International Trade and Investment
Seventh Edition

Franklin R. Root
The Wharton School
University of Pennsylvania

COLLEGE DIVISION South-Western Publishing Co.
Cincinnati Ohio
MULTINATIONAL ENTERPRISE
AND TRADE THEORY

Part IV is devoted to the theory and performance of multinational enterprises that span the globe with their production, marketing, and financial operations. These firms are responsible for a large share of international trade and almost all foreign direct investment. Here we indicate only the principal features of multinational enterprises that need to be incorporated into a theory of trade in order to explain actual patterns of trade.

The multinational enterprise is the foremost agent in moving factors of production from one country to another. The intimate link between the trade and investment activities of multinational enterprises points to the need for a synthesis of trade and investment theories.

Multinational enterprises are large firms in oligopolistic industries. Furthermore, the manufacturing and service multinational enterprises are oligopolists producing and selling differentiated products. Strongly motivated by growth objectives and the maintenance of global market shares and sensitive to each other’s behavior, multinational enterprises prefer to compete with new and differentiated products rather than with price. These firms are also characterized by increasing returns in production and organization that support their oligopolistic power. Competition among multinational enterprises occurs as a “strategic game” featured by a high degree of mutual interdependence played out in global markets.

Horizontally and vertically integrated across national boundaries, much of the international trade of multinational enterprises is among their national units. Indeed, one-third of U.S. exports of manufactures consists of transfers from U.S. parent companies to their foreign affiliates. The presence of intraenterprise trade raises the question of how sensitive such trade is to costs, prices, and other economic forces. By assuming exchanges between independent sellers and buyers, trade theory has ignored the phenomenon of intrafirm trade.

Multinational enterprises are more technologically intensive than their domestic counterparts. It is no coincidence that the five most R & D-intensive and export-intensive U.S. industries identified by Gruber, Mehta, and Vernon are also the industries most dominated by multinational enterprises. Such companies have the global capability to transfer technology through export goods, directly through licensing, or through production in foreign countries. They have speeded up the international flow of technology, and they are mainly responsible for both the creation and destruction of international technology gaps.

With their international information networks, multinational enterprises have a greater capability than other firms to reduce the ignorance and uncertainty gaps that constrain international trade. Furthermore, their size and the geographical diversification of their operations enables multinational enterprises to assume risks that would turn away other firms. One consequence of this “scanning ability” may be to speed up the product trade cycle: Anticipating foreign imitation of a new product, the multinational enterprise may itself start production in foreign markets. Moreover, it may “short-circuit” the trade cycle by locating capital-intensive production in a
THEORIES OF FOREIGN DIRECT INVESTMENT AND THE MULTINATIONAL ENTERPRISE

This chapter examines theories advanced by economists to explain foreign direct investment (FDI) and multinational enterprise (MNE). As a background, we first offer a statistical overview of foreign direct investment.

STATISTICAL OVERVIEW OF FOREIGN DIRECT INVESTMENT

There is a notable scarcity of statistical data on the multifaceted role of the multinational enterprise in the world economy. Conventional statistics are collected by governments and international organizations mainly to measure balance of payments transactions, that is, trade, service, capital, and monetary flows between the reporting country and the rest of the world. National income accounts do not distinguish foreign-owned production from locally owned production, and foreign trade statistics do not distinguish transactions between parent companies and their affiliates or among affiliates (intra-enterprise transactions) from transactions between independent exporters and importers. As a consequence, we lack reliable data on the location, size, and composition of the foreign production carried on by MNEs, as well as on the imports and exports associated with that production. On the financial side, we have only a sketchy knowledge of the aggregate current payments and receipts, sources and uses of capital financing, and size and distribution of earnings of multinational enterprises.

Because of poor statistics, both home and host governments can only guess how the decisions of MNEs affect production, employment, money supply, prices, exports, imports, the balance of payments, and other economic sectors. Thus, they are ill-prepared to devise rational policies toward multinational companies, running the risk that their actual policies will be either ineffective or counterproductive. Better statistics would remove much of the theoretical and policy-level confusion and debate about the economic role of MNEs, although they would
hardly quiet debate about the MNEs' political role. Given the economic importance of MNEs, we can expect national governments to improve their statistical coverage. In the end, however, the task will have to be taken on by an international agency, since no one government can hope to cover all the worldwide activities of multinational enterprises.\(^1\)

Before looking at statistical data, it is desirable to define more precisely the meaning of direct investment and book value. The U.S. Department of Commerce defines foreign direct investment to include all foreign business organizations in which a U.S. person, organization, or affiliated group owns an interest of 10 percent or more.\(^2\) The dollar values of foreign direct investments are the values carried on the books of the U.S. parent companies. The book value of an investment is its value at the time the investment was made; thus, it is a "historical" value that is not adjusted to changes in price levels. Since worldwide inflation has been common since the 1960s, the book values of direct investments made some years ago badly underestimate their current replacement values. The market value of U.S. direct investment abroad is almost certainly substantially higher than the reported book value.

Year-to-year increases in the book value of U.S. foreign direct investment are the net result of (1) the outflow of new capital from the United States, (2) new issues of securities sold abroad by U.S. companies to finance capital expenditures abroad (but not securities issued by their foreign affiliates or short-term borrowing abroad), (3) reinvested earnings of foreign affiliates, and (4) valuation of adjustments (which are mostly associated with liquidations of existing holdings). Foreign affiliates of parent companies that are organized as foreign corporations are commonly called subsidiaries; foreign affiliates may also be organized as branches that parent companies use to conduct business in their own names and always have full ownership of. Unless there are special tax advantages for a branch, parent companies generally organize their affiliates as separate corporations. For this reason we shall at times use subsidiary as a substitute for affiliate.

**Rising Importance of Foreign Direct Investment**

Foreign direct investment is growing faster than world gross domestic product and world trade. Figure 23-1 depicts the growth relationship between exports and FDI.

Since the early 1980s, FDI outflows have grown, three times faster than exports and four times faster than world output. This rising importance of FDI in the international economy reflects several factors, including the adoption of global strategies by more firms, the efforts of countries to attract investment from abroad, and continuing improvements in global communications networks. By the end of

---

\(^1\) The Center on Transnational Corporations at the United Nations now compiles statistics on multinational corporations.

Index of Foreign Direct Investment Outflows and the Current Value of Exports, 1975–1989 (1975 = 100). Over the 1975–1985 period as a whole, FDI outflows and world exports grew at about the same rate. But since 1985, the growth rate of FDI outflows has spurted ahead of the export growth rate.

the 1980s, the worldwide stock of FDI reached $1.5 trillion, and it was growing at almost $200 billion a year.³

Foreign Direct Investment Outflows of Principal Investing Countries

Table 23-1 shows the direct investment outflows of the five biggest investing countries that accounted for 69.1 percent of the world’s direct investment over the period 1985–1989. The industrial countries as a group generated most of the world’s direct investment. The small share of the developing countries is growing, owing mainly to newly industrializing countries (NICs) such as South Korea, Taiwan, Hong Kong, and Singapore.


<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>4.5</td>
<td>6.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Germany</td>
<td>7.7</td>
<td>7.4</td>
<td>7.8</td>
</tr>
<tr>
<td>Japan(^1)</td>
<td>5.5</td>
<td>8.9</td>
<td>18.8</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>17.4</td>
<td>19.4</td>
<td>20.2</td>
</tr>
<tr>
<td>United States(^2)</td>
<td>42.4</td>
<td>28.1</td>
<td>14.3</td>
</tr>
<tr>
<td>Total</td>
<td>77.5</td>
<td>69.8</td>
<td>69.1</td>
</tr>
<tr>
<td>All industrial</td>
<td>98.8</td>
<td>98.4</td>
<td>96.8</td>
</tr>
<tr>
<td>All developing</td>
<td>1.2</td>
<td>1.6</td>
<td>3.2</td>
</tr>
<tr>
<td>All countries</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total FDI in billions of dollars</td>
<td>$40.3</td>
<td>$45.3(^a)</td>
<td>$126.4</td>
</tr>
</tbody>
</table>

\(^1\) Data for Japan do not include reinvested earnings.
\(^2\) Excludes outflows to the finance (except banking), insurance, and real estate sectors of the Netherlands Antilles. Also excludes currency translation adjustments.
\(^a\) 1981-1985.


The role of the United States as a direct investor has diminished greatly, dropping from 42.4 percent of the world's average annual outflow of direct investment during the 1975-1980 period to 14.3 percent during the 1985-1989 period. In contrast, Japan's share of the world's direct investment outflows more than tripled between these periods. In the 1985-1989 period, the United States ranked third behind the United Kingdom and Japan in average annual outflows.

The dollar value of annual foreign direct investment outflows grew strongly in the 1980s, rising from an average of $45.3 billion in the first half of that decade to $126.4 billion in the second half.

The Growing Share of Services in Foreign Direct Investment

Table 23-2 depicts a rising share of services in the foreign direct investment outflows of the principal investing countries.

What explains this rising importance of services? Several factors are at work. Services have become the largest sector in the world economy, and many services, such as telecommunications, are undergoing massive transformations through technological innovation. Because many services are not tradable like merchandise, MNEs rely more heavily on foreign direct investment to establish production facilities.

Chapter 23 Foreign Direct Investment and the Multinational Enterprise 603
Table 23-2  Percentage Shares of Services in the Foreign Direct Investment Outflows of Major Industrial Countries, 1981-1984 and 1985-1989

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>41</td>
<td>49</td>
</tr>
<tr>
<td>Germany</td>
<td>55</td>
<td>64&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Japan</td>
<td>61</td>
<td>73</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>35</td>
<td>38&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>United States</td>
<td>52</td>
<td>57</td>
</tr>
</tbody>
</table>

<sup>a</sup>1985-1988.


of their services in foreign markets. Another factor is the liberalization by countries of their service sectors to attract multinational firms. Finally, the growing prominence of service FDI reflects intense competition among multinationals to exploit foreign market opportunities in financial and business services, wholesaling, retailing, tourism, air transportation, construction, and other services.

The internationalization of services through FDI is at an early stage. The growth in demand for services by business firms and households continues to outpace the growth of merchandise demand. Further liberalization of the service sector (including telecommunications, transportation, and public utilities) will stimulate more investment. Also, the dramatic growth in transborder data transmissions is making it possible to produce some services (such as computer software and data processing) in one location for consumption in another location.

The Triad Countries in Foreign Direct Investment

The global pattern of FDI is *tripolar*, centering on the United States, the European Community, and Japan. Known as the *Triad*, these three countries accounted for more than three-fourths of the world’s average annual outward flow of FDI and about two-thirds of its inward flow over the period 1985–1989<sup>4</sup> (see Table 23-3). Moreover, a growing share of FDI is concentrating in the triad. The triad countries also account for about one-half of world *trade*. The combined gross domestic product of the triad in 1987 was $11 trillion (two-thirds of world GDP) allocated as follows: United States—26 percent, European Community—25 percent, and Japan—14 percent.

<sup>4</sup>For the sake of convenience we refer to the triad as comprising three “countries.” As we know, the EC embraces twelve independent countries forming a common market.

<sup>5</sup>For trade among the three poles more broadly defined as OECD Europe, North America, and East Asia, see Table 1-3 in Chapter 1.

604  Part IV  International Investment/Multinational Enterprise
Table 23-3  Average Annual Outward and Inward FDI Flows of the Triad Countries, 1985–1989 (Billions of Dollars)

<table>
<thead>
<tr>
<th>Country</th>
<th>Outward Flow</th>
<th>Inward Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Community(^1)</td>
<td>39</td>
<td>19</td>
</tr>
<tr>
<td>United States</td>
<td>18</td>
<td>46</td>
</tr>
<tr>
<td>Japan</td>
<td>24</td>
<td>*</td>
</tr>
<tr>
<td>Triad</td>
<td>81</td>
<td>65</td>
</tr>
<tr>
<td>World(^1)</td>
<td>105</td>
<td>100</td>
</tr>
<tr>
<td>Triad as percent of world</td>
<td>77.1</td>
<td>65.0</td>
</tr>
</tbody>
</table>

\(^1\)Excludes intra-EC foreign direct investment.
\(^*\)Negligible.

*Note:* The data for Japan and several European countries do not include reinvested profits. The data for the EC do not include Ireland, Greece, and Luxembourg.


Several shifts occurred within the triad during the 1980s. The United States declined as a home country but became the major host country, receiving $46 billion of the triad’s average annual $65 billion inward flow of direct investment during the period 1985–1989. The EC became the leading home country. A third shift relates to Japan. Japan’s outward flow of FDI exploded in the 1980s to surpass that of the United States. At the same time, inward flows of FDI to Japan were modest. This imbalance prompted protests from the United States and the EC, charging that Japan maintains barriers against foreign multinational firms.

Figure 23-2 illustrates the total FDI stocks in 1988 that each triad member had in the others. Stocks are the cumulative totals of all previous FDI flows. As such, they reveal the structure of international production among the triad countries. Evidently, the most important FDI relationship is between the United States and the EC. As of 1988, the United States had invested $131.1 billion in the EC; the EC had invested $193.9 billion in the United States. The imbalance between Japan as a home country and a host country is striking. By 1988, Japan had invested $53.4 billion in the United States and $12.5 billion in the EC. In contrast, the United States had invested $17.9 billion and the EC only $1.7 billion in Japan.

Linkages Between Foreign Direct Investment and International Trade

The relationship between international production (FDI) and international trade is complex because international production can both replace trade (substitution effect) and create trade (expansion effect).\(^6\) Which effect predominates depends on...

\(^6\)International trade and factor movements as both substitutes and complements are discussed in Chapter 5.
allocation would lower the use of many can never be approached in countries, the time, factor

answer that advantage in, while the need-intensive, which thus intensive, and commands a places as foreign this higher demand and to produce Kingdom are need for textiles on—especially active to wages in the United, labor in the factors (labor less expenses becomes
tor prices be could it ever no transfer tial specialization. 4 But only the
ade and factor ited Kingdom les in the first gainful oppo- nation between

foreign investment (capital outflow) and trade is a matter of controversy in the United States. Do restrictions on U.S. investment abroad raise or lower U.S. exports? What about U.S. imports? Labor unions assert that foreign investment causes a loss of jobs to American workers as U.S. companies transfer production to foreign locations. Some observations are made in the following section indicating that factor movements and trade may also be complementary.

**International Trade and Factor Movements as Complements: Economic Integration**

The conclusion that trade and factor movements are substitutes derives from the H-O factor endowments theory, which is concerned only with allocational efficiency under static conditions (perfect competition, fixed factor endowments, and no technology gaps). When these assumptions are dropped to allow for dynamic elements, it is no longer evident that international factor movements cause a general decrease in international trade. What the static analysis ignores are the effects of factor movements on economic growth and, particularly, economic integration.

As stated earlier, international factor flows are mainly initiated by multinational companies that transfer a mix of management, capital, and technology from one country to another. These factors are combined with local factors to manufacture products that, for the most part, are new to the host economy. 29 This process contributes both directly and indirectly to the growth of the economy. 30 By promoting economic growth, factor movements increase the capacity of nations to trade with one another; expansion occurs in both the size and diversity of production and markets. Although factor movements have displaced trade in some products, statistical data suggest that their growth effects on trade have been more powerful than their substitution effects. Trade and factor flows have expanded together for the world as a whole; in the European Community, factor transfers among the member countries have been accompanied by a growth in mutual trade that has exceeded the growth in trade with outside countries. At the enterprise level, it is also noteworthy that the principal exporters of manufactures from the United States are also the principal investors in production abroad.

Generally we are witnessing a process of economic integration on a global scale (particularly among the industrial countries) that is being carried forward by a complex mix of trade and factor flows. Economists generally agree that factor movements constitute a more powerful instrument for factor-price equalization than trade in products. Consequently, factor transfers can be expected to join national economies together to a higher degree than goods transfers alone. As local and regional markets earlier gave way to national markets, so national markets are now giving way to world markets. In the past, trade created an international economy; today, factor flows are creating a world economy.

---

29 The term host economy refers to the country that receives the factor transfers.
30 This is intended only as a general statement: Some factor transfers are more growth generating than others. For this and other qualifications, see Chapter 24.
the specific context of an investment venture. For instance, when an MNE sets up production in a foreign country in response to actual or prospective trade barriers that threaten its exports, then it may replace trade. This may be true of Japanese investments in the United States in automobiles and consumer electronics. But the substitution effect is not certain even in those cases, because if export markets would have been lost anyway, then FDI is not replacing them. The expansion effects of FDI occur in nontradable services where local production is the only way to enter a foreign market. Also, multinational enterprises expand trade when they invest abroad to build up horizontally and vertically integrated systems, as described in Chapter 22. Whether or not FDI replaces or creates trade in specific instances, it is indisputable that MNEs are responsible for much of international trade.

Table 23-4 indicates that the U.S. affiliates (subsidiaries) of foreign MNEs and the foreign affiliates of U.S. MNEs account for about half of U.S. exports and imports. Actually, this impressive fraction understates the importance of MNEs in trade. When the exports of the U.S. parent companies (that is, the U.S. companies that own the foreign affiliates) are taken into account, then multinationals undertake at least 80 percent of U.S. trade. It is also noteworthy that over one-third of


Intra-Triad Foreign Direct Investment: Outward Stocks in 1988 (Billions of Dollars). This figure shows the stock (book value) of FDI of each member country in the other two in 1988. The most important FDI relationship is between the United States and the European Community. The United States has become the major FDI host country and the European Community the major FDI home country. Japan is much more important as a home country than a host country.
Table 23-4 Percentage of U.S. Merchandise Exports and Imports Attributable to U.S. Affiliates of Foreign MNEs and Foreign Affiliates of U.S. MNEs in 1987

<table>
<thead>
<tr>
<th></th>
<th>U.S. Exports</th>
<th>U.S. Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. affiliates of foreign MNEs</td>
<td>19.2</td>
<td>33.0</td>
</tr>
<tr>
<td>Foreign affiliates of U.S. MNEs</td>
<td>31.5</td>
<td>18.5</td>
</tr>
<tr>
<td>All MNEs</td>
<td>50.7</td>
<td>53.5</td>
</tr>
<tr>
<td>Intrafirm transactions of all MNEs</td>
<td>34.4</td>
<td>41.2</td>
</tr>
</tbody>
</table>


U.S. exports and imports are intrafirm transactions between parent companies and their affiliates.\(^9\)

To conclude, the impact of FDI on international trade is pervasive. MNEs hold substantial shares of world trade, particularly in technology-intensive products. Massive international flows of trade, technology, and long-term capital are generated by MNE investment in international production, which, in turn, is responsive to MNE strategies. In sum, multinational corporations are becoming ever more dominant in the world economy.

**Requirements for a Theory of Foreign Direct Investment**

Foreign direct investment is the distinctive feature of multinational enterprise. Hence, a theory of foreign direct investment is also a theory of the multinational enterprise as an actor in the world economy.\(^9\) As described in Chapter 22, foreign direct investment is not simply (or even primarily) an international transfer of capital but rather the extension of an enterprise from its home country into a foreign host country. The extension of enterprise involves flows of capital, technology, and entrepreneurial skills to the host economy, where they are combined with local factors in the production of goods for local or export markets. This transfer of a “bundle” of factor services remains under the control of the investing (parent) firm, as do the subsequent production and marketing activities of its subsidiary in the host country. Commonly, the transfer of factor services is accompanied by exports from the parent company of intermediate goods that are inputs in the subsidiary’s production process or by exports of final goods channeled through the subsidiary’s marketing facilities. In view of the nature of foreign direct investment, therefore, it

---

\(^9\)Intra-industry trade (which includes intrafirm trade) is treated in Chapter 4.

\(^9\)As an economic theory, a theory of foreign direct investment would not, of course, seek to explain all facets of the multinational enterprise; it would ignore internal management processes as well as political and sociocultural factors.
is evident that a theory of foreign direct investment should be, first and foremost, a theory of international business enterprise.

What are the requirements, then, of a theory of foreign direct investment? Such a theory should answer three fundamental questions:

1. Why do firms go abroad as direct investors?
2. How can direct-investing firms compete successfully with local firms, given the inherent advantage of local firms operating in a familiar business environment?
3. Why do firms choose to enter foreign countries as producers rather than as exporters or licensors?

In answering these questions, a theory of foreign direct investment should also throw light on the following related questions:

4. Why is foreign direct investment dominated by large firms in oligopolistic markets?
5. Why does foreign direct investment occur in some industries and not in others?
6. Why does “reverse investment” occur at both country and industry levels (for example, when U.S. firms make direct investments in European countries and at the same time European firms make direct investments in the United States, usually in the same industries as well)?
7. Why are only a few countries the source of most foreign direct investment in the world?

Unlike trade theory, which stretches back at least to Adam Smith, foreign direct investment theory is a new domain for international economists. This is not surprising, because the contemporary scope of foreign direct investment and multinational enterprise is mainly owing to developments since World War II. Although economists are now busily engaged in theory building, as yet no single dominant theory of foreign direct investment has emerged to match the Heckscher-Ohlin model of international trade.\(^{10}\) Instead we have several theories, but we shall discover that, for the most part, they are complementary rather than rival explanations of foreign direct investment.

THE THEORY OF INTERNATIONAL PORTFOLIO INVESTMENT

Conventional economic theory has relied on a model of portfolio investment to explain the international movement of capital as a factor of production. This

\(^{10}\)However, as we saw in Chapter 3, the H-O model has come under attack from new theories of international trade, making its continued dominance highly questionable. Today both trade and investment theory are in intellectual ferment for much the same reason: The multinational enterprise (foreign direct investment) not only calls for explanation but has also undermined the assumptions of conventional trade theory.
theory postulates interest-rate differences among countries as the cause of international capital movements. Capital moves from country A to country B because the long-term interest rate (return on capital) is higher in country B than in country A, reflecting the comparative abundance of capital in the latter. Capital continues to move from country A to country B until interest rates are equal and the marginal product of capital in the two countries is the same.

This theory may be depicted in terms of the simple formula for capitalizing a stream of earnings, $C = \frac{Y}{i}$, where $C$ is the value of a capital asset, $Y$ is the stream of income produced by the asset, and $i$ is the rate of interest. Then capital moves from country A to country B when the value of an asset is higher in country A than in country B for the same income stream. Investors in country A will purchase the lower-priced asset in country B. This theory offers a good explanation of international movements of portfolio capital and short-term capital when account is taken of foreign exchange and other risks.

But is a difference in $i$ between two countries a good explanation of foreign direct investment? Do multinational enterprises establish foreign affiliates because they expect to earn higher rates of return on the same assets than at home? Or do they invest abroad because they expect to earn a higher income on the same assets than do local companies in the host country, the cost of capital ($i$) being the same for both?

Statistical data do not support the hypothesis that rates of return on foreign direct investment are higher than rates of return on home investment, particularly when the higher risks of foreign investment are taken into account. Sometimes they are, sometimes they are not. Nor can the country distribution of U.S. foreign direct investment be explained by yield differences between host countries and the United States.

The second hypothesis, that multinational enterprises expect to earn a higher income ($Y$) than local competitors, appears to be a better explanation. It is consistent with the observed fact that multinational enterprises must assume many costs of international business that are not assumed by local companies. They must overcome barriers imposed by distance, time, information gaps, nationality, culture, and other aspects of a foreign environment that are not experienced by uninaional firms. These higher costs must be offset by higher incomes than are earned by local competitors. To earn a higher income, the multinational enterprise must possess advantages over local competitors that derive from its superior technology, its entrepreneurial and other management skills, and its worldwide organization.

The hypothesis that foreign direct investment occurs because of differences in

---

11 The more elaborate formula discounts the stream of earnings for futurity to obtain its present value. The simple formula indicates that if an asset permanently generates an annual income of, say, $100, then it is worth $2,000 when capitalized at an interest rate of 5 percent.

12 See the discussion of forward rates of exchange in Chapter 13.

13 This is not to deny that large multinational enterprises may have better credit ratings than local companies, enabling them to raise capital funds more inexpensively. But local companies do not necessarily have lower credit ratings than multinational enterprises.
rather than differences in \( i \) is also consistent with the acquisition of local companies by multinational enterprises. Why should the MNE be willing to pay more for a company than local investors? The most plausible answer is that the MNE expects to earn higher profits (a higher \( Y \)) from the acquired company than do local investors. Furthermore, this hypothesis is consistent with the observed fact that European MNEs invest in the United States at the same time that American MNEs in the same industry are investing in Europe. Both sets of companies believe that they can compete effectively in each other's territory.

To conclude, the theory of international portfolio investment cannot adequately explain foreign direct investment. Indeed, by assuming perfect competition, this theory rules out any foreign direct investment. In perfectly competitive markets, local firms could buy the technology and other skills available to nonlocal firms. Hence, international firms possessing no advantages over local firms would have no incentive to produce abroad: They would incur costs of doing business abroad (not incurred by local firms) that would not be offset by higher sales revenues. In that kind of world, capital would move through international capital markets rather than through the mediation of the international firm, as occurs with foreign direct investment. It follows that an explanation of foreign direct investment must be found in departures from perfect competition (what the economist calls "market imperfections" or "market failure") that give the direct-investing firm one or more competitive advantages over local firms.

We now turn to three contemporary theories of foreign direct investment that agree on the importance of market imperfections but offer different approaches: the monopolistic advantage theory, the internalization theory, and the eclectic paradigm.

THE MONOPOLISTIC ADVANTAGE THEORY OF FOREIGN DIRECT INVESTMENT

The monopolistic advantage theory postulates that the investing firm possesses monopolistic advantages that enable it to operate subsidiaries abroad more profitably than local competing firms. These advantages are specific to the firm rather than to its production locations. The advantages are owned by the firm and are not available to other firms on the open market. Hence, direct investment belongs more to the theory of industrial organization than to the theory of international capital movements. The monopolistic advantages of the investing firm fall into two broad categories: superior knowledge and economies of scale.

In presenting the monopolistic advantage theory of foreign direct investment, we distinguish between horizontal foreign investment and vertical foreign investment.

---