

Rates of Return on Direct Investment

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THIS ARTICLE updates the alternative measures prepared by the Bureau of Economic Analysis (BEA) of the rates of return on foreign direct investment in the United States (FDIUS) and on U.S. direct investment abroad (USDIA). It compares these rates of return with those on all-U.S.-business investment and discusses possible explanations for the relatively low rates of return on FDIUS.

Last year, BEA introduced two alternative measures of the rate of return on direct investment that were based on BEA estimates of the direct investment positions valued at current-period prices: The return on direct investment positions at market value, which is a measure of financial returns to direct investment, and the return on direct investment positions valued at current cost, which is a measure of economic returns on direct investment from current operations.¹ These alternative measures overcome a major limitation of estimates of rates of return based on historical costs—the noncomparability of investments that differ considerably in age and therefore in price—by presenting estimates on a consistent valuation basis.

Table 1 shows rates of return for USDIA and FDIUS based on market value and on current cost compared with a market rate of return for all U.S. businesses; it also shows rates of return for USDIA and FDIUS based on historical costs.² For both USDIA and FDIUS, the rates of return at current-period prices are lower, on average, than the rates of return at historical costs. However, the differences are much larger for USDIA than for FDIUS because the adjustment needed to restate direct investment positions from historical costs to current-period prices is much larger for

USDIA. This price adjustment is larger for USDIA because most USDIA occurred in the 1960's and 1970's and thus tends to be "older" than FDIUS, most of which occurred in the 1980's.

For USDIA, the rates of return at market value and at current cost are similar, on average, to the rates of return for all U.S. businesses. However, for FDIUS, the rates of return at market value and at current cost are considerably below the rates of return for all U.S. businesses. (The historical-cost rates of return for FDIUS are also quite low.) The remainder of this article examines the question of why the rates of return on FDIUS are so low relative to the rates of return on domestic investments.³

3. For other recent studies on FDIUS and the low rates of return on FDIUS, see Harry Grubert, Timothy Goodspeed, and Debrah Swenson, "Explaining the Low Taxable Income of Foreign-Controlled Companies in the United States," unpublished, contact author, Harry Grubert, U.S. Treasury) November 1991; Edward M. Graham and Paul R. Krugman, *Foreign Direct Investment in the United States*, 2d edition (Washington, DC: Institute for International Economics, 1991); and "Review of Internal Revenue Service Statistics on Foreign Controlled Domestic Corporations 1983 through 1988," prepared by KPMG Peat Marwick for the Organization for International Investment, July 1992.

Table 1.—Alternative Measures of the Rate of Return for U.S. Direct Investment Abroad, Foreign Direct Investment in the United States, and All U.S. Businesses
[Percent]

	Returns based on historical cost		Returns based on current cost		Returns based on market value		All U.S. businesses ¹
	USDIA	FDIUS	USDIA	FDIUS	USDIA	FDIUS	
1982	11.4	2.7	6.0	1.2	n.a.	n.a.	11.0
1983	12.9	3.9	7.0	2.3	11.4	4.0	9.9
1984	14.4	6.3	8.3	4.4	11.6	5.7	11.1
1985	12.6	4.3	7.9	3.3	9.1	3.2	8.7
1986	12.2	3.7	7.6	2.8	7.2	2.2	7.2
1987	13.4	3.6	8.3	2.6	7.7	2.5	8.1
1988	15.5	4.4	10.0	3.4	8.4	3.9	9.0
1989	15.2	2.2	10.2	1.6	7.9	2.2	7.6
1990	13.8	.4	9.4	.2	7.6	-.3	7.7
1991	11.2	-.7	7.7	-.8	6.9	-.2	6.0
Average, 1983-91	13.5	3.1	8.5	2.2	8.7	2.6	8.4

n.a. Not available.

1. This measure is a weighted average of the after-tax earnings per dollar of stock for Standard and Poor's Composite 500 companies and the average yield on corporate bond holdings rated AAA by Moody's Investors Service. The returns on debt and equity are weighted by the ratio of debt to equities at market value for nonfinancial corporate businesses published by the Board of Governors of the Federal Reserve System, *Balance Sheets for the U.S. Economy, 1960-91*, (Washington, DC: March 1992).

USDIA U.S. direct investment abroad

FDIUS Foreign direct investment in the United States

1. For a discussion of the various measures, see "Alternative Measures of the Rate of Return on Direct Investment," SURVEY OF CURRENT BUSINESS 71 (August 1991): 44-45. For a discussion of the estimates of direct investment at market value and current cost, see "The International Investment Position of the United States in 1991," SURVEY 72 (June 1992): 46-59. For a discussion of the concepts and estimating procedures underlying the current-period estimates of direct investment, see "Valuation of the U.S. Net International Investment Position," SURVEY 71 (May 1991): 40-49.

2. The data are limited to the period from 1982 or 1983 to 1991 because the complete information on equity flows and equity positions that is required for the market-value measure is unavailable for earlier years.

Returns on FDIUS

In examining rates of return on FDIUS, it is important to note that a multinational company tries to maximize its total profits around the world in deciding where to invest, where to produce, and where to realize its income. As a result, a multinational company structures its operations, costs, and product pricing across countries to maximize its global profits rather than to maximize profits on an individual investment or even on all of its investments in a single country. It may accept a below-average profit to gain access to the large U.S. market or to scarce raw materials. Alternatively, it may accept low returns on some parts of its operations to take advantage of economies of scale and technological efficiencies in other parts of its operations. In addition to these types of operational—or industrial organization—factors, multinationals also take into account a number of other factors, such as differences across countries in the cost and availability of capital, in expected returns on investment, in the tax treatment of income, and in tariffs and nontariff barriers.⁴

The low rates of return on FDIUS appear to reflect certain long-term factors associated with the operations of multinational companies and the effects of a number of transitional factors that led to a surge in FDIUS in the 1980's. In the 1980's, current-account surpluses in Japan and several other countries generated excess funds available for investment. Funds were attracted to the United States by average yields on U.S. investments that were higher than those on home-country investments; this spread allowed foreign investors to accept yields that were below the average yield on U.S. investments. Further, depreciation of the dollar against most foreign currencies in the latter half of the 1980's increased potential long-term yields for those investors who believed that the U.S. dollar was undervalued. The combination of these factors meant that investments that had looked attractive from an operations perspective now also looked attractive from an investment perspective. The resulting surge in FDIUS in the 1980's meant that much of the investment on which the rates of return are calculated was relatively new, and new investments typically have lower rates of return than more mature investments. Moreover, a consid-

4. There has been much discussion about the relative importance of cost-of-capital and macroeconomic explanations versus industrial-organization explanations for direct investment. Most analysts concede that both have a role in direct investment but that industrial-organization explanations tend to have a larger role than the other explanations. See, for example, Graham and Krugman in *Foreign Direct Investment*, 35–38.

erable portion of this new FDIUS consisted of acquisitions of financially distressed U.S. companies that foreign companies presumably hoped to restructure and restore to financial health.

Long-term factors associated with the goal of maximizing profits on a global basis rather than on an individual-country basis also may have held down the rates of return on FDIUS. These factors included the following: Economies of scale and the advantages of vertical integration, differences between countries in the treatment of taxes, and avoidance of tariffs and nontariff barriers.

The analysis that follows covers the rates of return on FDIUS for 10 of the 11 countries that were the largest direct investors in the United States during the last decade.⁵ In 1991, these 10 countries accounted for over 90 percent of cumulative FDIUS, and the top 5 accounted for over 75 percent (table 2). It should be noted that underlying economic conditions and motivations for direct investment vary markedly among these countries, and it is difficult to generalize about the factors leading to low rates of return on their direct investments.

5. Although the Netherlands Antilles' FDIUS position ranks eighth among all countries, it is excluded from the analysis because of the unique nature of its inward investment, which resulted from its activity as an offshore financial center (offshore financial centers were created to avoid certain interest-rate controls, bank lending restrictions and reserve requirements, and other regulatory constraints). Additionally, it had a favorable tax treaty with the United States that offered an exemption from the withholding tax on certain interest payments from U.S. affiliates to their Antillean parents. Consequently, foreign corporations made large investments in the United States through their Antillean affiliates rather than investing directly in the United States.

However, over the past decade, the Netherlands Antilles' share of total FDIUS has declined substantially. Its current-dollar position has remained fairly constant since 1984, while its real share of total FDIUS has declined from 7 percent in 1982 to 2 percent in 1991. This downtrend can be partly explained by the elimination of U.S. withholding taxes on interest payments to foreigners in 1984, which largely nullified the Netherlands Antilles' unique tax advantage.

Table 2.—Top 10 Countries with Largest Foreign Direct Investments in the United States, 1991

	Millions of dollars	Percent of total
All countries	407,577	100
Top 10 countries	371,927	91
United Kingdom	106,064	26
Japan	86,658	21
Netherlands	63,848	16
Canada	30,002	7
Germany	28,171	7
France	22,740	6
Switzerland	17,594	4
Australia	6,626	2
Sweden	5,597	1
Belgium/Luxembourg	4,627	1
Netherlands Antilles ¹	7,948	2

1. See footnote 5 in the text.

Transitional factors

Differences in average yields.—During much of the last decade, average yields on investments in the top 10 investor countries were below those in the United States (table 3). Between 1982 and 1989, the average real rate of return on total invested capital—debt and equity combined—was 6.6 percent in these countries, compared with 7.3 percent in the United States. The average yield on debt in these countries was 4.8 percent, compared with 6.3 percent; the average yield on equities was 7.6 percent, compared with 7.8 percent.

Table 3.—Rates of Return in the United States and in the Top 10 Investor Countries

[Percent]

	Average in the United States			Average in the top 10 investor countries		
	1982–91	1982–89	1990–91	1982–91	1982–89	1990–91
Real long-term interest rate ¹	5.9	6.3	4.3	4.8	4.8	5.0
Earnings/price ratio ²	7.3	7.8	5.4	7.4	7.6	6.7
Average total return ³	6.8	7.3	5.0	6.5	6.6	6.1

1. Data for individual countries were obtained from International Monetary Fund publications; these data have been weighted by their share of the FDIUS intercompany debt payable position for the top 10 countries.

2. Data for foreign countries were obtained from Morgan Stanley Capital International, *Perspective* (various issues), and for the United States from Standard and Poor's Corporation, *The Analysts Handbook* (various issues); the foreign country data have been weighted by their share of the FDIUS equity position for the top 10 countries.

3. For the United States and the top 10 investor countries, average total returns are a weighted average of the real long-term interest rate and the earnings/price ratio, with the real long-term interest rate receiving a 35-percent weight and the earnings/price ratio receiving a 65-percent weight. These weights represent the typical financial structure of countries that value their debt/equity ratios at market value.

FDIUS Foreign direct investment in the United States

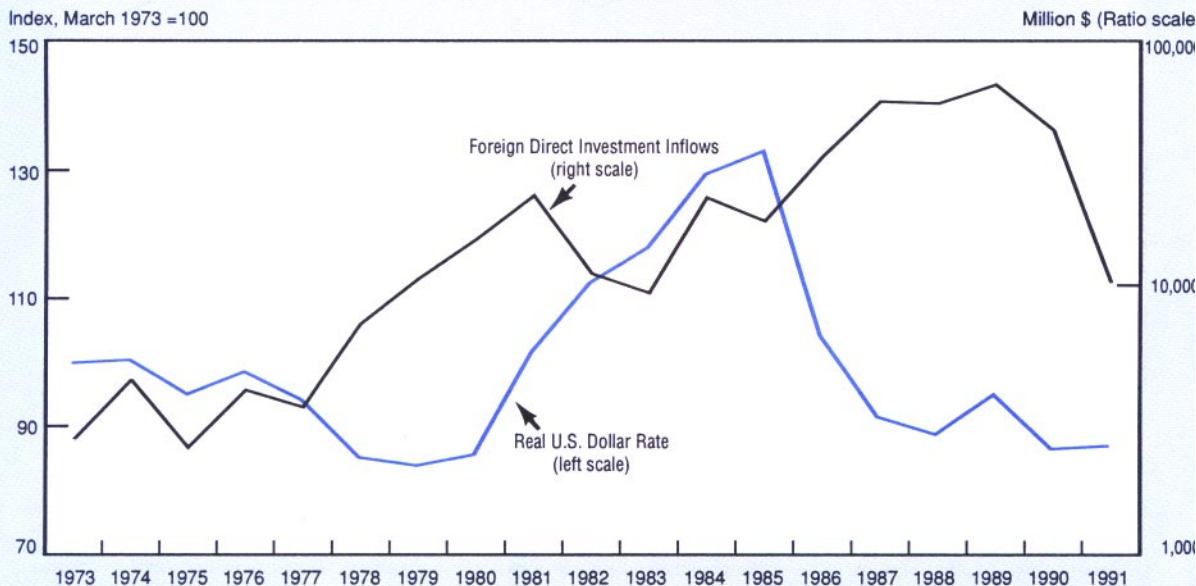
For several of these major investor countries, the difference between returns on direct equity investments was substantial. For example, Japanese investors received an average yield of 6.5 percent on their equity FDIUS between 1983 and 1989, compared with a yield of 2.8 percent on Japanese equities. Thus, returns on Japanese investments in the United States raised Japanese investors' aggregate yields, even though they were lower than the all-U.S.-business average.

Depreciation of the dollar.—A second and more important factor increasing FDIUS in the 1980's was the decline in the value of the U.S. dollar. In the latter half of the 1980's, the real value of the dollar declined 35 percent, and foreign firms more than doubled their direct investment position. This surge in FDIUS was similar to one that occurred between 1975 and 1980, when the dollar depreciated about 15 percent and FDIUS more than tripled.

In the latter half of the 1980's, overseas investors presumably believed that the dollar was undervalued and that future returns to dollar-denominated direct investments would be well above their current values. U.S. firms' assets looked undervalued to those who believed that the dollar was below its long-run equilibrium and purchasing-power-parity value. Although it is difficult to determine the long-run equilibrium value for the dollar, a number of indicators sup-

CHART 1

Real U.S. Dollar Rate and Foreign Direct Investment Inflows



Data: *Economic Report of the President*, February 1992
U.S. Department of Commerce, Bureau of Economic Analysis

ported the view of investors who believed the dollar was undervalued. For example, observed differences in real asset prices—such as those between Japanese and U.S. real estate and stock market investments—as well as estimates of the purchasing power of the dollar and of relative U.S. unit labor costs, suggested the dollar was undervalued.⁶ As **chart 1** shows, the surges in FDIUS in both the late 1970's and the late 1980's oc-

6. According to Organisation for Economic Co-operation and Development estimates of purchasing-power parity, the dollar was undervalued by roughly 19 percent against the currencies of the major industrialized economies in 1990. Estimates by the Federal Reserve Board indicated that U.S. unit labor costs were roughly 15 percent below those of the other major industrialized countries. For a different perspective on the effect of the dollar

curred when the dollar was below its 1973 value, which may be regarded as a rough indicator of the dollar's equilibrium value.

Rates of return on new direct investments.—The combined effects of higher relative rates of return on investments in the United States and the depreciation of the dollar made U.S. returns look particularly attractive to overseas companies that had increased profits from sales to U.S. markets and had thereby accumulated substantial cash reserves. For these firms, increasing

on FDIUS, see Graham and Krugman, *Foreign Direct Investment*, 44-47 and 80-82.

Table 4.—Rate of Return on Assets of U.S. Companies in Year Prior to Foreign Acquisition Compared With All U.S. Nonfinancial Corporations

[Percent]

	1982	1983	1984	1985	1986	1987	1988	1989	1990
Foreign direct investment in the United States:									
Total	1.6	0.9	0.7	1.8	0.8	2.4	0.3	0.3	0
Manufacturing	1.6	-1.6	.8	2.8	.4	1.7	.8	3.0	.4
All U.S. nonfinancial corporations ¹	3.6	4.6	5.2	4.8	4.0	4.9	5.5	4.6	3.8

1. Income is measured as total receipts less total deductions after total net tax liability, as published by the Internal Revenue Service. Total receipts less total deductions, after taxes, have been adjusted to remove foreign source income and to add the part of the capital consumption adjustment in the national income and product accounts that adjusts for consistent accounting at historical cost. Total assets is that published by the Federal Reserve Board in *Balance Sheets*

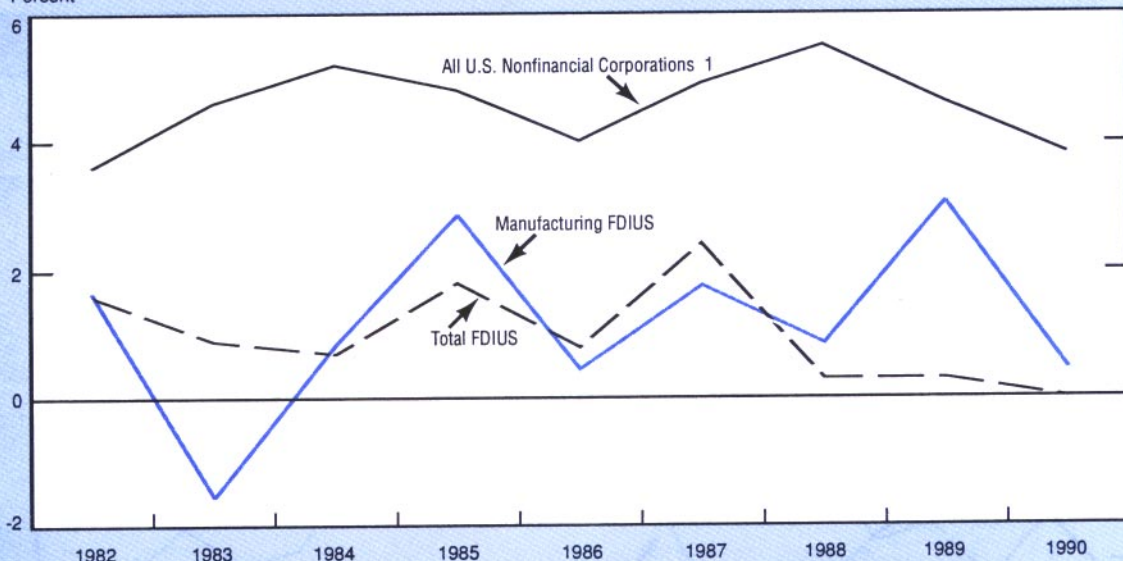
for the *U.S. Economy, 1960-91*; the published totals have been adjusted to exclude claims on foreign affiliates. In this measure of total assets, tangible assets are valued at historical cost, and claims on other nonfinancial corporations are excluded.

NOTE.—Rate of return is measured as net income to total assets.

CHART 2

Rate of Return on Assets of U.S. Companies in Year Prior to Foreign Acquisition Compared With All U.S. Nonfinancial Corporations

Percent



FDIUS - Foreign direct investment in the United States.

1. This measure is the ratio of total receipts less total deductions after total net tax liability as published by the Internal Revenue Service to total assets for all U.S. nonfinancial corporations. Total receipts less total deductions after taxes have been adjusted to remove foreign source income and to add the part of the capital consumption adjustment in the national income and product accounts that adjusts for consistent accounting at historical cost. The measure of total assets used in this ratio is that published by the Federal Reserve Board in *Balance Sheets for the U.S. Economy, 1960-91*; the published totals have been adjusted to exclude claims on foreign affiliates. In this measure of total assets, tangible assets are valued at historical cost, and claims on other nonfinancial corporations are excluded.

U.S. Department of Commerce, Bureau of Economic Analysis

their U.S. presence through direct investment was attractive from an investment as well as an operations perspective. The combination of these factors may even have encouraged companies abroad to buy financially distressed U.S. companies as long-term investments. Presumably, foreign companies either believed that they could turn their U.S. investments around over time by using their expertise in product development, process technology, and management, or they believed that they could achieve higher returns from an appreciation of the dollar.

During the 1980's, about three-fourths of all FDIUS was for acquiring existing companies, and about one-fourth was for establishing new companies. For the companies established, rates of return were low or negative because of the startup costs that all new firms experience. For the companies acquired, rates of return were already low or negative: Between 1982 and 1990, the rate of return on assets for U.S. companies in the year before their acquisition by foreigners was 1.0 percent, compared with 4.6 percent for all U.S. nonfinancial companies (table 4, chart 2).⁷ In addition, the foreign owners' newly acquired companies not only began with below-average returns, but presumably these returns were lowered further as owners restructured these companies by investing in new plant and equipment and in modernization of older plants, by writing-off and closing obsolete units, by increasing marketing efforts, and by aggressively pricing their products to regain market share.

Recent developments.—By 1990, many of the transitional factors that had encouraged direct investment in the United States were no longer present. Other countries' current-account surpluses with the United States were reduced. Multinational companies needed to reduce debt and rebuild their balance sheets, and their bankers needed to limit credit and meet higher capital standards. At the same time, the relative real rates of return on investments were reversed, as U.S. real interest rates and returns to equities decreased in relation to those abroad (table 3). In late 1990 and early 1991, the slide in the value of the dollar stopped, and its value began to increase, which raised the cost to foreign investors of new direct investments in the United States. These developments combined to produce a sharp drop in

FDIUS from \$67.8 billion in 1989 to \$11.5 billion in 1991.

With the slowdown in new FDIUS, the rates of return on existing FDIUS should rise as these investments mature. Rates of return on USDIA have shown this pattern, and there is some evidence that rates of return on FDIUS have tended to rise over time as well.⁸ However, long-term factors may continue to hold down FDIUS rates of return.

Long-term factors

Vertical integration.—One fundamental reason for foreign companies to make direct investments in other countries is to achieve vertical integration.⁹ Owning both "upstream" raw material and production facilities and "downstream" distribution outlets may make it easier to further penetrate foreign markets. Through U.S. affiliates, foreign parent companies can better design, manufacture, distribute, and service products for the special requirements of the U.S. market. Either through resale of the foreign parent's products by their U.S. affiliates or through sales of the parent's products as inputs to the affiliates, increased sales of the parent's products can achieve economies of scale in home-country production, resulting in lower unit production costs for their products.

Besides company affiliation, U.S. affiliates of foreign multinational companies cite other reasons for relying on imports from the parent company, including product quality, assured sources of supply, and specialized product needs. Presumably, vertical integration and maximizing total company profits also play a role. Whatever the reasons, foreign-owned affiliates do have a higher propensity to import than do U.S. multinational companies in the United States. Imports by U.S. affiliates of foreign multinationals accounted for 24 percent of their total purchases of inputs in 1987, compared with 8 percent for U.S. multinational companies (table 5). Part of the higher propensity to import is explained by the practice of using U.S. affiliates mainly as distribution outlets. Overall, U.S. affiliates' imports for resale as a share of their total sales was 15

8. For a discussion of the increase in returns with age on USDIA in manufacturing affiliates, see L.A. Lupo, Arnold Gilbert, and Michael Liliestedt, "The Relationship Between Age and Rate of Return of Foreign Manufacturing Affiliates of U.S. Manufacturing Parent Companies," SURVEY 58 (August 1978): 60–66. For a general discussion of the effect of age on profitability, see F.M. Scherer, *Industrial Market Structure and Economic Performance*, 3rd edition (Boston: Houghton Mifflin Company, 1990): 172–174.

9. For a general discussion of vertical integration as a motivation for foreign direct investment, see Richard E. Caves, "The Multinational Enterprise as an Economic Organization," in *Multinational Enterprise and Economic Analysis* (Cambridge: Cambridge University Press, 1983): 15–24 and 95; and Scherer, *Industrial Market Structure*, 94–96 and 109–111.

7. For the most recently published data on U.S. companies in the year before their acquisition by foreign parents, see "U.S. Business Enterprises Acquired or Established by Foreign Direct Investors in 1991," SURVEY 72 (May 1992): 69–79.

percent in 1987; for several direct investors, the share was much higher (table 6).

With a vertically integrated company, the profits resulting from economies of scale can be allocated among the parent and its affiliates in order to maximize total returns. Such decisions can affect rates of return on individual investments. For example, a company that requires access to a scarce raw material may accept a lower rate of return on its "upstream" investments in mining because such access will raise its global profits. Alternatively, a company may accept lower returns on its "downstream" operations because, through vertical integration, it can raise total sales and take advantage of economies of scale and technological efficiencies that raise its total profits.

Taxes.—Differences in tax treatment across countries can significantly affect both the location of direct investment and, through "transfer pricing," the distribution of profits between parent and affiliate.¹⁰ If the effective tax rate on the

10. For further discussion of the use of transfer pricing between parent and affiliate to reallocate income for tax purposes, see Graham and Krugman, *Foreign Direct Investment*, 82–83; and Mohammad F. Al-Eryani, Pervaiz Alam, and Syed H. Akhter, "Transfer Pricing Determinants of U.S. Multinationals," *Journal of International Business Studies*, 3rd quarter, 1990: 409–425.

For more information on how effective tax rates affect the flow of investment to domestic or foreign locations, see Joel Slemrod, "Tax Effects on Foreign Direct Investment in the United States: Evidence from a Cross-Country Comparison," in *Taxation in the Global Economy*, Assaf Razin and

domestic income of the foreign parent is lower than that on the income earned by the U.S. affiliate, the company can raise its total return by shifting income from the affiliate to the parent. This is achieved through use of transfer prices for transactions between the affiliate and its parent, whereby the company raises the price of exports to the affiliate and lowers the price of imports from the affiliate.

In table 7, effective tax rates on income from investments in U.S. affiliates are compared with those on income from domestic investments for the top 10 foreign investor countries (as before, excluding the Netherlands Antilles). Computations of effective tax rates are subject to considerable uncertainty and are sensitive to the assumptions made regarding such variables as inflation and the financing mix. However, the rates in table 7, which are derived from a recent study on effective tax rates by the Organisation of Economic Co-operation and Development (OECD), show that foreign parents in all but one of the 10 major investor countries may have an incentive to transfer income from their U.S. affiliates to themselves.¹¹

Avoidance of tariffs and nontariff barriers.—Tariffs and nontariff barriers raise the cost of exports and provide an incentive for for-

Joel Slemrod, eds., (Chicago: The University of Chicago Press, 1990): 79–122; and Kan H. Young, "The Effects of Taxes and Rates of Return on Foreign Direct Investment in the United States," *National Tax Journal* (March 1988): 109–121.

11. See OECD, *Taxing Profits in a Global Economy: Domestic and International Issues* (Paris: OECD, 1991).

Table 5.—Operating Characteristics of Foreign Direct Investment in the United States

Operating characteristic	1977	1987
Vertical integration (ratio of gross product to sales):		
Parents of U.S. multinationals	37	37
U.S. affiliates of foreign multinationals	18	21
Propensity to import for inputs (ratio of imports to total purchases of inputs):		
Parents of U.S. multinationals	9	8
U.S. affiliates of foreign multinationals	27	24
Local content (ratio of local inputs to sales):		
Parents of U.S. multinationals	95	95
U.S. affiliates of foreign multinationals	79	81

Source: U.S. Department of Commerce, Bureau of Economic Analysis; Council of Economic Advisers.

Table 6.—U.S. Affiliate Imports for Resale as a Share of Total Sales, 1987

	[Percent]
All countries	14.7
Top 10 countries:	
Japan	33.9
Sweden	21.6
Germany	18.9
Switzerland	11.1
Belgium/Luxembourg	8.7
Canada	5.3
France	4.7
United Kingdom	3.6
Netherlands	3.1
Australia	2.3

NOTE.—Imports and sales are identified by country of foreign parent.

Table 7.—Effective Tax Rates on Income from Investments in U.S. Affiliates Compared With Domestic Investments, January 1991

	Effective tax rate for income from:		Ratio of effective tax rate for investment in U.S. affiliate to effective tax rate for domestic investment
	Investment in U.S. affiliate	Domestic investment	
Australia	44	43	1.03
Belgium	43	24	1.78
Canada	53	49	1.08
France	46	38	1.22
Germany	46	23	2.00
Japan	56	49	1.14
Luxembourg	40	40	.98
Netherlands	40	30	1.34
Sweden	48	30	1.62
Switzerland	38	25	1.51
United Kingdom	38	37	1.04
United States	44	44	1.00

NOTE.—The effective tax rate is calculated as the difference between the return before corporate taxes that is required to generate a 5-percent return before personal taxes, and the return after both corporate and personal taxes divided by the return before corporate taxes. The results are based on the following assumptions: Investment financing includes one-third each from intercompany debt, new equity, and reinvested earnings; the source of funds for financing is from the parent's home country; inflation is at a 4.5-percent annual rate; and the top tax rate is used for personal income.

Source: Organisation for Economic Co-operation and Development, *Taxing Profits in a Global Economy: Domestic and International Issues*. Paris, 1991, tables 5.4, 5.8, and 5.11.

eigners to invest abroad.¹² In recent years, direct investments in the U.S. auto industry were presumably related to actual and potential restrictions on vehicle exports to the United States. In addition, direct investment in several industries—televisions, typewriters, semiconductors, and automobiles—may have been related to antidumping suits and antidumping duties against foreign producers of these products. In these cases, the motive for direct investment may be to avoid tariffs and nontariff barriers in order to maximize total company returns, rather than to maximize returns on the direct investment. For example, a foreign manufacturer can avoid antidumping duties by exporting parts and components, on which there is no duty, for final assembly by the U.S. affiliate, rather than exporting the finished product, on which antidumping duties would be levied.

Importance of country-specific factors

The complex interrelationship among the factors that have caused rates of return to be lower for FDIUS than for all U.S. businesses is perhaps best demonstrated by an examination of the direct investment activities of companies from different countries. This section contrasts the activities of the two largest investor countries—Japan and the United Kingdom (table 8). Together, these two countries accounted for nearly one-half of the FDIUS position on a historical-cost basis in 1991. In 1982, the United Kingdom had the largest position, and it maintained that standing during the 1980's; Japan had the fifth largest position in 1982

12. For a discussion of how foreign direct investment is motivated by the desire to avoid tariffs and nontariff barriers, see "Strengthening GATT Antidumping Rules," *Economic Report of the President* (Washington, DC: U.S. Government Printing Office, 1992): 219; and U.S. Congress, *U.S. Trade Restraints: Effects on Foreign Investment*, report prepared by James K. Jackson (Washington, DC: Library of Congress, 1989).

Table 8.—Financial and Tax Factors Affecting Japanese and British Direct Investment in the United States

[Percent]

	Top 10 countries	Japan	United Kingdom	All U.S. businesses
Real long-term interest rate: ¹				
Average for 1982-91	4.8	4.6	4.5	5.9
Average for 1986-91	4.6	4.1	4.0	4.8
Earnings/price ratio: ²				
Average for 1982-91	7.4	3.0	8.7	7.3
Average for 1986-91	6.9	2.3	8.3	6.5
Effective tax rates, January 1991: ³				
Investment in U.S. affiliates	45	56	38	44
Domestic investments	38	49	37	44

1. See footnote 1 to table 3.

2. See footnote 2 to table 3.

3. Source is same as that for table 7. Effective tax rates for individual countries have been weighted by their share of the FDIUS total position for the top 10 countries.

and the second largest position at the end of the 1980's.

In terms of Japan's rates of return and the factors that have driven these returns, Japanese FDIUS was typical of FDIUS as a whole during the last decade. Large current-account surpluses in the 1980's in combination with relatively low rates of return in Japan led to large flows of direct investment capital from Japanese companies that were seeking higher returns in the United States. Low rates of return for U.S. companies in the year prior to their acquisition, along with high restructuring costs after acquisition, led to low earnings by affiliates of Japanese parents. Vertical integration, indicated by U.S. affiliates' heavy reliance on imports for immediate resale, and practices related to vertical integration, such as transfer pricing, further depressed returns on direct investment.¹³ Effective tax rates on the domestic income of Japanese parents were lower than those on the income of their U.S. affiliates, which created an incentive to shift profits from the United States to Japan. Finally, tariffs and nontariff barriers, such as Voluntary Restraint Agreements (VRA's) and antidumping suits and duties, may have induced Japanese companies to substitute assembly and production plants in the United States for final goods exports from Japan.

By contrast, for British FDIUS, rates of return and the factors that have driven these returns are largely *dissimilar* to those for all FDIUS. Throughout the 1980's, the United Kingdom maintained only small current-account surpluses and had higher-than-average expected rates of return at home. Although the flow of direct investment from the United Kingdom during this period was the largest in absolute terms, from 1983 to 1991 new flows accounted for a much smaller percentage of the direct investment position of the United Kingdom than that for Japan. Thus, while British investors probably also bought some low-return U.S. companies and encountered similarly high restructuring costs, these low returns would have been more than offset by higher returns on the United Kingdom's larger stock of more mature investments. A primary example of a mature investment is the British investment in petroleum, which has a diversified structure within the United States that includes both upstream and downstream activities. Investment in this industry has boosted the overall British

13. Heavy reliance on imports for immediate resale by U.S. affiliates of Japanese parents and, more generally, all U.S. affiliates' substantial dependence on imports for use in production, probably also contributed to reductions in rates of return from 1985-87 because of the steep depreciation of the dollar.

rate of return; in contrast, Japanese investment in wholesale trade—typically a more downstream activity—has held down the overall Japanese rate of return. In addition, effective tax rates in the United Kingdom are comparable with those on British investments in the United States, produc-

ing little incentive for profit shifting. Finally, imports from the United Kingdom have not generally been in industries subjected to VRA's or other nontariff barriers, thus creating no incentive for earning less than the profit-maximizing return on direct investment. 