

# The Multinational Corporation in a Global Setting

## Learning Objectives

Upon completion of this chapter, readers should be able to:

- Understand how the factors affecting supply and demand are affected in different countries around the world.
- Define the exchange rate and identify several methods of hedging.
- Understand multinational capital budgeting and explain how it differs from capital budgeting of a domestic corporation.
- Show how changing transfer prices can benefit a corporation.

## The Situation

Global Foods has ceased to be a strictly domestic corporation. It has opened production facilities that produce both its soft drinks and its bottled water in several countries in western Europe and the Pacific Rim. It is now ready to make an investment in one of the countries that was formerly part of the Soviet sphere. Management has been investigating in which of the countries to locate. It turned out that it favored the Czech Republic. This country is centrally located, has a skilled labor force, has been very active in privatizing industry, and has a fairly stable government. Its labor costs are relatively low.

After an investigation of various locations within the Czech Republic, the company found a plant not presently in use but rather well maintained just outside the town of Pelhřimov, in southeastern Bohemia, not too far from the border of Moravia. It is about 115 kilometers from Prague, the capital city. The town itself has about 17,000 inhabitants. Pelhřimov has some light industry including wood processing, food, textile, and clothing.

George Kline, manager of Global Foods' capital planning (we met George in the previous chapter), has been given the task of preparing a capital budgeting evaluation. He consults with the marketing and manufacturing departments. He discusses the Czech economic situation with the company's economist. He obtains estimates of Czech and U.S. inflation rates, and the exchange rate of the Koruna (KCZ) against the U.S. dollar. He further acquaints himself with the corporate tax rate in the Czech Republic. Armed with this information, he begins to put down the assumptions with which he will work.

He expects that the fixed investment by Global Foods, U.S.A., will be \$4 million, and that another \$400,000 will be invested in working capital. The fixed investment will be depreciated straight-line over 8 years. Because the plant is in very good condition, only the installation of machinery will be needed for the plant to begin operating rather quickly.

To be very conservative, cash flows for only 4 years will be estimated, with a terminal value estimated at the end of the 4 years. His marketing people think that first year's sales will be 400 million KCZ and that the volume will

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increase by 6 percent each year. Production costs in the first year will be 190 million KCZ. The parent company will be providing various supplies and services to the subsidiary starting at 110 million KCZ and will grow at the same rate as volume. A license fee of 3 percent of sales will be paid by the Czech subsidiary to the parent corporation. General and administrative expenses will be 12 percent of sales revenue. The following are estimates of annual price level changes in the United States and the Czech Republic:

General price level in the United States	2.0% <sup>1</sup>
General price level in the Czech Republic	3.5%
Sales price in Czech Republic	4.0%
Cost of production in Czech Republic	4.0%

The exchange rate was 27 KCZ/\$1. The exchange rate is expected to change in relation to the inflation rates in the two countries.<sup>2</sup> The income tax rate in the Czech Republic is 31 percent, whereas it is 35 percent in the United States. After the initial infusion of working capital into the project, the subsidiary will require that working capital be 10 percent of sales. Fifty percent of this additional requirement will be financed internally (profits and increase in current liabilities), and the other 50 percent will be financed externally by the subsidiary.

Global Foods' cost of capital for projects of average risk is 15 percent. However, to account for the additional risk faced by operating in a foreign country that just recently embraced free trade (although still regulated), a 4 percent risk margin will be added so the discount rate for the parent company will be 19 percent. The cost of capital for similar enterprises in the Czech Republic is 22 percent.

The profit calculated on the parent's shipments of supplies to its subsidiary will be computed at 5 percent. This appears reasonable and should not be questioned by U.S. or Czech tax authorities.

The subsidiary will remit 50 percent of its aftertax profits to the parent.

With all this information, George will now input the data into an Excel spreadsheet that he specifically prepared for this project. He will have to organize his work into five separate exhibits. First, he will calculate the profit of the subsidiary. Second, he must compute the additional working capital investment made by the subsidiary. The third exhibit will be a cash flow statement for the subsidiary with a calculation of the NPV and IRR. The fourth exhibit may appear somewhat complicated. It translates the dividend by the subsidiary to the parent from KCZ into U.S. dollars; this involves a process called "grossing up" to ascertain the tax for which the parent may be liable because the Czech tax rate is lower than that in the United States.<sup>3</sup> Last, the parent company must compute the NPV and IRR of all cash flows received from the subsidiary.

## INTRODUCTION

Most of our discussion in this book does not differentiate between domestic and international businesses. We touch briefly on aspects of international business in the "Global Application" sections that are found at the end of most chapters. However, the opportunities and problems faced by American corporations in foreign countries occupy many recent headlines and articles in the business media. Therefore, we devote a chapter to this increasingly important topic—the multinational corporation.<sup>4</sup>

A multinational corporation (usually abbreviated as MNC or MNE for multinational enterprise) is faced with the same opportunities and problems as the domestic corporation. It must concern itself with the forces of supply and demand. It must

<sup>1</sup>The price of supplies and services from the United States will also increase at 2 percent.

<sup>2</sup>Because inflation in the United States is 2 percent and in the Czech Republic 3.5 percent, the KCZ will depreciate each year by 1.5 percent.

<sup>3</sup>The process of grossing up is explained later in this chapter.

<sup>4</sup>Some of the topics discussed in this chapter may have been mentioned in some of the previous chapters. However, this chapter tries to tie the various strings together into a unified whole. This chapter benefited a great deal from Michael H. Moffett, Arthur I. Stonehill, and David K. Eiteman, *Fundamentals of Multinational Finance*, 2nd ed. Boston: Pearson Addison Wesley, 2006.

consider demand elasticity for its products and seek to achieve profit optimization by applying the marginal principle, given business and financial risks. All these concerns are discussed thoroughly in this text. One of the main reasons why a company wants to operate globally is to take advantage of new growth opportunities in the rapidly expanding countries such as China, India, and Brazil and in the emerging countries such as Vietnam, Indonesia, and Turkey. But in doing so, such companies also face new challenges and risks. These risks involve factors such as exchange rate fluctuations; different tax systems and government regulations; tariffs and other restrictions; and, of course, different languages, cultures, and ways of doing business. In this chapter, we present an overview of these opportunities and risks, starting first with the opportunities.

## OPPORTUNITIES FOR MULTINATIONAL CORPORATIONS IN A GLOBAL ECONOMY

### Expanding the Dressings Category Throughout the World

In Chapters 4 and 5, we talked about the key factors that affect the demand for a product and the challenges of estimating and forecasting this demand. For companies that operate in a global environment, it is also critical to understand how and why the various factors that influence demand may differ among the countries in which they sell their products. To help illustrate this point, we asked Lisa Vortsman, product manager of a real “Global Foods Company,” to share some of her experiences.<sup>5</sup> This section is based on what she told us about her efforts to increase the sales of the dressings category in the top ten countries of the world based on per capita consumption of dressings. These countries include the United States, the United Kingdom, France, Brazil, and Russia.

In the food business, the dressings category consists primarily of mayonnaise, ketchup, mustard, and salad dressings.<sup>6</sup> All food companies find it very challenging to grow revenue and profit in this category. Strong price competition exists in all of the top ten countries. Unit costs are increasing due to the rising price of key ingredients such as soybean oil. But the key factors that Lisa and her team knew they had to address relate to the nature of the market demand for dressings in the top ten countries. More specifically, she provided the following information:

1. **Household penetration is already very high:** The dressings category is mature and developed. For example, there is a 75 percent household penetration in western Europe and a 98 percent penetration rate in Russia.
2. **Most consumers use dressings on limited occasions:** Many consumers use condiments such as mayonnaise, ketchup, and salad dressings on a limited basis because they tie it to only a few dishes. In large dressings markets like the United Kingdom and the United States, mayonnaise and ketchup are perceived as condiments that cannot be eaten with too many dishes. For example, ketchup is used primarily with hamburgers and fries. Consumer habits are difficult to break and eating habits are no exception.
3. **Health is a significant concern:** Consumer perception of the category tends to be negative across the globe. For example, because of its high fat and calorie content, mayonnaise is considered to be unhealthy in top markets such as the United Kingdom, the United States, and Brazil. Many Russian consumers are concerned about using mayonnaise because they believe it is made with artificial ingredients; they associate ketchup with junk food.

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<sup>5</sup>We are grateful to Lisa Vortsman for her contribution to this chapter. She is currently the product manager in a major global food company. This section is based on her actual experience as the product manager of the dressings category. However, she has requested that we do not publish the name of her company.

<sup>6</sup>For a good overview of the sauces and dressings industry in the United States, see <http://www.preparedfoods.com/articles/print/110990-cooking-sauces-and-dressings>.

Lisa and her team realized that, to grow this category's revenue and profits, they would have to overcome these barriers. Could they get the 25 percent of the households in western Europe to at least try their company's condiments? Could they get those who use these dressings to try it with different foods or in different recipes? Could they get people who have negative views of dressings because of health concerns to see that these dressings actually contained ingredients that were not so unhealthy and in fact were "good for you"? This was their challenge.

Before taking any action, Lisa commissioned a Triggers and Barriers study to find out as much as possible about the current tastes and preferences of the consumers of dressings in the world's top ten markets. What really would get consumers to use more dressings? What actually prevents them from buying it or using it more often? These were the kinds of questions that the study sought to answer.

The Triggers and Barriers study identified the top requirements that consumers have when using dressings products. As suspected, the study revealed that in the United States, Brazil, and the United Kingdom, consumers looked for dressings that contained healthier ingredients, such as certain types of oils. They also looked for mayonnaise that contained fewer calories and fats. In France and Russia, consumers wanted ketchup that contained less sugar. In the United States, the United Kingdom, Brazil, and Russia, consumers looked for dressings that provided them with cooking solutions. The lack of healthier ingredients was the main barrier that kept consumers from buying dressings or from using them more frequently.

Based on the study's findings, Lisa decided that an effective way to overcome these barriers was to educate the consumers on the actual content of her company's dressings. For example, consumers in Brazil thought that a spoonful of mayonnaise contained anywhere between 200 and 600 calories when, in reality, it has only 40 calories. The marketing message in Brazil made sure that this fact was made clear to consumers. The demand by American consumers for foods that contain omega-3 oils has been steadily increasing. An important source of omega-3 is soybean oil, which also happens to be a major ingredient of mayonnaise. Hence, the company's marketing message in the United States was that mayonnaise is a good source of omega-3 oils. In the United Kingdom, consumers were particularly keen on using dressings with less saturated fat. Therefore the message in this market stressed the lower saturated fat content of the company's line of dressings. In the United States, the United Kingdom, and Brazil, the communication messages focused on stressing that mayonnaise is made with real ingredients such as eggs, oil, and vinegar. In France (as well as Argentina and Colombia), the communication message highlighted the amount of tomatoes that are in each ketchup bottle. The main objective of the messages in all of these countries was to tell consumers about the benefits of using products in the dressings category.

The communication's focus on positive (or less negative) health factors effectively dealt with the barriers to buying and using food dressings. However, two challenges still remained: Dressings is a mature category, and, in many countries, the use of the major products such as ketchup and mayonnaise is limited to being an accompaniment to only certain foods or dishes.

To overcome the barrier of lack of versatility and, even better, to offer a trigger to buying and using dressings, Lisa and her team came up with a marketing strategy based on the theme of "mom's home cooking." They conducted a study in the top ten countries to learn about the following:

1. What are mom's favorite dishes to prepare?
2. Which of these dishes use any of the main products in the dressings category (i.e., ketchup, mayonnaise, and mustard)?
3. How could these dishes be improved by using one or more of the products from the dressings category in their recipe?

Once they got their answers, the team then launched a marketing campaign that used the theme of “make something new today.” They also offered suggestions for recipes whose ingredients included one or more of the products. They based these recipes on favorite recipes of mothers around the world, keeping in mind the differences in cooking preferences and behaviors in different countries. For example, Russia has the highest consumption per capita of mayonnaise. Russians use it on almost everything, including salads, chicken, soup, and potatoes. French consumers use a lot of dressings, but they like to make their own from scratch whenever possible. The British like to keep things simple. So if they are given a “secret ingredient” that will add a new taste to their everyday dishes, they tend to try it.

To summarize this case in relation to Chapters 3, 4 and 5, we can say that Lisa’s studies of the demand for dressings in the top ten country markets led to a marketing communications strategy that helped to increase demand for her company’s dressing in each of these countries without their having to cut prices. In effect, we can say that all of their efforts caused a rightward shift in the demand for food dressings. To continue this section’s theme of opportunities for multinational countries, we now discuss the challenges of doing business in India, the country with the world’s second largest population: 1.2 billion people.

## DOING BUSINESS IN INDIA<sup>7</sup>

### Brief Introduction to Some of India’s Key Industries

Back in 2001, Jim O’Neill, chief economist for Goldman Sachs, believed that the combined economies of four countries—Brazil, Russia, India, and China—would eclipse the total output of the six largest western economic powers in about forty years.<sup>8</sup> Interestingly enough, at the time, O’Neill had visited China only. In hindsight, not only did he have a keen sense of global economic trends, he showed a streak of marketing genius by referring to this group of four as the BRIC countries. Countless articles and books have been written about the BRICs. Our aim in this section is to give readers a brief idea of what doing business in the BRIC countries is like by using India as an example. We start first with a general overview of the Indian economy and some of its major industries. We then conclude with the challenges that McDonald’s faced when it chose to operate in India. In terms of managerial economics, McDonald’s challenges and eventual success in its India operations clearly indicate the importance of understanding the differences in consumer tastes and preferences, incomes, and government regulation (three key factors affecting demand or supply) in different countries of the world.

India is on the Asian subcontinent. Its land mass is roughly one-third the size of the United States, and it represents 2.4 percent of the world’s total. However its population of approximately 1.2 billion people is about four times that of the United States, and it represents 17.5 percent of the world’s population. Thus, India is the world’s second most populous country (after China, of course), but it is the most populous democracy in the world.<sup>9</sup> India has a legacy of long-term colonial stagnation and economic backwardness. But in 1947, after India regained independence from Britain, it began its journey toward self-reliance.<sup>10</sup> The aspiration of India’s leaders during

<sup>7</sup>This section was prepared by Dr. Navin Punjabi, Professor of Business at H.R. College of Business and Economics, Mumbai, India. We are grateful for his assistance.

<sup>8</sup><http://www.ft.com/intl/cms/s/0/112ca932-00ab-11df-ae8d-00144feabdc0.html#axzz23u2w1vFn>.

<sup>9</sup><http://www.india.gov.in/knowindia/profile.php> accessed on July 22, 2012.

<sup>10</sup>Kapoor, A. (2006). Part One Overviews: 1.3. An Economic Overview of India. In *Doing Business with India* (pp. 17–23). Blue Ibex Ltd.

independence was to turn India into a vibrant, self-reliant national economy and to do away with the abject poverty so prevalent among its people.

It appears that India is on its way to becoming economically developed. From 2000 until mid-2012, the annual growth rate of India's gross domestic product (GDP) averaged 7.4 percent.<sup>11</sup> This is more than twice the long-term growth rate of 3.3 percent for the United States.<sup>12</sup> As of this writing, the Indian economy has slowed somewhat from its rapid growth over the past decade. There are concerns about whether this is a long-term trend or just a cyclical dip. However, the optimistic view is that India's economy will resume its fast growth.<sup>13</sup>

In 2011, agriculture and related activities accounted for 14.7 percent of the GDP. It also made up about 58 percent of the nation's employment. The industrial sector, including construction, made up 28 percent of the GDP. Within this sector, manufacturing accounted for about 15 percent of the total GDP. Note that this share was considerably less than China, where manufacturing accounted for over 40 percent, and other East Asian countries, where manufacturing's share of GDP was over 30 percent.<sup>14</sup>

China is sometimes called the world's factory, while India is sometimes called the world's back office. And the economic data clearly supports these catchphrases. The service sector share in India's GDP is close to 57 percent. As expected, the information technology (IT) sector dominates the service sector in India. IT and business processes outsourcing (BPO) generates employment for close to 2.8 million persons and indirect employment for another 8.9 million people. The share of IT in India's exports was close to 62 percent in 2011.<sup>15</sup>

Although India is known for its services sector, it has also become a growing presence in the global pharmaceutical industry. For almost four decades prior to 2005, Indian pharmaceutical companies (also known as pharmas) manufactured foreign patent-protected drugs that they had reverse-engineered and sold their copies in the Indian home market. They were able to do this because the Indian government did not abide by international patent laws, and it protected these companies by putting very high tariffs on foreign patent products. But in 2005, the government agreed to adhere to international patent laws. Under the new patent regime, Indian pharmaceutical companies could no longer make products protected by foreign patents, nor could they expect tariff protection. At first, these actions obviously hurt their revenue and profits, but Indian pharmaceutical companies learned to adapt quickly to the new competitive environment. They began manufacturing generic versions of the foreign products whose patents had expired. They then started exporting these generics as well as selling in the domestic market.<sup>16</sup> They have also begun to invest in the research and development required to invent their own patented products. Some industry analysts estimate that India pharmas have the potential to capture up to 10 percent of the global market for patented drugs.<sup>17</sup>

The Indian retail industry contributes 14 percent to India's GDP and employs 7 percent of India's population. The retail industry comprises organized and unorganized stores. Organized retailing refers to trading activities undertaken by licensed

<sup>11</sup><http://www.tradingeconomics.com/india/gdp-growth>.

<sup>12</sup><http://www.tradingeconomics.com/united-states/gdp-growth>.

<sup>13</sup>Punj Shweta, (March 16, 2012), Budget 2012: Economic Survey exudes hope, optimism and caution, *Business Today*. <http://businesstoday.intoday.in/story/budget-2012-economic-survey-union-budget-2012-13/1/23243.html>, accessed on July 23, 2012.

<sup>14</sup>Government of India (2012) Economic Survey of India 2012-13 retrieved from <http://www.indiabudget.nic.in/es2011-12/echap-09.pdf> July 23, 2012.

<sup>15</sup>Government of India (2012) Economic Survey of India 2012-13 retrieved from <http://www.indiabudget.nic.in/es2011-12/echap-10.pdf>.

<sup>16</sup>[http://www.usitc.gov/publications/332/working\\_papers/EC200705A.pdf](http://www.usitc.gov/publications/332/working_papers/EC200705A.pdf).

<sup>17</sup>Ernst and Young (2011), *Doing Business in India*, retrieved from <http://www.ey.com/IN/en/Services/Tax/Tax—Budget-Plus-2011>.

retailers who are registered for sales and income taxes. These retailers are typically incorporated or privately owned hypermarkets and retail chains. Unorganized retailers engage in the more traditional forms of buying and selling. One of the most important types in this retail category is the Kirana: the small, owner-operated neighborhood shop similar to what Americans call a mom and pop store. Another common type of unorganized retailer is the street vendor. Unorganized retailers account for more than 95 percent of total retail sales in India. As India continues to develop, the growth potential for organized retailing is tremendous. According to the AT Kearney Global Retail Development Index (GRDI),<sup>18</sup> India ranks first among thirty emerging market economies in retail attractiveness.

The Indian government currently allows only single-brand retail chains to operate in India. Thus, companies like Nike, the Gap, or Abercrombie and Fitch can own and operate retail shops in India, but Wal-Mart and Carrefour are prohibited from doing business in India. The situation may change, but as of 2012, these global chains can only operate in India as 50 percent owners of wholesale operations.

### The Business and Investment Climate

The World Bank and the International Finance Corporation (IFC) rank countries in order of ease of doing business. The ranking is based on factors such as starting a business, obtaining construction permits, getting electric power, registering property, obtaining credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and resolving insolvency. India ranks 132nd among the 183 countries in the World Bank and IFC report. A higher rank indicates an environment more conducive to business. Singapore ranks number one and the African country of Chad ranks 183rd.<sup>19</sup>

Despite the relative difficulty of doing business in India, the country's huge growth potential continues to attract foreign investment. According to a 2012 report prepared by the United Nations Conference on Trade and Development (UNCTAD), India attracted \$31.6 billion in foreign direct investment in 2011. This makes India the third most favored destination for foreign direct investment after the United States and China.<sup>20</sup>

### Socioeconomic and Political Factors

Undoubtedly the most important socioeconomic problem facing India today is its pervasive and abject poverty. Roughly one-third of its 1.2 billion people live below the international poverty line, which is the equivalent of about \$1.25 per day. Almost 70 percent live on about \$2.00 per day.<sup>21</sup> Unfortunately, this degree of poverty also characterizes the other three BRICs: Brazil, Russia, and China. Over the past decade, however, there has been rapid growth and development in India and the other three BRICs, accompanied by a rising middle class. This offers businesses a market of hundreds of millions of households with more discretionary income to spend on consumer durables and nondurables.

India is culturally rich and very diverse. India's national language is Hindi, but it also has twenty-one other official languages. Its four main religions are Hinduism,

<sup>18</sup><http://www.atkearney.com/index.php/Publications/global-retail-development-index.html>.

<sup>19</sup>World Bank and IFCI, 2012, *Doing Business in a More Transparent World*, <http://www.doingbusiness.org/~media/fpdkm/doing%20business/documents/annual-reports/english/db12-fullreport.pdf>, retrieved on July 23, 2012.

<sup>20</sup>E. T. Bureau, July 9, 2012, "India seen as an attractive destination for foreign direct investment" [http://articles.economicstimes.indiatimes.com/2012-07-09/news/32605031\\_1\\_fdi-flows-foreign-direct-investment-world-investment-report](http://articles.economicstimes.indiatimes.com/2012-07-09/news/32605031_1_fdi-flows-foreign-direct-investment-world-investment-report), retrieved on July 23, 2012.

<sup>21</sup>An article in Wikipedia provides a plethora of government data detailing the extent and seriousness of this problem. See [http://en.wikipedia.org/wiki/Poverty\\_in\\_India](http://en.wikipedia.org/wiki/Poverty_in_India).

Islam, Christianity, and Sikhism, and other religions such as Buddhism, Jainism, Judaism, and Zoroastrianism also have many followers. Because there are so many languages spoken throughout the country, English is used by many Indians as the common language. English is taught at an early age in many schools throughout the country. Of course, this widespread command of English has given the country its competitive advantage in many global services such as call center operations, business process outsourcing, and IT consulting.

India's government is a parliamentary democracy, established in 1950 by the Constitution of India. Its political system has three main branches: executive, legislative, and judiciary. The president of India is the head of the executive branch, followed by the vice president and then the prime minister. But as is the case in all parliamentary forms of government, the prime minister holds the most political power, while the president serves as the titular head of state. The legislative system includes the Rajya Sabha (upper house/Council of States) and the Lok Sabha (lower house/House of Commons). The judiciary consists of the Supreme Court, followed by high courts and district courts.<sup>22</sup>

More than 5 percent of India's population is below the age of twenty-five. The educational system in India has produced a very wide range of results. On one hand, about 25 percent of the population is illiterate. On the other hand, India's higher education system is extremely demanding and has produced many highly qualified professionals in all of the major fields, such as science, engineering, and medicine. The institutions of higher education that comprise its world-renowned Indian Institute of Technology (IIT) are more difficult to gain entry to than all of the other top universities around the world, including the U.S. Ivy League colleges and Oxford and Cambridge in the United Kingdom.

In summary, the rapid growth rate in GDP, a rising middle class, a youthful population, large numbers of highly skilled workers and professionals, and widespread use of English all make India a very attractive market in which to invest and operate. However, India still remains a rather difficult country in which to do business because of its lack of business transparency and legal safeguards. To illustrate some of the specific challenges of doing business, let us look at the Indian operations of one of the world's most recognizable global companies: McDonald's.

### McDonald's in India

McDonald's is the world's leading food service retailer. It is difficult to stay current with McDonald's statistics. As of 2011, this global food chain had 33,000 restaurants in 118 countries serving more than 67 million customers each day. We found an interesting source that listed ten facts in a highly entertaining way. For example, consider the fact that more people eat at McDonald's per day than the total population of Great Britain!<sup>23</sup> McDonald's business in India is particularly fascinating because one might wonder how a company that is known for selling hamburgers is able to succeed in a country where the majority of its population does not eat beef. About 80 percent of India's 1.2 billion people do not eat beef because the cow is a sacred animal in the Hindu religion. Another 13 percent or so of the country's Muslims do not eat pork. In fact, the majority of India's population is vegetarian.

McDonald's entered the Indian market in 1996 as part of its global expansion strategy.<sup>24</sup> Starting with only a few stores at that time, McDonald's India had a network

<sup>22</sup>[http://en.wikipedia.org/wiki/Indian\\_government](http://en.wikipedia.org/wiki/Indian_government).

<sup>23</sup><http://www.businessinsider.com/amazing-facts-mcdonalds-2010-12?op=1>.

<sup>24</sup>An interesting history of McDonald's in India is provided in the following PowerPoint presentation by an Indian business professor. See <http://www.scribd.com/doc/2303069/Case-McDonalds-India-Launch>.

of over 250 restaurants across the country serving about 650,000 customers per day.<sup>25</sup> In the beginning, McDonald's faced two key challenges in India: (1) how to avoid hurting religious sentiments, and (2) how to avoid political confrontations with the Indian government.<sup>26</sup> To help with these problems, McDonald's secured the help of Indian consultants, managers, and licensing partners.

McDonald's then developed a menu especially for India, with vegetarian selections to suit the Indian palate. It also reengineered its operations to address the special requirements of vegetarians. It takes special care to ensure that all vegetable products are prepared separately, using dedicated equipment and utensils. This separation of vegetarian and nonvegetarian food products is maintained throughout the various stages of procurement, cooking, and serving. McDonald's uses only vegetable oil as a cooking medium in India. Even the mayonnaise and condiments are 100 percent vegetarian. Instead of the Big Mac, McDonald's launched the Maharaja Mac (made of two lamb patties, special sauce, cheese, pickles, and onion on a sesame seed bun). As it has done everywhere else in the world, McDonald's has positioned its restaurants in India as a place for families and children. Therefore, Ronald McDonald is a well-known figure to many Indian children, as he is to children around the world.

## RISKS FACED BY A MULTINATIONAL CORPORATION

All companies, whether domestic or international, face risk. Risk can be defined as the chance that business results will be different from those that are expected. Because most businesspeople are risk averse, they are mostly concerned with downside risk. A multinational corporation (MNC) must deal with risks faced by domestic industries; however, it is faced with risks that are present only because it transacts business across national borders, that is, **multinational corporation risk**.

One of the important concerns for a corporation is **exchange rate risk** resulting from changes in exchange rates. We discuss these concerns later in this chapter. Here we touch on various other risks faced by the MNC:

*Blockage of funds and capital controls:* A country may prohibit the repatriation of funds. Such action can lead to a corporation investing its funds less than optimally.

*Differences in cultural and religious philosophies:* These may create potentially hostile attitudes toward foreign corporations.

*Ownership restrictions:* Complete ownership of subsidiaries may not be permitted. Thus, the MNC may be restricted to minority participation.

*Human resources restrictions:* Rules and regulations regarding employment practices may differ from those in the home country. Companies may be required to hire only local workers. In some countries, labor laws and union contracts make hiring and firing more rigid. In some countries, there may be restrictions regarding the hiring and promotion of female employees.

*Intellectual property:* In some countries, it may be difficult to enforce protection of intellectual property, such as software, textbooks, and films.

*Discrimination:* Governments may impose special regulations and taxes on foreign corporations, while subsidizing domestic business.

*Red tape and corruption:* Such problems exist in most countries, in some to a greater extent than in others. As an example, Transparency International publishes a

<sup>25</sup>Retrieved from <http://www.mcdonaldsindia.com/aboutus.html> on July 23, 2012.

<sup>26</sup>For examples of some of McDonald's challenges dealing with the Indian government, see Dash Kishore, 2007, "McDonald's in India, Thunderbird, The Garvin School of International Management," <http://www.csumba.org/mba602/McDonald's%20in%20India.pdf>, retrieved on July 23, 2012.

“Corruption Perceptions Index” ranking 183 countries. This index is based on the perception of the degree of corruption as seen by businesspeople, academics, and risk analysts. The scores can range from 0 (most corrupt) to 10 (least corrupt). In the 2011 index, New Zealand ranked the highest (with a score of 9.5), followed by Denmark (9.4), Finland (9.4), and Sweden (9.3). Somalia and North Korea came in last, with scores of 1.0. The United States ranked twenty-fourth, with a score of 7.1.<sup>27</sup>

*Internal and external wars:* These can occur at any time.

*Changes in government:* A friendly government may be replaced by a hostile one. At the extreme, the new government may expropriate foreign property.

These are just some of the risks that an MNC must take into consideration. No listing can be entirely complete.

The PRS Group, Inc., publishes the “International Country Risk Guide.” Its composite index combines three measures of risk: political, economic, and financial. Each component rates countries on a large number of risk categories. The publication has ranked 140 countries for many years. The highest achievable rating (i.e., the lowest risk) is 100, the lowest is 0. In a recent issue, Norway (89.0), Brunei (88.8), and Switzerland (88.5) topped the list, and Somalia (41.3), Zimbabwe (44.3), and Sudan (49.3) were last. The United States was thirtieth, with a score of 76.<sup>28</sup>

## EXCHANGE RATES

One important risk that an MNC faces has to do with exchange rates. Companies that sell in or buy from foreign countries and receive or make payments later in foreign currencies must always consider the possibility that exchange rates may turn unfavorable during the period between the setting of the price and the time when payment is made.

An **exchange rate** is the price of one country’s currency in terms of another country’s. An exchange rate may be quoted in terms of the domestic or foreign currency. If we want to measure the euro in terms of the U.S. dollar, and at a given time the euro is worth \$1.40, then we write the exchange rate as €1/\$1.40. If we want to express the exchange rate in terms of the euro, then we write it as \$1/€0.714.

Assume a U.S. exporter sells goods worth €100,000 to an importer in Germany when the exchange rate is €1/\$1.40. At today’s exchange rate, the shipment would be worth \$140,000. When the payment becomes due in 60 days, the exchange rate is quoted at €1/\$1.35. The euro has weakened during this interval. The U.S. exporter will receive only \$135,000.

Now let us look at the exchange rate risk faced by an importer. The U.S. company purchases goods from a German exporter in the amount of €100,000, at a time when the exchange rate is €1/\$1.40. The shipment is worth \$140,000. Sixty days later, when the payment becomes due, the exchange rate is quoted at €1/\$1.45; the dollar has weakened, and now the U.S. importer will have to pay \$145,000. Of course, if the exchange rate movement had been opposite, the U.S. company would have gained.

## EXCHANGE RATE HEDGING

**Exchange rate hedging** refers to various ways that companies can protect themselves from such a potential loss. Of course, a U.S. company could attempt to have all transactions denominated in U.S. dollars. This, however, is not always possible.

<sup>27</sup>Transparency International, *Corruption Perception Index 2011*, <http://www.transparency.org>.

<sup>28</sup>The PRS Group, Inc., *International Country Risk Guide*, February 2012.

## Offsetting Transactions

A U.S. company could export goods of the same amount to the same country from which it had imported goods spanning the same period of time. Thus a change in the exchange rate would be offset. Although such transactions may be the easiest way to hedge against possible exchange rate losses, this is not always possible or practical.

## The Forward Market

A company wanting to protect itself against adverse exchange rate fluctuations can enter the forward market. Although the spot exchange rate is the price of currency today for immediate delivery, a forward contract permits a company to buy or sell currency at a specific rate at a specific time.

Assume a U.S. importer owes €1 million to a French exporter 60 days from now. If the importer does not want to be affected by a sudden strengthening of the euro, it may execute a contract to buy €1 million 60 days forward. Thus it assures itself of a specific price that it will have to pay in 60 days.<sup>29</sup> In contrast, a U.S. exporter who expects to receive a payment of €1 million 60 days from now may contract to sell the euros 60 days from now, thus protecting itself against an unexpected weakening of the euro.

Both London and New York have extensive forward markets. Forward transactions are usually executed by commercial banks, and sometimes by currency brokers. Contracts are usually available for amounts of \$1 million or greater and can be made for 30 to 360 days, and sometimes longer.

## The Futures Market

Futures contracts are similar to forwards. However, there are several differences.

Futures contracts are made for standard amounts, and they mature on certain days (on Wednesdays of specific months). When a future is purchased, a certain amount—called the margin—must be deposited. The contracts are marked to market each day and transaction fees are negotiated. The largest futures market in the United States is the International Monetary Market of the Chicago Mercantile Exchange. Again, as in the case with forwards, if a person or a company expects the foreign currency to rise, the futures will be purchased. If a weakening of the foreign currency is expected, the futures will be sold.

## Currency Options

A currency option is a contract that gives the buyer the right to buy or sell a certain amount of currency at a specified price during a certain period of time. A call option gives the purchaser the right to buy the foreign currency, whereas a put option represents the right to sell. The price of the option for each unit of currency is called the premium, and the exercise (or strike) price is the price that must be paid when the option is exercised. Each contract specifies the expiration date of the option—the last day on which the option can be exercised.<sup>30</sup>

A company will purchase a call option if it has an obligation to pay in a foreign currency in the future. If during the period before expiration the price of the foreign currency rises above the strike price, the company will exercise the option. If, however,

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<sup>29</sup>Of course, if the euro were to weaken during the next 60 days, the importer could have made a gain. But again, we must remember that most people are risk averse, and thus prefer to assure themselves that they will not incur a loss.

<sup>30</sup>An American option can be exercised at any time prior to the expiration date, whereas a European option can be exercised only on the expiration date.

the foreign currency remains below the strike price, the company will let the option expire. As mentioned previously, the purchase of an option gives the buyer the right to exercise the option; however, it has no obligation to do so.

Here is a brief example of a U.S. company that will have to pay a French supplier in 90 days. The present exchange rate is \$1.40 for €1. Because the company wants to obtain euros to pay the French company, it buys a 90-day call option with a strike price of \$1.42/€ at a premium of \$0.015 (1.5 cents) per option. If at the expiration date the exchange rate is \$1.44/€, the company will exercise the option. It will gain 2 cents per option, and after deducting the cost of the premium it will have a net gain of \$0.005 per option. If a €1 million option had been purchased, the net gain would have been \$5,000. Even if the exchange rate 3 months hence is only \$1.43/€, the company would still exercise the option. It will only lose \$0.005 per option because it would recover a part of the premium. If the exchange rate is less than \$1.42/€ the company would let the option lapse. In this case it will lose only what it originally paid for the option.

Similarly, when a company expects to receive funds in the future, it can protect itself against a decline in the value of a foreign currency by purchasing a put. Options are traded on various exchanges, for instance, the Chicago Mercantile Exchange.

### Currency Swaps

A currency swap can occur when two companies in two different countries expect a cash flow from other companies in their respective countries. Assume U.S. company A sells its products to customers in the United Kingdom and will receive payment in pounds sterling (£), whereas company B, located in the United Kingdom sells its product to companies in the United States and expects payment in U.S. dollars. However, each company wants to receive its own currency. In that case, the two companies can arrange a currency swap to receive payment in their own currencies. Such transactions can be negotiated directly or through a bank. Thus, both companies can be sure to receive payments denominated in their own currencies and avoid a possible exchange rate loss.

## FOREIGN DIRECT INVESTMENT

As corporations move into their multinational phase, they expand their operations into foreign countries. These operations may involve the licensing of foreign companies or joint ventures. But in creating a permanent presence abroad, they will begin to invest in real assets. They may do this by acquiring fixed assets, buying out existing firms, or establishing foreign subsidiaries with their own infrastructure. This is called **foreign direct investment (FDI)**.

The main reason for a company's foreign investment is, of course, to increase its earnings and increase the value of the company. Companies that experience heavy competition in their domestic market may seek a competitive advantage in foreign markets. Their domestic market may have become saturated and their growth potential can only be realized by entering new previously unexplored markets. In contrast, a corporation may have a competitive advantage in its home country and by moving abroad will be able to exploit this advantage worldwide. Another reason for FDI may be that a foreign country imposes restrictions on imports; by establishing itself in that country, the company will avoid these restrictions and may even be welcomed there if it contributes to the country's balance of payments by exporting its products to another country. The company may also be able to take advantage of economies of scale, as well as lower production and transportation costs.

Before making a foreign investment, whether it is to purchase a company, establish a subsidiary, or undertake a large project, the company will have to conduct a capital budgeting analysis to ascertain whether the project will be profitable (i.e., whether

it will have a positive net present value (NPV) or whether its return on the investment will exceed the cost of capital). We turn to this subject next.

## MULTINATIONAL CAPITAL BUDGETING

The method of capital budgeting for an MNC proceeds along the same lines as for a domestic corporation. We must identify the investment made in a project, estimate the cash flows, establish a discount rate, and then solve for NPV and/or internal rate of return (IRR). However, in addition to the complications encountered in doing a capital budgeting analysis for a domestic corporation, there are several other variables that must be taken into consideration when we deal with **multinational capital budgeting**.

### Intercompany Fund Flows

There will be cash flows going from the parent to the subsidiary, and vice versa. The parent will tend to finance, at least partially, large projects in a subsidiary. It may provide equity investment or loans. As the project gets under way, the subsidiary will most likely begin to remit cash payments—dividends—to the parent. Further, the subsidiary may also pay license fees or royalties (e.g., for the use of the parent's patents used in the products made by the subsidiary). The parent may also ship certain products, such as components, to be assembled and marketed by the subsidiary for which the subsidiary must pay the parent.<sup>31</sup>

### Inflation Rates

The rates of inflation in the country of the parent corporation and of the subsidiary may differ. The sales price and the cost of production in the subsidiary country may change at a different rate from those of the home country. Therefore, expected inflation must be included in the calculation.

### Exchange Rates

The exchange rate between the parent and subsidiary country will change during the project period. This change may be based on the differential inflation between the two countries. Because the subsidiary may remit its profits, or part of the profits, and other payments to the parent, it is extremely important that expected changes in exchange rates be considered in the analysis. Of course, unexpected changes cannot be predicted. The company may engage in hedging to avoid losses from unexpected changes in the exchange rate. However, because a capital project will span over many years, long-term hedges are needed. They are available for certain leading currencies (euro, yen, etc.); however, many of the world's currencies cannot be hedged for longer periods of time.

### Tax Differences

Tax rates differ between the two locations and this has to be taken into account when a capital project is under consideration. But differences in income tax rates are not the only problems that may be encountered. A country may not only have a tax on profits made locally, but may also charge an additional tax on remittances to the parent's country. This withholding tax can be levied on remitted profits (dividends), as well as license fees, royalties, or interest payments made by the subsidiary to the parent; the tax rates can differ among the various payments.

<sup>31</sup>This brings up the question of the price the parent should charge the subsidiary. Transfer pricing is an important aspect of the parent–subsidiary relationship and is discussed later in this chapter.

Another complication arises. When the parent receives payments from the subsidiary that are taxable to it, it could be open to double taxation because taxes have already been paid in the subsidiary's country. To avoid double taxation, most countries permit the parent to credit tax payments in the subsidiary's home country. How the tax credits are treated may differ among countries. Generally, if the tax in the parent country turns out to be higher than in the subsidiary country, the parent will have to pay the difference. As a rule, the tax credit is limited to the amount of taxes that would have been paid in the parent's country.<sup>32</sup>

To calculate the foreign tax credit, a calculation called "gross up" must be performed. The dividend by the subsidiary must be "grossed up" to a before-tax amount. This is done by dividing the dividend received by  $1 - t$  (1 minus the tax rate in the subsidiary's country). Then the tax to be paid by the parent using the parent's tax rate must be calculated. The calculation is illustrated in "The Solution" vignette of this chapter, using the example posed in "The Situation" vignette.

### Differences in Cash Flows

Because of the various differences mentioned previously, the cash flows received and recorded by the parent may differ substantially from those in the subsidiary's country. Thus, capital budgeting calculations must be made at both locations to determine whether the project meets the company's criteria.

### Cost of Capital

When projects are evaluated both from the parent's and the subsidiary's viewpoint, they must be discounted at the cost of capital. But here again, there could be a difference between the two. Because the project may be financed partially in the subsidiary's country and because of different tax rates, as well as the possibility of obtaining subsidized loans locally, the subsidiary's cost of capital may differ substantially from that applied by the parent to the cash flows from the subsidiary. The parent company presumably uses a specific cost of capital for its investments and adjusts this rate up or down to take account of project risks. Thus, because of certain uncertainties that exist in making a cross-border investment, the company may adjust the capital cost of such a project higher than the company's weighted average cost of capital. Political risk is certainly one of those that must be considered in setting that rate.

### The Final Project Valuation

As mentioned previously, the cash flows and discount rates used may differ substantially between those of the parent and those of the subsidiary. It can easily happen that the differences are so significant that the project may be deemed acceptable (i.e., positive NPV, or IRR exceeding the cost of capital) in one calculation and not acceptable in the other. Which of the two measures should prevail, the parent's or the subsidiary's?

Most financial practitioners would agree that the results from the parent's point of view should dominate. The cash flows from the subsidiary are those that add to or detract from the value of the company and the company's goal of maximizing shareholder value. Although the results from the parent's viewpoint appear to be theoretically more correct, this may not be the case in practice. Many companies appear to prefer to determine acceptability of a project based on the results in the subsidiary.

<sup>32</sup>In the United States, an excess foreign tax credit can be offset against tax liabilities owed by the parent on income from other subsidiaries, as long as the income is of a similar nature.

## THE REPOSITIONING OF FUNDS

For an MNC, the movement of funds among countries may contribute to greater profitability and an enhancement of the company's value. The positioning of funds may affect a company's tax liabilities, earnings on excess funds, and its cost of capital. Several methods of achieving this are outlined briefly. One of the methods, transfer pricing, is discussed at greater length.

Royalties and license fees can be used to channel funds to those areas of the company where they may be used most profitably.

Dividend payments to the parent are another method of controlling the positioning of funds. Because the parent company pays dividends to stockholders, dividends paid by subsidiaries to the parent are influenced by the size of the parent's dividend payout. However, other considerations enter. First, there are tax implications. Some countries apply different tax rates to distributed and undistributed earnings. Second, some countries levy a tax on dividends that are transmitted to the parent.

However, if a particular subsidiary has the opportunity to reinvest its earnings profitably (i.e., more profitably than other parts of the company), it may be asked to remit a smaller portion of its earnings, whereas subsidiaries with less favorable investment opportunities may be required to remit larger percentages of their earnings. In addition, a corporation must consider political risk and potential changes in exchange rates in shaping its dividend remittance policies. If a subsidiary must make payments to its parent or other subsidiaries (e.g., for goods purchased from the parent or another subsidiary), they can be postponed if the subsidiary that is to pay can earn higher yields than the parent or subsidiary that is supposed to receive the payment. Borrowing (interest) rates may also determine when the payment will be made.

Reinvoicing centers can be established by the company to manage the cash flows among the parent and its subsidiaries. They can direct funds to where they would earn the most.<sup>33</sup>

## MULTINATIONAL TRANSFER PRICING



### Module 13A

The theory of transfer pricing is discussed in Chapter 10. Ensuring a company sets prices that will optimize profits when products are transferred from one division to another within the same company and within the same country is difficult enough. When products are transferred across borders, additional complications arise. **Multinational transfer pricing** involves products or services that are transferred from the parent company to a subsidiary or among subsidiaries located in different countries.

An MNC can affect a transfer of funds from one unit to another by charging high or low prices. If a transfer is made at low prices, this will basically shift funds to the country receiving the product. This may be profitable for a company if investment opportunities are higher in the receiving country than they are in the shipping country.

However, charging specifically high or low transfer prices may have an effect on a corporation's tax liability. The reason for this is that different countries, as we already mentioned, have different tax systems and different tax rates. Thus a company can try to take advantage of these differentials by setting its transfer price at a level to minimize its taxes.

Let us use a simple example to show how this can happen.

<sup>33</sup>However, caution must be exercised lest the company could be accused by a government of profit shifting.

### Multinational Transfer Pricing Example

An MNC has a components plant in its parent country, P. It ships these components to its subsidiary in country S, where other components are produced and then assembled into a final piece of electronic equipment that will then be sold in S.<sup>34</sup> Assume that during one year P ships 100,000 units with a production cost of 2 per unit to S. Operating expenses in P are 35,000 per year, while in S they are 25,000. Additional costs to complete the product and bring it to market in S are 1 per unit. P sets a transfer price of 3.20 per unit and S will sell the final product at 5.00 per unit. The income tax rate in P is 25 percent and in S 35 percent. In Table 13.1 we calculate the profit in each country, the combined profit and the combined income tax.

As shown in the first half of Table 13.1, the cost to the subsidiary is the revenue received by the parent (320,000) plus 100,000 of its own production cost. The combined profit for the two entities is 99,500, and their combined tax liability is 40,500. However, because the tax rate in S is higher than in P, the company would gain if the parent retained a higher portion of the profit at the expense of the subsidiary. In the second half of Table 13.1, the transfer price per unit has been increased to 3.60. The parent's profit now rises to 93,750 while the subsidiary's profit declines to 9,750. Because of the lower tax rate in S, the combined profit has risen by 4,000 to 103,500, and the tax liability has decreased by the same amount to 36,500.

If the income tax rate had been higher in the parent country than in the subsidiary, the corporation could have increased its profits (and cut its tax liability) by lowering the transfer price.<sup>35</sup> If a tariff is imposed by the importing country, this will offset, at least to some extent, the advantage of a high transfer price.

**Table 13.1** The Effect of Taxes on Profit in Transfer Pricing

	Parent	Subsidiary
Income tax rate	25.0 %	35.0 %
Revenue	320,000	500,000
Cost of production	<u>200,000</u>	<u>420,000</u>
Gross profit	120,000	80,000
Operating expenses	<u>35,000</u>	<u>25,000</u>
Profit before taxes	85,000	55,000
Income taxes	<u>21,250</u>	<u>19,250</u>
Profit after taxes	63,750	35,750
Combined result:		
	Taxes	40,500
	Profit	99,500
Revenue	360,000	500,000
Cost of production	<u>200,000</u>	<u>460,000</u>
Gross profit	160,000	40,000
Operating expenses	<u>35,000</u>	<u>25,000</u>
Profit before taxes	125,000	15,000
Income taxes	<u>31,250</u>	<u>5,250</u>
Profit after taxes	93,750	9,750
Combined result:		
	Taxes	36,500
	Profit	103,500

<sup>34</sup>To make this example simple, let us assume that the exchange rate between the currencies of the two countries is  $1P = 1S$ . This will permit us to explain the example without the complication of translating the values of the currencies.

<sup>35</sup>Readers can calculate similar results by turning to Module 13A. The module includes the effects of tariffs.

A simple equation can be used to ascertain the effect on the tax liability due to a change in the transfer price:

$$\Delta T = (Q \times \Delta P \times t_e) - (Q \times \Delta P \times t_m)$$

where  $\Delta T$  = Change in the total tax bill

$Q$  = Quantity of products shipped by  $E$  (exporter) to  $M$  (importer)

$\Delta P$  = Change in the price of the product

$t_e$  and  $t_m$  = Tax rate in the exporting and importing countries, respectively

If  $t_e > t_m$ , combined income would increase if transfer prices are lowered, and if  $t_e < t_m$ , combined incomes would rise if transfer prices are increased.

### Transfer Pricing in Practice

The potential for decreasing the tax liability is a subject that is attracting a great deal of attention by tax authorities in many countries.

In the United States, Section 482 of the U.S. Internal Revenue Code gives the Internal Revenue Service (IRS) the authority to “shift around income and expense figures to arrive at what the government considers a more equitable result.”<sup>36</sup> In such cases, the burden of proof is on the taxpayer to prove that the IRS has been incorrect in reallocating income.

The IRS requires that transfer pricing be done on an “arm’s length” relationship. There are several methods of calculating such a relationship; however, the best evidence is that prices resemble those that would be established between two independent companies.

Although regulations regarding transfer pricing have been present in industrialized countries for many years, as globalization becomes even more prominent, developing countries are now becoming active in this area. For instance, the government of Vietnam amended its tax laws on January 1, 2004, to include specific rules regarding transfer pricing. The Income Tax Department of India issued its first transfer pricing orders in 2004, asking some MNCs in India to pay additional taxes.<sup>37</sup> Following the recent economic and financial crises, many governments face budgetary shortages and have thus strengthened their transfer pricing regulations and enforcement in order to increase revenues. In the United States, the Internal Revenue Service added 100 specialists to tighten the enforcement of transfer pricing laws.<sup>38</sup>

Here are just a few examples of transfer pricing actions taken by governments. In January 2004, the IRS notified GlaxoSmithKline (GSK), the prominent pharmaceutical company, that it owes the government \$5.2 billion (\$2.7 billion in back taxes and \$2.5 billion in interest charges). The IRS claims that GSK has “used development and production of drugs outside the U.S. to improperly avoid taxes due” since 1989. In 2006 GSK agreed to pay the Internal Revenue Service \$3.4 billion to settle the case.<sup>39</sup> This settlement was the largest in the IRS’s history.

In February 2007, Merck & Co. agreed to settle a transfer pricing case with the Internal Revenue Service for about \$2.3 billion. An agreement dating back to 1993

<sup>36</sup>C. Carroll, “IRS Target Local Company in ‘Transfer Pricing’ Case,” *Houston Business Journal*, February 3, 1997.

<sup>37</sup>“Finance—Vietnam Tightens Management on Multinationals’ Transfer Pricing,” *Vietnam News Brief Service*, January 16, 2004; “I-T’s First Transfer Pricing Order to Demand More Tax from MNCs,” *Economic Times*, February 18, 2004, p. 5.

<sup>38</sup>Brian Tully, “Transfer Pricing Strategies and the Impact on Organizations,” *Financial Executive*, July/August 2012, pp. 34–37.

<sup>39</sup>David Firm, “GSK Faces \$5.2 Claim for Tax and Interest,” *Financial Times*, January 7, 2004; David S. Hilzenrath, “Glaxo to Pay IRS \$3.4 Billion; Tax Settlement Is Biggest in Agency’s History,” *Washington Post*, September 12, 2006.

allowed Merck to shift taxable income to a subsidiary of a United Kingdom bank.<sup>40</sup> More recently AstraZeneca, an Anglo-Swedish drug company, was involved in two transfer pricing cases. In 2010, it agreed to pay £505 million to British tax authorities in a case that spanned a 15-year period, from 1996 to 2010. In 2011, the company settled a case with the United States for \$1.1 billion.<sup>41</sup> In 2006, Symantec Corporation, a large antivirus software producer, agreed to settle one dispute with the Internal Revenue Service for \$36 million. In another claim the IRS has charged Symantec about \$1 billion. This amount relates to transactions by Veritas Software Corporation (which Symantec acquired in 2005) with its subsidiary in Ireland.<sup>42</sup>

Several large technology firms have recently reported disputes with the IRS regarding transfer pricing. Among these firms are AOL, Inc.; Hewlett-Packard Company; Microsoft Corporation; and Yahoo, Inc. In a case involving Amazon.com, Inc., the IRS has proposed a \$1.5 billion tax increase relating to transfer pricing over a period starting in 2006. Amazon is planning to contest the IRS's proposal.<sup>43</sup>

A 2010 Global Transfer Pricing Survey of 877 multinational companies across 25 countries by Ernst & Young reported that in 2010, 67 percent of the companies responding had experienced a transfer pricing audit, compared to 52 percent in 2007.<sup>44</sup>

### GLOBAL APPLICATION: TONY THE TIGER MEETS A BENGAL TIGER<sup>45</sup>

The Kellogg Company is one of the authentic and venerable global food companies around the world today. It has been in business for over 100 years. It has manufacturing facilities in eighteen different countries and sells its products in more than 180 countries around the world.<sup>46</sup> With all of Kellogg's experience and success as a global food company, we think it is interesting to note the risks that it had to deal with in its early efforts to enter the markets of developing economies. A case in point is Kellogg's initial efforts to get into the Indian market in 1994.

In the early 1990s, Kellogg saw that the U.S. market was stagnating and revenues were being generated only by small price increases. It wanted a new market, and the Indian market held great significance for the Kellogg Company because of the sheer size of its young population. (Remember that India at that time had not even begun to grow at the rate it has over the past decade.) Unfortunately, Kellogg's initial offerings in India included cornflakes, wheat flakes, and Basmati rice flakes. Despite the high quality of its products and the backing of corporate technical, managerial, and financial resources, Kellogg's products failed in the Indian market.

In assessing the causes of its failure, Kellogg realized that it was not the quality of its products but a misunderstanding of Indian tastes and preferences that stymied their efforts. A distinguishing feature of Kellogg's breakfast cereals is their crispiness. But Indians prefer to use warm milk in their cereal, and pouring warm milk on Kellogg's corn flakes, no matter how crispy they are inside the wax liner in the box, made them soggy. Indians also prefer hot or warm food for breakfast. And cold milk

<sup>40</sup>"Merck Settles IRS Probe of 1993–2001 Taxes," *Dow Jones News Service*, February 14, 2007.

<sup>41</sup>Richard Wachman, "AstraZeneca to pay pounds 505m tax bill after 15-year transfer pricing row," *The Guardian*, February 24, 2010; Graham Ruddick, "UK loses out to US in AstraZeneca tax row," *The Daily Telegraph*, March 29, 2011.

<sup>42</sup>"Symantec Faces \$1B Tax Demand," *Reuters Technology News*, June 30, 2006; "IRS Hits Symantec with \$1 bn Tax Bill for Irish Arm," *Irish Independent*, April 19, 2006.

<sup>43</sup>"Transfer Pricing Brings Tax Troubles to Tech Giants," *Dow Jones News Service*, April 2, 2012.

<sup>44</sup>Ruan Joste, "Transfer pricing in numbers," *Financial Mail*, January 28, 2011.

<sup>45</sup>We are grateful to Navin Punjabi for suggesting this topic and for providing us with content references.

<sup>46</sup><http://www.kelloggcompany.com/company.aspx?id=32>.

over a cold bowl of corn flakes will not taste great, no matter what Tony the Tiger says (“Tastes greaaaat!”).<sup>47</sup>

The challenge for Kellogg was to persuade Indian consumers to eat corn flakes and its other products. It began by launching Kellogg’s Breakfast Week,<sup>48</sup> a community service initiative to generate awareness about eating breakfast. The program focused on the prevention of anemia and offered a series of nutrition workshops and activities for both individuals and families. As summarized by an expert in marketing in India, “Some product categories are more conducive to local interpretation. If you don’t honor that, you’re likely to remain on a slow growth curve. Food is perhaps the most culturally sensitive category.”<sup>49</sup>

As evidenced by the discussion about building the dressings category earlier in this chapter, global food companies today are well aware of the need to “do their homework” in studying local tastes and preferences among the different countries of the world in which they operate. They know that one of the best ways to mitigate the risk of launching products in different countries is to make sure that their products and marketing efforts take these local factors into account.

## The Solution



Module 13B



With all the data at hand, George Kline begins to input the information into the Excel spreadsheet he had prepared (Table 13.2).

At the top of the sheet, he enters the percent volume change and the price level changes. He could have entered different numbers for each year, but he chose not to.

He then enters today’s exchange rate in year 0. The new exchange rates are calculated automatically based on the relationship between U.S. and Czech inflation.

He enters the fixed asset investment and the working capital in the year 0 column. Next he enters the various factors in the “Constant” column. In the “Depreciation” line he obtains the annual depreciation by dividing I by the depreciation life of the property. He sets the terminal value at 100 million KCZ. Any of these inputs can be easily changed if his assumptions change and new iterations of the solution are desired.

He also enters the sales revenue, production cost, and imports in year 1. George now goes over the results of his calculations. The NPV for the subsidiary is positive and the IRR exceeds the cost of capital. Thus, it would appear that the project is acceptable from the subsidiary’s viewpoint. George notes, however, that the IRR is just barely above the cost of capital and NPV is relatively small. Any small adverse change in his assumptions would probably cause the NPV to turn negative.

He next looks at the results from the parent company’s viewpoint. Here the NPV is negative (and the IRR substantially below the cost of capital). George is very familiar with the opinion of most of the experts in the financial area—that the parent’s results are the ones that should be considered primarily.

George arranges for a meeting with the company’s executives, including the vice presidents (VPs) of finance, marketing, and manufacturing, to present his results. He recommends that the project should be shelved at this time. However, he points out that the various assumptions he made may be subject to change, and proposes to consult the various departments in 3 months and repeat the analysis. The VP of manufacturing suggests that better results could possibly be obtained if the company were to build a new, more efficient plant (i.e., to make a greenfield investment) and thus improve the profitability of the project. He asks George to make another calculation with new assumptions. However, the VPs of marketing and finance argue that this would probably only make the results worse. They have several reasons for this. From the marketing viewpoint, the VP points out that this is not a new product in Europe and that the

(continued)

<sup>47</sup><http://www.icmriindia.org/casestudies/catalogue/Marketing/Kellogg's%20Indian%20Experience.htm>, retrieved on July 24, 2012.

<sup>48</sup>Business Standard, April 17, 1997, Kellogg’s Breakfast week in Calcutta, <http://www.business-standard.com/india/news/kelloggs-breakfast-week-in-calcutta/41852/> retrieved on July 24, 2012.

<sup>49</sup>Knowledge@Wharton, March 12, 2009, Made for India: Succeeding in a Market Where One Size Won’t Fit All, <http://knowledge.wharton.upenn.edu/india/article.cfm?articleid=4358> retrieved on July 24, 2012.

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company would face stiff competition. Because the demand for the product is probably quite price elastic, the company would have to be very careful in its pricing. The VP of finance adds that even though a brand new plant may be more efficient, the advantage of purchasing the existing plant is the relatively low price, resulting in lower depreciation charges.

The final decision is to hold off on this project. However, George is asked to review his numbers with the various staffs and report back to the executives in about 2 months.<sup>50</sup>

**Table 13.2** Capital Project Evaluation

	Constant	Year 0	Year 1	Year 2	Year 3	Year 4
<i>Assumptions</i>						
Volume change			6.0%	6.0%	6.0%	6.0%
Price level %Δ in United States			2.0%	2.0%	2.0%	2.0%
Price level %Δ in Czech Republic			3.5%	3.5%	3.5%	3.5%
Sales price %Δ in Czech Republic			4.0%	4.0%	4.0%	4.0%
Cost %Δ in Czech Republic			4.0%	4.0%	4.0%	4.0%
Exchange rate—KCZ/\$		27.00	27.41	27.82	28.23	28.66
Fixed-asset investment (\$000)		4,000				
Working capital (\$000)		400				
Cost of capital United States	19.0%					
Cost of capital Czech Republic	22.0%					
<i>Income Statement for Czech Subsidiary (Thousands of KCZ)</i>						
			Year 1	Year 2	Year 3	Year 4
1. Sales revenue			400,000	440,960	486,114	535,892
2. Production costs— Czech Republic			190,000	209,456	230,904	254,549
3. Imports from United States			110,000	120,716	132,476	145,381
4. License fees	3.0%		12,000	13,229	14,583	16,077
5. G&A expense	12.0%		48,000	52,915	58,334	64,307
6. Depreciation	12.5%		13,500	13,500	13,500	13,500
7. EBIT			26,500	31,144	36,317	42,078
8. Income taxes	31.0%		8,215	9,655	11,258	13,044
9. NEAT			18,285	21,489	25,059	29,034
10. Cash dividend	50.0%		9,143	10,745	12,529	14,517

(continued)

<sup>50</sup>In 2012, when this edition was being prepared, the exchange rate for the Czech Koruna was about 19 to the U.S. dollar. However, we decided to keep the exchange rate at 27 to show that a project can be financially acceptable from the subsidiary's viewpoint and not acceptable from the parent's viewpoint. Readers may want to insert the new exchange rate in Module 13B to see how the results are affected.

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**Working Capital (WC) Requirements**  
(Thousands of KCZ)

	Constant	Year 0	Year 1	Year 2	Year 3	Year 4
1. Required at $t = 0$		10,800				
2. Year-end requirement (as percent of sales)	10.0%		40,000	44,096	48,611	53,589
3. Required additions			29,200	4,096	4,515	4,978
4. Financed internally in Czech Republic	50.0%		14,600	2,048	2,258	2,489
5. New WC required			14,600	2,048	2,258	2,489

**Cash Flows for Czech Subsidiary**  
(Thousands of KCZ)

1. NEAT			18,285	21,489	25,059	29,034
2. Depreciation			13,500	13,500	13,500	13,500
3. Terminal value	100,000					100,000
4. WC additions			-14,600	-2,048	-2,258	-2,489
5. Original investment by U.S. parent		-118,800				
6. Net cash flow		-118,800	17,185	32,941	36,301	140,045
7. NPV		626				
8. IRR		22.2%				

**Calculation of Dividends Received  
by Parent from Subsidiary**

(KCZ in 000)						
1. Cash dividend paid		9,143	10,745	12,529	14,517	
2. Dividend percent of tax paid		4,108	4,827	5,629	6,522	
3. Grossed-up dividend (\$ in 000)		13,250	15,572	18,158	21,039	
4. Grossed-up dividend		483	560	643	734	
5. Income tax in United States	35.0%	169	196	225	257	
6. Credit for sub's taxes		150	174	199	228	
7. Additional tax due in United States		19	22	26	29	
8. Cash dividend paid to parent		334	386	444	507	
9. Aftertax div. rec. by parent		314	364	418	477	

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<i>Cash Flows Received by U.S. Parent</i>						
	Constant	Year 0	Year 1	Year 2	Year 3	Year 4
(KCZ in 000)						
1. License fees from Czech subsidiary			12,000	13,229	14,583	16,077
2. Profit on exports to Czech subsidiary	5.0%		5,500	6,036	6,624	7,269
3. Total receipts from Czech subsidiary (\$ in 000)			17,500	19,265	21,207	23,346
4. Total receipts from Czech subsidiary			639	693	751	815
5. Income tax in United States			223	242	263	285
6. Aftertax receipts			415	450	488	530
7. Aftertax dividend			314	364	418	477
8. Project cost		-4,400				
9. Terminal value						3,490
10. Net cash flows		-4,400	729	814	906	4,496
11. NPV		-432				
12. IRR		15.1%				

## SUMMARY

A multinational corporation must compete not just domestically but worldwide. As we discuss in previous chapters, managers must always be concerned with the economic environment facing them. They must inform themselves about the demand for their products, the cost of supplies and components, the productivity of their machinery and labor force, and changes in technology. They must digest this information to try to maximize the corporation's profitability (in a broader definition, the corporation's market value). We have learned that, to achieve best results, corporate managers must be aware that any increase in revenue must be greater than costs when the corporation grows; in other words, they must apply the concepts of marginal revenue and marginal cost.

An MNC must consider these factors and many others:

- **Economic factors:** Exchange rates and exchange rate changes, differences in cost of capital, economic stability of the foreign country, production costs in foreign country influencing the choice of sourcing locations
- **Political factors:** Stability of government institutions, different tax systems, restrictions on foreign ownership, blockage of fund transfers, laws regarding employment and wages, bureaucracy and corruption, attitude of government toward multinational corporations, expropriation, war, terrorism
- **Social and cultural factors:** Religious differences, differences in the hiring of and promotion of female employees, different attitudes toward profit maximization

We describe in detail the differences in capital budgeting between a domestic and a multinational corporation. We specifically direct our attention at differences in taxation,

consideration of differential rates of inflation and their influence on the exchange rate, and differences in the cost of capital. We also discuss the question of whether the decision to make an investment should be based on the results in the subsidiary or the parent.

Finally, we addressed the extremely important topic of transfer pricing. A corporation can achieve higher profits (and lower taxes) by manipulating the prices charged for products or services flowing from the parent to a subsidiary or among subsidiaries. Governments are becoming very wary of these practices and, in many cases, corporations have been required to pay additional taxes.

## IMPORTANT CONCEPTS

**Exchange rate.** The price of one country's currency in terms of another. (p. 518)

**Exchange rate hedging.** Actions that a company can employ to protect itself from exchange rate fluctuations. Among these are forward contracts, futures, currency options, and currency swaps. (p. 518)

**Exchange rate risk.** The possibility that exchange rates will change to the detriment of an MNC. (p. 517)

**Foreign direct investment (FDI).** Investment in real assets by an MNC, including the acquisition of fixed assets, purchase of a foreign plant, or establishment of a subsidiary. (p. 520)

**Multinational capital budgeting.** Decision making by an MNC when it seeks to undertake a long-term project in a foreign country. (p. 521)

**Multinational corporation risk.** Risks that are faced by a multinational corporation not directly faced by a domestic corporation. These include economic, political, and social and cultural risks. (p. 517)

**Multinational transfer pricing.** The pricing of goods and services when these are transferred across borders. These decisions are affected by different tax rates between countries and import tariffs. (p. 523)

## QUESTIONS

1. What is the difference between a futures contract and a forward contract?
2. A U.S. importer who owes a Belgian company €500,000 payable 30 days from today expects that the US\$ will weaken during this period. What would you advise the importer to do? What would happen if the US\$ were to strengthen during this period?
3. A U.S. importer purchases a currency option. If the foreign currency does not rise to the strike price, what should the importer do?
4. Describe the additional complications facing an MNC compared with a domestic corporation when it is evaluating a capital budgeting project.
5. Why should an MNC's capital budgeting decision be based on the parent's results rather than those of the subsidiary?
6. Is an MNC generally faced with incurring double taxation on its profits in the subsidiary's country? Why or why not?
7. Why should a government be concerned with the pricing of products that a company transfers to an affiliate in another country?

## PROBLEMS

1. The Great Computer Company, a U.S. corporation, has a subsidiary in the Netherlands. It is deciding whether to invest \$2 million of its (the parent's) funds in a 3-year project in the Netherlands.

The aftertax cash flows to the subsidiary are estimated to be as follows (in euros):

Year 1	€500,000
2	800,000
3	900,000

The entire cash flows of the subsidiary are remitted to the parent annually. There is no additional tax (nor credit) in the parent country.

The exchange rate today is €1/\$1.20. The exchange rate forecast for the next 3 years is the following:

Year 1	€1/\$1.15
2	€1/\$1.10
3	€1/\$1.05

The cost of capital for both the parent and the subsidiary is 13 percent.

- a. What is the NPV of this project to the Netherlands' subsidiary?
  - b. What is the NPV of this project to the U.S. parent?
  - c. Should the project be accepted?
2. The XYZ Multinational Corporation has manufacturing facilities in country A and an assembly plant in country B. The company ships manufactured units from its plant in A to its assembly plant in B.
    - a. In April 2013, the company will ship 1,000 units with a production cost of 65 per unit to its plant in country B. Its operating expenses in A are 15,000 for the month. The income tax rate in A is 20 percent and in B 40 percent. The company plans to have a transfer price of 100 per unit. The final product can be sold in B for 140. B's operating expenses are 10,000 during the month. How much will the combined profits be of the two operations in April 2013?
    - b. Could the company benefit by changing the transfer price to 120?
    - c. Now, suppose the income tax rate in A is 40 percent, while in B it is 20 percent. What will the combined profit be if all other numbers are the same as in a?
    - d. What would be the result in c if the company decreased its transfer price to 90?
  3. Today the XYZ Corporation shipped goods valued at €1 million to a customer in Belgium. Payment is due in 90 days, and the Belgian firm will make the payment in euros. Today's spot rate is €1/\$1.40. The 90-day forward rate is €1/\$1.38.
    - a. How many dollars would XYZ receive if payment were made today?
    - b. If XYZ sells €1 million forward for 90 days, how much is it assured to receive 90 days from now?
    - c. If XYZ had not hedged in the forward market and the spot rate 90 days from now is €1/\$1.39, how much would XYZ receive (in U.S. dollars)?
    - d. If the U.S. dollar were to weaken in the 90 days and XYZ did not hedge, would it benefit or lose?
  4. The ABC Company expects to receive payment in euros from a German company in 60 days. To protect itself from a decline in the value of the euro, it purchases a put option with a strike price of \$1.42/€ at a premium of \$0.015 (1.5 cents) per option.
    - a. If the exchange rate 60 days from now is \$1.40/€, should ABC exercise the option? How much will it gain or lose on the transaction?
    - b. If the exchange rate is \$1.41/€, what should the company do and why?
    - c. At what exchange rate will the company break even?