

CHAPTER 18

International Financial Management



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AFTER STUDYING THIS CHAPTER, YOU SHOULD BE ABLE TO:

1. Analyze the advantages and disadvantages of the major forms of payment in international trade.
2. Identify the primary types of foreign-exchange risk faced by international businesses.
3. Describe the techniques used by firms to manage their working capital.
4. Evaluate the various capital budgeting techniques used for international investments.
5. Discuss the primary sources of investment capital available to international businesses.

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SINGAPORE AIRLINES' WORLDWIDE FINANCIAL MANAGEMENT

Singapore Airlines lives or dies in the international market. It has no domestic market because the land mass of its home, the city-state of Singapore, is only 267 square miles (693 square kilometers). Singapore Airlines competes head-to-head against other major international carriers, including Air France, American Airlines, British Airways, Cathay Pacific, KLM, Japan Air Lines, United, and Qantas.

The foundation of Singapore Airlines' global success is its reputation for providing high-quality service. It has lured passengers of all nationalities to its flights, particularly highly valued business travelers, who are willing to pay a premium for safe and reliable service. Only 30 percent of its business is done within the friendly turf of East Asia. European operations account for 22 percent of its revenue, and flights to the Americas generate 20 percent. The carrier also provides West Asian, Pacific, and African services.

A truly international carrier, Singapore Airlines flies to more than 62 cities in 35 countries on all six inhabited continents. But its international success brings a major financial challenge—managing its holdings of dozens of currencies it uses in the normal conduct of business. Singapore Airlines receives from its customers a rainbow of currencies, including baht, ringgit, rupees, rand, krone, dollars (Australian, Canadian, Hong Kong,

New Zealand, and U.S.), as well as yen, yuan, pounds, Swiss francs, euros, and of course its home currency, the Singapore dollar. It also must pay in local currency for local services—landing fees, ground-handling services, travel agent commissions, and so on—in each country in which it does business.

Managing the firm's revenues, expenses, assets, and liabilities, all denominated in various foreign currencies, is a major task for Singapore Airlines' financial officers. To pay local expenses, they must maintain local-currency cash balances in each country. They also must search worldwide for sources of low-cost capital to modernize the firm's aircraft fleet and thereby maintain its reputation for high-quality service. In addition, they must protect the carrier from exchange rate fluctuations, which will change the value in its home currency that it receives for its services and the costs it incurs for aircraft, fuel, flight services, and ground handling. These executives must thoroughly understand how the contemporary international monetary system operates. They must monitor changes in the foreign-exchange market, be knowledgeable about potential shifts in government economic policies in their major markets, and constantly shop for the best credit terms in such capital markets as Amsterdam, London, Frankfurt, New York, Singapore, and Tokyo.¹ ■

In many business transactions, the receipt of goods by the buyer and the receipt of payment by the seller in a form the seller can use immediately do not coincide. Even when a customer pays for goods with a check, the seller will not have access to the funds until the check clears. Until then, the seller risks having the check returned because of insufficient funds. Thus, some type of financing and some degree of trust between buyer and seller are necessary to allow business transactions to occur.

Although these problems affect both domestic and international businesses, the problems of financing and credit checking are far greater for international transactions. Differences in laws, customs, financial practices, and currency convertibility among countries mean that an international firm must know the practices both of its home country and of each country in which it does business—or else hire experts who do. A firm also must acquire specific credit information about the foreign firms with which it wants to deal. On top of these problems is that of transacting in a foreign currency—a problem that either the buyer or the seller must face. Financial officers of international businesses such as Singapore Airlines are well aware of the challenges created by using different currencies. How international businesses address these myriad problems is the subject of this chapter.

Financial Issues in International Trade

We begin by considering the problems associated with financing international trade. In any business transaction, the buyer and the seller must negotiate and reach agreement on such basic issues as price, quantity, and delivery date. However, when the transaction involves a buyer and a seller from two countries, several other issues arise:

- Which currency to use for the transaction
- When and how to check credit
- Which form of payment to use
- How to arrange financing

Choice of Currency

One problem unique to international business is choosing the currency to use to settle a transaction. Exporters and importers usually have clear—and conflicting—preferences as to which currency to use. The exporter typically prefers payment in its home currency so it can know the exact amount it will receive from the importer. The importer generally prefers to pay in its home currency so it can know the exact amount it must pay the exporter. Sometimes an exporter and an importer may elect to use a third currency. For example, if both parties are based in countries with relatively weak or volatile local currencies, they may prefer to deal in a more stable currency such as the euro, the Japanese yen, or the U.S. dollar. By some estimates, more than 70 percent of the exports of less-developed countries and 85 percent of the exports of Latin American countries are invoiced using the U.S. dollar, whereas the exports of many of the new entrants into the European Union favor the euro.² In some industries one currency is customarily used to settle commercial transactions. In the oil and commercial aircraft industries, for instance, the U.S. dollar serves this function. Among the major exporting countries, the most common practice is for the exporter to invoice foreign customers using its home currency. However, smaller exporting countries may choose to use the currency of a major trading partner; most of Thailand's exports are invoiced in U.S. dollars, for example.

Credit Checking

Another critical financial issue in international trade concerns the reliability and trustworthiness of the buyer. If an importer is a financially healthy and reliable company and one with whom an exporter has had previous satisfactory business relations, the exporter may choose to simplify the payment process by extending credit to the importer. However, if the importer is financially troubled or known to be a poor credit risk, the exporter may demand a form of payment that reduces its risk.

In commercial transactions it is wise to check customers' credit ratings. For most domestic business transactions firms have simple and inexpensive mechanisms for doing this. In North America, for instance, firms may ask for credit references or contact established sources of credit information such as Dun & Bradstreet or Moody's. Similar sources are available in other countries; however, many first-time exporters are unaware of them. Fortunately, an exporter's domestic banker often can obtain credit information on foreign customers through the bank's foreign banking operations or through its correspondent bank in a customer's country. Most national government agencies in charge of export promotion also offer credit-checking services. For example, the International Trade Administration, a branch of the U.S. Department of Commerce, provides financial information about foreign firms for a fee. Numerous commercial credit-reporting services also are available. Country desk officers of the U.S. and Foreign Commercial Service are available to steer new exporters to these services.

The firm that ignores the credit-checking process may run into serious payment problems. For example, one small U.S. manufacturer exported \$127,000 worth of fan blades to a new customer in Africa. However, it failed to first contact any of the customer's credit references. Frustrated by the subsequent lack of payment, the manufacturer turned the account over to a collection agency, which discovered that the supposed customer had vanished and its credit references were nonexistent.³

Implicit in this discussion is an important lesson that many successful international businesspeople have learned the hard way. Because the physical and cultural gaps between the exporter and the importer are often large, finding partners, customers, and distributors with whom to build long-term, trusting relationships is invaluable to any international business.

Method of Payment

Parties to the international transaction normally negotiate a method of payment based on the exporter's assessment of the importer's creditworthiness and the norms of their industry. Many forms of payment have evolved over the centuries, including payment in advance, open account, documentary collection, letters of credit, credit cards, and countertrade. As with most aspects of finance, each form involves different degrees of risk and cost.

PAYMENT IN ADVANCE **Payment in advance** is the safest method of payment from the exporter's perspective: The exporter receives the importer's money before shipping the goods.

Financing Trade

Financing terms are often important in closing an international sale. In most industries standard financing arrangements exist, and an international firm must be ready to offer those terms to its foreign customers. Depending on the product, industry practice may be to offer the buyer 30 to 180 days to pay after receipt of an invoice. For the sale of complex products such as commercial aircraft, which will be delivered several years in the future, the payment terms may be much more complicated. They may include down payments, penalty payments for cancellation or late delivery, inflation clauses, and concessionary interest rates for long-term financing. In many emerging markets, capital markets are often not well developed, and local lenders may charge extremely high interest rates, especially to smaller borrowers. Thus, exporters with access to low-cost capital can gain a competitive advantage by offering financing to foreign customers who lack access to cheaper financing. Of course, by acting as a lender, the exporter increases the risk of not being paid for its goods. Before deciding to extend credit, the exporter must examine the trade-off between the benefits of increased sales and the higher risks of default.

As noted previously, banks and other commercial lenders often are willing to finance accounts receivable of exporters by purchasing letters of credit or time drafts or factoring open accounts at a discount from face value. Many developed countries supplement the services of these commercial lenders with government-supported financing programs to promote exports. For example, the Export-Import Bank of the United States (Eximbank) offers a working capital guarantee loan program to encourage U.S. exports. Under this program, commercial loans made to finance exportable inventory and foreign accounts receivable will be reimbursed 90 percent if the importer defaults on its obligations. Eximbank activities aided \$35.8 billion of exports in 2012. Eximbank has made a special effort to serve the needs of small businesses; in 2012, it provided \$6.1 billion of support for U.S. small businesses exports.¹⁸ Eximbank also offers medium-term loan guarantees (up to 7 years' duration) and long-term guarantees (more than 10 years' duration) for telecommunications, electrical generation, and transportation infrastructure projects.

In Practice

- A variety of financing techniques have developed to facilitate international trade. Selecting a technique often involves a tradeoff between the risk involved in the transaction and the fees charged by intermediaries such as banks.
- Many governments provide financing guarantees or reduced-rate loans to spur their countries' exports.

For further consideration: If you were a small business person involved in international trade, how important to the health of your business is having a good working relationship with a local banker?

Managing Foreign Exchange Risk

By using contracts denominated in a foreign currency, Singapore Airlines and other firms that conduct international business are exposed to the risk that exchange rate fluctuations may affect the firms adversely. Experts have identified three types of foreign-exchange exposure confronting international firms: transaction, translation, and economic.

Transaction Exposure

A firm faces **transaction exposure** when the financial benefits and costs of an international transaction can be affected by exchange rate movements that occur after the firm is legally obligated to complete the transaction. Many typical international business transactions denominated in a foreign currency can lead to transaction exposure, including the following:

- Purchase of goods, services, or assets
- Sales of goods, services, or assets

value of the loan to lock in an exchange rate of 2,650 rupiah per dollar for its loan repayments. In hindsight this turned out to be a fortunate move because within a year the rupiah had fallen in value by more than 70 percent against the dollar. Many of Indo-Rama's compatriots were not so farsighted—or perhaps were unwilling at the time to pay the 10 percent premium to lock in a forward rate for repayment of their debts. There is little doubt that the 1997–1998 Asian currency crisis was worsened by the failure of many Asian firms to manage their transaction exposure effectively.²⁰

Translation Exposure

As part of reporting its operating results to its shareholders, a firm must integrate the financial statements of its subsidiaries into a set of consolidated financial statements. Problems can arise, however, when the financial statements of a foreign subsidiary are denominated in a foreign currency rather than the firm's home currency. **Translation exposure** is the impact on the firm's consolidated financial statements of fluctuations in exchange rates that change the value of foreign subsidiaries as measured in the parent's currency. If exchange rates were fixed, translation exposure would not exist. (Because translation exposure develops from the need to consolidate financial statements into a common currency, it is often called *accounting exposure*.)

Consider this simple example of translation exposure. Suppose GM transfers \$20 million to Barclays Bank to open an account for a new British distribution subsidiary, General Motors Import & Distribution Company Ltd., so the subsidiary can begin operations. Further assume that the exchange rate on the day of the transfer is £1 = \$2.00. Thus, the subsidiary's sole asset is a bank account containing £10 million. If the value of the dollar were to rise to £1 = \$1.95, the subsidiary still would have £10 million. However, when GM's accountants prepare the firm's consolidated financial statements, its investment in the British subsidiary would be worth only \$19,500,000 (10 million pounds × \$1.95). GM thus would suffer a translation loss of \$500,000 (\$20,000,000 – \$19,500,000).

Financial officers can reduce their firm's translation exposure through the use of a balance sheet hedge. A **balance sheet hedge** is created when an international firm matches its assets denominated in a given currency with its liabilities denominated in that same currency. This balancing occurs on a currency-by-currency basis, not on a subsidiary-by-subsidiary basis. For example, Georgia-based AFLAC Inc. is the largest foreign provider of supplemental insurance in Japan. To protect its \$13.6-billion net investment in Japan from translation exposure, the company uses a two-pronged balance sheet hedge. Its Japanese insurance subsidiary owns \$8.3 billion of U.S. dollar-denominated securities. To finance its other operations, the parent corporation borrowed \$850 million worth of yen from Japanese lenders. Through these transactions, only a net \$4.4 billion of AFLAC's assets are vulnerable to translation exposure should the yen fall in value.²¹ The Walt Disney Company, Pfizer, Procter & Gamble, and McDonald's follow similar strategies to reduce their translation exposure.²²

A controversy exists among financial experts over whether or not firms should protect themselves from translation exposure. Some experts believe managers should ignore translation exposure and instead focus on reducing transaction exposure, arguing that transaction exposure can produce true cash losses to the firm, whereas translation exposure produces only paper, or accounting, losses. Other experts disagree, stating that translation exposure should not be ignored. For instance, firms forced to take write-downs of the value of their foreign subsidiaries may trigger default clauses in their loan contracts if their debt-to-equity ratios rise too high. Further, in AFLAC's case its Japanese operations are so large relative to the rest of the company—75 percent of its premium income is generated there—that the company feels compelled to manage its translation exposure.

Economic Exposure

The third type of foreign-exchange exposure is **economic exposure**, the impact on the value of a firm's operations of unanticipated exchange rate changes. From a strategic perspective, the threat of economic exposure deserves close attention from the firm's highest policy makers because it affects virtually every area of operations, including global production, marketing, and financial planning. Unanticipated exchange rate fluctuations may affect a firm's overall sales and profitability in numerous markets. In the first half of 2011, for example, the value of the yen

In Practice

- International businesses confront three types of foreign-exchange exposure: transaction, translation, and economic.
- Firms can reduce their transaction exposure by engaging in forward transactions, purchasing currency futures, buying currency options, or acquiring an offsetting asset.

For further consideration: Why do some firms go naked (i.e., choose not to protect themselves from transaction exposure)?

Management of Working Capital

Managing foreign-exchange exposure is related to another task that financial officers of international businesses perform—managing working capital, or cash, balances. This task is more complicated for MNCs than for purely domestic firms. An MNC's financial officers must consider the firm's working capital position for each of its foreign subsidiaries and in each currency in which the subsidiaries do business, as well as for the firm as a whole. Singapore Airlines, for instance, routinely uses more than 20 currencies in its operations, and its financial officers must monitor its holdings of each of these currencies. In the process, they must balance three corporate financial goals:

1. Minimizing working capital balances
2. Minimizing currency conversion costs
3. Minimizing foreign-exchange risk

Minimizing Working Capital Balances

Financial officers seek to minimize the firm's working capital balances. Both domestic and international firms must hold working capital for two reasons: to facilitate day-to-day transactions and to cover the firm against unexpected demands for cash. (Note that the term *cash* refers here to actual cash, checking account balances, and highly liquid marketable securities that normally carry low yields.) Obviously, a firm does not want to run out of cash on hand. Failure to have sufficient cash to pay workers or suppliers can lead, at a minimum, to expensive emergency borrowings or, in the worst case, to an embarrassing loss of reputation that may cause suppliers and lenders to cut off future lines of credit. However, the rate of return on working capital is extremely low, and financial officers prefer to capture higher rates of return, if possible, by investing surplus funds in some other form than cash. Thus, they need to balance the firm's needs for cash against the opportunity cost of holding the firm's financial assets in such low-yielding forms.

One technique MNCs can use to minimize their company-wide cash holdings is **centralized cash management**. A centralized cash manager, typically a member of the MNC's corporate treasury staff, coordinates the MNC's worldwide cash flows. Each of the MNC's subsidiaries sends to the centralized cash manager a daily cash report and an analysis of the subsidiary's expected cash balances and needs over the short run, which may range from a week to a month depending on the parent corporation's operating requirements. These reports then are assembled by the centralized cash manager's staff, who uses them to reduce the precautionary balances held by the corporation as a whole and to plan short-term investment and borrowing strategies for the MNC. Instead of each subsidiary holding precautionary, "just in case" cash balances, the staff may direct each subsidiary to send cash in excess of its operational needs to a central corporate bank account. The centralized cash manager will pool these funds, funneling them to subsidiaries when and if emergencies arise. The unexpected need for additional cash by one subsidiary often will be offset by an unexpected excess of cash generated by a second. Thus, the centralized cash manager is able to reduce the precautionary cash balances held by the firm as a whole and thereby reduce the amount of the firm's assets tied up in such a low-yielding form.

Further, the expertise of the centralized cash manager's staff can be used to seek out the best short-term investment opportunities available for the firm's excess cash holdings and to

monitor expected changes in the values of foreign currencies. By transferring these tasks from the subsidiaries to the parent corporation, this approach also reduces the number of highly trained, high-salaried financial specialists that the corporate family needs. It is more efficient and cost effective to concentrate such financial information gathering and decision making in one unit of the corporation, rather than compelling each subsidiary to develop such expertise in house.

Minimizing Currency Conversion Costs

International businesses face another complication. Their foreign subsidiaries may continually buy and sell parts and finished goods among themselves. For example, Samsung, Korea's largest *chaebol*, has major assembly plants as well as company-owned parts suppliers and distribution companies throughout the world. The constant transfer of parts and finished goods among Samsung subsidiaries generates a blizzard of invoices and a constant need to transfer funds among the subsidiaries' bank accounts. Cumulative bank charges for transferring these funds and converting the currencies involved can be high. For large transactions involving two major currencies, currency conversion fees and expenses may average 0.3 percent of the value of the transaction. For smaller-sized transactions or for transactions involving minor currencies with narrow markets, such fees and expenses can easily be three or four times higher.

Let us consider Samsung's operations in just three countries: Mexico, the United Kingdom, and South Korea. As depicted in Figure 18.3, the gross trade among the firm's subsidiaries in the three countries is \$21 million ($= 1 + 3 + 6 + 4 + 5 + 2$). (We have denominated their trade in a common currency—U.S. dollars—for simplicity.) If the costs of converting currencies total 0.5 percent of the transactions' value, Samsung would pay 0.5 percent times \$21 million, or \$105,000, to convert the currencies necessary to settle these transactions among its subsidiaries.

This cost can be cut considerably, however, if the subsidiaries engage in **bilateral netting**, in which two subsidiaries net out their mutual invoices. Consider Samsung's Mexican and British subsidiaries. Rather than have the Mexican subsidiary convert \$1 million worth of pesos into pounds and the British subsidiary convert \$3 million worth of pounds into pesos, it makes more sense for them to net out the difference. In this case, the British subsidiary simply should pay the Mexican subsidiary \$2 million in pesos, making them even. In similar fashion, the South Korean subsidiary can pay the British subsidiary \$2 million worth of pounds (\$6 million – \$4 million = \$2 million), and the Mexican subsidiary can pay the Korean subsidiary \$3 million worth of Korean won (\$5 million – \$2 million = \$3 million). By engaging in bilateral netting, Samsung reduces its currency conversion costs to \$35,000 (0.5 percent \times \$7 million).

Currency conversion costs can be reduced further if Samsung engages in **multilateral netting**, which is done among three or more business units. As shown in Table 18.3, the British subsidiary owes the equivalent of \$7 million to the other two subsidiaries but also is owed \$7 million by them. The South Korean subsidiary is owed \$9 million but owes

FIGURE 18.3
Payment Flows without
Netting

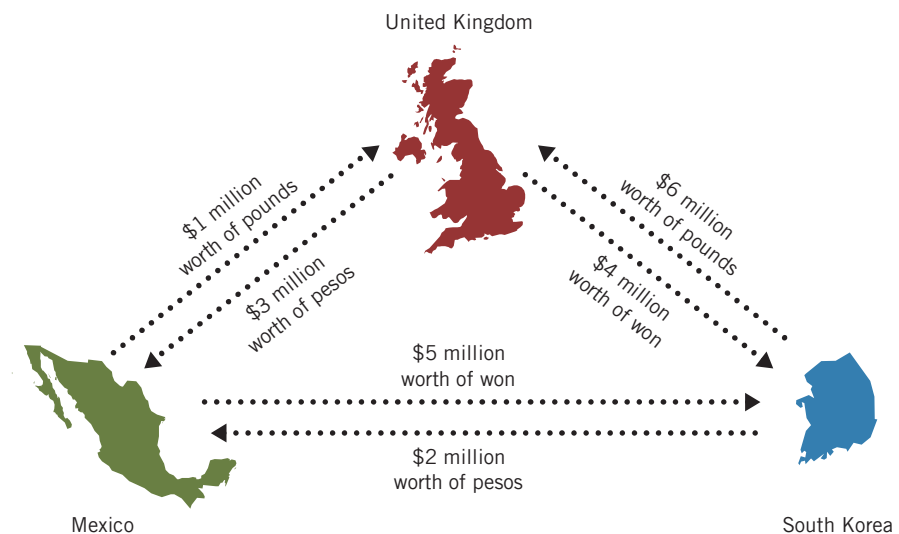


TABLE 18.3 Multilateral Netting in Action (All quantities in millions of U.S. dollar equivalents)

		Payments Owed by			Total Receipts	Net Transfer
		South Korean Subsidiary	Mexican Subsidiary	British Subsidiary		
Receipts due to	South Korean subsidiary	—	5	4	9	+ 1
	Mexican subsidiary	2	—	3	5	– 1
	British subsidiary	6	1	—	7	0
	Total payments	8	6	7	21	

\$8 million, for a net receipt of \$1 million. The Mexican subsidiary is owed \$5 million but owes \$6 million, for a net debt of \$1 million. When accompanied by the appropriate bookkeeping entries, all transactions among the three subsidiaries can be settled by the Mexican subsidiary transferring \$1 million worth of won to the South Korean subsidiary. Because only \$1 million is being converted physically in the foreign-exchange market and transferred through the banking system, Samsung's conversion costs shrink to \$5,000 (0.5 percent \times \$1 million) as a result of the multilateral netting operation.

In concept, multilateral netting differs little from what children do on the playground all the time: "David owes Karen a quarter, but Karen owes LaTisha 20 cents, so David owes LaTisha 20 cents and Karen 5 cents, and Karen doesn't owe anyone anything." To complicate matters, however, some countries impose restrictions on netting operations to support their local banking industries, which benefit from the fees charged for currency exchange. MNCs wanting to engage in netting operations often have to work around such government-imposed barriers.

Minimizing Foreign-Exchange Risk

Financial officers also typically adjust the mix of currencies that make up the firm's working capital to minimize foreign-exchange risk. Often firms use a **leads and lags strategy** to try to increase their net holdings of currencies that are expected to rise in value and to decrease their net holdings of currencies that are expected to fall in value. For example, if the Thai baht were expected to decline in value, the financial officers would try to minimize the MNC's baht-denominated liquid assets, perhaps by demanding quicker (or *leading*) payment on baht-denominated accounts receivable or by reducing baht-denominated bank balances. The officers also would try to increase the firm's baht-denominated short-term liabilities, perhaps by slowing (or *lagging*) payment on baht-denominated accounts payable or by increasing short-term borrowing from Thai banks. Conversely, if the Mexican peso were expected to rise in value, the financial officers would try to maximize the firm's net holdings of pesos through reverse techniques.

Avon adopted these tactics as the Asian currency crisis worsened in late 1997. It bought most of the raw materials needed by its Asian factories locally; the working capital needs of these factories were supplied by local banks with the loans repayable in the local currency. Avon thus increased its liabilities denominated in weakened currencies like the Indonesian rupiah, the Malaysian ringgit, and the Philippine peso. Its Asian subsidiaries were required to repatriate their earnings to headquarters on a weekly basis rather than on the monthly basis they had used previously. In this way Avon minimized its holdings of these vulnerable currencies.²⁵

In summary, an MNC's financial officers face a complex task. They must ensure each subsidiary maintains sufficient cash balances to meet expected ordinary day-to-day cash outflows, as well as an appropriate level of precautionary balances to respond quickly to sudden, unexpected increases in cash outflow. They also must balance each subsidiary's expected and unexpected demands for cash against the opportunity cost of holding the firm's financial assets in such low-yielding forms, while simultaneously controlling working capital-related currency conversion costs and foreign-exchange risk. Typically, such tasks are performed by a single unit of the firm, such as the treasury department of the parent corporation. For example, Tate & Lyle, a large British food processor, has followed this approach. Its centralized treasury provides cash

management, in-house banking, currency conversion, and foreign-exchange risk management services for all of the company's far-flung subsidiaries. Its centralized treasury handles more than \$6 billion of intracorporate cash flows a year.²⁶

In Practice

- Corporate treasurers for international businesses face the complex tasks of minimizing working capital balances while simultaneously minimizing currency conversion costs and foreign-exchange risk.
- Most MNCs engage in currency netting operations to control their currency conversion costs.

For further consideration: These currency netting operations are conducted at the corporate level, not on a subsidiary by subsidiary basis. Why?

International Capital Budgeting

Another task that financial officers of any business face is capital budgeting. Firms have limited funds for investment and often a seemingly endless set of projects from which to choose. Financial officers must establish mechanisms for developing, screening, and selecting projects in which the firm will make significant new investments. Numerous approaches for evaluating investment projects are available, but the most commonly used methods include net present value, internal rate of return, and payback period.

Net Present Value

The net present value approach is based on a basic precept of finance theory that a dollar today is worth more than a dollar in the future. To calculate the net present value of a project, a firm's financial officers estimate the cash flows the project will generate in each time period and then discount them back to the present. For many projects, the cash flow in the early years will be negative because the firm must outlay cash for the initial investment and be prepared to suffer start-up operating losses in the first year or two. In later years, of course, the firm expects cash flows to be positive. Financial officers must decide which interest rate, called the *rate of discount*, to use in the calculation, based on the firm's cost of capital. For example, if the firm's cost of capital is 10 percent, then financial officers will use an annual interest rate of 10 percent to discount the cash flows generated by the project through time to calculate the present value. The firm will undertake only projects that generate a positive net present value.

The net present value approach can be used for both domestic and international projects. However, several additional factors must be considered when determining whether to undertake an international project. These factors are risk adjustment, currency selection, and choice of perspective for the calculations.

RISK ADJUSTMENT Because a foreign project may be riskier than a domestic project, international businesses may adjust either the discount rate upward or the expected cash flows downward to account for a higher level of risk. The amount of risk adjustment should reflect the degree of riskiness of operating in the country in question. For example, little if any risk adjustment is needed for Germany because of its political stability, well-respected court system, and superb infrastructure. In contrast, civil war in Syria and political conflict in Egypt warrant the use of much larger risk adjustments for potential investments in those countries.

CHOICE OF CURRENCY The determination of the currency in which the project should be evaluated depends on the nature of the investment. If the project is an integral part of the business of an overseas subsidiary, use of the foreign currency is appropriate. For example, GM's German subsidiary Adam Opel AG invested millions of German marks to build a new factory in Eisenach, Germany, in the 1990s. Constructing the plant was central to Opel's overall business plan,

and the subsidiary's financial officers thus made the net present value calculation in German marks. For foreign projects that are more properly viewed as integrated parts of a firm's global procurement strategy, translation into the home country currency may make sense. For instance, Hewlett-Packard allocates production between its U.S. and foreign factories as part of an overall strategy of global reduction of production costs. If Hewlett-Packard invests £10 million to expand the output of its Czech production facilities, it should calculate the project's net present value in U.S. dollars instead of Czech koruna. To do this, it must estimate revenues and costs for the project and then convert them into dollars. It also must account for any expected changes in the exchange rate between the dollar and the koruna over the life of the project.

WHOSE PERSPECTIVE: PARENT'S OR PROJECT'S? Another factor is determining whether the cash flows that contribute to the net present value of the capital investment should be evaluated from the perspective of the parent or that of the individual project. In practice, some international businesses analyze the cash flows of the individual project, others focus on the project's impact on the parent, and others do both.²⁷

The cash flows to the parent can differ from those to the project for several reasons. MNCs often impose arbitrary accounting charges on the revenues of their operating units for the units' use of corporate trademarks or to cover general corporate overhead. These arbitrary charges may reduce the *perceived* cash flows generated by the project but not the *real* cash flows returned to the parent. For example, suppose that when the corporate parent's accountants are calculating a subsidiary's profitability, they routinely assess a 5-percent fee against revenues for general corporate and administrative expenses. This technique may be a reasonable mechanism for allocating general corporate expenses across all the firm's operations. The 5-percent charge, however, does not represent a true drain on the cash flow generated by the subsidiary. Thus, the charge should be ignored in the calculation of the net present value to the parent of a project the subsidiary proposes. Similarly, fees assessed against the subsidiary for the use of corporate trademarks, brand names, or patents should not be considered in the net present value calculation because the parent firm incurs no additional costs regardless of whether the subsidiary undertakes the project.

Financial officers also must consider any governmental restrictions on currency movements that would affect the firm's ability to repatriate profits when it wants. A project proposed by a foreign subsidiary may be enormously profitable, but if the profits can never be repatriated to the parent, the project may not be desirable from the perspective of the parent and its shareholders. The importance of currency controls in determining the attractiveness of a project also may be a function of the parent's overall strategy. For example, PepsiCo has made a long-term commitment to the Ukrainian soft-drink market. Any current Ukrainian restrictions on profit repatriation are of little concern to PepsiCo and its shareholders because the firm expects to increase its investments in the country in the short and medium term. However, PepsiCo's shareholders would be concerned if the firm were never allowed to repatriate profits from its Ukrainian operations.

Internal Rate of Return

A second approach commonly used for evaluating investment projects is to calculate the internal rate of return. With this approach, financial officers first estimate the cash flows generated by each project under consideration in each time period, as in the net present value analysis. They then calculate the interest rate—called the *internal rate of return*—that makes the net present value of the project just equal to zero. As with the net present value approach, the financial officers must adjust their calculations for any accounting charges that have no cash flow implications (intracorporate licensing fees, overhead charges for general corporate and administrative expenses, and so on). They then compare the project's internal rate of return with the **hurdle rate**—the minimum rate of return the firm finds acceptable for its capital investments. The hurdle rate may vary by country to account for differences in risk. The firm will undertake only projects for which the internal rate of return is higher than the hurdle rate.

Payback Period

A third approach for assessing and selecting projects is to calculate a project's **payback period**—the number of years it will take the firm to recover, or pay back, the original cash

investment from the project's earnings. The payback period technique has the virtue of simplicity: All one needs is simple arithmetic to calculate the payback period. This approach ignores, however, the profits generated by the investment in the longer run. A project that earns large early profits but whose later profits diminish steadily over time may be selected over a project that suffers initial start-up losses but makes large continuous profits after that.

Because of its simplicity, many firms use the payback period technique for a quick-and-dirty screening of projects and then follow with a more sophisticated method for further analysis of those projects that pass the preliminary screening.²⁸ A firm may choose different payback criteria for international projects than for domestic ones. Here too adjustments must be made to eliminate intracorporate charges that have no real effect on corporate cash flows.

In Practice

- Because firms have limited funds, capital budgeting is a critical task for corporate financial officers. Comparing a proposed investment in country A with a proposed investment in country B is often complicated because the risks and the currencies involved may be different in the two countries.
- The most commonly used methods for evaluating investment projects include net present value, internal rate of return, and payback period.

For further consideration: In evaluating a subsidiary's prospective investment project, why is it important that financial officers focus on real rather than perceived cash flows generated by the proposed project?

Sources of International Investment Capital

Firms use capital budgeting techniques to allocate their financial resources toward those domestic and international projects that promise the highest rates of return. Having identified such profitable opportunities, firms must secure sufficient capital to fund them, from either external or internal sources. In doing so, an international business wants to minimize the worldwide cost of its capital, while also minimizing its foreign-exchange risk, political risk, and global tax burden.

External Sources of Investment Capital

When raising external financing for their investment projects, international businesses may choose from a rich source of debt and equity alternatives. Investment bankers, such as Goldman Sachs, and securities firms, such as Merrill Lynch and Nomura, can help firms acquire capital from external sources. For example, if a firm wants to increase its equity base, such an intermediary can place the firm's stock with investors in the home country, in the host country, or in other countries. To facilitate the raising of equity internationally, many MNCs list their common stock on stock markets in several different countries. For example, Sony's stock is listed on the New York, London, Tokyo, and Osaka stock exchanges. Through multiple foreign listings, international businesses assure foreign investors they can easily dispose of their shares should the need arise.

International firms also have many opportunities to borrow funds internationally on either a short-term or a long-term basis. They may shop for the best credit terms in their home country market, in the host country market, or in other markets. For example, consider New Jersey's Baltek Corporation, which annually produces \$30 million worth of balsa wood products at its factory in Ecuador. Baltek relied on local Ecuadorian banks to finance its expansion into shrimp farming in the Gulf of Guayaquil. The firm found those banks more eager for its business than U.S. banks were—an example of the advantages of being a big fish in a small pond.²⁹ Larger MNCs may rely on syndicated short- and medium-term loans in which a consortium of international banks and pension fund managers join together to provide the capital. Often these syndicated loans use Eurocurrencies because the absence of expensive central bank regulations reduces the cost of Eurocurrency-based loans. MNCs also may secure longer-term loans in the form of home country bonds, foreign bonds, and Eurobonds, as discussed in Chapter 8.

Securities firms and investment banks are continually developing innovative financing techniques to reduce the costs of borrowing for their MNC clients or to exploit gaps in national financial regulations.³⁰ For example, an MNC may issue dual-currency bonds, whereby it borrows money and pays interest in one currency but repays the principal in a second currency. Alternatively, bonds may be denominated as a basket of several currencies or be redeemable in gold. Some firms get creative. For instance, the Walt Disney Company issued \$400 million in Eurobonds that had a different twist: Their interest rate depended on the success of 13 Disney movies. Investors were guaranteed at least a 3-percent rate, with a possible return of 13.5 percent. Comparable quality bonds were yielding only 7 to 8 percent at the time. Eager investors snapped up the bonds, betting that Disney movies would be box office hits.³¹ Pleased with its ability to shift some movie-making risks to the bondholders through low minimum interest rates, several years later Disney offered a similar note linked to a new set of motion pictures.³²

A particularly important facet of the international capital market is the **swap market**, in which two firms can exchange their financial obligations. Swaps are undertaken to change the cost and nature of a firm's interest obligations or to change the currency in which its debt is denominated. For example, suppose firm A has a fixed-rate obligation but prefers a floating-rate one, whereas firm B has a floating-rate obligation and wants a fixed-rate one. The two firms can swap their obligations. As noted by one financial officer, "The advantage of the swap market is that it allows you to adjust exposure profiles without having to undo the underlying transactions."³³ Often an international bank will facilitate such swaps by acting as a broker or by undertaking half of a swap for its own account.

MNCs also often engage in currency swaps to shift their interest and payment obligations from a less preferred currency to a more preferred one. An MNC may consider its net obligations in one currency to be too large or may expect exchange rate fluctuations to adversely affect its loan repayment costs. A swap may be arranged between two firms that have differing currency preferences. International banks play a key role in the currency swap market. Because they continually monitor foreign-exchange markets as well as their own net currency exposures, they usually can accommodate any MNC's currency swap needs. Most international banks engage in currency swaps with corporate clients on an ongoing basis.

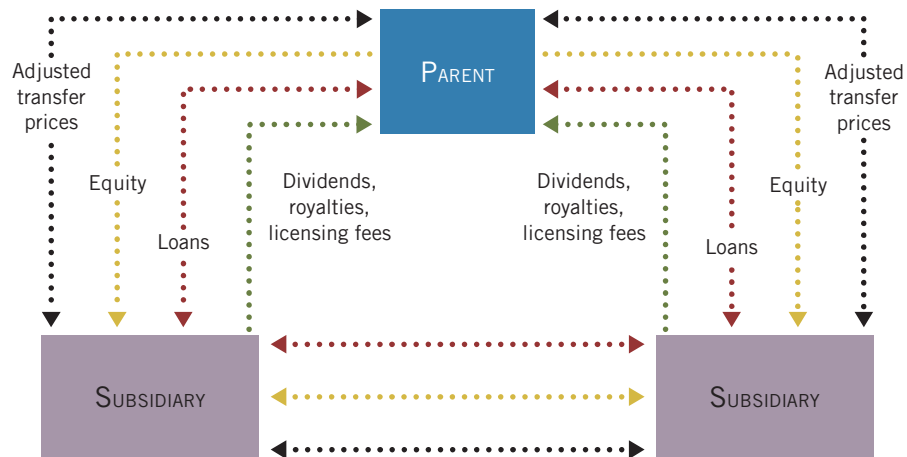
Internal Sources of Investment Capital

Another source of investment capital for international businesses is the cash flows generated internally—for example, profits from operations and noncash expenses such as depreciation and amortization earned by the parent firm and its various subsidiaries. The amount from such sources is significant: In 2010, foreign subsidiaries of U.S.-owned firms earned \$1,021 billion, while the net income of U.S. subsidiaries of foreign-owned parents totaled \$85.9 billion.³⁴

Subject to legal constraints, the parent firm may use the cash flow generated by any subsidiary to fund the investment projects of any member of the corporate family. The corporate parent may access the cash flow directly via the subsidiary's dividend payments to the parent. The parent then can channel those funds to another subsidiary through either a loan or additional equity investments in that subsidiary. Alternatively, one subsidiary can invest in or lend funds directly to a second subsidiary. Figure 18.4 summarizes the various internal sources of capital available to the parent and its subsidiaries.

Two legal constraints may affect the parent's ability to shift funds among its subsidiaries. First, if the subsidiary is not wholly owned by the parent, the parent must respect the rights of the subsidiary's other shareholders. Any intracorporate transfers of funds must be done on a fair-market basis. This ensures that the parent does not siphon off the subsidiary's profits through self-dealing, thereby harming the other shareholders' interests. Of course, what is "fair" is often in the eyes of the beholder. For instance, Holcim, a global manufacturer of cement and construction aggregates, announced it would raise the royalty rates paid by its 80.65 percent-owned Indonesian subsidiary to the parent from 1.7 percent of sales to 5 percent. Minority shareholders protested the change.³⁵ If the subsidiary is wholly owned, transfers of funds do not raise this issue. Second, some countries impose restrictions on the repatriation of profits, thus blocking their intracorporate transfer.

FIGURE 18.4
Internal Sources of
Capital for International
Businesses



Strategic Use of Transfer Pricing

A significant percentage of world trade involves transactions between subsidiaries of the same corporation, such as a production subsidiary of Toyota Motor Company selling Lexus sedans made in Japan to Toyota's sales subsidiary in the United States. Intracorporate shipments account for an estimated 31 percent of U.S. international trade, for instance.

A **transfer price** is the price paid for goods and services involved in intracorporate transactions between a subsidiary and other branches of the corporate family. In practice, transfer prices are calculated in one of two ways:

1. Market-based method
2. Nonmarket-based methods

MARKET-BASED TRANSFER PRICES The market-based method uses prices determined in the open market to transfer goods between units of the same corporate parent. Suppose Samsung wants to export memory chips from South Korea for use in assembling personal computers at one of its U.S. subsidiaries. It can establish the transfer price for the memory chips between its U.S. and Korean subsidiaries by using the open market price for such chips.

This market-based approach has two main benefits. First, it reduces conflict between the two units over the appropriate price. The higher the price charged in the intracorporate transfer, the better the selling subsidiary's performance appears and the poorer the buying subsidiary's performance appears. To the extent that the parent allocates managerial bonuses or investment capital to its subsidiaries on the basis of profitability, the unit managers have incentives to squabble over the transfer price because they care about how the MNC's accounting system reports their unit's performance. From the parent's perspective, however, such arguments waste firm resources. Once the firm's accounting records are consolidated, its overall before-tax profits will remain the same regardless of whether the transfer price overstates unit A's profitability and understates unit B's, or vice versa. Assuming both subsidiaries recognize the basic fairness of the market-based price, such intracorporate conflict will be reduced.

Second, the market-based approach promotes the MNC's overall profitability by encouraging the efficiency of the selling unit. If the price the unit can charge for intracorporate sales is limited to the market price, its managers know the unit's profitability depends on their ability to control its costs. Moreover, they recognize that if they successfully produce the product in question more cheaply than their international competitors can, the parent's market-based transfer pricing will acknowledge their efforts in full. Motivated by the prospects of bonuses and lucrative promotions, unit managers have every incentive to improve the efficiency and profitability of their operations.

NONMARKET-BASED TRANSFER PRICES Transfer prices also may be established using nonmarket-based methods. Prices may be set by negotiations between the buying and selling units or on the basis of cost-based rules of thumb, such as production costs plus a fixed markup.

conducted by researchers indicate that MNCs routinely engage in tax-shifting behavior through transfer pricing and other devices.³⁸ Suppose an MNC operates in two countries, one with high corporate income tax rates and the second with low rates. The firm can raise the transfer prices charged to the subsidiary in the high-tax country and lower those charged to the subsidiary in the low-tax country. Doing this will reduce the profitability of the first subsidiary, as measured by its accounting records, while increasing the profitability of the second. The net effect is to shift the location of the MNC's profits from the high-tax country to the low-tax country, thereby reducing the firm's overall tax burden. Ireland, for example, offers low income tax rates on corporate profits to encourage MNCs to locate factories and service facilities in that country. Yet this tax break also encourages MNCs to manipulate the transfer prices charged by their Irish subsidiaries so as to increase the profits reported by those subsidiaries and lower the profits reported by their non-Irish subsidiaries (see the chapter's closing case, "Double Irish and a Dutch Sandwich").³⁹ "Venturing Abroad" explores how the U.S. government addresses such tax-shifting behavior.

Although such intracorporate transfers of funds may theoretically benefit the entire firm, they can create serious problems at the subsidiary and managerial levels. From the parent's perspective, shifting cash flows to minimize taxes may be beneficial. However, it may cause operational problems and increased expenses for the subsidiary. The parent may consider it wise policy to siphon off the subsidiary's working capital and reduce its reported profitability by inflating royalty fees, administrative charges, or other transfer prices. Yet such approaches may result in a misleading picture of the subsidiary's performance in the marketplace. If the parent rewards managerial performance without making adjustments for these financial manipulations, morale among the subsidiary's managers may plummet, to the detriment of the parent.

VENTURING ABROAD

TAXATION OF FOREIGN SUBSIDIARY INCOME BY THE U.S. GOVERNMENT

Subsidiaries incorporated in a foreign country are legally distinct from the home country parent corporation. In general, for U.S. tax purposes, a U.S. parent corporation does not need to include the earnings of its foreign subsidiaries in calculating its taxable income, as long as those earnings are reinvested in the foreign subsidiaries. The **deferral rule** in the U.S. tax code states such earnings will be taxed only when they are remitted to the parent in the form of dividends, thus allowing the parent to defer paying U.S. taxes on foreign subsidiaries' reinvested earnings.

The deferral rule is intended to stimulate international business activity by U.S. firms. Consider Caterpillar. More than half its sales are outside the United States, and the deferral rule, by annually saving it millions of dollars in taxes, has helped it penetrate key markets in Europe and Asia. However, one important exception to the deferral rule attempts to ensure that U.S. firms do not establish shell corporations in tax havens that do little but provide the parent with the ability to defer U.S. taxes. U.S. tax law requires a parent corporation to determine whether each of its foreign subsidiaries is a controlled foreign corporation. A **controlled foreign corporation (CFC)** is a foreign corporation in which U.S. shareholders—each of which holds at least 10 percent of the firm's shares—together own a majority of its stock. This definition may seem strange, but it is designed to focus on foreign firms that are controlled by a single U.S. firm or a group of U.S. firms acting in concert, rather than foreign firms owned by many small U.S. investors.

According to the U.S. tax code, the income of CFCs is divided into two types: active income and passive income (also called Subpart F income). **Active income** is income generated by traditional business operations such as production, marketing, and distribution. **Subpart F income**, or **passive income**, is generated by passive activities such



as the collection of dividends, interest, royalties, and licensing fees—the type of activities typically performed by subsidiaries incorporated in tax havens. U.S. firms may defer active income earned by CFCs they control. In calculating their U.S. taxes, however, they generally may not defer Subpart F income. In the absence of this restriction, U.S. firms could escape federal corporate income taxes on earnings generated by their intellectual property and investment portfolios. The firms could do this by establishing subsidiaries in tax havens and transferring to those subsidiaries legal title to the firms' trademarks, patents, brand names, and investment portfolios. The U.S. government, by treating active and passive earnings of foreign subsidiaries differently, is walking a fine line between stimulating U.S. firms' international business activities and limiting the firms' ability to avoid U.S. taxes through the creation of subsidiaries in tax havens. Not surprisingly, U.S. companies are continually probing the limits of the law in their attempts to cut their tax bills, as the chapter's closing case, "Double Irish and a Dutch Sandwich," indicates.

One unintended consequence of this policy is the growing stockpile of cash that U.S. MNCs have parked outside the country's borders. For instance, Apple has an estimated \$102 billion (out of total cash balances of \$154 billion) in accounts outside the United States that benefit from the deferral rule. All told, U.S. MNCs have an estimated \$1.7 trillion in such foreign cash balances, which are untaxed by the Internal Revenue Service as long as they are not repatriated to the United States.

Sources: "Apple tax probe in U.S. spurs plans for global regime," *Financial Times*, May 24, 2013, p. 3; "Apple chief's gamble pays off as criticism remains muted," *Financial Times*, May 22, 2013, p. 2; "Tech groups swell U.S. cash pile," *Financial Times*, March 19, 2013, p. 13; "Firms Keep Stockpiles of 'Foreign' Cash in U.S.," *Wall Street Journal*, January 23, 2013, p. A1.

EMERGING OPPORTUNITIES

SUN, SAND, AND SHELLS

Being a tax haven can create a thriving economy, as the 54,000 residents of the Cayman Islands are well aware. The per capita income of this British Overseas Territory is an estimated \$47,000. Although the islands' white coral sand beaches and luxurious hotels draw upward of 2 million visitors a year, the Caymans are equally attractive to the world's financiers because its government imposes no income taxes on personal or corporate earnings. Almost 100,000 foreign firms are registered there, outnumbering local citizens by nearly two to one. Many of these registered companies are mere corporate shells, allowing their owners to shift their reported profits to these shells through the artful use of transfer pricing. The Cayman Islands' success as a tax haven reflects the high-quality services it provides to international businesses; an MNC can create and incorporate a Cayman Islands subsidiary within 24 hours if needed. The firms create demand for highly paid professionals such



as accountants, bankers, and lawyers. As a result, the Cayman Islands is a major world banking and finance center, home to 226 active banks with assets totaling \$1.6 trillion, more than 700 insurance companies, and 9,400 hedge funds controlling \$2.2 trillion in investments. From the Cayman Islands' perspective the tax-haven sector of the local economy represents the ultimate "clean" industry so beloved by economic development officials. However, the existence of tax havens creates numerous headaches for the taxing authorities of other countries.

*Sources: World Factbook found at www.cia.gov; Cayman Islands Monetary Authority website, www.cimoney.com.ky, June 2, 2013; "Buried treasure," *Financial Times*, February 8, 2013, p. 8; "Global concern drives rethink in Caymans," *Financial Times*, January 18, 2013, p. 4; "Generation of huge changes," *Financial Times*, February 2, 2000, p. III.*

Tax Havens

The ability of MNCs to lower their tax burdens by the strategic use of transfer prices is facilitated by the existence of **tax havens**, countries that impose little or no corporate income taxes. For a relatively small fee, an MNC may set up a wholly owned subsidiary in a tax haven. By manipulating payments such as transfer prices, dividends, interest, royalties, and capital gains between its various subsidiaries, an MNC may divert income from subsidiaries in high-tax countries to the subsidiary operating in the tax haven. By booking its profits in the tax haven subsidiary, the MNC escapes the clutches of revenue agents in other countries. For example, an MNC may give ownership of its trademarks to a subsidiary located in Bermuda. That subsidiary then can charge each of the corporation's operating subsidiaries a fee for the use of the trademarks. The fees paid by the operating subsidiaries reduce their profitability and thus the corporate income taxes they must pay to their host governments. The government of Bermuda,

While thousands of tourists annually visit the Cayman Islands to sunbathe and collect seashells along its white sandy beaches, the islands also attract companies seeking a different kind of shell. The islands are home to thousands of shell corporations, established to take advantage of the islands' lack of income taxes.



Walter Bibikow/Alamy

reducing the taxes IBM owed the British government.⁴⁰ Of course, determining the appropriate arm's length price for a unique asset like IBM's trademarks and technology is not simple. Similarly, in 2004, the U.S. Internal Revenue Service claimed that British drug company GlaxoSmithKline owed it \$2.7 billion, plus interest, alleging that the company overcharged its U.S. subsidiaries for the cost of research and development done in the United Kingdom. In 2011, the Internal Revenue Service settled a similar lawsuit against AstraZeneca for \$1.1 billion.⁴¹

Such conflicts are rarely resolved easily or quickly. To remedy the cost and uncertainty of the resolution of complex transfer pricing conflicts, firms may negotiate an **advance pricing agreement (APA)** with the U.S. Internal Revenue Service. The APA, which represents a binding contract between the firm and the IRS, details the methodology that will be used to establish the firm's transfer prices. The IRS agrees it will not retroactively review or challenge the firm's transfer prices as long as the firm abides by the methodology established in the APA.

In Practice

- International businesses rely on external and internal sources of funds to finance attractive investments.
- In funding these investments, corporate finance officers seek to minimize the worldwide cost of acquiring capital, while simultaneously limiting foreign-exchange risk, political risk, and the corporation's total tax burden.

For further consideration: Why is transfer pricing so controversial? Are companies that aggressively use transfer pricing to reduce their tax burden acting unethically?

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CHAPTER REVIEW

Summary

International firms face financial management challenges that are far more complex than those confronting purely domestic firms. Conflicts may arise between exporters and importers over the currency to use in invoicing international transactions. Exporting firms often find it difficult to check the creditworthiness of their foreign customers. Also, obtaining payment for goods from foreign customers may be more difficult because of greater geographic distances, differing legal systems, and unfamiliar business customs. Fortunately, many methods of payment have been developed over the centuries, including payment in advance, open accounts, letters of credit, documentary collection, credit cards, and countertrade.

International firms must strive to minimize the impact of exchange rate fluctuations on the firms' operations. Three

main types of exchange rate exposure exist. Transaction exposure refers to the impact of exchange rate fluctuations on the profitability of a business transaction denominated in a foreign currency. Translation exposure reflects the impact of exchange rate fluctuations on the book value of foreign subsidiaries in a firm's accounting records. Economic exposure is the impact unanticipated exchange rate movements have on the value of the firm's operations.

Management of working capital balances presents international businesses with unique challenges. A firm and each of its operating subsidiaries must have sufficient cash to facilitate day-to-day operations and to meet unexpected demands for cash. Also, the firm must monitor its holdings of each currency in which it and its subsidiaries do business. MNCs often use centralized cash management and currency

netting operations to control their working capital balances, reduce currency conversion costs, and minimize their exposure to adverse changes in exchange rates.

Financial officers of international firms must adjust capital budgeting techniques to meet the unique requirements of international business. Standard investment evaluation techniques, such as net present value, internal rate of return, and payback period analysis, must be adjusted to account for differences in risk, government restrictions on currency movements, and various payments between the parent firm and its foreign subsidiaries that do not affect net cash flows generated by an investment project.

Finally, financial officers must look worldwide for low-cost sources of capital. Ongoing operations of the parent firm and its foreign subsidiaries are often an important internal source of investment capital. Well-developed international debt and equity markets can provide external sources of such capital. Also, international businesses often use the swap market to reduce their exposure to adverse changes in currency values or interest rates.

Review Questions

- 18-1. Who bears the risk when payment in advance is used to settle an international transaction?
- 18-2. Who bears the risk when an open account is used to settle an international transaction?
- 18-3. What are the different types of letters of credit?
- 18-4. What is the hurdle rate?
- 18-5. Which are the most commonly used methods for evaluating investment projects?
- 18-6. How do the various types of countertrade arrangements differ from one another?
- 18-7. What is translation exposure? What effect does a balance sheet hedge have on translation exposure?
- 18-8. What capital budgeting techniques are available to international businesses?
- 18-9. Why does the strategic use of nonmarket-based transfer prices benefit international business?

Questions for Discussion

- 18-10. Letters of credit come in different kinds and formats. When is a letter of credit irrevocable and confirmed?
- ★ 18-11. Why do firms use countertrade? What problems do they face when they do?
- 18-12. Discuss the techniques available to reduce transaction exposure.
- 18-13. How do tax havens manage to attract foreign companies?
- 18-14. Discuss the external sources of investment capital, and give examples for each of them.
- 18-15. How can firms use transfer prices and tax havens to reduce their corporate income tax bills? What do governments do in response?
- ★ 18-16. Are firms that create shell corporations in tax havens being socially responsible?
- ★ 18-17. Why would a firm want to negotiate an APA with the Internal Revenue Service? Why would the Internal Revenue Service want to negotiate an APA?

Building Global Skills

Consider Belgian Lace Products (BLP), a hypothetical table linens manufacturer. BLP consists of a parent corporation, a wholly owned manufacturing subsidiary in Belgium, and four wholly owned distribution subsidiaries in Belgium, the United Kingdom, Japan, and the United States. Its manufacturing subsidiary buys inputs from various suppliers, manufactures high-quality lace napkins and tablecloths, and sells the output to the four BLP-owned distribution subsidiaries. The four distribution subsidiaries in turn sell the products to retail customers in the subsidiaries' marketing areas. The distribution subsidiaries buy certain inputs, such as labor, warehouse space, electricity, and computers, from outside suppliers as well.

The following summarizes typical monthly transactions for each of the BLP operating units (note that the symbol for the euro is €):

Manufacturing Subsidiary

Sales to Belgian distribution subsidiary: €15,000
Sales to British distribution subsidiary: €12,500

Sales to Japanese distribution subsidiary: €17,500
Sales to U.S. distribution subsidiary: €11,250
Costs of inputs purchased from Belgian suppliers: €7,500
Costs of inputs purchased from British suppliers: £25,000
Costs of inputs purchased from Japanese suppliers: ¥3,000,000
Costs of inputs purchased from U.S. suppliers: \$5,000

Belgian Distribution Subsidiary

Sales to retail customers: €50,000
Payments to BLP manufacturing subsidiary: €15,000
Payments to external suppliers: €750 and £10,000

British Distribution Subsidiary

Sales to retail customers: £75,000
Payments to BLP manufacturing subsidiary: €12,500
Payments to external suppliers: £5,000, €1,000, and \$9,000

Japanese Distribution Subsidiary

Sales to retail customers: ¥5,000,000
 Payments to BLP manufacturing subsidiary: €17,500
 Payments to external suppliers: ¥3,000,000 and \$8,000

U.S. Distribution Subsidiary

Sales to retail customers: \$40,000
 Payments to BLP manufacturing subsidiary: €11,250
 Payments to external suppliers: \$10,000 and ¥300,000

Exchange Rates

€1.33 = £1
 €1 = \$1.00
 €1 = ¥120

Use the preceding information to answer the following questions:

18-18. Calculate the profitability of each of BLP's five subsidiaries. (Because BLP is Belgian, perform

the calculations in terms of euros, which Belgium began using as its national currency in 2002.) Are any of the subsidiaries unprofitable? On the basis of the information provided, would you recommend shutting down an unprofitable subsidiary? Why or why not?

18-19. Suppose it costs each subsidiary 1 percent of the transaction amount each time it converts its home currency into another currency to pay its suppliers. Develop a strategy by which BLP as a corporation can reduce its total currency conversion costs. Suppose your strategy costs BLP 400 euros per month to implement. Should the firm still adopt your approach?

18-20. If the United Kingdom decided to join the European Union's single-currency bloc and use the euro, what effect would this have on BLP? What effect would it have on the benefits and costs of the strategy you developed to reduce BLP's currency conversion costs?

CLOSING CASE**Double Irish and a Dutch Sandwich**

Note: You may find it helpful to re-read "Venturing Abroad: Taxation of Foreign Subsidiary Income by the U.S. Government" on page 549 and "Emerging Opportunities: Sun, Sand, and Shells" on page 550.

Taxation of business income is always a contentious public policy issue. Firms, tax lawyers, and accountants continually engage in cat-and-mouse clashes with their national tax authorities. The former group strives to minimize the tax burden imposed on their businesses, asserting that they have a fiduciary duty to their shareholders to do so. The latter group responds that they are charged with the task of ensuring that all the taxes owed to the government are appropriately and legally collected. Although the battle of wits, lawsuits, and lobbying is intense between domestic firms and domestic tax authorities, it pales in comparison to the company-government wars fought over international taxation.

Most politicians care little about the nuances of the benefits of comparative advantage, the productivity gains generated by specialization of labor, or the deleterious impact of trade barriers. Their concerns are focused on job creation and tax revenue, and they are willing to adjust their national tax codes if doing so stimulates the local economy. The result is wide variations in corporate income taxes among countries. For instance, in the United States, the federal corporate income tax rate is 35 percent, while in

Canada it is 16.5 percent, but only 12.5 percent in Ireland. In many tax havens, no taxes are imposed on corporate earnings. Another complicating factor is differences in how various types of income are taxed. When taxing dividends, some countries, such as Australia and Mexico, provide dividend tax credits to the shareholder for income taxes paid by the corporation; others, such as the United States and Sweden, do not. Estonia and the Slovak Republic choose not to tax dividend income at all. Ireland offers generous tax credits for research and development expenditures and exemptions for income generated by intellectual property. The effective rate on royalty income imposed by Ireland can be as low as zero, for example.

These variations in tax codes generate opportunities for firms to locate or relocate their economic activities to lower their overall taxation costs. Firms can also creatively fashion the transfer prices they charge for intracorporate transactions. Much of the attention of the world's tax collectors has been focused on so-called tax havens (see "Emerging Opportunities" on page 550). But Ireland has become the new focal point for imaginative structuring of corporate transactions to reduce tax bills. Of the Organisation for Economic Co-operation and Development (OECD) nations, Ireland has been the most aggressive user of its corporate tax code to promote economic development. The Industrial Development Agency

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- 18-28.** Discuss the primary forms of financing international trade. What are the advantages and disadvantages of each technique, from the perspective of the exporter? From the perspective of the importer?
- 18-29.** What are the three forms of exchange rate exposure that MNCs confront? What techniques are available to MNCs to reduce or control these exchange rate exposures?
- 18-30.** Mymanagementlab Only—comprehensive writing assignment for this chapter.

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