

CRS Report for Congress

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

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Summary

The impact of foreign direct investment on U.S. employment is provoking a national debate. 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 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. This report will be updated as events warrant.

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

Overview¹

The United States is the largest foreign direct investor in the world and the largest recipient of such investment funds.² On a historical cost basis, or book value basis, the Department of Commerce estimates that by the end of 2006 U.S. firms had accumulated \$2.4 trillion worth of direct investment abroad, compared with the \$1.8 trillion foreign investors had spent to acquire or establish businesses in the United States.³ As **Figure 1** shows, direct foreign investment flows increased sharply in 2006.⁴

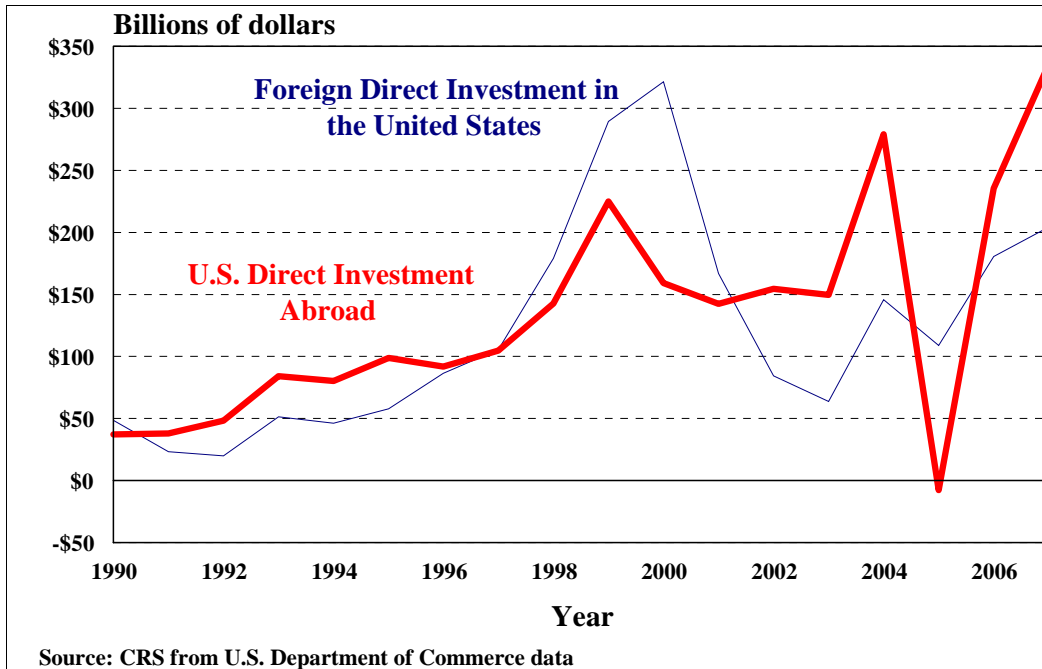
¹ Data for this report were taken from the annual surveys conducted by the Bureau of Economic Analysis on U.S. direct investment abroad and on foreign direct investment in the United States. See *U.S. Direct Investment Abroad: Operations of U.S. Parent Companies and Their Foreign Affiliates*; and *Foreign Direct Investment in the United States: Operations of U.S. Affiliates of Foreign Companies*. Preliminary results appear in the *Survey of Current Business* generally 18 months after the end of the reporting calendar year, with the more detailed reports issued in the fall of that year.

² 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.

³ Ibarra, Marilyn, and Jennifer Koncz, Direct Investment Positions for 2006, *Survey of Current Business*, July 2007, p 21. 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 U.S. direct investment abroad increased by \$320 billion and \$808 billion in 2006, respectively, to reach \$2.9 and \$4.4 trillion. Abaroa, Patricia E., The International Investment Position of the United States at Yearend 2006, *Survey of Current Business*, July 2007, p.10.

⁴ 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
(continued...)

Figure 1. Foreign Direct Investment in the United States and U.S. Direct Investment Abroad, Annual Flows 1990-2007



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.

Foreign direct investment in the United States on an annual basis peaked at \$320 billion in 2000 before plummeting to about \$40 billion in 2002, according to Commerce Department data.⁵ Recent Department of Commerce data indicate that Foreigners invested \$180 billion in U.S. businesses and real estate in 2006, according to data published by the Department of Commerce and invested more than \$200 billion in 2007.⁶ New spending by U.S. firms on businesses and real estate abroad, or U.S. direct investment abroad,⁷ rose sharply in 2006 to \$235 billion up from the \$8 billion net they brought home in 2005. New investments in 2007 likely exceeded

⁴ (...continued)

business enterprise or an equivalent interest in an unincorporated business enterprise. 15 CFR § 806.15 (a)(1).

⁵ Bach, Christopher, L., U.S. International Transactions in 2007. *Survey of Current Business*, April 2008. p. 48.

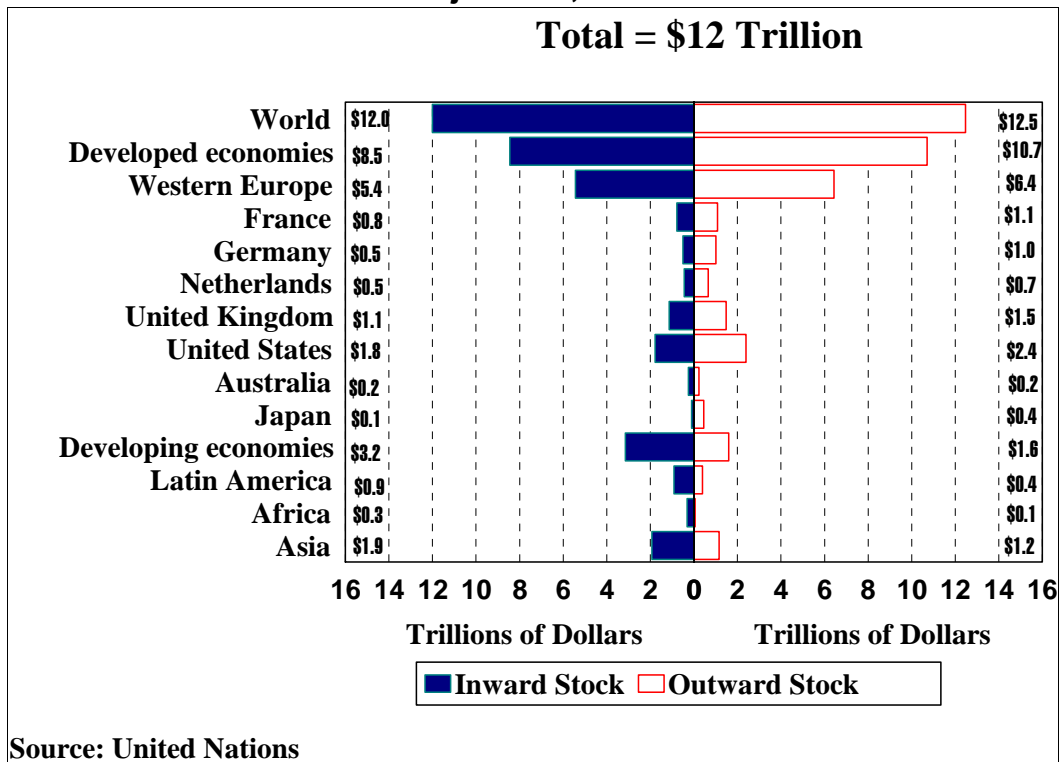
⁶ *Ibid.* Direct investment data reported in the balance of payments differ from capital flow data reported elsewhere, because the balance of payments data have not been adjusted for current cost adjustments to earnings.

⁷ 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).

\$330 billion, according to balance of payments data by the Department of Commerce.⁸

Globally, the total, or cumulative, amount of foreign direct investment reached \$12 trillion in 2006 (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 \$450 billion abroad through 2006, but had received \$107 billion in investment inflows. Among the developing economies, Asia, which includes China, has accumulated \$1.9 trillion in direct investment, followed by Latin America (\$908 billion) and Africa (\$315 billion).

Figure 2. Inward and Outward Global Direct Investment Position, By Major Area, 2006



⁸ Bach, Christopher L., U.S. International Transactions in 2007. *Survey of Current Business*, April 2008, p. 48. 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.

Global direct investment flows picked sharply after 2004, following three years of reduced flows. According to the United Nations' *World Investment Report*,⁹ 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 2004-2007 period, as indicated in **Table 1**. In 2005, 2006, and 2007 global direct investment flows grew by 27%, 38%, and 18%, respectively, to reach \$1.5 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. The developed economies continue to 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%. The United Nations estimates that foreign direct investment should remain strong through 2009.¹⁰

Table 1. Global Annual Inflows of Foreign Direct Investment, By Major Area
(in billions of dollars; percent shares)

	2005	2006	2007	2005	2006	2007
	Inflows of foreign direct investment (in billions of dollars)			Share of annual foreign direct investment inflows (in percent)		
World	\$945.8	\$1,305.9	\$1,537.9	100.0%	100.0%	100.0%
Developed economies	590.3	857.5	1,001.9	62.4	65.7	65.1
Western Europe	495.0	566.4	651.0	52.3	43.4	42.3
European Union	486.4	531.0	610.0	51.4	40.7	39.7
Other Western Europe	8.6	35.4	38.0	0.9	2.7	2.5
North America	129.9	244.4	n.a.	13.7	18.7	n.a.
United States	101.0	175.4	192.9	10.7	13.4	12.5
Other developed econ.	-34.6	46.7	n.a.	-3.7	3.6	n.a.
Developing economies	314.3	379.1	438.4	33.2	29.0	28.5
Africa	29.6	35.5	35.6	3.1	2.7	2.3
Latin America	75.5	83.7	125.8	8.0	6.4	8.2
Asia	209.1	259.8	277.0	22.1	19.9	18.0
Other Europe	41.2	69.3	97.6	4.4	5.3	6.3

Source: *World Investment Report, 2007*, United Nations. Annex table B.1; Foreign Direct Investment Reached New Record in 2007, UNCTAD press release, January 8, 2008.

⁹ *World Investment Report 2007*, United Nations, July 2007. P. 5.

¹⁰ *World Investment Prospects Survey: 2007-2009*. United Nations Conference on Trade and Development, 2007.

U.S. and Foreign Multinational Companies

By the end of 2005, there were more than 2,300 U.S. parent companies with 24,000 affiliates operating abroad, as **Table 2** indicates. In comparison, foreign firms had about 5,300 affiliates operating in the United States. U.S. parent companies employed nearly 22 million workers in the United States, compared with the 10.3 million workers employed abroad by U.S. firms and the 5.5 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 foreign affiliates of U.S. parent companies, however, had a third higher value of gross product than did the affiliates of foreign firms operating in the United States. In addition, the foreign affiliates of U.S. firms had total sales that were a third higher than that of the U.S. affiliates of foreign firms. The foreign affiliates of U.S. firms, however, paid three times 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, 2005
(in millions of dollars unless otherwise indicated)

	U.S. Multinational Companies		U.S. Affiliates of Foreign Firms
	Parent Companies	Affiliates	
Number of firms	2,303	24,456	5,331
Employment (thousands)	21,768.5	10,333.3	5,530.1
Employee compensation	\$1,288,871	\$391,846	\$363,340
Gross product	\$2,303,060	\$882,099	\$539,869
Total assets	\$16,767,078	\$9,951,716	\$6,848,777
Sales	\$7,588,306	\$4,224,685	\$2,755,941
Taxes	\$166,767	\$168,811	\$49,595
R&D Expenditures	\$NA	\$28,316	\$34,637

Source: *U.S. Direct Investment Abroad: Operations of U.S. Parent Companies and Their Foreign Affiliates, Preliminary 2005 Estimates*; and *Foreign Direct Investment in the United States: Operations of U.S. Affiliates of Foreign Companies, Preliminary 2005 Estimates*.

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 \$2.3 trillion in goods and services in 2005, up slightly from the \$2.2 trillion dollars they produced in 2004. This amount comprised about 21% of total U.S. private industry gross product, a share of total gross product of U.S. parent companies that has remained fairly consistent since the early 1990s despite significant changes in the U.S. economy as a whole. The data also demonstrate the impact the improvement in the U.S. economy after 2002 had on the operations of U.S. multinational companies.

The manufacturing sector presents a similar picture. During the 1990s, manufacturing production continued to decline as a share of U.S. parent company gross product, falling from 53% of total output in 1994, to 45% in 2002, 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.

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.¹¹

Table 3. Gross Product and Manufacturing Gross Product by U.S. Multinational Companies, 1994-2005
(in billions of dollars and percent share)

	Gross Product			Manufacturing Gross Product	
	U.S. Parent Companies	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
	Billions of dollars				
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	10,221.5	21.7%	45.6%	14.0%
2005	2,303.1	10,892.2	21.1%	45.7%	13.9%

Source: Shares developed by CRS from Department of Commerce data.

¹¹ Mataloni, Raymond J. Jr. U.S. Multinational Companies: Operations in 1998. *Survey of Current Business*, July 2000. pp. 26-45.

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.¹² Some observers argue that recent actions by U.S. parent companies are different from previous experiences with foreign investment because the parent companies are shifting jobs, capital, and technology 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 in **Table 4** indicate, though, that the employment trends of U.S. parent companies 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, and in the early 2000s.

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 growth rate of the economy also affect the growth in employment among the foreign affiliates, though not necessarily by the same magnitude as indicated in **Figure 3**. As a result, the number of employees in the parent companies and in the affiliates tend to rise and fall in a generally 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 outsourcing.

¹² For a comprehensive look at how offshore outsourcing is affecting U.S. workers, see CRS Report RL32292, *Offshoring (a.k.a. Offshore Outsourcing) and Job Insecurity Among U.S. Workers*, by Linda Levine. Also, see Drezner, Daniel W., *The Outsourcing Bogeyman*. *Foreign Affairs*, May/June, 2004; and Engardio, Pete, Aaron Bernstein, and Manjeet Kripalani, *Is Your Job Next?* *Business Week*, February 3, 2003. P. 50-60.

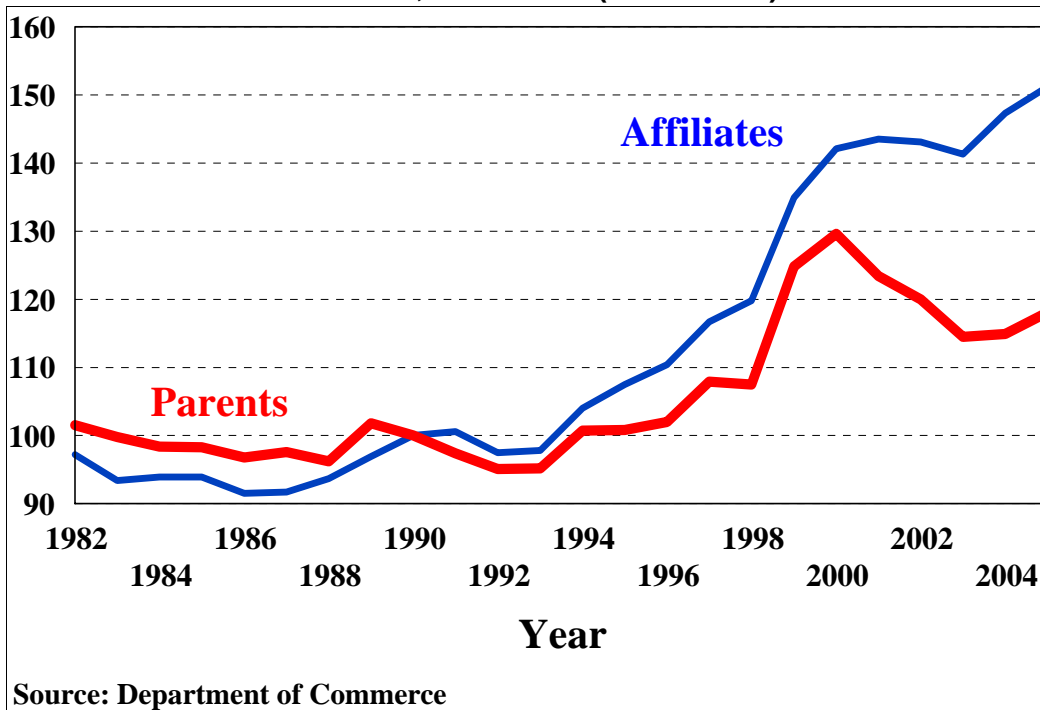
Table 4. Employment of U.S. Multinational Companies and the Affiliates of Foreign Firms, 1985-2005

(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
1985	24,531.9	18,112.6	6,419.3	2,862.2	107,150	16.90%	5.99%	2.67%
1986	24,082.0	17,831.8	6,250.2	2,937.9	109,597	16.27%	5.70%	2.68%
1987	24,255.4	17,985.8	6,269.6	3,224.3	112,440	16.00%	5.58%	2.87%
1988	24,141.1	17,737.6	6,403.5	3,844.2	114,968	15.43%	5.57%	3.34%
1989	25,387.5	18,765.4	6,622.1	4,511.5	117,342	15.99%	5.64%	3.84%
1990	25,263.6	18,429.7	6,833.9	4,734.5	118,793	15.51%	5.75%	3.99%
1991	24,837.1	17,958.9	6,878.2	4,871.9	117,718	15.26%	5.84%	4.14%
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	15.35%	7.20%	3.99%
2005	32,101.8	21,768.5	10,333.3	5,530.1	141,730	15.36%	7.29%	3.90%

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

Figure 3. Employment of U.S. Parent Companies and Their Foreign Affiliates, 1992-2005 (1990 = 100)



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 are relevant to the current discussion and are likely to account for the largest share of unwanted job changes during any given year. When cyclical and structural unemployment coincide it often is difficult to distinguish one from another.

Long-term changes in the basic structure of the economy, especially in such dynamic economies as in 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

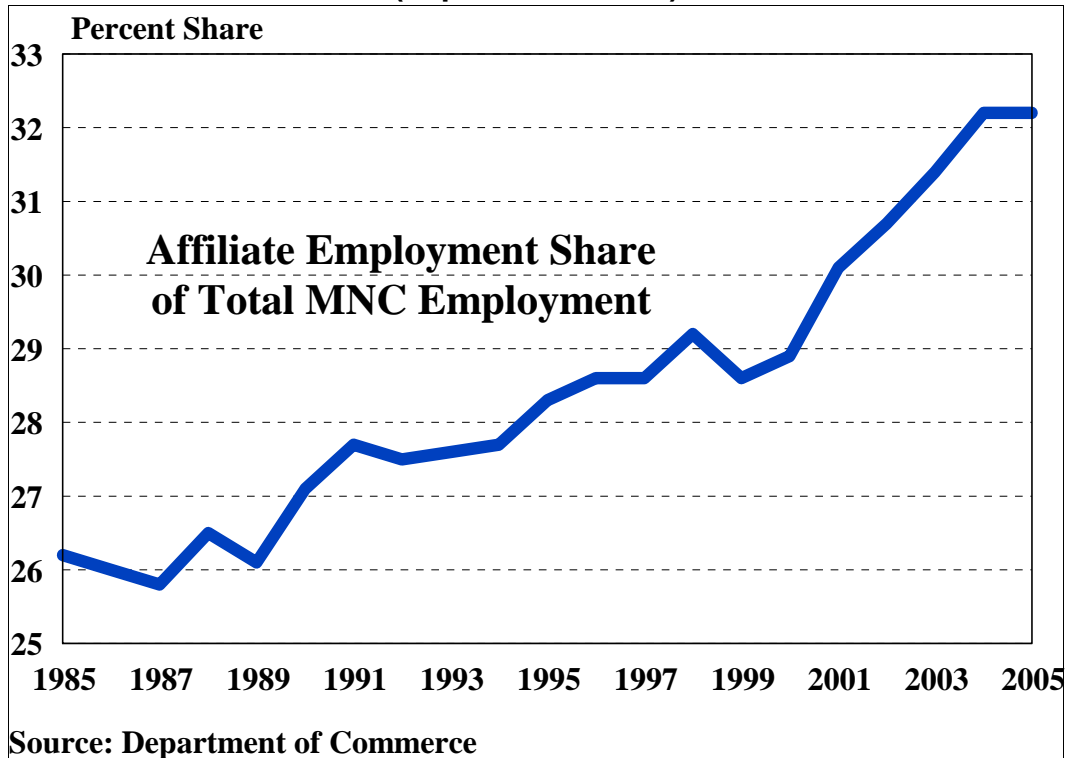
Both U.S. parent companies and their foreign affiliates lost employment during the economic contraction of the early 1980s, as is indicated in **Table 4** (page 8).

These multinational companies apparently were affected more by the cyclical changes than were purely domestic firms. As a result, the parent companies' share of total U.S. civilian employment declined until 2004, when it began to increase, indicating that U.S. parent companies had at least stemmed the decline in their share of U.S. civilian employment (the relative share of U.S. employment represented by the U.S. foreign affiliates is provided only for comparison purposes). The affiliates of foreign firms operating in the United States bucked this trend and added to their absolute level of employment except in 2003, when they reduced the number of workers and fell as a share of overall U.S. civilian employment. 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.¹³ While such 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. In 1985, U.S. multinational companies employed 24.5 million workers. Of this number, 18.1 million workers were employed by the parent company and 6.4 million workers were employed abroad by the foreign affiliates of those parent companies. Throughout the 1980s, an economic recession and a broad restructuring of the economy caused U.S. parent companies to lose employment, while employment among the foreign affiliates of these parent companies generally held even.

By 1989, U.S. parent companies reversed the downward slide in their employment and began expanding their employment roles, a year behind the turn-around in employment of their foreign affiliates. Prior to this turn-around, the parent companies' share of the U.S. civilian labor force had fallen from 18.8% to 16% between 1982 and 1989. In comparison, the employment of U.S. affiliates abroad fell from a representative share of U.S. civilian employment of 6.7% in 1982 to 5.6% in 1989. During the same time, foreign firms were investing heavily in the United States and their employment rose from 2.5 million workers in 1982 to 4.5 million in 1989, or from 2.5% of U.S. civilian employment in 1982 to 3.8% in 1989. Employment among U.S. parent companies dipped again in the early 1990s and in the early 2000s in response to economic downturns that occurred during those periods. 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 30% in 2002 as a share of total U.S. multinational company employment, as indicated by **Figure 4**.

¹³ McNeil, Lawrence R., "Foreign Direct Investment in the United States: New Investment in 2006." *Survey of Current Business*, June 2007, p. 44-51.

**Figure 4. Employment of the Foreign Affiliates of U.S. Parent Companies as a Share of the Total Employment of U.S. Multinational Companies, 1985-2005
(in percent shares)**



The 1990s marked a major turn-around in employment for U.S. multinational companies. In 1994, U.S. parent companies began to regain employment at a faster rate than did the U.S. economy as a whole, thereby raising their share of total U.S. civilian employment. By 2000, U.S. parent company employment had reached 23.9 million, an all-time high and was equivalent to 17.5% of U.S. civilian employment, the highest share of such employment since 1983. Employment among the affiliates of foreign firms operating in the United States also peaked in 2000, mirroring the trend of U.S. parent companies. Employment among the overseas affiliates of U.S. parent companies continued to add workers through 2001, before they also were forced to reduce their total number of workers in 2002 due to slowing economic growth abroad. Starting in 2004, employment picked up in all three categories of firms as U.S. parent companies increased their employment and the foreign affiliates of U.S. parent firms expanded their employment to the highest levels recorded.

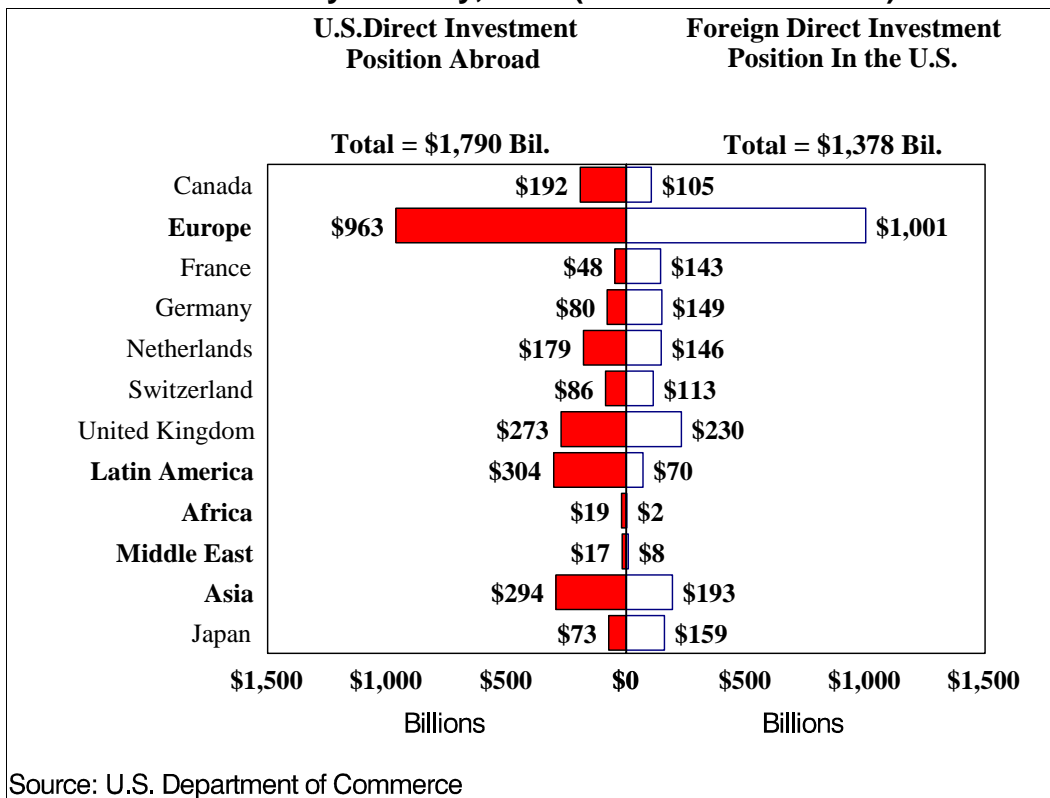
Employment by Sector and Area

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 over half of all the employment of the foreign affiliates in 2005 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, retail trade, chemicals, and computers and equipment. Employment in the services sectors, mining, and the food sectors grew most rapidly from 2003 to 2005 among the U.S. foreign affiliates. Sharp declines in employment were experienced in the utilities sector, beverages and tobacco manufacturing, and broadcasting. Most other sectors showed moderate increases in employment over the three-year period.

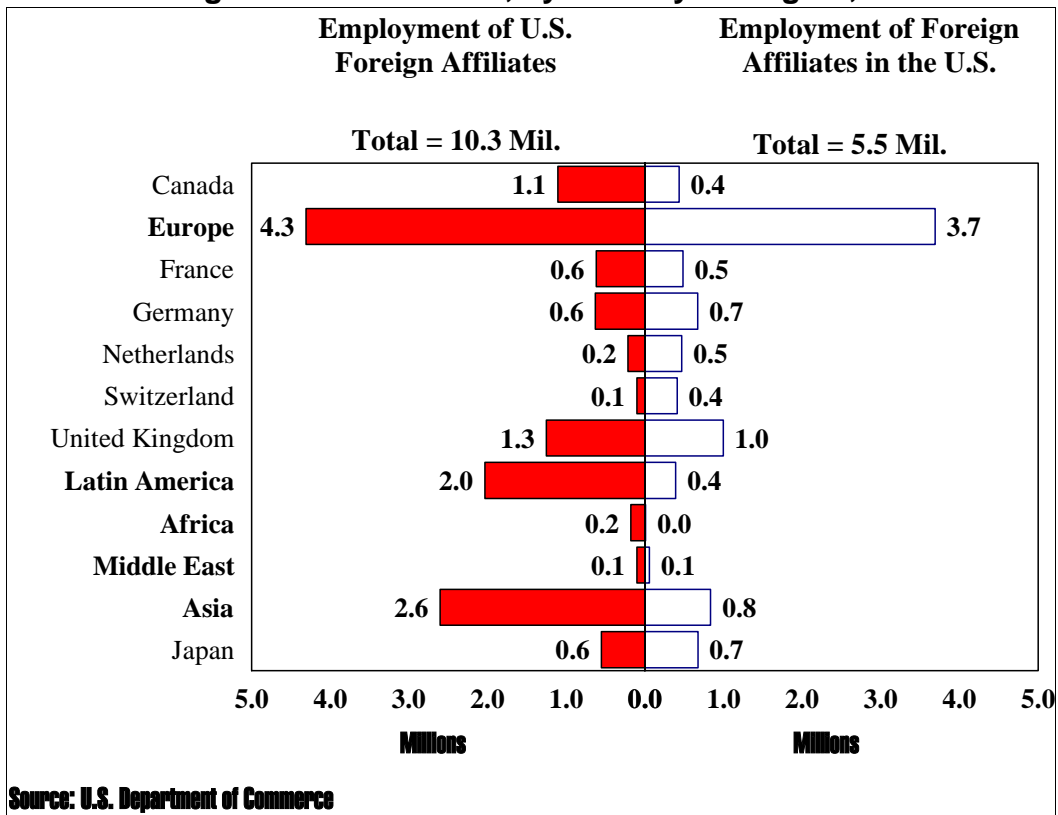
By country, over two-thirds of the investments and the employees of U.S. overseas investors are in the most highly developed economies where labor compensation, standards of living, and consumer tastes are most closely comparable to those in the United States. These countries are also the largest foreign direct investors and the largest foreign employers in the United States, as indicated in **Figures 5 and 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 in Europe inside the tariff protection created by the formation of the EEC and access to the European market continues to draw U.S. direct investment. Moreover, with the enlargement of the European

Figure 5. U.S. and Foreign Direct Investment Position, Cumulative Position by Country, 2005 (in billions of dollars)



Union,¹⁴ the largest share of U.S. direct investment abroad likely will remain focused on this region for some time to come. Nevertheless, from 2003 to 2005, employment by U.S. firms in Asia, particularly in China, Malaysia and Singapore grew especially rapidly. In China, for instance, employment over the 2003-2005 period grew by 45% to reach 490,000. As a whole, employment by U.S. firms in Asia accounts for one-fourth of the total employment by U.S. firms abroad.

Figure 6. Employment of U.S. Foreign Affiliates and Affiliates of Foreign Firms in the U.S., by Country or Region, 2005



¹⁴ For additional information, see CRS Report RS21344, *European Union Enlargement*, by Kristin Archick, updated April 9, 2004.

Table 5. Employment of Non-Bank U.S. Foreign Affiliates by Major Sector and Area, 2003-2005

(in thousands)

Industries	2003	2004	2005
All industries	8,242.2	8,617.2	8,955.8
Mining	92.9	102.1	122.6
Utilities	74.8	63.3	50.7
Manufacturing	4,756.0	4,838.8	4,963.7
Food	384.2	390.5	551.3
Beverages and tobacco products	204.6	208.7	130.2
Textiles, apparel, and leather products	59.5	56.4	54.9
Petroleum and coal products	132.7	136.5	156.9
Chemicals	747.0	734.5	748.8
Pharmaceuticals	329.0	321.8	327.5
Metal products	257.1	252.3	232.7
Machinery	317.3	325.8	309.1
Computers and electronic products	717.2	774.0	743.4
Communications equipment	157.1	164.7	171.0
Semiconductors, electronic components	223.8	265.1	328.9
Transportation equipment	1,219.1	1,227.0	1,255.5
Wholesale trade	370.7	379.7	367.2
Information	344.9	339.1	351.7
Broadcasting and telecommunications	124.3	94.2	106.6
Information services and data processing	135.8	147.8	139.6
Finance and insurance	300.7	291.4	295.6
Professional, scientific, and technical services	518.1	543.2	587.5
Computer systems design and related services	312.9	329.9	361.9
Other industries	1,784.1	2,059.6	2,216.7
Retail trade	637.0	639.9	756.7
Administration, support, and waste management	448.0	493.7	553.6
Accommodation and food services	385.7	197.7	534.5
Countries			
All countries	8,242.2	8,617.2	8,955.8
Canada	1,060.5	1,065.1	1,079.1
Europe	3,703.8	3,879.3	3,906.9
France	547.2	562.8	584.1
Germany	578.4	601.7	590.0
Italy	222.4	236.5	225.5
Netherlands	171.6	175.1	184.3
Spain	190.1	197.2	192.2
United Kingdom	1,153.1	1,166.3	1,160.6
Latin America	1,572.9	1,580.2	1,689.7
Brazil	347.8	345.8	393.3
Mexico	818.5	785.2	838.4
Africa	149.8	160.8	154.0
Middle East	52.6	54.4	59.8
Asia and Pacific	1,702.6	1,877.4	2,063.4
Australia	272.7	271.9	283.9
China	338.9	407.9	489.6
Japan	235.9	227.6	242.0
Malaysia	88.5	97.5	116.3
Singapore	95.5	110.7	112.5

Source: Department of Commerce.

Some U.S. observers are concerned that the U.S. economy is losing jobs to developing countries where labor rates are considerably below those in the United States, but the data 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. 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 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 2005, U.S. affiliates in Mexico had over 1 million employees, third behind affiliates in Canada with 1.1 million employees and affiliates in the United Kingdom with nearly 1.3 million employees. Between 2001 and 2002, U.S. direct investment employment in Latin America and Asia increased, while employment in Africa and the Middle East 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 developing countries, such as in Latin American and Asia, and among 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 2006, the economy created an average of more than 2 million jobs per year. 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. In 2004 and 2005, these affiliates created more than 300,000 jobs per year, reflecting the increase in economic activity abroad. 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.¹⁵ 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 2005 period, or about 6% of the average number of jobs created by the U.S. economy in a year.

Gross Product

Another concern 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 is partially muted by foreigners investing in the United States. A large share of such investment is comprised of foreign acquisitions of existing U.S. firms. Although such acquisitions can not be characterized as creating new jobs, they do help sustain U.S. employment and production. There is bound to be some shifting of

¹⁵ 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.

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. 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 \$2.3 trillion in 2005, representing 72% of the total output of U.S. multinational companies, compared with a gross product of their majority-owned foreign affiliates of \$822 billion. As the U.S. economy expanded rapidly in the last half of the 1990s, 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 78% in 2000. Since 2000, however, output among U.S. parent companies has grown at a slower pace than did that of their majority-owned foreign affiliates, which had grown to account for nearly 28% of total output of the U.S. multinational companies.

Table 6. Gross Product of U.S. Parent Companies and Their Majority-Owned Foreign Affiliates
(in millions of dollars and percent share)

	Total Gross Product	Parent Companies	Majority-Owned Foreign Affiliates	Parent Companies	Majority-Owned foreign Affiliates
	(millions of dollars)			(percent shares)	
1994	\$1,717,488	\$1,313,792	\$403,696	76.5%	23.5%
1995	1,831,046	1,365,470	465,576	74.6%	25.4%
1996	1,978,948	1,480,638	498,310	74.8%	25.2%
1997	2,094,318	1,573,451	520,867	75.1%	24.9%
1998	2,100,773	1,594,504	506,269	75.9%	24.1%
1999	2,480,739	1,914,343	566,396	77.2%	22.8%
2000	2,748,106	2,141,480	606,626	77.9%	22.1%
2001	2,478,056	1,892,399	585,657	76.4%	23.6%
2002	2,460,411	1,858,805	601,606	75.5%	24.5%
2003	2,655,903	1,958,125	667,778	73.7%	26.3%
2004	2,991,723	2,173,467	818,256	72.6%	27.4%
2005	3,185,159	2,303,060	882,099	72.3%	27.7%

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.¹⁶ 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 1989¹⁷. This share stayed fairly constant at about 22% through much of the 1990s until 1998,

¹⁶ 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.

¹⁷ Mataloni, Operations of U.S. Multinational Companies. p. 31.

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. 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 during the period from 1989 to 1998. The MNC share of all other industries rose from 16% to 18% during the 10-year period, but they lost shares in the 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%).¹⁸

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. The shift in U.S. direct investment abroad over the last decade reflects fundamental changes that occurred in the U.S. economy during the same 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.¹⁹ 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.

Foreign-Owned Firms

On average, foreign-owned establishments operating within the United States are outperforming their U.S.-owned counterparts. Although foreign-owned firms account for less than 4% of all U.S. manufacturing establishments, they have 14% more value added on average and 15% higher value of shipments than other manufacturers. The average plant size for foreign-owned firms is much larger — five times — than for U.S. firms, on average, in similar industries. This difference in plant size apparently rises from the fact that there are no 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 14% higher than all U.S. manufacturing firms, had 40% higher productivity per worker, and 50% greater output per worker than the average of comparable U.S.-owned manufacturing plants.

¹⁸ Ibid., p. 31.

¹⁹ CRS Report RS21118, *U.S. Direct Investment Abroad: Trends and Current Issues*, by James K. Jackson.

Foreign-owned firms also display higher capital intensity in a larger number of industries than all U.S. establishments.²⁰

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.

Table 7. U.S. Direct Investment Abroad; Investment Outflows for Selected Regions and Countries, 2002-2006

	(millions of dollars)				
	2002	2003	2004	2005	2006
All Countries	\$134,946	\$129,352	\$257,967	\$-27,736	\$216,614
Canada	15,003	17,340	23,865	11,023	14,793
Europe	79,492	87,509	120,382	-55,068	127,375
France	4,604	1,074	7,820	-579	4,886
Germany	2,416	4,376	9,432	6,047	8,275
Ireland	10,700	7,408	8,336	-3,174	13,264
Italy	1,230	2,862	3,210	-652	3,184
Luxembourg	10,485	8,080	6,568	-16,755	15,127
Netherlands	14,790	15,502	26,489	-38,515	32,896
Spain	3,032	1,820	3,954	170	2,712
Sweden	2,520	2,270	2,520	434	2,954
Switzerland	7,924	14,462	9,468	-12,290	10,441
United Kingdom	15,265	26,738	29,755	3,114	19,382
Latin America	15,192	3,901	22,915	-1,489	22,273
Mexico	7,656	3,664	7,712	7,385	10,645
Bermuda	4,313	-3,778	2,856	-5,137	5,685
U.K. Islands	6,146	3,314	7,927	-11,208	-4,635
Africa	-578	2,697	1,317	1,025	2,176
Egypt	127	470	570	621	630
South Africa	125	232	304	65	287
Other	-1,418	1,823	-127	1,144	2,091
Middle East	2,559	1,315	1,610	3,769	4,956
Israel	202	1,263	570	3,076	2,815
Saudi Arabia	1,505	-1,245	-1,044	-380	593
United Arab Emirates	400	186	544	1	1,211

²⁰ 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. 55-73; Mataloni, Raymond J., Jr. "Real Gross Product of U.S. Companies' Majority-Owned Foreign Affiliates." *Survey of Current Business*, April 1997, p. 8-17.

Oman	-46	163	59	143	289
Qatar	677	665	1,170	997	-248
Asia and Pacific	23,277	16,592	87,878	13,003	45,041
Australia	8,036	7,717	(D)	(D)	6,460
China	875	1,273	3,446	1,441	4,656
Hong Kong	1,226	-689	(D)	3,556	4,817
India	919	354	1,002	667	2,074
Japan	8,711	867	11,974	6,998	12,241
Korea	1,681	1,231	3,598	1,831	2,402
Singapore	530	5,446	(D)	-9,625	5,363

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. The drop in U.S. direct investment abroad in 2005 reflects 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).

Cyclical vs. Structural Changes

The Bureau of Economic Analysis publishes detailed data on a broad range of industries represented by U.S. parent companies and their foreign affiliates. These data are used to compare differences in performance between U.S. parent companies and their foreign affiliates in terms of gross production and employment across a range of industrial sectors during three time periods, representing two periods of fast growth separated by a period of slower growth to measure the performance of U.S. parent firms and their foreign affiliates during these periods. In particular, the data are compared to determine if there has been any noticeable shift in production or jobs from U.S. parent companies to their foreign affiliates in the 1999 to 2002 period, when economic growth slowed in the United States, that is different from what has happened during the 1995 to 1998 period and 2003 to 2005 period when growth was relatively stronger. The data are then used to determine if shifts in production from parent companies to foreign affiliates can be attributed to structural changes in the economy or to cyclical changes that are associated with the business cycle. Structural changes, for instance, can occur in industries that are maturing and experiencing economies 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 certain 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.

The data in **Table 8** compare two periods of economic expansion -- 1995 to 1998 and 2003 to 2005-- with the economic slowdown in the 1999 to 2002 period. These three periods are useful for comparing the overall economic performance of U.S. parent companies and their foreign affiliates by examining their rates of growth in output and employment during the first and third periods when the U.S. economy grew at an annual average rate of more than 3% per year and the later period when the economy grew at an average annual rate of about 2.5%. If U.S. parent companies are prone to outsourcing more jobs during periods when the U.S. economy is growing more slowly, then industries that are experiencing long-term structural decline would be expected to show relatively poor economic performance by the parent company

in both periods relative to a more robust performance by the foreign affiliates. In contrast, industries that are experiencing strong growth during the expansion part of the business cycle would be expected to show stronger growth in gross product and employment by the parent firms than by the foreign affiliates.

The period between 1999 and 2002, however, shows the impact a slowdown in the U.S. economy has on the operations of U.S. parent companies. During this period, the U.S. parent companies' average annual gross product decreased by 1%, while the average annual gross product of U.S. foreign affiliates rose by 2.6%, slightly below the average annual rate of growth they experienced in the 1995 to 1998 period. Employment fell among parent companies, mostly in the 2000-2002 period as a result of the slowdown in the U.S. economy, while employment grew on average at a 1.7% average annual rate among the affiliates, a rate that is about one-third the 4.8% average annual rate the affiliates experienced in the 1995 to 1998 period and far below the average annual rate of 12.7% increase in employment the affiliates experienced in the 2003 to 2005 period. In contrast, during the 1995-1998 period, parent company's gross product grew at an average annual rate of 5.6%, about twice the rate of the foreign affiliates, although employment among the parents grew by 2.2% during the period, or half the rate of the growth in employment among foreign affiliates as indicated in **Figures 7 and 8**. These trends make it difficult to detect a general shift of jobs abroad by U.S. parent companies. In many cases, both employment and gross product of the parent firms and the foreign affiliates seem to move in the same general direction. This partial synchronization may reflect the overwhelming impact the U.S. economy has on the global economy.

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

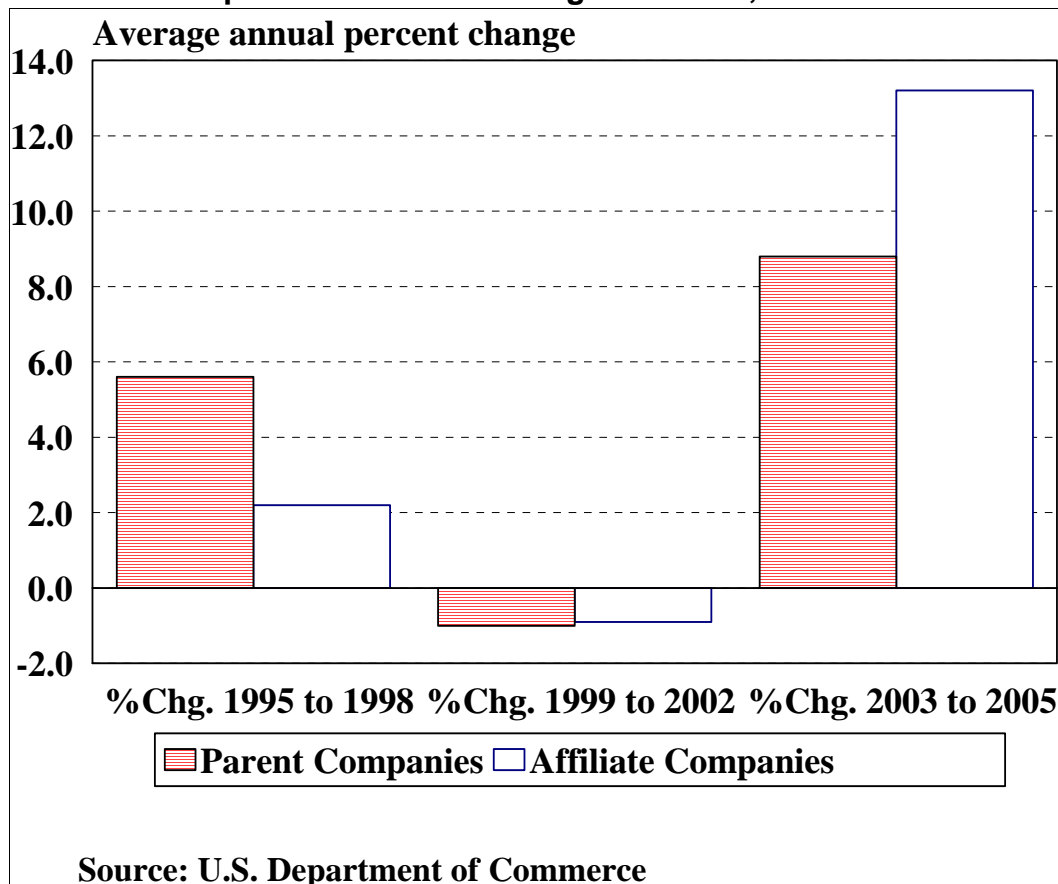
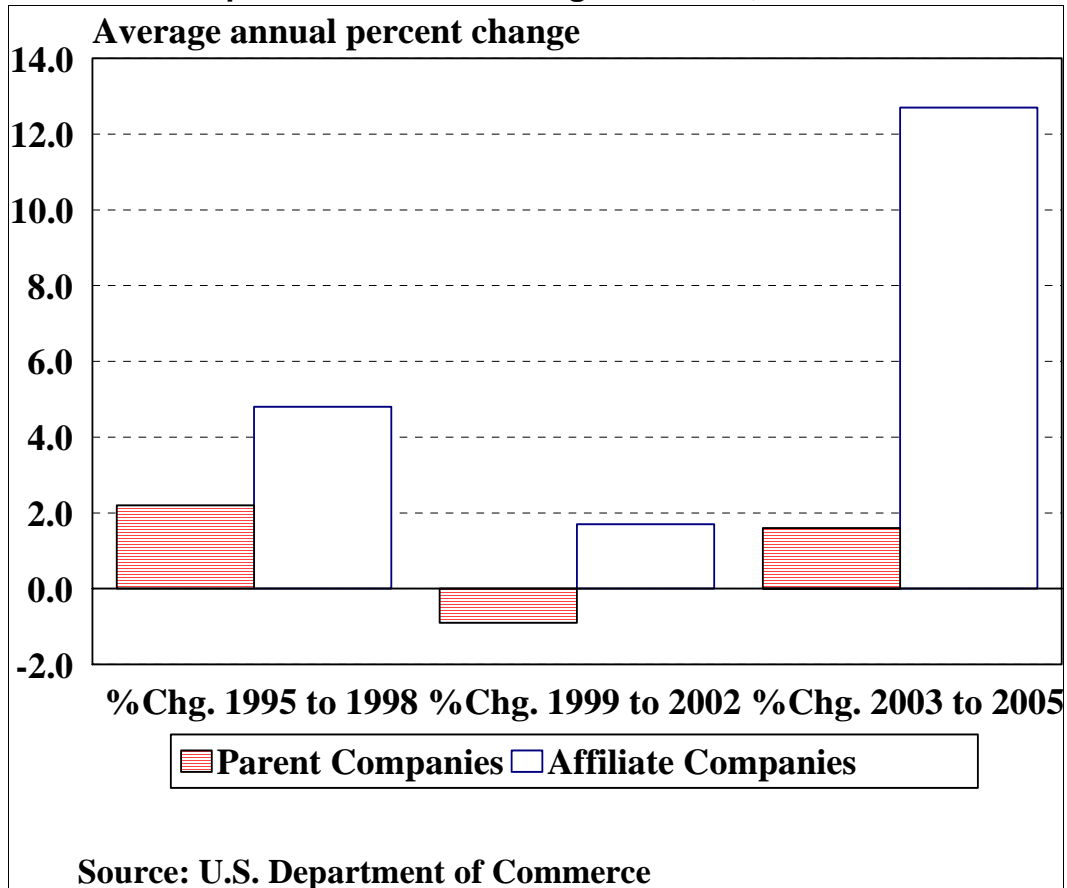


Table 8. Average Annual Percent Change in Gross Product and Employment of U.S. Parent Companies and Their Foreign Affiliates For Select Periods
(in percent change)

	Average Annual Percent Change 1995 to 1998				Average Annual Percent Change 1999 to 2002				Average Annual Percent Change 2003 to 2005			
	Gross Product		Employment		Gross Product		Employment		Gross Product		Employment	
	Parents	Affiliates	Parents	Affiliates	Parents	Affiliates	Parents	Affiliates	Parents	Affiliates	Parents	Affiliates
All industries	5.6%	2.9%	2.2%	4.8%	-1.0%	2.6%	-0.9%	1.7%	8.8%	13.2%	1.6%	12.7%
Oil and gas extraction	78.1	-4.8	38.0	44.8	13.9	-16.0	2.9	6.1	30.5	40.4	20.5	NA
Manufacturing	2.7	1.1	-2.0	1.1	-3.7	3.6	-2.4	0.3	10.8	12.8	0.0	9.0
Food and kindred products	-0.6	2.3	-11.4	-5.4	-2.0	-1.5	3.1	2.6	23.0	95.8	1.9	33.7
Chemicals and allied products	2.5	4.0	-4.1	1.5	3.2	4.2	0.1	1.2	18.4	8.1	3.2	2.7
Primary and fabricated metals	0.7	3.6	0.8	-1.2	1.3	2.0	-1.2	0.7	9.6	1.2	0.7	-2.4
Computer and office equipment	-1.7	-4.7	0.0	4.7	-3.7	9.7	0.9	-3.0	-2.3	5.3	-4.4	3.2
Electronic equipment	6.5	-1.4	1.0	-4.2	-6.9	-5.9	-7.3	-5.9	21.1	43.5	8.5	35.5
Transportation equipment	6.8	5.5	1.1	6.4	-12.6	-7.3	-7.2	3.6	7.4	8.1	0.2	9.4
Motor vehicles and equipment	1.3	5.5	-4.2	2.6	-10.6	-3.9	-3.8	-33.3	3.2	5.9	-1.9	NA
Textile products and apparel	3.6	2.6	-1.9	-0.4	-11.3	-7.9	-11.9	-0.9	14.9	10.9	2.0	-2.8
Wholesale trade	26.6	1.2	16.6	32.9	3.1	-4.2	0.1	5.2	21.6	14.3	16.6	2.4
Finance	16.7	20.4	3.9	9.5	9.5	3.7	0.5	6.2	-1.1	4.9	-9.9	12.7
Insurance	-3.0	16.0	-2.8	1.3	10.4	5.3	-0.6	6.0	8.2	9.6	-7.5	1.6
Real estate	3.8	21.0	3.2	233.0	6.2	10.8	9.1	1.3	59.1	27.5	13.6	75.7
Retail trade	10.3	5.6	8.1	NA	6.7	24.1	1.0	12.3	9.5	4.7	5.0	17.1
Services	14.4	17.3	11.4	17.1	0.9	0.2	-1.3	0.9	14.0	11.8	10.4	9.5

Source: Data are from the 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



Gross product in the manufacturing sector fared poorly over the first two periods, but showed strong gains in the 2003 to 2005 recovery as output by U.S. parent companies increased by 10.8% on an average annual basis, while output among the foreign affiliates increased by 12.8%, as indicated in **Figures 9 and 10**. This performance illustrates the impact a temporary slowdown in the business cycle has on industrial sectors that also are experiencing long-term structural changes. From 1995 to 1998, manufacturing gross product among parent companies increased at an average annual rate of 2.7%, more than twice the rate among the overseas affiliates. Employment among the parent companies, however fell at an average annual rate of 2% as the U.S. manufacturing sector continued to experience structural changes and a robust increase in productivity. In contrast, employment among the foreign affiliates increased at an average annual rate of 1%, commensurate with their rate of growth in gross product. During the period 1999 to 2002, when U.S. economic growth slowed, gross product in the manufacturing sector among parent companies fell at an average annual rate of 3.7%, and employment fell at an average annual rate of 2.4%, or fell at a slightly faster rate than in the previous period, likely reflecting the effects of the slowdown in growth combined with the advanced stages of structural retrenchment that had already occurred. In comparison, U.S.-owned foreign manufacturing affiliates experienced a 3.6% increase in average annual gross product, but only a average annual increase in employment of 0.3%. During the recovery of 2003 to 2005, however, gross product among U.S. parent companies

increased at an average annual rate of 10.8%, while the foreign affiliates experienced an increase of 12.8%. Despite this strong recovery in output, U.S. parent companies experienced no measurable growth in employment, while the foreign affiliates expanded their employments roles by an average annual rate of 9%.

In other major industries, the results are mixed. The impact on wholesale trade shows the impact of the economic slowdown in the 1999 to 2002 period, as indicated in **Table 8** (page 21). 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 1999 to 2002 period, when the rate of economic growth had slowed, gross product among parent companies increased at an average annual rate of 3%, while employment stayed even. Among affiliates, gross product fell at an average annual rate of 4%, but employment increased by an average annual rate of 5%. In the 2003 to 2005 period, however, both U.S. parent companies and their foreign affiliates experienced a resurgence in the average annual rate of growth (21.6% and 14.3%, respectively), but employment grew at a much slower average annual rate among the affiliates (2.4%) than among the U.S. parent companies (16.6%).

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

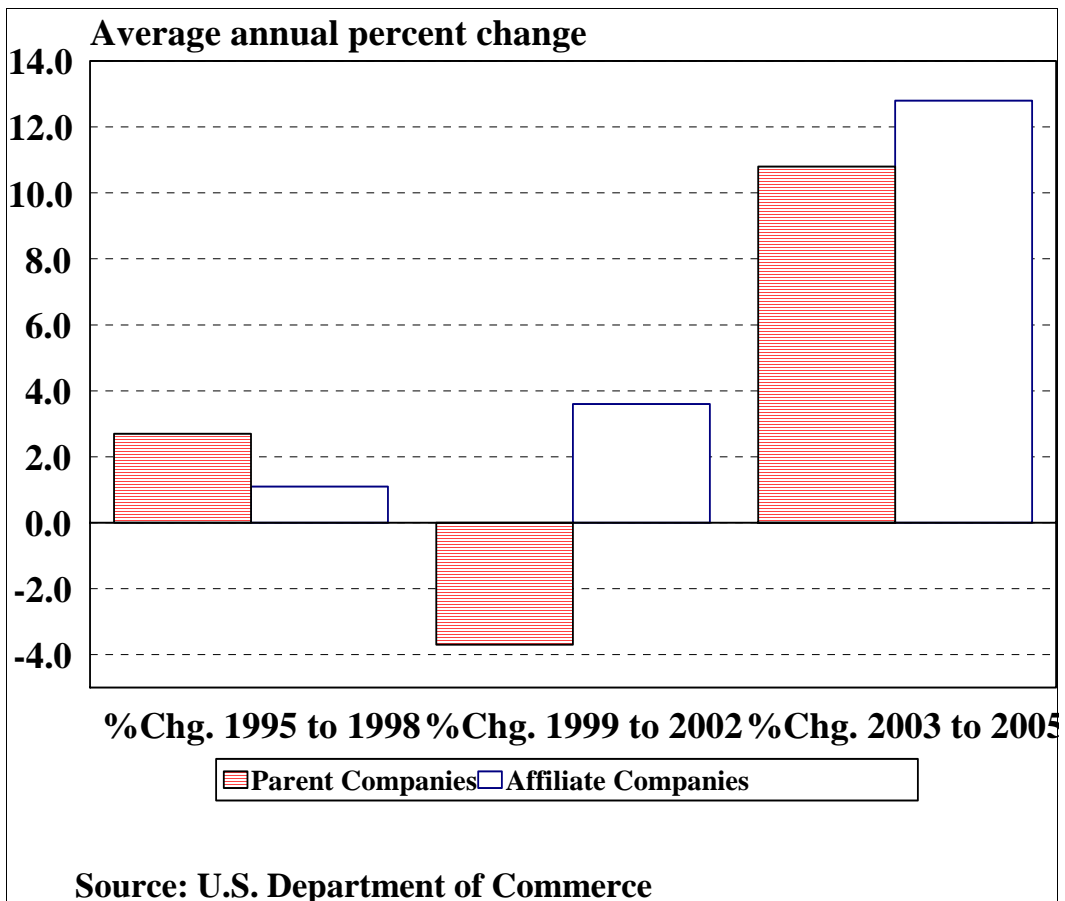
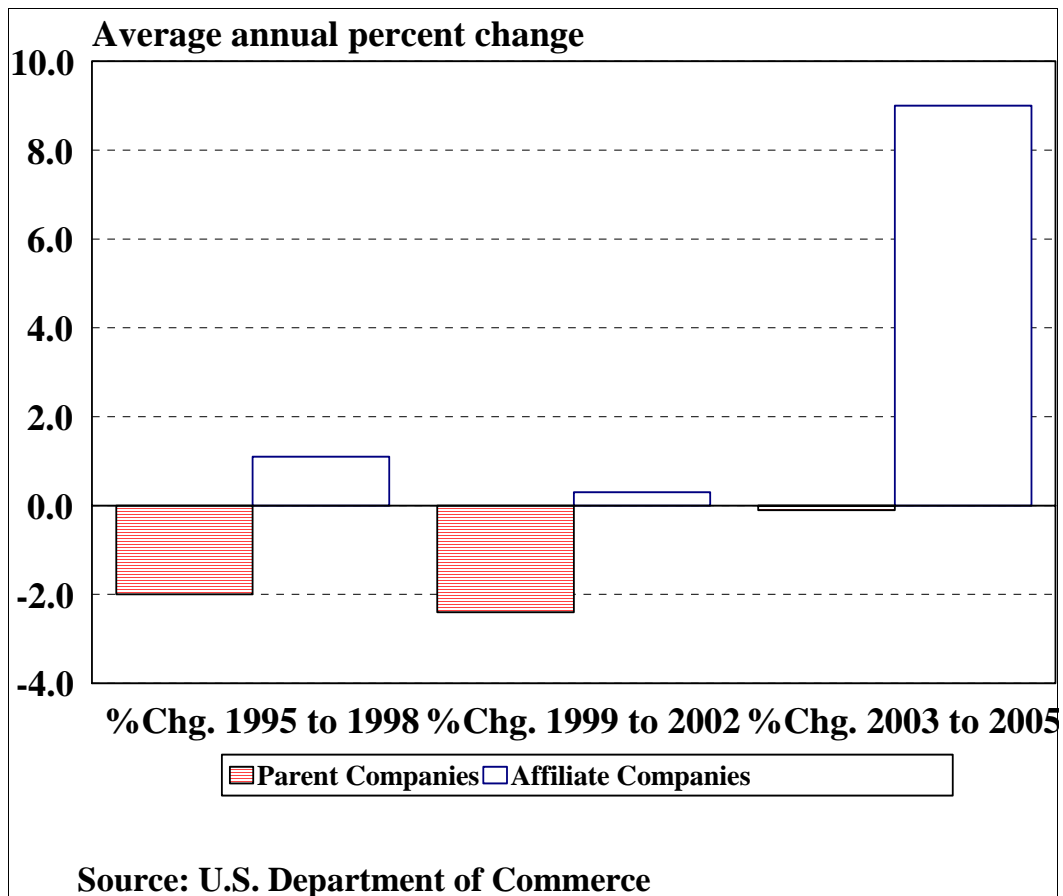


Figure 10. Average Annual Percent Change in Manufacturing Employment of U.S. Parent Companies and Their Foreign Affiliates, Selected Periods



Finance, a sector where the United States is generally believed to have a competitive edge, shows a different pattern. 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 1999 to 2002, as average annual gross product among parent companies grew by 9.5%, compared with an increase of 3.7% for foreign affiliates. During the same period, employment among U.S. parent firms in the finance sector grew by 0.5%, while employment among the affiliates grew at an average annual rate of 6.2%. The response during the recovery period, 2003 to 2005 by both the U.S. parents and the foreign affiliates is unique: while gross product among U.S. parents fell at an average annual rate of 1.1% and employment fell at an average annual rate of 9.9%, gross product among the foreign affiliates grew at an average rate of 4.9% and employment grew by 12.7%.

In 1999, the Bureau of Economic Analysis changed the composition of industries in its survey to include more high-tech service sectors. Twenty of these sectors are listed in **Table 9**, with data for the 1999 to 2002 period and for the 2003 to 2005 period. During the first period, average annual gross product by parent companies fell in eight of the sectors, reflecting the lower overall rate of economic growth during the period of lower economic growth. Not all of these eight sectors, however, experienced lower average annual losses in employment. Indeed, in twelve of the sectors, the average annual rate of gross output for the parent firms increased over the 1999 to 2002 period, with most of those sectors experiencing positive increases in employment.

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

	1999 to 2002				2003 to 2005			
	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	-3.7%	9.7%	0.9%	-3.0%	-2.3%	5.3%	-4.4%	3.2%
Computers and equipment	0.1	24.4	5.5	-8.4	-21.1	-14.1	-4.7	-15.7
Communications equipment	-3.8	-0.4	-9.9	2.8	-1.7	9.3	-11.1	6.4
Audio and video equipment	-16.9	-20.6	-14.6	-33.3	-7.8	40.7	-18.9	-12.5
Semiconductors and components	-17.5	-4.1	-4.9	-1.0	11.8	29.9	3.7	25.9
Navigational and other instruments	84.6	73.7	64.8	4.7	-1.6	4.3	-3.3	-11.5
Magnetic and optical media	-12.0	3.0	-8.2	-33.3	15.1	11.5	7.1	8.3
Professional services	0.9	0.2	-1.3	0.9	14.0	11.8	10.4	9.5
Architectural and engineering serv.	1.6	-2.1	-2.9	-7.3	49.2	17.8	38.5	1.2
Computer systems design	-1.4	-1.8	-2.3	2.1	5.7	9.0	1.7	-50.0
Management and consulting	8.7	23.6	4.0	0.3	-8.0	12.5	-14.6	4.6
Advertising and related services	10.1	0.4	2.2	1.4	-1.0	3.4	-4.1	-5.6
Other	-1.1	2.2	-2.2	3.4	33.2	47.7	28.0	-50.0
Mang. of nonbank companies	-56.2	17.6	30.9	32.9	-18.8	9.3	101.0	107.4
Administrative support	4.9	-1.8	-5.8	1.7	22.4	19.9	-8.1	-50.0
Health care and social assistance	7.8	72.4	3.1	10.7	-6.8	-6.5	-15.9	-19.1
Accommodation and food services	3.5	-1.1	5.5	1.9	1.8	22.5	0.9	37.7
Accommodation	3.4	-1.5	5.8	1.2	-0.7	8.4	-0.4	22.0
Food services	3.6	-1.0	5.3	2.0	3.6	25.1	1.5	38.8
Miscellaneous services	7.7	-5.4	14.5	-2.4	32.9	35.9	24.8	-50.0

Source: Department of Commerce.

The pattern of the foreign affiliates closely resembles that of the parent firms, with the affiliates experiencing positive rates of growth and employment in about a dozen sectors. Some sectors, though, experienced falling rates of output and employment during the 1999-2002 period and during the 2003-2005 period, reflecting a broader scale of economic decline that extended beyond the economic downturn. The computers and electronic products sector and the audio and video equipment sector experienced declines in the average annual rate of growth and in employment among both the parent companies and among the foreign affiliates. Overall, the foreign affiliates appeared to have recovered positive growth in eighteen sectors

during the 2003-2005 period, while parent firms experienced positive average annual rates of output in ten sectors. Both parent companies and foreign affiliates experienced a rebound in employment about 10 sectors, mostly the same sectors, which makes it difficult to track a trend of outsourcing by U.S. parent companies to their foreign affiliates.

Trade

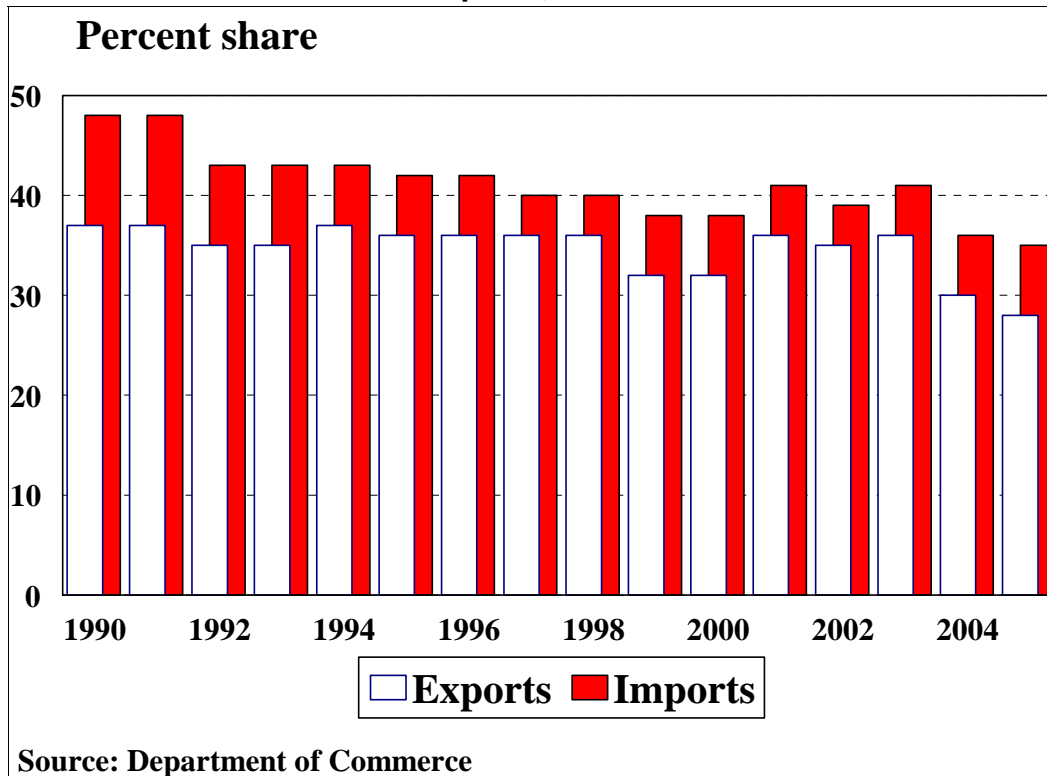
Another aspect of foreign direct investment that causes concern is the impact foreign direct investment has on the amount of foreign trade associated with those investments. Some observers argue that U.S. direct investment abroad supplants U.S. exports, jobs, and research and development funds, thereby 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.²¹ According to this scenario, as firms invest abroad, they shift production abroad, thereby eliminating jobs in the United States. As production shifts abroad, jobs are lost in the United States and goods once produced in the United States are now imported from abroad. Most studies indicate that, on balance, direct investment abroad increases U.S. exports and helps sustain employment and wages at home.²²

If foreign direct investment is a substitute for trade and replaces 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 foreign investment is displacing jobs and domestic production, or outsourcing jobs, it would be reasonable to expect imports from U.S. foreign affiliates to the U.S. parent company to increase over time. 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 during the 1990s did not increase 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 since 2003, intrafirm trade in exports and imports fell as a share of total U.S. exports and imports.

²¹ *International Investment Perspectives: 2006 Edition*, the Organization for Economic Cooperation and Development. p. 99.

²² *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, 1990-2005



As **Table 10** indicates, the share of U.S. exports shipped by U.S. parent companies peaked at 67% in 1994, but dropped to 54% in 2005. Similarly, the share of U.S. exports shipped by the U.S. affiliates of foreign parent companies fell from 23% in 1990 to 19% in 2005. 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 27% of U.S. exports in 1990 to 20% in 2005, 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 fell from 10% of U.S. exports in 1990 to 9% in 2005. Similarly, total intra-firm exports fell from 37% of U.S. exports in 1990 to 28% in 2005. 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, 1990-2005
(in millions of dollars)

Total U.S. Exports of Goods	Exports By U.S. Parent Companies			Exports By Foreign Affiliates			By Others	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				
1990	\$392,923	\$241,285	61%	\$106,426	\$92,308	23%	\$37,764	\$59,330	\$144,190	37%
1991	421,763	257,861	61%	115,311	96,933	23%	42,222	66,969	157,533	37%
1992	448,166	265,915	59%	105,999	103,925	23%	48,767	78,326	154,766	35%
1993	465,090	274,666	59%	113,762	106,615	23%	47,350	83,809	161,112	35%
1994	512,626	344,504	67%	136,128	120,683	24%	51,147	47,439	187,275	37%
1995	584,742	374,002	64%	152,666	135,153	23%	57,246	75,587	209,912	36%
1996	625,075	405,721	65%	161,751	140,886	23%	60,831	78,468	222,582	36%
1997	689,182	441,272	64%	186,526	141,305	21%	63,025	106,605	249,551	36%
1998	682,138	438,292	64%	185,372	151,005	22%	57,565	92,841	242,937	36%
1999	695,797	435,192	63%	162,503	153,572	22%	59,881	107,033	222,384	32%
2000	781,918	448,807	57%	182,719	165,321	21%	65,342	167,790	248,061	32%
2001	733,583	419,014	57%	197,967	157,459	21%	65,897	314,569	263,864	36%
2002	682,422	399,781	59%	184,799	137,037	20%	61,530	282,641	246,329	36%
2003	713,415	408,600	57%	183,976	147,643	21%	71,186	304,815	255,164	36%
2004	807,516	438,193	54%	164,344	155,507	19%	74,784	369,323	239,128	30%
2005	894,631	485,627	54%	174,743	169,238	19%	78,799	409,004	253,542	28%

Source: Department of Commerce.

On the import side, intra-firm trade has also declined as a share of total U.S. imports, but such trade has remained fairly stable as a share of total U.S. imports as indicated in **Table 11**. Imports shipped to U.S. parent companies fell from 43% of total U.S. imports in 1990 to 36% of U.S. imports in 2005. Similarly, U.S. imports by the U.S. affiliates of foreign firms fell from 37% of U.S. imports in 1990 to 27% of U.S. imports in 2005. In addition, intra-firm imports, or imports from the foreign affiliates of U.S. parent companies to those parent companies fell from 21% of total U.S. imports to 13% of U.S. imports from 1990 to 2005, which raises serious questions concerning the concept of U.S. outsourcing of production abroad. During the same time, imports from foreign parent companies to their U.S. affiliates fell from 37% to 27% of U.S. imports, so that intra-firm imports as a whole fell from 48% of total U.S. imports to 35% over the 1990 to 2005 period, due in part to imports shipped to importers outside the intra-firm trade relationship. These data do not seem to conform with 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.

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 by 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, follows a pattern similar to that of the trade patterns of these companies and does not offer conclusive evidence of an increase in jobs or activities being outsourced abroad.

As **Table 12** indicates, the foreign affiliates of U.S. parent companies had \$3.7 trillion in sales in 2005. The largest share of affiliate sales — about two-thirds — 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 2005 accounted for about one-fourth of the affiliates' sales. European affiliates, which accounted for slightly over half of all affiliate sales, also accounted for the lowest share of their sales back to the United States, where over one-third of their sales is to other foreign countries, mostly to other countries within the European Common Market. Out of all U.S. affiliate sales, 9% 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 2.1% of their sales were to other U.S. persons, or to importers that are not directly associated with the parent company.

Table 11. Multinational Corporations' Intra-Firm Imports of U.S. Goods, 1990-2005
(in millions of U.S. dollars)

	Total U.S. Imports of Goods	Imports Shipped to U.S. Parents			Imports Shipped to Foreign Affiliates			From Others	Intra-MNC Imports	Intra-MNC Imports as Share of Total U.S. Imports
		Total	Share of Total U.S. Imports	From Affiliates	Total	Share of Total U.S. Imports	From the Foreign Parent Group			
1990	\$495,978	\$213,358	43%	\$102,150	\$182,936	37%	\$137,458	\$99,684	\$239,608	48%
1991	488,450	212,642	44%	102,783	178,702	37%	132,166	97,106	234,949	48%
1992	532,663	219,676	41%	93,893	184,464	35%	137,799	128,523	231,692	43%
1993	580,659	223,901	39%	97,112	200,599	35%	150,789	156,159	247,901	43%
1994	663,256	256,820	39%	113,415	232,362	35%	174,641	174,074	288,056	43%
1995	743,543	289,941	39%	122,273	250,824	34%	191,222	202,778	313,495	42%
1996	795,289	326,200	41%	137,160	268,673	34%	197,656	200,416	334,816	42%
1997	869,704	350,822	40%	147,452	264,924	30%	202,355	253,958	349,807	40%
1998	911,896	355,976	39%	158,146	292,046	32%	205,181	263,874	363,327	40%
1999	1,024,618	388,480	38%	164,449	324,994	32%	229,857	311,144	394,306	38%
2000	1,218,022	446,016	37%	191,150	366,647	30%	272,374	404,224	463,524	38%
2001	1,177,644	437,133	37%	216,899	347,823	30%	266,451	392,688	483,350	41%
2002	1,167,377	427,559	37%	217,673	324,578	28%	256,691	415,240	474,364	41%
2003	1,264,307	471,132	37%	232,522	356,756	28%	290,492	436,419	523,014	41%
2004	1,477,094	540,904	37%	217,216	394,463	27%	320,268	541,727	537,484	36%
2005	1,681,780	603,345	36%	220,522	452,968	27%	360,026	625,467	580,548	35%

Source: Department of Commerce.

Table 12. Sales of Goods and Services by U.S. Foreign Affiliates by Destination and Industry, 2005
(millions of dollars, percent share)

	Total	To U.S. parents	Local	Other foreign countries	Other U.S. Persons
	Millions of \$	Percent Share			
<i>Sales by Destination</i>					
All countries	\$3,693,759	8.8%	61.0%	26.1%	2.1%
Canada	478,595	18.8	74.6	2.2	4.3
Europe	1,920,132	5.2	56.4	37.1	1.3
Latin America	408,627	16.5	57.9	22.0	3.5
Africa	60,079	13.1	52.8	28.0	6.1
Middle East	24,627	13.2	48.9	32.3	5.6
Asia and Pacific	801,699	7.0	66.5	25.1	1.4
<i>Sales by Industry</i>					
All industries	\$3,693,759	8.8	61.0	26.1	2.1
Mining	167,151	11.8	52.6	30.1	5.5
Utilities	40,453	N.A.	N.A.	0.8	N.A.
Manufacturing	1,708,791	10.7	56.4	30.9	2.1
Wholesale trade	941,586	8.3	56.2	34.3	1.2
Information	117,128	2.7	69.0	26.3	2.1
Finance and insurance	262,219	7.7	65.8	23.6	3.0
Services	120,521	7.1	79.9	11.6	1.4
Other industries	335,909	N.A.	N.A.	9.6	N.A.

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 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. In fact, among all the regions, sales by affiliates in the Middle East 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 about 75% 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 Africa and Latin America are similar in that about 55% of their sales are in their local markets, about 15% is sent to the United States, and nearly 30% 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 11% of these goods are shipped back to the United States. The largest share of sales by industry that are accounted for by sales to U.S. parent companies is in the mining industry, as U.S. parent companies have invested abroad in order to gain access to raw materials. All other industries show low levels of sales back to the U.S. parent, with a heavy concentration of sales in the local market and to other 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.²³ As **Table 13** indicates, U.S. foreign affiliates had \$574 billion in services sales in 2005. Of this amount, 5.5% consisted of service sales back to the U.S. parent company. The largest share — 77% — 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. Africa 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 is in the area of finance and insurance. The strong sales 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.

Table 13. Sales of Services by U.S. Foreign Affiliates by Destination and Industry, 2005

(millions of dollars, percent share)

	Total	To U.S. Parents	Local	Other Foreign Countries	Other U.S. Persons
	Millions of \$	Percent share			
Sales by Destination					
All countries	\$574,666	5.5%	76.6%	15.3%	2.5%
Canada	63,041	7.4	87.4	1.0	4.1
Europe	297,621	5.4	76.2	16.5	1.9
Latin America	66,623	6.4	64.1	26.3	3.2
Africa	7,754	9.3	59.2	18.1	13.4
Middle East	4,077	10.4	71.9	15.6	2.1
Asia and Pacific	135,550	4.0	79.8	13.9	2.3
Sales by Industry					
All industries	574,666	5.5	76.6	15.3	2.5
Mining	16,330	N.A.	N.A.	N.A.	N.A.
Utilities	N.A.	N.A.	N.A.	N.A.	N.A.
Manufacturing	12,011	7.1	77.8	13.2	1.9
Wholesale trade	26,393	0.0	0.0	29.9	0.7
Information	N.A.	N.A.	N.A.	N.A.	N.A.
Finance and insurance	150,416	6.8	68.2	23.1	1.9
Services	N.A.	N.A.	N.A.	N.A.	N.A.
Other industries	N.A.	N.A.	N.A.	N.A.	N.A.

Source: Department of Commerce.

²³ Lohr, Steve. "High-End Technology Work Not Immune to Outsourcing." *The New York Times*, June 16, 2004, p. C1.

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 14** 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 1999 and 2002, when the U.S. economy was slowing, 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 2003 to 2005 period in which the pace of U.S. economic growth picked up relative to the previously period, the overall average annual rate of growth in the sales of services rose by nearly 10%. Similarly, sales of services to U.S. parent companies rose by 23%, or at double 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 8%, still more than double the rate experienced in the previous period. Sales to other foreign countries, however, fell from 37% to 11% as sales to the U.S. parents and in the local market absorbed the largest share of production of services.

Table 14. Sales of Services by U.S. Foreign Affiliates, Average Annual Rates of Change for Selected Periods
(percent change)

Time period	Total		To U.S. parents		Local		Other foreign countries	
	Avg. Ann % Chg 1999 to 2002	Avg. Ann % Chg 2003 to 2005	Avg. Ann % Chg 1999 to 2002	Avg. Ann % Chg 2003 to 2005	Avg. Ann % Chg 1999 to 2002	Avg. Ann % Chg 2003 to 2005	Avg. Ann % Chg 1999 to 2002	Avg. Ann % Chg 2003 to 2005
All countries	6.7%	9.8%	11.2%	23.3%	3.6%	7.9%	36.6%	11.0%
Canada	5.0	18.9	2.5	97.7	5.1	15.8	103.1	-9.5
Europe	5.7	7.9	28.2	16.9	0.7	7.9	42.4	3.0
Latin America	8.1	5.2	1.3	17.8	7.9	-0.2	11.5	17.1
Africa	5.1	34.2	-11.0	43.6	2.0	19.3	925.6	39.0
Middle East	-14.8	23.4	4.0	7.0	-16.2	19.0	9.8	65.2
Asia and Pacific	11.0	11.5	0.7	17.2	9.5	7.4	49.3	35.0

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.²⁴ Although various academic studies have found that such “spillover” effects appear to be small, a 2003

²⁴ *Incentives*. United Nations Conference on Trade and Development, United Nations, 2004.

study challenges these conclusions.²⁵ 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 15** indicates, foreign firms spend more on high-technology research and development within the United States than U.S. firms spend abroad. All three types of firms indicated in the table experienced a slowdown in R&D spending in 1991 and in 2002 in response to the slowdown in economic growth in that period. Other than those two 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.

Table 15. 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

Source: Department of Commerce.

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

²⁵ 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.

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.²⁶

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: the presence of ownership-specific competitive advantages in a transnational corporation, the presence of locational advantages in a host country, and the presence of superior commercial benefits in an intra-firm as against arm's-length relationship between investor and recipient.²⁷

For some, 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.²⁸

According to the United Nations, technological improvements in the area of telecommunications and computers 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

²⁶ Lipsey, Robert E., *Interpreting Developed Countries' Foreign Direct Investment*. NBER Working Paper 7810. National Bureau of Economic Research, July 2000. P. 3-4.

²⁷ *World Investment Report 1998: Trends and Determinants*. United Nations, New York, 1998. P. 89.

²⁸ *Ibid*, p. 118.

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.²⁹

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.³⁰ These observations have not been borne out over time as foreign direct investment has become a prominent feature of the globalization process. This 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.³¹ These analysts conclude that market imperfections and firm-specific factors³² give some firms economic advantages over their competitors that

²⁹ *Ibid*, p. 108-109.

³⁰ 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.

³¹ Mundell, Robert A. International Trade and Factor Mobility. *American Economic Review*, June 1957. p. 321.

³² 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.

(continued...)

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),³³ the market power of the firm,³⁴ the absolute size of the firm,³⁵ cost advantages that arise from patents or other special advantages, or from product-specific advantages (product differentiation).³⁶

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.³⁷ Some of these actions may be related to gaining access to markets that are protected by high tariffs or by other economic barriers.³⁸ 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.³⁹ At this early stage, product

³² (...continued)

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.

³³ 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.

³⁴ 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.

³⁵ Glickman, Norman J., and Douglas P. Woodward. *The New Competitors*. New York, Basic Books, Inc., 1989. p. 80-90.

³⁶ 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.

³⁷ Lipsey, Robert E., and Merle Yahr Weiss. Foreign Production and Exports of Individual Firms. *The Review of Economics and Statistics*, May 1984. p. 491.

³⁸ Helpman, Elhanan, and Paul R. Krugman. *Market Structure and Foreign Trade*. Cambridge, The MIT Press, 1985. p. 247-259.

³⁹ Vernon, Raymond. “International Investment and International Trade in the Product (continued...) ”

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.⁴⁰ 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.⁴¹ 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.⁴² 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.⁴³ 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,

³⁹ (...continued)

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.

⁴⁰ 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.

⁴¹ 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.

⁴² 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.

⁴³ Lipsey, and Weiss, Foreign Production and Exports in Manufacturing Industries, p. 490

multinational firms shift the source of their production to their offshore subsidiaries.⁴⁴

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.⁴⁵ 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.⁴⁶ These and such other external conditions as relative growth rates among national economies, exchange rate movements, productivity, trade restraints, and the desire to acquire technology⁴⁷ are among the most important factors in determining foreign investments. As a result of these market conditions,⁴⁸ 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.⁴⁹

Additional analyses indicate that foreign investment and, therefore, foreign production, may allow corporations to reduce such risks as bad weather, national

⁴⁴ 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.

⁴⁵ 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.

⁴⁶ 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.

⁴⁷ 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.

⁴⁸ Root, *International Trade and Investment*, p. 464.

⁴⁹ *Ibid.*, p. 3.

business cycles, strikes, and changes in government policies.⁵⁰ 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.⁵¹ 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.⁵² 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 erode their price competitiveness, during periods of fluctuating exchange rates in order to maintain or even to enlarge their market shares in foreign countries.⁵³

Conclusions

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

⁵⁰ 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.

⁵¹ 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.

⁵² Williamson, *Multinational Enterprise Behavior and Domestic Industry Adjustment Under Import Threat*, p. 60.

⁵³ Ohno, Kenichi. Exchange Rate Fluctuations, Pass-Through, and Market Share. *IMF Staff Papers*, June 1990. p. 294-309.

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 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 within the economy and by new foreign investments in the 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 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.

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.