The Nature and Scope of Multinational Enterprise

Franklin R. Root


In the 1960s, U.S. business firms went abroad on a massive scale unprecedented in the history of international enterprise. Today the production and sales of the foreign operations owned and managed by U.S. companies are more than three times the value of U.S. exports. The prevailing response of big American companies to market opportunities abroad is to establish producing affiliates in foreign countries. The dominant agency in the surge of U.S. business abroad is the multinational enterprise (MNE) – the large industrial or service corporation that possesses plants or other operations in many countries that produce for markets throughout the world. Many industrial firms in Western Europe and Japan have also become MNEs and they are emerging in newly industrializing countries, such as Mexico and South Korea, as well.

Because of their vast size, the worldwide operations of multinational companies are now a decisive force in shaping the patterns of trade, investment, and technology flows among nations. It has become impossible to understand the world economy without an appreciation of the many roles of multinational enterprises as producers, investors, traders, and innovators on a global scale. National governments must also reckon with this force because of its impact on domestic production, employment, trade, and the balance of payments. In so doing, they are commonly frustrated by the capability of multinational companies to far outrun national jurisdiction in taxation, antitrust, and other policy areas. Moreover, many governments view the multinational enterprise as a political threat, representing as it does an intrusion into the national domain by a company whose control is exercised by a headquarters located in another country. Even in the United States, the multinational enterprise has come under attack by labor and protectionist groups who charge it with exporting jobs and technology to the detriment of the U.S. economy.

The expansion of U.S. business into foreign production is not new. Today’s multinational enterprises have roots that go deep into the American past. In the decades following the Civil War, the transformation of industrial corporations into national enterprises, together with notable improvements in transportation and communications, encouraged a number of American manufacturers with unique products to make investments in Canada and Europe. One of the pioneers, Singer, licensed a French company in 1855 to manufacture its new sewing machine (the first and last time Singer ever licensed a patent to an independent foreign concern), and in 1867 it established the first plant abroad, in Glasgow. In 1879, Westinghouse started a shop in Paris to manufacture brakes; in 1882, Western Electric and International Bell Telephone Company jointly set up a manufacturing
affiliate in Belgium; and by 1889, Eastman had incorporated a company in London to manufacture film for Kodak cameras imported from the United States. In the 1870s and 1880s, then, many American companies with new products (screws, cash registers, elevators, steam pumps, locomotives, locks, and guns) were eagerly seeking export markets and, in some instances, entering into foreign production.

It is noteworthy that this early movement of U.S. manufacturers abroad was based on new products, new methods of production, and new marketing methods that offered strong competitive advantages in foreign markets. From the very beginning, therefore, U.S. business investors appeared primarily as exporters of technology and management rather than exporters of capital. By the turn of the century, the presence of U.S. companies in Europe was sufficient enough to alarm some observers, who spoke of “the American invasion” in much the same terms as J. J. Servan-Schreiber did some seventy years later.

Although its historical roots are deep, the multinational enterprise as we know it today is a recent phenomenon, emerging for the most part only since the mid-1950s. Before that time the inadequacies of the global infrastructure of communications and transportation, as well as the pervasive influence of restrictive government policies, rendered global business strategies nothing more than utopian dreams in the minds of a few entrepreneurs. The emergence of multinational enterprise systems directed and controlled by a single decision center had to await the dramatic postwar improvements in communications and transportation and the massive liberalization of international trade and payments that gathered steam in the late 1950s.

The many economic and political issues raised by the multinational enterprise are examined in later chapters. First, however, we need to learn something about the nature and scope of the multinational enterprise.

The Multinational Enterprise as an International Transfer Agent

We now examine the role of the multinational enterprise as an international transfer agent in the world economy. The multinational enterprise becomes an international transfer agent when it moves products and factor services (capital, technology, and management) among national economies. But let us turn first to the question of defining the multinational enterprise.

Some Definitions of the Multinational Enterprise

There is no single agreed-upon definition of the multinational (or transnational) enterprise. This is hardly surprising in view of the fact that “multinationality” has many dimensions and may be viewed from any of several different perspectives — economic, political, legal, managerial, and others.

Some observers regard ownership as the key criterion. In their view an enterprise becomes multinational only when the headquarters or parent company is effectively owned by nationals of at least two countries. Shell and Unilever, which are controlled by British and Dutch interests, are commonly cited as examples. By this ownership test, very few international companies may be called multinational. The dominant ownership interest in the overwhelming majority of big international
companies is uninational, namely, American, British, French, or Japanese. The ownership criterion has been rejected by most authorities.

A second definition of the MNE relies on the criterion of the nationality mix of headquarters management. An international company is seen as multinational only when the managers of the parent company are nationals of several different countries. Here again, very few international companies would qualify as multinational enterprises, because most have headquarters organizations that are entirely or mainly staffed with nationals of the home country. But uninational management may well prove to be a transitional phenomenon. Already it is commonplace for international companies to staff their foreign affiliates with local nationals all the way to the top levels, and some of these nationals are now being promoted to the parent headquarters. Multinational management, then, is more a consequence of the continuing evolution of the MNE than its distinguishing feature.

Most observers of large international companies have been concerned with their economic and business behavior. Accordingly, they have defined the MNE in terms of organizational structure or business strategy. Vernon sees the multinational enterprise as a “parent company that controls a large cluster of corporations of various nationalities.” Finding the essence of the multinational enterprise in its attempt “to treat the various national markets as though they were one,” Behrman emphasizes the presence of a single management (strategy) center which guides the actions of foreign affiliates. Perlmutter has distinguished three kinds of international companies by reference to the attitudes held by their top executives. Ethnocentric companies follow policies that are home country–oriented, polycentric companies follow policies that are host country–oriented, and geocentric companies follow policies that are world-oriented. To Perlmutter, a firm’s multinationality may be judged by “the pervasiveness with which its executives think geocentrically.”

The foregoing conceptions may be covered in a single definition of the multinational enterprise that contains both structural and strategic (attitudinal) elements. A multinational enterprise denotes a headquarters or parent company that

1. engages in foreign production and other activities through its own affiliates located in several different countries
2. exercises direct control over the policies of those affiliates
3. strives to design and implement business strategies in production, marketing, finance, and other functions that transcend national boundaries, becoming thereby progressively more geocentric in outlook

This definition is consistent with the approach taken in this and later chapters.

Unfortunately organizational structure and business strategy do not lend themselves to direct quantitative measurement. Thus, the definition of the MNE for statistical data–gathering purposes must rely on “proxy variables,” such as the percentages of a company’s assets, sales, earnings, employment, or production abroad. A company whose foreign sales are 25 percent or more of total sales is certainly heavily involved in international business on both operational and
strategic levels, and in most instances it probably qualifies as a multinational enterprise. But there is no magic percentage at which a company is transformed into a multinational enterprise. The MNE is too complex a phenomenon to be captured by a single number. Any statistical definition of the MNE, however useful, is bound, therefore, to be arbitrary.

The Multinational Enterprise System

The multinational enterprise performs its role as an international transfer agent through institutional or organizational arrangements that collectively make up the *multinational enterprise system*. This system, as depicted in Figure 1, comprises the parent company and its foreign affiliates.

![Figure 1: The multinational enterprise system](image)

The parent company (denoted by the P circle) is the enterprise decision center that determines the goals and controls the operations of the entire system. The key decisions of the parent company relate to the establishment (or acquisition), country location, size, and “product mix” of its production affiliates; the direction, volume, and composition of transfers among the affiliates; and the national markets to be served by the affiliates. These strategy decisions generate a pattern of factor and product flows among the members of the system. The parent company and its affiliates (denoted by the A circles) are located in different countries, as indicated by the dashed lines. Most of the affiliates perform both production and marketing functions, but some perform only a marketing or financial function.
The affiliates are connected to the parent company and, in some instances, to other affiliates by a variety of cross-national flows of products, capital, technology, and management.\(^1\) Flows of factor services, usually accompanied by product flows, generally move from the parent company to the affiliates. Any of these kinds of flows may also link pairs of affiliates. To illustrate, \(A_1\) may transfer parts or components that it manufactures to \(A_6\), which uses them to manufacture other products. \(A_4\) may transfer certain finished products to \(A_5\), which then resells them in the local market. Idle funds accumulating in \(A_2\) may be transferred to \(A_3\) to finance a capital expansion. \(A_5\) may develop new technology that is transferred to \(A_7\). A manager in \(A_6\) may be transferred to a new position in \(A_2\). Some products and factor services may also be transferred from an affiliate to the parent company, such as from \(A_6\) to \(P\).

One of the distinctive features of the multinational enterprise system is the rapid growth of interaffiliate transfers as managers in the parent company try to improve the performance of the entire system. Managers perceive a worldwide market for the company’s products, and they work to build up interaffiliate transfers on regional or global levels to take advantage of similarities among national markets, economies of scale, and international specialization. Hence, the multinational enterprise system becomes progressively more integrated in production, marketing, finance, research and development, and management.

Several external constraints may limit the integration of a multinational enterprise system, and a parent company also encounters internal constraints, such as the domestic orientation of many managers. External constraints include all of the obstacles to international trade and payments that were examined in Parts One and Two. Most prominent are the restrictions imposed by governments on the flows of factor services, products, and current payments. When trade restrictions are severe, they inhibit interaffiliate product transfers. Furthermore, uncertainty about future government actions and unstable political conditions in some host countries may greatly enhance the risks of interdependence among affiliates. In Figure 1, for instance, an interruption in the production or shipments of \(A_6\) will halt the production of \(A_6\) unless \(A_6\) has access to another supplier. Or again, the host government may prevent \(A_5\) from importing products from \(A_4\) to fill out its product line.

As a result of external and internal constraints the parent company will seldom push the integration of its system to a logical extreme. Instead, integration is most likely to be partial, applying to some regions but not to the entire world or to some products but not to all products. In particular, many parent companies have been reluctant to integrate the operations of affiliates in the industrial countries with the operations of affiliates in the developing countries because of restrictions and political instability prevalent in developing countries.

To conclude, the multinational enterprise system functions as an international transfer agent for both products and factor services. Although the pattern of these transfers will depend on the parent company’s strategy and various constraints, the parent company is the only source of certain factor services (notably, systemwide management) and is usually the principal source of capital and technology. However, as we have seen, the parent company may also initiate factor flows (as well as product flows) among the affiliates in different countries and from them back to itself. Hence, the multinational enterprise system recapitulates in microcosm the
the multinational enterprise

international economic system of trade and factor movements among national economies. We now take a closer look at product and factor transfers within the multinational enterprise system.

Transfers of Product in the Multinational Enterprise System

As noted above, the multinational enterprise system generates many cross-national product transfers within the system itself. These intra-enterprise product transfers are the direct consequence of the decisions made by the parent company managers relating to three strategy questions:

1. Where in the world are the markets for our final products?
2. Where should we locate our production facilities to supply those markets?
3. Where and from whom should we obtain the inputs (raw materials, parts, components, capital equipment) necessary to the manufacture of our final products?

For each country market of the multinational enterprise’s final products, parent company managers must decide whether to produce within the market or export into it from a production base located in another country. For each production affiliate, parent company managers must decide whether to make or buy the necessary production inputs. If the decision is to make them, then the managers must decide whether to make them in the same country as the affiliate in question or to obtain them from an affiliate in another country. When the parent company is following a global strategy, these decisions will create some degree of system integration in marketing, production, or both.

Horizontal Integration

Figure 2 depicts a pattern of intra-enterprise product transfers resulting from a high degree of integration in the production of final products. Instead of having the parent company (P) and each foreign affiliate (the A’s) produce full product lines, the parent company managers achieve a pattern of specialization among them, taking into account the scale of operations and the mix of factor services available at each of the country locations (including the home country); the logistical costs of storage, handling, and transportation; and the constraints imposed by import duties, quotas, and other trade restrictions. The transfer of final products among affiliates and between affiliates and the parent company enables the multinational enterprise system to offer full product lines in each country market at lower costs or higher quality levels than would be possible if those lines were entirely produced by each affiliate.

Furthermore, the parent company and each affiliate is assigned a regional market that it is best prepared to serve. For example, the French affiliate (A1) serves all markets in the EC, the Mexican affiliate (A2) serves all markets in Latin America, and so on. Hence, the parent company and the affiliates are exporting finished products to multicountry regional markets as well as participating in intra-enterprise trade. This multimarket approach can be the source of advantages separate from economies of specialization and scale derived from production. On the cost side, an international standardization of products in the multinational enterprise
system makes possible the application of the same marketing policies to multi-country markets. For instance, the costs of designing an advertising program may now be spread over a hundred country markets. On the demand side, product standardization (involving the same product lines, trademarks, brand names, and packaging offered by all members of the system) helps to create a global product image that can stimulate demand throughout the world. In this way, the multinational enterprise can take advantage of communication links among consumers and industrial buyers in different countries.

Vertical Integration

Vertical integration in production also creates product transfers within the multinational enterprise system. Vertical integration occurs when a producer decides to produce at least some of the intermediate inputs required to make the final products. At the extreme, vertical integration can extend backward into raw material extraction, but for most producers (except for heavy industries, such as steel and other metals, chemicals, and oil refining), it is likely to go no further than the production of certain components and parts that are assembled into final products. Vertical integration becomes international in scope when a multinational enterprise system produces raw materials, components, or other inputs in one or more of its member companies (including the parent company) for use in production by member companies in other countries.

Figure 3 depicts one pattern of intra-enterprise product transfers that results from vertical integration in production. The parent company (P) transfers intermediate products to affiliates A₂, A₃, and A₄ for use in their production. At the same time, A₁ manufactures a component that is transferred to A₄, while A₂ and A₃ also manufacture inputs for A₄. Subsequently A₄ uses all these inputs to produce the final product, which is then sold to worldwide markets.
Vertical integration enables the multinational enterprise system to reap the advantages of international specialization and economies of scale, as was also true of horizontal integration. The classic example of vertical integration on a global scale is provided by the major petroleum companies, whose affiliates (located in developing countries) ship crude oil to refinery affiliates (mostly located in industrial countries), which in turn ship refined products to marketing affiliates for sale throughout the world.  

**Figure 3: Product transfers within the multinational enterprise system: Vertical integration**

Vertical integration enables the multinational enterprise system to reap the advantages of international specialization and economies of scale, as was also true of horizontal integration. The classic example of vertical integration on a global scale is provided by the major petroleum companies, whose affiliates (located in developing countries) ship crude oil to refinery affiliates (mostly located in industrial countries), which in turn ship refined products to marketing affiliates for sale throughout the world.  

**Transfers of Capital in the Multinational Enterprise System**

The MNE is the dominant vehicle for direct foreign investment. For the most part, decisions to invest directly abroad are made by managers in multinational parent companies. Unlike portfolio investment, which is a pure transfer of capital, direct foreign investment is the transfer of a bundle of factor services that represent in their totality an extension of a business enterprise across national boundaries. In a behavioral sense, therefore, direct foreign investment encompasses everything that MNEs do when they establish and manage their affiliates in different countries.

We have observed that the direct investment activities of MNEs initiate a complex set of product and factor flows within a multinational system, which is an ongoing enterprise with expectations of continuing indefinitely into the future. It follows that no single act of direct investment and, even more so, no single product or factor flow can be fully understood without relating it to the entire system of which it is a part. In particular, any assessment of the economic effects of the MNE should consider the performance of the total system. As long as we avoid mistaking the part for the whole, however, fruitful economic analysis can proceed by investigating the constituent transfer functions of the multinational enterprise system.

The international transfer of *real* capital (plant, equipment, and inventories) commonly (but not always) occurs first as a *financial* transfer of capital funds.
In examining the flow of capital in the multinational enterprise system, therefore, we must consider the financial strategy of the parent company. Nonetheless, we should keep in mind that only when capital funds are converted into real capital do they contribute to production in the system.

Upon deciding to undertake new investment abroad, the parent company must then decide on the sources for financing the necessary capital expenditures. For a multinational enterprise pursuing a global strategy, the appropriate question is, Where in the world should we obtain financing for our affiliate in country Y? The answer to this question (and others like it) will determine the pattern of capital flows within the enterprise system and between the enterprise system and outside financial sources located in different countries.

**Sources of Capital Financing**

In deciding on the sources of financing for investment abroad, two questions are prominent in the deliberations of managers in most parent companies: (1) Should funds be obtained at home (the country of the parent) or abroad? (2) Should funds be obtained from sources within the system (parent company and affiliates) or from sources outside the system (investment banks, security markets, and other financial institutions)? Thus, the enterprise has four basic sourcing options, as depicted in Figure 4.

![Figure 4: Basic capital-sourcing options for the multinational enterprise](image)

A choice of either option 1 or 2 results in the transfer of capital from the home country to a host country. The transfer may initially take the form of funds (financial transfer) or the form of capital equipment and inventory (real transfer).\(^\text{16}\) Again, the transfer may represent an equity contribution, a formal loan, or an informal advance. Under option 1, financing comes from the retained earnings of the parent company. Under option 2, the parent company obtains financing from financial institutions in the home country.

Under options 3 and 4, no net transfer of capital occurs between the home and foreign countries, because the funds are both raised abroad and invested abroad. Alternative 3 is available to the parent company only when it has affiliates with retained earnings.\(^\text{17}\) When capital expansion in a given affiliate is financed by the affiliate’s own earnings, no international transfer of capital takes place.\(^\text{18}\) When, however, a given affiliate obtains capital funds (or real capital) from another affiliate located in a different country, there does occur an international transfer of capital. If, for example, the parent company directs a transfer of capital from its affiliate in Cologne to its affiliate in Paris, then capital moves from West Germany to France.
Under option 4, the affiliate may obtain capital from local financial institutions with or without the guarantee of the parent company. Or the parent company may raise capital funds under its own name from external sources in the host country of the affiliate. In both instances, the resulting capital flow is domestic, not international. When, however, the parent company (or more rarely, an affiliate) obtains external capital funds from a third country or from an international market (Eurocurrencies or Eurobonds), then capital flows to the host country from one or more third countries.

The final choice of a capital-sourcing option depends on the strategy preferences of the parent company and on a variety of constraints. As to the choice between home country versus foreign country sources, apparently the majority of U.S. parent companies strongly favor the use of capital funds generated abroad by their affiliates, including their retained earnings and local loans obtained without the parent’s guarantee. Although new affiliates depend much more on parent company funds, established affiliates are almost always compelled to obtain much of their financing from local sources. However, in those enterprises whose operations involve a large volume of exports shipped to affiliates from the United States, the parent companies frequently extend long-term inventory loans on open account.

The most recent benchmark census of U.S. direct foreign investment reveals that at the end of 1982 the aggregate investment of U.S. parent companies in their foreign affiliates was 15.4 percent of the total assets of those affiliates.

Constraints on Capital-Sourcing Policies

Numerous factors both at home and abroad act to constrain the capital-sourcing choices of parent companies. Here we mention only the more prominent ones without going into detail.

Exchange restrictions in the home country may limit the capital a parent company can invest abroad, as did controls in the United States in the late 1960s. Generally controls in the home country compel a parent company to rely more on foreign-source capital than it would otherwise care to do. Exchange restrictions in a host country may cause a parent company to rely more on local financing of an affiliate’s capital needs because of a reluctance to transfer funds into an inconvertible currency. High rates of inflation, high exchange risks, or high political risks (such as a threat of expropriation) also favor local financing, other things being equal. All too often, however, a parent company encounters these conditions in developing countries that cannot provide local financing to meet all of the affiliate’s capital requirements. In that event, the parent company has no choice but to transfer capital into the host country unless it is willing to limit the growth (and perhaps endanger the survival) of its affiliate.

Some countries also limit the foreign-owned affiliate in its access to local capital sources. Somewhat paradoxically, the same countries may also limit the parent company’s ownership interests in the local affiliate to a given percentage (commonly 49 percent). This ownership constraint can raise a serious financing problem for the joint-venture affiliate, because the parent company may be unwilling to lend to the affiliate as opposed to making an equity investment.

Taxation in home and host countries may also influence the source of capital financing in a multinational enterprise system as well as the kind of financing used
(equity versus loan). To illustrate, the United States does not ordinarily tax foreign earnings until they are repatriated to the parent company, but it may tax capital transfers among foreign affiliates by regarding them as “constructive” loans or investments of the parent company. This tax policy encourages the retention of earnings in the affiliate and thereby encourages local financing. Probably the most important single effect of taxation in host countries on capital-sourcing decisions lies in the differential impact of the diverse tax systems on affiliate earnings and therefore the amounts available for new investment, either in the host country or elsewhere.

Varying costs of capital in different countries will also influence the choice of external capital sources. As the multinational enterprise becomes more global in its operations, it establishes intimate links with financial institutions in many countries and with international financial centers. Thus, it is in a position to raise capital in low-cost locations for transfer to high-cost locations. Regarding internal capital sources, the logical cost to the enterprise is the highest marginal opportunity cost of capital funds anywhere in the entire multinational enterprise system. Nonetheless, parent companies commonly make a decision to invest in a particular country without comparing investment opportunities in other countries (including the home country). Most parent companies do, however, have a desired rate of return on capital, which in effect is their internal cost of capital.

In closing, it should be evident that a U.S. parent company may undertake direct investment abroad without using its own capital resources or even without any transfer of capital from the home country to the host country. An inescapable conclusion is that international capital transfers are not a necessary element of direct foreign investment. Rather, the necessary element is an international transfer of management control.

Although not strictly necessary, direct foreign investment almost always involves at least some capital transfer from a parent company to its affiliate, especially when the affiliate is new. And, as we have observed, capital-sourcing decisions in the multinational enterprise system may generate many capital transfers between second and third countries.

Transfers of Technology in the Multinational Enterprise System

The multinational enterprise functions as an international innovation system that goes far beyond the traditional mode of international technological diffusion through imitation. Indeed, the comparative advantage of the MNE in world markets centers on its mastery of the innovation process far more than its mere size or financial strength. Multinational enterprises are research-intensive, and their remarkable growth proceeds from their capacity to create and market new products on a global scale.

Technology needs to be distinguished from technological innovation. Technology, as such, is a body of knowledge that is applicable to the production of goods and the creation of new goods. Technology, therefore, consists of ideas about products and how to make them rather than the products themselves or production facilities. Today – with only modest exceptions – the source of new technology is scientific research and invention in industrial, government, and university laboratories.

Technological innovation, on the other hand, is the entire process whereby research and invention are converted into technology that is then applied to the
production of “new” products or improvements in the production of “older” products. Innovation involves many activities performed by different groups of people: technical research, development (the conversion of research into industrial technology through process and product designs, engineering specifications, “scaling-up,” and so on), production startup (all activities necessary to begin actual production), marketing startup (all activities necessary to launch a marketing program), and market research (the identification and measurement of market opportunities for new products). Taken together, these activities and their linkages comprise the innovation system. Because of its complexity, the process of innovation is subject to numerous failures. Many research discoveries are not developed into technology, available technology may not be used to transform production functions or create new products, and new products may not succeed in the marketplace for one or more reasons.

International Transfer of Technological Innovation

Technological innovation may spread from one country to another either (1) through the transfer of technical knowledge (via licensing, trade, technical publications, official technical assistance programs, and other forms of communication) that is then “imitated” in new production functions and new goods by local business enterprises, or (2) through the transfer of innovation by multinational enterprises that establish operations in the recipient country via direct investment.

The first mode of innovation diffusion is critically dependent on the willingness and capacity of nationals to utilize the imported technology. Nations differ widely in this regard. Japanese entrepreneurs are able to turn imported technology quickly into new products that may even be exported to the country that was the source of the technology. A well-known example was their use of transistor technology to create the transistor radio, which found its biggest market in the United States, the source of the original technology. The United States itself has used European technology to produce new products in advance of the originators. Evidence indicates that imitation works less quickly in Europe than in Japan or the United States. In the developing countries, however, imitation works slowly or not at all, because they lack the industrial and entrepreneurial skills that are necessary for innovation. As the pace of innovation quickens, lags in innovation (to say nothing of complete failure) place a nation at an increasing disadvantage in international competition. The consequences of the failure of a country’s nationals to imitate foreign technology (or generate their own) may be alleviated, however, by the transfer of innovation within the multinational enterprise system.

A unique contribution of the multinational enterprise is the internationalization of the entire innovation process. The MNE undertakes technical research, development, production startup, marketing startup, and market research on a global scale. In this way the MNE overcomes the entrepreneurial gaps that constrain the spread of innovation through imitation alone.

Multinational manufacturers set up production abroad to gain new markets or to hold on to markets that were first developed through direct exports. International investment strategy, then, is firmly market-oriented; the dominant consideration is the foreign market potential of products in which the company believes it has an advantage. If the investment region is highly developed, such as Western Europe or North America, most opportunities for multinational enterprises are found
in new products that have not been imitated by local producers. This is why research-intensive industries are responsible for most of the U.S. direct investment in Western Europe.

When a multinational enterprise establishes operations in a new country, it does not simply duplicate its operations as they exist in the home or third countries. Adaptations to local conditions are usually necessary in production, in marketing, or in the product itself. As a company becomes more international, all the elements of its innovation system are affected by its foreign operations. When a company views itself as a single global entity, a multinational innovation system emerges that ties together research centers, production, and markets located throughout the world. Flows of information relating to market research, technical research, production programs, and marketing programs connect the parent company with its affiliates and connect the affiliates with each other to form one system guided by a dominant management center. In this way, each affiliate has access to both the inputs (scientific discoveries, manufacturing engineering specifications, and so on) and the outputs (new products) of the entire multinational enterprise system.

Not all multinational enterprises have fully internationalized their innovation systems. Many American multinationals still try out new products in the United States before producing them abroad and they concentrate R & D in U.S. laboratories. But as multinational enterprises become more and more global, the innovation function is expanded, since managers perceive the advantages of tapping research brains in several countries and quickly introducing new products in many national markets. We can reasonably expect, therefore, more dispersal of corporate R & D facilities; in effect, laboratories will be taken to the research workers rather than the other way around. Some multinational enterprises economize on research expense by using the small and medium-sized production facilities of their affiliates for trial runs of new products.

The Transfer of Innovation to Developing Countries

Attracted by big, dynamic markets, U.S. industry has moved mainly into Western Europe and other economically advanced areas. Nonetheless, it would be erroneous to infer that the multinational enterprise has contributed little to technological innovation in the developing countries.

As indicated earlier, the capacity of local enterprise in developing countries to imitate imported technology is generally very limited and in some instances virtually nonexistent. Thus, the transfer of technology to these countries is a necessary but insufficient condition for innovation. Unfortunately the direct transfer of innovation by multinational enterprise is also subject to many constraints in the developing countries. Aside from restrictive government policies, which are taken up in Chapter 24, two factors especially inhibit innovation transfer: (1) small, stagnant, domestic markets, and (2) the absence of an industrial infrastructure consisting of people with technical and management skills, supporting industries, transportation, power, communications, and other services. Apart from the obvious limitations on sales potentials, small markets often require major and costly adaptations in product line and design, manufacturing, and marketing. The absence of an industrial infrastructure makes it very difficult to staff new affiliates with nationals at the technical and management levels. Furthermore, the scarcity of local suppliers of components and other production inputs forces the affiliate either to
make many of its required inputs, to buy them from abroad (when permitted by the host government), or to develop local sources of supply through technical and financial assistance.

To begin production in a developing country, therefore, multinational enterprises are usually compelled to staff the new affiliate with expatriate technical and management personnel drawn from the parent company or affiliates in other countries. This arrangement is not only costly but may run counter to the nationalistic policies of the host government. Hence, multinationals strive to “nationalize” the affiliate staff as quickly as possible through training programs at the worker, technical, and management levels. The magnitude of this effort is seldom appreciated by host governments or critics of multinational enterprise.

To sum up, the multinational enterprise takes advantage of international technology and entrepreneurial gaps in producing and marketing new products on a global scale. Although international production is the principal vehicle used by the MNE to transfer technology to host countries, it is by no means the only vehicle. The establishment of local R & D facilities, the training and education of local nationals, the use of local subcontractors and suppliers, and the introduction of advanced management practices also serve to spread technology. Furthermore, the intra-enterprise product transfers (trade) of multinational enterprises and their licensing and cross-licensing arrangements with independent foreign companies transfer technology among countries. Multinational enterprises may also indirectly stimulate innovation in host countries by creating new primary markets (for example, the market for integrated circuits in Europe), by encouraging local companies to emulate them (positive demonstration effect), and by forcing local companies to innovate to withstand competition. The pace of innovation in Western Europe during the 1960s would have been much slower in computers, specialized plastics, electronic test and measuring instruments, numerically controlled machine tools, and many other new products if American companies had not invested there. Because Western Europe has an advanced industrial society, local companies would have eventually imitated these products on their own, but more slowly than the imitation that actually took place because of the direct innovation of U.S. companies in Europe. In the 1980s, European and Japanese multinationals have stepped up the pace of innovation in the United States by introducing new products, such as the VCR.

Transfers of Entrepreneurial Skills in the Multinational Enterprise System

The international transfer of entrepreneurial skills is the distinctive (and unique) function of the multinational enterprise system. Entrepreneural managers centered in the parent company take the initiative in combining natural resources (land), capital, labor, and technology in different countries to produce goods and services for sale in local and external markets. Ordinarily much of the capital and all of the technology are brought into a host country by the multinational enterprise, but it is the transfer of entrepreneurial skills that truly distinguishes the MNE from other modes of capital or technology transfer, such as portfolio investment or licensing. In brief, the multinational enterprise, as its name implies, transfers enterprise from one country to another.

We have already anticipated the transfer of entrepreneurial skills in our discussion of technology transfer because of our emphasis on technological innovation.
We noted that the transfer of technical knowledge (technology per se) is a communicative process and that the transfer of technological innovation by the MNE requires not only the transfer of technical knowledge but also the transfer of management skills to overcome entrepreneurial gaps.

The international transfer of entrepreneurial skills by the multinational enterprise is not limited to technological innovation; it serves to mobilize all the factors of production for new tasks in new markets. The key decisions that result from the exercise of entrepreneurial skills by the parent company include answers to the strategic questions presented earlier: Where in the world are the best markets? Where in the world should we manufacture our products to supply these markets? Where in the world should we undertake R & D to create new products for future markets? Where in the world should we obtain financing for our capital investments? Where in the world should we recruit the technical and managerial staff for our parent company and affiliates? In short, entrepreneurial decisions determine the structure and evolution of the entire multinational enterprise system.

Two aspects of entrepreneurial management in the multinational enterprise deserve additional comment: (1) the perception of economic opportunity, and (2) the deliberate assumption of risk.

**The Perception of Economic Opportunity**

Strongly oriented toward corporate growth through innovation, the managers of multinational enterprises continually search for new economic opportunities. Their “opportunity horizons” are far broader than the horizons of domestic managers; they extend into many countries and world regions. What is a dazzling opportunity to a multinational manager may not even be noticed by a domestic manager in the same industry. In general, the managers of a multinational enterprise perceive far more opportunities than managers of uninational enterprises, if only because so many of their opportunities are generated by differences among national economies. For example, a given product is seldom in the same phase of its life cycle in all countries. A product that is experiencing market saturation in the United States may be in a growth stage in, say, Western Europe and not even on the market in some developing countries. Again, local competition may be very strong in one country but moderate in another. Aside from market differences, multinational managers can take advantage of international cost differences, they can alter the patterns of specialization and exchange among affiliate companies, and, in the longer run, they can shift the country locations of production, R & D, and other activities.

The perception of economic opportunity depends not only on the horizons of managers but also on their access to information about markets, competitors, new technology, government policies, and general economic and political conditions. Hence, multinational enterprises organize “strategic intelligence” systems to gather information from sources both inside and outside the enterprise. The intelligence systems of some firms (for example, the large petroleum companies) are superior to those of most national governments. Continuous scanning of the international horizon for new opportunities is a vital entrepreneurial activity of the MNE.
The Deliberate Assumption of Risk

The multinational enterprise

The perception of economic opportunity alone does not make an entrepreneur. The individual must also act to exploit the opportunity in an appropriate way. In so doing, the risks that accompany innovation must also be assumed. Multinational enterprises have demonstrated both a willingness and a capacity to assume risks in countries throughout the world.29

Although multinational managers ordinarily perceive far more opportunities than uninational managers, the risks involved tend to be greater. These risks may be broadly classified as economic and political. Economic risks proceed from uncertainty about demand, competition, costs, and other market conditions. They are the same in kind, if not in degree, for the multinational enterprise as for the domestic enterprise. The same, however, cannot be said of political risks. For the multinational enterprise, political risks emanate from uncertainty about political events of many kinds, such as war, revolution, coup d’état, expropriation, taxation, devaluation or revaluation, exchange controls, and import restrictions. These events are political (as opposed to economic), because they result from government actions or bear on the political authority of a nation, although they may be influenced (or even caused) by economic conditions. In addition to the economic risks of innovation, therefore, multinational enterprises must deliberately assume extraordinary political risks in performing their entrepreneurial role in the world economy.30 The capacity of multinational enterprises to bear such risks is enormously enhanced by their great size and financial strength, their dispersal of operations in many countries, and the sophistication of their management.

The Contribution of the Multinational Enterprise to the World Economy

Does the multinational enterprise make a positive contribution to the world economy? From the perspective of liberal economic theory, the answer is certainly yes. It is instructive to repeat some statements about international trade and factor movements that were made in Chapter 5.

Both trade and factor movements bring about a superior allocation of resources among nations. Trade enables a country to take advantage of international specialization in production by exporting products with low opportunity costs and importing products with high opportunity costs. International factor movements achieve a better allocation of productive agents by transferring relatively abundant factors (such as technology and entrepreneurial skills) in one country to a second country where they are relatively scarce and where they may be combined with relatively abundant factors (such as natural resources and labor) in the production of goods and services. Under conditions of perfect competition, the flow of factors would continue until their marginal productivities (and prices) were the same everywhere. Then the international allocation of factors would be optimal, because any further factor movement would lower production and consumer satisfactions for the world as a whole. Although such an optimal allocation can hardly be achieved in the world as we know it, it follows that the greater the mobility of factors among countries, the better their international allocation and the higher the efficiency of the world economy.
In light of these theoretical considerations, it is evident that the multinational enterprise system is making a major contribution to the allocative efficiency of the world economy in carrying out its role as an international transfer agent. The contribution of the MNE has been compared with the earlier role of the national corporation in building a single national economy by moving capital, technology, and entrepreneurial skills from regions of factor abundance to regions of factor scarcity. In the same way that the activities of national corporations helped to integrate regional economies into national economies, so the activities of multinational enterprises are helping to integrate national economies into a world economy.31

But the MNE’s contribution to the static, allocative efficiency of the world economy is far less important than its contribution to the rate of innovation within that economy. The multinational enterprise is first and foremost an innovator. Through international production and trade, the MNE quickly spreads new ideas, new products, new production functions, new methods of management and organization, and other innovations on a global scale. *International innovation* defines the special contribution of the multinational enterprise; no other institution or group of institutions can match this contribution. And so, the multinational enterprise has become the preeminent agent of change in the world economy.

The positive contribution of the MNE to the world economy does not necessarily imply a positive economic contribution to each and every country, although the presumption is strong that all countries can share in the benefits of a more efficient and more dynamic world economy. The economic benefits and costs of direct foreign investment for both home and host countries are explored in Chapter 24. That chapter also takes up the controversial question of the political costs of the multinational enterprise, which may be perceived by some host countries as outweighing any net economic benefits.

**Some Empirical Data on Multinational Firms**

Table 1 ranks the world’s fifty largest manufacturing companies by their worldwide sales in 1985 and also indicates the percentage of each company’s worldwide sales made by its foreign affiliates. This percentage underestimates the *international involvement* of these companies because it excludes any home-country exports. Exports are particularly high for Japanese and West German companies. For instance, in 1985 Toyota Motor exported $12.2 billion of motor vehicles; Matsushita, $5.3 billion of electrical equipment; Volkswagen, $8.2 billion of motor vehicles, and Hoechst, $5.0 billion of chemicals. The sales of foreign affiliates, therefore, are of products manufactured outside the home country, and they measure the *international production* of their parent companies, which is a distinctive feature of the multinational enterprise. Japanese and West German companies are now rapidly expanding their international production, following in the footsteps of companies headquartered in the United States, the United Kingdom, the Netherlands, and Switzerland. Not all of the top fifty manufacturing companies are multinational in an organizational or strategic sense, but all of them face competition from both domestic and foreign rivals.
### Table 1: International production of the world’s fifty largest manufacturing companies, 1985 (billions of dollars)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Firm</th>
<th>Home country</th>
<th>Sector</th>
<th>Total worldwide sales(^1) (A)</th>
<th>Sales of foreign affiliates(^2) (B)</th>
<th>B/A (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>General Motors</td>
<td>USA</td>
<td>Motor vehicles</td>
<td>96.4</td>
<td>16.2</td>
<td>16.8</td>
</tr>
<tr>
<td>2.</td>
<td>Ford Motor</td>
<td>USA</td>
<td>Motor vehicles</td>
<td>52.8</td>
<td>16.0</td>
<td>30.3</td>
</tr>
<tr>
<td>3.</td>
<td>IBM</td>
<td>USA</td>
<td>Electrical equipment</td>
<td>50.1</td>
<td>21.5</td>
<td>43.0</td>
</tr>
<tr>
<td>4.</td>
<td>E.I. du Pont</td>
<td>USA</td>
<td>Chemicals</td>
<td>29.5</td>
<td>10.4</td>
<td>35.8</td>
</tr>
<tr>
<td>5.</td>
<td>General Electric</td>
<td>USA</td>
<td>Electrical equipment</td>
<td>29.3</td>
<td>3.1</td>
<td>10.6</td>
</tr>
<tr>
<td>6.</td>
<td>Toyota Motor</td>
<td>JPN</td>
<td>Motor vehicles</td>
<td>28.4</td>
<td>1.4</td>
<td>5.0</td>
</tr>
<tr>
<td>7.</td>
<td>ENI</td>
<td>ITA</td>
<td>Chemicals</td>
<td>24.5</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>8.</td>
<td>Unilever</td>
<td>NETH-UK</td>
<td>Food, drink</td>
<td>24.2</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>9.</td>
<td>Chrysler</td>
<td>USA</td>
<td>Motor vehicles</td>
<td>21.3</td>
<td>2.5</td>
<td>11.7</td>
</tr>
<tr>
<td>10.</td>
<td>Matsushita</td>
<td>JPN</td>
<td>Electrical equipment</td>
<td>21.2</td>
<td>1.5</td>
<td>7.0</td>
</tr>
<tr>
<td>11.</td>
<td>Hitachi</td>
<td>JPN</td>
<td>Electrical equipment</td>
<td>21.0</td>
<td>2.5</td>
<td>12.1</td>
</tr>
<tr>
<td>12.</td>
<td>Siemens</td>
<td>FRG</td>
<td>Electrical equipment</td>
<td>18.6</td>
<td>4.6</td>
<td>24.5</td>
</tr>
<tr>
<td>13.</td>
<td>USX</td>
<td>USA</td>
<td>Metals</td>
<td>18.4</td>
<td>1.1</td>
<td>5.8</td>
</tr>
<tr>
<td>14.</td>
<td>Philips</td>
<td>NETH</td>
<td>Electrical equipment</td>
<td>18.1</td>
<td>16.9</td>
<td>93.6</td>
</tr>
<tr>
<td>15.</td>
<td>Volkswagen</td>
<td>FRG</td>
<td>Motor vehicles</td>
<td>17.8</td>
<td>4.2</td>
<td>23.4</td>
</tr>
<tr>
<td>16.</td>
<td>Daimler-Benz</td>
<td>FRG</td>
<td>Motor vehicles</td>
<td>17.8</td>
<td>4.1</td>
<td>23.0</td>
</tr>
<tr>
<td>17.</td>
<td>Nestlé</td>
<td>SWI</td>
<td>Food, drink</td>
<td>17.2</td>
<td>16.9</td>
<td>98.1</td>
</tr>
<tr>
<td>18.</td>
<td>B.A.T.</td>
<td>UK</td>
<td>Food, drink, tobacco</td>
<td>16.5</td>
<td>14.3</td>
<td>86.8</td>
</tr>
<tr>
<td>19.</td>
<td>Philip Morris</td>
<td>USA</td>
<td>Food, drink, tobacco</td>
<td>16.0</td>
<td>4.5</td>
<td>28.0</td>
</tr>
<tr>
<td>20.</td>
<td>Bayer</td>
<td>FRG</td>
<td>Chemicals</td>
<td>15.6</td>
<td>7.9</td>
<td>50.6</td>
</tr>
<tr>
<td>21.</td>
<td>Nissan</td>
<td>JPN</td>
<td>Motor vehicles</td>
<td>15.2</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>22.</td>
<td>BASF</td>
<td>FRG</td>
<td>Chemicals</td>
<td>15.1</td>
<td>4.3</td>
<td>28.4</td>
</tr>
<tr>
<td>23.</td>
<td>United Technologies</td>
<td>USA</td>
<td>Aerospace</td>
<td>15.0</td>
<td>3.0</td>
<td>20.0</td>
</tr>
<tr>
<td>24.</td>
<td>Hoechst</td>
<td>FRG</td>
<td>Chemicals</td>
<td>14.5</td>
<td>5.9</td>
<td>40.6</td>
</tr>
<tr>
<td>25.</td>
<td>Mitsubishi</td>
<td>JPN</td>
<td>Industrial equipment</td>
<td>14.5</td>
<td>0.3</td>
<td>1.8</td>
</tr>
<tr>
<td>26.</td>
<td>Fiat</td>
<td>ITA</td>
<td>Motor vehicles</td>
<td>14.2</td>
<td>3.9</td>
<td>27.2</td>
</tr>
<tr>
<td>27.</td>
<td>Toshiba</td>
<td>JPN</td>
<td>Electrical equipment</td>
<td>14.0</td>
<td>0.9</td>
<td>6.1</td>
</tr>
<tr>
<td>28.</td>
<td>Imperial Chemical</td>
<td>UK</td>
<td>Chemicals</td>
<td>13.9</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>29.</td>
<td>Boeing</td>
<td>USA</td>
<td>Aerospace</td>
<td>13.6</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>30.</td>
<td>Renault</td>
<td>FRA</td>
<td>Motor vehicles</td>
<td>13.6</td>
<td>4.8</td>
<td>35.1</td>
</tr>
<tr>
<td>31.</td>
<td>Proctor &amp; Gamble</td>
<td>USA</td>
<td>Chemicals</td>
<td>13.6</td>
<td>3.4</td>
<td>25.1</td>
</tr>
<tr>
<td>32.</td>
<td>Beatrice</td>
<td>USA</td>
<td>Food, drink</td>
<td>12.6</td>
<td>2.8</td>
<td>21.9</td>
</tr>
<tr>
<td>33.</td>
<td>RJR Nabisco</td>
<td>USA</td>
<td>Food, drink, tobacco</td>
<td>12.4</td>
<td>2.7</td>
<td>21.4</td>
</tr>
<tr>
<td>34.</td>
<td>Honda</td>
<td>JPN</td>
<td>Motor vehicles</td>
<td>12.2</td>
<td>1.6</td>
<td>13.2</td>
</tr>
<tr>
<td>35.</td>
<td>Nippon Steel(^3)</td>
<td>JPN</td>
<td>Metals</td>
<td>12.0</td>
<td>–</td>
<td>0.2</td>
</tr>
<tr>
<td>36.</td>
<td>ITT</td>
<td>USA</td>
<td>Electrical equipment</td>
<td>11.9</td>
<td>6.4</td>
<td>54.0</td>
</tr>
<tr>
<td>37.</td>
<td>Thyssen</td>
<td>FRG</td>
<td>Metals</td>
<td>11.8</td>
<td>4.5</td>
<td>38.5</td>
</tr>
<tr>
<td>38.</td>
<td>Dow</td>
<td>USA</td>
<td>Chemicals</td>
<td>11.5</td>
<td>6.3</td>
<td>54.8</td>
</tr>
<tr>
<td>39.</td>
<td>McDonnell Douglas</td>
<td>USA</td>
<td>Aerospace</td>
<td>11.5</td>
<td>2.7</td>
<td>23.2</td>
</tr>
<tr>
<td>40.</td>
<td>Rockwell</td>
<td>USA</td>
<td>Aerospace</td>
<td>11.3</td>
<td>0.9</td>
<td>8.4</td>
</tr>
<tr>
<td>41.</td>
<td>Peugeot-Citroen</td>
<td>FRA</td>
<td>Motor vehicles</td>
<td>11.2</td>
<td>4.8</td>
<td>42.6</td>
</tr>
<tr>
<td>42.</td>
<td>Westinghouse</td>
<td>USA</td>
<td>Electrical equipment</td>
<td>10.7</td>
<td>0.9</td>
<td>8.4</td>
</tr>
<tr>
<td>43.</td>
<td>Eastman Kodak</td>
<td>USA</td>
<td>Photographic equipment</td>
<td>10.6</td>
<td>3.2</td>
<td>30.5</td>
</tr>
<tr>
<td>44.</td>
<td>Volvo</td>
<td>SWE</td>
<td>Motor vehicles</td>
<td>10.0</td>
<td>5.0</td>
<td>49.6</td>
</tr>
<tr>
<td>45.</td>
<td>NEC</td>
<td>JPN</td>
<td>Electrical equipment</td>
<td>9.8</td>
<td>0.6</td>
<td>6.0</td>
</tr>
<tr>
<td>46.</td>
<td>Goodyear</td>
<td>USA</td>
<td>Rubber</td>
<td>9.6</td>
<td>3.1</td>
<td>32.8</td>
</tr>
<tr>
<td>47.</td>
<td>Lockheed</td>
<td>USA</td>
<td>Aerospace</td>
<td>9.5</td>
<td>0.2</td>
<td>2.2</td>
</tr>
<tr>
<td>48.</td>
<td>Allied Signal</td>
<td>USA</td>
<td>Chemicals</td>
<td>9.1</td>
<td>2.0</td>
<td>22.5</td>
</tr>
<tr>
<td>49.</td>
<td>General Foods</td>
<td>USA</td>
<td>Food, drink</td>
<td>9.0</td>
<td>1.7</td>
<td>19.3</td>
</tr>
<tr>
<td>50.</td>
<td>Union Carbide</td>
<td>USA</td>
<td>Chemicals</td>
<td>9.0</td>
<td>2.6</td>
<td>29.2</td>
</tr>
</tbody>
</table>

\(^1\)Consolidated sales for the enterprise and its subsidiaries.

\(^2\)Consolidated sales of subsidiaries and affiliates outside the home country.

\(^3\)The sales of Nippon Steel's foreign affiliates totalled less than $100 million.


Dutch and Swiss firms show the highest levels of international sales (production) through foreign affiliates (Nestle [98.1 percent] and Philips [93.6 percent]), which reflects the small size of their home-country markets. Nearly half (twenty-four) of the top fifty firms are headquartered in the United States, followed by Japan (nine) and West Germany (six).

Table 2 ranks the world’s ten largest petroleum companies. Two observations are pertinent. First, most of the petroleum companies depend heavily on the sales (production) of foreign affiliates. With the exception of Pemex, exports of petroleum products from the home countries are comparatively small. Nippon Oil and Pemex are not true multinationals: Nippon Oil’s operations are mostly confined to purchasing oil outside Japan for sale inside Japan, and Pemex’s operations are mostly limited to the production and sale of oil in Mexico and the export of oil from Mexico. Second, the United States is the dominant home country (six companies), followed by the United Kingdom (two companies).

Table 2: International production of the world’s ten largest petroleum companies in 1985 (billions of dollars)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Firm</th>
<th>Home country</th>
<th>Total worldwide sales (A)</th>
<th>Sales of foreign affiliates (B)</th>
<th>B/A (percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Exxon</td>
<td>USA</td>
<td>86.7</td>
<td>59.0</td>
<td>68.1</td>
</tr>
<tr>
<td>2.</td>
<td>Royal Dutch Shell</td>
<td>NETH-UK</td>
<td>81.8</td>
<td>–</td>
<td>58.0'</td>
</tr>
<tr>
<td>3.</td>
<td>Mobil</td>
<td>USA</td>
<td>56.0</td>
<td>32.0</td>
<td>57.2</td>
</tr>
<tr>
<td>4.</td>
<td>British Petroleum</td>
<td>UK</td>
<td>53.1</td>
<td>29.2</td>
<td>55.4</td>
</tr>
<tr>
<td>5.</td>
<td>Texaco</td>
<td>USA</td>
<td>46.3</td>
<td>21.9</td>
<td>47.2</td>
</tr>
<tr>
<td>6.</td>
<td>Chevron</td>
<td>USA</td>
<td>43.8</td>
<td>13.6</td>
<td>31.0</td>
</tr>
<tr>
<td>7.</td>
<td>Nippon Oil</td>
<td>JPN</td>
<td>27.9</td>
<td>0.1</td>
<td>0.3</td>
</tr>
<tr>
<td>8.</td>
<td>Amoco</td>
<td>USA</td>
<td>26.9</td>
<td>6.0</td>
<td>22.2</td>
</tr>
<tr>
<td>9.</td>
<td>Atlantic Richfield</td>
<td>USA</td>
<td>21.7</td>
<td>2.1</td>
<td>9.8</td>
</tr>
<tr>
<td>10.</td>
<td>Pemex</td>
<td>MEX</td>
<td>20.4</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

'Percent for 1978.

In the 1980s, many firms in service industries – banking, investment services, insurance, retailing, accounting, advertising, market research, law, construction, publishing, air transportation, hotel services, and others – established foreign affiliates (as sole ventures, joint ventures, or franchises) to penetrate world markets. Table 3 indicates the international involvement of the world’s ten largest fast-food and restaurant chains. U.S. firms are the innovators in this business: All of the ten largest chains are headquartered in the United States.

**Summary**

1. In the 1960s, U.S. business firms went abroad on a massive scale unprecedented in the history of international enterprise. Many industrial and service companies in Western Europe and Japan have also become multinational enterprises. Because of their vast size, the worldwide operations of multinational companies are now a decisive force in shaping the patterns of trade, investment, and technology flows among nations.

2. There is no single agreed-upon definition of the multinational enterprise. For our purposes, a multinational enterprise denotes a parent company that takes part in foreign production through its own affiliates, exercises direct control over the policies of its affiliates, and seeks to follow a worldwide strategy.
3. The manifold activities of the multinational enterprise may be usefully conceptualized as the performance of international transfer functions. The multinational enterprise becomes an international transfer agent when it moves products and factor services (capital, technology, and management) among national economies.

4. The multinational enterprise performs its role as an international transfer agent through institutional or organizational arrangements that collectively make up the multinational enterprise system. This system comprises the parent company, its foreign affiliates, and the relationships among them. The strategy decisions of the parent company generate a pattern of factor and product flows among the members of the system.

5. Intra-enterprise product transfers are the direct consequence of the strategy of the parent company. When the parent company is following a global strategy, its decisions will create some degree of horizontal and vertical integration.

6. Direct foreign investment is the transfer of a bundle of factor services that represent in their totality an extension of a business enterprise across national boundaries.

7. The international transfer of real capital by the MNE commonly (but not always) occurs first as a financial transfer of capital funds. The parent company must decide whether to obtain funds at home or abroad and whether to obtain funds from inside the enterprise or outside. The final choice of the capital-sourcing option depends on the strategy preferences of the parent company and on a variety of constraints: exchange restrictions, political risks, access to local capital sources, taxation, and capital costs. International capital transfers are not a necessary element of direct foreign investment, although they usually accompany it.

8. The multinational enterprise functions as an international innovation system that goes far beyond the traditional mode of international technological diffusion through local imitation. The MNE undertakes technical research, development, production startup, marketing startup, and market research on a global scale. It would appear that the multinational enterprise transfers more technology (and far more innovation) to the industry of developing countries than all the technical assistance and aid programs of governments and international agencies.
9. The international transfer of entrepreneurial skills is the distinctive (and unique) function of the multinational enterprise. Managers centered in the parent company take the initiative in combining natural resources (land), capital, labor, and technology in different countries to produce goods and services for sale in local and external markets.

10. The multinational enterprise makes a major contribution to the allocative efficiency of the world economy, but its key contribution is innovation.

Notes


5. Of course, the shares of these companies may be held in comparatively small amounts by nationals of many countries. Indeed, several U.S. companies list their shares on stock exchanges in Europe and Japan. But the controlling ownership interest remains in the hands of nationals of the home country, where the parent company is located.


10. They are also connected by financial flows that represent the financing and payment of the real flows. These include product payments, capital funds, interest and dividend payments, royalties, and management fees. Our interest in this chapter is focused on the real flows of products and factor services rather than on the associated financial flows.

11. In different language, the MNE internalizes cross-national market transactions. The theory of internalization is treated in the next chapter.

12. The system also generates cross-national sales to nonsystem customers and cross-national purchases from nonsystem suppliers. Both of these extra-enterprise transactions and the cross-national transfers within the system (intra-enterprise transfers) constitute the inter-national trade created by the system.

13. In the 1970s, governments in developing countries expropriated the crude-oil operations of the international petroleum companies. Instead of owning their own crude-oil affiliates, the international companies now obtain oil from developing countries under contractual arrangements. Nonetheless, the international petroleum companies retain much of their vertical integration. Expropriation is examined in Chapter 24.

14. For a narrow definition of direct foreign investment as an international capital flow, see Chapter 23.

15. For a discussion of capital as a factor of production, see Chapter 3.

16. Intangibles, such as patent rights, management services, and goodwill may also be capitalized. This practice is more common when the affiliate is a joint venture than when it is wholly owned by the parent company.

17. The entire cash flow of affiliates (earnings plus depreciation allowances) may be used for capital financing, but we are concerned here only with a net expansion of capital.

18. Since the retained earnings could be repatriated to the parent company, one can argue that the use of retained earnings should be considered a capital flow from the parent to the affiliate. However, in their financial decisions most multinational enterprises draw a distinction between repatriated earnings and earnings retained abroad.
However, the sale of securities abroad by the U.S. parent company is entered in the U.S. balance of payments as a long-term capital infl ow, but when the funds are spent on investment abroad an offsetting entry of a long-term capital outfl ow (direct investment) is also recorded. Hence, the transaction is merely a bookkeeping entry with no net effect on the balance of payments.

Eurocurrencies and Eurobonds are described in Chapter 19.


Hedging in forward exchange, swap arrangements, and investment guarantees provided by the home government may be used by the parent company to offset some of the risks. For a treatment of the U.S. investment insurance program, see Chapter 24.

For earlier discussions of technology in the context of international trade theory, see Chapter 5.

Like all words that refer to a wide variety of phenomena, technology has no standard definition. In particular, the distinction between technology as knowledge and its embodiment in capital equipment, industrial processes, and products is commonly obscured by writers. The derivation of the word indicates that its essential meaning is that of a kind of knowledge.

A more recent example is the VCR.

In contrast to entrepreneurial gaps among countries, the international mobility of technical knowledge is usually quite high.

The principal arguments for the centralization of R & D in the home country are the ease of coordination and the avoidance of duplication. In view of the remarkable improvements taking place in long-distance communication, these arguments are not convincing when set against the advantages of decentralization.

We distinguish entrepreneurial skills, which innovate, from administrative skills, which direct and otherwise support the routine activities of a program or organizational unit.

In Chapter 4 we treated the subject of ignorance, uncertainty, and risk in international trade. What we said then is also pertinent to investment and the multinational enterprise.

Some political risks assumed by the multinational enterprise are treated in Chapter 24.

Some economists challenge the conclusion that multinational enterprises improve the allocative efficiency of the world economy on grounds that they are oligopolistic rather than purely competitive firms. Although the possible anticompetitive effects of the multinational enterprise should not be ignored, this position surely overstates the case. The national corporations that integrated regional economies into national economies were also, in essence, oligopolists. As we shall see in the next chapter, the MNE is mainly an institutional response to exogenous imperfections in the international markets for products (both intermediate and final) and technology.

Selected Readings


