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## Foreign-Owned Businesses in the United States

Jonathan S. Leonard and Rachel McCulloch

For the United States, concern about foreign direct investment (FDI) has historically centered on the costs and benefits to the nation from the establishment of subsidiaries abroad by U.S. multinational firms. Since the mid-1970s, however, the United States has emerged as the world's leading host to inward direct investment. Along with record purchases of U.S. securities, individual and institutional investors across the globe have purchased U.S. farmland, department stores, and luxury hotels. Foreign manufacturing firms have expanded U.S. distribution and service facilities and local production capacity. Japanese and European banks have opened branch offices in New York, Chicago, and Los Angeles. By 1984, the total value of foreign direct investments in the United States amounted to about 10 percent of the value of all New York Stock Exchange stocks. Moreover, these holdings had increased at a dramatic rate, from \$35 billion in 1977 to \$160 billion (nominal) in 1984.

This flood of inward foreign direct investment represents a dramatic shift from the established pattern of the earlier postwar period. Until the 1970s, FDI globally was dominated by the outward thrusts of U.S. firms: the multinational corporations doing the investing were viewed by many writers as a peculiarly American phenomenon. But now foreign direct investment appears to be one more area in which the nation's industrial competitors have been catching up to the United States. After years of relative stability, the ratio of inward to outward direct investments rose from less than one-quarter in 1977 to more than three-quarters by 1985 (Lipsey 1987).

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As the foreign presence grows, U.S. policy concerns shift accordingly. Policymakers in the United States once focused primarily on the effects of direct investments abroad by U.S.-based corporations. The central issue in that policy debate was the relationship of outward investments to U.S. trade and domestic employment. Researchers assessed the degree of complementarity or substitution between U.S. exports and host-country production by U.S. subsidiaries and, to a lesser extent, between U.S. production for domestic markets and imports from subsidiaries abroad (e.g., Musgrave 1975; Dewald et al., 1978; Bergsten, Horst, and Moran 1978, chaps. 3, 4).

From a theoretical perspective, the key question was whether U.S. investments abroad were “defensive”—necessary to secure markets that would otherwise be lost to foreign rivals. Sympathetic observers like Vernon (1971) inferred from case studies that investments abroad by U.S. multinationals were largely defensive, but most American labor unions and some academic researchers (e.g., Frank and Freeman 1978) took a less optimistic view. Empirical testing was complicated by the product-cycle character of most U.S. direct investments abroad; the industries and firms with above-average propensities to invest abroad were also those with above-average propensities to export.

Today, while the potential loss of U.S. jobs associated with establishment of foreign subsidiaries by U.S. firms remains an important policy concern, attention has moved to issues raised by inward direct investment—issues that are novel from the U.S. perspective but widely discussed during the postwar period in other major host countries, both industrialized and developing. The fundamental concern is the extent to which the investing firm, rather than the host country, derives the lion’s share of economic benefits from controlled local production.

The distinguishing feature of foreign direct investment is an ownership stake sufficient to permit a local management role for the investor.<sup>1</sup> In dollar terms, direct investment inflows from abroad remain small relative to the nation’s total foreign borrowings. However, this measure may understate the potential economic, political, and social impact. By definition, direct investments represent the extension of foreign firms’ managerial control into the U.S. economy, just as U.S. direct investments abroad have allowed American firms to control significant parts of the domestic economies of other nations.<sup>2</sup> The recent pattern is controversial in the United States for much the same reasons that the former one has been controversial in host nations abroad.

What accounts for the rapid increase in foreign direct investments in the United States? Is the flood of capital from abroad linked to U.S. trade problems? Should the United States welcome foreign investors, or are there reasons to limit the sale of U.S. assets?

This paper considers the theoretical explanations for the growing foreign direct investment in the United States and explores some of the empirical regularities associated with foreign-owned companies. Section 9.1 discusses the

many motivations underlying FDI in general and in the United States specifically. It provides a synthesis of theoretical explanations for the effects of these investments on the domestic labor market. Section 9.2 presents our data sources and methods. Section 9.3 analyzes the differences and similarities between U.S. and foreign-owned businesses in the United States. Section 9.4 offers some conclusions from the analysis.

## **9.1 The Motivations for Foreign Direct Investment**

### **9.1.1 Foreign Investment and Internationalization**

Once largely insulated from developments abroad by its size and distance from other industrial powers, the United States has in recent years been drawn into increased economic intimacy with other nations. Foreign direct investments, first outward and more recently inward, have played a central role in establishing these linkages, bringing production and sales of enterprises in the United States and other nations under the control of a single management.

The internationalization of the U.S. economy can be measured in a number of ways. The most obvious is that U.S. markets for goods and services are far more open than in the past. Almost every manufacturing industry has experienced a dramatic rise in the ratio of imports to domestic production—perhaps no surprise at a time when the nation has run trade deficits of record proportions. Less well known is that almost every U.S. manufacturing industry has also experienced a rise, albeit not as dramatic, in its exports. The same is true for agriculture, for the extractive industries, and for many of the service activities that now dominate U.S. employment.

Even more striking than the increased flow of goods across U.S. borders is the growth in the volume and variety of asset transactions with other nations.<sup>3</sup> U.S. investors have long dominated international financial markets as lenders. In the 1980s, however, the United States became a major international borrower. Indeed, as a result of increased foreign borrowing and reduced foreign lending, the nation is today billed as the world's leading debtor nation—an unfamiliar role, and one that many Americans find troubling. While the nation's overall dependence on capital from abroad is itself worrisome, the primary focus of concern is direct investment and the associated control by foreign enterprises over U.S. productive activity.

The increased trade in financial assets reflects several independent developments. The United States and most other industrial nations have greatly reduced legal barriers to both inward and outward financial flows, part of a more general trend toward deregulation of financial markets. The recycling of large petrodollar surpluses in the 1970s contributed to the growth of institutions capable of handling huge international capital flows. Revolutionary changes in global communications have facilitated the integration of national financial markets into a single worldwide network of lenders and borrowers.

Together with expanded options for international communication, reduced costs of transporting goods and people have promoted a shift by many firms from national to global management of innovation, production, and distribution.

Although the recent cries of alarm suggest otherwise, U.S. borrowings abroad are themselves nothing new. The United States was a borrower and net debtor for most of the period between the nation's founding and World War I. What *is* new is the emergence of the United States as the major host country for inward foreign direct investments by multinational corporations based in other countries. From 1961 through 1967, less than 3 percent of the world's flow of new FDI came to the United States. That fraction rose gradually during the 1970s and peaked in 1981, when the United States attracted nearly half of total direct investment inflows worldwide and two-thirds of total inflows going to developed countries (Lipsey 1987). Around 1980, the United States displaced Canada as the world's leading host to foreign subsidiaries.

The growth in U.S. trade and the growth in foreign direct investment have been linked developments. Transactions between multinational firms and their foreign subsidiaries have accounted for a major share of the overall rise in the volume of U.S. trade.<sup>4</sup> Coordinated by a single global management, trade in intermediate inputs as well as completed goods allows international comparative advantage to operate not only at the level of individual products but also in determining the location of different steps in the production of a single product.

As of 1985, about 15 percent of all foreign direct investments in the United States (and nearly two-thirds of all Japanese investments) were in the wholesale trade sector. The main task of such investments is to promote the parent's imports to or exports from the United States. Even when local production by a manufacturing subsidiary replaces goods previously imported, as has occurred in autos and electronics, the resulting fall in imports of finished goods is typically offset by an associated increase in imports of components.<sup>5</sup>

### 9.1.2 Why Firms Go Abroad

To understand why foreign firms have been increasing their ownership stakes in the U.S. economy, it is useful to review the basic conditions required for profitable foreign direct investment. These conditions provide a context for identifying specific changes in the global environment that may underlie the recent surge in establishment of U.S. subsidiaries by firms abroad.

In one sense, the central puzzle concerning FDI is why it takes place at all, given the significant competitive disadvantages faced by a firm entering a foreign market. To make the strategy viable, the investing firm must possess an "advantage" in terms of product, process, or management sufficient to outweigh its obvious disadvantages relative to actual or potential domestic competitors in the host country. The existence of additional hurdles and risks fac-

ing a foreign entrant suggests that foreign subsidiaries should on average yield higher profits than domestic operations in the same industry. These conditions imply that direct investments will be concentrated in markets that do not conform to the paradigm of perfect competition—markets characterized by incomplete information, barriers to entry, or other “imperfections.”<sup>6</sup>

A rent-generating competitive advantage is still only a necessary condition for the viability of foreign direct investment. Since the firm’s competitive advantage could in some circumstances be better exploited by exporting from the home country, an additional requirement for setting up foreign operations is a locational advantage. This could reflect the usual considerations of production and transport costs as well as advantages arising from national policy at home and abroad, for example, taxation, regulation, and barriers to trade. In the absence of a significant locational advantage, the potential investor is likely to choose exporting over the more costly and risky option of establishing a local subsidiary.

Like the competitive advantage, the locational advantage is necessary but not sufficient. Even with a locational advantage, there must be an organizational advantage of FDI over alternative strategies such as licensing or other long-term contractual arrangements with firms in the host country. In the language of industrial organization, there must be an internalization advantage—an advantage to substituting internal modes of resource coordination within a single firm for an external market-based arrangement between independent firms. In other words, there must be an advantage of integrated global management.<sup>7</sup>

### 9.1.3 Internalization and Internationalization

Foreign direct investment *is* precisely a firm’s internalization of economic activity across a national boundary—internalization of management. The underlying motives are essentially the same ones that promote expansion of a firm’s activities within a single domestic market, but with a larger anticipated benefit required to offset the larger costs of international expansion.

This perspective is supported by the empirical finding that firms investing abroad are on average larger in their domestic operations than other firms in the same industry. Multinational firms based in small countries are also typically smaller in absolute size than their counterparts from large countries. Both observations are consistent with the hypothesis that firms should exhaust the gains from domestic internalization before going abroad.

Since the investments abroad of U.S. multinationals dominated the global picture for several decades after World War II, most of the empirical research has focused on these. Studies of FDI by U.S. manufacturing firms have verified that investment activity is clustered in the industries where research and development and advertising expenditures are important. Such expenditures presumably create the competitive advantage necessary for a U.S. firm to operate profitably in a foreign environment. Competitive advantages interact

with potential gains from internalization. For example, high-technology firms tend to exploit their newest technologies via subsidiaries, while older products and processes are licensed to independent foreign producers.

Evidence on locational advantage is less compelling, except for resource-based industries. Predictable factors such as availability of suitable labor at lower cost, a large and protected domestic market, favorable tax or regulatory treatment, and stable political environment all appear to have some influence on location decisions.

Other locational considerations cannot be separated from the benefits of a single global management structure (internalization). Some FDI is primarily for the purpose of enhancing local sales of goods imported from a firm's production facilities elsewhere, as with distribution and service facilities.<sup>8</sup> Local operations can also enhance exports by the parent to the host market by providing the parent with up-to-date market information when conditions are changing rapidly, thus keeping the parent in close touch with market trends. In a concentrated industry, the establishment of local production capacity may be central to the investing firm's competitive strategy (e.g., Graham 1978). The subsidiary represents the firm's precommitment to a substantial presence in the local market.

Other advantages of multinational activity are associated with being multinational rather than with any specific host location. A global production network permits the firm to diversify risk and, more generally, increases its options when conditions are volatile (e.g., Kogut 1983). The risk-handling motive may be relevant in explaining not only investments in the post-Bretton-Woods era of volatile exchange rates but also the classic foreign direct investments in extractive industries. Enhanced opportunities for tax avoidance are another widely cited benefit of multinational operations. The modest reported financial success (and correspondingly low tax burdens) of many foreign-owned U.S. plants may reflect such accounting manipulation.

#### 9.1.4 Exchange Rates and Direct Investment

Other things equal, a lower dollar makes U.S. products a better buy in world markets. Should the same hold for assets? If a U.S. asset is seen as a claim to a future stream of dollar-denominated profits, and if profits will be converted back into the domestic currency of the investor at the same exchange rate, the level of the exchange rate does not affect the present discounted value of the investment. Thus, dollar undervaluation (or overvaluation) is irrelevant unless a major motive for the investment is speculation on future movements in exchange rates. Speculative motives may influence portfolio investments but are unlikely to play an important role in direct investments, where the planning horizon usually extends over years or even decades.

A more relevant consideration is that a weak dollar makes the United States more attractive as a production site. By lowering U.S. production costs rela-

tive to those in Europe or Japan, a fall in the dollar might shift locational preference for direct investors toward the United States. Even so, advantages of internalization would be required to make direct investment a profitable response to the new currency values. In the absence of such advantages, foreign firms would be unable to compete with U.S. firms in exploiting the locational advantage of lower production costs.

A more basic problem with attributing investment flows to exchange-rate levels is that the post-Bretton-Woods regime of generalized floating has been characterized by large swings in key rates, from apparent undervaluation to apparent overvaluation and back again.<sup>9</sup> Thus, the motive for increased U.S. investments may lie less in the specific level of the exchange rate around the time of the investment than in the high probability of future large movements. Here internalization does play a key role—allowing increased costs in one location to be offset by reduced costs elsewhere and permitting some flexibility in shifting marginal production between locations on different sides of a major rate alignment.

#### 9.1.5 The Role of Protection

No other incentive for foreign direct investment has received as much attention as import barriers. It seems almost self-evident that tariffs or quotas will stimulate direct investments in the protected markets. Recent developments in the U.S. auto and electronics industries offer visible support for the proposition. Yet statistical analyses of Canadian and U.S. data have failed to confirm a systematic relationship between direct investment and protection.

The likely reason for the weak empirical findings is that protection by itself confers only a locational advantage. Whether that locational advantage leads to inward investment or simply alters conditions of domestic entry and exit depends on other industry characteristics. In the absence of a firm-specific competitive advantage optimally exploited through internalization, domestic producers will be better able than subsidiaries of foreign companies to capture the benefits of local production.

Important though they are in their own right, autos and electronics may be exceptions to the general rule. In these industries, technological know-how and managerial know-how are firm-specific advantages that allow foreign producers (notably Japanese) to compete effectively with established domestic firms.<sup>10</sup> By contrast, the highly protected U.S. apparel and footwear industries have seen almost no direct investments from abroad. For these low-technology industries, firm-specific advantages are apparently too small to offset the greater costs incurred by foreign investors.

Evidence at the country rather than the industry level also casts doubt on the hypothesis that protection is a strong magnet for inward direct investments. Among the less-developed countries, open, export-oriented economies have been more successful in attracting new investments than nations pursuing import-substitution strategies. For U.S. outward investments, Canada, the



United Kingdom, and Germany, all with relatively liberal trade regimes, have been the most important host countries.

Bhagwati (1985) suggests a more subtle link between protection and direct investment using the concept of “quid pro quo” foreign investment—investment made to defuse protectionist pressure rather than to circumvent actual current or anticipated protection. On this interpretation, Japanese investments in the automobile industry were intended, at least in part, to avoid future increases in protection (e.g., local-content requirements) rather than to circumvent existing import restrictions. Presumably, such investments would lessen the perceived need for protection and also would shift the domestic political balance toward a more liberal trade stance.

An alternative “strategic” interpretation is suggested by the oligopolistic structure of the auto industry and the extensive publicity surrounding Japanese entry into U.S. production. Japanese firms may wish to demonstrate to their U.S. rivals that Washington cannot protect them from yielding part of their customary shares in the U.S. market. The new Japanese entrants could actually benefit from future increases in protection if their competitive advantage translates into lower costs in U.S. production while trade barriers prevent the Big Three from putting their own nameplates on captive imports from Japan or elsewhere.

#### 9.1.6 Foreign Investment and U.S. Labor

For host countries worldwide, the most important anticipated benefit from foreign investment is the creation of new jobs. In this, the United States has been no different. Holding out the prospect of hundreds or even thousands of new jobs, U.S. state and local officials have mounted formidable campaigns to lure foreign plants, usually offering sizable financial incentives to supplement the region’s other attractions.<sup>11</sup> Yet, as with the presumed job losses associated with outward investments of U.S. multinationals, the overall effects of inward investments on domestic employment are far from clear.

First, while there are obviously “new jobs” created by new subsidiaries, to some extent these new jobs will be offset by employment losses elsewhere. In the most optimistic scenario, local production will simply substitute for goods previously imported.<sup>12</sup> At least for the industry, the effect on total employment should be positive. But local production by foreign affiliates can also cut into the market share of domestic competitors, so that the new jobs are matched by layoffs elsewhere in the same industry. If the affiliates use more imported inputs than their domestic counterparts, production and employment may be reduced accordingly in the supplier industries.

A second concern is about the types of jobs created. Will foreign multinationals use U.S. labor for routine assembly operations, keeping the “good jobs” at home? Reich and Mankin (1986) interpret Japanese joint ventures in the United States as “part of a continuing, implicit Japanese strategy to keep the higher paying, higher value-added jobs in Japan and to gain the project

engineering and production process skills that underlie competitive success.” A related concern shared with other host countries is that foreign affiliates allow little opportunity for local workers to rise into management ranks.

While the Japanese presence in U.S. manufacturing is still too small and too new to offer much evidence on this issue, most analysts agree that U.S. operations abroad have benefited U.S. managers and skilled workers at the expense of less-skilled U.S. production workers, whose jobs have moved offshore.

### 9.1.7 U.S. Competitiveness and Inward Direct Investment

The close link between FDI and the investing firm’s competitive advantage suggests that the rise in inward foreign investments in the United States as well as the slowing of U.S. direct investments abroad reflect the industrial catch-up of other nations to the United States. Where the competitive advantages were once controlled almost exclusively by U.S. companies, new rivals have emerged in Europe, Japan, and even some of the developing countries. As with the successful U.S. multinationals of earlier decades, these firms have exploited their competitive advantages first through exports and later through direct investment in the market countries.

Like other host countries over the years, the United States is reevaluating the potential gains and losses from allowing free entry to foreign subsidiaries.

## 9.2 Data Sources and Methods

Section 9.3 compares foreign-owned U.S. firms with their U.S.-owned counterparts. Most of the data used are derived from foreign direct investment series published by the Bureau of Economic Analysis of the U.S. Department of Commerce. Extensive cross-sectional data for 1980 are from *Foreign Direct Investment in the United States, 1980*, a survey of U.S. business enterprises in which foreign ownership, either direct or indirect, was at least 10 percent.

A number of caveats apply to these data, particularly where comparisons are made to domestic aggregates. First, FDI data are reported in consolidated form for the U.S. affiliates. The activities of each establishment within multi-establishment enterprises are not classified separately by their own industry (as in the National Income and Product Accounts) but, rather, are classified by the industry group accounting for the largest percentage of the enterprise’s sales. This undercounts data for industries with many “owned” establishments and overcounts for industries with many “owner” establishments. It overstates cross-industry variance in sales.

Second, FDI data aggregate petroleum-related activities including extraction, refining, and retailing. These have been removed from their respective industries and aggregated into a separate category that has been suppressed in the industry detail presented here. In consequence, these foreign-owned activities are undercounted in their respective subindustries.

Third, enterprises that are entirely foreign owned but in which no single foreign person owns at least 10 percent are not classified as foreign owned. For this purpose, "person" is defined to include any individual, partnership, associated group, or corporation, including members of a syndicate or joint venture.

Fourth, compensation and employment data are collected only for U.S. affiliates whose assets, sales, or net income exceeded \$1 million or whose land ownership exceeded two hundred acres.

Fifth, data are annual averages for each enterprise's fiscal year.

Sixth, employment is reported as annual average number of employees, not as full-time equivalents. This will cause an understatement of compensation or wages per employee as reported here, but it should not affect the comparison of foreign direct with domestic because analogous concepts are used for domestic. Compensation per employee is also understated in some cases by the use of part-year compensation and year-end employment in some newly acquired enterprises and establishments.

Finally, all the data discussed here are aggregates of enterprise data. The composition of the underlying sample changes over time, as the section on new acquisitions and establishments shows. Any change in, say, compensation per employee may then be due to (1) pay raises within previously sampled establishments, (2) deletion of low-wage establishments from the sample, (3) addition of high-wage establishments, or (4) purchase of a high-wage establishment by an enterprise with greater sales in another industry.

### 9.3 Buying American

Foreign direct investment in the United States includes all firms in which 10 percent or more of the equity is foreign owned. The stock of FDI increased more than fourfold (in nominal terms) from \$34.6 billion in 1977 to \$159.6 billion in 1984. In 1977, the value of FDI in the United States was equal to 23.6 percent of the value of U.S. direct investment in foreign countries built up during earlier decades. By 1984, the reversal of net investment flows was well along. FDI in the United States was 68.4 percent of U.S. FDI abroad. Between 1977 and 1984, FDI in the United States more than doubled in proportion to the total value of all stocks listed on the New York Stock Exchange, the proportion rising from 4.3 percent to 10.1 percent. In part, this reflects growing foreign investments in all forms of U.S. assets. However, table 9.1 also shows that foreign direct investments increased in value relative to foreign-owned stocks and to U.S. investment abroad. Both developments indicate that potential foreign investors see greater competitive, locational, and organizational advantages to establishment of U.S. subsidiaries than in earlier periods.

High interest rates affected many foreign investments in U.S. financial in-

**Table 9.1 International Assets, 1977-84**

	1977	1978	1979	1980	1981	1982	1983	1984
1. Private foreign investment in private U.S. assets <sup>a</sup>	157.9	189.8	242.1	308.7	380.1	477.0	559.2	630.5
2. Row 1 as % of private U.S. fixed nonresidential gross capital	5.3	5.6	6.2	6.9	7.7	9.0	10.1	10.9
3. FDI in the U.S. <sup>a</sup>	34.6	42.5	54.5	83.0	108.7	124.7	137.1	159.6
4. Row 3 as % of NYSE Value	4.3	5.2	5.7	6.7	9.5	9.6	8.7	10.1
5. Row 3 as % of foreign-owned U.S. stocks	86.9	101.0	112.8	128.5	168.3	162.4	140.9	166.4
6. Row 3 as % of U.S. direct investment abroad	23.6	26.1	29.0	38.5	47.6	56.2	60.4	68.4

Sources: *Survey of Current Business*, various issues; *Economic Report of the President*, various issues; *Statistical Abstract of the United States*.

<sup>a</sup> Billion current dollars.

**Table 9.2 Flows of Foreign Investment in the United States, 1960-86 (billions of U.S. dollars)**

Year	Total Inflow	Total FDI	FDI as % of Total	Japanese FDI	% of FDI from Japan
1960	2.3	.3	13.7	NA	NA
1970	6.4	1.5	23.0	.0	3.6
1972	21.5	.9	4.4	.0	2.0
1974	22.5	4.8	21.0	.2	4.4
1976	42.7	4.3	10.2	.6	13.5
1978	65.4	7.2	12.1	1.0	12.5
1980	84.7	13.7	16.1	.7	5.3
1981	78.2	22.0	28.1	2.8	12.6
1982	109.7	10.4	9.5	1.7	16.8
1983	96.9	11.9	12.3	1.7	13.8
1984	108.2	25.4	23.4	4.4	17.2
1985	127.1	17.9	14.0	3.1	17.3
1986	213.3	25.6	12.0	4.7	18.5

Sources: *Survey of Current Business*, various issues (for 1972-86); *Business Statistics, 1984* (for 1960 and 1970).

Note: Percentages calculated from unrounded flow data. Data for 1986 are preliminary.

struments. The composition effect created by the increase in foreign ownership of U.S. financial assets overshadows a less noticed shift in foreign investment toward direct corporate ownership. Since 1977, foreigners have increasingly been purchasing control of U.S. corporations. The value of inward FDI, as a percentage of foreign ownership of U.S. stocks, rose from 87 percent in 1977 to 166 percent in 1984.

Table 9.2 shows the trends in the flow of new FDI. The total inflow of foreign investments increased in the 1970s and 1980s. Although FDI as a

percentage of the total inflow of investment does not show a distinct trend over this longer period, Japanese FDI has increased substantially. The flow statistics offer less support for the hypothesis of changing competitive, locational, or organizational advantages to establishment of U.S. subsidiaries by foreign-based multinational corporations. The absence of a trend in FDI as a percentage of total investment inflow indicates that the growth in FDI may be simply a manifestation of the growth in all forms of foreign investment in the United States. The trend in Japanese FDI in the United States suggests that economic advantage arguments may, however, apply to Japan and to the industries in which Japanese companies are highly visible.

### 9.3.1 Acquisitions and New Establishments

Newly acquired or established enterprises show one form of increased investment by foreigners in the United States (see table 9.3). The Bureau of Economic Analysis (BEA) classifies as a new acquisition an existing U.S. enterprise in which foreign ownership (directly or through U.S. affiliates) passes 10 percent. However, this is only a small part of total investment, because additional equity investments in existing U.S. affiliates are not counted once the 10 percent threshold has been passed, and because only enterprises with assets exceeding \$1 million or two hundred acres of U.S. land are included. To illustrate, of the 2.1 million U.S. employees of foreign-owned companies in 1980, 13 percent were in newly acquired enterprises, and .6 percent were in newly established enterprises. Compared to analogous rates for total domestic industry, the acquisition rate is high and the start-up rate low. Of the \$522 million of foreign-owned 1980 assets, 8 percent were newly acquired and 1.4 percent newly established. Roughly 80 percent of these investment funds came through existing U.S. affiliates. In 1980, 37 percent of these investments were financed by U.S.-source funds. Only 2 percent of

**Table 9.3** Outlays and Employment in U.S. Enterprises Newly Acquired or Established by Foreign Direct Investors, 1979–85

	Outlays (\$ million current)	Employment New Establishments	Employment New Acquisitions
1979	15,317	15,467	314,548
1980	12,172	13,022	279,459
1981	23,219	14,072	428,745
1982	10,817	8,169	225,673
1983	8,091	5,556	102,557
1984	15,197	4,139	168,406
1985	19,547	7,772 <sup>a</sup>	235,667 <sup>a</sup>

Sources: Outlays: Shea (1986, 47, table 1). Employment: same 1979, 1980, 1981, 1982, 1983, 1984, and 1985.

<sup>a</sup> preliminary

these investments (1982) were reported to receive specific state or local investment incentives or subsidies.

Measured either by employment or assets added in new acquisitions or establishments, inward FDI has been volatile and shows no clear trend. This is misleading. Indeed, both assets and employment in foreign direct investments have been growing steadily in the 1980s. The difference arises because most of the growth has occurred in ongoing foreign-owned businesses. This is similar to the growth process of domestic industry generally, which is also dominated by the expansion of ongoing concerns.

### 9.3.2 Foreign Ownership by Industry

The nature of the industries in which foreigners invest does differ substantially from domestic industry as a whole. Table 9.4 shows the industrial distribution of employment in foreign-owned businesses. It bears greater resemblance to U.S. direct investment in other developed economies. Overall, foreigners invest predominantly in U.S. manufacturing industries. While 22.1 percent of 1980 U.S. employment was in manufacturing, this sector accounted for fully 54.3 percent of FDI. The service and retail trade sectors show the fastest growth in FDI, but manufacturing still dominates. Employment in foreign-owned manufacturing doubled between 1977 and 1984.

Measured as a percentage of total industrial employment, foreign ownership has advanced farthest in chemicals, where 39 percent of all employment is in foreign-owned establishments; stone, clay, and glass (11 percent); primary metals (11 percent); food (9 percent); and electrical machinery (8 percent).<sup>13</sup> The chemical industry stands out as a case in which foreign ownership is approaching a majority of the industry. These are all manufacturing industries in which the foreign parent may have a competitive advantage due to the importance of technology in determining business success. Of the sectors

**Table 9.4 Industrial Distribution of Employment in Foreign-owned Business, 1977-84 (%)**

	1977	1978	1979	1980	1981	1982	1983	1984
Mining	1.31	1.12	1.03	1.23	1.65	1.67	1.46	1.18
Manufacturing	56.28	56.22	57.39	54.33	53.79	50.74	51.54	50.76
Wholesale trade	12.55	12.03	11.18	10.67	10.51	11.44	10.61	10.79
Retail trade	11.65	11.96	13.46	14.95	14.23	16.26	16.51	16.72
Construction	1.07	1.61	1.60	2.11	2.40	2.12	1.98	1.55
Services	3.04	3.57	3.76	4.18	5.13	5.43	5.34	7.07
Residual	14.11	13.50	11.58	12.54	12.29	12.34	12.55	11.93
Total								
(thousands)	1,219	1,430	1,753	2,034	2,417	2,448	2,526	2,715

Sources: U.S. Department of Commerce (1983) and Shea (1986).

Note: Foreign employment in industry *i* over total foreign employment (in %), 1977-84.

with highest foreign ownership, two (electronics and chemicals) are commonly considered to embody advanced and rapidly progressing technology.

In most other industries, the share of employment in foreign-owned businesses remains under 5 percent. Foreign employment as a share of total employment is notably low in communications and public utilities (.4 percent), services (.8 percent), agriculture (.5 percent), and construction (.9 percent). Regulation limits access to the first of these markets. The others are all non-manufacturing industries with low domestic sales concentration.

Foreign ownership rates are highest within manufacturing. Foreign ownership is increasing in almost every industry, including stagnant industries such as primary metals. In recent years, it has increased fastest in such home-goods industries as service, real estate, and retail trade.

### 9.3.3 Location Decisions

As new entrants to the U.S. employment market, foreign direct investors have at times been characterized as locating in the low-wage South, the growing West, or the technologically advanced Northeast. From the perspective of any of these stories, the surprising fact is just how closely the geographic distribution of FDI employment parallels that of all domestic firms.

Table 9.5 shows, for each of the nine major Census geographic divisions, the shares of foreign direct and of domestic employment for all sectors and for manufacturing. The largest difference between FDI and domestic location occurs in the Middle Atlantic states (New York, Pennsylvania, and New Jersey), which account for 21 percent of FDI employment but just 17 percent of do-

**Table 9.5 Geographic Distribution of Employment, 1980 (in thousands)**

Geographic Region			Fraction of Total		Manufacturing		Fraction of Total Manufacturing	
	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic
New England	122.9	5,474.5	.06	.06	72.2	1,524.6	.07	.07
Middle Atlantic	414.5	15,011.6	.21	.17	217.2	3,554.2	.20	.17
South Atlantic	363.1	14,625.2	.18	.16	192.1	3,041.5	.18	.15
East North								
Central	368.1	16,826.8	.18	.19	226.4	4,687.6	.21	.23
East South								
Central	99.5	5,145.5	.05	.06	61.5	1,362.7	.06	.07
West North								
Central	103.2	6,903.0	.05	.08	63.2	1,381.3	.06	.07
West South								
Central	209.8	9,313.3	.10	.10	93.2	1,669.5	.08	.08
Mountain	64.0	4,488.1	.03	.05	29.1	563.2	.03	.03
Pacific	274.8	13,058.8	.14	.14	142.7	2,569.0	.13	.13
Total	2,019.9	90,846.8	1.00	1.00	1,097.7	20,353.6	1.00	1.00

Sources: U.S. Department of Commerce (1983, table F-7); U.S. Bureau of Labor Statistics.

mestic. FDI employment is also more prevalent in the South Atlantic states and less prevalent in the relatively depressed East North Central region. Aside from these differences, the location decisions of foreign direct investors in the United States look much like those of domestic employers. As we noted above, much FDI involves the creation of wholesale, retail, and service establishments to support the international trade of the parent. Apparently, the geographic distribution of population in the United States is more important than regional labor market differences in determining the location of these establishments.

#### 9.3.4 Compensation Differences

U.S. production workers do not appear to suffer under foreign ownership. In the manufacturing sector, the ratio of compensation per worker in foreign-owned to the same measure for employees of U.S.-owned businesses increased from .94 in 1977 to 1.08 in 1984 (table 9.6). Foreign ownership has little effect on the mix of fringes to wages, so wages show a similar pattern. While compensation per worker is 10 percent lower in the foreign-owned establishments of the food, primary metals, and instruments industries, in general foreign gains in domestic industries have not been accompanied by relatively low-wage labor.

Overall, workers in foreign-owned businesses enjoy a 20–30 percent advantage in compensation over employees of U.S.-owned businesses. The compensation differential can be decomposed into a within-industry differential and a composition effect. Only about a third of the overall difference is due to higher compensation in foreign direct employment within industry. For the most part, the higher compensation found in the aggregate in foreign direct employment is explained by the greater concentration of FDI in the high-wage manufacturing sector.

For manufacturing, the BEA provides separate data on wages, hours, and occupational structure. The hourly wages of production workers in foreign-owned enterprises are 8 percent greater than the domestic average in 1980, although the hours worked are 8 percent less. For production workers, increased hourly pay is balanced by shorter hours. Foreign-owned firms in manufacturing appear more top heavy, employing 64 percent production workers in 1980 compared to the domestic average of 70 percent (see table 9.7).<sup>14</sup> Since the overall 1980 compensation ratio is less than one, non-production workers in foreign-owned firms appear to be paid less than their counterparts in U.S.-owned firms.

As table 9.6 shows, foreigners appear to invest in high-wage industries. In our discussion of the sources of advantage to FDI, we noted that locational advantages may be conferred by protective trade policies, as in the automotive industry, for example. However, successful direct investment requires that the foreign investor also possess competitive advantage. Otherwise, only domestic entry and pricing decisions are altered by the protection. When some trade



**Table 9.6 Compensation Ratios (foreign compensation per worker over domestic compensation per worker)**

Industry	1977	1978	1979	1980	1981	1982	1983	1984
All industries	1.20	1.23	1.20	1.20	1.27	1.30	1.29	1.26
All nonpetroleum industries	1.17	1.20	1.18	1.19	1.42	1.28	1.28	1.24
Mining	.94	1.02	.98	1.02	1.09	1.16	1.16	1.14
Manufacturing	.94	.96	.94	.95	1.06	1.11	1.08	1.08
Durable								
Transportation & equipment	.81	1.07	.93	.97	.97	.98	.90	.96
Primary metal industries	.83	.86	.80	.86	.86	.90	.95	.99
Fabricated metal products	.96	.98	.98	.90	.98	1.09	.96	1.12
Machinery, except electrical	.96	.99	.98	.97	.99	1.10	1.05	1.01
Electric & electronic equipment	.83	.86	.87	.90	.99	1.00	.96	.98
Nondurable								
Textile products & apparel	1.21	1.13	1.07	1.07	1.14	1.21	1.17	1.21
Lumber & furniture	1.01	.93	.81	.89	.84	.83	1.03	1.01
Paper & allied products	.99	1.00	.98	.96	1.22	1.24	1.30	1.18
Printing & publishing	1.02	1.03	1.07	1.07	1.10	1.11	1.14	1.14
Rubber & plastics products	.82	.83	.87	.95	.91	.94	.92	1.06
Stone, clay, & glass products	.90	.97	.97	1.08	1.11	1.21	1.17	1.12
Food & kindred products	.89	.91	.78	.83	.89	.90	.87	.91
Wholesale trade	1.03	1.03	1.01	1.02	1.01	1.11	1.19	1.13
Retail trade	1.22	1.21	1.29	1.24	1.18	1.21	1.13	1.05
Construction	.80	1.10	1.16	1.06	1.16	1.23	1.26	1.14
Services	1.10	1.17	1.11	1.04	.94	.97	1.03	1.05
Finance	1.33	1.67	1.68	1.54	1.54	1.91	1.87	1.71
Real estate	1.02	.96	1.40	1.38	1.34	1.19	1.12	1.12
Insurance	1.00	1.02	1.01	.99	.94	.93	.91	.91
Communication	1.31	.86	1.13	.74	.76	.63	.55	.57
Transportation	1.05	1.07	1.09	.90	.88	.93	1.14	1.07

Sources: U.S. Department of Commerce (1983); *Survey of Current Business*; National Income and Product Accounts.

flows are restricted through commercial policy, factor flows are magnified. A partial explanation of the tendency of foreigners to invest in high-wage U.S. industries (and to pay the U.S. wage in those industries) is the export of capital to the United States as an alternative to export of the products of their domestic high-wage industries.

### 9.3.5 Research and Development

Just as U.S. direct investment in other countries is dominated by industries with substantial research and development (R&D), foreigners investing in U.S. domestic industries use R&D to generate a competitive advantage. While R&D scientists and engineers constitute only .5 percent of employees of domestic-owned firms, they are 2.1 percent of the employees in foreign-owned companies (see table 9.8). By this measure, R&D intensity is half

**Table 9.7 Proportion of Production Workers in Manufacturing, 1980**

	Ownership	
	Foreign	Domestic
Manufacturing	.64	.70
Food & kindred products	.68	.69
Chemicals & allied products	.48	.57
Primary & fabricated metals	.72	.75
Primary metals	.71	.77
Fabricated metals	.74	.74
Machinery	.61	.64
Machinery, except electrical	.57	.64
Electric & electronic	.63	.64
Textile products & apparel	.81	.86
Lumber & furniture	.79	.82
Paper & allied products	.74	.75
Printing & publishing	.57	.56
Rubber & plastics	.75	.77
Stone, clay, & glass	.75	.77
Transportation equipment	.66	.65
Instruments & related products	.64	.60

Sources: U.S. Department of Commerce (1983); *Statistical Abstract of the United States*.

**Table 9.8 Research and Development Intensity, 1980**

	% of Total Employees Who are R&D Scientists and Engineers	
	Foreign	Domestic
All industries	2.13	.46
Manufacturing		
Food & kindred products	.50	.42
Chemicals & allied products	6.14	4.48
Primary metal industries	.72	.78
Fabricated metal products	2.40	.61
Machinery	3.62	3.03
Electric & electronic equipment	3.78	3.91
Other manufacturing		
Textile products & apparel	.39	.09
Paper & allied products	.43	1.09
Stone, clay, & glass products	.94	.81
Transportation & equipment	2.34	1.88
Instruments & related products	4.10	3.86

Sources: U.S. Department of Commerce (1983); National Science Foundation.

again as high in foreign-owned compared to domestic-owned manufacturing businesses (3.1 vs. 2.0 percent) and more than ten times greater in nonmanufacturing (.9 vs. .07 percent). One need not be xenophobic to wonder about the fate of U.S. comparative advantage in R&D-intensive industries when the declining share of U.S. citizens in U.S. graduate science and engineering education is coupled with the declining domestic-ownership share in U.S. R&D-intensive industries.

### 9.3.6 Collective Bargaining

Among industrialized countries, the United States now has one of the lowest union representation rates. Among the many explanations proffered, some have pointed to differences in management attitude. Managers from some European countries and Japan are often surprised at the unquestioned and vehement antiunion animus of their U.S. counterparts.

Higher unionization rates in home countries may be associated with greater management tolerance of unionization and perhaps with greater skill in developing cooperative arrangements with unions. If foreign owners really take a less antagonistic position toward unions, one might expect this to carry over to their U.S. operations and reveal itself in higher unionization rates than in U.S.-owned domestic operations.

On the other hand, once geographically removed from home country approbation and leverage, the same cost considerations that drive U.S. companies may dominate. To the extent that cost disadvantages of union firms can be capitalized in the sales price of corporate assets, no difference in unionization is expected on the basis of foreign ownership.

In 1980, 23 percent of U.S. employees were union members. Among foreign-owned companies, 29 percent of employees were covered by collec-

**Table 9.9 Union Density at Home and Abroad, 1980**

	% Covered by Collective Bargaining in Foreign Owned		% Unionized Home Country
	All Industry	Manufacturing	
United States		35.9	23.1
All foreign owned	29.27	31.13	
Canada	32.05	35.39	30.50
United Kingdom	26.07	29.11	53.10
Japan	20.26	28.82	30.80
Netherlands	24.52	34.03	37.10
Sweden	31.90		87.80
France	47.49	55.05	19.20
Germany	30.96	20.06	38.60
Switzerland	17.35	22.55	33.50

Sources: U.S. Department of Commerce (1983); Kokkelenberg and Sockell (1985); Troy and Shefflin (1985).

tive bargaining contracts (see table 9.9). Again, this difference is almost entirely due to the greater concentration of FDI in the manufacturing sector. Within manufacturing, foreigners leave any pro-union sentiments at home. Whereas 36 percent of U.S. employees are union members, only 31 percent of the employees in foreign-owned companies are covered by collective bargaining contracts (a more inclusive measure).

Part of the difference in manufacturing union density may reflect union avoidance on the part of foreigners. Part may reflect compositional differences within manufacturing, and part may be due to a vintage effect. Newer firms and industries are less unionized, and foreign ownership is presumably concentrated among these. In any case, owner attitudes inferred from home-country unionization can be dismissed as an important factor. The growing internationalization of the world economy has so far presented greater competition attacking local rents and greater opportunities for union avoidance than for the international application of union leverage to enforce union standards.

### 9.3.7 Home-Country Effects

The characteristics of FDI in the United States may differ systematically by home country of the investor, although in general one may suspect that such differences either are transient or represent industry-specific or firm-specific effects. For the countries that are home to most of the ultimate beneficial owners of FDI in the United States, table 9.10 compares a number of characteristics.

Of these countries, investments owned by Australians and Dutch appear the most successful. They show the highest return on assets and the highest pay. The Dutch investments are also R&D intensive. Countries such as Germany and Switzerland, with the greatest share of their investment in manufacturing, show the worst rates of return. Japanese investments stand out only in their avoidance of manufacturing, compared to the investments of other foreigners. In general, the measures in table 9.10 appear to tell more about the common characteristics of FDI in the United States than about differences systematically related to home-country factors.

## 9.4 Conclusions

The close link between foreign direct investment and the investing firm's competitive advantage suggests that both the rise in inward direct investment in the United States and the slowing of U.S. direct investment abroad reflect the industrial catch-up of other nations to the United States. Where the competitive advantages that underlie successful foreign investment were once controlled almost exclusively by U.S. companies, new rivals have emerged in Europe and Japan, and even in some of the developing countries. As with the U.S.-based multinationals that dominated global direct investment flows in earlier decades, these foreign-based firms have exploited their competitive

**Table 9.10 Characteristics of Foreign Direct Investment by Country of Origin, 1980**

	All Foreign Countries	Canada	United Kingdom	Japan	Netherlands	France	Germany	Switzerland	Australia, New Zealand, South Africa	United States
1. Net income/assets	.031	.022	.056	.026	.049	.011	.006	.008	.097	.059
2. Wages/workers*	16.28	16.92	14.59	16.26	18.84	18.58	15.40	15.99	18.17	13.91
3. Compensation/workers*	19.69	20.68	17.80	18.57	23.00	22.76	18.73	19.04	21.35	16.39
4. R&D employed/workers	.021	.011	.017	.015	.040	.016	.024	.038	.019	.005
5. Manufacturing employed/workers	.54	.52	.52	.31	.55	.58	.64	.65	.29	.20
6. Wages/workers**	16.92	17.79	15.13	16.35	17.60	20.33	15.76	17.88	17.97	17.36
7. Compensation/workers**	20.67	21.90	18.50	19.25	21.13	25.64	19.38	21.50	21.12	21.68

Sources: U.S. Department of Commerce (1983, tables B-8, E-2, F-2, F-13, F-14).

Note: U.S. column gives comparable domestic averages.

\*In thousands of dollars.

\*\*In manufacturing.

advantages first through exports and later through direct investments in market countries.

As with U.S. companies investing abroad, foreign firms establishing subsidiaries in the United States often rely on superior technology for the competitive advantage necessary to make their investments profitable. Although these firms come to the United States to exploit an already-established competitive advantage, their U.S. operations employ a larger proportion of scientists and engineers than U.S.-owned businesses in the same industry; foreign-owned enterprises in the United States are on average more R&D intensive than their domestic counterparts.

However, R&D intensity is the only large difference between foreign-owned and U.S.-owned businesses that emerged from our statistical comparison. Indeed, it is striking how similar foreign-owned and U.S.-owned businesses appear statistically. Although foreign-owned companies have a different industrial mix favoring manufacturing, retail and service establishments are growing fastest. Wages and compensation of foreign-owned businesses are very similar to those of U.S.-owned businesses in the same industries.

## Notes

1. In U.S. statistics, the line is drawn at 10 percent of equity, although most U.S. direct investments abroad and many foreign direct investments in the United States are wholly owned subsidiaries of the parent. Other asset purchases, e.g., of private or government bonds or smaller blocks of stocks, are termed portfolio investments.

2. The size of the ownership stake need not indicate the total size of the controlled activity. A fall in measured direct investment could, in principle, be accompanied by an increase in the extent of controlled activity. Alternative measures of foreign influence include sales, employment, and profits of the controlled enterprise.

3. Although appropriately classed as asset transactions, direct investments are distinctive in that no international transfer of financial capital, i.e., purchasing power, need be entailed. In many cases, the contribution of the investing firm to a joint venture consists primarily of proprietary technology or managerial expertise rather than financial capital. Even when financial capital is part of the investment "package," the required funds may be borrowed locally in the host country. This was a common practice in the 1960s for the U.S. firms establishing European subsidiaries.

4. In 1983, U.S. multinational corporations accounted for more than three-quarters of U.S. exports and almost half of U.S. imports. However, these shares have been declining from their peaks in the 1970s (the comparable percentages for 1977 were 84 and 58), while the U.S. trade role of foreign multinational firms appears to have grown over the same period. (See Barker 1986.)

5. This has been alleged in recent years about Japanese investments in the United States but is also a longstanding complaint of less-developed host countries. These nations invite foreign investments with the hope of reducing chronic balance-of-payments difficulties. The usual experience is that induced imports of machinery and components tend to offset any direct reduction in imports or rise in exports of the

product itself. This is, of course, consistent with the notion that balance-of-payments difficulties are fundamentally macroeconomic problems requiring macroeconomic solutions. On the macroeconomic roots of the U.S. trade deficit, see McCulloch and Richardson (1986).

6. The idea that FDI requires a significant departure from conditions of perfect competition was advanced by Hymer (1960) and expanded by Kindleberger (1969), Caves, and many others. For a comprehensive survey of the literature, see Caves (1982, chap. 2).

7. The three "necessary conditions" are elaborated by Dunning (1981, and earlier papers). Dunning uses this classification to explain the distribution of investment by home and host country and industry. For a detailed analysis of direct investment as international internalization, see Rugman (1980).

8. The U.S. investments by Japanese firms are a case in point. While this kind of complementary relationship between exporting and direct investment was suggested by Bergsten, Horst, and Moran (1978) for manufacturing investments, it may be even more important in the case of service industries such as banking and insurance.

9. As long as rates are determined mainly by market forces, in one sense under- or overvaluation cannot occur. These descriptions usually refer to a deviation of market-determined rates from rates calculated using relative price levels (purchasing power parity).

10. As discussed below, local policies to attract new investment may also play a role.

11. These benefits include tax breaks, cheap loans, worker training, and free infrastructure. According to a Kentucky legislative study, the state will spend \$125 million, or about \$42 per job, to attract Toyota's new plant (Lore 1987).

12. In early 1987, the president of Ford Motor Co. called for further reductions in auto imports from Japan to compensate for increased production by Japanese plants in the United States.

13. Statistics are for 1984. Sources are U.S. Department of Commerce, *Foreign Direct Investment in the United States*, and the *Survey of Current Business*.

14. This difference may be understated by the use of full-time equivalent counting only for the domestic figure.

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