



## 13: Direct Foreign Investment

MNCs commonly capitalize on foreign business opportunities by engaging in **direct foreign investment (DFI)**, which is investment in real assets (such as land, buildings, or even existing plants) in foreign countries. They engage in joint ventures with foreign firms, acquire foreign firms, and form new foreign subsidiaries. Any of these types of DFI can generate high returns when managed properly. However, DFI requires a substantial investment and can therefore put much capital at risk. Moreover, if the investment does not perform as well as expected, the MNC may have difficulty selling the foreign

project it created. Given these return and risk characteristics of DFI, MNCs tend to carefully analyze the potential benefits and costs before implementing any type of DFI. Financial managers must understand the potential return and risk associated with DFI so that they can make investment decisions that maximize the MNC's value.

### The specific objectives of this chapter are to:

- describe common motives for initiating direct foreign investment and
- illustrate the benefits of international diversification.

## Motives for Direct Foreign Investment

MNCs commonly consider direct foreign investment because it can improve their profitability and enhance shareholder wealth. In most cases, MNCs engage in DFI because they are interested in boosting revenues, reducing costs, or both.

### Revenue-Related Motives

The following are typical motives of MNCs that are attempting to boost revenues:

- *Attract new sources of demand.* A corporation often reaches a stage when growth is limited in its home country, possibly because of intense competition. Even if it faces little competition, its market share in its home country may already be near its potential peak. Thus, the firm may consider foreign markets where there is potential demand. Many developing countries, such as Argentina, Chile, Mexico, Hungary, and China, have been perceived as attractive sources of new demand. Many MNCs have penetrated these countries since barriers have been removed. Because the consumers in some countries have historically been restricted from purchasing goods produced by firms outside their countries, the markets for some goods are not well established and offer much potential for penetration by MNCs.

### EXAMPLE

Blockbuster Entertainment Corp. has recently established video stores in Australia, Chile, Japan, and several European countries where the video-rental concept is relatively new. With over 2,000 stores in the United States, Blockbuster's growth potential in the United States was limited.

China has also attracted MNCs. Motorola recently invested more than \$1 billion in joint ventures in China. The Coca-Cola Co. has invested about \$500 million in bottling facilities in China, and PepsiCo has invested about \$200 million in bottling facilities. Yum Brands has KFC franchises and Pizza Hut franchises in China. Other MNCs, such as Ford Motor Co., United Technologies, General Electric, Hewlett-Packard, and IBM, have also invested more than \$100 million in China to attract demand by consumers there. ■

- *Enter profitable markets.* If other corporations in the industry have proved that superior earnings can be realized in other markets, an MNC may also decide to sell in those markets. It may plan to undercut the prevailing, excessively high prices. A common problem with this strategy is that previously established sellers in a new market may prevent a new competitor from taking away their business by lowering their prices just when the new competitor attempts to break into this market.
- *Exploit monopolistic advantages.* Firms may become internationalized if they possess resources or skills not available to competing firms. If a firm possesses advanced technology and has exploited this advantage successfully in local markets, the firm may attempt to exploit it internationally as well. In fact, the firm may have a more distinct advantage in markets that have less advanced technology.
- *React to trade restrictions.* In some cases, MNCs use DFI as a defensive rather than an aggressive strategy. Specifically, MNCs may pursue DFI to circumvent trade barriers.

### EXAMPLE

Japanese automobile manufacturers established plants in the United States in anticipation that their exports to the United States would be subject to more stringent trade restrictions. Japanese companies recognized that trade barriers could be established that would limit or prohibit their exports. By producing automobiles in the United States, Japanese manufacturers could circumvent trade barriers. ■

- *Diversify internationally.* Since economies of countries do not move perfectly in tandem over time, net cash flow from sales of products across countries should be more stable than comparable sales of the products in a single country. By diversifying sales (and possibly even production) internationally, a firm can make its net cash flows less volatile. Thus, the possibility of a liquidity deficiency is less likely. In addition, the firm may enjoy a lower cost of capital as shareholders and creditors perceive the MNC's risk to be lower as a result of more stable cash flows. Potential benefits to MNCs that diversify internationally are examined more thoroughly later in the chapter.

### EXAMPLE

Several firms experienced weak sales because of reduced U.S. demand for their products. They responded by increasing their expansion in foreign markets. AT&T and Nortel Networks pursued new business in China. U.S. Technology planned substantial expansion in Europe and Asia. IBM increased its presence in China, India, South Korea, and Taiwan. Cisco Systems expanded substantially in China, Japan, and South Korea. Foreign expansion diversifies an MNC's sources of revenue and thus reduces its reliance on the U.S. economy. Wal-Mart has not only diversified internationally but has spread its business into many emerging markets as well. Thus, it is less sensitive to a recession in the more developed countries such as those in Western Europe. ■

## Cost-Related Motives

MNCs also engage in DFI in an effort to reduce costs. The following are typical motives of MNCs that are trying to cut costs:

- *Fully benefit from economies of scale.* A corporation that attempts to sell its primary product in new markets may increase its earnings and shareholder wealth due to **economies of scale** (lower average cost per unit resulting from increased production). Firms that utilize much machinery are most likely to benefit from economies of scale.

### EXAMPLE

The removal of trade barriers by the Single European Act allowed MNCs to achieve greater economies of scale. Some U.S.-based MNCs consolidated their European plants because the removal of tariffs between countries in the European Union (EU) enabled firms to achieve economies of scale at a single European plant without incurring excessive exporting costs. The act also enhanced economies of scale by making regulations on television ads, automobile standards, and other products and services uniform across the EU. As a result, Colgate-Palmolive Co. and other MNCs are manufacturing more homogeneous products that can be sold in all EU countries. The adoption of the euro also encouraged consolidation by eliminating exchange rate risk within these countries. ■

### HTTP://

<http://www.cia.gov>

The CIA's home page, which provides a link to the *World Factbook*, a valuable resource for information about countries that MNCs might be considering for direct foreign investment.

- *Use foreign factors of production.* Labor and land costs can vary dramatically among countries. MNCs often attempt to set up production in locations where land and labor are cheap. Due to market imperfections (as discussed in Chapter 1) such as imperfect information, relocation transaction costs, and barriers to industry entry, specific labor costs do not necessarily become equal among markets. Thus, it is worthwhile for MNCs to survey markets to determine whether they can benefit from cheaper costs by producing in those markets.

### EXAMPLE

Many U.S.-based MNCs, including Black & Decker, Eastman Kodak, Ford Motor Co., and General Electric, have established subsidiaries in Mexico to achieve lower labor costs.

Mexico has attracted almost \$8 billion in DFI from firms in the automobile industry, primarily because of the low-cost labor. Mexican workers at General Motors' subsidiaries who manufacture sedans and trucks earn daily wages that are less than the average hourly rate for similar workers in the United States. Ford is also producing trucks at subsidiaries based in Mexico.

Non-U.S. automobile manufacturers are also capitalizing on the low-cost labor in Mexico. Volkswagen of Germany produces its Beetle in Mexico. Daimler AG of Germany manufactures its 12-wheeler trucks in Mexico, and Nissan Motor Co. of Japan produces some of its wagons in Mexico.

Other Japanese companies are also increasingly using Mexico and other low-wage countries for production. For example, Sony Corp. recently established a plant in Tijuana. Matsushita Electrical Industrial Co. has a large plant in Tijuana.

Baxter International has established manufacturing plants in Mexico and Malaysia to capitalize on lower costs of production (primarily wage rates). Honeywell has joint ventures in countries such as Korea and India where production costs are low. It has also established subsidiaries in countries where production costs are low, such as Mexico, Malaysia, Hong Kong, and Taiwan. ■

- *Use foreign raw materials.* Due to transportation costs, a corporation may attempt to avoid importing raw materials from a given country, especially when it plans to sell the finished product back to consumers in that country. Under such circumstances, a more feasible solution may be to develop the product in the country where the raw materials are located.
- *Use foreign technology.* Corporations are increasingly establishing overseas plants or acquiring existing overseas plants to learn the technology of foreign countries.

This technology is then used to improve their own production processes and increase production efficiency at all subsidiary plants around the world.

- *React to exchange rate movements.* When a firm perceives that a foreign currency is undervalued, the firm may consider DFI in that country, as the initial outlay should be relatively low.

A related reason for such DFI is to offset the changing demand for a company's exports due to exchange rate fluctuations. For example, when Japanese automobile manufacturers build plants in the United States, they can reduce exposure to exchange rate fluctuations by incurring dollar costs for their production that offset dollar revenues. Although MNCs do not engage in large projects simply as an indirect means of speculating on currencies, the feasibility of proposed projects may be dependent on existing and expected exchange rate movements.

### Cost-Related Motives in the Expanded European Union.

Several countries that became part of the European Union in 2004 and 2007 were targeted for new DFI by MNCs that wanted to reduce manufacturing costs.

#### EXAMPLE

General Motors expanded its production in Poland, Peugeot increased its production in the Czech Republic, Toyota expanded its production in Slovakia, Audi expanded in Hungary, and Renault expanded in Romania. Volkswagen recently expanded its capacity in Slovenia and cut some jobs in Spain. While it originally established operations in Spain because the wages were about half of those in Germany, wages in Slovenia are less than half of those in Spain. The expansion of the EU allows new member countries to transport products throughout Europe at reduced tariffs. ■

The shifts to low-wage countries will make manufacturers more efficient and competitive, but the tradeoff is thousands of jobs lost in Western Europe. However, it may be argued that the high unionized wages encouraged the firms to seek growth in productivity elsewhere. European labor unions tend to fight layoffs but recognize that manufacturers might move completely out of the Western European countries where unions have more leverage and move into the low-wage countries in Eastern Europe.

#### GOVERNANCE

##### Selfish Managerial Motives for DFI

In addition to the motives discussed so far, there are other selfish motives for DFI. First, managers may attempt to expand their divisions internationally if their compensation may be increased as a result of expansion. Second, many high-level managers may have large holdings of the MNC's stock and would prefer that the MNC diversify its business internationally in order to reduce risk. This goal will not necessarily satisfy shareholders who want the MNC to focus on increasing its return. However, it will satisfy high-level managers who want to reduce risk, so that the stock price is more stable, and the value of their stock holdings is more stable. An MNC's board of directors can attempt to oversee the proposed international projects to ensure that the DFI would serve shareholders. ■

#### HTTP://

<http://www.morganstanley.com/views/gef/index.html>  
Morgan Stanley's Global Economic Forum, which has analyses, discussions, statistics, and forecasts related to non-U.S. economies.

### Comparing Benefits of DFI among Countries

Exhibit 13.1 summarizes the possible benefits of DFI and explains how MNCs can use DFI to achieve those benefits. Most MNCs pursue DFI based on their expectations of capitalizing on one or more of the potential benefits summarized in Exhibit 13.1.

The potential benefits from DFI vary with the country. Countries in Western Europe have well-established markets where the demand for most products and services is large. Thus, these countries may appeal to MNCs that want to penetrate markets because they have better products than what are already being offered. Countries in

**HTTP://**

<http://finance.yahoo.com/>  
Information about economic growth and other macroeconomic indicators used when considering direct foreign investment in a foreign country.

Eastern Europe, Asia, and Latin America tend to have relatively low costs of land and labor. If an MNC desires to establish a low-cost production facility, it would also consider other factors such as the work ethic and skills of the local people, availability of labor, and cultural traits. Although most attempts to increase international business are motivated by one or more of the benefits listed here, some disadvantages are also associated with DFI.

**E X A M P L E**

Iowa Co., a large clothing manufacturer, wants to pursue DFI in the Philippines or Mexico because the cost of producing its clothing will be much lower in either country. Iowa Co. determines that the direct costs of production would be lower in the Philippines. However, there are some other indirect costs of DFI that should also be considered. Iowa Co. determines that economic conditions in the Philippines are uncertain, that government restrictions might be imposed on a subsidiary there, and that inflation and exchange rate movements might be unfavorable. Most importantly, the safety of employees who would be sent there to manage the subsidiary might be threatened by terrorist groups. After considering all the costs, Iowa Co. decides not to pursue DFI in the Philippines. ■

**HTTP://**

<http://www.worldbank.org>  
Valuable updated country data that can be considered when making DFI decisions.

## Comparing Benefits of DFI over Time

As conditions change over time, so do possible benefits from pursuing direct foreign investment in various countries. Thus, some countries may become more attractive targets while other countries become less attractive. The choice of target countries for DFI has changed over time. Canada now receives a smaller proportion of total

**Exhibit 13.1** Summary of Motives for Direct Foreign Investment

Means of Using DFI to Achieve This Benefit	
<b>Revenue-Related Motives</b>	
1. Attract new sources of demand.	Establish a subsidiary or acquire a competitor in a new market.
2. Enter markets where superior profits are possible.	Acquire a competitor that has controlled its local market.
3. Exploit monopolistic advantages.	Establish a subsidiary in a market where competitors are unable to produce the identical product; sell products in that country.
4. React to trade restrictions.	Establish a subsidiary in a market where tougher trade restrictions will adversely affect the firm's export volume.
5. Diversify internationally.	Establish subsidiaries in markets whose business cycles differ from those where existing subsidiaries are based.
<b>Cost-Related Motives</b>	
6. Fully benefit from economies of scale.	Establish a subsidiary in a new market that can sell products produced elsewhere; this allows for increased production and possibly greater production efficiency.
7. Use foreign factors of production.	Establish a subsidiary in a market that has relatively low costs of labor or land; sell the finished product to countries where the cost of production is higher.
8. Use foreign raw materials.	Establish a subsidiary in a market where raw materials are cheap and accessible; sell the finished product to countries where the raw materials are more expensive.
9. Use foreign technology.	Participate in a joint venture in order to learn about a production process or other operations.
10. React to exchange rate movements.	Establish a subsidiary in a new market where the local currency is weak but is expected to strengthen over time.

DFI than it received in the past, while Europe, Latin America, and Asia receive a larger proportion than in the past. More than one-half of all DFI by U.S. firms is in European countries. The opening of the Eastern European countries and the expansion of the EU account for some of the increased DFI in Europe, especially Eastern Europe. The increased focus on Latin America is partially attributed to its high economic growth, which has encouraged MNCs to capitalize on new sources of demand for their products. In addition, MNCs have targeted Latin America and Asia to use factors of production that are less expensive in foreign countries than in the United States.

### EXAMPLE

Last year Georgia Co. contemplated DFI in Thailand, where it would produce and sell cell phones. It decided that costs were too high. Now it is reconsidering because costs in Thailand have declined. Georgia could lease office space at a low cost. It could also purchase a manufacturing plant at a lower cost because factories that recently failed are standing empty. In addition, the Thai baht has depreciated substantially against the dollar recently, so Georgia Co. could invest in Thailand at a time when the dollar can be exchanged at a favorable exchange rate.

Georgia Co. also discovers, however, that while the cost-related characteristics have improved, the revenue-related characteristics are now less desirable. A new subsidiary in Thailand might not attract new sources of demand due to the country's weak economy. In addition, Georgia might be unable to earn excessive profits there because the weak economy might force existing firms to keep their prices very low in order to survive. Georgia Co. must compare the favorable aspects of DFI in Thailand with the unfavorable aspects by using multinational capital budgeting, which is explained in the following chapter. ■

## Benefits of International Diversification

An international project can reduce a firm's overall risk as a result of international diversification benefits. The key to international diversification is selecting foreign projects whose performance levels are not highly correlated over time. In this way, the various international projects should not experience poor performance simultaneously.

### EXAMPLE

Merrimack Co., a U.S. firm, plans to invest in a new project in either the United States or the United Kingdom. Once the project is completed, it will constitute 30 percent of the firm's total funds invested in itself. The remaining 70 percent of its investment in its business is exclusively in the United States. Characteristics of the proposed project are forecasted for a 5-year period for both a U.S. and a British location, as shown in Exhibit 13.2.

Merrimack Co. plans to assess the feasibility of each proposed project based on expected risk and return, using a 5-year time horizon. Its expected annual after-tax return on investment on its prevailing business is 20 percent, and its variability of returns (as measured

**Exhibit 13.2** Evaluation of Proposed Projects in Alternative Locations

	Existing Business	Characteristics of Proposed Project	
		If Located in the United States	If Located in the United Kingdom
Mean expected annual return on investment (after taxes)	20%	25%	25%
Standard deviation of expected annual after-tax returns on investment	.10	.09	.11
Correlation of expected annual after-tax returns on investment with after-tax returns of prevailing U.S. business	—	.80	.02

**HTTP://**

<http://www.trade.gov/mas/>  
Outlook of international trade  
conditions for each of sev-  
eral industries.

by the standard deviation) is expected to be .10. The firm can assess its expected overall performance based on developing the project in the United States and in the United Kingdom. In doing so, it is essentially comparing two portfolios. In the first portfolio, 70 percent of its total funds are invested in its prevailing U.S. business, with the remaining 30 percent invested in a new project located in the United States. In the second portfolio, again 70 percent of the firm's total funds are invested in its prevailing business, but the remaining 30 percent are invested in a new project located in the United Kingdom. Therefore, 70 percent of the portfolios' investments are identical. The difference is in the remaining 30 percent of funds invested.

If the new project is located in the United States, the firm's overall expected after-tax return ( $r_p$ ) is

$r_p =$	<b>[(70%)</b>	<b>×</b>	<b>(20%)</b>	<b>+</b>	<b>[(30%)</b>	<b>×</b>	<b>(25%)</b>	<b>=</b>	<b>21.5%</b>
	% of funds invested in prevailing business		Expected return on prevailing business		% of funds invested in new U.S. project		Expected return on new U.S. project		Firm's overall expected return

This computation is based on weighting the returns according to the percentage of total funds invested in each investment.

If the firm calculates its overall expected return with the new project located in the United Kingdom instead of the United States, the results are unchanged. This is because the new project's expected return is the same regardless of the country of location. Therefore, in terms of return, neither new project has an advantage.

With regard to risk, the new project is expected to exhibit slightly less variability in returns during the 5-year period if it is located in the United States (see Exhibit 13.2). Since firms typically prefer more stable returns on their investments, this is an advantage. However, estimating the risk of the individual project without considering the overall firm would be a mistake. The expected correlation of the new project's returns with those of the prevailing business must also be considered. Recall that portfolio variance is determined by the individual variability of each component as well as their pairwise correlations. The variance of a portfolio ( $\sigma_p^2$ ) composed of only two investments (A and B) is computed as

$$\sigma_p^2 = w_A^2 \sigma_A^2 + w_B^2 \sigma_B^2 + 2w_A w_B \sigma_A \sigma_B (CORR_{AB})$$

where  $w_A$  and  $w_B$  represent the percentage of total funds allocated to investments A and B, respectively;  $\sigma_A$  and  $\sigma_B$  are the standard deviations of returns on investments A and B, respectively, and  $CORR_{AB}$  is the correlation coefficient of returns between investments A and B. This equation for portfolio variance can be applied to the problem at hand. The portfolio reflects the overall firm. First, compute the overall firm's variance in returns assuming it locates the new project in the United States (based on the information provided in Exhibit 13.2). This variance ( $\sigma_p^2$ ) is

$$\begin{aligned} \sigma_p^2 &= (.70)^2(.10)^2 + (.30)^2(.09)^2 + 2(.70)(.30)(.10)(.09)(.80) \\ &= (.49)(.01) + (.09)(.0081) + .003024 \\ &= .0049 + .000729 + .003024 \\ &= .008653 \end{aligned}$$

If Merrimack Co. decides to locate the new project in the United Kingdom instead of the United States, its overall variability in returns will be different because that project differs from the new U.S. project in terms of individual variability in returns and correlation with the prevailing business. The overall variability of the firm's returns based on locating the new project in the United Kingdom is estimated by variance in the portfolio returns ( $\sigma_p^2$ ):

$$\begin{aligned}
 \sigma_p^2 &= (.70)^2(.10)^2 + (.30)^2(.11)^2 + 2(.70)(.30)(.10)(.11)(.02) \\
 &= (.49)(.01) + (.09)(.0121) + .0000924 \\
 &= .0049 + .001089 + .0000924 \\
 &= .0060814
 \end{aligned}$$

Thus, Merrimack will generate more stable returns if the new project is located in the United Kingdom. The firm's overall variability in returns is almost 29.7 percent less if the new project is located in the United Kingdom rather than in the United States.

The variability is reduced when locating in the foreign country because of the correlation of the new project's expected returns with the expected returns of the prevailing business. If the new project is located in Merrimack's home country (the United States), its returns are expected to be more highly correlated with those of the prevailing business than they would be if the project was located in the United Kingdom. When economic conditions of two countries (such as the United States and the United Kingdom) are not highly correlated, then a firm may reduce its risk by diversifying its business in both countries instead of concentrating in just one. ■

### Diversification Analysis of International Projects

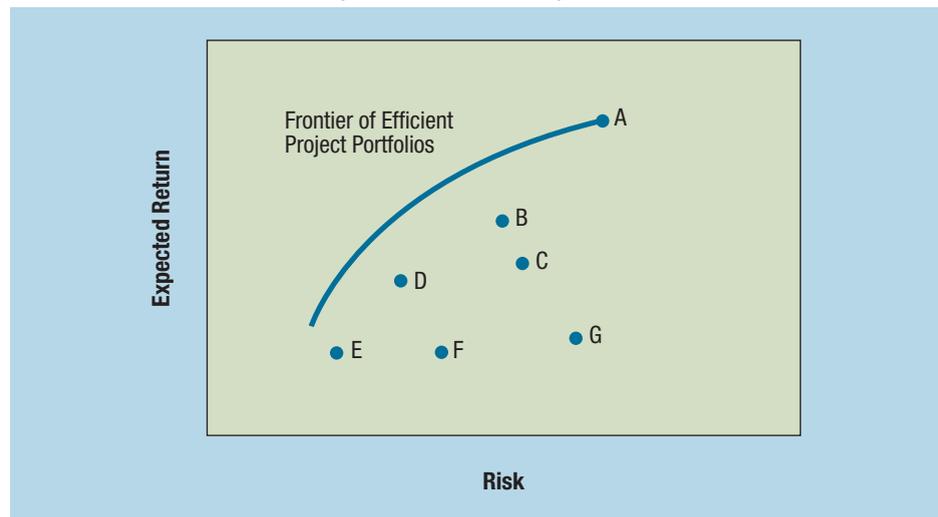
Like any investor, an MNC with investments positioned around the world is concerned with the risk and return characteristics of the investments. The portfolio of all investments reflects the MNC in aggregate.

#### EXAMPLE

Virginia, Inc., considers a global strategy of developing projects as shown in Exhibit 13.3. Each point on the graph reflects a specific project that either has been implemented or is being considered. The return axis may be measured by potential return on assets or return on equity. The risk may be measured by potential fluctuation in the returns generated by each project.

Exhibit 13.3 shows that Project A has the highest expected return of all the projects. While Virginia, Inc., could devote most of its resources toward this project to attempt to achieve such a high return, its risk is possibly too high by itself. In addition, such a project may not be able to absorb all available capital anyway if its potential market for customers is limited. Thus, Virginia, Inc., develops a portfolio of projects. By combining Project A with several other projects, Virginia, Inc., may decrease its expected return. On the other hand, it may also reduce its risk substantially.

**Exhibit 13.3** Risk-Return Analysis of International Projects



**HTTP://**

<http://www.treasury.gov>  
Links to international information that should be considered by MNCs that are considering direct foreign investment.

If Virginia, Inc., appropriately combines projects, its project portfolio may be able to achieve a risk-return tradeoff exhibited by any of the points on the curve in Exhibit 13.3. This curve represents a frontier of efficient project portfolios that exhibit desirable risk-return characteristics, in that no single project could outperform any of these portfolios. The term *efficient* refers to a minimum risk for a given expected return. Project portfolios outperform the individual projects considered by Virginia, Inc., because of the diversification attributes discussed earlier. The lower, or more negative, the correlation in project returns over time, the lower will be the project portfolio risk. As new projects are proposed, the frontier of efficient project portfolios available to Virginia, Inc., may shift. ■

**Comparing Portfolios along the Frontier.** Along the frontier of efficient project portfolios, no portfolio can be singled out as “optimal” for all MNCs. This is because MNCs vary in their willingness to accept risk. If the MNC is very conservative and has the choice of any portfolios represented by the frontier in Exhibit 13.3, it will probably prefer one that exhibits low risk (near the bottom of the frontier). Conversely, a more aggressive strategy would be to implement a portfolio of projects that exhibits risk-return characteristics such as those near the top of the frontier.

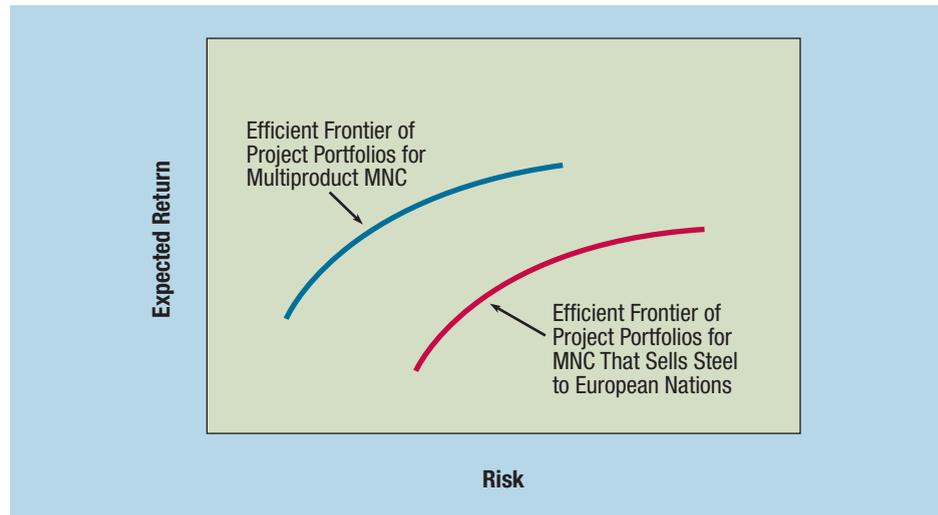
**Comparing Frontiers among MNCs.** The actual location of the frontier of efficient project portfolios depends on the business in which the firm is involved. Some MNCs have frontiers of possible project portfolios that are more desirable than the frontiers of other MNCs.

**E X A M P L E**

Eurosteel, Inc., sells steel solely to European nations and is considering other related projects. Its frontier of efficient project portfolios exhibits considerable risk (because it sells just one product to countries whose economies move in tandem). In contrast, Global Products, Inc., which sells a wide range of products to countries all over the world, has a lower degree of project portfolio risk. Therefore, its frontier of efficient project portfolios is closer to the vertical axis. This comparison is illustrated in Exhibit 13.4. Of course, this comparison assumes that Global Products, Inc., is knowledgeable about all of its products and the markets where it sells. ■

Our discussion suggests that MNCs can achieve more desirable risk-return characteristics from their project portfolios if they sufficiently diversify among products and

**Exhibit 13.4** Risk-Return Advantage of a Diversified MNC

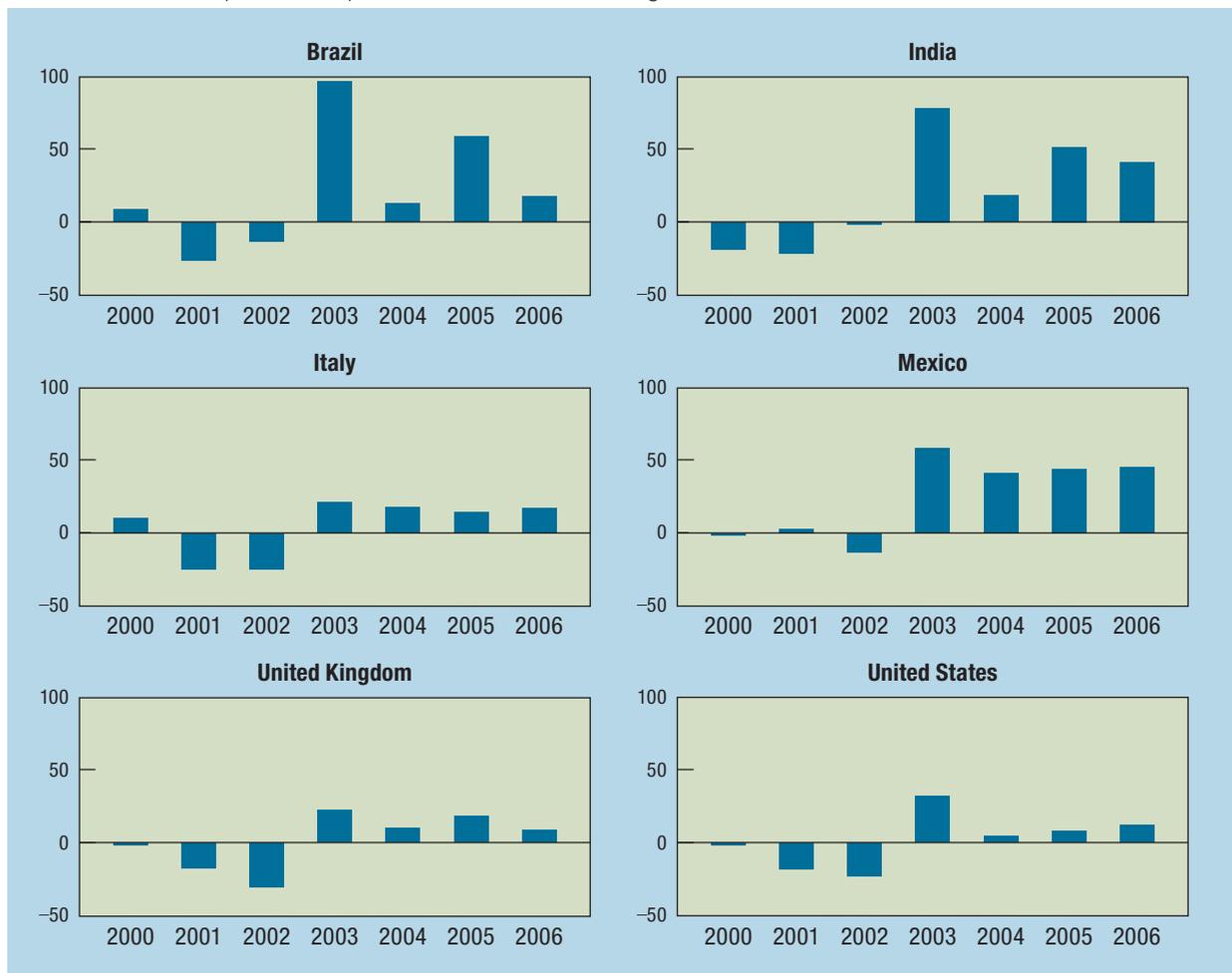


geographic markets. This also relates to the advantage an MNC has over a purely domestic firm with only a local market. The MNC may be able to develop a more efficient portfolio of projects than its domestic counterpart.

### Diversification among Countries

Exhibit 13.5 shows how the stock market values of various countries have changed over time. A country's stock market value reflects the expectations of business opportunities and economic growth. Notice how the changes in stock market values vary among countries, which suggests that business and economic conditions vary among countries. Thus, when an MNC diversifies its business among countries rather than focusing on only one foreign country, it reduces its exposure to any single foreign country. However, economic conditions are commonly correlated over time, because the weakness of one country may cause a reduction in imports demanded from other countries. Notice that in 2002 (when the United States experienced a recession), all stock markets in Exhibit 13.5 were weak, reflecting expectations of weak economic conditions in these countries. Yet, the degree of weakness varies over time. Economic conditions were strong in the 2005–2006 period, but were especially strong in emerging markets such as Brazil, India, and Mexico.

**Exhibit 13.5** Comparison of Expected Economic Growth among Countries: Annual Stock Market Return



## Decisions Subsequent to DFI

Once direct foreign investment takes place, periodic decisions are necessary to determine whether further expansion should take place in a given location. In addition, as the project generates earnings, the MNC must decide whether to have the funds remitted to the parent or used by the subsidiary. If the subsidiary has a use for the funds that would be of more value than the parent's use, the subsidiary should retain the funds. Of course, a certain percentage of the funds will be needed to maintain operations, but the remaining funds can be sent to the parent, sent to another subsidiary, or reinvested for expansion purposes.

Facts relevant to the decision of whether the subsidiary should reinvest the earnings should be analyzed on a case-by-case basis. The appropriate decision depends on the economic conditions in the subsidiary's country and the parent's country, as well as restrictions imposed by the host country government.

## Host Government Views of DFI

Each government must weigh the advantages and disadvantages of direct foreign investment in its country. It may provide incentives to encourage some forms of DFI, barriers to prevent other forms of DFI, and impose conditions on some other forms of DFI.

## Incentives to Encourage DFI

The ideal DFI solves problems such as unemployment and lack of technology without taking business away from local firms.

### EXAMPLE

Consider an MNC that is willing to build a production plant in a foreign country that will use local labor and produce goods that are not direct substitutes for other locally produced goods. In this case, the plant will not cause a reduction in sales by local firms. The host government would normally be receptive toward this type of DFI. Another desirable form of DFI from the perspective of the host government is a manufacturing plant that uses local labor and then exports the products (assuming no other local firm exports such products to the same areas). ■

### HTTP://

<http://www.pwcglobal.com>  
Access to country-specific information such as general business rules and regulations, tax environments, and some other useful statistics and surveys.

In some cases, a government will offer incentives to MNCs that consider DFI in its country. Governments are particularly willing to offer incentives for DFI that will result in the employment of local citizens or an increase in technology. Common incentives offered by the host government include tax breaks on the income earned there, rent-free land and buildings, low-interest loans, subsidized energy, and reduced environmental regulations. The degree to which a government will offer such incentives depends on the extent to which the MNC's DFI will benefit that country.

### EXAMPLE

The decision by Allied Research Associates, Inc. (a U.S.-based MNC), to build a production facility and office in Belgium was highly motivated by Belgian government subsidies. The Belgian government subsidized a large portion of the expenses incurred by Allied Research Associates and offered tax concessions and favorable interest rates on loans to Allied. ■

While many governments encourage DFI, they use different types of incentives. France has periodically sold government land at a discount, while Finland and Ireland attracted MNCs in the late 1990s by imposing a very low corporate tax rate on specific businesses.

## Barriers to DFI

Governments are less anxious to encourage DFI that adversely affects locally owned companies, unless they believe that the increased competition is needed to serve consumers. Therefore, they tend to closely regulate any DFI that may affect local firms, consumers, and economic conditions.

**Protective Barriers.** When MNCs consider engaging in DFI by acquiring a foreign company, they may face various barriers imposed by host government agencies. All countries have one or more government agencies that monitor mergers and acquisitions. These agencies may prevent an MNC from acquiring companies in their country if they believe it will attempt to lay off employees. They may even restrict foreign ownership of any local firms.

**“Red Tape” Barriers.** An implicit barrier to DFI in some countries is the “red tape” involved, such as procedural and documentation requirements. An MNC pursuing DFI is subject to a different set of requirements in each country. Therefore, it is difficult for an MNC to become proficient at the process unless it concentrates on DFI within a single foreign country. The current efforts to make regulations uniform across Europe have simplified the paperwork required to acquire European firms.

**Industry Barriers.** The local firms of some industries in particular countries have substantial influence on the government and will likely use their influence to prevent competition from MNCs that attempt DFI. MNCs that consider DFI need to recognize the influence that these local firms have on the local government.

**Environmental Barriers.** Each country enforces its own environmental constraints. Some countries may enforce more of these restrictions on a subsidiary whose parent is based in a different country. Building codes, disposal of production waste materials, and pollution controls are examples of restrictions that force subsidiaries to incur additional costs. Many European countries have recently imposed tougher antipollution laws as a result of severe problems.

**Regulatory Barriers.** Each country also enforces its own regulatory constraints pertaining to taxes, currency convertibility, earnings remittance, employee rights, and other policies that can affect cash flows of a subsidiary established there. Because these regulations can influence cash flows, financial managers must consider them when assessing policies. Also, any change in these regulations may require revision of existing financial policies, so financial managers should monitor the regulations for any potential changes over time. Some countries may require extensive protection of employee rights. If so, managers should attempt to reward employees for efficient production so that the goals of labor and shareholders will be closely aligned.

**Ethical Differences.** There is no consensus standard of business conduct that applies to all countries. A business practice that is perceived to be unethical in one country may be totally ethical in another. For example, U.S.-based MNCs are well aware that certain business practices that are accepted in some less developed countries would be illegal in the United States. Bribes to governments in order to receive special tax breaks or other favors are common in some countries. If MNCs do not participate in such practices, they may be at a competitive disadvantage when attempting DFI in a particular country.

**Political Instability.** The governments of some countries may prevent DFI. If a country is susceptible to abrupt changes in government and political conflicts, the feasibility of DFI may be dependent on the outcome of those conflicts. MNCs want

to avoid a situation in which they pursue DFI under a government that is likely to be removed after the DFI occurs.

### HTTP://

<http://www.transparency.org/>

The Political Instability section has information about corruption in some countries.

## Government-Imposed Conditions to Engage in DFI

Some governments allow international acquisitions but impose special requirements on MNCs that desire to acquire a local firm. For example, the MNC may be required to ensure pollution control for its manufacturing or to structure the business to export the products it produces so that it does not threaten the market share of other local firms. The MNC may even be required to retain all the employees of the target firm so that unemployment and general economic conditions in the country are not adversely affected.

### EXAMPLE

Mexico requires that a specified minimum proportion of parts used to produce automobiles there are made in Mexico. The proportion is lower for automobiles that are to be exported.

Spain's government allowed Ford Motor Co. to set up production facilities in Spain only if it would abide by certain provisions. These included limiting Ford's local sales volume to 10 percent of the previous year's local automobile sales. In addition, two-thirds of the total volume of automobiles produced by Ford in Spain must be exported. The idea behind these provisions was to create jobs for workers in Spain without seriously affecting local competitors. Allowing a subsidiary that primarily exports its product achieved this objective. ■

Government-imposed conditions do not necessarily prevent an MNC from pursuing DFI in a specific foreign country, but they can be costly. Thus, MNCs should be willing to consider DFI that requires costly conditions only if the potential benefits outweigh the costs.

## SUMMARY

■ MNCs may be motivated to initiate direct foreign investment in order to attract new sources of demand or to enter markets where superior profits are possible. These two motives are normally based on opportunities to generate more revenue in foreign markets. Other motives for using DFI are typically related to cost efficiency, such as using foreign factors of production, raw materials, or technology. In addition MNCs may engage in DFI to protect their foreign market share, to react to exchange rate movements, or to avoid trade restrictions.

■ International diversification is a common motive for direct foreign investment. It allows an MNC to

reduce its exposure to domestic economic conditions. In this way, the MNC may be able to stabilize its cash flows and reduce its risk. Such a goal is desirable because it may reduce the firm's cost of financing. International projects may allow MNCs to achieve lower risk than is possible from only domestic projects without reducing their expected returns. International diversification tends to be better able to reduce risk when the DFI is targeted to countries whose economies are somewhat unrelated to an MNC's home country economy.

## POINT COUNTER-POINT

### Should MNCs Avoid DFI in Countries with Liberal Child Labor Laws?

**Point** Yes. An MNC should maintain its hiring standards, regardless of what country it is in. Even if a foreign country allows children to work, an MNC

should not lower its standards. Although the MNC forgoes the use of low-cost labor, it maintains its global credibility.

**Counter-Point** No. An MNC will not only benefit its shareholders, but will create employment for some children who need support. The MNC can provide reasonable working conditions and perhaps may even offer educational programs for its employees.

**Who Is Correct?** Use the Internet to learn more about this issue. Which argument do you support? Offer your own opinion on this issue.

## SELF TEST

Answers are provided in Appendix A at the back of the text.

1. Offer some reasons why U.S. firms might prefer to engage in direct foreign investment (DFI) in Canada rather than Mexico.
2. Offer some reasons why U.S. firms might prefer to direct their DFI to Mexico rather than Canada.
3. One U.S. executive said that Europe was not considered as a location for DFI because of the euro's value. Interpret this statement.
4. Why do you think U.S. firms commonly use joint ventures as a strategy to enter China?
5. Why would the United States offer a foreign automobile manufacturer large incentives for establishing a production subsidiary in the United States? Isn't this strategy indirectly subsidizing the foreign competitors of U.S. firms?

## QUESTIONS AND APPLICATIONS

1. **Motives for DFI.** Describe some potential benefits to an MNC as a result of direct foreign investment (DFI). Elaborate on each type of benefit. Which motives for DFI do you think encouraged Nike to expand its footwear production in Latin America?
2. **Impact of a Weak Currency on Feasibility of DFI.** Packer, Inc., a U.S. producer of computer disks, plans to establish a subsidiary in Mexico in order to penetrate the Mexican market. Packer's executives believe that the Mexican peso's value is relatively strong and will weaken against the dollar over time. If their expectations about the peso's value are correct, how will this affect the feasibility of the project? Explain.
3. **DFI to Achieve Economies of Scale.** Bear Co. and Viking, Inc., are automobile manufacturers that desire to benefit from economies of scale. Bear Co. has decided to establish distributorship subsidiaries in various countries, while Viking, Inc., has decided to establish manufacturing subsidiaries in various countries. Which firm is more likely to benefit from economies of scale?
4. **DFI to Reduce Cash Flow Volatility.** Raider Chemical Co. and Ram, Inc., had similar intentions to reduce the volatility of their cash flows. Raider implemented a long-range plan to establish 40 percent of its business in Canada. Ram, Inc., implemented a long-range plan to establish 30 percent of its business in Europe and Asia, scattered among 12 different countries. Which company will more effectively reduce cash flow volatility once the plans are achieved?
5. **Impact of Import Restrictions.** If the United States imposed long-term restrictions on imports, would the amount of DFI by non-U.S. MNCs in the United States increase, decrease, or be unchanged? Explain.
6. **Capitalizing on Low-Cost Labor.** Some MNCs establish a manufacturing facility where there is a relatively low cost of labor. Yet, they sometimes close the facility later because the cost advantage dissipates. Why do you think the relative cost advantage of these countries is reduced over time? (Ignore possible exchange rate effects.)
7. **Opportunities in Less Developed Countries.** Offer your opinion on why economies of some less developed countries with strict restrictions on international trade and DFI are somewhat independent from economies of other countries. Why would MNCs desire to enter such countries? If these countries relaxed their restrictions, would their economies continue to be independent of other economies? Explain.

8. **Effects of September 11.** In August 2001, Ohio, Inc., considered establishing a manufacturing plant in central Asia, which would be used to cover its exports to Japan and Hong Kong. The cost of labor was very low in central Asia. On September 11, 2001, the terrorist attacks on the United States caused Ohio to reassess the potential cost savings. Why would the estimated expenses of the plant increase after the terrorist attacks?
9. **DFI Strategy.** Bronco Corp. has decided to establish a subsidiary in Taiwan that will produce stereos and sell them there. It expects that its cost of producing these stereos will be one-third the cost of producing them in the United States. Assuming that its production cost estimates are accurate, is Bronco's strategy sensible? Explain.
10. **Risk Resulting from International Business.** This chapter concentrates on possible benefits to a firm that increases its international business.
- What are some risks of international business that may not exist for local business?
  - What does this chapter reveal about the relationship between an MNC's degree of international business and its risk?
11. **Motives for DFI.** Starter Corp. of New Haven, Connecticut, produces sportswear that is licensed by professional sports teams. It recently decided to expand in Europe. What are the potential benefits for this firm from using DFI?
12. **Disney's DFI Motives.** What potential benefits do you think were most important in the decision of the Walt Disney Co. to build a theme park in France?
13. **DFI Strategy.** Once an MNC establishes a subsidiary, DFI remains an ongoing decision. What does this statement mean?
14. **Host Government Incentives for DFI.** Why would foreign governments provide MNCs with incentives to undertake DFI there?
- local partners who knew the preferences of the local customers.
- What comparative advantage does J.C. Penney have when establishing a store in a foreign country, relative to an independent variety store?
  - Why might the overall risk of J.C. Penney decrease or increase as a result of its recent global expansion?
  - J.C. Penney has been more cautious about entering China. Explain the potential obstacles associated with entering China.
16. **DFI Location Decision.** Decko Co. is a U.S. firm with a Chinese subsidiary that produces cell phones in China and sells them in Japan. This subsidiary pays its wages and its rent in Chinese yuan, which is stable relative to the dollar. The cell phones sold to Japan are denominated in Japanese yen. Assume that Decko Co. expects that the Chinese yuan will continue to stay stable against the dollar. The subsidiary's main goal is to generate profits for itself and reinvest the profits. It does not plan to remit any funds to the U.S. parent.
- Assume that the Japanese yen strengthens against the U.S. dollar over time. How would this be expected to affect the profits earned by the Chinese subsidiary?
  - If Decko Co. had established its subsidiary in Tokyo, Japan, instead of China, would its subsidiary's profits be more exposed or less exposed to exchange rate risk?
  - Why do you think that Decko Co. established the subsidiary in China instead of Japan? Assume no major country risk barriers.
  - If the Chinese subsidiary needs to borrow money to finance its expansion and wants to reduce its exchange rate risk, should it borrow U.S. dollars, Chinese yuan, or Japanese yen?

### Advanced Questions

15. **DFI Strategy.** J.C. Penney has recognized numerous opportunities to expand in foreign countries and has assessed many foreign markets, including Brazil, Greece, Mexico, Portugal, Singapore, and Thailand. It has opened new stores in Europe, Asia, and Latin America. In each case, the firm was aware that it did not have sufficient understanding of the culture of each country that it had targeted. Consequently, it engaged in joint ventures with

### Discussion in the Boardroom

This exercise can be found in Appendix E at the back of this textbook.

### Running Your Own MNC

This exercise can be found on the Xtra! website at <http://maduraxtra.swlearning.com>.

## BLADES, INC. CASE

### Consideration of Direct Foreign Investment

For the last year, Blades, Inc., has been exporting to Thailand in order to supplement its declining U.S. sales. Under the existing arrangement, Blades sells 180,000 pairs of roller blades annually to Entertainment Products, a Thai retailer, for a fixed price denominated in Thai baht. The agreement will last for another 2 years. Furthermore, to diversify internationally and to take advantage of an attractive offer by Jogs, Ltd., a British retailer, Blades has recently begun exporting to the United Kingdom. Under the resulting agreement, Jogs will purchase 200,000 pairs of “Speedos,” Blades’ primary product, annually at a fixed price of £80 per pair.

Blades’ suppliers of the needed components for its roller blade production are located primarily in the United States, where Blades incurs the majority of its cost of goods sold. Although prices for inputs needed to manufacture roller blades vary, recent costs have run approximately \$70 per pair. Blades also imports components from Thailand because of the relatively low price of rubber and plastic components and because of their high quality. These imports are denominated in Thai baht, and the exact price (in baht) depends on prevailing market prices for these components in Thailand. Currently, inputs sufficient to manufacture a pair of roller blades cost approximately 3,000 Thai baht per pair of roller blades.

Although Thailand had been among the world’s fastest growing economies, recent events in Thailand have increased the level of economic uncertainty. Specifically, the Thai baht, which had been pegged to the dollar, is now a freely floating currency and has depreciated substantially in recent months. Furthermore, recent levels of inflation in Thailand have been very high. Hence, future economic conditions in Thailand are highly uncertain.

Ben Holt, Blades’ chief financial officer (CFO), is seriously considering DFI in Thailand. He believes that this is a perfect time to either establish a subsidiary or acquire an existing business in Thailand because the uncertain economic conditions and the depreciation of the baht have substantially lowered the initial costs required for DFI. Holt believes the growth potential in Asia will be extremely high once the Thai economy stabilizes.

Although Holt has also considered DFI in the United Kingdom, he would prefer that Blades invest in Thailand as opposed to the United Kingdom. Forecasts indicate that the demand for roller blades in the United Kingdom is similar to that in the United States; since

Blades’ U.S. sales have recently declined because of the high prices it charges, Holt expects that DFI in the United Kingdom will yield similar results, especially since the components required to manufacture roller blades are more expensive in the United Kingdom than in the United States. Furthermore, both domestic and foreign roller blade manufacturers are relatively well established in the United Kingdom, so the growth potential there is limited. Holt believes the Thai roller blade market offers more growth potential.

Blades can sell its products at a lower price but generate higher profit margins in Thailand than it can in the United States. This is because the Thai customer has committed itself to purchase a fixed number of Blades’ products annually only if it can purchase Speedos at a substantial discount from the U.S. price. Nevertheless, since the cost of goods sold incurred in Thailand is substantially below that incurred in the United States, Blades has managed to generate higher profit margins from its Thai exports and imports than in the United States.

As a financial analyst for Blades, Inc., you generally agree with Ben Holt’s assessment of the situation. However, you are concerned that Thai consumers have not been affected yet by the unfavorable economic conditions. You believe that they may reduce their spending on leisure products within the next year. Therefore, you think it would be beneficial to wait until next year, when the unfavorable economic conditions in Thailand may subside, to make a decision regarding DFI in Thailand. However, if economic conditions in Thailand improve over the next year, DFI may become more expensive both because target firms will be more expensive and because the baht may appreciate. You are also aware that several of Blades’ U.S. competitors are considering expanding into Thailand in the next year.

If Blades acquires an existing business in Thailand or establishes a subsidiary there by the end of next year, it would fulfill its agreement with Entertainment Products for the subsequent year. The Thai retailer has expressed an interest in renewing the contractual agreement with Blades at that time if Blades establishes operations in Thailand. However, Holt believes that Blades could charge a higher price for its products if it establishes its own distribution channels.

Holt has asked you to answer the following questions:

1. Identify and discuss some of the benefits that Blades, Inc., could obtain from DFI.

2. Do you think Blades should wait until next year to undertake DFI in Thailand? What is the tradeoff if Blades undertakes the DFI now?
3. Do you think Blades should renew its agreement with the Thai retailer for another 3 years? What is the tradeoff if Blades renews the agreement?
4. Assume a high level of unemployment in Thailand and a unique production process employed by

Blades, Inc. How do you think the Thai government would view the establishment of a subsidiary in Thailand by firms such as Blades? Do you think the Thai government would be more or less supportive if firms such as Blades acquired existing businesses in Thailand? Why?

## SMALL BUSINESS DILEMMA

### Direct Foreign Investment Decision by the Sports Exports Company

Jim Logan's business, the Sports Exports Company, continues to grow. His primary product is the footballs he produces and exports to a distributor in the United Kingdom. However, his recent joint venture with a British firm has also been successful. Under this arrangement, a British firm produces other sporting goods for Jim's firm; these goods are then delivered to that distributor. Jim intentionally started his international business by exporting because it was easier and cheaper to export than to establish a place of business in the United Kingdom. However, he is considering establishing a firm in the United Kingdom to produce the footballs there instead of in his garage (in the

United States). This firm would also produce the other sporting goods that he now sells, so he would no longer have to rely on another British firm (through the joint venture) to produce those goods.

1. Given the information provided here, what are the advantages to Jim of establishing the firm in the United Kingdom?
2. Given the information provided here, what are the disadvantages to Jim of establishing the firm in the United Kingdom?

## INTERNET/EXCEL EXERCISES

IBM has substantial operations in many countries, including the United States, Canada, and Germany. Go to <http://finance.yahoo.com/q?s=ibm> and click on 1y just below the chart provided.

1. Scroll down and click on Historical Prices. (Or apply this exercise to a different MNC.) Set the date range so that you can obtain quarterly values of the U.S. stock index for the last 20 quarters. Insert the quarterly data on a spreadsheet. Compute the percentage change in IBM's stock price for each quarter. Then go to <http://finance.yahoo.com/intlindices?e=americas> and click on index GSPC (which represents the U.S. stock market index), so that you can derive the quarterly percentage change in the U.S. stock index over the last 20 quarters. Then run a regression analysis with IBM's quarterly return (percentage change in stock price) as the dependent variable and the quarterly percentage

change in the U.S. stock market's value as the independent variable. (Appendix C explains how Excel can be used to run regression analysis.) The slope coefficient serves as an estimate of the sensitivity of IBM's value to the U.S. market returns. Also, check the fit of the relationship based on the *R*-squared statistic.

2. Go to <http://finance.yahoo.com/intlindices?e=europe> and click on GDAXI (the German stock market index). Repeat the process so that you can assess IBM's sensitivity to the German stock market. Compare the slope coefficient between the two analyses. Is IBM's value more sensitive to the U.S. market or the German market? Does the U.S. market or the German market explain a higher proportion of the variation in IBM's returns (check the *R*-squared statistic)? Offer an explanation of your results.