2% | 67.6% | 18.3% | 17.9% | 81.1% |
| Europe | $68.5 | 41.2% | 55.8% | 85.0% | 43.7% | 53.2% | 15.0% | 27.4% | 70.9% |
| Europe an Union | $55.5 | 37.1% | 60.1% | 84.4% | 39.5% | 57.4% | 15.6% | 24.2% | 74.6% |
| L. America | $39.8 | 24.6% | 72.5% | 74.2% | 28.0% | 68.7% | 25.8% | 14.6% | 83.4% |
| Africa | $1.7 | 27.2% | 24.5% | 50.7% | 36.1% | 43.2% | 49.3% | 18.0% | 5.2% |
| M. East | $0.6 | 34.4% | 59.0% | 74.2% | 35.2% | 60.2% | 25.8% | 32.0% | 55.6% |
| Asia | $51.3 | 46.8% | 51.4% | 86.7% | 47.8% | 51.1% | 13.3% | 39.9% | 53.3% |
| Industries | | | | | | | | | |
| Manufacturing | $135.7 | 1.6% | 98.0% | 78.0% | 1.8% | 98.0% | 22.0% | 1.2% | 97.7% |
| Food | $6.3 | 3.0% | 95.7% | 62.7% | 3.2% | 96.0% | 37.3% | 2.7% | 95.1% |
| Chemicals | $23.9 | 3.6% | 96.2% | 88.5% | 3.8% | 96.0% | 11.5% | 2.6% | 97.2% |
| Plastics | $3.5 | NA | 96.1% | 88.5% | NA | 96.0% | 11.5% | NA | 97.3% |
| Machinery | $9.2 | NA | 95.1% | 81.1% | NA | 96.6% | 18.9% | NA | 88.9% |
| Computers and electronics | $20.3 | NA | 99.6% | 87.6% | NA | 99.5% | 12.4% | 0.0% | 100.0% |

**Source:** Department of Commerce.

On the import side, intra-firm trade has also declined as a share of total U.S. imports, defying the notion that U.S. firms are supplanting U.S. production with imports by outsourcing production abroad. Until recently, intra-firm imports have remained fairly stable as a share of total U.S. imports as indicated in **Table 12**. Imports shipped to U.S. parent companies fell from 41% of total

U.S. imports in 1992 to 36% of U.S. imports in 2008, before rising to 42% of total U.S. imports in 2010. In addition, U.S. imports by the U.S. affiliates of foreign firms fell from 35% of U.S. imports in 1992 to 27% of U.S. imports in 2010. Intra-firm imports, or imports from the foreign affiliates of U.S. parent companies to those parent companies, fell from 18% of total U.S. imports to 13% of U.S. imports from 1992 to 2010, which raises questions about the concept of U.S. outsourcing of production abroad replacing U.S. domestic production. During the same 1992-2010 period, imports from foreign parent companies and their associated affiliates (collectively known as the foreign parent group) to their U.S. affiliates fell from 35% to 27% of U.S. imports, so that intra-firm imports as a whole fell from 43% of total U.S. imports in 1992 to 33% in 2010, due in part to imports shipped to importers outside the intra-firm trade relationship. These data do not seem to conform to the argument that U.S. firms have shifted some production facilities abroad and have supplanted domestic production with imports. At the same time, data are not conclusive and may also indicate that foreign investment can stimulate foreign sales, which boosts domestic production and mitigates the economic impact of foreign outsourcing.

**Table 12. Multinational Corporations' Intra-Firm Imports of U.S. Goods, 1992-2010**

(in billions of U.S. dollars)

| | | Imports Shipped to U.S. Parents | | | Imports Shipped to Foreign Affiliates | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total U.S. Imports of Goods | Total | Share of Total U.S. Imports | From Affiliates | Total | Share of Total U.S. Imports | From the Foreign Parent Group | From Others | Intra-MNC Imports | Intra-MNC Imports as Share of Total U.S. Imports |
| 1992 | 532.7 | 219.7 | 41% | 93.9 | 184.5 | 35% | 137.8 | 128.5 | 231.7 | 43% |
| 1993 | 580.7 | 223.9 | 39% | 97.1 | 200.6 | 35% | 150.8 | 156.2 | 247.9 | 43% |
| 1994 | 663.3 | 256.8 | 39% | 113.4 | 232.4 | 35% | 174.6 | 174.1 | 288.1 | 43% |
| 1995 | 743.5 | 289.9 | 39% | 122.3 | 250.8 | 34% | 191.2 | 202.8 | 313.5 | 42% |
| 1996 | 795.3 | 326.2 | 41% | 137.2 | 268.7 | 34% | 197.7 | 200.4 | 334.8 | 42% |
| 1997 | 869.7 | 350.8 | 40% | 147.5 | 264.9 | 30% | 202.4 | 254.0 | 349.8 | 40% |
| 1998 | 911.9 | 356.0 | 39% | 158.1 | 292.0 | 32% | 205.2 | 263.9 | 363.3 | 40% |
| 1999 | 1,024.6 | 388.5 | 38% | 164.4 | 325.0 | 32% | 229.9 | 311.1 | 394.3 | 38% |
| 2000 | 1,226.7 | 446.0 | 36% | 191.1 | 366.6 | 30% | 272.4 | 414.0 | 463.5 | 38% |
| 2001 | 1,148.2 | 437.1 | 38% | 216.9 | 347.8 | 30% | 266.5 | 363.3 | 483.4 | 41% |
| 2002 | 1,167.4 | 427.6 | 37% | 217.7 | 324.6 | 28% | 256.7 | 415.2 | 474.4 | 41% |
| 2003 | 1,270.2 | 471.1 | 37% | 232.5 | 356.8 | 28% | 290.5 | 442.3 | 523.0 | 41% |
| 2004 | 1,485.5 | 540.9 | 36% | 217.2 | 394.5 | 27% | 320.3 | 550.1 | 537.5 | 36% |
| 2005 | 1,692.4 | 603.3 | 36% | 220.5 | 453.0 | 27% | 360.0 | 636.1 | 580.5 | 35% |
| 2006 | 1,875.1 | 694.5 | 37% | 237.6 | 482.4 | 26% | 381.0 | 698.2 | 618.6 | 33% |
| 2007 | 1,982.8 | 728.4 | 37% | 259.6 | 533.4 | 27% | 426.8 | 721.0 | 686.4 | 35% |
| 2008 | 2,137.6 | 768.1 | 36% | 262.8 | 567.0 | 27% | 451.9 | 802.6 | 714.7 | 33% |
| 2009 | 1,575.5 | 703.0 | 41% | 208.4 | 482.9 | 31% | 382.3 | 389.5 | 590.7 | 38% |
| 2010 | 1,934.0 | 804.6 | 42% | 245.5 | 518.0 | 27% | 395.6 | 611.4 | 641.1 | 33% |

**Source:** Department of Commerce.

# Sales

Another way of viewing the impact foreign direct investment has on U.S. jobs is by examining the sales patterns of U.S. multinational companies. If U.S. parent companies are embarking on a more extensive effort to outsource jobs abroad, it is reasonable to expect that this pattern would affect the sales from these foreign affiliates to the U.S. parent company or that sales to other U.S. persons of foreign-sourced goods would increase over time. In addition, some observers are concerned that certain types of service jobs are being moved abroad with service activities being outsourced to foreign workers. The BEA data on sales of U.S. multinational companies, however,

follow a pattern similar to that of the trade patterns of these companies and do not offer conclusive evidence in support of an increase in jobs or activities being outsourced abroad.

As **Table 13** indicates, the foreign affiliates of U.S. parent companies had $4.9 trillion in sales in 2010. The largest share of affiliate sales—about 61%—is in the local market where the affiliate is located. U.S. parent companies also use their foreign affiliates as a springboard to increase sales in neighboring areas or countries. Such sales to other foreign countries in 2010 accounted for about 30% of the affiliates' sales. European affiliates, which accounted for about half of all affiliate sales, also accounted for the lowest share of their sales back to the United States, where about 40% of their sales are to other foreign countries, mostly to other countries within the European Common Market. Of all U.S. affiliate sales, 7.7% of those sales was shipped back to parent firms in the United States, a share that has remained quite stable over the last decade, and another 1.9% of their sales were to other U.S. persons, or to importers that are not directly associated with the parent company.

**Table 13. Sales of Goods and Services by U.S. Foreign Affiliates by Destination and Industry, 2010**

| | Total | To U.S. Parents | Local | Other Foreign Countries | Other U.S. Persons |
|---|---|---|---|---|---|
| | Billions of Dollars | Percent Share | | | |
| ***Sales by Destination*** | | | | | |
| All countries | $4,950.9 | 7.7% | 60.7% | 29.7% | 1.9% |
| Canada | 551.3 | 16.3% | 76.5% | 3.5% | 3.7% |
| Europe | 2,418.9 | 5.2% | 54.5% | 38.6% | 1.8% |
| Latin America | 583.5 | 10.7% | 65.7% | 21.3% | 2.4% |
| Africa | 97.2 | 16.2% | 50.1% | 32.1% | 1.6% |
| Middle East | 63.2 | 13.2% | 62.6% | 22.1% | 2.1% |
| Asia and Pacific | 1,236.7 | 6.3% | 64.3% | 28.1% | 1.4% |
| ***Sales by Industry*** | | | | | |
| All industries | $4,950.9 | 7.7% | 60.7% | 29.7% | 1.9% |
| Manufacturing | 2,215.6 | 9.1% | 56.5% | 32.5% | 1.9% |
| Chemicals | 456.9 | 4.4% | 58.6% | 35.3% | 1.8% |
| Pharmaceuticals | 173.2 | 5.4% | 48.3% | 44.6% | 1.7% |
| Machinery | 140.1 | 10.8% | 47.0% | 39.6% | 2.7% |
| Semiconductors | 119.9 | 22.7% | 36.1% | 38.8% | 2.4% |
| Electrical equipment | 50.9 | 10.9% | 46.8% | 40.3% | 2.0% |

**Source:** Department of Commerce.

Affiliates located in the Middle East, which accounted for the lowest amount overall of affiliate sales, sent 13% of their goods back to the parent firm in the United States. A large part of these sales originated in Israel, which has had a free trade agreement (FTA) with the United States since 1985. Among all the regions, sales by affiliates in Europe and Africa are most evenly spread among sales to the United States, local sales, and sales to other foreign countries. Canada represents the most unequal distribution of sales, with 77% of affiliate sales taking place in

Canada. Sales by European affiliates are heavily concentrated within Europe: sales either in the local area or to neighboring countries account for 93% of all sales by European affiliates. Sales by affiliates in Latin America are dominated by local sales, which accounted for about 66% of total sales, with about 11% of sales sent to the United States, and 21% is sent to other foreign countries, likely within the region.

Sales by industry indicate that manufactured goods account for about half of all affiliate sales and that about 9% of these goods were shipped back to the United States in 2010. The largest share of sales by industry that are accounted for by sales to U.S. parent companies is in the semiconductor industry, as much of the physical making of computer chips has moved off-shore, while much of the high-tech engineering of the design of the chips has remained within the United States. All other industries show low levels of sales back to the U.S. parent, with a heavy concentration on sales within the local market and to other nearby foreign countries.

## Sales of Services

For some observers, another concern is that U.S. parent firms have started moving service jobs offshore, or outsourcing, in sectors that once were thought to be immune to such activities.[28] A report published by the National Academy of Public Administrators (NAPA) on the impact of foreign investment on the services sectors, especially on services involving advanced science and engineering education concluded that, "services off-shoring has had little economic impact on the S&E (science and engineering) labor market, education of S&E workers, or S&E career choices of American students."[29] As **Table 14** indicates, U.S. foreign affiliates had $841 billion in services sales in 2008. Of this amount, 4.9% consisted of service sales back to the U.S. parent company. The largest share—74%—of sales of services were made in the local market. This share is substantially higher than the comparable share for sales of goods and services combined and is consistent with the general view that the distinguishing feature of services is that they are consumed where they are produced. Latin America and the Middle East are the areas with the highest share of sales back to the U.S. parent companies, while Asia and Europe represent the areas with the lowest share of services sales back to the U.S. parent. The Commerce Department has suppressed a large amount of the data on sales of services by industry in order to protect the confidentiality of individual firms, but the highest share of service sales in the local market is in the areas of finance and insurance and information. The strong sale of financial services is not unusual, however, given the general conclusion that U.S. financial services companies are among the most competitive in the world.

[28] Lohr, Steve. "High-End Technology Work Not Immune to Outsourcing." *The New York Times*, June 16, 2004, p. C1.

[29] *Off-shoring: What Are It's Effects?,* National Academy of Public Administration, January 2007, p. xiii.

**Table 14. Sales of Services by U.S. Foreign Affiliates by Destination and Industry, 2010**

| | Total | To U.S. Parents | Local | Other Foreign Countries | Other U.S. Persons |
|---|---|---|---|---|---|
| | Billions of Dollars | Percent share | | | |
| ***Sales by Destination*** | | | | | |
| All countries | $1,233.3 | 6.0% | 72.5% | 19.2% | 2.3% |
| Canada | 124.1 | 3.8% | 91.9% | 2.6% | 1.7% |
| Europe | 636.3 | 6.5% | 66.3% | 24.3% | 3.0% |
| Latin America | 144.8 | 6.4% | 71.5% | 19.9% | 2.2% |
| Africa | 12.8 | (D) | 78.1% | 14.1% | (D) |
| Middle East | 16.9 | (D) | 78.6% | 11.9% | (D) |
| Asia and Pacific | 298.5 | 5.7% | 77.5% | 15.7% | 1.2% |
| ***Sales by Industry*** | | | | | |
| All industries | $1,233.3 | 6.0% | 72.5% | 19.2% | 2.3% |
| Mining | 32.6 | 1.2% | 81.9% | 15.7% | 1.3% |
| Utilities | (D) | (D) | (D) | (D) | (D) |
| Manufacturing | 30.0 | 4.2% | 73.2% | 22.3% | 0.3% |
| Wholesale trade | (D) | (D) | (D) | (D) | (D) |
| Information | 156.9 | 9.5% | 65.6% | 19.9% | 5.1% |
| Finance and insurance | 259.7 | 10.5% | 68.2% | 17.6% | 3.7% |
| Services | 176.0 | 5.8% | 75.3% | 17.7% | 1.2% |
| Other industries | 264.6 | 2.5% | 80.8% | 14.9% | 1.8% |

**Source:** Department of Commerce.

**Note:** A (D) indicates that the data have been suppressed by the Department of Commerce to protect the confidentiality of the foreign investor.

Although the dollar amount of sales of services back to the United States by U.S. foreign affiliates is low compared to the overall amount of sales of services, as **Table 15** indicates, the rate of growth in the sale of services back to the U.S. parent has been among the highest of service sales to all areas. Between 2002 and 2006, when the U.S. economy was expanding at a relatively fast pace, the average annual rate of growth in the sales of services back to the U.S. parent company grew by 11%, based mostly on sales by affiliates in Europe. The average annual rate of growth in the sales of services from affiliates in Africa fell by 11%, while sales from other areas rose slowly.

In the 2006 to 2010 period during which the pace of U.S. economic growth slowed relative to the previous period, the overall average annual rate of growth in the sales of services rose by nearly 75%. Similarly, sales of services to U.S. parent companies rose by 93%, or at nearly eight times the rate experienced in the previous period. The average annual rate in the sale of services back to the United States grew at especially rapid pace from affiliates in Canada and Africa. Overall, the average annual rate in the sales of services to the local markets grew by about 3.6% in the 2002-2006 period and by 63% in the 2006-2010 period. Sales of services to other foreign countries rose

by 37% to in the 2006 period and by 114% in the 2006-2010 period, led by sales in Europe, where slow growth likely spurred firms to seek for sales outside their country of production.

**Table 15. Sales of Services by U.S. Foreign Affiliates, Average Annual Rates of Change for Selected Periods**

(percent change)

| | Total | | To U.S. Parents | | Local | | Other Foreign Countries | |
|---|---|---|---|---|---|---|---|---|
| Time period | Avg. Ann % Chg 2002 to 2006 | Avg. Ann % Chg 2006 to 2010 | Avg. Ann % Chg 2002 to 2006 | Avg. Ann % Chg 2006 to 2010 | Avg. Ann % Chg 2002 to 2006 | Avg. Ann % Chg 2006 to 2010 | Avg. Ann % Chg 2002 to 2006 | Avg. Ann % Chg 2006 to 2010 |
| All countries | 6.7% | 74.9% | 11.2% | 92.9% | 3.6% | 63.1% | 36.6% | 113.8% |
| Canada | 5.0 | 82.4 | 2.5 | 278.9 | 5.1 | 73.0 | 103.1 | 83.0 |
| Europe | 5.7 | 82.4 | 28.2 | 77.9 | 0.7 | 64.9 | 42.4 | 140.9 |
| Latin America | 8.1 | 48.3 | 1.3 | 98.6 | 7.9 | 37.9 | 11.5 | 67.8 |
| Africa | 5.1 | 88.7 | -11.0 | 21.3 | 2.0 | 88.0 | 925.6 | 97.0 |
| Middle East | -14.8 | 271.7 | 4.0 | 105.6 | -16.2 | 295.9 | 9.8 | 155.6 |
| Asia and Pacific | 10.9 | 63.1 | 0.7 | 65.7 | 9.5 | 60.4 | 49.3 | 57.2 |

**Source:** Department of Commerce.

# Research and Development

National governments and many state and local governments spend considerable amounts of money attracting foreign direct investment under the belief that such investment has a positive impact on their respective economies.[30] Although various academic studies have found that such "spillover" effects appear to be small, a 2003 study challenges these conclusions.[31] The authors argue that technology spillovers from foreign direct investment to U.S.-owned manufacturing firms accounted for about 11% of the growth in productivity in the U.S. firms between 1987 and 1996. In addition, as **Table 16** indicates, foreign firms generally spend more on high-technology research and development within the United States than U.S. firms spend abroad. All three types of R&D spending indicated in the table experienced a slowdown in R&D spending in 1991, 2002, and 2009 in response to the slowdown in economic growth in those periods. Other than those three years, however, R&D spending in nominal terms has increased every year by all three types of firms. In addition, affiliates of foreign firms operating in the United States outspent the foreign affiliates of U.S. multinational companies in every year, making the United States a net recipient of R&D expenditures.

[30] *Incentives.* United Nations Conference on Trade and Development, United Nations, 2004.

[31] Keller, Wolfgang, and Stephen R. Yeaple, *Multinational Enterprises, International Trade, and Productivity Growth: Firm-Level Evidence From the United States.* IMF Working Paper WP/03/248, International Monetary Fund, December 2003.

**Table 16. Expenditures on Research and Development by U.S. Multinational Firms and by the Affiliates of Foreign Firms Operating in the United States**

(Millions of dollars)

| | U.S. Multinational Companies | | U.S. Affiliates of Foreign Firms |
|---|---|---|---|
| | Parent Companies | Affiliates | |
| 1990 | $72,802 | $10,417 | $12,593 |
| 1991 | 67,366 | 9,396 | 11,872 |
| 1992 | 72,107 | 11,084 | 13,864 |
| 1993 | 74,176 | 10,954 | 14,199 |
| 1994 | 91,574 | 11,877 | 15,566 |
| 1995 | 96,500 | 13,238 | 17,542 |
| 1996 | 100,551 | 14,039 | 17,984 |
| 1997 | 106,800 | 14,593 | 17,216 |
| 1998 | 113,777 | 14,664 | 22,375 |
| 1999 | 126,291 | 18,144 | 24,027 |
| 2000 | 135,467 | 20,457 | 26,089 |
| 2001 | 143,546 | 19,402 | 26,415 |
| 2002 | 137,968 | 21,151 | 25,453 |
| 2003 | 139,884 | 22,793 | 29,803 |
| 2004 | 164,189 | 25,840 | 29,900 |
| 2005 | 178,542 | 28,316 | 31,694 |
| 2006 | 184,428 | 29,583 | 34,257 |
| 2007 | 200,397 | 35,019 | 39,806 |
| 2008 | 199,105 | 36,991 | 36,991 |
| 2009 | 195,004 | 35,939 | 40,425 |
| 2010 | 212,513 | 39,470 | 41,272 |

**Source:** Department of Commerce.

# Global Value Chains

Beyond the traditional equity-based direct investment, there is a growing prevalence of global value chains,[32] within which production, trade, and investment all take place. These global value chains reflect a new phase in economic globalization in which multinational corporations are engaging in an increasingly complex array of non-equity activities to build interdependent networks of operations. Non-equity activities increase the costs and, therefore, reduce the profits

[32] A global value chain comprises the full range of activities of a firm, from R&D, design, production, marketing, distribution, and support to the final customer. *Interconnected Economies: Benefitting From Global Value Chains*, Organization for Economic Cooperation and Development, 2013, p. 14.

of multinational firms, but reportedly they help firms avoid many of the costs associated with managing the cross-border activities of complex, multi-plant, multi-currency operations. Despite the many advantages of such multi-layer cross border trade and financial connections, the OECD warns that the small margin of error firms build into value chains in order to reduce costs "may well increase systemic risks, because the failure of a single entity or cluster of entities may result in cascading disruptions that can bring down the entire system or large parts of it."[33] For instance, the 2008-2009 financial crisis quickly spread through cross-border linkages in financial markets to other developed economies and caused a serious contraction in the rate of economic growth among the developed economies. In addition, the contraction in economic growth combined with a collapse in trade financing and funding for mergers and acquisitions in 2009 caused a sharp drop in both foreign investment activity and in international trade flows. In turn, the drop in trade flows was transmitted quickly through the value chains to other geographical areas and may have intensified both the speed with which the rate of economic growth fell and the depth of the economic recession.

According to the United Nations, the increased use of global value chains by multinational firms has been facilitated by four major developments: (1) the increasing fragmentation of production processes between locations; (2) the growing sophistication in codification of knowledge and the prevalence of industry standards; (3) the improving intellectual property protection regimes worldwide; and (4) the growing capabilities and increasing availability of credible and technologically sophisticated partner firms in new markets.[34] Such activities have grown more rapidly than traditional equity investments over the past decade and are aiding firms in externalizing activities that had predominantly been accomplished within the firm. According to the OECD, the growth of global value chains "strengthens the case for advancing multilateral trade negotiations, as barriers between third countries upstream and downstream matter as much as barriers in direct trading partners and are best addressed together."[35]

These alternate forms of ownership mean that firms no longer need to choose between full control of a foreign affiliate through direct investment and no control, but they can choose between a range of modes in which control is exercised in various configurations and to various degrees. Evidence to date suggests that such forms of control are not specific to any particular part of the value chain or type of activity, but are prevalent in shaping global trade patterns in such industries as automotive components, consumer electronics, garments, hotels, and information technology and business process services.[36] The United Nations refers to these mechanisms, or alternative forms of governing the disparate parts of global value chains by multinational companies, as non-equity modes (NEM) of investment, that include partial ownership, joint ventures, contract manufacturing, services outsourcing, contract farming, franchising and licensing, and other forms of contractual relationships through which firms coordinate and control the activities of partner firms.[37] In order to protect their image and manage risks, multinational firms often attempt to control their foreign partners through codes of conduct developed individually by the firms, although these codes generally are founded on internationally agreed upon standards.[38]

[33] *Ibid,* p. 244.

[34] *Non-Equity Modes of International Production and Development*, p. 123-176.

[35] *Interconnected Economies: Benefitting From Global Value Chains*, p. 9.

[36] *Non-Equity Modes of International Production and Development*, p. 129.

[37] *Ibid*, p. 124.

[38] For additional information about codes of conduct see: CRS Report RS20803, *Codes of Conduct for Multinational Corporations: An Overview*, by James K. Jackson.

The international operations of the overseas subsidiaries of U.S. multinational corporations combined with their non-equity investments provide such firms and national economies with opportunities to concentrate on that part of the production process they do best, while using intermediate goods and services imported from elsewhere to complement their own activities. This type of specialization is referred to as vertical specialization in which countries specialize in specific stages and tasks in the value chain. Traditional economic theory argues that firms and nations export goods and services that reflect their international comparative advantage. Global value chains, however, often are characterized by firms that have vertically integrated operations in which the disparate suppliers have a comparative advantage in some portion of the vertically integrated production process, rather than in the production of entire goods or services.

Estimating the size of non-equity types of investments is complicated by the various forms such activities can take and the lack of any central entity that coordinates and collects data. Nevertheless, the United Nations estimates that the four main forms of non-equity investment—contract manufacturing, franchising, licensing, and management contracts—accounted for about $2 trillion in global sales in 2010. Contract manufacturing accounted for more than half this total amount, with franchising and licensing accounting for about $300 billion each and management contracts accounting for about $100 billion. Contract manufacturing and services outsourcing represent the largest modes of cross-border activities and comprise significant levels of intra-firm trade. By some estimates, contract manufacturing accounts for 90% of the cost of goods sold in the toys and sporting goods industries, 80% in the consumer electronics industry, and 60%-70% in the automotive industry.[39]

In addition, estimating the full economic impact of non-equity investments is challenging, because the impact of such investments varies depending on the type of investment activity, the industry of the investment, and the role the investment plays in the value chain of production. Worldwide, non-equity investments are estimated to employ directly 18 million-21 million workers, according to the United Nations. In addition, the non-equity investments are expected to have a significant impact on ancillary industries that are indirectly affected by non-equity investments. In some cases, however, non-equity investments have been characterized by substandard working conditions, a lack of employment stability, and prolonged reliance on low value-added activities. In addition, jobs in labor-intensive industries are highly sensitive to the business cycle and tend to be eliminated quickly during times of economic distress, magnifying the impact of the business cycle.

In recognizing the importance of global supply chains, the Obama Administration issued a national strategy for securing the global supply chains, in which the Administration argued that, the global supply chain system provides the food, medicine, energy, and products that are essential to the economy and security of the United States and is a critical global asset.[40] As a result, the Administration's strategy for strengthening and securing the global supply chains consists of two goals. The first goal of the strategy is to promote the "timely and efficient" flow of commerce while protecting and securing the supply chain from exploitation, and reducing its vulnerability to disruption. The second goal of the strategy is to foster a global supply chain

[39] *Non-Equity Modes of International Production and Development*, p. 134.

[40] *National Strategy for Global Supply Chain Security*, January 23, 2012, available at: http://www.whitehouse.gov/sites/default/files/national_strategy_for_global_supply_chain_security.pdf.

system that is prepared for, and can withstand, evolving threats and hazards and can recover rapidly from disruptions.[41]

The growing role of global value chains in production and international trade has raised awareness that "conventional trade statistics may give a misleading perspective of the importance of trade to economic growth and income."[42] In addition, global value chains may present a distorted view of bilateral trade relations and have important implications for trade negotiations between trading partners. Consequently, the World Trade Organization (WTO) and the Organization for Economic Cooperation and Development (OECD) are developing an international input-output model that identifies and creates links between exports in one country and the purchasing industries or final demand consumers in the importing country in order to estimate the real contribution that export-affiliated industries make to economic growth and employment.

**Table 17** presents data developed by the OECD and WTO on the domestic and foreign sources of value added in the exports of a broad range of countries. The data attempt to capture the extent to which intermediate imports are used in the production of final goods. The data indicate that the foreign and domestic sources of value added in a nation's exports can vary significantly between countries, reflecting a number of different factors. According to the OECD-WTO data set, U.S. exports contain 89% domestic value added and 11% foreign value added, which ranks it among the lowest of the advanced economies in terms of the share of foreign value added in the nation's exports. Countries in the European Union have higher shares of foreign value added, reflecting the special trading relationship among countries that exists within the European Community. Even within the EU, Luxembourg, with nearly a 50% share of foreign content in its exports, ranks as the country with the highest foreign value added content of its exports.

[41] *Ibid*, p. 2.

[42] *Trade in Value-Added: Concepts, Methodologies and Challenges*, Organization for Economic Cooperation and Development and the World Trade Organization. Available at: http://www.oecd.org/sti/ind/49894138.pdf.

**Table 17. Sources of Value Added in Global Value Chains**

(in Billions of dollars and percent)

| Country | Gross exports | Domestic value-added embodied in gross exports | Share of domestic value added in total gross exports (%) | Foreign value added content of gross exports | Share of foreign value added in total gross exports (%) |
|---|---|---|---|---|---|
| United States | $1,458.2 | $1,293.6 | 88.7% | $164.6 | 11.3% |
| United Kingdom | 559.7 | 462.8 | 82.7 | 96.9 | 17.3 |
| Canada | 367.6 | 295.7 | 80.5 | 71.8 | 19.5 |
| France | 584.0 | 439.5 | 75.3 | 144.5 | 24.7 |
| Germany | 1,159.4 | 850.6 | 73.4 | 308.9 | 26.6 |
| Mexico | 231.9 | 161.6 | 69.7 | 70.3 | 30.3 |
| China | 1,284.0 | 865.0 | 67.4 | 419.0 | 32.6 |
| Ireland | 196.3 | 113.2 | 57.7 | 83.1 | 42.3 |
| Singapore | 212.4 | 106.4 | 50.1 | 106.0 | 49.9 |
| Luxembourg | 79.3 | 32.6 | 41.1 | 46.7 | 58.9 |

**Source:** OECD-WTO Trade in Value Added.

# Why Firms Invest Abroad

Foreign direct investment challenges a number of concepts economists hold about international capital flows. Most explanations of such capital flows argue that direct investment is just another form of international capital flows and that capital flows to locations where the rate of return is the highest. While this may be true in a general sense, the bulk of foreign direct investment takes place between highly developed countries where rates of return are very similar. In addition, those countries that are large investors are also recipients of large amounts of direct investment and investment flows into and out of these countries seem to move together, so that those economic conditions that encourage inflows of direct investment also promote outflows of direct investment.[43]

Economists generally believe that firms invest abroad to increase their profits. They are less certain about which factors trigger the initial investment decision, about why firms choose to invest where they do, and about what distinguishes firms that invest abroad from those that remain purely domestic. In most cases, economists conclude that a broad range of factors influence a firm's decision to invest abroad that include far more than a simple search for low-cost labor. The United Nations characterizes the major determinants of foreign direct investment as the confluence of three sets of determining factors that exist simultaneously: (1) the presence of ownership-specific competitive advantages in a transnational corporation, (2) the presence of

[43] Lipsey, Robert E., *Interpreting Developed Countries' Foreign Direct Investment*. NBER Working Paper 7810. National Bureau of Economic Research, July 2000. P. 3-4.

locational advantages in a host country, and (3) the presence of superior commercial benefits in an intra-firm as against arm's-length relationship between investor and recipient.[44]

For some observers, foreign direct investment seems to be characterized by a relatively simple process of firms seeking out low-cost production locations and low-cost resources, including low-cost labor. Multinational firms, however, are motivated by more than a single factor, and likely invest abroad not only to gain access to a low-cost resource, but to improve their efficiency, or to improve their market share. In all, direct investment is a complex activity that involves a long-term commitment to a business venture in a foreign country that requires the coordination and management of considerable resources and assets across countries. The relative importance of characteristics that determine where investments are located depend on a broad range of factors that can change over time and with economic conditions. Although low-cost abundant labor is a principal resource that some firms seek, academic studies of foreign direct investment indicate that it is always labor plus other advantages, particularly industrial infrastructure, that influence a firm's investment decision. Based on observations through 1998, the United Nations concluded that investments based solely on low-cost labor have been highly mobile and have increased dramatically the risk of losing any locational advantage based on just that factor alone.[45]

According to the United Nations, technological improvements in the area of telecommunications and computers have helped to make it possible for firms to extend their efficiency strategies across national borders. When firms undertake competitiveness-enhancing foreign direct investment, they seek not only cost-reductions and bigger market shares, but also access to technology and innovative capacity, which can be highly influenced by national policies. Nations that are successful in attracting direct investment generally possess such infrastructure facilities as high-quality telecommunications links, reliable transportation systems, and such skills as accountancy, legal services, purchasing and marketing, finance and R&D capabilities, and large markets.[46]

At times, economists have puzzled over the presence of foreign direct investment, because it seemed unthinkable to most of them that nations would simultaneously import and export the same good and that investments would occur within the same industry between two different trading countries and by the same company. For some economists, trade and investment were thought to be opposites; therefore, as long as international trade was free, there was no reason for international investment to occur. These economists based their conclusions on the argument that free trade caused commodity prices between countries to converge. Such a convergence was expected eventually to equalize wage rates and rates of return on investments and to make investing abroad of little economic value.[47] These observations have not been borne out over time as foreign direct investment has become a prominent feature of the globalization process. This

[44] World Investment Report 1998: Trends and Determinants. United Nations, New York, 1998. P. 89.

[45] *Ibid*, p. 118.

[46] *Ibid*, p. 108-109.

[47] This result, known as the factor-price equalization theorem, is a fundamental result in the theory of international trade. It states that, under certain conditions, free trade will equalize the prices of goods between trading countries. When goods' prices are the same, this theorem states, the prices of the factors of production (labor and capital) will also be equalized. This result is based on a number of assumptions: nations share similar production technology; there is a free international flow of capital and labor; there are perfectly competitive goods and price clearing markets; and consumer tastes do not change with changes in income. For a detailed presentation, see Silberberg, Eugene. *The Structure of Economics*. New York, McGraw-Hill, Inc., 1990. p. 553-554.

suggests that a complex set of factors account for the continued presence of foreign direct investment.

## Ownership-Specific Advantages

Economists generally argue that foreign investment is a viable option for some firms due to economic advantages that arise from a unique set of characteristics that are related to specific types of firms. These characteristics include managerial ability, technical advantages, or market strength, which give firms an incentive to invest abroad and to provide the advantages necessary to be competitive in markets at home and abroad.[48] These analysts conclude that market imperfections and firm-specific factors[49] give some firms economic advantages over their competitors that allow them to attain an oligopolistic position in their home and in foreign markets and to increase their market shares. Such firms possess a competitive advantage over their foreign competitors or they would be incapable of overcoming the disadvantages of operating in a foreign market—additional costs associated with managing an enterprise at some distance, and added political and economic risks. Some of the potential advantages that firms might enjoy could arise from market imperfections and from firm specific advantages that arise from producing in large quantities (economies of scale),[50] the market power of the firm,[51] the absolute size of the firm,[52] cost advantages that arise from patents or other special advantages, or from product-specific advantages (product differentiation).[53]

## Location Advantages

Foreign direct investment may also be one step in a series of actions multinational firms take to grow or to remain competitive by gaining access to new markets.[54] Some of these actions may be

[48] Mundell, Robert A. International Trade and Factor Mobility. *American Economic Review*, June 1957. p. 321.

[49] Horst, Thomas. Firm and Industry Determinants of the Decision to Invest Abroad: An Empirical Study. The Review of Economics and Statistics, August 1972. p. 258-266; Caves, Richard E. Causes of Direct Investment: Foreign Firm's Shares in Canadian and United Kingdom Manufacturing Industries. The Review of Economics and Statistics, August 1974. p. 279-293; Grubaugh, Stephen G. Determinants of Direct Foreign Investment. The Review of Economics and Statistics, February 1987. p. 149-152; Ethier, The Multinational Firm, p. 805-833; and Benvignati, Anita M. Industry Determinants and "Differences" in U.S. Intrafirm and Arms-Length Exports. *The Review of Economics and Statistics*, August 1990. p. 481-488.

[50] Root, Franklin R. *International Trade and Investment* Cincinnati, South-Western Publishing Co., 1984. p. 457-458; Markusen, James R. Multinationals, Multi-Plant Economies, and the Gains From Trade. *Journal of International Economics*, May 1984; Haldi, John, and David Whitcomb. Economies of Scale in Industrial Plants. *Journal of Political Economy*, August 1967. p. 373-385; and Kim, H. Youn. Economies of Scale in Multi-Product Firms: an Empirical Analysis. *Economica*, May 1987. p. 185-206.

[51] Dunning, John H.,and Alan M. Rugman. The Influence of Hymer's Dissertation on the Theory of Foreign Direct Investment. *American Economic Review*, May 1985. p. 228.

[52] Glickman, Norman J., and Douglas P. Woodward. *The New Competitors*. New York, Basic Books, Inc., 1989. p. 80-90.

[53] Caves, Richard E. "International Corporations: The Industrial Economics of Foreign Investment." *Economica*, February 1971. p. 3-11; and Bergsten, C. Fred, Thomas Horst, and Theodore H. Moran. *American Multinationals and American Interests*. Washington, The Brookings Institution, 1978. p. 215-216. For an overview of empirical studies, see Stevens, Guy V.G. "The Determinants of Investment." In Dunning, John H., ed. *Economic Analysis and the Multinational Enterprise*. New York, Praeger Publishers, 1974.

[54] Lipsey, Robert E., and Merle Yahr Weiss. Foreign Production and Exports of Individual Firms. *The Review of Economics and Statistics*, May 1984. p. 491.

related to gaining access to markets that are protected by high tariffs or by other economic barriers.[55] In some cases, foreign investment is driven by a product cycle process that starts in the introduction of a new product and in the growth of market shares.[56] At this early stage, product innovations serve as a basis for market advantages over competitors and production is centered in the home country, with foreign subsidiaries acting primarily as marketing agents.

In later phases, competition increases as the innovation is acquired by other producers. In this stage, businesses invest abroad in order to maintain the market shares they gained through exporting. As a result, the transition from exporting, to assembling, to producing in the foreign market may be a natural process, with foreign investment being the facilitating link. While some of the motivation for shifting production abroad may be to avoid tariffs, or other export restraints, lower transportation costs and proximity to the foreign market are important considerations.[57] This shift is apparent in U.S. direct investment abroad where large shares of foreign production are consumed in the local market or shipped to neighboring countries, rather than being exported back to the United States.

Evidence indicates that there is little empirical basis for expecting a universal linkage between foreign investment and trade.[58] If there is a tendency for overseas production to substitute for some exports from an area, it appears to be offset by influences that tend to increase exports of related products or services.[59] Studies show that the higher the level of output by a U.S. firm in a foreign area, the higher are the firm's exports from the United States to that area and the smaller are the exports of other foreign firms. This pattern may be influenced by the host country's trade policy, which may discourage imports, thereby encouraging the affiliates of foreign companies to produce locally.[60] Moreover, multinational companies may gain added economic flexibility as a result of their foreign subsidiaries, which allows the parent companies to alter their sources of inputs in response to cheaper imports: instead of altering prices of domestically produced goods to remain competitive. Multinational firms also tend to shift the source of their production to their offshore subsidiaries.[61]

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[55] Helpman, Elhanan, and Paul R. Krugman. *Market Structure and Foreign Trade*. Cambridge, The MIT Press, 1985. p. 247-259.

[56] Vernon, Raymond. "International Investment and International Trade in the Product Cycle." *Quarterly Journal of Economics*, May 1966. p. 190-207; and Wells, Louis T. Jr. "Test of a Product Cycle Model of International Trade: U.S. Exports of Consumer Durables." *Quarterly Journal of Economics*, February 1969. p. 152-162.

[57] Stevens, Guy V.G., and Robert E. Lipsey. *Interactions Between Domestic and Foreign Investment*. Cambridge, Mass., National Bureau of Economic Research, 1988. (Working Paper No. 2714) p. 11; and U.S. Department of Commerce. Bureau of Economic Analysis. *Survey of Current Business*, May 1986. U.S. Merchandise Trade Associated With U.S. Multinational Companies, by Betty L. Barker. p. 56.

[58] Kahley, William J. *Countervailing Advantage and Foreign Direct Investment in the United States*. Federal Reserve Bank of Atlanta, 1988. Working Paper Series. (Working Paper 88-1) p. 9; Stevens, and Lipsey, *Interactions Between Domestic and Foreign Investment*, p. 29; and U.S. Library of Congress. Congressional Research Service. *Foreign Direct Investment: Effects on the U.S. Trade Balance*. Report No. 89-416 E, by James K. Jackson. Washington, 1989.

[59] Lipsey, Robert E., and Merle Yahr Weiss. "Foreign Production and Exports of Individual firms." *The Review of Economics and Statistics*, May 1984. p. 305; Williamson, Peter J. "Multinational Enterprise Behavior and Domestic Industry Under Import Threat." *The Review of Economics and Statistics*, August 1986. p. 359; and Horst, Thomas. "American Multinationals and the U.S. Economy." *American Economic Review*, May 1976. p. 149.

[60] Lipsey, and Weiss, Foreign Production and Exports in Manufacturing Industries, p. 490

[61] Williamson, Peter J. "Multinational Enterprise Behavior and Domestic Industry Adjustment Under Import Threat." *The Review of Economics and Statistics*, August 1986. p. 365; and Alder, Michael, and Guy V.G. Stevens. "The Trade Effects of Direct Investment." *Journal of Finance*, May 1974. p. 657.

## Commercial Benefits

The decision to invest abroad also represents a critical strategic move for a company operating in a global industry—a move that the company determines jointly with the use and development of its production and distribution facilities worldwide.[62] In some cases, these investments can span a number of locations and production stages through a multi-layer supply chain. Such macroeconomic factors as monetary and fiscal policies have been found to be prime determinants not only of U.S. trade performance but also of a firm's investment behavior through their influence on exchange rates, prices, and wage and productivity behavior.[63] These and such other external conditions as relative growth rates among national economies, exchange rate movements, productivity, trade restraints, and the desire to acquire technology[64] are among the most important factors in determining foreign investments. As a result of these market conditions,[65] multinational firms compensate for such market failures as poorly developed or non-functioning capital or labor markets, by investing abroad and by shifting resources among their foreign subsidiaries. The importance of these factors in motivating direct investment varies over time and among companies and foreign markets. For example, economists trace much of the surge of U.S. direct investment into Common Market countries in the late 1950s and the 1960s to attempts by U.S. companies to avoid trade barriers, to expectations of an increased rate of economic growth in these countries, and to efforts to overcome the perceived overvaluation of the dollar. Once these initial investments were established, a high level of earnings from them continued to be reinvested, probably to maintain market shares and profit margins.[66]

Additional analyses indicate that foreign investment and, therefore, foreign production, may allow corporations to reduce such risks as bad weather, national business cycles, strikes, and changes in government policies.[67] Recent analysis suggests that the establishment of foreign subsidiaries can give multinational companies added flexibility in setting their prices in response to increased competition or to such other factors as changes in exchange rates.[68] This may include the ability to switch among their various subsidiaries in supplying major markets to maintain their competitive position without altering the market price of their goods.[69] As a result, local prices may grow less sensitive to changes in the costs of imports. Linkages between the foreign affiliates and the parent companies apparently allow the affiliates to curtail price changes, which might

[62] Caves, Richard E. and Sanjeev K. Mehra. "Entry of Foreign Multinationals into U.S. Manufacturing Industries." In Porter, Michael E., ed. *Competition in Global Industries*. Boston, Harvard Business School Press, 1986. p. 473.

[63] Lipsey, Robert E., and Irving B. Kravis. *The Competitive Position of U.S. Manufacturing Firms*. Cambridge, Mass., National Bureau of Economic Research, 1985. (Working Paper No. 1557). p. 2; and Aliber, Robert Z. "A Theory of Direct Foreign Investment." In Kindleberger, Charles P. *The International Corporation*. Cambridge, Mass., The M.I.T. Press, 1970.

[64] Lipsey, and Kravis, The Competitive Position of U.S. Manufacturing Firms, p. 2; and Ray, Edward John. The Determinants of Foreign Direct Investment in the United States: 1979-1985. Cambridge, Mass., National Bureau of Economic Research, 1988. p. 2.

[65] Root, International Trade and Investment, p. 464.

[66] Ibid., p. 3.

[67] Little, Jane Sneddon. "The Industrial Composition of Foreign Direct Investment in the United States and Abroad: A Preliminary Look." *Federal Reserve Bank of Boston New England Economic Review*, May-June 1984. p. 38-39.

[68] Helpman and Krugman, *Market Structure and Foreign Trade*, p. 67-83; and Mann, Catherine L. "Prices, Profit Margins, and Exchange Rates." Board of Governors of the Federal Reserve System. *Federal Reserve Bulletin*, June 1986. p. 366-379.

[69] Williamson, Multinational Enterprise Behavior and Domestic Industry Adjustment Under Import Threat, p. 60.

erode their price competitiveness, during periods of fluctuating exchange rates in order to maintain or even to enlarge their market shares in foreign countries.[70]

# Conclusion

This report utilizes a broad collection of data on direct investment published by the Bureau of Economic Analysis of the U.S. Department of Commerce to assess the impact of U.S. direct investment abroad and foreign direct investment in the United States on the U.S. economy. These data were analyzed to determine if U.S. parent companies are shifting jobs abroad in a way that is different or unique from previous experiences with such investment. Data published by the BEA are the most extensive set of published data on foreign investment activities, but they were not developed to address the issue of jobs outsourcing and it is not possible with the BEA data to track job losses or gains in specific industries, specific companies, or specific plants with changes in jobs abroad. Broad, comprehensive data on U.S. multinational companies published by the BEA lag behind current events by two years, which means that assessing these activities may seem to be out of sync with the more limited anecdotal examples that appear in the popular press and raises questions about the relevancy of the data to assessing short-term developments compared with long term trends.

Despite these caveats, the data offer no conclusive evidence that current investment trends are substantially different from those of previous periods. A comparison of gross product and employment between U.S. parent companies and their foreign affiliates over three distinct time periods indicates that U.S. business cycles have a stronger impact on U.S. parent companies than on the foreign affiliates, but that even the affiliates are affected. Any long-term structural changes that are occurring in the economy apparently are reinforced by the business cycle in the economy, but these same business cycles affect the foreign affiliates. As a result of this partial synchronization effect, U.S. direct investment abroad and foreign direct investment in the United States generally move in the same direction. From the data examined, it is not apparent that U.S. parent companies are systematically outsourcing jobs at a faster pace or in a manner that is fundamentally different or distinct from previous periods. An increase in economic growth in the U.S. parent companies relative to the rate of growth in the foreign affiliates likely increases pressure within the economy to complete structural changes and to shift capital and labor from declining sectors to expanding sectors. Such changes may also lead to a greater number of jobs being outsourced, but this effect likely would be muted by the overall strong demand for jobs and by new foreign investments in the U.S. economy.

On the other hand, an economic slowdown among U.S. parent companies relative to the rate of growth among foreign affiliates likely would lead to an overall decline in employment throughout the economy. This overall decline in employment would make it difficult to distinguish between those sectors that are undergoing long-term structural changes compared with those sectors that are experiencing short-term job losses due to the relatively slower rate of economic growth. U.S. parent companies may or may not respond to the economic slowdown by outsourcing jobs abroad because the dominating presence of the U.S. economy in the world economy means that an economic slowdown in the United States likely reduces economic growth abroad as well and that the foreign affiliates of those parent companies may not be a position to add more jobs. The

[70] Ohno, Kenichi. Exchange Rate Fluctuations, Pass-Through, and Market Share. *IMF Staff Papers*, June 1990. p. 294-309.

uneven effect of an economic slowdown among U.S. parent companies on their investment behavior abroad likely means that jobs outsourcing may appear to be more acute during periods in which the long-term structural changes in the economy coincide with the short-term economic adjustments that arise from a slowdown in the rate of growth of the U.S. economy.

A recent development in the area of foreign direct investment is the growing role of global value chains. Such chains include a broad range of activities, generally referred to as non-equity investments, that reflect a new phase in economic globalization in which multinational corporations are engaging in an increasingly complex array of non-equity activities to build interdependent networks of operations. Global value chains help firms avoid many of the costs associated with managing the cross-border activities of complex, multi-plant, multi-currency operations, but they can increase systemic risks, because the failure of a single entity or cluster of entities could result in a contagion of disruptions that could bring down an entire value chain and potentially large parts of the global trading system. Despite these advantages, global value chains, or non-equity investments, have been characterized by substandard working conditions, a lack of employment stability, and prolonged reliance on low value-added activities. In addition, jobs in labor-intensive industries are highly sensitive to the business cycle and tend to be eliminated quickly during times of economic distress, magnifying the impact of the business cycle. A lack of comprehensive data on the activities of global value chains severely constrains efforts to determine the full impact of the chains on international investment and trade and those factors that may limit their overall size and economic impact.

Trade and sales data also indicate that there is no perceptible change in previous patterns that would signal a shift toward a greater emphasis on foreign production and imports. In fact, BEA data indicate that intra-firm trade has declined over the last decade. Although not conclusive, this result is contrary to what would be expected if U.S. parent companies were outsourcing a greater share of their production abroad and importing more goods from their foreign affiliates. These results also seem to challenge estimates that predict a large shift of jobs abroad over the next half decade.

Concerns about the currency of BEA do not seem to be warranted. One characteristic of U.S. direct investment abroad and foreign direct investment in the United States is the relative stability in the patterns of that investment over time. This pattern is unlikely to change over a short period of time, so that the lag in publication of BEA data is unlikely to alter appreciably any general conclusions about the role of direct investment in the economy. A large share of U.S. direct investment abroad remains concentrated in the most highly developed economies and the share of jobs supported by the foreign affiliates comprises a small share relative to the U.S. economy. Employment and jobs in the U.S. economy continue to arise from economic factors that are unique to the U.S. economy and to U.S. economic policies. On average, U.S. foreign affiliates are expected to continue to produce about 300,000 jobs a year, a small share of the average number of jobs produced by the U.S. economy during any given year.

For Congress, the data on direct investment seem to indicate that the number of jobs created by U.S. parent companies and by the foreign affiliates of those parent companies is tied closely to the overall performance of the U.S. economy. Such economic measures as employment, trade, and investment will rise and fall among U.S. parent companies and their foreign affiliates generally in tandem. Swings in the rate of growth in the economy that are associated with the business cycle tend to affect U.S. parent companies more than they affect their foreign affiliates and more than those U.S. firms that are purely domestic firms. Policies that ameliorate the business cycle, especially the downside of the cycle when the economy is experiencing a slow

rate of economic growth, likely would do the most to help U.S. parent companies. Furthermore, Congress may choose to address the economic plight of those workers and communities that experience a disproportionate share of the adjustment costs that are associated with the business cycle by providing specialized assistance or other types of short-term support.

Workers and communities that are involved with economic activities that are facing long-term structural decline may require support to assist displaced workers regain employment or to find new business partners to sustain economic development in those communities. Workers in industries that are undergoing long-term structural decline may well see production and jobs move abroad. Addressing such long-term structural decline, however, is especially challenging, because the economic forces that are working against such industries can be immense.

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