

# MULTINATIONAL RESTRUCTURING

## LEARNING OBJECTIVES

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

- provide a background on how MNCs use international acquisitions as a form of multinational restructuring,
- explain how MNCs conduct valuations of foreign target firms,
- explain why valuations of a target firm vary among MNCs that plan to restructure by acquiring a target, and
- identify other types of multinational restructuring besides international acquisitions.

*Multinational corporations (MNCs) commonly engage in restructuring their assets and liabilities. **Multinational restructuring** decisions involve restructuring the composition and location of multinational assets or liabilities. The differing economies and currencies makes borrowing and investing a more complex process than the purely domestic equivalent. Thus, multinational restructuring decisions not only determine the types of assets, but also the countries where those assets are located and the currencies used to finance those assets. Financial managers must understand how to assess restructuring alternatives so that they can make restructuring decisions that maximize the value of the MNC.*

## BACKGROUND ON MULTINATIONAL RESTRUCTURING

Decisions by an MNC to build a new subsidiary in the Netherlands, to acquire a company in Italy, to sell its Singapore subsidiary, to downsize its operations in New Zealand, or to shift some production from its US subsidiary to its Mexican subsidiary all represent forms of multinational restructuring. Even the most successful MNCs continuously assess possible forms of multinational restructuring so that they can capitalize on changing economic, political, or industry conditions across countries.

MNCs re-evaluate their existing businesses and other proposed projects when determining the ideal composition of assets to employ and the locations where the assets are employed. Even if an existing business adds value to the MNC, it may be worth while to assess whether the business would generate more value to the MNC if it was restructured.

### Trends in international investments and acquisitions

The volume of foreign acquisitions tends to vary greatly over the years for the UK. Comparing 2007 with 2009, acquisitions were 73% lower in number and disposals were 64% lower according to the Office for National Statistics. Although variable the value of acquisitions of foreign companies by UK companies has averaged 3.4 times the disposal value. UNCTAD figures for investment prospects for 2009–11 rank the most popular destinations for worldwide foreign direct investment as China, United States, India, Brazil, Russian Federation and the United Kingdom. The size of foreign investments is reflected in the fact that one third of global trade is intra firm, that is trade between parts of the same multinational company. The type of trade is also shifting to the service sector and is about 60% today.

### Model for valuing a foreign target

An MNC's decision to invest in a foreign company is similar to the decision to invest in other projects, in that it is based on a comparison of benefits and costs as measured by net present value. From an MNC's parent's perspective, the foreign target's value can be estimated as the present value of cash flows that it would receive from the target, as the target would become a foreign subsidiary owned by the parent.

## MANAGING FOR VALUE

### *International acquisitions*

In 2002 the Chinese company Fook Tin ('rich field') purchased the French bathroom and kitchen scales manufacturer Terrailon, adding to its existing purchase in 2000 of Scaime (France) a global leader in magnitude sensors. The Hong Kong-based company now manufactures scales in Shenzhen province (China) where it is seeking to expand. Thus French design, Chinese manufacturing and Hong Kong entrepreneurial spirit are combined. Andre Terrailon founded the company that bore his name in 1947 in France at a location near Switzerland (Haute Savoie near Geneva). Making watches and scales are similar activities, in this sense it could be regarded as part of an investment

cluster. After initial success, the company experienced difficulties in the 1980s, affected by competition and rising costs. It was taken over in 1981 by Bernard Tapie, a well-known French entrepreneur, who was unable to revive the company's fortunes. Eventually an Irish venture capital fund purchased the company from the Credit Lyonnais bank and improved the company's fortunes. It was then bought out by an American electronics company MSI who met with stock market disapproval and sold it on to Fook Tin. Terrailon represents a fairly typical example of the history of an MNC – a tale of sale and acquisition.

The MNC's parent would consider investing in the target only if the estimated present value of the cash flows it would ultimately receive from the target over time exceeds the initial outlay necessary to purchase the target. Thus, capital budgeting analysis can be used to determine whether a firm should be acquired. The net present value of a company from the acquiring firm's perspective ( $NPV_a$ ) is

$$NPV_a = -IO_a + \left( \sum_{t=1}^n \frac{CF_{a,t}}{(1+k)^t} \right) + \frac{SV_a}{(1+k)^n}$$

where:

- $IO_a$  = initial outlay needed by the acquiring firm to acquire the target
- $CF_{a,t}$  = cash flow to be generated by the target for the acquiring firm
- $k$  = required rate of return on the acquisition of the target
- $SV_a$  = salvage value of the target (expected selling price of the target at a point in the future)
- $n$  = time when the target will be sold by the acquiring firm.

The capital budgeting analysis of a foreign target must account for the exchange rate of concern. For example, consider a UK-based MNC that assesses the acquisition of a foreign company. The initial outlay ( $IO_{UK}$ ) needed by the UK firm is determined by the acquisition price in foreign currency units ( $IO_f$ ) and the spot rate of the foreign currency ( $S$ ):

$$IO_{UK} = IO_f(S)$$

The pound-denominated cash flows to the UK firm is determined by the foreign currency cash flows ( $CF_{f,t}$ ) per period remitted to the United Kingdom and the spot rate at that time ( $S_t$ ):

$$CF_{a,t} = CF_{f,t}(S)$$

This ignores any withholding taxes or blocked-funds restrictions imposed by the host government and any income taxes imposed by the UK government. The pound salvage value to the UK firm is determined by the salvage value in foreign currency units ( $SV_f$ ) and the spot rate at the time (period  $n$ ) when it is converted to pounds ( $S_n$ ):

$$SV_a = (SV_f)S_n$$

The net present value of a foreign target can be derived by substituting the equalities just described in the capital budgeting equation:

$$NPV_a = -IO_a + \left( \sum_{t=1}^n \frac{CF_{a,t}}{(1+k)^t} \right) + \frac{SV_a}{(1+k)^n}$$

$$NPV_a = -(IO^f)S + \left( \sum_{t=1}^n \frac{(CF_{f,t})S_t}{(1+k)^t} \right) + \frac{(SV_f)S_n}{(1+k)^n}$$

## Assessing potential acquisitions after the Asian crisis

Although the Asian crisis had devastating effects, it created an opportunity for some MNCs to pursue new business in Asia. The initial outlay for acquiring a firm in Asia was lower as a result of the crisis. First, property values in Asia had declined. Second, the parent's currency (for parents in the United States or Europe) had more purchasing power due to the weakening of the Asian currencies. Third, many firms in Asia were near bankruptcy and were unable to obtain necessary funding. Fourth, the governments in these countries were more willing to allow foreign acquisitions of local firms (especially those that were failing) as a means of resolving the crisis. Consequently, some US and European firms pursued direct foreign investment in Asia during the Asian crisis.

In the first six months of 1998, US firms invested more than \$8 billion in Asia – more than double the amount they had invested there in all of 1997. Procter & Gamble agreed to acquire Sanyong Paper (a large conglomerate in South Korea) during the crisis. Citicorp obtained a large stake of First City Bank in Thailand.

Firms that made acquisitions had to consider the obvious adverse effects of the crisis in their capital budgeting analysis. The lower economic growth meant that most Asian projects would generate lower cash flows, and the weak currencies reduced the amount of cash flows (in the parent's currency) that would ultimately be received as a return on the parent's investment.

To the extent that the firms believed that the Asian currency values had hit bottom and would rebound, they could assume that any new acquisitions of Asian firms would benefit from future exchange rate movements. Firms could initiate their investment in Asia by investing their home currency in exchange for the weak Asian currency. Then, if the Asian currency appreciated over time, the earnings generated there would be worth more (in terms of the parent's currency) when remitted to the parent.

## Assessing potential acquisitions in Europe

Before the adoption of the euro, MNCs had to separately consider the exchange rate effects from acquiring firms in different European countries. For example, Italy's currency (the lira) was considered more likely to weaken against the dollar than some of the other European currencies, and this could affect the decision of whether to acquire an Italian firm versus a firm in Germany or France. The adoption of the euro as the local currency by several European countries has simplified the analysis for an MNC that is comparing possible target firms in those countries. The MNC can still be affected by future movements in the euro's value against the dollar, but those effects will occur regardless of whether the MNC purchases a firm in Italy or in any other euro-zone country. Thus, the MNC can make its decision on which firm to acquire within these countries without being concerned about differential exchange rate effects. If the MNC is also considering firms in European countries that have not adopted the euro as their currency, however, it will still have to compare the potential exchange rate effects that could result from the acquisition.

## FACTORS THAT AFFECT THE EXPECTED CASH FLOWS OF THE FOREIGN TARGET

When an MNC estimates the future cash flows that it will ultimately receive after acquiring a foreign target, it considers several factors that reflect either conditions in the country of concern or conditions of the target itself.

### Target-specific factors

The following characteristics of the foreign target are typically considered when estimating the cash flows that the target will provide to the parent.

**Target's previous cash flows.** Since the foreign target has been conducting business, it has a history of cash flows that it has generated. The recent cash flows per period may serve as an initial base from which future cash flows per period can be estimated after accounting for other factors.

A company's previous cash flows are not necessarily an accurate indicator of future cash flows, however, especially when the target's future cash flows would have to be converted into the acquirer's home currency as they are remitted to the parent. Therefore, the MNC needs to carefully consider all the factors that could influence the cash flows that will be generated from a foreign target.

**Managerial talent of the target.** An acquiring firm must assess the target's existing management so that it can determine how the target firm will be managed after the acquisition. The way the acquirer plans to deal with the managerial talent will affect the estimated cash flows to be generated by the target.

If the MNC acquires the target, it may allow the target firm to be managed as it was before the acquisition. Under these conditions, however, the acquiring firm may have less potential for enhancing the target's cash flows.

A second alternative for the MNC is to downsize the target firm after acquiring it. For example, if the acquiring firm introduces new technology that reduces the need for some of the target's employees, it can attempt to downsize the target. Downsizing reduces expenses but may also reduce productivity and revenue, so the effect on cash flows can vary with the situation. In addition, an MNC may encounter significant barriers to increasing efficiency by downsizing in several countries. Governments of some countries are likely to intervene and prevent the acquisition if downsizing is anticipated.

A third alternative for the MNC is to maintain the existing employees of the target but restructure the operations so that labour is used more efficiently. For example, the MNC may infuse its own technology into the target firm and then restructure operations so that many of the employees receive new job assignments. This strategy may cause the acquirer to incur some additional expenses, but there is potential for improved cash flows over time.

## Country-specific factors

An MNC typically considers the following country-specific factors when estimating the cash flows that will be provided by the foreign target to the parent.

**Target's local economic conditions.** Potential targets in countries where economic conditions are strong are more likely to experience strong demand for their products in the future and may generate higher cash flows. However, some firms are more sensitive to economic conditions than others. Also, some acquisitions of firms are intended to focus on exporting from the target's home country, so the economic conditions in the target's country may not be as important. Economic conditions are difficult to predict over a long-term period, especially for emerging countries.

**Target's local political conditions.** Potential targets in countries where political conditions are favourable are less likely to experience adverse shocks to their cash flows. The sensitivity of cash flows to political conditions is dependent on the firm's type of business. Political conditions are also difficult to predict over a long-term period, especially for emerging countries.

**Target's industry conditions.** Industry conditions within a country can cause some targets to be more desirable than others. Some industries in a particular country may be extremely competitive while others are not. In addition, some industries exhibit strong potential for growth in a particular country, while others exhibit very little potential. When an MNC assesses targets among countries, it would prefer a country where the growth potential for its industry is high and the competition within the industry is not excessive.

**Target's currency conditions.** If a UK-based MNC plans to acquire a foreign target, it must consider how future exchange rate movements may affect the target's local currency cash flows. It must also consider how exchange rates will affect the conversion of the target's remitted earnings to the UK parent. In the typical case, ideally the foreign currency would be weak at the time of the acquisition (so that the MNC's initial outlay is low) but strengthen over time as funds are periodically remitted to the UK parent. There can be exceptions to this general statement, but the point is that the MNC forecasts future exchange rates and then applies those forecasts to determine the impact on cash flows.

**Target's local stock market conditions.** Potential target firms that are publicly held are continuously valued in the market, so their stock prices can change rapidly. As the target firm's stock price changes, the acceptable bid price necessary to buy that firm will likely change as well. Thus, there can be substantial swings in the purchase price that would be acceptable to a target. This is especially true for publicly traded firms in emerging markets in Asia, Eastern Europe, and Latin America where stock prices commonly change by 5%

or more in a week. Therefore, an MNC that plans to acquire a target would prefer to make its bid at a time when the local stock market prices are generally low.

**Taxes applicable to the target.** When an MNC assesses a foreign target, it must estimate the expected after-tax cash flows that it will ultimately receive in the form of funds remitted to the parent. Thus, the tax laws applicable to the foreign target are used to derive the after-tax cash flows. First, the applicable corporate tax rates are applied to the estimated future earnings of the target to determine the after-tax earnings. Second, the after-tax proceeds are determined by applying any withholding tax rates to the funds that are expected to be remitted to the parent in each period. Third, if the acquiring firm's government imposes an additional tax on remitted earnings or allows a tax credit, that tax or credit must be applied.

## EXAMPLE OF THE VALUATION PROCESS

### EXAMPLE

Lincoln Ltd desires to expand in Latin America or Canada. The methods Lincoln uses to initially screen targets in various countries and then to estimate a target's value are discussed next.

#### International screening process

Lincoln considers the factors just described when it conducts an initial screening of prospective targets. It has identified prospective targets in Mexico, Brazil, Colombia and Canada, as shown in Exhibit 1.1. The target in Mexico has no plans to sell its business and is unwilling to even consider an offer from Lincoln. Therefore, this firm is no longer considered. Lincoln anticipates potential political problems that could create barriers to an acquisition in Colombia, even though the Colombian target is willing to be acquired. Stock market conditions are not favourable in Brazil, as the stock prices of most Brazilian companies have recently risen substantially. Lincoln does not want to pay as much as the Brazilian target is now worth based on its prevailing market value.

Based on this screening process, the only foreign target that deserves a closer assessment is the target in Canada. According to Lincoln's assessment, Canadian currency conditions are slightly unfavourable, but this is not a reason to eliminate the target from further consideration. Thus, the next step would be for Lincoln to obtain as much information as possible about the target and conditions in Canada. Then Lincoln can use this information to derive the target's expected cash

flows and to determine whether the target's value exceeds the initial outlay that would be required to purchase it, as explained next.

#### Estimating the target's value

Once Lincoln has completed its initial screening of targets, it conducts a valuation of all targets that passed the screening process. Lincoln can estimate the present value of future cash flows that would result from acquiring the target. This estimation is then used to determine whether the target should be acquired.

Continuing with our simplified example, Lincoln's screening process resulted in only one eligible target, a Canadian firm. Assume the Canadian firm has conducted all of its business locally. Assume also that Lincoln expects that it can obtain materials at a lower cost than the target can because of its relationships with some Canadian suppliers and that it also expects to implement a more efficient production process. Lincoln also plans to use its existing managerial talent to manage the target and thereby reduce the administrative and marketing expenses incurred by the target. It also expects that the target's revenue will increase when its products are sold under Lincoln's name. Lincoln expects to maintain prices of the products.

The target's expected cash flows can be measured by first determining the revenue and expense levels in recent years and then adjusting those levels to reflect the changes that would occur after the acquisition.

*(Continued)*



**EXHIBIT 1.1** Example of process used to screen foreign targets

Target based in	Is the target receptive to an acquisition	Local economic and industry conditions	Local political conditions	Local currency conditions	Prevailing stock market prices	Tax laws
Mexico	No	Favourable	OK	OK	OK	May change
Brazil	Maybe	OK	OK	OK	Too high	May change
Colombia	Yes	Favourable	Volatile	Favourable	OK	Reasonable
Canada	Yes	OK	Favourable	Slightly unfavourable	OK	Reasonable

**Revenue**

The target's annual revenue has ranged between C\$80 million and C\$90 million in Canadian dollars (C\$) over the last four years. Lincoln expects that it can improve sales, and forecasts revenue to be C\$100 million next year, C\$93.3 million in the following year, and C\$121 million in the year after. The cost of goods sold has been about 50% of the revenue in the past, but Lincoln expects it will fall to 40% of revenue because of improvements in efficiency. The estimates are shown in Exhibit 1.2.

**Expenses**

Selling and administrative expenses have been about C\$20 million annually, but Lincoln believes that through restructuring it can reduce these expenses to C\$15 million in each of the next three years. Depreciation expenses have been about C\$10 million in the past and are expected to remain at that level for the next three years. The Canadian tax rate on the target's earnings is expected to be 30%.

**Earnings and cash flows**

Given the information assumed here, the after-tax earnings that the target would generate under Lincoln's ownership are estimated in Exhibit 1.2. The cash flows generated by the target are determined by adding the depreciation expenses back to the after-tax earnings. Assume that the target will need C\$5 million in cash each year to support existing operations (including the repair of existing machinery) and that the remaining cash flow can be remitted to the UK parent. Assume that the target firm is financially supported

only by its equity. It currently has 10 million shares of stock outstanding that are priced at C\$17 per share.

**Cash flows to parent**

Since Lincoln's parent wishes to assess the target from its own perspective, it focuses on the cash flows that it expects to receive. Assuming no additional taxes, the expected cash flows generated in Canada that are to be remitted to Lincoln's parent are converted into pounds at the expected exchange rate at the end of each year. Lincoln uses the prevailing exchange rate of the Canadian dollar (which is £0.50) as the expected exchange rate for the Canadian dollar in future years.

**Estimating the target's future sales price**

If Lincoln purchases the target, it will sell the target in three years, after improving the target's performance. Lincoln expects to receive C\$230 million (after capital gains taxes) from the sale. The price at which the target can actually be sold will depend on its expected future cash flows from that point forward, but those expected cash flows are partially dependent on its performance prior to that time. Thus, Lincoln can enhance the sales price by improving the target's performance over the three years it plans to own the target.

**Valuing the target based on estimated cash flows**

The expected pound cash flows to Lincoln over the next three years are shown in Exhibit 1.2. The high cash flow in Year 3 is due to Lincoln's plans to sell the

(Continued)

**EXHIBIT 1.2** Valuation of Canadian target based on the assumptions provided (in millions of Canadian dollars)

	Last Year	Year 1	Year 2	Year 3
Revenue	C\$90	C\$100	C\$93.3	C\$121
Cost of goods sold	45	40	37.3	48.4
Gross profit	45	60	56	72.6
Selling & administrative expenses	20	15	15	15
Depreciation	10	10	10	10
Earnings before taxes	15	35	31	47.6
Tax (30%)	4.5	10.5	9.3	14.28
Earnings after taxes	10.5	24.5	21.7	33.32
<b>+ Depreciation</b>		<b>10</b>	<b>10</b>	<b>10</b>
<b>– Funds to reinvest</b>		<b>5</b>	<b>5</b>	<b>5</b>
Sale of firm				230
Cash flows in C\$		29.5	26.7	268.32
Exchange rate of C\$		£0.50	£0.50	£0.50
Cash flows in £		£14.75	£13.35	£134.16
PV (20% discount rate)		£12.29	£9.27	£77.64
Cumulative PV		£12.29	£21.56	£99.20

target at that time. Assuming that Lincoln has a required rate of return of 20% on this project, the cash flows are discounted at that rate to derive the present value of target cash flows. From Lincoln's perspective, the present value of the target is about £99.20 million.

Given that the target's shares are currently valued at C\$17 per share, the 10 million shares are worth C\$170 million. At the prevailing exchange rate of £0.50 per pound, the target is currently valued at £85 million by the market (computed as C\$170 million  $\times$  £0.50). Lincoln's valuation of the target of about £99.2 million is about 17% above the market valuation. However, Lincoln will have to pay a premium on the shares to persuade the target's board of directors to approve the acquisition. Premiums commonly range from 10% to 40% of the market price. If Lincoln allows for a

premium of 10% above the prevailing stock price of C\$17 per share, it would pay C\$18.7 per share for the target. At this price per share, the price paid for the Canadian firm would be C\$187 million, or £93.5 million at the existing exchange rate. This price is less than the perceived net present value of the target, so Lincoln may be willing to pay this amount.

Lincoln recognizes that the target may reject its offer of a 10% premium and ask for a higher premium, but it will not pay more than its estimate of the target's net present value. Since Lincoln values the target at about £99.2 million, it will not pay more than about C\$198 million at the prevailing exchange rate (computed as £99.2 million divided by £0.50 per Canadian dollar), or a share price of C\$19.80 (computed as C\$198 million divided by 10 million shares).

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### Sources of uncertainty

This example shows how the acquisition of a publicly traded foreign firm differs from the creation of a new foreign subsidiary. Although the valuation of a publicly traded foreign firm can utilize information about an existing business, the cash flows resulting from the acquisition are still subject to uncertainty for several reasons, which can be identified by reviewing the assumptions made in the valuation process. First, the growth rate of revenue is subject to uncertainty. If this rate is overestimated (perhaps because Canadian economic growth is overestimated), the earnings generated in Canada will be lower, and cash flows remitted to the UK parent will be lower as well.

Second, the cost of goods sold could exceed the assumed level of 40% of revenue, which would reduce cash flows remitted to the parent. Third, the selling and administrative expenses could exceed the assumed amount of C\$15 million, especially when considering that the annual expenses were C\$20 million prior to the acquisition. Fourth, Canada's corporate tax rate could increase, which would reduce the cash flows remitted to the parent. Fifth, the exchange rate of the Canadian dollar may be weaker than assumed, which would reduce the cash flows received by the parent. Sixth, the estimated selling price of the target three years from now could be incorrect for any of the previous five reasons, and this estimate is very influential on the valuation of the target today.

Since one or more of these conditions could occur, the estimated net present value of the target could be overestimated. Consequently, it is possible for Lincoln to acquire the target at a purchase price exceeding its actual value. In particular, the future cash flows are very sensitive to exchange rate movements. This can be illustrated by using sensitivity analysis and re-estimating the value of the target based on different scenarios for the exchange rate over time.

### Changes in valuation over time

If Lincoln Ltd decides not to bid for the target at this time, it will need to redo its analysis if it later reconsiders acquiring the target. As the factors that affect the expected cash flows or the required rate of return from investing in the target change, so will the value of the target.

### Impact of stock market conditions

A change in stock market conditions affects the price per share of each stock in that market. Thus, the value

of publicly traded firms in that market will change. Remember that an acquirer needs to pay a premium above the market valuation to acquire a foreign firm.

Continuing with our example involving Lincoln's pursuit of a Canadian target, assume that the target firm has a market price of C\$17 per share, representing a valuation of C\$170 million, but that before Lincoln makes its decision to acquire the target, the Canadian stock market level rises by 20%. If the target's stock price rises by this same percentage, the firm is now valued at:

$$\begin{aligned}\text{New stock price} &= \text{C}\$170 \times 1.2 \\ &= \text{C}\$204 \text{ million}\end{aligned}$$

Using the 10% premium assumed in the earlier example, Lincoln must now pay C\$224.4 million (computed as C\$204 million  $\times$  1.1) if it wants to acquire the target. This example illustrates how the price paid for the target can change abruptly simply because of a change in the general level of the stock market.

### Impact of stock market conditions on the value of private firms

Even if a target is privately held, general stock market conditions will affect the amount that an acquirer has to pay for the target because a privately held company's value is influenced by the market price multiples of related firms in the same country. A simple method of valuing a private company is to apply the price-earnings (P/E) ratios of publicly traded firms in the same industry to the private company's annual earnings.

For example, if the annual earnings of a private Canadian company are C\$8 million and the average P/E ratio of publicly traded Canadian firms in the same industry is 15, the company's market valuation can be estimated as:

$$\begin{aligned}\text{Market valuation} &= \text{earnings} \times \text{average P/E ratio} \\ &= \text{C}\$8 \text{ million} \times 15 \\ &= \text{C}\$120 \text{ million}\end{aligned}$$

If the stock market level rises by 20%, the average P/E ratio of the firms in the same industry is likely to rise by about 20%, which represents an increase in the P/E ratio from 15 to 18. The new market valuation of the Canadian firm will be C\$144 (i.e. C\$8  $\times$  18).

As this example illustrates, private companies also become more expensive targets when local stock market conditions improve.

**Impact of exchange rates.** Whether a foreign target is publicly traded or private, a UK acquirer must convert pounds to the local currency to purchase the target. If the foreign currency appreciates by the time the acquirer makes payment, the acquisition will be more costly. The cost of the acquisition changes in the same proportion as the change in the exchange rate.

**Combined stock market and exchange rate effects.** In reality, stock market levels and exchange rates change simultaneously. The effects on the cost of acquiring a foreign target are especially pronounced in emerging markets where stock and currency values are volatile.

## EXAMPLE

For example, assume that Mizner plc, a UK firm, wants to acquire a firm in the Czech Republic so that it can expand its business in Eastern Europe. Also assume that the Czech target's valuation moves in tandem with general Czech stock market conditions. Exhibit 1.3, which is based on actual data from a recent period, shows how the cost to Mizner of acquiring the Czech target could change over time, even though the performance of the firm itself does not change. During the period shown, the cost of acquisi-

tion could have increased by 20% in a single month (December of Year 1) as a result of a very strong stock market in that month and also appreciation of the Czech currency (koruna). At the other extreme, the cost of the acquisition declined by 20% in a single month (March of Year 2) as a result of a weakening stock market and koruna over that month. This exhibit illustrates how sensitive the cost of an acquisition of a foreign target is to foreign market conditions.

**Impact of market anticipation regarding the target.** The stock price of the target may increase if investors anticipate that the target will be acquired, since they are aware that stock prices of targets rise abruptly after a bid by the acquiring firm. Thus, it is important that Lincoln keep its intentions about acquiring the target confidential.

## WHY VALUATIONS OF A TARGET MAY VARY AMONG MNCs

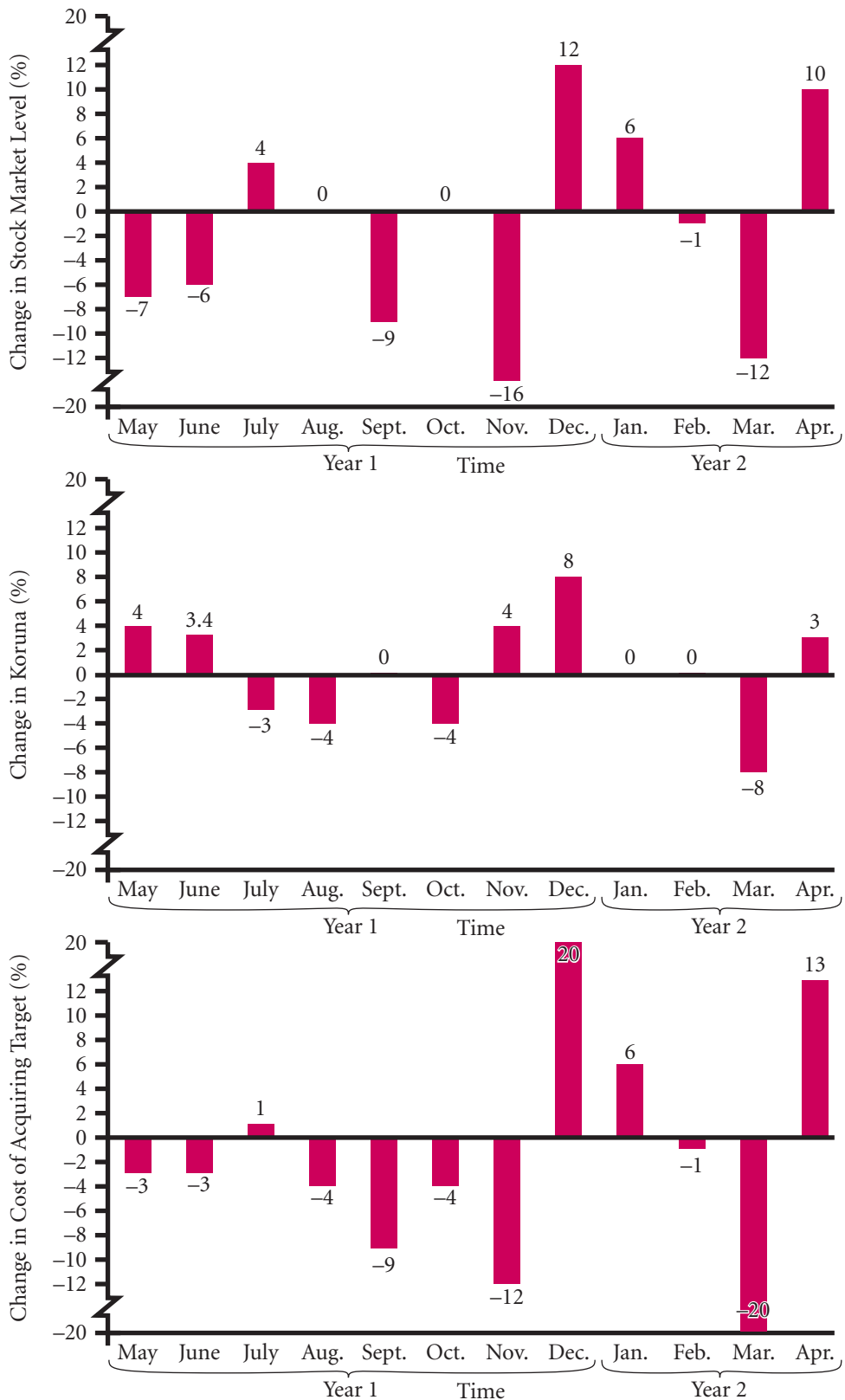
Most MNCs that consider acquiring a specific target will use a somewhat similar process for valuing the target. Nevertheless, their valuations will differ because of differences in the way the MNC's estimate the key determinants of a given target's valuation: (1) cash flows to be generated by the target, (2) exchange rate effects on funds remitted to the MNC's parent, and (3) the required rate of return when investing in the target.

### Estimated cash flows of the foreign target

The target's expected future cash flows will vary among MNCs because the cash flows will be dependent on the MNC's management or oversight of the target's operations. If an MNC can improve the production efficiency of the target without reducing the target's production volume, it can improve the target's cash flows.

Each MNC may have a different plan as to how the target will fit within its structure and how the target will conduct future operations. The target's expected cash flows will be influenced by the way it is utilized.

EXHIBIT 1.3 Influence of Czech stock market and currency conditions on the cost of acquiring a Czech target



An MNC with production plants in Asia that purchases another Asian production plant may simply be attempting to increase its market share and production capacity. This MNC's cash flows change because of a higher production and sales level. Conversely, an MNC with all of its production plants in the United Kingdom may purchase an Asian production plant to shift its production where costs are lower. This MNC's cash flows change because of lower expenses.

Tax laws can create competitive advantages for acquirers based in some countries. Acquirers based in low-tax countries may be able to generate higher cash flows from acquiring a foreign target than acquirers in high-tax countries simply because they are subject to lower taxes on the future earnings remitted by the target (after it is acquired).

## Exchange rate effects on the funds remitted

The valuation of a target can vary among MNCs simply because of differences in the exchange rate effects on funds remitted by the foreign target to the MNC's parent. If the target remits funds frequently in the near future, its value will be partially dependent on the expected exchange rate of the target's local currency in the near future. If the target does not remit funds in the near future, its value is more dependent on its local growth strategy and on exchange rates in the distant future.

## Required return of acquirer

The valuation of the target could also vary among MNCs because of differences in their required rate of return from investing funds to acquire the target. If an MNC targets a successful foreign company with plans to continue the target's local business in a more efficient manner, the risk of the business will be relatively low, and therefore the MNC's required return from acquiring the target will be relatively low. Conversely, if an MNC targets the company because it plans to turn the company into a major exporter, the risk is much higher. The target has not established itself in foreign markets, so the cash flows that would result from the exporting business are very uncertain. Thus, the required return to acquire the target company will be relatively high as well.

If potential acquirers are based in different countries, their required rates of return from a specific target will vary even if they plan to use the target in similar ways. Recall that an MNC's required rate of return on any project is dependent on the local risk-free interest rate (since that influences the cost of funds for that MNC). Therefore, the required rate of return for MNCs based in countries with relatively high interest rates such as Brazil and Venezuela may differ from MNCs based in low-interest-rate countries such as the United States or Japan. The higher required rate of return for MNCs based in Latin American countries will not necessarily lead to a lower valuation. The target's currency might be expected to appreciate substantially against Latin American currencies (since some Latin American currencies have consistently weakened over time), which would enhance the amount of cash flows received as a result of remitted funds and could possibly offset the effects of the higher required rate of return.

## OTHER TYPES OF MULTINATIONAL RESTRUCTURING

Besides acquiring foreign firms, MNCs can engage in multinational restructuring through international partial acquisitions, acquisitions of privatized businesses, international alliances, and international divestitures. Each type is described in turn.

### International partial acquisitions

In many cases, an MNC may consider a partial international acquisition of a firm, in which it purchases part of the existing stock of a foreign firm. A partial international acquisition requires less funds

because only a portion of the foreign target's shares are purchased. With this type of investment, the foreign target normally continues operating and may not experience the employee turnover that commonly occurs after a target's ownership changes. Nevertheless, by acquiring a substantial fraction of the shares, the MNC may have some influence on the target's management and be in a position to complete the acquisition in the future. Some MNCs buy substantial stakes in foreign companies to have some control over their operations. For example, Coca-Cola has purchased stakes in many foreign bottling companies that bottle its syrup. In this way, it can ensure that the bottling operations meet its standards.

**Valuation of a foreign firm that may be partially acquired.** When an MNC considers a partial acquisition in which it will purchase sufficient shares so that it can control the firm, the MNC can conduct its valuation of the target in much the same way as when it purchases the entire firm. If the MNC buys only a small proportion of the firm's shares, however, the MNC cannot restructure the firm's operations to make it more efficient. Therefore, its estimates of the firm's cash flows must be made from the perspective of a passive investor rather than as a decision-maker for the firm.

## International acquisitions of privatized businesses

In recent years, government-owned businesses of many developing countries in Eastern Europe and South America have been sold to individuals or corporations. Many MNCs have capitalized on this wave of so-called privatization by acquiring businesses being sold by governments. These businesses may be attractive because of the potential for MNCs to increase their efficiency.

**Valuation of a privatized business.** An MNC can conduct a valuation of a foreign business that was owned by the government in a developing country by using capital budgeting analysis, as illustrated earlier. However, the valuation of such businesses is difficult for the following reasons:

- The future cash flows are very uncertain because the businesses were previously operating in environments of little or no competition. Thus, previous sales volume figures may not be useful indicators of future sales.
- Data concerning what businesses are worth are very limited in some countries because there are not many publicly traded firms in their markets, and there is limited disclosure of prices paid for targets in other acquisitions. Consequently, there may not be any benchmarks to use when valuing a business.
- Economic conditions in these countries are very uncertain during the transition to a market-oriented economy.
- Political conditions tend to be volatile during the transition, as government policies for businesses are sometimes unclear or subject to abrupt changes.
- If the government retains a portion of the firm's equity, it may attempt to exert some control over the firm. Its objectives may be very different from those of the acquirer, a situation that could lead to conflict.

Hungary serves as a model country for privatizations. More than 25 000 MNCs have a foreign stake in Hungary's businesses. Hungary's government has been quick and efficient at selling off its assets to MNCs.

## International alliances

MNCs commonly engage in international alliances such as joint ventures and licensing agreements with foreign firms. International alliances are quite different from international acquisitions. The initial outlay is typically smaller because the MNC is not acquiring a foreign firm, and the cash flows to be received are typically smaller as well.

## EXAMPLE

Lasceaux Sarl (French) plans to provide a Brazilian firm with technology. In return, the Brazilian firm will pay royalties amounting to 10% of its future sales of products resulting from use of this technology over the next five years. Lasceaux's initial outlay for this international alliance is the initial expense incurred as a result of providing the technology. Lasceaux can estimate the cash flows to be received from the Brazilian firm by

first forecasting the Brazilian firm's annual sales (in Brazilian real) of products based on the technology. Lasceaux will receive 10% of this amount. Then, it must forecast the value of the real over each of the next five years so that it can determine the euro cash flows resulting from these royalties. It must also consider any tax effects.

## International divestitures

An MNC should periodically reassess its direct foreign investments to determine whether they should be retained or sold (divested). Some foreign projects may no longer be feasible as a result of the MNC's increased cost of capital, increased host government taxes, increased political risk in the host country, or revised projections of exchange rates. Many divestitures occur as a result of a revised assessment of industry or economic conditions. For example, Warner-Lambert Co, Johnson & Johnson, and several other US-based MNCs recently divested some of their Latin American subsidiaries when economic conditions deteriorated there.

<http://>

Visit the World Bank's website at <http://www.worldbank.org> for data on socioeconomic development and performance indicators as well as links to statistical and project-oriented publications and analyses.

**Assessing whether to divest existing operations in Asia.** During the Asian crisis in the 1997–98 period, some MNCs with direct foreign investment in Asia reassessed the feasibility of their existing operations. The expected cash flows that these operations would generate for the parent had declined in many cases for two obvious reasons. First, the rate of economic growth in Asia declined, which led to a decline in expected local sales by the foreign subsidiaries and therefore a decline in the expected level of foreign currency cash flow. Second, the weak currencies of Asian countries led to a decline in the expected amount of the parent's currency to be received when foreign subsidiaries in Asian countries remitted funds. At the same time, however, market valuations had declined so much that any operations could be divested only if the parent was willing to sell them at a low price. The low prices deterred some divestitures.

**Valuation of an international project that may be divested.** The valuation of a proposed international divestiture can be determined by comparing the present value of the cash flows if the project is continued to the proceeds that would be received (after taxes) if the project is divested.

## EXAMPLE

Reconsider the example from the previous chapter in which Spartan Ltd considered establishing a Singapore subsidiary. Assume that the Singapore subsidiary was created and, after two years, the spot rate of the Singapore dollar (S\$) is £0.33. In addition, forecasts have been revised for the remaining two years of the project, indicating that the Singapore dollar should be worth £0.29 in Year 3 and £0.27 in the project's final year. Because these forecasted exchange rates have an adverse effect on the project, Spartan considers divesting the subsidiary. For simplicity, assume that the original forecasts of the other variables remain unchanged and that a potential acquirer has offered S\$13 million (after adjusting for any capital gains taxes) for the subsidiary if the acquirer can retain the existing working capital.

Spartan can conduct a divestiture analysis by comparing the after-tax proceeds from the possible sale of the project (in pounds) to the present value of the expected pound inflows that the project will generate if it is not sold. This comparison will determine the net present value of the divestiture ( $NPV_d$ ), as illustrated in Exhibit 1.4. Since the present value of the subsidiary's cash flows from Spartan's perspective exceeds the price at which it can sell the subsidiary, the divestiture is not feasible. Thus, Spartan should not divest the subsidiary at the price offered. Spartan may still search for another firm that is willing to acquire the subsidiary for a price that exceeds its present value.

## RESTRUCTURING DECISIONS AS REAL OPTIONS

Some restructuring issues faced by MNCs involve **real options**, or implicit options on real assets (such as buildings, machinery and other assets used by MNCs to facilitate their production). A real option can be classified as a call option on real assets or a put option on real assets, as explained next.

EXHIBIT 1.4 Divestiture analysis Spartan Ltd

	End of year 2 (today)	End of year 3 (one year from today)	End of year 4 (two years from today)
16. S\$ remitted after withholding taxes		S\$6 840 000	S\$7 560 000
17. Salvage value			S\$12 000 000
Selling price	S\$13 000 000		
<b>18. Exchange rate of S\$</b>	<b>£0.33</b>	<b>£0.29</b>	<b>£0.27</b>
<b>19a. Cash flows to parent (if divested)</b>	<b>£4 290 000</b>		
<b>19b. Cash flows to parent (if not divested)</b>		<b>£1 983 600</b>	<b>£5 281 200</b>
<b>20a. PV of parent cash flows (if divested)</b>	<b>£4 290 000</b>		
<b>20b. PV of parent cash flows if not divested (15% discount rate)</b>		<b>(£1 724 870 + £4 401 663) = 6.126.533</b>	
<b>Divest – retain</b>	<b>£4 290 000 – 6 126 533 = –£1 836 533</b>		



## Call option on real assets

A **call option on real assets** represents a proposed project that contains an option of pursuing an additional venture that may or may not be undertaken. The additional venture has in some sense to rely on the original project being undertaken. Some possible forms of restructuring by MNCs contain a call option on real assets. Multinational capital budgeting can be conducted in a manner to account for the option.

### EXAMPLE

Coral plc, a clothing firm in the United Kingdom, is considering the acquisition of a clothing manufacturer in Morocco. Coral estimates and discounts the expected pound cash flows that would result from acquiring this business and compares them to the initial outlay. At this time, the present value of the future cash flows that are directly attributable to the Moroccan business is slightly lower than the initial outlay that would be required to purchase that business, so the business appears to be an unprofitable investment.

A Brazilian clothing firm is also likely to come up for sale in the following year for a given value, but its owners will only sell the business to a firm that they know and trust, and Coral plc has no relationship with this business. A possible advantage of the Moroccan firm that is not measured by the traditional multinational capital budgeting analysis is that it frequently does business with the Brazilian firm and could use its relationship to help Coral acquire the Brazilian firm. If Coral purchases the Moroccan business, it estimates that in about one year's time it will in effect have an option to also acquire the clothing firm in Brazil. In essence, Coral will have a call option on real assets (of the Brazilian firm), because it will have the option (not the obligation) to purchase the Brazilian firm.

The extra or premium that Coral would be willing to pay for the right to bid for the Brazilian firm is an extra benefit for the Moroccan investment – it is a hidden benefit that should be included in the original calculations.

The difficulty is in valuing this option. If the clothing market prospers, Coral should value the Brazilian cash flows with a low risk discount and almost certainly

take up the option. If the clothing market is subsequently poor it should apply a higher risk discount and possibly not take up the option. In the terminology of options (see earlier chapters) the expected purchase price of the Brazilian firm serves as the exercise or strike price in the call option on real assets. Coral's valuation serves as the spot price on maturity of the option and the premium is the benefit that Coral has acquired in having this option when taking over the Moroccan firm.

In theory the Black Scholes option pricing model can be used to estimate the value of the option. The problem with using the model is that whereas in a financial market context many of the input variables can be estimated from data, in a real investment context, input variables are subject to as much uncertainty as the object of estimation (i.e. the premium). Thus, in this case, the value of the Brazilian firm has to be estimated as does the volatility of the market, however defined. There are also further complications if the exercise price is not wholly independent of Coral's valuation (the spot); this seems likely in that if the market is good, the price for the Brazilian firm is likely to be higher.

The true value of the option approach is to highlight possible avenues that would otherwise not be available and to alert investors to the value of having the option to take up these opportunities. The Black Scholes approach to valuing such options is in many ways problematic and MNCs would do well to evaluate possible scenarios and use probability to approximate the expected benefits.

## Put option on real assets

A **put option on real assets** represents a proposed project that contains an option of divesting part or all of the project. As with a call option on real assets, a put option on real assets can be accounted for by multinational capital budgeting.

## EXAMPLE

Jade Ltd, a UK office supply firm, is considering the acquisition of a similar business in Italy. Jade believes that if future economic conditions in Italy are favourable, the net present value of this project is positive. However, given that weak economic conditions in Italy are more likely, the proposed project appears to be unprofitable.

Assume now that Jade knows that it has the option to sell the Italian firm at a specified price to another firm over the next four years. In this case, Jade has an implied put option attached to the project.

Jade can treat the option to sell as a put option where the selling price is the strike or exercise price, the actual value of the firm is the spot price and the

premium is the value of this option. Jade should add the value of the option (i.e. the premium) to the net present value of the project before coming to a decision. Analysis as to the direct application of option theory to value the option is the same as for the above call option example. To have a guaranteed price over the next four years irrespective of actual market conditions is indeed a valuable offer that would for most investors affect the valuation of the Italian business. The valuation process can be entirely subjective, use the Black Scholes model with subjective input or employ the scenario approach – all with approximate results. The benefit of analysis is that it will have structured the decision and indicated approximate value.

## SUMMARY

- International acquisitions are one of the most common types of multinational restructuring. MNCs can use capital budgeting to determine whether a foreign target is worth acquiring. The expected cash flows of a foreign target are affected by target-specific factors (such as the target's previous cash flows and its managerial talent) and country-specific factors (such as economic conditions, political conditions, currency conditions, and stock market conditions).
- In the typical valuation process, an MNC initially screens prospective targets based on willingness to be acquired and country barriers. Then, each prospective target is valued by estimating its cash flows, based on target-specific characteristics and the target's country characteristics, and by discounting the expected cash flows. Then the perceived value is compared to the target's market value to determine whether the target can be purchased at a price that is below the perceived value from the MNC's perspective.
- Valuations of a foreign target may vary among potential acquirers because of differences in estimates of the target's cash flows or exchange rate movements or differences in the required rate of return among acquirers. These differences may be especially pronounced when the acquirers are from different countries.
- Besides international acquisitions of firms, the more common types of multinational restructuring include international partial acquisitions, international acquisitions of privatized businesses, international alliances (such as international licensing or joint ventures), and international divestitures. Each of these types of multinational restructuring can be assessed by applying multinational capital budgeting.

## CRITICAL DEBATE

### Can a foreign target be assessed like any other asset?

**Proposition.** Yes. The value of a foreign target to an MNC is the present value of the future cash flows to the MNC. The process of estimating a foreign target's value is the same as the process of estimating a machine's value. A target has expected cash flows, which can be derived from information about previous cash flows.

**Opposing view.** No. A target's behaviour will change after it is acquired by an MNC. Its efficiency may improve depending on the ability of the MNC to integrate the target with its own operations. The MNC's performance may also change. It is not enough to just have one valuation figure. A range of possible scenarios must be considered.

**With whom do you agree?** Which argument do you support? Offer your own opinion on this issue.

## SELF TEST

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

- 1 Explain why more acquisitions have taken place in Europe in recent years.
- 2 What are some of the barriers to international acquisitions?
- 3 Why might MNCs prefer to establish a foreign subsidiary rather than acquire an existing firm in a foreign country?

- 4 Provoke Ltd (based in the UK), has been considering the divestiture of a Swedish subsidiary that produces ski equipment and sells it locally. A Swedish firm has already offered to acquire this Swedish subsidiary. Assume that the UK parent has just revised its projections of the Swedish krona's value downward. Will the proposed divestiture now seem more or less feasible than it did before? Explain.

## QUESTIONS AND APPLICATIONS

- 1 **Motives for restructuring.** Why do you think MNCs continuously assess possible forms of multinational restructuring, such as foreign acquisitions or downsizing of a foreign subsidiary?
- 2 **Exposure to country regulations.** Maude Ltd a UK-based MNC, has recently acquired a firm in Singapore. To eliminate inefficiencies, Maude downsized the target substantially, eliminating two-thirds of the workforce. Why might this action affect the regulations imposed on the subsidiary's business by the Singapore government?
- 3 **Global expansion strategy.** Toki Ltd a UK-based MNC, is considering expanding into Thailand because of decreasing profit margins in the UK. The demand for Toki's product in Thailand is very strong. However, forecasts indicate that the baht is expected to depreciate substantially over the next three years. Should Toki expand into Thailand? What factors may affect its decision?
- 4 **Alternatives to international acquisitions.** Rastelle SA, a French-based MNC, is considering the acquisition of a Russian target to produce personal computers (PCs) and market them throughout Russia, where demand for PCs has increased substantially in recent years. Assume that the stock market conditions are not favourable in Russia, as the stock prices of most Russian companies rose substantially just prior to Rastelle's assessment of the target. What are some alternatives available to Rastelle?
- 5 **Comparing international projects.** Savannah SA (Spain), a manufacturer of clothing, wants to increase its market share by acquiring a target producing a popular clothing line in the US. This clothing line is well established. Forecasts indicate a relatively stable dollar over the life of the project. Marquette SA wants to increase its market share in the personal computer market by acquiring a target in Thailand that currently produces radios and converting the operations to produce PCs. Forecasts indicate a depreciation of the

baht over the life of the project. Funds resulting from both projects will be remitted to the respective Spanish parents on a regular basis. Which target do you think will result in a higher net present value? Why?

**6 Privatized business valuations.** Why are valuations of privatized businesses previously owned by the governments of developing countries more difficult than valuations of existing firms in developed countries?

**7 Valuing a foreign target.** Blore plc a UK-based MNC, has screened several targets. Based on economic and political considerations, only one eligible target remains in Malaysia. Blore would like you to value this target and has provided you with the following information:

- Blore expects to keep the target for three years, at which time it expects to sell the firm for 300 million Malaysian ringgit (MYR) after any taxes.
- Blore expects a strong Malaysian economy. The estimates for revenue for the next year are MYR200 million. Revenues are expected to increase by 8% in each of the following two years.
- Cost of goods sold is expected to be 50% of revenue.
- Selling and administrative expenses are expected to be MYR30 million in each of the next three years.
- The Malaysian tax rate on the target's earnings is expected to be 35%.
- Depreciation expenses are expected to be MYR20 million per year for each of the next three years.
- The target will need MYR7 million in cash each year to support existing operations.

- The target's stock price is currently MYR30 per share. The target has 9 million shares outstanding.
- Any remaining cash flows will be remitted by the target to Blore plc. Blore uses the prevailing exchange rate of the Malaysian ringgit as the expected exchange rate for the next three years. This exchange rate is currently £0.25.
- Blore's required rate of return on similar projects is 20%.
  - a Prepare a worksheet to estimate the value of the Malaysian target based on the information provided.
  - b Will Blore plc be able to acquire the Malaysian target for a price lower than its valuation of the target?

**8 Uncertainty surrounding a foreign target.** Refer to question 7. What are some of the key sources of uncertainty in Blore's valuation of the target? Identify two reasons why the expected cash flows from an Asian subsidiary of a UK-based MNC would have been lower as a result of the Asian crisis.

**9 Divestiture strategy.** The reduction in expected cash flows of Asian subsidiaries as a result of the Asian crisis likely resulted in a reduced valuation of these subsidiaries from the parent's perspective. Explain why a European-based MNC might not have sold its Asian subsidiaries.

**10 Why a foreign acquisition may backfire.** Provide two reasons why an MNC's strategy of acquiring a foreign target will backfire. That is, explain why the acquisition might result in a negative *NPV*.

## ADVANCED QUESTIONS

**11 Pricing a foreign target.** Alaska Ltd would like to acquire Estoya EIRL which is located in Peru. In initial negotiations, Estoya has asked for a purchase price of 1 billion Peruvian new sol. If Alaska completes the purchase, it would keep Estoya's operations for two years and then sell the company. In the recent past, Estoya has generated annual cash flows of 500 million new sol per year, but Alaska believes that it can increase these cash flows by 5% each year by improving the operations of the plant. Given these improvements, Alaska believes it will be able to resell Estoya in two years for 1.2 billion new sol. The current exchange rate of the new sol is £0.19, and

exchange rate forecasts for the next two years indicate values of £0.19 and £0.18, respectively. Given these facts, should Alaska Ltd pay 1 billion new sol for Estoya Corp. if the required rate of return is 18%? What is the maximum price Alaska should be willing to pay?

**12 Global strategy.** Senser GmbH (Germany) established a subsidiary in Russia two years ago. Under its original plans, Senser intended to operate the subsidiary for a total of four years. However, it would like to reassess the situation, since exchange rate forecasts for the Russian rouble indicate that it may

depreciate from its current level of 0.033 euros to 0.028 euros next year and to 0.025 euros in the following year. Senser could sell the subsidiary today for 5 million roubles to a potential acquirer. If Senser continues to operate the subsidiary, it will generate cash flows of 3 million roubles next year and 4 million roubles in the following year. These cash flows would be remitted back to the parent in Germany. The required rate of return of the project is 16%. Should Senser continue operating the Russian subsidiary?

- 13 Divestiture decision.** Collumpton Springs Ltd plans to divest either its Singapore or its Canadian subsidiary. Assume that if exchange rates remain constant, the pound cash flows each of these subsidiaries would provide to the parent over time would be somewhat similar. However, the firm expects the Singapore dollar to depreciate against the British pound, and the Canadian dollar to appreciate against the pound. The firm can sell either subsidiary for about the same price today. Which one should it sell?
- 14 Divestiture decision.** San Gabriel SA (Spain) recently considered divesting its Italian subsidiary and determined that the divestiture was not feasible. The required rate of return on this subsidiary was 17%. In the last week, San Gabriel's required return on that subsidiary increased to 21%. If the sales price of the subsidiary has not changed, explain why the divestiture may now be feasible.
- 15 Divestiture decision.** Ethridge plc has a subsidiary in India that produces products and sells them throughout Asia. In response to a recent downturn in domestic sales Ethridge decided to conduct a capital

budgeting analysis to determine whether it should divest the subsidiary. Why might this decision be different if Ethridge were doing well? Describe the general method for determining whether the divestiture is financially feasible.

- 16 Feasibility of a divestiture.** Flowerdew Ltd has a subsidiary in Bulgaria that it fully finances with its own equity. Last week, a firm offered to buy the subsidiary from Flowerdew for £60 million in cash, and the offer is still available this week as well. The annualized long-term risk-free rate in the United Kingdom increased from 7% to 8% this week. The expected monthly cash flows to be generated by the subsidiary have not changed since last week. The risk premium that Flowerdew applies to its projects in Bulgaria was reduced from 11.3% to 10.9% this week. The annualized long-term risk-free rate in Bulgaria declined from 23% to 21% this week. Would the NPV to Flowerdew from divesting this unit be more or less than the NPV determined last week? Why? (No analysis is necessary, but make sure that your explanation is very clear.)
- 17 Accounting for government restrictions.** Sunveldt NV (Dutch) plans to purchase a firm in Indonesia. It believes that it can install its operating procedure in this firm, which would significantly reduce the firm's operating expenses. However, the Indonesian government may approve the acquisition only if Sunveldt does not lay off any workers. How can Sunveldt possibly increase efficiency without laying off workers? How can Sunveldt account for the Indonesian government's position as it assesses the NPV of this possible acquisition?

## PROJECT WORKSHOP

- 18 Current events affecting MNCs.** Use an online news source to review international events in the last week. Select three economic events that could affect economic or political conditions in foreign countries and explain how an MNC might restructure its business in response to these events. Would the MNC increase or reduce its business in that country due to that event?
- 19** Go to the web page of the United Nations Conference on Trade and Development <http://www.unctad.org> and enter on the search box: 'OFDI' and the name of the country, e.g. Argentina or Russia. Look for a pdf report on outward foreign investment from that country. From the report summarize the motives for FDI and the examples given. Consider the motives and rank them in order of importance giving your reasons.



## DISCUSSION IN THE BOARDROOM

This exercise can be found on the companion website at [www.cengagelearning.co.uk/madura\\_fox2e](http://www.cengagelearning.co.uk/madura_fox2e).

## RUNNING YOUR OWN MNC

This exercise can be found on the companion website at [www.cengagelearning.co.uk/madura\\_fox2e](http://www.cengagelearning.co.uk/madura_fox2e).

## BLADES PLC CASE STUDY

### *Assessment of an acquisition in Thailand*

Recall that Ben Holt, Blades' financial director, has suggested to the board of directors that Blades proceed with the establishment of a subsidiary in Thailand. Due to the high growth potential of the roller blade market in Thailand, his analysis suggests that the venture will be profitable. Specifically, his view is that Blades should establish a subsidiary in Thailand to manufacture roller blades, whether an existing agreement with Entertainment Products (a Thai retailer) is renewed or not. Under this agreement, Entertainment Products is committed to the purchase of 180 000 pairs of 'Speedos', Blades' primary product, annually. The agreement was initially for three years and will expire two years from now. At this time, the agreement may be renewed. Due to delivery delays, Entertainment Products has indicated that it will renew the agreement only if Blades establishes a subsidiary in Thailand. In this case, the price per pair of roller blades would be fixed at 4594 Thai baht per pair. If Blades decides not to renew the agreement, Entertainment Products has indicated that it would purchase only 5000 pairs of Speedos annually at prevailing market prices.

According to Ben Holt's analysis, renewing the agreement with Entertainment Products and establishing a subsidiary in Thailand will result in a net present value (*NPV*) of some £1 760 000. Conversely, if the agreement is not renewed and a subsidiary is established, the resulting *NPV* is about £5 830 000. Consequently, Holt has suggested to the board of directors that Blades establish a subsidiary without renewing the existing agreement with Entertainment Products.

Recently, a Thai roller blade manufacturer called Skates'n'Stuff contacted Holt regarding the potential sale of the company to Blades. Skates'n'Stuff entered the Thai roller blade market a decade ago and has generated a profit in every year of operation. Furthermore, Skates'n'Stuff has established distribution channels in Thailand. Consequently, if Blades acquires the company, it could begin sales immediately and would not require an additional year to build the plant in Thailand. Initial forecasts indicate that Blades would be able to sell 280 000 pairs of roller blades annually. These sales are incremental to the acquisition of Skates'n'Stuff.

Furthermore, all sales resulting from the acquisition would be made to retailers in Thailand. Blades' fixed expenses would be 20 million baht annually. Although Holt has not previously considered the acquisition of an existing business, he is now wondering whether acquiring Skates'n'Stuff may be a better course of action than building a subsidiary in Thailand.

Holt is also aware of some disadvantages associated with such an acquisition. Skates'n'Stuff's CFO has indicated that he would be willing to accept a price of 1 billion baht (one thousand million) in payment for the company, which is clearly more expensive than the 550 million baht outlay that would be required to establish a subsidiary in Thailand. However, Skates'n'Stuff's CFO has indicated that it is willing to negotiate. Furthermore, Blades' employs a high-quality production process, which enables it to charge relatively high prices for roller blades produced in its plants. If Blades acquires Skates'n'Stuff, which uses an inferior production process (resulting in lower quality roller blades), it would have to charge a lower price for the roller blades it produces there. Initial forecasts indicate that Blades will be able to charge a price of 4500 Thai baht per pair of roller blades without affecting demand. However, because Skates'n'Stuff uses a production process that results in lower-quality roller blades than Blades' Speedos, operating costs incurred would be similar to the amount incurred if Blades establishes a subsidiary in Thailand. Thus, Blades estimates that it would incur operating costs of about 3500 baht per pair of roller blades.

Ben Holt has asked you, a financial analyst for Blades plc, to determine whether the acquisition of Skates'n'Stuff is a better course of action for Blades than the establishment of a subsidiary in Thailand. Acquiring Skates'n'Stuff will be more favourable than establishing a subsidiary if the present value of the cash flows generated by the company exceeds the purchase price by more than £5 830 000, the *NPV* of establishing a new subsidiary. Thus, Holt has asked you to construct a spreadsheet that determines the *NPV* of the acquisition.

To aid you in your analysis, Holt has provided the following additional information, which he gathered



from various sources, including unaudited financial statements of Skates'n'Stuff for the last three years:

- Blades, requires a return on the Thai acquisition of 25%, the same rate of return it would require if it established a subsidiary in Thailand.
- If Skates'n'Stuff is acquired, Blades plc., will operate the company for ten years, at which time Skates'n'Stuff will be sold for an estimated 1.1 million baht.
- Of the 1 billion baht purchase price, 600 million baht constitutes the cost of the plant and equipment. These items are depreciated using straight-line depreciation. Thus, 60 million baht will be depreciated annually for ten years.
- Sales of 280 000 pairs of roller blades annually will begin immediately at a price of 4500 baht per pair.
- Variable costs per pair of roller blades will be 3500 per pair.
- Fixed operating costs, including salaries and administrative expenses, will be 20 million baht annually.
- The current spot rate of the Thai baht is \$0.023. Blades expects the baht to depreciate by an average of 2% per year for the next ten years.
- The Thai government will impose a 25% tax on income and a 10% withholding tax on any funds remitted by Skates'n'Stuff to Blades plc. Any earnings remitted to the United Kingdom will not be taxed again in the United Kingdom. All earnings generated by Skates'n'Stuff will be remitted to Blades plc.
- The average inflation rate in Thailand is expected to be 12% annually. Revenues, variable costs, and fixed costs are subject to inflation and are

expected to change by the same annual rate as the inflation rate.

In addition to the information outlined above, Ben Holt has informed you that Blades will need to manufacture all of the 180 000 pairs to be delivered to Entertainment Products this year and next year in Thailand. Since Blades previously only used components from Thailand (which are of a lower quality but cheaper than UK components) sufficient to manufacture 72 000 pairs annually, it will incur cost savings of 32.4 million baht this year and next year. However, since Blades will sell 180 000 pairs of Speedos annually to Entertainment Products this year and next year whether it acquires Skates'n'Stuff or not, Holt has urged you not to include these sales in your analysis. The agreement with Entertainment Product will not be renewed at the end of next year.

Ben Holt would like you to answer the following questions:

- 1 Using a spreadsheet, determine the *NPV* of the acquisition of Skates'n'Stuff. Based on your numerical analysis, should Blades establish a subsidiary in Thailand or acquire Skates'n'Stuff?
- 2 If Blades negotiates with Skates'n'Stuff, what is the maximum amount (in Thai baht) Blades should be willing to pay?
- 3 Are there any other factors Blades should consider in making its decision? In your answer, you should consider the price Skates'n'Stuff is asking relative to your analysis in question 1, other potential businesses for sale in Thailand, the source of the information your analysis is based on, the production process that will be employed by the target in the future, and the future management of Skates'n'Stuff.

## SMALL BUSINESS DILEMMA

### *Multinational restructuring by the Sports Exports Company*

The Sports Exports Company (Ireland) has been successful in producing basketballs in Ireland and exporting them to the United Kingdom. Recently, Jim Logan (owner of the Sports Exports Company) has considered restructuring his company by expanding throughout Europe. He plans to export basketballs and other sporting goods that were not already popular in Europe to one large sporting goods distributor in Germany; the goods will then be distributed to any retail sporting goods stores throughout Europe that are willing to purchase these goods. This distributor will make payments in euros to the Sports Exports Company.

- 1 Are there any reasons why the business that has been so successful in the United Kingdom will not necessarily be successful in other European countries?
- 2 If the business is diversified throughout Europe, will this substantially reduce the exposure of the Sports Exports Company to exchange rate risk?
- 3 Now that several countries in Europe participate in a single currency system, will this affect the performance of new expansion throughout Europe?