Part 1 (Chapters 1 through 5) provides an overview of the multinational corporation (MNC) and the environment in which it operates. Chapter 1 explains the goals of the MNC, along with the motives and risks of international business. Chapter 2 describes the international flow of funds between countries. Chapter 3 describes the international financial markets and how these markets facilitate ongoing operations. Chapter 4 explains how exchange rates are determined, while Chapter 5 provides background on the currency futures and options markets. Managers of MNCs must understand the international environment described in these chapters in order to make proper decisions.
Multinational corporations (MNCs) are defined as firms that engage in some form of international business. Their managers conduct international financial management, which involves international investing and financing decisions that are intended to maximize the value of the MNC. The goal of their managers is to maximize the value of the firm, which is similar to the goal of managers employed by domestic companies.

Initially, firms may merely attempt to export products to a particular country or import supplies from a foreign manufacturer. Over time, however, many of them recognize additional foreign opportunities and eventually establish subsidiaries in foreign countries. Dow Chemical, IBM, Nike, and many other firms have more than half of their assets in foreign countries. Same businesses, such as ExxonMobil, Fortune Brands, and Colgate-Palmolive, commonly generate more than half of their sales in foreign countries. A prime example is the Coca-Cola Co., which distributes its products in more than 160 countries and uses 40 different currencies. Over 60 percent of its total annual operating income is typically generated outside the United States. Even smaller U.S. firms commonly generate more than 20 percent of their sales in foreign markets, including AMSCO International (Pennsylvania), Ferro (Ohio), Interlake (Illinois), Medtronic (Minnesota), Sybron (Wisconsin), and Synoptics (California). These U.S. firms that conduct international business tend to focus on the niches that have made them successful in the United States. Seventy-five percent of U.S. firms that export have fewer than 100 employees.

International financial management is important even to companies that have no international business because these companies must recognize how their foreign competitors will be affected by movements in exchange rates, foreign interest rates, labor costs, and inflation. Such economic characteristics can affect the foreign competitors’ costs of production and pricing policies.

This chapter provides background on the goals of an MNC and the potential risk and returns from engaging in international business.

The specific objectives of this chapter are to:

- identify the management goal and organizational structure of the MNC,
- describe the key theories that justify international business,
- explain the common methods used to conduct international business, and
- provide a model for valuing the MNC.

Managing the MNC

The commonly accepted goal of an MNC is to maximize shareholder wealth. Managers employed by the MNC are expected to make decisions that will maximize the stock price and therefore serve the shareholders. Some publicly traded MNCs based outside the United States may have additional goals, such as satisfying their respective governments, banks, or employees. However, these MNCs now place more emphasis on satisfying shareholders so that they can more easily obtain funds from shareholders to support their operations. There are even some firms in Russia, Poland, and Slovenia that have issued stock to investors and are focused on satisfying their shareholders. Our focus in this text is on the U.S.-based MNC and its shareholders, but the concepts commonly apply to MNCs based in other countries.
The focus of this text is on MNCs whose parents wholly own any foreign subsidiaries, which means that the U.S. parent is the sole owner of the subsidiaries. This is the most common form of ownership of U.S.-based MNCs, and it enables financial managers throughout the MNC to have a single goal of maximizing the value of the entire MNC instead of maximizing the value of any particular foreign subsidiary.

**Facing Agency Problems**

Managers of an MNC may make decisions that conflict with the firm's goal to maximize shareholder wealth. For example, a decision to establish a subsidiary in one location versus another may be based on the location's appeal to a particular manager rather than on its potential benefits to shareholders. A decision to expand a subsidiary may be motivated by a manager's desire to receive more compensation rather than to enhance the value of the MNC. This conflict of goals between a firm's managers and shareholders is often referred to as the *agency problem*.

The costs of ensuring that managers maximize shareholder wealth (referred to as *agency costs*) are normally larger for MNCs than for purely domestic firms for several reasons. First, MNCs with subsidiaries scattered around the world may experience larger agency problems because monitoring managers of distant subsidiaries in foreign countries is more difficult. Second, foreign subsidiary managers raised in different cultures may not follow uniform goals. Third, the sheer size of the larger MNCs can also create large agency problems. Fourth, some non-U.S. managers tend to downplay the short-term effects of decisions, which may result in decisions for foreign subsidiaries of the U.S.-based MNCs that are inconsistent with maximizing shareholder wealth.

**Parent Control of Agency Problems.** The parent corporation of an MNC may be able to prevent agency problems with proper governance. It should clearly communicate the goals for each subsidiary to ensure that all subsidiaries focus on maximizing the value of the MNC rather than their respective subsidiary values. The parent can oversee the subsidiary decisions to check whether the subsidiary managers are satisfying the MNC's goals. The parent can also implement compensation plans that reward the subsidiary managers who satisfy the MNC's goals. A common incentive is to provide managers with the MNC's stock (or options to buy the stock at a fixed price) as part of their compensation, so that they benefit directly from a higher stock price when they make decisions that enhance the MNC's value.

**Corporate Control of Agency Problems.** There are also various forms of corporate control that can help prevent agency problems and therefore ensure that managers make decisions to satisfy the MNC's shareholders. If the MNC's managers make poor decisions that reduce its value, another firm may be able to acquire it at a low price and likely remove the weak managers. In addition, institutional investors such as mutual funds or pension funds that have large holdings of an MNC's stock have some influence over management because they can complain to the board of directors if managers are making poor decisions. They may attempt to enact changes in a poorly performing MNC, such as the removal of high-level managers or even board members. The institutional investors may even work together when demanding changes in an MNC because an MNC would not want to lose all of its major shareholders.

**How SOX Improved Corporate Governance of MNCs**

One limitation of the corporate control process is that investors rely on the reporting by the firm's managers for information. If managers are serving themselves rather than the investors, they may exaggerate their performance. There are many well-known examples (such as Enron and WorldCom) in which large MNCs were able to alter their financial reporting so that investors would not be aware of their financial problems.
Part 1: The International Financial Environment

Enacted in 2002, the Sarbanes-Oxley Act (SOX) ensures a more transparent process for managers to report on the productivity and financial condition of their firm. It requires firms to implement an internal reporting process that can be easily monitored by executives and the board of directors. Some of the common methods used by MNCs to improve their internal control process are:

- Establishing a centralized database of information
- Ensuring that all data are reported consistently among subsidiaries
- Implementing a system that automatically checks data for unusual discrepancies relative to norms
- Speeding the process by which all departments and all subsidiaries have access to the data that they need
- Making executives more accountable for financial statements by personally verifying their accuracy

These systems made it easier for a firm’s board members to monitor the financial reporting process. Therefore, SOX reduced the likelihood that managers of a firm can manipulate the reporting process and therefore improved the accuracy of financial information for existing and prospective investors.

Management Structure of an MNC

The magnitude of agency costs can vary with the management style of the MNC. A centralized management style, as illustrated in the top section of Exhibit 1.1, can reduce agency costs because it allows managers of the parent to control foreign subsidiaries and therefore reduces the power of subsidiary managers. However, the parent’s managers may make poor decisions for the subsidiary if they are not as informed as subsidiary managers about financial characteristics of the subsidiary.

Alternatively, an MNC can use a decentralized management style, as illustrated in the bottom section of Exhibit 1.1. This style is more likely to result in higher agency costs because subsidiary managers may make decisions that do not focus on maximizing the value of the entire MNC. Yet, this style gives more control to those managers who are closer to the subsidiary’s operations and environment. To the extent that subsidiary managers recognize the goal of maximizing the value of the overall MNC and are compensated in accordance with that goal, the decentralized management style may be more effective.

Given the obvious tradeoff between centralized and decentralized management styles, some MNCs attempt to achieve the advantages of both styles. That is, they allow subsidiary managers to make the key decisions about their respective operations, but the parent’s management monitors the decisions to ensure that they are in the best interests of the entire MNC.

How the Internet Facilitates Management Control

The Internet is making it easier for the parent to monitor the actions and performance of its foreign subsidiaries.

EXAMPLE

The parent of Jersey, Inc., has subsidiaries in Australia and Italy. The subsidiaries are in different time zones, so communicating frequently by phone is inconvenient and expensive. In addition, financial reports and designs of new products or plant sites cannot be easily communicated over the phone. The Internet allows the foreign subsidiaries to e-mail updated information in a standardized format to avoid language problems and to send images of financial reports and product designs. The parent can easily track inventory, sales, expenses, and earnings of each subsidiary on a weekly or monthly basis. Thus, the use of the Internet can reduce agency costs due to international business.
Why Firms Pursue International Business

The commonly held theories as to why firms become motivated to expand their business internationally are (1) the theory of comparative advantage, (2) the imperfect markets theory, and (3) the product cycle theory. The three theories overlap to a
Part 1: The International Financial Environment

degree and can complement each other in developing a rationale for the evolution of international business.

Theory of Comparative Advantage
Multinational business has generally increased over time. Part of this growth is due to the heightened realization that specialization by countries can increase production efficiency. Some countries, such as Japan and the United States, have a technology advantage, while other countries, such as Jamaica, Mexico, and South Korea, have an advantage in the cost of basic labor. Since these advantages cannot be easily transported, countries tend to use their advantages to specialize in the production of goods that can be produced with relative efficiency. This explains why countries such as Japan and the United States are large producers of computer components, while countries such as Jamaica and Mexico are large producers of agricultural and handmade goods. MNCs such as Oracle, Intel, and IBM have grown substantially in foreign countries because of their technology advantage.

When a country specializes in some products, it may not produce other products, so trade between countries is essential. This is the argument made by the classical theory of comparative advantage. Comparative advantages allow firms to penetrate foreign markets. Many of the Virgin Islands, for example, specialize in tourism and rely completely on international trade for most products. Although these islands could produce some goods, it is more efficient for them to specialize in tourism. That is, the islands are better off using some revenues earned from tourism to import products rather than attempting to produce all the products that they need.

Imperfect Markets Theory
If each country's markets were closed from all other countries, there would be no international business. At the other extreme, if markets were perfect, so that the factors of production (such as labor) were easily transferable, then labor and other resources would flow wherever they were in demand. The unrestricted mobility of factors would create equality in costs and returns and remove the comparative cost advantage, the rationale for international trade and investment. However, the real world suffers from imperfect market conditions where factors of production are somewhat immobile.

There are costs and often restrictions related to the transfer of labor and other resources among countries. Because markets for the various resources used in production are “imperfect,” MNCs such as the Gap and Nike often capitalize on a foreign country's resources. Imperfect markets provide an incentive for firms to seek out foreign opportunities.

Product Cycle Theory
One of the more popular explanations as to why firms evolve into MNCs is the product cycle theory. According to this theory, firms become established in the home market as a result of some perceived advantage over existing competitors, such as a need by the market for at least one more supplier of the product. Because information about markets and competition is more readily available at home, a firm is likely to establish itself first in its home country. Foreign demand for the firm's product will initially be accommodated by exporting. As time passes, the firm may feel the only way to retain its advantage over competition in foreign countries is to produce the product in foreign markets, thereby reducing its transportation costs. The competition in the foreign markets may increase as other producers become more familiar with the firm's product. The firm may develop strategies to prolong the foreign demand for its product. A common approach is to attempt to differentiate the product so that other
competitors cannot offer exactly the same product. These phases of the cycle are illustrated in Exhibit 1.2. As an example, 3M Co. uses one new product to penetrate foreign markets. After entering the market, it expands its product line.

There is more to the product cycle theory than is summarized here. This discussion merely suggests that, as a firm matures, it may recognize additional opportunities outside its home country. Whether the firm’s foreign business diminishes or expands over time will depend on how successful it is at maintaining some advantage over its competition. The advantage could represent an edge in its production or financing approach that reduces costs or an edge in its marketing approach that generates and maintains a strong demand for its product.

How Firms Engage in International Business

Firms use several methods to conduct international business. The most common methods are these:

- International trade
- Licensing
- Franchising
- Joint ventures
- Acquisitions of existing operations
- Establishing new foreign subsidiaries

Each method is discussed in turn, with some emphasis on its risk and return characteristics.

Exhibit 1.2  International Product Life Cycle
Part 1: The International Financial Environment

International Trade

International trade is a relatively conservative approach that can be used by firms to penetrate markets (by exporting) or to obtain supplies at a low cost (by importing). This approach entails minimal risk because the firm does not place any of its capital at risk. If the firm experiences a decline in its exporting or importing, it can normally reduce or discontinue this part of its business at a low cost.

Many large U.S.-based MNCs, including Boeing, DuPont, General Electric, and IBM, generate more than $4 billion in annual sales from exporting. Nonetheless, small businesses account for more than 20 percent of the value of all U.S. exports.

How the Internet Facilitates International Trade.

Many firms use their websites to list the products that they sell, along with the price for each product. This allows them to easily advertise their products to potential importers anywhere in the world without mailing brochures to various countries. In addition, a firm can add to its product line or change prices by simply revising its website. Thus, importers need only monitor an exporter's website periodically to keep abreast of its product information.

Firms can also use their websites to accept orders online. Some products such as software can be delivered directly to the importer over the Internet in the form of a file that lands in the importer's computer. Other products must be shipped, but the Internet makes it easier to track the shipping process. An importer can transmit its order for products via e-mail to the exporter. The exporter's warehouse fills orders. When the warehouse ships the products, it can send an e-mail message to the importer and to the exporter's headquarters. The warehouse may even use technology to monitor its inventory of products so that suppliers are automatically notified to send more supplies once the inventory is reduced to a specific level. If the exporter uses multiple warehouses, the Internet allows them to work as a network so that if one warehouse cannot fill an order, another warehouse will.

Licensing

Licensing obligates a firm to provide its technology (copyrights, patents, trademarks, or trade names) in exchange for fees or some other specified benefits. For example, AT&T and Verizon Communications have licensing agreements to build and operate parts of India's telephone system. Sprint Nextel Corp. has a licensing agreement to develop telecommunications services in the United Kingdom. Eli Lilly & Co. has a licensing agreement to produce drugs for Hungary and other countries. HGA, Inc., which operates more than 3,000 supermarkets in the United States, has a licensing agreement to operate supermarkets in China and Singapore. Licensing allows firms to use their technology in foreign markets without a major investment in foreign countries and without the transportation costs that result from exporting. A major disadvantage of licensing is that it is difficult for the firm providing the technology to ensure quality control in the foreign production process.

How the Internet Facilitates Licensing.

Some firms with an international reputation use their brand name to advertise products over the Internet. They may use manufacturers in foreign countries to produce some of their products subject to their specifications.

Springs, Inc., has set up a licensing agreement with a manufacturer in the Czech Republic. When Springs receives orders for its products from customers in Eastern Europe, it relies on this manufacturer to produce and deliver the products ordered. This expedites the delivery process and may even allow Springs to have the products manufactured at a lower cost than if it produced them itself.
Franchising

Franchising obligates a firm to provide a specialized sales or service strategy, support assistance, and possibly an initial investment in the franchise in exchange for periodic fees. For example, McDonald's, Pizza Hut, Subway Sandwiches, Blockbuster Video, and Dairy Queen have franchises that are owned and managed by local residents in many foreign countries. Like licensing, franchising allows firms to penetrate foreign markets without a major investment in foreign countries. The recent relaxation of barriers in foreign countries throughout Eastern Europe and South America has resulted in numerous franchising arrangements.

Joint Ventures

A joint venture is a venture that is jointly owned and operated by two or more firms. Many firms penetrate foreign markets by engaging in a joint venture with firms that reside in those markets. Most joint ventures allow two firms to apply their respective comparative advantages in a given project. For example, General Mills, Inc., joined in a venture with Nestlé SA, so that the cereals produced by General Mills could be sold through the overseas sales distribution network established by Nestlé.

Xerox Corp. and Fuji Co. (of Japan) engaged in a joint venture that allowed Xerox Corp. to penetrate the Japanese market and allowed Fuji to enter the photocopying business. Sara Lee Corp. and AT&T have engaged in joint ventures with Mexican firms to gain entry to Mexico's markets. Joint ventures between automobile manufacturers are numerous, as each manufacturer can offer its technological advantages. General Motors has ongoing joint ventures with automobile manufacturers in several different countries, including Hungary and the former Soviet states.

Acquisitions of Existing Operations

Firms frequently acquire other firms in foreign countries as a means of penetrating foreign markets. For example, American Express recently acquired offices in London, while Procter & Gamble purchased a bleach company in Panama. Acquisitions allow firms to have full control over their foreign businesses and to quickly obtain a large portion of foreign market share.

Example

Home Depot acquired the second largest home improvement business in Mexico. This acquisition was Home Depot's first in Mexico, but allowed it to expand its business after establishing name recognition there. Home Depot is expanding in Mexico just as it did in Canada throughout the 1990s.

An acquisition of an existing corporation is subject to the risk of large losses, however, because of the large investment required. In addition, if the foreign operations perform poorly, it may be difficult to sell the operations at a reasonable price.

Some firms engage in partial international acquisitions in order to obtain a stake in foreign operations. This requires a smaller investment than full international acquisitions and therefore exposes the firm to less risk. On the other hand, the firm will not have complete control over foreign operations that are only partially acquired.

Establishing New Foreign Subsidiaries

Firms can also penetrate foreign markets by establishing new operations in foreign countries to produce and sell their products. Like a foreign acquisition, this method requires a large investment. Establishing new subsidiaries may be preferred to foreign acquisitions because the operations can be tailored exactly to the firm's needs. In addition, a smaller investment may be required than would be needed to purchase existing operations. However, the firm will not reap any rewards from the investment until the subsidiary is built and a customer base established.
Summary of Methods

The methods of increasing international business extend from the relatively simple approach of international trade to the more complex approach of acquiring foreign firms or establishing new subsidiaries. Any method of increasing international business that requires a direct investment in foreign operations normally is referred to as a direct foreign investment (DFI). International trade and licensing usually are not considered to be DFI because they do not involve direct investment in foreign operations. Franchising and joint ventures tend to require some investment in foreign operations, but to a limited degree. Foreign acquisitions and the establishment of new foreign subsidiaries require substantial investment in foreign operations and represent the largest portion of DFI.

Many MNCs use a combination of methods to increase international business. Motorola and IBM, for example, have substantial direct foreign investment but also derive some of their foreign revenue from various licensing agreements, which require less DFI to generate revenue.

The manner by which an MNC’s international business affects its cash flows is illustrated in Exhibit 1.3. In general, the cash outflows associated with international business by the U.S. parent are to pay for imports, to comply with its international arrangements, or to support the creation or expansion of foreign subsidiaries. Conversely, it will receive cash flows in the form of payment for its exports, fees for the services it provides within international arrangements, and remitted funds from the foreign subsidiaries. The first diagram in this exhibit represents a firm that has only domestic business activities. The second diagram reflects an MNC that engages in international trade. Thus, its international cash flows result from either paying for imported supplies or receiving payment in exchange for products that it exports.

The third diagram reflects an MNC that engages in some international arrangements (which can include international licensing, franchising, or joint ventures). Any of these international arrangements can require cash outflows by the MNC in foreign countries to comply with the arrangement, such as the expenses incurred from transferring technology or funding partial investment in a franchise or joint venture. These arrangements generate cash flows to the MNC in the form of fees for services (such as technology or support assistance) it provides.

The fourth diagram reflects an MNC that engages in direct foreign investment. This type of MNC has one or more foreign subsidiaries. There can be cash outflows from the U.S. parent to its foreign subsidiaries in the form of invested funds to help finance the operations of the foreign subsidiaries. There are also cash flows from the foreign subsidiaries to the U.S. parent in the form of remitted earnings and fees for services provided by the parent, which can all be classified as remitted funds from the foreign subsidiaries.
Valuation Model for an MNC

The value of an MNC is relevant to its shareholders and its debtholders. When managers make decisions that maximize the value of the firm, they maximize shareholder wealth (assuming that the decisions are not intended to maximize the wealth of debtholders at the expense of shareholders). Since international financial management should be conducted with the goal of increasing the value of the MNC, it is useful to review some basics of valuation. There are numerous methods of valuing an MNC, and some methods will lead to the same valuation. The valuation method described in this section can be used to understand the key factors that affect an MNC’s value in a general sense.

Domestic Model

Before modeling an MNC’s value, consider the valuation of a purely domestic firm that does not engage in any foreign transactions. The value ($V$) of a purely domestic firm in the United States is commonly specified as the present value of its expected...
Part 1: The International Financial Environment

Valuing International Cash Flows

An MNC's value can be specified in the same manner as a purely domestic firm's. However, consider that the expected cash flows generated by a U.S.-based MNC's parent in period $t$ may be coming from various countries and may therefore be denominated in different foreign currencies. The foreign currency cash flows will be converted into dollars. Thus, the expected dollar cash flows to be received at the end of period $t$ are equal to the sum of the products of cash flows denominated in each currency $j$ times the expected exchange rate at which that currency could be converted into dollars by the MNC at the end of period $t$.

$$E(CF_{t,j}) = \sum_{j} (E(CF_{t,j}) \times E(S_{j,t}))$$

where $CF_{t,j}$ represents the amount of cash flow denominated in a particular foreign currency at the end of period $t$, and $S_{j,t}$ represents the exchange rate at which the foreign currency (measured in dollars per unit of the foreign currency) can be converted to dollars at the end of period $t$.

**Valuation of an MNC That Uses Two Currencies.** An MNC that does business in two currencies could measure its expected dollar cash flows in any period by multiplying the expected cash flow in each currency times the expected exchange rate at which that currency could be converted to dollars and then summing those two products. If the firm does not use various techniques (discussed later in the text) to hedge its transactions in foreign currencies, the expected exchange rate in a given period would be used in the valuation equation to estimate the corresponding expected exchange rate at which the foreign currency can be converted into dollars in
Chapter 1: Multinational Financial Management: An Overview

that period. Conversely, if the MNC hedges these transactions, the exchange rate at which it can hedge would be used in the valuation equation.

It may help to think of an MNC as a portfolio of currency cash flows, one for each currency in which it conducts business. The expected dollar cash flows derived from each of those currencies can be combined to determine the total expected dollar cash flows in each future period. The present value of those cash flows serves as the estimate of the MNC’s value. It is easier to derive an expected dollar cash flow value for each currency before combining the cash flows among currencies within a given period, because each currency’s cash flow amount must be converted to a common unit (the dollar) before combining the amounts.

Carolina Co. has expected cash flows of $100,000 from local business and 1 million Mexican pesos from business in Mexico at the end of period $t$. Assuming that the peso’s value is expected to be $.09, the expected dollar cash flows are:

$$E(CF_j, t) = \sum_{j} E(CF_j, t) \times E(S_j, t)$$

$$= ($100,000) + [1,000,000 \text{ pesos} \times (.09)]$$

$$= ($100,000) + [$90,000]$$

$$= $190,000.$

The cash flows of $100,000 from U.S. business were already denominated in U.S. dollars and therefore did not have to be converted.

Valuation of an MNC That Uses Many Currencies. Carolina’s dollar cash flows at the end of every period in the future can be estimated in the same manner. Then, its value can be measured by determining the present value of the expected dollar cash flows, which is the sum of the discounted dollar cash flows that are expected in all future periods. If an MNC had transactions involving 40 currencies, the same process could be used. The expected dollar cash flows for each of the 40 currencies would be estimated separately for each future period. The expected dollar cash flows for each of the 40 currencies within each period could then be combined to derive the total dollar cash flows per period. Finally, the cash flows in each period would be discounted to derive the value of the MNC.

The general formula for the dollar cash flows received by an MNC in any particular period can be written as:

$$E(CF_j, t) = \sum_{j} E(CF_j, t) \times E(S_j, t)$$

The value of an MNC can be more clearly differentiated from the value of a purely domestic firm by substituting the expression $E(CF_j, t) \times E(S_j, t)$ for $E(CF_j, t)$ in the valuation model, as shown here:

$$V = \sum_{t=1}^{n} \left( \frac{\sum_{j} E(CF_j, t) \times E(S_j, t)}{(1 + r)^t} \right)$$

where $CF_j$ represents the cash flow denominated in a particular currency (including dollars), and $S_j$ represents the exchange rate at which the MNC can convert the foreign currency at the end of period $t$. Thus, the value of an MNC should be favorably affected by expectations of an increase in $CF_j$ or $S_j$. Only those cash flows that are to be received by the MNC’s parent in the period of concern should be counted.
avoid double-counting, cash flows of the MNC’s subsidiaries are considered in the valuation model only when they reflect transactions with the U.S. parent. Thus, any expected cash flows received by foreign subsidiaries should not be counted in the valuation equation until they are expected to be remitted to the parent.

The denominator of the valuation model for the MNC remains unchanged from the original valuation model for the purely domestic firm. However, recognize that the weighted average cost of capital for the MNC is based on funding some projects that reflect business in different countries. Thus, any decision by the MNC’s parent that affects the cost of its capital supporting projects in a specific country can affect its weighted average cost of capital (and its required rate of return) and therefore can affect its value.

In general, the valuation model shows that an MNC’s value can be affected by forces that influence the amount of its cash flows in a particular currency ($F_j$), the exchange rate at which that currency is converted into dollars ($S_j$), or the MNC’s weighted average cost of capital ($k$).

**Uncertainty Surrounding an MNC’s Cash Flows**

The MNC’s future cash flows (and therefore its valuation) are subject to uncertainty because of its exposure to international economic conditions, political conditions, and exchange rate risk, as explained next. Exhibit 1.4 complements the discussion.

**Exposure to International Economic Conditions.** The amount of consumption in any country is influenced by the income earned by consumers in that country. If economic conditions weaken, the income of consumers becomes relatively low, consumer purchases of products decline, and an MNC’s sales in that country may be lower than expected. This results in a reduction in the MNC’s cash flows, and therefore in its value.

**Exposure to International Political Risk.** Political risk (also called country risk) in any country can affect the level of an MNC’s sales. A foreign govern-

Exhibit 1.4  How an MNC’s Valuation Is Exposed to Uncertainty (Risk)

<table>
<thead>
<tr>
<th>Uncertain foreign currency cash flows due to uncertain foreign economic and political conditions</th>
<th>Uncertainty surrounding future exchange rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>$V = \sum_{t=1}^{n} \left( \frac{E(CF_j,t) \times E(S_j,t)}{(1 + k)^t} \right)$</td>
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<tr>
<th>Uncertainty Surrounding an MNC’s Valuation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposure to Foreign Economies: If $CF_j &lt; E(CF_j,t)$ then $V$</td>
</tr>
<tr>
<td>Exposure to Political Risk: If $CF_j &lt; E(CF_j,t)$ then $V$</td>
</tr>
<tr>
<td>Exposure to Exchange Rate Risk: If $S_j &lt; E(S_j,t)$ then $V$</td>
</tr>
</tbody>
</table>
ment may increase taxes or impose barriers on the MNC’s subsidiary. Alternatively, consumers in a foreign country may boycott the MNC if there is friction between the government of their country and the MNC’s home country.

**Exposure to Exchange Rate Risk.** If the foreign currencies to be received by a U.S.-based MNC suddenly weaken against the dollar, the MNC will receive a lower amount of dollar cash flows than was expected. This may reduce the value of the MNC.

**Organization of the Text**

The organization of the chapters in this text is shown in Exhibit 1.5. Chapters 2 through 8 discuss international markets and conditions from a macroeconomic perspective, focusing on external forces that can affect the value of an MNC. Though financial managers may not have control over these forces, they do have some control over their degree of exposure to these forces. These macroeconomic chapters provide the background necessary to make financial decisions.

Chapters 9 through 21 take a microeconomic perspective and focus on how the financial management of an MNC can affect its value. Financial decisions by MNCs are commonly classified as either investing decisions or financing decisions. In general, investing decisions by an MNC tend to affect the numerator of the valuation model because such decisions affect expected cash flows. In addition, if investing decisions by the MNC’s parent alter the firm’s weighted average cost of capital, they may also affect the denominator of the valuation model. Long-term financing decisions by an MNC’s parent tend to affect the denominator of the valuation model because they affect the MNC’s cost of capital.

**Exhibit 1.5 Organization of Chapters**
Part 1: The International Financial Environment

The main goal of an MNC is to maximize shareholder wealth. When managers are tempted to serve their own interests instead of those of shareholders, an agency problem exists.

International business is justified by three key theories. The theory of comparative advantage suggests that each country should use its comparative advantage to specialize in its production and rely on other countries to meet other needs. The imperfect markets theory suggests that because of imperfect markets, factors of production are immobile, which encourages countries to specialize based on the resources they have. The product cycle theory suggests that after firms are established in their home countries, they commonly expand their product specialization in foreign countries.

The most common methods by which firms conduct international business are international trade, licensing, franchising, joint ventures, acquisitions of foreign firms, and formation of foreign subsidiaries. Methods such as licensing and franchising involve little capital investment but distribute some of the profits to other parties. The acquisition of foreign firms and formation of foreign subsidiaries require substantial capital investments but offer the potential for large returns.

The valuation model of an MNC shows that the MNC valuation is favorably affected when its foreign cash inflows increase, the currencies denominating those cash inflows increase, or the MNC’s required rate of return decreases.

**SUMMARY**

- The main goal of an MNC is to maximize shareholder wealth. When managers are tempted to serve their own interests instead of those of shareholders, an agency problem exists.
- International business is justified by three key theories. The theory of comparative advantage suggests that each country should use its comparative advantage to specialize in its production and rely on other countries to meet other needs. The imperfect markets theory suggests that because of imperfect markets, factors of production are immobile, which encourages countries to specialize based on the resources they have. The product cycle theory suggests that after firms are established in their home countries, they commonly expand their product specialization in foreign countries.
- The most common methods by which firms conduct international business are international trade, licensing, franchising, joint ventures, acquisitions of foreign firms, and formation of foreign subsidiaries. Methods such as licensing and franchising involve little capital investment but distribute some of the profits to other parties. The acquisition of foreign firms and formation of foreign subsidiaries require substantial capital investments but offer the potential for large returns.
- The valuation model of an MNC shows that the MNC valuation is favorably affected when its foreign cash inflows increase, the currencies denominating those cash inflows increase, or the MNC’s required rate of return decreases.

**POINT COUNTER-POINT**

Should an MNC Reduce Its Ethical Standards to Compete Internationally?

**Point** Yes. When a U.S.-based MNC competes in some countries, it may encounter some business norms there that are not allowed in the United States. For example, when competing for a government contract, firms might provide payoffs to the government officials who will make the decision. Yet, in the United States, a firm will sometimes take a client on an expensive golf outing or provide skybox tickets to events. This is no different than a payoff. If the payoffs are bigger in some foreign countries, the MNC can compete only by matching the payoffs provided by its competitors.

**Counter-Point** No. A U.S.-based MNC should maintain a standard code of ethics that applies to any country, even if it is at a disadvantage in a foreign country that allows activities that might be viewed as unethical. In this way, the MNC establishes more credibility worldwide.

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

**SELF TEST**

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

1. What are typical reasons why MNCs expand internationally?
2. Explain why unfavorable economic or political conditions affect the MNC’s cash flows, required rate of return, and valuation.
3. Identify the more obvious risks faced by MNCs that expand internationally.
Chapter 1: Multinational Financial Management: An Overview

1. **Agency Problems of MNCs.**
   a. Explain the agency problem of MNCs.
   b. Why might agency costs be larger for an MNC than for a purely domestic firm?

2. **Comparative Advantage.**
   a. Explain how the theory of comparative advantage relates to the need for international business.
   b. Explain how the product cycle theory relates to the growth of an MNC.

3. **Imperfect Markets.**
   a. Explain how the existence of imperfect markets has led to the establishment of subsidiaries in foreign markets.
   b. If perfect markets existed, would wages, prices, and interest rates among countries be more similar or less similar than under conditions of imperfect markets? Why?

4. **International Opportunities.**
   a. Do you think the acquisition of a foreign firm or licensing will result in greater growth for an MNC? Which alternative is likely to have more risk?
   b. Describe a scenario in which the size of a corporation is not affected by access to international opportunities.
   c. Explain why MNCs such as Coca-Cola and PepsiCo, Inc., still have numerous opportunities for international expansion.

5. **International Opportunities Due to the Internet.**
   a. Do you think the Internet will result in greater growth for MNCs? How can it affect the growth of firms in both domestic and international markets?
   b. Offer your opinion on why the Internet may result in increased global competition.

6. **Impact of Exchange Rate Movements.** Plak Co. of Chicago has several European subsidiaries that remit earnings to it each year. Explain how appreciation of the euro (the currency used in many European countries) would affect Plak’s valuation.

7. **Benefits and Risks of International Business.** As an overall review of this chapter, identify possible reasons for growth in international business. Then, list the various disadvantages that may discourage international business.

8. **Valuation of an MNC.** Hudson Co., a U.S. firm, has a subsidiary in Mexico, where political risk has recently increased. Hudson’s best guess of its future peso cash flows to be received has not changed. However, its valuation has declined as a result of the increase in political risk. Explain.

9. **Centralization and Agency Costs.** Would the agency problem be more pronounced for Berkely Corp., which has its parent company make most major decisions for its foreign subsidiaries, or Oakland Corp., which uses a decentralized approach?

10. **Global Competition.** Explain why more standardized product specifications across countries can increase global competition.

11. **Exposure to Exchange Rates.** McCanna Corp., a U.S. firm, has a French subsidiary that produces wine and exports to various European countries. All of the countries where it sells its wine use the euro as their currency, which is the same currency used in France. Is McCanna Corp. exposed to exchange rate risk?

12. **Macro versus Micro Topics.** Review the Table of Contents and indicate whether each of the chapters from Chapter 2 through Chapter 21 has a macro or micro perspective.

13. **Methods Used to Conduct International Business.** Duve, Inc., desires to penetrate a foreign market with either a licensing agreement with a foreign firm or by acquiring a foreign firm. Explain the differences in potential risk and return between a licensing agreement with a foreign firm and the acquisition of a foreign firm.

14. **International Business Methods.** Snyder Golf Co., a U.S. firm that sells high-quality golf clubs in the United States, wants to expand internationally by selling the same golf clubs in Brazil.
   a. Describe the tradeoffs that are involved for each method (such as exporting, direct foreign investment, etc.) that Snyder could use to achieve its goal.
   b. Which method would you recommend for this firm? Justify your recommendation.

15. **Impact of Political Risk.** Explain why political risk may discourage international business.

16. **Impact of September 11.** Following the terrorist attack on the United States, the valuations of many MNCs declined by more than 10 percent. Explain why the expected cash flows of MNCs were reduced, even if they were not directly hit by the terrorist attacks.

**Advanced Questions**

17. **International Joint Venture.** Anheuser-Busch, the producer of Budweiser and other beers, has recently expanded into Japan by engaging in a joint venture with Kirin Brewery, the largest brewery in Japan.
The joint venture enables Anheuser-Busch to have its beer distributed through Kirin’s distribution channels in Japan. In addition, it can utilize Kirin’s facilities to produce beer that will be sold locally. In return, Anheuser-Busch provides information about the American beer market to Kirin.

- a. Explain how the joint venture can enable Anheuser-Busch to achieve its objective of maximizing shareholder wealth.
- b. Explain how the joint venture can limit the risk of the international business.
- c. Many international joint ventures are intended to circumvent barriers that normally prevent foreign competition. What barrier in Japan is Anheuser-Busch circumventing as a result of the joint venture? What barrier in the United States is Kirin circumventing as a result of the joint venture?
- d. Explain how Anheuser-Busch could lose some of its market share in countries outside Japan as a result of this particular joint venture.

18. Impact of Eastern European Growth. The managers of Loyola Corp. recently had a meeting to discuss new opportunities in Europe as a result of the recent integration among Eastern European countries. They decided not to penetrate new markets because of their present focus on expanding market share in the United States. Loyola’s financial managers have developed forecasts for earnings based on the 12 percent market share (defined here as its percentage of total European sales) that Loyola currently has in Eastern Europe. Is 12 percent an appropriate estimate for next year’s Eastern European market share? If not, does it likely overestimate or underestimate the actual Eastern European market share next year?

19. Valuation of an MNC. Birm Co., based in Alabama, considers several international opportunities in Europe that could affect the value of its firm. The valuation of its firm is dependent on four factors: (1) expected cash flows in dollars, (2) expected cash flows in euros that are ultimately converted into dollars, (3) the rate at which it can convert euros to dollars, and (4) Birm’s weighted average cost of capital. For each opportunity, identify the factors that would be affected.

- a. Birm plans a licensing deal in which it will sell technology to a firm in Germany for $3 million; the payment is invoiced in dollars, and this project has the same risk level as its existing businesses.
- b. Birm plans to acquire a large firm in Portugal that is riskier than its existing businesses.
- c. Birm plans to discontinue its relationship with a U.S. supplier so that it can import a small amount of supplies (denominated in euros) at a lower cost from a Belgian supplier.
- d. Birm plans to export a small amount of materials to Ireland that are denominated in euros.

20. Assessing Motives for International Business. Fort Worth, Inc., specializes in manufacturing some basic parts for sports utility vehicles (SUVs) that are produced and sold in the United States. Its main advantage in the United States is that its production is efficient and less costly than that of some other unionized manufacturers. It has a substantial market share in the United States. Its manufacturing process is labor intensive. It pays relatively low wages compared to U.S. competitors, but has guaranteed the local workers that their job positions will not be eliminated for the next 30 years.

- a. Theory of Competitive Advantage: There are not many SUVs sold in Mexico, so Fort Worth, Inc., would not have to face much competition there.
- b. Imperfect Markets Theory: Fort Worth cannot easily transfer workers to Mexico, but it can establish a subsidiary there in order to penetrate a new market.
- c. Product Life Cycle Theory: Fort Worth has been successful in the United States. It has limited growth opportunities because it already controls much of the U.S. market for the parts it produces. Thus, the natural next step is to conduct the same business in a foreign country.
- d. Exchange Rate Risk: The exchange rate of the peso has weakened recently, so this would allow Fort Worth to build a plant at a very low cost (by exchanging dollars for the cheap pesos to build the plant).
- e. Political Risk: The political conditions in Mexico have stabilized in the last few months, so Fort Worth should attempt to penetrate the Mexican market now.

21. Valuation of Wal-Mart’s International Business. In addition to all of its stores in the United States, Wal-Mart has 13 stores in Argentina, 382 stores in Brazil, 289 stores in Canada, 73 stores in China, 889 stores in Mexico, and 385 stores in the United Kingdom. Overall, it has 2,750 stores in foreign countries. Consider the value of Wal-Mart as being composed of two parts, a U.S. part (due to business in the United States) and a non-U.S. part (due to business in other countries). Explain how to determine the present value (in dollars) of the non-U.S.
22. Impact of International Business on Cash Flows and Risk. Nantucket Travel Agency specializes in tours for American tourists. Until recently, all of its business was in the United States. It just established a subsidiary in Athens, Greece, which provides tourist services in the Greek islands for American tourists. It rented a shop near the port of Athens. It also hired residents of Athens who could speak English and provide tours of the Greek islands. The subsidiary’s main costs are rent and salaries for its employees and the lease of a few large boats in Athens that it uses for tours. American tourists pay for the entire tour in dollars at Nantucket’s main U.S. office before they depart for Greece.

a. Explain why Nantucket may be able to effectively capitalize on international opportunities such as the Greek island tours.

b. Nantucket is privately owned by owners who reside in the United States and work in the main office. Explain possible agency problems associated with the creation of a subsidiary in Athens, Greece. How can Nantucket attempt to reduce these agency costs?

c. Greece’s cost of labor and rent are relatively low. Explain why this information is relevant to Nantucket’s decision to establish a tour business in Greece.

d. Explain how the cash flow situation of the Greek tour business exposes Nantucket to exchange rate risk. Is Nantucket favorably or unfavorably affected when the euro (Greece’s currency) appreciates against the dollar? Explain.

e. Nantucket plans to finance its Greek tour business with loans in euros from a bank in Greece to cover its rent, and its main office could pay off the loans over time. Alternatively, its main office could borrow dollars and would periodically convert dollars to euros to pay the expenses in Greece. Does either type of loan reduce the exposure of Nantucket to exchange rate risk? Explain.

f. Explain how the Greek island tour business could expose Nantucket to country risk.

23. Valuation of an MNC. Yahoo! has expanded its business by establishing portals in numerous countries, including Argentina, Australia, China, Germany, Ireland, Japan, and the United Kingdom. It has cash outflows associated with the creation and administration of each portal. It also generates cash inflows from selling advertising space on its website. Each portal results in cash flows in a different currency. Thus, the valuation of Yahoo! is based on its expected future net cash flows in Argentine pesos after converting them into U.S. dollars, its expected net cash flows in Australian dollars after converting them into U.S. dollars, and so on. Explain how and why the valuation of Yahoo! would change if most investors suddenly expected that the dollar would weaken against most currencies over time.

24. Uncertainty Surrounding an MNC’s Valuation. Carlisle Co. is a U.S. firm that is about to purchase a large company in Switzerland at a purchase price of $20 million. This company produces furniture and sells it locally (in Switzerland), and it is expected to earn large profits every year. The company will become a subsidiary of Carlisle and will periodically remit its excess cash flows due to its profits to Carlisle Co. Assume that Carlisle Co. has no other international business. Carlisle has $10 million that it will use to pay for part of the Swiss company and will finance the rest of its purchase with borrowed dollars. Carlisle Co. can obtain supplies from either a U.S. supplier or a Swiss supplier (in which case the payment would be made in Swiss francs). Both suppliers are very reputable and there would be no exposure to country risk when using either supplier. Is the valuation of the total cash flows of Carlisle Co. more uncertain if it obtains its supplies from a U.S. firm or a Swiss firm? Explain briefly.

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

Running Your Own MNC
This exercise can be found on the Xtra! website at http://madura.xtra.swlearning.com.

BLADES, INC. CASE
Decision to Expand Internationally

Blades, Inc., is a U.S.-based company that has been incorporated in the United States for three years. Blades is a relatively small company, with total assets of only $200 million. The company produces a single type of product, roller blades. Due to the booming roller blade market in the United States at the time of the company’s establishment, Blades has been quite successful. For example, in its first year of operation, it reported a
In light of these circumstances, Ben Holt, the company’s chief financial officer (CFO), is contemplating his alternatives for Blades’ future. There are no other cost-cutting measures that Blades can implement in the United States without affecting the quality of its product. Also, production of alternative products would require major modifications to the existing plant setup. Furthermore, and because of these limitations, expansion within the United States at this time seems pointless.

Ben Holt is considering the following: If Blades cannot penetrate the U.S. market further or reduce costs here, why not import some parts from overseas and/or expand the company’s sales to foreign countries? Similar strategies have proved successful for numerous companies that expanded into Asia in recent years to increase their profit margins. The CFO’s initial focus is on Thailand. Thailand has recently experienced weak economic conditions, and Blades could purchase components there at a low cost. Ben Holt is aware that many of Blades’ competitors have begun importing production components from Thailand.

Not only would Blades be able to reduce costs by importing rubber and/or plastic from Thailand due to the low costs of these inputs, but it might also be able to augment weak U.S. sales by exporting to Thailand. Thailand would preserve Blades’ sales before Thai competitors are able to penetrate the Thai market. Furthermore, if the company’s initial approach of exporting works well, establishing a subsidiary in Thailand would preserve Blades’ sales before Thai competitors are able to penetrate the Thai market.

As a financial analyst for Blades, Inc., you are assigned to analyze international opportunities and risks resulting from international business. Your initial assessment should focus on the barriers and opportunities that international trade may offer. Ben Holt has never been involved in international business in any form and is unfamiliar with any constraints that may inhibit his plan to export to and import from a foreign country. Mr. Holt has presented you with a list of initial questions you should answer.

1. What are the advantages Blades could gain from importing from and/or exporting to a foreign country such as Thailand?
2. What are some of the disadvantages Blades could face as a result of foreign trade in the short run? In the long run?
3. Which theories of international business described in this chapter apply to Blades, Inc., in the short run? In the long run?
4. What long-range plans other than establishment of a subsidiary in Thailand are an option for Blades and may be more suitable for the company?
had a high markup and that a low-cost football could possibly penetrate the U.S. market. He also knew how to produce footballs. His goal was to create a firm that would produce low-priced footballs and sell them on a wholesale basis to various sporting goods stores in the United States. Unfortunately, many sporting goods stores began to sell low-priced footballs just before Jim was about to start his business. The firm that began to produce the low-cost footballs already provided many other products to sporting goods stores in the United States and therefore had already established a business relationship with these stores. Jim did not believe that he could compete with this firm in the U.S. market.

Rather than pursue a different business, Jim decided to implement his idea on a global basis. While football (as it is played in the United States) has not been a traditional sport in foreign countries, it has become more popular in some foreign countries in recent years. Furthermore, the expansion of cable networks in foreign countries would allow for much more exposure to U.S. football games in those countries in the future. To the extent that this would increase the popularity of football (U.S. style) as a hobby in the foreign countries, it would result in a demand for footballs in foreign countries. Jim asked many of his foreign friends from college days if they recalled seeing footballs sold in sporting goods stores but that they expected the demand for footballs to increase in their home countries. Consequently, Jim decided to start a business of producing low-priced footballs and exporting them to sporting goods distributors in foreign countries. Those distributors would then sell the footballs at the retail level. Jim planned to expand his product line over time once he identified other sports products that he might sell to foreign sporting goods stores. He decided to call his business “Sports Exports Company.” To avoid any rent and labor expenses, Jim planned to produce the footballs in his garage and to perform the work himself. Thus, his main business expenses were the cost of the materials used to produce footballs and expenses associated with finding distributors in foreign countries who would attempt to sell the footballs to sporting goods stores.

1. Is Sports Exports Company a multinational corporation?
2. Why are the agency costs lower for Sports Exports Company than for most MNCs?
3. Does Sports Exports Company have any comparative advantage over potential competitors in foreign countries that could produce and sell footballs there?
4. How would Jim Logan decide which foreign markets he would attempt to enter? Should he initially focus on one or many foreign markets?
5. The Sports Exports Company has no immediate plans to conduct direct foreign investment. However, it might consider other less costly methods of establishing its business in foreign markets. What methods might the Sports Exports Company use to increase its presence in foreign markets by working with one or more foreign companies?

INTERNET/EXCEL EXERCISES

The website address of the Bureau of Economic Analysis is [http://www.bea.gov](http://www.bea.gov).

1. Use this website to assess recent trends in direct foreign investment (DFI) abroad by U.S. firms. Compare the DFI in the United Kingdom with the DFI in France. Offer a possible reason for the large difference.
2. Based on the recent trends in DFI, are U.S.-based MNCs pursuing opportunities in Asia? In Eastern Europe? In Latin America?