CHAPTER 14

Financing Foreign Investment

Opening Case 14: Failed US–Vietnamese Joint Ventures

Since 1994, US companies have established joint ventures with Vietnamese businesses on everything from auto factories and cola bottlers to power plants and steak houses. American partners include Chrysler, Ford, Proctor & Gamble, Citibank, Caterpillar, and Nike. Many factors – more capital, less political risk, and local marketing expertise among others – favored US–Vietnamese joint ventures. However, many American investors are forsaking their enterprises because of heavy losses. Consequently, US investment in Vietnam dropped from $635 million in 1996 to $117 million in 1999. Investors from several other countries, such as Taiwan, Korea, and Japan, have also lost heavily in Vietnam.

A key example of a failed joint venture is American Rice. Its multimillion-dollar effort to build a rice business in the Mekong delta – one of the first and most prominent US ventures in Vietnam – had collapsed in 1998. American Rice's local partners had become enemies, the police threatened to put its employees in prison, and the Communist Party attacked the situation as the latest example of American imperialism. Many US companies in Vietnam today realize that they share all of American Rice's problems – poor legal protection, hostile joint-venture partners, heavy bureaucracy, and differences in culture. Because of its importance, let us review the case.

In early 1994, American Rice set up a joint venture with an influential local partner to sell Vietnamese rice overseas. With American Rice hungry for supply and Vietnam desperate for customers, the venture seemed ideal for both sides and for millions of struggling Vietnamese farmers. But what started as a partnership quickly became a contest. The local partner refused to grant American Rice permits for exports and charged the company new fees that doubled the costs of the joint venture.

A few months into the new venture, American Rice received permits to export only 30,000 tons, well below the 120,000 tons agreed upon. In 1995, American Rice won a contract to sell the government of Iran $100 million of rice at the highest-ever price for Vietnamese rice. The Vietnamese government, however, forced American Rice to give about half of the Iran contract to local exporters. American Rice's radical rice-buying program stirred further controversy. Rather than buying from pricey state-owned brokers or traders, American Rice purchased straight from the growers, thereby cutting costs and delivering higher prices for the farmers. Thus, many rice farmers were delighted, but the government was not pleased and said to American Rice: "We gave you a license to sell rice, not to start a social revolution."

In October 1996, the government announced that it was launching a probe of the American Rice venture. Investigators questioned the entire staff and combed through stacks of company receipts. The government concluded that American Rice had "materially" violated its investment license and the laws of Vietnam, and caused serious damage to its Vietnamese partner. When the report was leaked to the local press, American Rice became a lightning rod for anti-Americanism. After incurring more than $3 million in losses, American Rice closed its Vietnamese venture in early 1998. No wonder, then, that in March 2000, Moody's Investor Service "pointed to the country's hesitance to allow further foreign participation in the economy" as a threat to progress.

Source: Robert Frank, "Withdrawal Pains: Americans Once Again Land in a Quagmire," *The Wall Street Journal*, Apr. 21, 2000, pp. A1, A6.

Multinational companies (MNCs) first decide on the nature of their needs for funds, and then they seek the funds from many available sources. In addition to the investment in fixed assets, a foreign investment project may require additional current assets such as accounts receivable and inventories. Consequently, MNCs must consider various sources of funds for their overseas projects and the decision variables that affect the selection of particular sources.

This chapter examines three major sources of funds for foreign investment: (1) internal sources of funds, (2) external sources of funds, and (3) sources of funds from development banks. First, MNCs may use internally generated funds such as profits and depreciation charges. If internal sources of funds are insufficient, they may obtain their capital from sources within their home country and/or in foreign countries. In addition to these internal and external sources of funds, development banks provide MNCs with a variety of financing sources.

14.1 Internal Sources of Funds

Internal sources of funds are those funds generated within a parent–affiliate network. They include capital contributions from the parent, loans with parent-company guarantees, funds provided by operations from retained earnings and depreciation, and intersubsidiary funds transfers.

14.1.1 Funds from the parent

Three major types of funds supplied by the parent are equity contributions, direct loans, and indirect loans under parent-company guarantees.

Equity contributions Every new foreign subsidiary must receive some funds in the form of equity to satisfy both authorities in the host country and outside creditors about its solvency. Occasionally, MNCs decide on expansion funds in the form of an equity investment for their own foreign subsidiary. This part of recapitalization gives the foreign subsidiary an increased capital base to support additional loans. More specifically, equity contributions of cash are used to acquire going concerns, to buy out local minority interests, to set up new foreign subsidiaries, or to expand existing subsidiaries. Although they are a normal way of handling direct investments, in some developing countries direct-equity investments take the form of machinery or technology instead of cash. Some MNCs have acquired a percentage of common-stock equity of foreign businesses in exchange for supplying machinery, equipment, tools, and intangibles (patents, engineering, etc.) necessary for manufacturing certain products.

Common stockholders have residual claims on earnings and assets in the event of liquidation. Hence, an equity investment is not very flexible for the investor, but it is most acceptable to the host country and outside creditors. Dividends – the profit remittances derived from equity investments – are heavily taxed when we compare equity contributions with investments derived from other funding alternatives. Normally, dividends from countries to foreign shareholders are subject to local income taxes as well as to withholding taxes. Withholding taxes are incurred when local earnings are distributed abroad as dividends. This explains why many MNCs are reluctant to make large equity investments in their foreign subsidiaries.

Direct loans MNCs may elect to provide investment funds to their foreign operations in the form of intracompany loans instead of increasing their equity contributions. However, the parent company lends money as an owner to its subsidiaries. The intracompany loan usually contains a specified repayment period for the loan principal and earns interest income that is taxed relatively lightly. These two features of intracompany loans compare favorably with an open-ended equity investment, which produces profits in the form of heavily taxed dividends.

Parent loans to foreign subsidiaries are usually more popular than equity contributions for a number of reasons. First, parent loans give a parent company greater flexibility in repatriating funds from its foreign subsidiary. In nearly every part of the world, laws make it more difficult to return funds to the parent through dividend payments or equity reductions than through interest and principal payments. Moreover, a reduction in equity is often construed as a plan to leave the country.

Second, tax considerations are another reason for favoring parent loans over equity contributions. In most cases, interest payments on internal loans are tax deductible in the host country, while dividends are not. Moreover, principal payments, unlike dividend payments, do not generally constitute taxable income. Thus, it is possible that both a parent and its subsidiaries will save taxes by using loans instead of equity contributions.

MNCs can also provide credit to their subsidiaries not only by making loans but also by delaying the collection of accounts receivable. The amount of credit available through these intracompany accounts is limited to the amount of goods exchanged. Moreover, governments frequently limit the length of the credit term. However, because intracompany accounts involve no formal documents, they are easier to use. In addition, most governments interfere less with payments on intracompany accounts than on loans.

Parent guarantees When foreign subsidiaries have difficulty in borrowing money, a parent may affix its own guarantees. While MNCs have traditionally been reluctant to guarantee the debts of their subsidiaries, indications are these guarantees will increase. There are a variety of parent guarantees:

1 The parent may sign a purchase agreement under which it commits itself to buy its subsidiary's note from the lender in the event of the subsidiary's default.
2 The lender may be protected on only a part of the specific loan agreement.
3 Another type of guarantee is limited to a single loan agreement between a lender and the subsidiary.
4 The strongest type requires that the lender be protected on all loans to the subsidiary without limits on amount or time.

The types of loans with parent guarantees and the availability of such loans depend largely upon the parent's prestige and credit standing.

14.1.2 Funds provided by operations

Once a newly formed subsidiary gets on its feet, **internal fund flows** – retained earnings and depreciation – are the major sources of funds. These internal fund flows, coupled with local credits, leave relatively little need for fresh funds from the parent.

Foreign subsidiaries are not always free to remit their earnings in hard currency elsewhere. Many developing countries have problems with their balance of payments and do not have sufficient international reserves. Thus, they restrict repatriation of funds for a specified number of years or to a certain percentage of the net income. These factors frequently force foreign subsidiaries to reinvest their internally generated funds in the host country. If a company wishes to use these internal fund flows for the expansion of an initial project in later years, an initial project may have to be smaller than actual demand requirements. If the anticipated expansion is necessary to meet current demand and the normal growth in demand, MNCs would have no difficulty in profitably using the internal fund flows in the host country.

14.1.3 Loans from sister subsidiaries

The availability of intersubsidiary credit, in addition to funds from the parent, vastly expands the number of possibilities for internal financing. For example, if a subsidiary in Austria has funds which it does not need immediately, it may lend these funds to a sister subsidiary in Norway, and vice versa. However, many countries impose exchange restrictions on capital movements to limit the range of possibilities for intersubsidiary loans. Moreover, the extensive use of intersubsidiary financial links makes it extremely difficult for a parent company to control its subsidiaries effectively.

Nevertheless, many subsidiaries borrow cash from their sister subsidiaries. When there are only a few subsidiaries within a company's family, it is straightforward to arrange intersubsidiary loans. One subsidiary treasurer may negotiate directly with another sister subsidiary treasurer to obtain or give credit. However, an MNC with many subsidiaries in many countries may prefer to have its central staff handle all excess funds, or to establish a central pool of these funds on a worldwide basis under two conditions: (1) if the number of financial relationships does not exceed the capability of the main office to manage them effectively; and (2) if a parent company does not want to lose control over its subsidiaries.

14.2 External Sources of Funds

If an MNC needs more funds than the amount that can be reasonably generated within a corporate family, the parent or its foreign subsidiaries may seek outside sources of funds. Such external sources of funds include joint business ventures with local owners and/or borrowings from financial institutions in the parent country, the host country, or any third country (see Global Finance in Action 14.1).

Although subsidiaries can borrow directly from outside the host country, most of them borrow locally for a number of reasons:

1 Local debts represent automatic protection against losses from a devaluation of local currency.
2 Subsidiary debts frequently do not appear on the consolidated financial statement issued by a parent as part of its annual report.
3 Some host countries limit the amount of funds that foreign companies can import from outside the host country.
4 Foreign subsidiaries often borrow locally to maintain good relations with local banks.

Global Finance in Action 14.1

Guidelines for Adequate Capitalization

MNCs are not only able to raise funds in international and national capital markets but also to take advantage of capital market imperfections throughout the world. This comparative advantage should theoretically allow MNCs to enjoy a lower cost of capital than competing domestic companies. Companies have a number of outside financial options from which to choose to finance their foreign investment projects. These external financial options include banks, government institutions, other types of financial intermediaries, and even the public sector in the host country. To avoid drawbacks inherent in the thin capitalization of foreign investment projects, companies usually seek an optimum capital structure. An optimum capital structure is defined as the combination of debt and equity that yields the lowest cost of capital.

Several ratios can be used to determine an optimum financing mix of debt and equity for overseas projects. Cassidy (1984) recommends a number of guidelines for companies to develop capitalization strategies for their overseas projects:

1 The investor's own resources should be sufficient to approximately cover the project investment in fixed assets. Outside financing should support investment in net working capital of the unit.

2 The ratio of outside financing to total capitalization of the project (the debt ratio) should generally be about 0.50. Thus, approximately equal amounts of outside debts and equity investments will be employed in the local project.

3 The projected earnings from the overseas project should provide adequate "interest coverage" for its intended outside debt service. To ensure continuing liquidity, these earnings should be a substantial multiple of the project's annual financial costs.

Source: G. T. Cassidy, "Financing Foreign Investments: The International Capital Markets," in Allen Sweeny and Robert Rachlin, eds., *Handbook for International Financial Management*, New York: McGraw-Hill, 1984, pp. 1–11.

14.2.1 Commercial banks

As noted in chapter 13, commercial banks are a major financial intermediary in trade credit. They are also the most important external source for financing nontrade international operations. The types of loans and services provided by banks vary from country to country, but all countries have some funds available at local banks.

Most of the local loans obtained by subsidiaries are short-term credits from commercial banks. These short-term credits are used largely to finance inventory and accounts receivable. They are self-liquidating loans to the extent that sufficient cash flows are produced to repay the credits as inventories are sold on credit and receivables are collected over the business cycle. The principal instruments used by banks to service an MNC's request for a loan are as follows:

- **Overdrafts** are lines of credit that permit the customer to write checks beyond deposits. The bank establishes the maximum amount of such credit on the basis of its analysis of the customer's request, needs, and potential cash flows. The borrower agrees to pay the amount overdrawn and interest on the credit. Although some banks waive service charges for their creditworthy customers, others frequently require service charges and other fees.
- **Unsecured short-term loans** – most short-term bank loans for MNCs to cover seasonal increases in current assets are made on an unsecured basis. The percentages of such loans vary from country to country, and reflect variations in individual bank policy and central government regulations. Most MNCs prefer to borrow on an unsecured basis because bookkeeping costs of secured loans are high, and because these loans have a number of highly restrictive provisions. However, some foreign subsidiaries cannot obtain loans on an unsecured basis, because they are either financially weak or have not established a satisfactory performance record.
- **Bridge loans** are short-term bank loans used while a borrower obtains long-term fixed-rate loans from capital markets. These bridge loans are repaid when the permanent financing arrangement is completed. During the peak of its currency crisis in early December 1997, Korea obtained a bridge loan of $1.3 billion from the Bank of Japan. This bridge loan was aimed at tiding Korea over until a $58 billion rescue package arranged by the International Monetary Fund began to kick in.
- **Currency swaps** are agreements to exchange one currency with another for a specified period, after which the two currencies are re-exchanged. Arbi loans are the best-known example of

such swaps. An arbi loan is arranged in a country where money is readily available at reasonable rates. It is converted to the desired local currency, but the borrower arranges a forward exchange contract to insure converting the local currency into the foreign currency of original denomination at a specified future date. Thus, arbi loans allow MNCs to borrow in one market for use in another market and to avoid foreign-exchange risks. The cost of arbi loans includes the interest on the loans and the charges associated with the forward exchange contract.

- **Link financing** is an arrangement whereby banks in strong-currency countries help subsidiaries in weak-currency countries obtain loans by guaranteeing repayment on the loans. These subsidiaries borrow money from local banks or firms with an excess of weak money. Certainly, banks in strong-currency countries require some sort of deposits from a borrower's parent company and the borrower must pay local interest rates. To protect itself against foreign-exchange risk, the lender usually hedges its position in the forward exchange market.

14.2.2 Interest rates on bank loans

Interest rates on most business loans are determined through direct negotiations between the borrower and the bank. The prevailing prime lending rate and the creditworthiness of the borrower are the two major factors of the interest rate charged. The prime rate is the rate of interest charged on short-term business loans to the most creditworthy customers.

Interest rates may be paid on either a collect basis or on a discount basis. On a collect basis, interest is paid at the maturity of the loan, which makes the effective rate of interest equal to the satiated rate of interest. On a discount basis, interest is paid in advance, which increases the effective rate of interest. Most short-term securities, such as Treasury bills, euro commercial papers, and bankers' acceptances, are sold on a discount basis.

Example 14.1

Assume that a company borrows $10,000 at 10 percent. Compute the effective rate of interest for the loan on a collect basis as well as on a discount basis.

The effective rate of interest on a collect basis is:

$$\frac{\$1,000}{\$10,000} = 10\%$$

The effective rate of interest on a discount basis is:

$$\frac{\$1,000}{\$10,000 - \$1,000} = 11.11\%$$

Compensating balances Banks typically require their customers to hold from 10 to 20 percent of their outstanding loan balance on deposit in a noninterest-bearing account. These **compensating balances** are used to: (1) cover the cost of accounts; (2) increase the liquidity position of the borrower that can be used to pay off the loan in case of default; and (3) increase the effective cost of borrowing.

Example 14.2

Assume that a company borrows \$20,000 at 10 percent. Calculate the effective interest cost if the loan requires a minimum compensating balance of 20 percent (\$4,000) and it is on a discount basis.

The effective interest cost of the loan is:

$$\frac{\$2{,}000}{\$20{,}000 - \$4{,}000 - \$2{,}000} = 14.29\%$$

Currency movement and interest rates In reality, the value of the currency borrowed will change with respect to the borrower's local currency over time. The actual cost of a bank credit by the borrower depends on the interest rate charged by the bank and the movement in the borrowed currency's value over the life of the loan. Thus, the effective interest rate may differ from the interest rate that we computed in examples 14.1 and 14.2. In this case, the effective interest rate is computed as follows:

$$r = (1 + i_f)(1 + i_e) - 1 \tag{14.1}$$

where r is the effective interest rate in US dollar terms, i_f is the interest rate of the foreign currency, and i_e is the percentage change in the foreign currency against the US dollar.

Example 14.3

A US company borrows Swiss francs for 1 year at 10 percent. The franc appreciates from \$0.50 to \$0.60, or 20 percent, over the life of the loan. Interest on this loan is paid at maturity. The effective interest rate of the loan in US dollar terms is:

$$\begin{aligned} r &= (1 + 0.10)(1 + 0.20) - 1 \\ &= 32\% \end{aligned}$$

Example 14.4

A US company borrows British pounds for 1 year at 10 percent. The pound depreciates from $1.50 to $1.20, or 20 percent, over the life of the loan. Interest on this loan is paid at maturity. The effective interest rate of the loan in US dollar terms is:

$$\begin{aligned} r &= (1+0.10)(1-0.20)-1 \\ &= -12\% \end{aligned}$$

A negative effective interest rate implies that the US borrower actually paid fewer dollars in total loan repayment than the number of dollars borrowed. Such a result can arise if the British pound depreciates substantially over the life of the loan. As shown in example 14.3, however, the effective interest rate in dollar terms can be much higher than the quoted interest rate if the British pound appreciates substantially over the life of the loan.

14.2.3 Edge Act and agreement corporations

Edge Act and agreement corporations are subsidiaries of American banks that are physically located in the United States, but they engage in international banking operations. The Edge Act of 1919 allows American banks to perform as holding companies and to own stock of foreign banks. Thus, these banks can provide loans and other banking services for American-owned companies in most countries around the world. **Edge Act corporations** are domestic subsidiaries of banking organizations chartered by the Federal Reserve Board; **agreement corporations** are Edge Act equivalents chartered by individual states. Both types of subsidiaries may not only perform international banking operations, but they may also finance foreign industrial projects through long-term loans or equity participation.

TYPES OF ACTIVITIES Edge Act and agreement corporations typically engage in three types of activities: international banking, international financing, and holding companies. In their capacity as international banking corporations, Edge Act and agreement corporations may hold demand and time deposits of foreign parties. They can make loans, but these loans to any single borrower cannot exceed 10 percent of their capital and surplus. They can also open or confirm letters of credit, make loans or advances to finance foreign trade, create bankers' acceptances, receive items for collection, remit funds abroad, buy or sell securities, issue certain guarantees, and engage in foreign-exchange transactions.

In their capacity as international financing corporations, Edge Act and agreement corporations invest in the stock of nonbank financial concerns, development corporations, or commercial and industrial companies. Certainly, such investments require the prior specific consent of the Federal Reserve Board or state banking authorities under certain circumstances. Edge Act subsidiaries have financed some foreign finance companies and official development corporations. In most cases, however, they finance commercial and industrial companies directly through loans and equity contributions. The major purpose of such financing activities is to provide promising foreign companies with capital at an early or important stage.

In their capacity as holding companies, Edge Act and agreement corporations can own shares of foreign banking subsidiaries and affiliates. Member banks of the Federal Reserve System are not permitted to own shares of foreign banking subsidiaries. A foreign banking subsidiary may be more advantageous than a branch for two reasons. First, foreign branches are allowed to carry on only the activities allowed to their parent banks in the USA. Second, certain countries do not permit nondomestic banks to open branches in their territory. In other instances, Edge Act and agreement corporations have been the instrument through which US banks have acquired equity interests in well-known foreign banks.

14.2.4 International banking facilities

Since December 3, 1981, banks in the USA have been allowed to establish international banking facilities at their offices in the USA. **International banking facilities (IBFs)** are vehicles that enable bank offices in the USA to accept time deposits in either dollars or foreign currency from foreign customers, free of reserve requirements and of other limitations. Foreigners can also borrow funds from IBFs to finance their foreign investment projects. IBFs have been further strengthened by legislation in New York, California, and other states that exempt them from state and local income taxes. IBFs are located in the USA, but in many respects they function like foreign branch offices of US banks. In other words, the creation of IBFs means the establishment of offshore banking facilities in the USA similar to other Eurocurrency market centers.

In order to qualify for IBFs, institutions must be depository institutions, Edge Act or agreement corporations, or US branch offices of foreign banks that are legally authorized to do business in the USA. These institutions do not require the approval of the Federal Reserve Board to establish IBFs; a simple notification is sufficient. In addition, they are not required to establish a separate organizational structure for IBFs, but they must maintain separate books that distinguish their offshore business from their domestic business.

IBFs have a number of advantages over bank operations through foreign locations. First, small banks can enter into the Eurocurrency market easily, because they no longer need to establish a foreign office or a domestic subsidiary exclusively for international banking operations. Second, US banks can reduce operating costs, because they have more direct control and can use existing support services such as personnel and facilities.

IBFs also have several disadvantages when we compare them to offshore banking centers, caused mostly by regulations that IBFs serve only nonresidents. First, IBFs must receive written acknowledgment from their customers that deposits do not support activities within the USA and that IBF loans finance only operations outside the USA. Second, IBFs are prohibited from offering demand deposits or transaction accounts that could possibly substitute for such accounts now held by nonresidents in US banks. Third, IBFs are also prevented from issuing negotiable certificates of deposits or bankers' acceptances, although they can issue letters of credit and undertake repurchase agreements. Fourth, time deposits offered to nonbank foreign residents require minimum deposits and the withdrawal of $100,000 to preserve the wholesale nature of the business; they also require a minimum maturity or two business days' notification prior to withdrawal.

14.2.5 Strategic alliances

In a trend that accelerated during the 1980s, companies have begun to link up with former competitors in a vast array of strategic alliances. A **strategic alliance** is any collaborative agreement between two companies that is designed to attain some strategic goal. International licensing agreements, marketing arrangements or management contracts, and joint ventures are some examples of strategic alliances. Most strategic alliances, however, are equity alliances or joint ventures.

Partners of strategic alliances might gain economies of scale or a variety of other commercial advantages. However, financial synergy, where a financially strong company helps a financially weak company, represents a key advantage of strategic alliances. The strategic alliance between KLM and Northwest Airlines represents an excellent example of financial synergy.

An international **licensing agreement** is an agreement whereby an MNC (the licensor) allows a local firm (the licensee) to produce the licensor's products in the firm's local markets in return for royalties, fees, and other forms of compensation. The licensor's products are intangible assets such as patents, trademarks, intellectual property, and technological expertise. The local licensee assumes the responsibility to produce, market, or distribute the licensor's products in the local market.

When a strategic alliance takes the form of a management contract, one party (an MNC) contractually agrees to manage an enterprise owned by another party (local investors). As an example, look at what the government of Zaire did when it expropriated foreign-owned copper mines in 1966. Because the government lacked the skills to operate the mines itself, it entered into a contract with the former Belgian mine owner, Union Miniere, to manage the production and marketing of the mines.

JOINT VENTURES A corporate entity in which two or more parties, for example, an MNC and host-country companies, have equity interest is known as a **joint venture**. In the past, the use of a wholly owned subsidiary was the most common approach to overseas investment, because worldwide strategy depended on complete control over all foreign operations. However, more and more host countries require that MNCs have some local participation. In some situations, MNCs will seek local partners even when there are no local requirements to do so.

There are four types of international joint ventures. First, two companies from the same country form a joint venture to conduct a business in a third country. For example, Exxon and Mobile established an oil company in Russia. Second, an MNC forms a joint venture with host-country companies. For instance, Sears Roebuck (the USA) and Simpsons (Canada) formed a joint venture in Canada. Third, an MNC and a local government form a joint venture. For example, Philips (the Netherlands) and the Indonesian government set up a joint venture in Indonesia. Fourth, companies from two or more countries establish venture in a third country. For instance, Diamond Shamrock (the USA) and Sol Petroleo (Argentina) established a joint venture in Bolivia.

Many factors may induce MNCs to enter into joint ventures with local partners, other MNCs, and local governments. These factors include tax benefits, local marketing expertise, more capital, less political risk, and quick acquisition of new technologies.

On the other hand, MNCs want tight control of their foreign subsidiaries to efficiently allocate investments and to maintain a coordinated marketing plan on a global basis. Dividend policy, financial disclosure, transfer pricing, establishment of royalty and other fees, and allocation of production and marketing costs among plants are just some areas in which each owner has an incentive to engage in activities that could hurt its partners. This is why most MNCs resist local participation. In fact, there are many cases in which MNCs have chosen to pull out of foreign countries rather than to comply with government regulations that require joint ventures with local partners.

Motives for strategic alliances Motives for strategic alliances may consist of two broad types: general and specific to international business. General motives for strategic alliances are to: (1) spread and reduce costs; (2) avoid or counter competition; (3) secure horizontal and vertical links; (4) specialize in a number of selected products, assets, or technologies; and (5) learn from other companies.

MNCs may collaborate with other companies to: (1) gain location-specific assets; (2) overcome legal constraints; (3) diversify geographically; and (4) minimize exposure in risky environments. First, MNCs may seek to form a strategic alliance with local companies that will help them manage location-specific problems, such as cultural, political, and economic differences. Second, strategic alliances may help MNCs overcome governmental constraints. Many countries limit foreign ownership. Government procurement, particularly military procurement, is another reason that may force MNCs to collaborate. Third, geographical diversification through strategic alliances enables MNCs to smooth their sales and earnings, because business cycles occur at different times within different countries. Finally, one way for MNCs to minimize loss from foreign political occurrences is to minimize the base of assets located abroad or share them with local companies.

14.2.6 Project finance

Project finance refers to an arrangement whereby a project sponsor finances a long-term capital project on a nonrecourse basis. The term "nonrecourse" is used here to mean that the project sponsor has legal and financial responsibilities for the project. Three characteristics distinguish project finance from other forms of financing (Butler 2000):

1 The project is established as an individual legal entity and relies heavily on debt financing.
2 The debt repayment is contractually tied to the cash flow generated by the project.
3 Government participation comes in the form of infrastructure support, operating or financing guarantees, or assurances against political risk.

Project finance offers several benefits over conventional debt financing. Project finance normally restricts the usage of the project's cash flows. The lenders, rather than the managers, can decide whether to reinvest excess cash flows or to use them to reduce the loan balance by more than the minimum required. Second, project finance increases the number and type of investment opportunities, thereby making capital markets more "complete." Third, project finance permits companies whose earnings are below the minimum requirements, specified in their existing bond indentures, to obtain additional debt financing.

In recent years, many large projects, such as the Alaska oil pipeline, the Channel Tunnel between England and France, and the EuroDisney theme park outside Paris, have been funded by project finance. Project finance is either a build–operate–own contract (BOO) or a build–operate–transfer (BOT) project. In a BOO contract, the sponsor assumes ownership of the project at the end of the contract life. In a BOT project, ownership of the project is transferred to the host government. Project finance is widely used today in China, India, Turkey, and many other emerging markets.

TURKEY'S BOT PROJECTS In early 1996, Turkey's BOT schemes yielded two large-scale deals for a hydroelectric power plant and a drinking water supply system; the total cost of these two projects was $2.5 billion (*Euromoney* 1996). According to Aydin Karzoz, head of the treasury's foreign relations department, Turkey had a total of 30 BOT projects under consideration by April 1996. The government promises to buy BOT services and products at a certain price over a specified period. Under current legislation, this specified period cannot exceed 49 years.

The BOT model has been used to finance many infrastructure projects: airports, bridges, highways, oil and gas pipelines, petrochemical refineries, power generation projects, tunnels, and waterworks. The potential is enormous. A recent report prepared by the World Bank estimates that Asia must spend $1.5 trillion on all forms of infrastructure over the next decade or forfeit high economic growth. The report says that Latin America must spend $800 billion over the same period.

International capital markets, such as bank loans, bonds, and equity offerings, contribute a substantial amount to infrastructure project finance – about $30 billion a year. The World Bank predicts that the fast growth of the market for infrastructure finance in the 1990s is likely to continue for many years to come. First, governments want to give their clients efficient, high-grade services without using tax money. Developing countries have the potential for increased access to international capital markets.

14.3 Development Banks

Development banks provide MNCs with a broad range of financing resources. They are banking organizations established to support the economic development of underdeveloped areas through intermediate and long-term loans. There are three broad groups of development banks: worldwide, regional, and national.

14.3.1 The World Bank Group

The **World Bank Group** is a group of worldwide financial institutions organized after the devastation of World War II to aid economic reconstruction. These institutions include the International Bank for Reconstruction and Development, the International Finance Corporation, and the International Development Association.

THE INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (IBRD) The bank, which is commonly known as the World Bank, was established at the Bretton Woods conference in 1944 as a companion institution to the International Monetary Fund. Because the major objective of the World Bank was to finance reconstruction and development after World War II, it made certain loans in Europe for reconstruction. It found its resources completely inadequate for this purpose and thus stopped reconstruction loans. However, the World Bank was able to concentrate on lending for economic development, because the Marshall Plan provided funds for reconstruction in Europe. The Marshall Plan was the European economic recovery program established by the USA in 1948. The overriding objective of the Plan was to restore the productive capacity of European industry destroyed during World War II. The Plan existed slightly less than 4 years and channeled more than $10 billion in American aid to Europe.

In recent decades, the World Bank has placed a major emphasis on loans to underdeveloped countries for social infrastructure projects such as irrigation, schools, and roads. This kind of development is essential for future industrialization. Approximately a third of its development loans has gone to electrical power, a third for transportation improvements, and the remaining third for agricultural projects and education. Loans are made only to member governments, government agencies, and private businesses whose loans are guaranteed by their governments.

Because the Bank finances only a portion of project costs, private investors must finance the remaining portion. To encourage the direct participation of private investors in its loans, the Bank has adopted high credit standards:

1 The Bank makes loans only for projects whose cost and revenue estimates are reasonably accurate.
2 When loans are made to private companies, these loans must be guaranteed by their governments.
3 An additional 1 percent is added to the regular interest rate. These funds go into reserve funds to meet losses in the event of default.
4 Member countries are required to pay the unpaid portion of their quotas in the event that funds are needed to meet losses.

Private funds for international investments have increased because the Bank has applied these high standards.

The capital subscribed by member countries represents the basic equity capital for the Bank. Member countries are assigned subscription quotas on the basis of their size and wealth. They must pay 10 percent of their quota when they join the Bank, and the remaining 90 percent of the quota is subject to call. However, a substantial portion of the Bank's capital comes from bonds sold on world markets. Because the Bank applies high credit standards, its bonds usually carry high credit ratings and low interest rates.

The newly established Multilateral Investment Guarantee Agency of the Bank offers various forms of political risk insurance. As one of the largest borrowers in the world, the Bank borrowed a total of $100 billion from 100 countries. Its loans are well diversified among more than 20 countries. The Bank enjoys the highest credit rating, AAA.

The International Finance Corporation (IFC) Initially, the World Bank had a number of problems in providing financial assistance to less developed countries. First, all loans had to be guaranteed by governments. Second, the Bank provided only loans. Third, it financed only the foreign-exchange requirements for a project and ignored local expenditures or working capital requirements. Fourth, it typically financed only large projects of public importance.

These problems led to the development of the International Finance Corporation (IFC) in 1956, primarily to finance private enterprises in less developed countries through loan or equity participation.

The IFC regards development finance companies and industrial projects as the proper outlets for its limited capital. It assists in establishing development finance companies in areas where there are gaps in the local capital and money markets. It also helps existing development finance companies to expand or reorganize operations. The IFC usually invests in those industrial projects that will contribute to improved foreign-exchange positions, increased employment, improved management skills, or the exploration of natural resources. It provides risk capital to companies that require funds in order to expand, modernize, or diversify operations. It also helps to finance new ventures. Ordinarily, it does not invest in such infrastructure projects as hospitals, transportation, and agricultural development.

IFC funds are available for either foreign-exchange or local-currency expenditures to meet fixed assets or working capital requirements. It makes nonguaranteed loans to private enterprises in less developed countries. Most of these loans have maturities from 7 years to 12 years. All of its investments are made along with private investors, and its financial contribution usually accounts for less than 50 percent of the total project cost.

The International Development Association (IDA) The association was established in 1960 as an affiliate of the World Bank Group to meet the specific needs of less developed countries. IDA loans are designed to finance projects for companies that cannot adhere to loan repayment schedules with conventional terms. Credit terms are generally extended for 50 years, with very low or no interest. Repayment begins after a 10-year grace period and can be made in local currencies.

All World Bank members are free to join the IDA, and more than 100 countries have done so. IDA resources are separate from World Bank resources. Nearly 90 percent of the IDA's capital comes from subscriptions of its member countries. The second most important source of its capital is the World Bank's contribution. IDA member countries are classified into two broad categories: part I countries, which consist of relatively developed countries; and part II countries, which consist of less developed countries. Part I countries pay all of their subscriptions in convertible currencies, while part II countries pay only 10 percent of their subscriptions in convertible currencies and the remainder in their own currencies. Certain nonmember countries such as Switzerland and New Zealand have made loans to the IDA on the same terms as the IDA lends to its members.

14.3.2 Regional development banks

Regional groups of countries have established regional development banks to promote effective economic development within the member countries. Leading regional development banks are the Inter-American Development Bank, the European Investment Bank, the European Bank for Reconstruction and Development, the Asian Development Bank, and the African Development Bank.

The Inter-American Development Bank (IDB) The bank was founded in 1959 by the USA and 19 Latin American countries, to further the economic development of its member countries. Twenty-six Latin American countries and 15 other countries now own the Bank, which is headquartered in Washington, DC. IDB loans are available only when private sources are not available on reasonable terms. The IDB usually finances no more than 50 percent of total project cost.

The IDB has three types of activity:

1 With its Ordinary Capital Resources Fund, the Bank makes development loans to both public and private institutions. These loans are earmarked for projects that promote Latin America's economic development.
2 With its US-created Social Progress Trust Fund, the Bank makes loans to finance projects with high social value.
3 With its Fund for Special Operations, the Bank makes loans whose terms are much more lenient than those available in the regular money and capital markets. Maturities may be extremely long, repayment may be made in the borrower's currency, or interest rates may be arbitrarily low.

The European Bank for Reconstruction and Development (EBRD) The bank was established in 1990 by 42 countries, as a development bank for emerging democracies in Eastern Europe. These 42 member countries include the USA, Japan, Russia, and European countries. The London-based EBRD encourages reconstruction and development in the Eastern and Central European countries through loans, guarantees, and equity investments in private and public companies. No more than 40 percent of EBRD financing can be used to support government enterprises.

The United States, with a 10 percent share, is the largest single shareholder. The United Kingdom, France, Italy, Japan, and Germany each have shares of 8.52 percent. Russia, with a 6 percent share in the bank, is the largest single shareholder among former Eastern-bloc countries. All together, European countries hold a major stake in the bank. Share contributions may be made in dollars, euros, or yen. All of the shareholders paid in only 30 percent of their capital contributions; the rest of their capital is callable.

The European Investment Bank (EIB) The bank was established in 1958 by members of the European Community. Its resources are used to support the socioeconomic infrastructure of the member nations or their basic industries. Most of these loans have maturities from 12 to 20 years. Ordinarily, 3- or 4-year intervals are established before loan repayments begin.

The EIB has three types of responsibility:

1 It assists in financing projects that involve two or more member governments. In this case, it plays an important role in coordinating the activities of different national financial agencies.
2 It promotes the potential of economies of scale. It helps specialize or expand the operations of plants or firms in countries with a comparative advantage in certain lines of business.
3 It helps achieve a more uniform and high level of economic maturity within the European Union.

The Asian Development Bank (ADB) The bank was formed in 1966 by 17 Asian countries, in partnership with the USA, Canada, the UK, Germany, and other European countries. The ADB has its headquarters in Manila and has 47 members; 17 are from outside the region. The Bank's founders created the ADB to promote the economic growth and development of its member countries. The ADB accomplishes its goals by offering loans, grants, and technical assistance. The ADB makes long-term loans to private companies without government guarantees. Some ADB loans go to Asian national banks that reloan to private enterprises through their respective development agencies. Some other ADB loans are used to supply risk capital. Only member countries, and occasionally, private enterprises, can borrow from the Bank.

THE AFRICAN DEVELOPMENT BANK (AfDB) The bank was established in 1964 by the Organization of African Unity, with headquarters in Abidjan, Ivory Coast. Unlike other regional development banks, the AfDB had, until the early 1980s, excluded nonregional partners in an effort to avoid undue outside influence; thus, it suffered from severe capital limitations, hampering its ability to lend. Since the early 1980s, the AfDB has accepted non-African countries as contributing but nonborrowing members. Members include 50 African nations and 26 non-African countries that have joined since 1982. AfDB activities are financed by member subscriptions, one-third of which are from non-African countries. In order to attract commercial bank funds and public debt offerings, the AfDB maintains conservative lending policies and interest rates. Loans are made only to governments or their agencies. Interest rates are similar to commercial rates.

14.3.3 National development banks

Many governments in industrial countries have their own development banks to foster international loans and investments. The three leading institutions of the USA are the Export–Import Bank, the Agency for International Development, and the Overseas Private Investment Corporation.

THE EXPORT–IMPORT BANK (EX–IM BANK) The Ex–Im Bank provides investment funds to MNCs. These funds include long-term direct financing to facilitate the purchase of US goods and services used in industrial projects in foreign countries. In this type of long-term direct financing, the Ex–Im Bank expects substantial equity participation by the borrower. Moreover, it provides US companies with guarantees on their engineering and feasibility studies, as well as on their technical and construction services, performed abroad. In summary, the Ex–Im Bank is a key source of financing overseas projects when private sources are not available. These projects must be economically justifiable, contribute to the economic development of the country, and improve the country's foreign-exchange position.

THE AGENCY FOR INTERNATIONAL DEVELOPMENT (AID) The agency was established in 1961 to carry out nonmilitary US foreign-assistance programs. As an agency of the US State Department, AID emphasizes assistance to friendly governments or to support programs that will make foreign friends for the USA. As the primary aid agency of the US government, it performs three functions:

1 It administers the government's programs of technical cooperation with less developed countries.
2 It administers the government's economic programs for less developed countries.
3 It carries out special emergency programs as directed by the US President.

Development loans are made to friendly governments, and private companies may borrow these funds from their governments. To prevent a heavy drain of US dollars, loans are usually tied to purchases of US goods and services. Moreover, these funds are generally maintained in the USA and are simply made available for use by recipient countries. All development loans are repayable in dollars and can have a maximum maturity of 50 years, with a grace period of 10 years. In making development loans, AID considers the availability of funds at reasonable terms from other free-world sources. Interest rates are usually lower than international money rates.

The Overseas Private Investment Corporation (OPIC) The corporation was established in 1969 to take over AID's responsibility for investment insurance and guarantee programs. The OPIC became operational in 1971 and is wholly owned by the US Treasury Department. It operates two programs: insurance of US private investments in less developed countries and project financing. More specifically, its insurance programs cover losses from political risks of currency inconvertibility, expropriation, and land-based war to US companies that make investments in friendly developing countries. Its project financing is carried out through an investment guarantee program. This program provides guarantees against losses from commercial and political risks, direct investment funds in dollars or foreign currencies, and a pre-investment survey program.

The OPIC combines private business with the US foreign-policy objective of encouraging American firms to invest in less developed countries. Thus, it grants insurance and guarantees for projects which are in the best interest of both the USA's and the host country's economy.

SUMMARY

For purposes of expansion, new investment, and day-to-day operations, the international financial manager must be familiar with various sources of internal or external funds. This chapter has discussed three types of internally generated funds: (1) retained earnings and depreciation provided by operations; (2) equity contributions, loans, and credits from the parent company; and (3) loans from sister subsidiaries.

External sources of funds include borrowing from financial institutions in a parent country or abroad, joint ventures with local partners, project finance, and development banks. Commercial banks are a major financial intermediary in foreign trade and investment. The upsurge of direct foreign investment by MNCs since the early 1950s has forced banks to follow their customers overseas. The principal instruments used by banks to accommodate MNCs' borrowing requests are overdrafts, unsecured short-term loans, bridge loans, arbi loans, and link financing.

Development banks provide MNCs with a variety of financing sources. They are banks established to aid in economic development through equity participation, loans, or some intermediate form of investment. They may be worldwide, regional, or national. The World Bank Group consists of the International Bank for Reconstruction and Development, the International Development Association, and the International Finance Corporation. These worldwide development banks are designed to provide financial support for less developed countries. Regional groups of countries have established regional development banks to promote more effective economic development within the member countries. Five regional lending institutions formed to facilitate development on four continents are the Inter-American Development Bank, the Asian Development Bank, the European Investment Bank, the European Bank for Reconstruction and Development, and the African Development Bank. National development banks perform the same general functions as worldwide and regional development banks.

Questions

1 What are the major types of funds supplied by the parent company to its subsidiaries?
2 Why are parent loans to foreign subsidiaries more popular than equity contributions?
3 What are the internal sources of funds provided by operations? What is the role of internal funds?
4 List the types of loans that local banks provide to foreign subsidiaries for nontrade international operations. Are these local credits used to finance current assets or fixed assets? Why are these loans sometimes called self-liquidating loans?
5 What are the similarities and differences between Edge Act and agreement corporations and international banking facilities?
6 What are the advantages and disadvantages of joint ventures?
7 George Cassidy has suggested several guidelines that can be used to determine an optimum financing mix of debt and equity for overseas projects. Explain these guidelines.
8 What is the role of development banks? How can multinational companies benefit from these development banks?
9 Describe the role of the European Bank for Reconstruction and Development (EBRD).

Problems

1 There are three alternatives to increase a net working capital of $10,000:
   (a) Forgo cash discounts with the terms of 2/10, net 40.
   (b) Borrow the money at 7 percent from the bank. This bank loan requires a minimum compensating balance of 20 percent and interest on the loan is paid at maturity.
   (c) Sell commercial paper at 8 percent. The underwriting fees of the issue are 2 percent of the face value.
   Calculate the effective annual cost of each of the above alternatives.
   (d) Which alternative should be chosen and why?
2 A $10,000 bank loan has a coupon rate of 10 percent.
   (a) Calculate the effective interest cost if the loan is on a discount basis.
   (b) Calculate the effective interest cost if the loan requires a minimum compensating balance of 20 percent and it is on a discount basis.
   (c) Calculate the effective interest cost if the loan requires a 25 percent compensating balance but it is on a collect basis.

3 A US company borrows Japanese yen for 1 year at 5 percent. During the year, the yen appreciates from $0.010 to $0.012 against the US dollar.
   (a) Determine the percentage appreciation of the yen.
   (b) Compute the effective interest rate of the loan in dollar terms.

4 A Mexican subsidiary of a US company needs a peso (local) loan. The Mexican loan rate is 15 percent per year, while a foreign loan rate is 7 percent per year. By how much must the foreign currency appreciate to make the cost of the foreign loan equal to that of the local loan?

5 A US company is considering three financing plans for 1 year: a dollar loan at 6 percent; a Swiss franc loan at 3 percent; and a euro loan at 4 percent. The company has forecasted that the franc will appreciate by 2 percent for the next year and that the euro will appreciate by 3 percent for the same period.
   (a) Compute the expected effective interest rate for each of the three plans.
   (b) Which plan appears to be most feasible?
   (c) Why might the company not necessarily choose the plan with the least interest rate?

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Case Problem 14: IBM's Strategic Alliances

IBM is the world's largest computer company, with 300,000 employees and annual sales of $90 billion. IBM is the company that had almost collapsed in the early 1990s. However, its comeback has been remarkable because of the strategic alliances and other actions taken by the company. IBM earned $7.7 billion in 1999, $4 per share. Its stock price increased from $45 per share in 1991 to $200 in 1999 ($100 after a two-for-one split in mid-1997). More than 60 percent of worldwide sales come from foreign operations. IBM has two fundamental missions: First, it strives to lead in the creation, development, and manufacture of the industry's advanced information technologies, including computer systems, software, networking systems, storage devices, and electronics. Second, it translates these advanced technologies into value for its customers through professional solutions for businesses worldwide. To achieve these two missions, IBM has relied heavily on a variety of strategic alliances, along with mergers and acquisitions of other firms. In addition, IBM has not hesitated to sell some none-core and/or unprofitable businesses. For example, IBM sold its Global Network business to AT&T for $5 billion in 1999.

The rush of new technology, the expense of staying on the leading edge, the demands of customers, and worldwide competition have required IBM and other high-tech companies to form a wide range of alliances and partnerships. The costs of developing the 256-million-bit memory chip (in a three-way pact with Siemens and Toshiba) have exceeded a billion dollars. Take the IBM PC as another example. Only about half of the machine and its components come from the company's plants. The rest – including the monochrome monitor, the keyboard, some graphics printers, and a large share of the semiconductor chips – come from its partners in Japan, Singapore, and Korea. With these stakes, sharing costs, risk, and knowledge is essential.

In a decade, IBM has moved from a do-it-all-yourself, inwardly directed company to an enterprise that reaches out for new ideas and approaches that intertwine with its own talents and strengths. Today, IBM has more than 20,000 business partnerships worldwide and more than 500 equity alliances with agents, dealers, distributors, software firms, service companies, and manufacturers.

The quest to satisfy customers has blurred traditional competitive boundaries. Apple Computer is IBM's partner in Taligent to develop object-oriented software and in Kaleida to create multimedia standards. Hewlett-Packard and IBM have developed and manufactured high-speed fiber-optic communications components. Wang and Mitsubishi sell IBM systems under their logos, and Digital Equipment is a partner in offering business recovery services. In March 1999, IBM agreed to sell Dell Computer Corp. $16 billion in parts over 7 years. This latest deal underscores IBM's new strategic focus on selling high-tech components on the open market, rather than just using them inside IBM computers.

This strategy has been advanced by IBM's CEO, Gerstner, who sees it as another way to derive profits from IBM's technology prowess and to keep the company competitive. Alliances not only divide high development and production costs, but also reduce critical time-to-market, pool scarce human skills, provide access to new markets and distribution channels, and fill product gaps.

Case Questions

1 What are the forms of strategic alliances used by IBM?
2 Why does a company as big as IBM have to depend on joint ventures so heavily for its global expansion?

3 How can these international strategic alliances enable IBM to achieve its objective of maximizing stockholder wealth?
4 What are the motives for strategic alliances in general?
5 The home page of IBM, www.ibm.com, covers the company's news, products, services, support, annual financial reports, and many other areas of its business operations. Use this web page to find recent IBM acquisitions and divestitures.

Sources: M. Potts and P. Behr, "Strange Global Bedfellows," *Across The Board*, Feb. 1987, pp. 24–30; "IBM Will Sell Dell $16 Billion of Parts," *The Wall Street Journal*, Mar. 19, 1999, pp. A3, A10; and IBM *Annual Report*, various issues.