

# Chapter 5

# Theories of International Trade and Investment

**Learning Objectives** *After studying this chapter, you should be able to:*

- 5.1** Explain why nations trade.
- 5.2** Learn about how nations can enhance their competitive advantage.
- 5.3** Understand why and how firms internationalize.
- 5.4** Explain the strategies internationalizing firms use to gain and sustain competitive advantage.

## Apple's Advantages in Global Competition

Since inception, Apple has sold more than 1.2 billion iPhones in 120 countries. Apple achieved worldwide sales of \$230 billion dollars in 2017 with net income of more than \$48 billion dollars. North and South America account for about 40 percent of total sales, followed by Asia with 30 percent and Europe with 25 percent. After the United States, China is Apple's best market, providing about 20 percent of total sales.

Apple products were once made entirely in the United States. Now, almost all of them are manufactured outside the United States.

Through *global sourcing*, Apple contracts with suppliers around the world, where more than 700,000 engineers build and assemble its products. One of Apple's key goals is to use comparative advantages from different countries. *Comparative advantage* is the ability of a specific country to produce a given product or service better or for a lower cost than other countries. For

example, Apple bases most of its iPhone manufacturing in China because of the country's high-quality, low-cost labor.

Consumers are one of the primary drivers of global trade, and they demand the best quality at the lowest prices. *Global sourcing* occurs when firms, striving for competitive advantage, capitalize on the comparative advantages of select countries to meet that demand. This results in increased imports through global trade.

Apple exemplifies superior *innovation*, including new product designs and more efficient production methods. It conducts most of its own research and product development in company-owned facilities in California. Innovation increases Apple's *productivity*, a gauge of how efficiently products are manufactured. Higher productivity allows firms like Apple to lower their production costs, which in turn increases profits and builds competitive advantage. An iPhone contains hundreds of parts, 90 percent of which



Source: humphery/Shutterstock

are produced outside the United States. Apple sources semiconductors from South Korea, memory chips from Japan, motion sensors from Italy, and rare metals from Africa. Apple then manufactures its products in China, the Czech Republic, and other low-cost locations to minimize the cost of its products. A lower price tag for iPhones or iPads stimulates sales, which in turn requires Apple to produce in high volumes. Manufacturing large quantities usually results in *economies of scale*—the larger the quantity produced, the lower the cost per unit to produce.

Global manufacturing and trade can also produce negative consequences. Apple's biggest supplier is Foxconn, a Taiwanese manufacturer that employs more than a million workers in its Chinese factories.

Employees there have complained about long hours, low wages, and crowded dormitories. Some have even committed suicide. In response, more than 250,000 protesters signed a petition demanding better labor conditions for Apple contract workers abroad.

Foxconn responded by increasing worker wages. This action reduced China's comparative advantage, but it also told the world of Foxconn's commitment to social responsibility. Apple also moved some production to India to take advantage of less expensive labor there. Apple, like many other firms, struggles with the right balance between economic considerations such as low-cost manufacturing and ethical issues such as ensuring safe and proper working conditions.

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### Questions

- 5-1. Explain why most Apple products are made outside the firm's home country, the United States.
- 5-2. What is comparative advantage? How does Apple benefit from comparative advantage?
- 5-3. Describe the problems that Apple experienced with its supplier Foxconn. What steps did Apple take to resolve the problems?

**SOURCES:** Apple Inc., Form 10-K (Annual Report) 2017, retrieved from <http://investor.apple.com>; Eva Dou, "Why Apple Is Hiring More Engineers in China," *Wall Street Journal (Online)*, March 4, 2014, p. 1; Jamie Fullerton, "Suicide at Chinese iPhone Factory Reignites Concern over Working Conditions," *The Telegraph*, January 7, 2018, [www.telegraph.co.uk](http://www.telegraph.co.uk); Hoovers. com, profile of Apple, Inc.; Dan Gallagher, "Apple's Bigger Smartphone Slice," *Wall Street Journal*, November 28, 2014, p. C8; Adam Lashinsky, *Inside Apple: How America's Most Admired—and Secretive—Company Really Works* (New York: Business Plus, 2012); Niall McCarthy, "Apple Has Sold 1.2 Billion iPhones over the Past 10 Years," *Forbes*, June 29, 2017, [www.forbes.com](http://www.forbes.com); Christopher Minasians, "Where Are Apple Products Made?," *Macworld*, September 18, 2017, [www.macworld.co.uk](http://www.macworld.co.uk); Adam Satariano, "Apple Supplier Working Conditions to Be Targeted in Protest," *Bloomberg*, February 8, 2012, [www.bloomberg.com](http://www.bloomberg.com); "Apple's Labor Practices in China Scrutinized After Foxconn," *Pegatron Reviews*, December 12, 2013, p. 2.

### Free trade

Relative absence of restrictions to the flow of goods and services between nations.

The opening story about Apple illustrates the benefits of global free trade. International trade enables Apple to keep its manufacturing costs low and sell its desired products at competitive global prices. **Free trade** refers to the relative absence of restrictions to the flow of goods and services between nations.

Imagine a scenario in which countries did not trade with each other. What would we be missing? At a minimum, we would not have access to products and services made elsewhere. We would end up paying higher prices for offerings that other nations can produce more economically. We would waste scarce resources making some products that other countries could produce more efficiently, using fewer resources.

Similarly, try to imagine a scenario in which firms could only do business within their national borders. What would be the consequences? Paying higher prices for some domestic inputs they could have imported from other nations? What would they lose if they could not sell their products to foreign customers or gain competitive advantage by learning from foreign partners or acquiring ideas, capital, or expertise? Numerous other undesirable outcomes would follow.

Fortunately, nations and firms are generally free to do business outside their national borders. Free trade allows consumers to access the products they want at lower costs, which helps increase living standards worldwide. Although the rationale for trading and investing beyond national borders is intuitive, economists have grappled with thoughtful explanations of cross-border trade and investment.

In this chapter, we review these formal explanations or theories, many of which have been developed over time, some becoming ever more sophisticated. They address the underlying economic rationale for international business and why firms and nations trade and invest internationally. We consider questions such as:

- What is the underlying economic rationale for international business activity?
- Why does trade take place?
- What are the gains to nations and firms from international trade and investment?

Central to understanding trade among nations are concepts of comparative advantage and competitive advantage, so let's explore these concepts next.

**Comparative advantage** describes superior features of a *nation* that provide unique benefits in global competition. These features typically are derived from either natural endowments or deliberate national policies. Also known as *country-specific advantage*, comparative advantage includes labor, climate, arable land, petroleum reserves and other inherited resources, such as those

### Comparative advantage

Superior features of a nation that provide unique benefits in global competition. These features typically are derived from either natural endowments or deliberate national policies.

enjoyed by countries in the Middle East. Other types of comparative advantages are acquired over time, such as entrepreneurial orientation, availability of venture capital, and innovative capacity.

**Competitive advantage** refers to assets and capabilities of a *company* that are difficult for competitors to imitate. Such advantages help the firm enter and succeed in foreign markets. These capabilities take various forms such as specific knowledge, competencies, innovativeness, superior strategies, or close relationships with suppliers. Competitive advantage is also known as *firm-specific advantage*.

In recent years, business executives and scholars have used *competitive advantage* to refer to the advantages possessed by nations *and* individual firms in international trade and investment. To be consistent with the recent literature, we adopt this convention as well.

Exhibit 5.1 arranges leading theories of international trade and investment into two broad groups. The first group includes *nation-level* theories. These are classical theories, widely accepted since the eighteenth century. They address two questions.

- Why do nations trade?
- How can nations enhance their competitive advantage?

The second group includes *firm-level* theories. These are more contemporary theories of how firms can create and sustain superior organizational performance. Firm-level explanations address two additional questions.

- Why and *how* do firms internationalize?
- How can internationalizing firms gain and sustain competitive advantage?

We organize the remainder of our discussion according to these four fundamental questions.

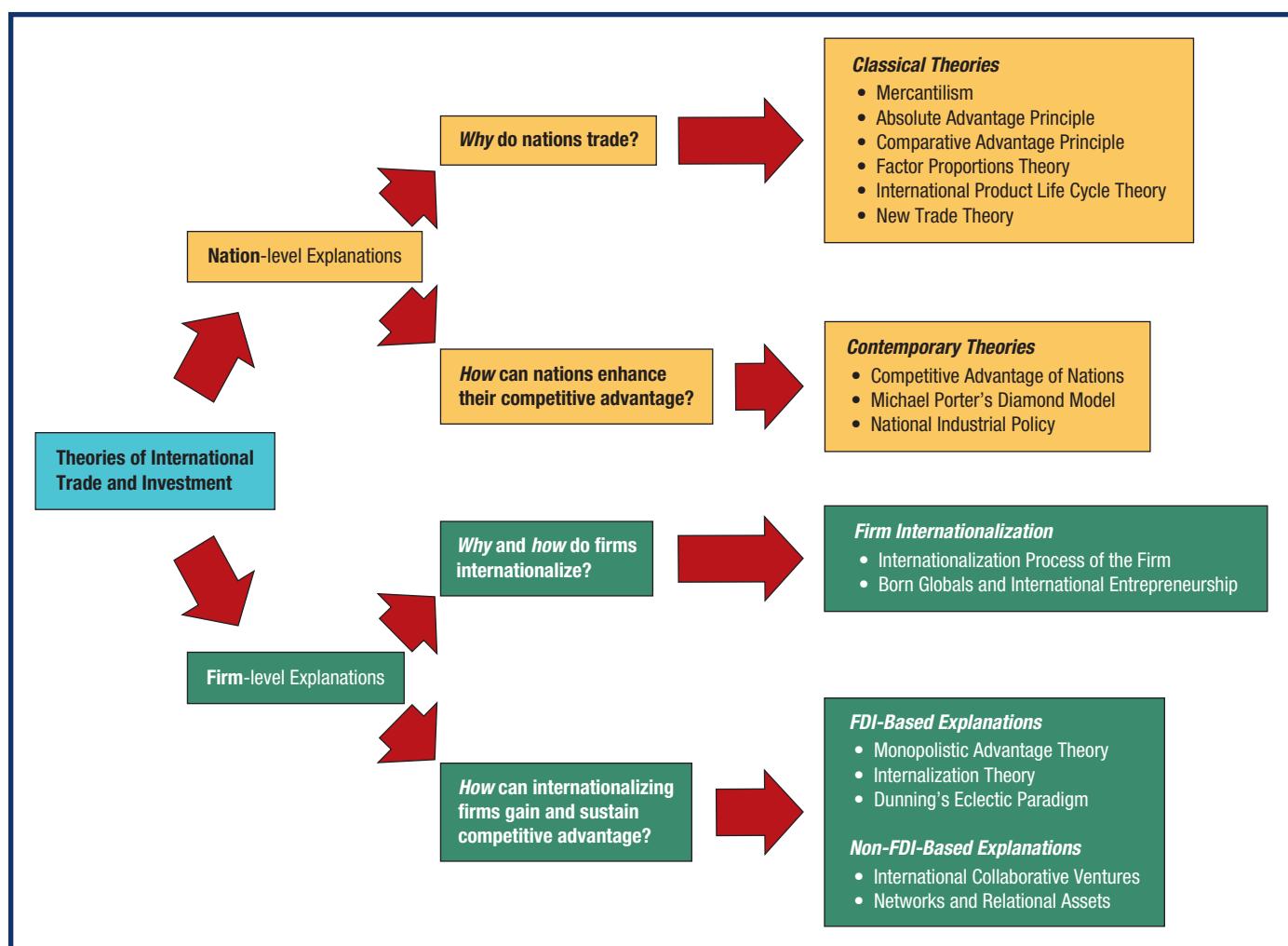
### Competitive advantage

Assets or capabilities of a firm that are difficult for competitors to imitate.

They are typically derived from specific knowledge, competencies, skills, or superior strategies.

### EXHIBIT 5.1

### Theories of International Trade and Investment



- 5.1 Explain why nations trade.

## Why Do Nations Trade?

Why do nations trade with one another? The short answer is that trade enables countries to use their national resources more efficiently through specialization and thus enables industries and workers to be more productive. These outcomes help keep the cost of many everyday products low, which translates into higher living standards. Without international trade, most nations would be unable to feed, clothe, and house their citizens at current levels. Even resource-rich countries such as the United States would suffer greatly without trade. Some types of food would become unavailable or very expensive. Coffee and sugar would be luxury items. Petroleum-based energy sources would dwindle. Vehicles would stop running, freight would go undelivered, and people would not be able to heat their homes in winter. In short, not only do nations, companies, and citizens benefit from international trade, modern life would be nearly impossible without it.

### Classical Theories

Six classical perspectives help explain the underlying rationale for trade among nations.

- Mercantilism
- Absolute advantage principle
- Comparative advantage principle
- Factor proportions theory and the Leontief Paradox
- International product life cycle theory
- New trade theory

**MERCANTILISM** The earliest explanations of international business emerged with the rise of European nation-states in the 1500s. During this era, gold and silver were the most important sources of wealth, and nations sought to amass as much of these treasures as possible. Nations typically received payment for exports in gold, but although exports increased nations' gold stock, imports reduced it because they paid for imports with their gold. Exports were seen as good and imports as bad. Because the nation's power and strength increase as its wealth increases, **mercantilism** argues that national prosperity results from a positive balance of trade achieved by maximizing exports and minimizing or even impeding imports.

Mercantilism explains why nations attempt to run a *trade surplus*—that is, to export more goods than they import. Many people believe that running a trade surplus is beneficial; they subscribe to a view known as *neo-mercantilism*. Labor unions (which seek to protect home-country jobs), farmers (who want to keep crop prices high), and certain manufacturers (those that rely heavily on exports) all tend to support neo-mercantilism.

However, mercantilism tends to harm firms that import, especially those that import raw materials and parts used in the manufacture of finished products. Mercantilism also harms consumers because restricting imports reduces the choice of products they can buy. Product shortages that result from import restrictions may lead to higher prices—that is, inflation. When taken to an extreme, mercantilism may invite beggar-thy-neighbor policies, promoting the benefits of one country at the expense of others. By contrast, free trade is a generally superior approach.

### Free trade typically produces the following outcomes:

- Consumers and firms can more readily buy the products they want.
- Imported products may be cheaper than domestically produced products (if the exporting country benefits from some national advantages such as abundant resources).
- Lower-cost imports can help reduce company expenses, thereby raising their profits (which may be passed on to workers in the form of higher wages).
- Lower-cost imports help consumers save money, thereby increasing their living standards.
- Unrestricted international trade generally increases the overall prosperity of poor countries.

**ABSOLUTE ADVANTAGE PRINCIPLE** Have you ever wondered why iPhones and iPads are not assembled in the United States, even though they are designed there? If you answer it is because labor cost is lower in China, you already know something about the absolute advantage principle. Because countries differ in national endowments (e.g., land, labor, technological capabilities), they are better off to specialize in the production of certain products and services and import others.

In 1776, Scottish political economist Adam Smith published *An Inquiry into the Nature and Causes of the Wealth of Nations*, a groundbreaking book. Smith attacked the mercantilist view by suggesting that nations have much to benefit from free trade. Smith argued that mercantilism deprives individuals of the ability to trade freely and to benefit from voluntary exchange. By minimizing imports and maximizing exports, a country wastes much of its national resources by having to produce products it is not suited to produce efficiently. The inefficiencies of mercantilism end up reducing the wealth of the nation as a whole while enriching a limited number of individuals and interest groups. Relative to others, each country is more efficient in the production of some products and less efficient in the production of other products. This simple idea that nations differ in their ability to produce a product efficiently is a well-accepted premise and is known as the absolute advantage principle.

Smith's **absolute advantage principle** states that a country benefits by producing primarily those products in which it has an absolute advantage—those that it can produce using fewer resources than any other country. (By "resources," early writers referred to tangible assets such as land and labor. Today, resources include intangibles such as knowledge and work ethic and capabilities such as design or zero-defect production.) Each country can increase its wealth by specializing in the production of goods in which it has unique advantages, exporting those goods, and then importing other goods in which it has no particular advantage. If every nation follows this practice, each can consume more than it otherwise could, generally at lower cost.

The absolute advantage principle applies to our daily choices as well. Consider the following scenario. Suppose you are employed as a corporate financial analyst. Imagine your car breaks down and you know nothing about repairing cars. You have the opportunity to take a leave from your job, enroll in a crash course in auto mechanics, and try to fix the car over several days. Alternatively, you can take your car to a professional mechanic. Which option would you choose? Most people will likely choose paying a professional mechanic since the alternative—forgoing wages you would have earned during the duration of the crash course—is less desirable. The professional mechanic has an absolute advantage in car repair. You have an absolute advantage in doing your financial analyst job. Using the services of a professional mechanic saves you both time and wages.

Now let's carry the absolute advantage principle to the country level. Imagine that there are only two nations: the Dairycountry, which produces and consumes only milk, and the Cattlecountry, which produces and consumes only beef. In this simplistic scenario, we ignore the cost of shipping products. Exhibit 5.2 presents the productivity of each nation. One unit of resources (labor) in Dairycountry can produce 10 gallons of milk or 8 pounds of beef. The Cattlecountry's efficiency is lower; one unit of resource produces only 2 gallons of milk or 4 pounds of beef.

We note that one unit of resources in the Dairycountry creates more of both products (10 gallons of milk or 8 pounds of beef) than the Cattlecountry (2 gallons of milk or 4 pounds of beef). Therefore, we conclude that the Dairycountry has an absolute advantage in both products; it is more efficient in the production of both milk and beef.

In the preceding example, keep in mind that we made a simplistic assumption by using a single resource: labor. Of course, in a real-world scenario, producing milk or beef requires multiple resources, labor, land, capital, appropriate climate, technical knowledge, and so on. The quantity and quality of these productive resources vary from country to country.

Even if the Dairycountry has absolute advantage in the production of both milk and beef, does it still make sense for the two nations to trade with each other? Are there benefits from trade for each nation? For the answers to these questions, we turn to the comparative advantage principle.



Source: creativehearts/123RF

Scottish political economist Adam Smith was among the first to articulate the advantages of international trade.

### Absolute advantage principle

The idea that a country benefits by producing only those products it can produce using fewer resources.

**EXHIBIT 5.2**

**Productivity of the Dairycountry and the Cattlecountry in Producing Milk and Beef**

	<i>Quantity of products produced by one unit of resources (labor)</i>	
	<i>Milk (gallons)</i>	<i>Beef (pounds)</i>
Dairycountry	10	8
Cattlecountry	2	4

**Comparative advantage principle**

It may be beneficial for two countries to trade with each other as long as one is relatively more efficient at producing a product needed by the other

**COMPARATIVE ADVANTAGE PRINCIPLE** In his 1817 book *The Principles of Political Economy and Taxation*, British political economist David Ricardo explained why it is beneficial for two countries to trade even though one of them may have an absolute advantage in the production of all products. Ricardo demonstrated that what matters is not the absolute cost of production but rather the *relative efficiency* with which the two countries can produce the products. Thus, the **comparative advantage principle** states that it will be beneficial for two countries to trade with each other as long as one is *relatively* more efficient at producing goods or services needed by the other. The principle of comparative advantage is the foundational logic for free trade among nations today.

To illustrate, let's recall the Dairycountry and the Cattlecountry scenario. Dairycountry has an absolute advantage in the production of both milk and beef. Therefore, you might initially conclude that Dairycountry should produce all the milk and beef it needs and not trade with Cattlecountry. However, it is still beneficial for Dairycountry to trade with Cattlecountry.

How can this be true? The answer is that rather than absolute efficiency, it is the *relative efficiency* between the two countries that matters. As we see in Exhibit 5.2, Dairycountry is five times ( $10/2$ ) more efficient at producing milk but only twice ( $8/4$ ) as efficient than Cattlecountry at producing beef. Although Cattlecountry is unable to produce either milk or beef more efficiently than Dairycountry, it produces beef more efficiently than it produces milk.

Conversely, Dairycountry is relatively more efficient at producing milk than beef ( $10/2$  versus  $8/4$ ). Thus, Dairycountry should devote all its resources to producing milk and import all the beef it needs from Cattlecountry. Cattlecountry should specialize in producing beef and import its milk from Dairycountry. Each country can then produce and consume relatively more of the goods it desires for a given level of resource.

Recall the car repair example. Let's assume you are a mechanically inclined do-it-yourselfer and can fix your car faster than the professional auto mechanic. You hold absolute advantages both in car repair *and* in financial analysis. The auto mechanic, although not as efficient as you in either financial analysis or car repair, is still pretty good at repairing cars. Therefore, he should specialize in auto repair. By the same argument, you are better off focusing on your financial analyst job, no matter how talented you are at auto repair. In other words, although the car mechanic lacks absolute advantage in both tasks, he has comparative advantage in automotive repair.

Whereas a nation might conceivably have a sufficient variety of resources to provide every kind of product and service, it cannot produce all with equal proficiency. The United States could produce all the shoes its citizens need, but only at high cost. This occurs because shoes require much labor to produce, and manufacturing wages in the United States are relatively high. By contrast, producing shoes is a reasonable activity in China, where labor is abundant and wages are relatively low. It is advantageous, therefore, for the United States to specialize in a product such as patented pharmaceuticals. The production of pharmaceuticals more efficiently employs the United States' abundant supply of knowledge workers and technology in the pharmaceutical industry. The United States is better off exporting medications and importing shoes from China. (In fact, footwear marketers such as Nike and Reebok design their own shoes but source the finished product from China and other low-labor-cost countries.)

The comparative advantage view is optimistic because it implies that a nation need not be the first-, second-, or even third-best producer of a particular product to benefit from international trade. A country needs to be only *relatively* capable in producing various types of goods. In this way, the comparative advantage view implies that it is generally advantageous for *all* countries to participate in international trade.

Now, you might ask what accounts for national differences in efficiency. Initially, scholars focused on the importance of *inherited* or *natural resource advantages*, such as fertile land, abundant minerals, and favorable climate. Because South Africa has extensive mineral deposits, it produces and exports diamonds. Because Brazil has abundant fertile land and a suitable climate, it produces and exports wheat and beef.

In addition to naturally occurring advantages such as these, it has become clear that countries can also *create* or *acquire* comparative advantages. Consider the case of Japan—a few decades ago, Japan intentionally acquired many advantages (e.g., capital, specialized knowledge, and capabilities in quality assurance) that benefited its consumer electronics industry. The investments the Japanese government, banks, and manufacturing firms made paid off enormously. Companies such as Hitachi, Panasonic, and Sony invested massive resources to acquire the knowledge and skills needed to become world leaders in consumer electronics. Today, Japan accounts for a huge proportion of the industry's total world production, including digital cameras, flat panel TVs, and personal computers. More recently, South Korea has made similar investments, giving rise to such leading-edge firms as LG and Samsung.

### MyLab Management Watch It!

If your professor has assigned this, go to the Assignments section of [www.pearson.com/  
mylab/management](http://www.pearson.com/mylab/management) to complete the video exercise titled InfoSys Comparative and Competitive Advantages in Global Competition.

The box highlights the limitations of traditional trade theories. Over time, scholars have introduced additional explanations of international trade, which we review next.

**FACTOR PROPORTIONS THEORY** A significant contribution to explaining international trade was developed in the 1920s. Two Swedish economists, Eli Heckscher and his student, Bertil Ohlin, proposed the *factor proportions theory*, sometimes called the factor endowments theory.<sup>1</sup> This view rests on two premises:

- Products differ in the types and quantities of factors (labor, natural resources, and capital) required for their production.
- Countries differ in the type and quantity of production factors that they possess.

### Limitations of Absolute and Comparative Advantage Theories

Although the concepts of absolute advantage and comparative advantage provide the rationale for international trade, they overlook factors that make contemporary trade complex, such as the following:

- Government restrictions such as tariffs (taxes on imports), import barriers, and regulations can hamper international trade.
- Just as Japan has done, governments may target and invest in certain industries, build infrastructure, or provide subsidies, all to boost the competitive advantages of home-country firms.
- Large-scale production in certain industries may provide *economies of scale* and, therefore, lower prices. Economies of scale tend to compensate for weak national comparative advantages. Similarly, modern communications and the Internet tend to reduce the cost and complexity of cross-border trade.
- The main participants in international trade are individual firms that differ in significant ways. Far from being homogenous enterprises, many are highly entrepreneurial and innovative or have access to exceptional human talent, all of which support international business success.
- International shipping and insurance, critical for cross-border trade to take place, are relatively costly and make imported goods more expensive.
- Traded products are not just commodities anymore, such as milk and beef. Today, most traded goods are relatively complex. They are characterized by strong branding and differentiated features.
- Many services, such as banking and retailing, cannot be exported in the usual sense and must be internationalized through foreign direct investment.

The theory suggests that each country should export products that intensively use relatively abundant factors of production and import goods that intensively use relatively scarce factors of production. For example, the United States produces and exports capital-intensive products, such as pharmaceuticals and commercial aircraft. Argentina produces land-intensive products, such as wine and sunflower seeds.

Factor proportions theory differs somewhat from earlier theories by emphasizing the importance of each nation's factors of production. The theory states that, in addition to differences in the *efficiency* of production, differences in the *quantity* of production factors countries hold also determine international trade patterns. In this way, a country that possesses an abundance of a given production factor (e.g., labor, land) obtains a *per-unit-cost advantage* in the production of goods that use that factor intensively.

In the 1950s, research by Russian economist Wassily Leontief seemed to contradict the factor proportions theory. His *Leontief paradox* suggests that, because the United States has abundant capital, it should be an exporter of capital-intensive products. However, Leontief's analysis revealed that the United States often exported labor-intensive goods and imported more capital-intensive goods than the theory would ordinarily predict. What accounts for the inconsistency? One explanation is that numerous factors determine the composition of a country's exports and imports. Another is that, in Leontief's time, U.S. labor was relatively more productive than labor elsewhere in the world.

Perhaps the main contribution of the Leontief paradox is its suggestion that international trade is complex and cannot be fully explained by a single theory. Subsequent refinements of factor proportions theory suggested that other country-level assets—knowledge, technology, and capital—are instrumental in explaining each nation's international trade prowess. Taiwan, for example, is very strong in electronics technology and is home to a sizable population of knowledge workers in this sector.

**INTERNATIONAL PRODUCT LIFE CYCLE THEORY** In a 1966 article, Raymond Vernon sought to explain international trade based on the evolutionary process that occurs in the development and diffusion of products to markets around the world.<sup>2</sup> In his *International Product Life Cycle (IPLC) Theory*, Vernon observed that each product and its manufacturing technologies go through three stages of evolution: introduction, maturity, and standardization. This is illustrated in Exhibit 5.3.

Historically, in the introduction stage, a new product typically originated in an advanced economy, such as Germany or the United States. Such countries possess abundant capital and research and development (R&D) capabilities, providing key advantages in the invention of new goods. Advanced economies also have abundant, high-income consumers who are willing to

try new products, which are often expensive. During the introduction stage, the new product is produced in the inventing country, which enjoys a temporary monopoly.

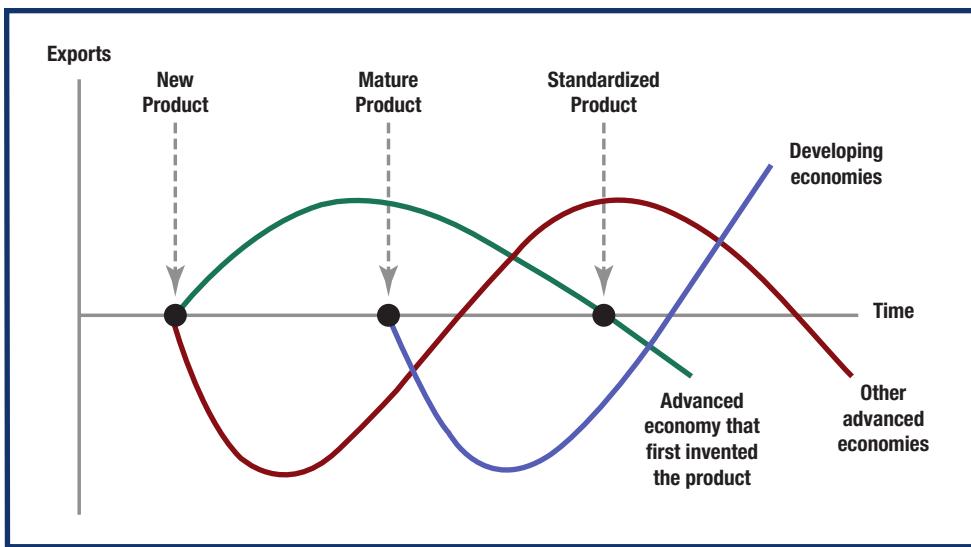
As the product enters the maturity phase, the product's inventors mass-produce it and seek to export it to other advanced economies. Gradually, however, the product's manufacturing becomes more routine, and foreign firms begin producing alternative versions, ending the inventor's monopoly power. At this stage, as competition intensifies and export orders begin to come from lower-income countries, the inventor may earn only a narrow profit margin.

In the standardization phase, knowledge about how to produce the product is widespread and manufacturing has become straightforward. Early in the product's evolution, production had required specialized workers skilled in R&D and manufacturing. Once standardized, however, mass production becomes the dominant activity and can be accomplished using cheaper inputs and



Source: Mark Agnor/123RF

Factor proportions theory describes how abundant production factors result in national advantages. Russia, for example, is an enormous land mass with abundant minerals and other natural resources.

**EXHIBIT 5.3****Illustration of Vernon's International Product Life Cycle**

*Source:* Adapted from Raymond Vernon, "International Investment and International Trade in the Product Cycle," *Quarterly Journal of Economics* 80 (May 1966), pp. 190–207 and [www.provenmodels.com/583/international-product-life-cycle/raymond-vernon](http://www.provenmodels.com/583/international-product-life-cycle/raymond-vernon).

lower-cost labor. Production shifts to low-income countries where competitors enjoy low-cost advantages and can economically serve export markets worldwide. The country that invented the product eventually becomes a net importer. It and other advanced economies become saturated with imports of the good from developing economies. In effect, exporting the product has caused its underlying technology to become widely known and standardized around the world.

As an example, consider the evolution of television sets. The base technology was invented in the United States. U.S. firms began domestic production of TV sets in the 1940s. U.S. sales grew rapidly for many years. However, once TVs became a standardized product, production shifted to China, Mexico, and other countries that offered lower-cost production. Today the United States imports nearly all its television sets.

The IPLC illustrates that national advantages do not last forever. Firms worldwide are continuously creating new products, and others are constantly imitating them. The product cycle is continually beginning and ending. Vernon assumed the product diffusion process occurs slowly enough to generate temporary differences between countries in their access and use of new technologies. This assumption is no longer valid today—the IPLC has become much shorter as new products diffuse much more quickly around the world. Buyers in emerging markets are particularly eager to adopt new technologies as soon as they become available. This trend explains the rapid spread of new consumer electronics such as smartphones and tablets around the world.

**NEW TRADE THEORY** In the 1970s, economists, including Paul Krugman, observed that trade was growing fastest among industrialized countries with similar factors of production. In some new industries, there appeared to be no clear comparative advantage. The solution to this puzzle became known as the *new trade theory*. It argues that increasing returns to scale, especially *economies of scale*, are important for superior international performance in industries that succeed best as their production volume increases. For example, the commercial aircraft industry has high fixed costs that necessitate high-volume sales to achieve profitability. As a nation specializes in the production of such goods, productivity increases and unit costs fall, providing significant benefits to the local economy.

Many national markets are small, and the domestic producer may not achieve economies of scale because it cannot sell products in large volume. New trade theory implies that firms can solve this problem by exporting and gaining access to the much larger global marketplace. Industries such as generic pharmaceuticals achieve minimally profitable economies of scale by selling their output in multiple markets worldwide. The effect of increasing returns to scale allows the nation to specialize in a smaller number of industries in which it may not necessarily hold factor or comparative advantages. According to new trade theory, trade is thus beneficial even for countries that produce only a limited variety of products.

**5.2** Learn about how nations can enhance their competitive advantage.

## How Can Nations Enhance Their Competitive Advantage?

The globalization of markets has fostered a new type of competition—a race among nations to reposition themselves as attractive for business and investment. The more competitive economies today possess a combination of comparative advantages and firm-specific advantages. They feature such strengths as abundant resources, sophisticated infrastructure, well-trained workers, powerful brands, technological leadership, worldwide networks of suppliers and collaborators, and a favorable work ethic. Therefore, we conceive national competitiveness as the sum of national comparative advantages and competitive advantage of a nation's firms collectively. This notion is illustrated in Exhibit 5.4.

Now let's explore how nations can enhance their national competitiveness.

Three contemporary perspectives help explain the development of national competitive advantage: the competitive advantage of nations, the determinants of national competitiveness, and national industrial policy. Let's explain each of these in turn.

### The Competitive Advantage of Nations

How can nations position themselves in a global race for national competitiveness? An important contribution came from Professor Michael Porter in his 1990 book *The Competitive Advantage of Nations*.<sup>3</sup> According to Porter, the competitive advantage of a nation depends on the collective competitive advantages of the nation's firms. Over time, this relationship is reciprocal; the competitive advantages the nation holds tend to drive the development of new firms and industries with these same competitive advantages.

For example, Britain achieved a substantial national competitive advantage in the prescription drug industry due to its first-rate pharmaceutical firms, such as GlaxoSmithKline and AstraZeneca. The United States has a national competitive advantage in professional services because of such leading firms as Goldman Sachs (investment banking), Marsh & McLennan (insurance), and McKinsey (consulting). The presence of these and numerous other strong services firms, in turn, has provided the United States with overall national competencies in the global services sector.

At both the firm and national levels, competitive advantage and technological advances grow out of *innovation*.<sup>4</sup> Companies innovate in various ways. They develop new product designs, new production processes, new approaches to marketing, and new ways of organizing or training. Firms sustain innovation (and, by extension, competitive advantage) by continually finding better products, services, and ways of doing things.<sup>5</sup> For example, Australia's Vix ([www.vixtechnology.com](http://www.vixtechnology.com)) is a world leader in fare collection equipment and software systems for the transit industry. The firm has installed systems in subways, bus networks, and other mass transit systems in such major cities as Melbourne, Rome, San Francisco, Stockholm, and Singapore. It has won numerous awards for its innovative products that have allowed the firm to internationalize quickly. Vix's investment in R&D has been significant, running as high as 23 percent of the firm's revenue.



**EXHIBIT 5.4**

**Components of National Competitiveness: Comparative Advantage and Competitive Advantage**

Innovation results primarily from R&D. Among the industries most dependent on technological innovation are biotechnology, information technology, new materials, pharmaceuticals, robotics, medical equipment, fiber optics, and various electronics-based industries.

In a report called the *Global Innovation 1000*, the management consultancy Strategy& (www.strategyand.pwc.com) annually reports on MNEs that spend the most on R&D. Most top European, Japanese, and U.S. firms spend half or more of their total R&D in countries other than where they are headquartered. The firms do this for several reasons:

- To gain access to talent—gifted engineers and scientists reside around the world in countries such as China and India.
- To cut costs by hiring lower-paid engineers and scientists abroad to replace higher-paid personnel in the home country.
- To relocate certain R&D activities abroad where they can gain insights on specific needs of target markets.<sup>6</sup>

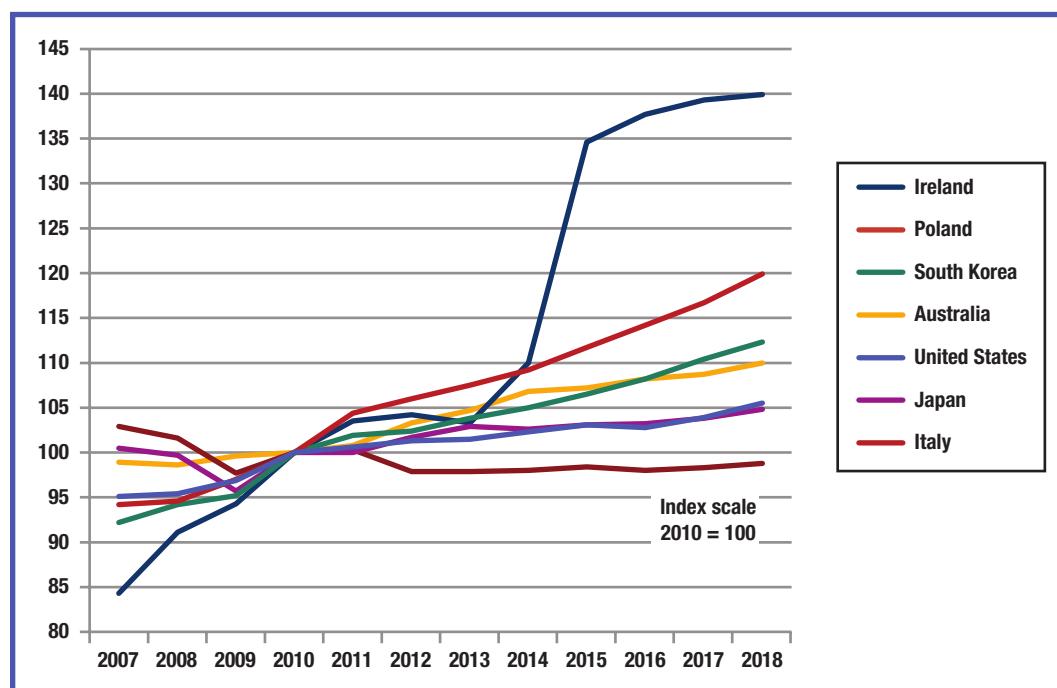
Innovation also promotes *productivity*, which is measured as output per unit of labor or capital. The more productive a firm is, the more efficiently it uses its resources. The more productive the firms in a nation are, the more efficiently the nation uses its resources.<sup>7</sup>

At the national level, productivity is a key determinant of the nation's long-run standard of living and a basic source of national per-capita income growth. Exhibit 5.5 depicts productivity levels in various nations over time, measured as output per hour of workers in manufacturing. Ireland and South Korea have been very successful in growing their productivity over time.

### Determinants of National Competitiveness

As part of his explanation in *The Competitive Advantage of Nations*, Michael Porter described several factors that give rise to competitive advantage at both the company and national levels. Named the Porter Diamond Model, it is composed of four major elements.

- *Demand conditions* refer to the nature of home-market demand for specific products and services. The presence of demanding customers pressures firms to innovate faster and produce better products. For example, the United States has a large population of prosperous senior citizens who suffer from various health problems. These conditions have created an enormous market for quality medical equipment and cutting-edge pharmaceutical medications.



### EXHIBIT 5.5

#### Labor Productivity Levels in Selected Countries: Output per Hour in Manufacturing, 2007–2018 (index scale, 2010 = 100)

Source: OECD, OECD Data: Labour Productivity (Organisation for Economic Cooperation and Development, 2018), <https://data.oecd.org/lprdt/labour-productivity-forecast.htm#indicator-chart>.

- *Firm strategy, structure, and rivalry* refer to the nature of domestic rivalry and conditions in a nation that determines how firms are created, organized, and managed. Vigorous competitive rivalry puts these firms under continual pressure to innovate and improve. They compete not only for market share but also for human talent, technical leadership, and superior product quality. The presence of strong competitors in a nation helps to create and maintain national competitive advantage. Japan has one of the world's most competitive consumer electronics industries, with major players such as Hitachi, Nintendo, Sony, and Toshiba producing semiconductors, computers, video games, and liquid crystal displays. Intense rivalry has pushed firms like Sony to a leading position in the industry worldwide and has enabled Japan to emerge as a leader in consumer electronics.
- *Factor conditions* describe the nation's resources such as labor, natural resources and advanced factors such as capital, technology, entrepreneurship, advanced workforce skills, and know-how. Each nation has a relative abundance of certain factor endowments. This helps determine the nature of its national competitive advantage. For example, Germany's abundance of workers with strong engineering skills has propelled the country to commanding heights in the global engineering and design industries.
- *Related and supporting industries* refer to the presence of clusters of suppliers, competitors, and a skilled workforce. An **industrial cluster** refers to a concentration of businesses, suppliers, and supporting firms in the same industry located at a particular geographic location.

#### **Industrial cluster**

A concentration of businesses, suppliers, and supporting firms in the same industry at a particular location, characterized by a critical mass of human talent, capital, or other factor endowments.

#### **National industrial policy**

A proactive economic development plan a government initiates to build or strengthen a particular industry.

Industrial clusters are characterized by a critical mass of human talent, capital, or other factor endowments. Examples of industrial clusters include:

- The fashion industry in northern Italy.
- The pharmaceutical industry in Switzerland.
- The footwear industry in Vietnam.
- The medical technology industry in Singapore.
- Wireless Valley in Stockholm, Sweden.
- The consumer electronics industry in Japan.

Operating within a mass of related and supporting industries provides advantages through information and knowledge exchange. This results in cost-savings through economies of scale and scope.

The most important sources of national advantage are the *knowledge and skills* individuals, firms, industries, and countries possess. Knowledge and skills are the most important factors in

deciding where companies will locate. Silicon Valley, California, and Bangalore, India, have emerged as leading-edge business clusters because of the availability of specialized talent. Some even argue that knowledge is the most important source of sustainable long-run competitive advantage. If correct, then future national wealth will go to those countries that invest the most in R&D, education, and infrastructure that support knowledge-intensive industries

#### **National Industrial Policy**

Michael Porter's Diamond Model integrates country-based theories (with their focus on nation-level comparative advantages) with firm-based theories (with their focus on firm-level competitive advantages) to determine national competitiveness. Many countries develop national industrial policies. A **national industrial policy** is a proactive economic development plan a government launches to build or strengthen a particular industry, often implemented in



Source: StudioDin/Shutterstock

The United Kingdom enjoys a distinctive collection of comparative and competitive advantages, which have helped propel the nation to prominence in the global pharmaceutical industry.

collaboration with the private sector. Usually, governments design such policies to support high value-adding industries, those that yield higher corporate profits, better wages, and tax revenues. Historically, governments favored traditional industries, including automobiles, shipbuilding, and heavy machinery—all with long value chains that produce enormous added value.

High value-adding industries typically are knowledge-intensive industries such as IT, biotechnology, medical technology, and financial services. Dubai developed a national industrial policy to become an international commercial center in the information and communications technology (ICT) sector. Singapore's Innovation Manifesto has propelled the city-state to become a world-class center of excellence in such areas as nuclear technology.

Governments play a key role in influencing each of the four components of the Porter diamond. They can do this either positively or negatively. Governments can influence *demand conditions* and *related and supporting industries* through regulations. They can influence *factor conditions* by supporting educational initiatives and capital markets. Government tax policies and regulations can influence *firm strategy, structure, and rivalry*.

### Features of National Industrial Policies

- *Tax incentives.* Tax incentives encourage citizens and firms to save and invest money, which can then be used as capital for public and private investment in R&D, plant, equipment, and worker skills.
- *Monetary and fiscal policies.* These include low-interest loans that provide a stable supply of capital.
- *Educational systems.* Superior educational systems ensure a steady stream of competent workers in high technology or high value-adding industries.
- *Infrastructure.* Modern national infrastructure in areas such as IT, communication systems, and transportation enhance productivity.
- *Legal and regulatory systems.* These institutions ensure the stability of national economies.

Sources: Iurii Vinslav, "National Industrial Policy," *Problems of Economic Transition* 56, No. 9 (2014), pp. 16-47; Lester Thurow, *Head to Head: The Coming Economic Battle Among Japan, Europe, and America* (New York: William Morrow, 1992).

### National Industrial Policy in Practice

How well does national industrial policy work in practice? Let's examine the experience of New Zealand. For much of the early twentieth century, government policies limited New Zealand's ability to flourish and trade with the rest of the world. Living standards were low, and many wondered about the nation's future. In the 1980s, the New Zealand government began to develop pro-trade policies in cooperation with the private sector that resulted in national

Statistic	New Zealand in 1993	New Zealand in 2005	New Zealand in 2017
GDP per capita	\$12,452	\$27,206	\$41,629
NZX 50 Stock Market Index	2,200	3,200	8,000
Unemployment rate	9.8%	3.8%	4.8%
National debt	47% of the nation's GDP	18% of the nation's GDP	24% of the nation's GDP

### EXHIBIT 5.6

#### Transformation of New Zealand's Economy, 1993 to 2017

Source: International Monetary Fund, World Economic Outlook Databases, 2017, [www.imf.org](http://www.imf.org); Yahoo! Finance, <http://finance.yahoo.com>



Source: Pixsooz/Shutterstock

Following many years of poor economic performance, the government of New Zealand implemented various national industrial policies that succeeded in elevating several key economic indicators, thus raising living standards for the New Zealand people.

advantages. The government helped systematically transform the country from an agrarian, protectionist, and regulated economy to an industrialized, globally competitive, and free-market economy. New Zealand's economy grew rapidly and achieved high living standards.

These accomplishments are summarized in Exhibit 5.6. Between 1993 and 2017, New Zealand raised its per-capita GDP from \$12,452 to \$41,629, a 334 percent improvement in income and now among the highest in the world. During this period New Zealand's main stock market index, the NZX 50, rose from 2,200 to 8,000. The country's unemployment rate declined by more than half to 4.8 percent. Finally, the government halved its national debt as a proportion of GDP from 47 to 24 percent.

As Exhibit 5.6 reveals, dynamic growth boosted real incomes and greatly improved living standards in New Zealand. The World Bank recently ranked New Zealand as the most business-friendly country in the world.<sup>8</sup>

### How New Zealand Successfully Transformed Its Economy Using National Industrial Policy

- Government-controlled wages, prices, and interest rates were freed and allowed to fluctuate according to market forces.
- The banking sector was liberalized, foreign exchange controls were eliminated, and the New Zealand dollar was allowed to float according to market forces.
- Most trade barriers were removed.
- Subsidies formerly granted to agriculture and other sectors were eliminated.
- The government worked earnestly with labor unions to reduce wage inflation, helping ensure that jobs remained in New Zealand and were not outsourced to lower-wage countries.
- The government initiated programs to encourage development of a knowledge economy. New Zealanders continuously upgraded skills and knowledge, providing a supply of scientists, engineers, and trained managers.
- Personal and corporate income tax rates were reduced, and the tax base was diversified to stabilize government revenues. This move fostered entrepreneurship, boosted consumer spending, and increased the nation's attractiveness for investment from abroad.
- State-owned enterprises—such as the national airline, post office, telecom, and other utilities—were sold to the private sector.

Sources: Dean Hyslop and Dave Mar, "Skill Upgrading in New Zealand, 1986–2001," *Australian Economic Review* 42, No. 4 (2009), pp. 422–434; Johan Christensen, "Bureaucracies, Neoliberal Ideas, and Tax Reform in New Zealand and Ireland," *Governance* 26, No. 4 (2013), pp. 563–584.

### 5.3 Understand why and how firms internationalize.

### Why and How Do Firms Internationalize?

Earlier theories of international trade focused on why and how cross-national business occurs. Beginning in the 1960s, scholars turned their attention to why and how individual firms pursue internationalization. Let's examine these views.

## Internationalization Process of the Firm

Scholars developed the *internationalization process model* in the 1970s to describe how companies expand abroad. According to this model, internationalization takes place in incremental stages over a long period.<sup>9</sup> Initially and without much analysis or planning, firms begin exporting, the simplest foreign market entry strategy. As they become more knowledgeable, firms gradually progress to foreign direct investment (FDI), the most complex entry strategy. The relatively slow nature of internationalization often results from managers' uncertainty and uneasiness about how to proceed. They lack information about foreign markets and experience with cross-border transactions. The progression from exporting to FDI coincides with increasing levels of both risk and control.

This gradual, incremental model of internationalization is illustrated in Exhibit 5.7. Preoccupied with business in its home market, the firm starts out with a *domestic focus*. Management may be unable or unwilling to start doing international business because of concerns over its readiness or perceived obstacles in foreign markets. Eventually, the firm advances to the *pre-export stage*, often because it receives unsolicited product orders from abroad. In this stage, management investigates the feasibility of undertaking international business. Later, the firm advances to the *experimental involvement stage* by initiating limited international activity, typically through basic exporting. As managers begin to view foreign expansion more favorably, they undertake *active involvement* in international business. This occurs through the systematic exploration of international options and the commitment of resources and managerial time to achieve international success. Management may finally advance to the *committed involvement stage*. This stage is characterized by genuine interest and commitment of resources to making international business a key part of the firm's profit-making and value-chain activities. In this stage, the firm targets numerous foreign markets through various entry modes, especially FDI.<sup>10</sup>

To illustrate, let's examine the consumer electronics firm Samsung Corporation, headquartered in Seoul, South Korea ([www.samsung.com](http://www.samsung.com)). In the 1970s, Samsung began exporting televisions and other products to Europe and North America. In the 1990s, it entered joint ventures with various partners abroad to manufacture televisions, refrigerators, and video equipment. Around the same time, Samsung used FDI to establish regional headquarters in China, Europe, Singapore, and the United States. In the 1990s, the firm set up factories in China and other countries to manufacture consumer electronics and appliances. By 2005, Samsung had established 64 manufacturing and sales subsidiaries and 13 R&D centers around the world.<sup>11</sup>

### Born Global Firms

Is the gradual, cautious internationalization process previously described still valid today? Current research suggests it is not.<sup>12</sup> What we see today is an increasing number of young, entrepreneurial firms that intently pursue customers in foreign markets from an early age. Scholars and management consultants alike referred to this relatively novel breed of companies as *born global firms*.<sup>13</sup> Born globals are innovative start-ups that initiate international business soon after their founding. Mojang, maker of the Minecraft video game, is a born global. Established in 2009 in Sweden, the firm found a ready market for its popular video games. Minecraft sold 1 million games within one month of its launch to gamers worldwide. The first Minecraft convention was held in 2011 in Las Vegas, United States, and attended by 4,500 users from 24 countries. Mojang gamers are located in countries around the world.<sup>14</sup>

Born global firms are now found in virtually all economies. This has developed despite the scarcity of financial, human, and tangible resources that characterize most new businesses. Born globals have emerged in large numbers for two main reasons.

- Globalization has made doing international business easier than ever before.
- Advances in communication and transportation technologies have reduced the costs of operating internationally.

### EXHIBIT 5.7

#### Stages in the Internationalization Process of the Firm



The born global phenomenon has given rise to a new academic field, *international entrepreneurship*.<sup>15</sup> Current trends suggest that early internationalizing firms will become even more common in international business.

- 5.4** Explain the strategies internationalizing firms use to gain and sustain competitive advantage.

## How Can Internationalizing Firms Gain and Sustain Competitive Advantage?

MNEs such as Nestlé, Unilever, Sony, Coca-Cola, and Caterpillar have all expanded abroad on a massive scale. Such MNEs have helped shape international patterns of trade, investment, and technology flows. Over time, the aggregate activities of these firms became a key driving force of globalization and ongoing integration of world economies. Let's examine how multinationals gain and sustain competitive advantage in global markets.

### FDI-Based Explanations

Most explanations of international business have emphasized FDI, the preferred entry strategy of MNEs. These large, resource-rich companies conduct business through networks of production facilities, marketing subsidiaries, regional headquarters, and other operations around the world. One way to illustrate the huge volume of FDI is to examine *FDI stock*. FDI stock refers to the total value of assets that MNEs invest abroad.

Exhibit 5.8 shows the stock and growth of inward FDI for 2006 and 2016 for a group of leading FDI destination countries. The exhibit highlights three interesting points.

- Even smaller economies such as Ireland and the Netherlands are popular destinations for direct investment.
- Both developed and developing economies are major recipients of FDI.
- Hong Kong and Singapore receive considerable FDI as important *entrepôt* ports. In such ports, merchandise can be imported without paying import duties. The goods are then transshipped to and from China, the world's largest emerging market.

Historically, most of the world's FDI was invested both by and in Western Europe, the United States, and Japan. Today, rapidly developing economies now account for a huge proportion of global FDI. An exception is Africa. It receives relatively little FDI, which hinders its ability to raise living standards in the region.<sup>16</sup>

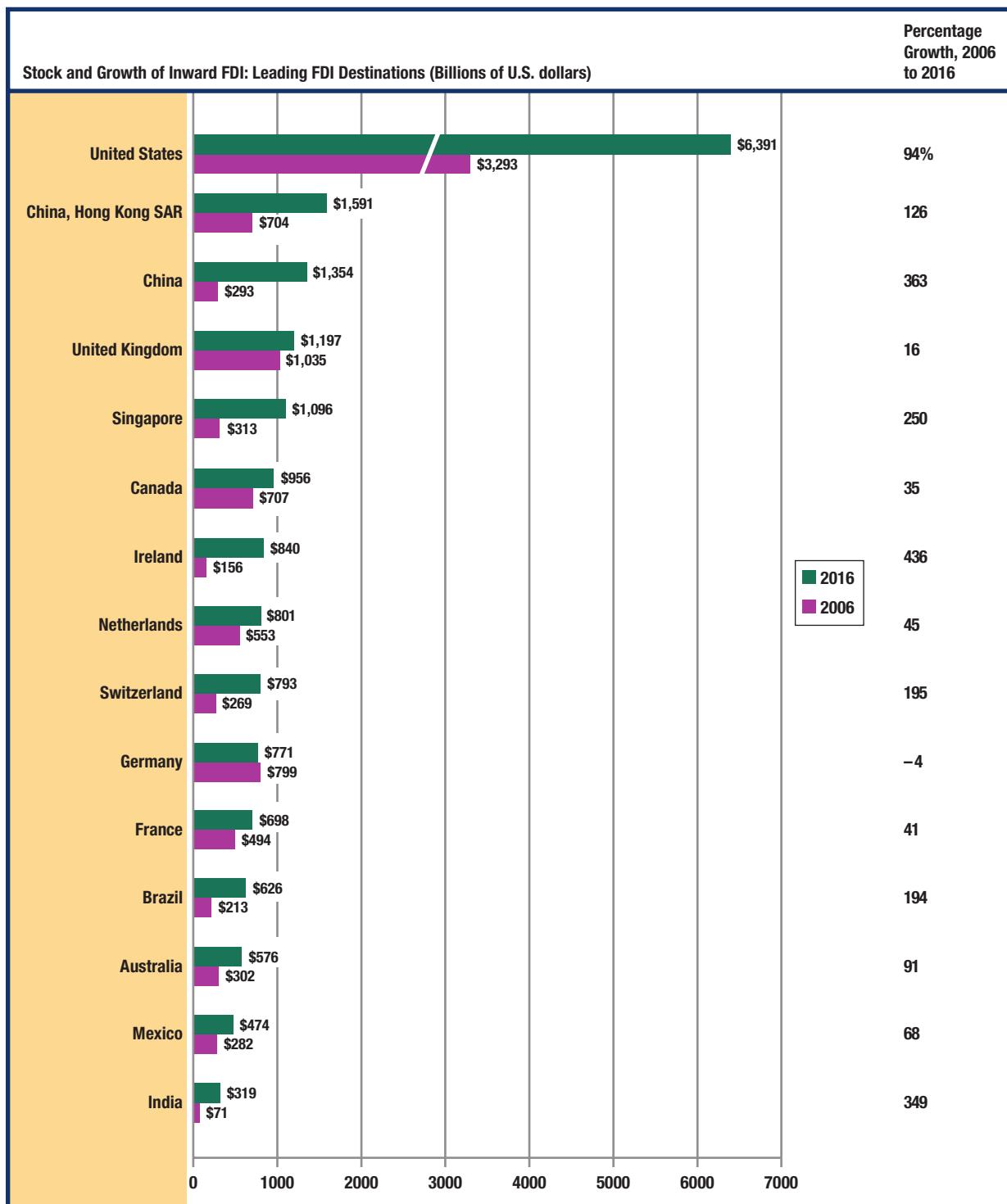
Exhibit 5.9 shows the stock and growth of outward FDI for a collection of the leading FDI-providing countries. Note that firms from both advanced economies and emerging markets invest substantial FDI abroad. For example, China has greatly increased its FDI investments in recent years. Among all countries, total outward FDI stock now constitutes nearly one-third of global GDP, an impressive amount.<sup>17</sup>

Scholars have developed three alternative theories of how firms can use FDI to gain and sustain competitive advantage. These are the monopolistic advantage theory, internalization theory, and Dunning's eclectic paradigm. These theoretical perspectives are summarized in Exhibit 5.10.

**MONOPOLISTIC ADVANTAGE THEORY** Monopolistic advantage refers to resources or capabilities a company holds that few other firms have. Monopolistic advantage theory suggests that firms that use FDI as an internationalization strategy must own or control certain resources and capabilities not easily available to competitors. This gives them a degree of monopoly power over local firms in foreign markets. This monopolistic advantage should be specific to the MNE itself, such as a proprietary technology or a brand name, rather than to the locations where it does business.

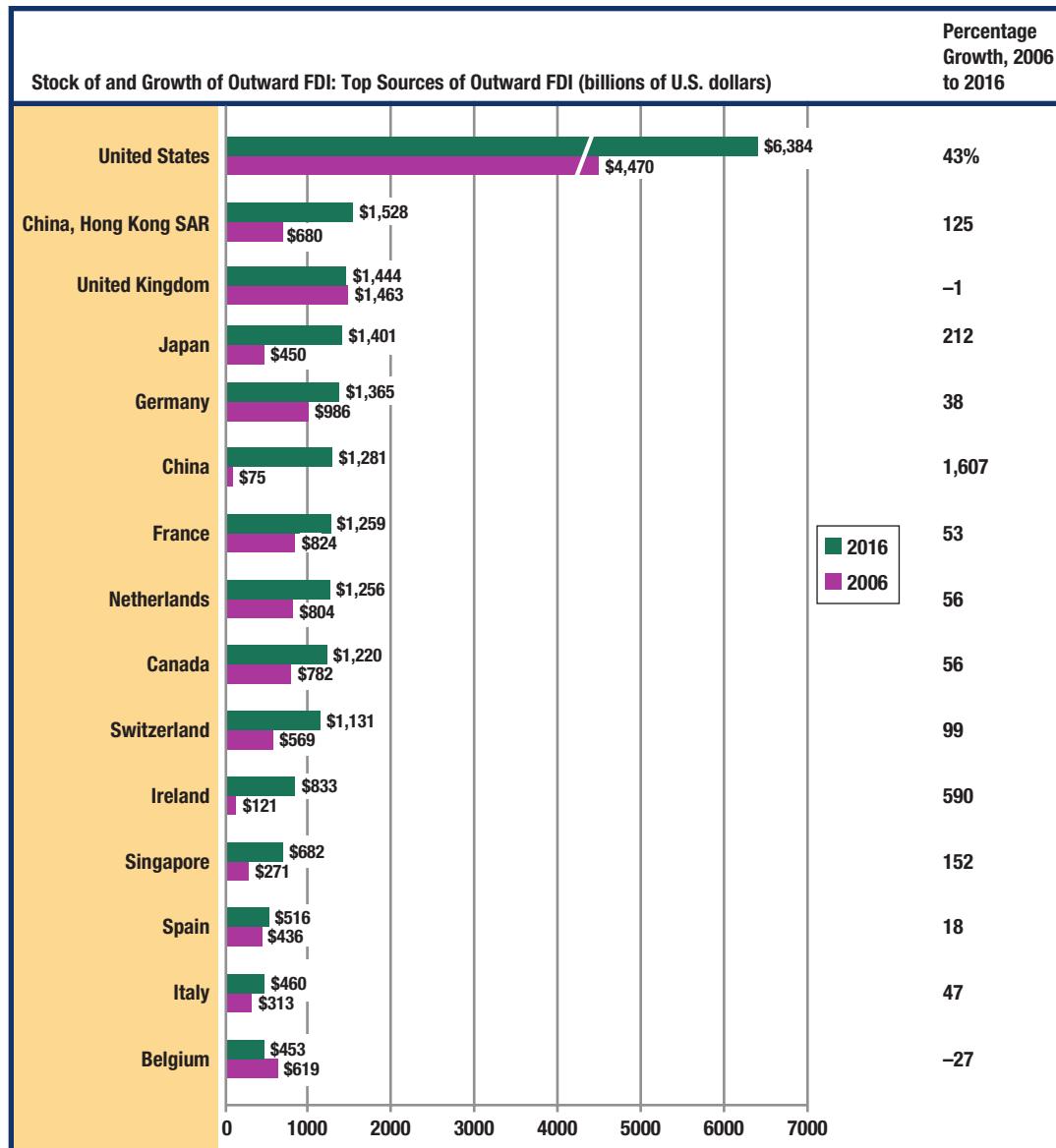
Monopolistic advantage theory argues that at least two conditions should be present for a firm to target a foreign market over its home market. First, returns accessible in the foreign market should be superior to those available in the home market. This would provide the firm with incentives to expand abroad to take advantage of its monopoly power. Second, returns achievable in the foreign market should be superior to those earned by existing domestic competitors in the foreign market. This would give the firm an opportunity to earn monopoly profits that domestic firms in the foreign market cannot imitate.

To illustrate, let's revisit Samsung Corporation. By being on the leading edge of innovation, Samsung established many pioneering standards in the consumer electronics industry. Over time, Samsung's superior R&D and internal controls allowed the firm to acquire and keep a

**EXHIBIT 5.8****Stock and Growth of Inward FDI: Leading FDI Destinations (billions of U.S. dollars) and Percentage Growth, 2006 and 2016**

Sources: UNCTAD, *UNCTAD Stat 2017* (New York: United Nations, 2018), <http://unctad.org/en/pages/Statistics.aspx>.

large body of relatively unique knowledge. This unique knowledge provided the firm with various monopolistic advantages. Samsung invented many popular products that were, for a time, relatively unique. Continuous innovation within the firm allowed Samsung to keep this uniqueness for many years. Samsung used its superior innovativeness to develop monopoly power and



### EXHIBIT 5.9

#### Stock of and Growth of Outward FDI: Top Sources of Outward FDI (billions of U.S. dollars) and Percentage Growth, 2006 to 2016

Sources: UNCTAD, *UNCTAD Stat 2017* (New York: United Nations, 2018), <http://unctad.org/en/pages/Statistics.aspx>.

#### Internalization theory

An explanation of the process by which firms acquire and retain one or more value-chain activities inside the firm. This minimizes the disadvantages of dealing with external partners and allows for greater control over foreign operations.

dominate world markets in such products as LCD panels and smartphones. As the Samsung example implies, the most important monopolistic advantages are superior knowledge and intangible skills.<sup>18</sup>

**INTERNALIZATION THEORY** Internalization theory explains the process by which firms acquire and retain one or more value-chain activities inside the firm. Internalizing value-chain activities (instead of outsourcing them to external suppliers) reduces the disadvantages of dealing with outside partners for performing arms-length activities such as exporting and licensing. Internalization also gives the firm greater control over its foreign operations.

For example, the MNE might internalize manufacturing by acquiring or establishing its own plant in the foreign market. This enables the firm to produce needed inputs itself rather than sourcing from independent suppliers. Alternatively, it might internalize the marketing function by

Theory	Key Characteristics	Benefits	Examples
<b>Monopolistic Advantage Theory</b>	The firm controls one or more resources, or offers relatively unique products and services that provide it a degree of monopoly power relative to foreign markets and competitors.	The firm can operate foreign subsidiaries more profitably than the local firms that compete in their own markets.	The Swiss pharmaceutical Novartis earns substantial profits by marketing various patent medications through its subsidiaries worldwide.
<b>Internalization Theory</b>	The firm acquires and retains one or more value-chain activities within the firm.	<ul style="list-style-type: none"> <li>Minimizes the disadvantages of relying on intermediaries, collaborators, or other external partners.</li> <li>Ensures greater control over foreign operations, helping to maximize product quality, reliable manufacturing processes, and sound marketing practices.</li> <li>Reduces the risk that knowledge and proprietary assets will be lost to competitors.</li> </ul> 	The Chinese MNE Lenovo: <ul style="list-style-type: none"> <li>Owns and operates factories in dozens of countries to manufacture laptop computers.</li> <li>Controls its own manufacturing processes, ensuring quality output.</li> <li>Ensures its marketing activities are carried out per headquarters' plan.</li> <li>Retains key assets within the firm, such as leading-edge knowledge for producing the next generation of laptops.</li> </ul>
<b>Dunning's Eclectic Paradigm</b>	<ul style="list-style-type: none"> <li><i>Ownership-specific advantages:</i> The firm owns knowledge, skills, capabilities, processes, or physical assets.</li> <li><i>Location-specific advantages:</i> Factors in individual countries provide specific benefits, such as natural resources, skilled labor, low-cost labor, and inexpensive capital.</li> <li><i>Internalization advantages:</i> The firm benefits from internalizing foreign manufacturing, distribution, or other value-chain activities.</li> </ul>	Provides various advantages relative to competitors, including the ability to own, control, and optimize value-chain activities—R&D, production, marketing, sales distribution, after-sales service, as well as relationships with customers and key contacts—performed at the most beneficial locations worldwide.	The German MNE Siemens: <ul style="list-style-type: none"> <li>Owns factories at locations worldwide that provide optimal access to natural resources, as well as skilled and low-cost labor.</li> <li>Leverages the knowledge base of its employees in 190 countries.</li> <li>Internalizes a wide range of manufacturing activities in categories such as lighting, medical equipment, and transportation machinery.</li> </ul>

## EXHIBIT 5.10

### Theoretical Perspectives on Why Firms Choose FDI

establishing its own distribution subsidiary abroad instead of contracting with an independent foreign distributor to handle its marketing in the foreign market. The firm replaces business activities performed by independent suppliers in external markets with business activities it performs itself.

Another key reason companies internalize certain value-chain functions is to control proprietary knowledge critical to the development, production, and sale of their products and services. Because independent foreign companies are outside the MNE's direct control, they can acquire and exploit proprietary knowledge to their own advantage. They might even use the acquired knowledge to become competitors.<sup>19</sup>

Procter & Gamble initially considered exporting when it entered Japan. With exporting, P&G would have had to contract with an independent Japanese distributor to handle warehousing and marketing of its soap, diapers, and other products. Instead, P&G chose to enter Japan through FDI for three reasons: (1) trade barriers imposed by the Japanese government, (2) the strong market power of local Japanese firms, and (3) the risk of losing control over its proprietary knowledge. It established its own marketing subsidiary and national headquarters in Tokyo.

In the 1980s, Samsung followed a policy of exporting its products to Europe and North America. Management realized it could improve and speed up international operations by creating its own sales and production facilities in strategic markets. In the 1990s, Samsung internalized much of its production and distribution channels in Brazil, China, Mexico, and the United Kingdom. To ensure product quality, Samsung internalized production of semiconductors and circuit boards for use in making telecommunications equipment. The firm gradually transferred its manufacturing operations from Western to Eastern Europe to profit from lower-cost labor in the East. Samsung also produces various software through its subsidiary, Samsung R&D Institute in India.

### Dunning's Eclectic Paradigm

Professor John Dunning proposed the eclectic paradigm as a framework to explain the extent and pattern of the value chain operations that companies should own abroad. He drew from various theories, including comparative advantage, factor proportions, monopolistic advantage, and internalization theory. The eclectic paradigm is often viewed as the most comprehensive of FDI theories.

The eclectic paradigm specifies three conditions that determine whether a company will internationalize through FDI:

- Ownership-specific advantages
- Location-specific advantages
- Internalization advantages

Let's explain each condition in turn.

**OWNERSHIP-SPECIFIC ADVANTAGES** An MNE should hold knowledge, skills, capabilities, key relationships, and other advantages that it owns and that allow it to compete effectively in foreign markets. To ensure international success, the firm's competitive advantage must be substantial enough to offset the costs that it incurs in establishing and operating foreign operations. It should also be specific to its own organization and not readily transferable to other firms. Competitive advantage may incorporate proprietary technology, managerial skills, trademarks or brand names, economies of scale, or access to substantial financial resources. The more valuable the firm's ownership-specific advantages, the more likely it is to internationalize by FDI.

Alcoa has 60,000 employees in 35 countries. The company's integrated operations include bauxite mining and aluminum refining. Its products include primary aluminum (which it refines from bauxite), automotive components, and sheet aluminum for beverage cans and Reynolds Wrap®. One of Alcoa's most important ownership-specific advantages is the proprietary technology it has acquired through its R&D activities. It has also acquired special managerial and marketing skills in the production and marketing of refined aluminum. The firm has a well-known brand name that facilitates sales. As a large firm, Alcoa also profits from economies of scale and the ability to finance expensive projects. These advantages have allowed Alcoa to generate maximal profits from its international operations.

**LOCATION-SPECIFIC ADVANTAGES** The second condition that determines whether a firm will internationalize by FDI is the presence of location-specific advantages. These are the comparative advantages available in individual foreign countries that may be translated into firm competitive advantages. These may include natural resources, skilled labor, low-cost labor, or inexpensive capital. Alcoa located refineries in Brazil because of Brazil's huge deposits of bauxite, a mineral found in relatively few other locations. The Amazon and other major rivers in Brazil generate huge amounts of hydroelectric power, which is a critical ingredient in electricity-intensive aluminum refining. Alcoa also benefits from Brazil's low-cost, relatively well-educated laborers who work in the firm's refineries. The presence of these location-specific advantages helped persuade Alcoa to locate in Brazil through FDI.

**INTERNALIZATION ADVANTAGES** The third condition that determines FDI-based internationalization is the presence of internalization advantages. The firm gains these benefits from

internalizing foreign-based manufacturing, distribution, or other value chain activities. When profitable, the firm will transfer its ownership-specific advantages across national borders within its own organization rather than dissipating them to independent, foreign entities. The FDI decision depends on which is the best option—internalization versus using external partners and whether they are licensees, distributors, or suppliers. Internalization advantages include the ability to control how the firm’s products are produced or marketed, greater control of its proprietary knowledge, and greater buyer certainty about product value.<sup>20</sup>

With Alcoa, the firm had five reasons to internalize many of its operations instead of letting external suppliers handle them. First, management was concerned about minimizing the dissemination of proprietary knowledge, specifically its aluminum-refining operations—knowledge the firm acquired at great expense. Second, internalization provides the best net return, allowing Alcoa to minimize the cost of operations. Third, Alcoa needs to control sales of its aluminum products to avoid depressing world aluminum prices through oversupply. Fourth, the firm wants to be able to apply a differential pricing strategy, charging different prices to different customers, a strategy it could not implement without controlling distribution. Finally, aluminum refining is complex, and Alcoa wants to maintain control of it to ensure product quality.

### Non-FDI-Based Explanations

FDI became a popular entry mode with the rise of the MNE in the 1960s and 1970s. In the 1980s, firms began to recognize the importance of collaborative ventures and other flexible entry strategies.

**INTERNATIONAL COLLABORATIVE VENTURES** A collaborative venture is a form of cooperation between two or more firms. There are two major types: equity-based *joint ventures* that result in a new legal entity and non-equity-based (project-based) strategic alliances in which the firms’ partner, for a finite duration, to collaborate on projects related to R&D, design, manufacturing, or any other value-adding activity. In both cases, collaborating firms pool resources and capabilities and generate synergy. In other words, collaboration allows the partners to carry out activities that each might be unable to perform on its own. Collaborating firms share the risk of their joint efforts, which reduces vulnerability for any one partner.

Collaboration is critical in international business. A firm sometimes has no choice but to partner with other companies to gain access to resources and capabilities unavailable within its own organization. In addition, occasionally a government will restrict companies from entering its national market through wholly owned FDI. For example, the Chinese government prohibits foreign firms from attaining full ownership of ventures in China’s health, life, and pension insurance industries, partly because local authorities intend to stimulate the development of Chinese companies in these industries. Where such restrictions exist, the firm may have no choice but to collaborate with a local partner to enter the market.<sup>21</sup>

A collaborative venture can give a company access to foreign partners’ expertise, capital, distribution channels, marketing assets, or the ability to overcome government-imposed obstacles. By collaborating, the firm can position itself better to create new products and enter new markets. For example, Starbucks now boasts more than 1,300 coffee shops in Japan. Starbucks first entered Japan through a joint venture with a local partner, Sazaby League, Ltd. The venture allowed Starbucks to internationalize and navigate the marketplace with the help of a knowledgeable local partner.<sup>22</sup>

**NETWORKS AND RELATIONAL ASSETS** Networks and relational assets represent the economically beneficial long-term *relationships* the firm undertakes with other business entities. Such entities include manufacturers, distributors, suppliers, retailers, consultants, banks, transportation suppliers, governments, and any other organization that can provide needed capabilities. Firm-level relational assets represent a distinct competitive advantage in international business. Numerous emerging markets feature *family conglomerates*—large, highly diversified firms with interlinked ownership. A typical family conglomerate combines numerous firms in diverse industries under the control of a family or an individual owner, within a complex corporate network. In Japan, a *keiretsu* is a conglomeration of businesses linked together by cross-shareholdings to form a complex conglomerate of interlinked associations.<sup>23</sup> For example, the Sumitomo keiretsu comprises the SMBC Bank, Sumitomo Life (insurance), Sumitomo Realty & Development Company, Sumitomo Chemical Company, Sumitomo Corporation (trading company), Sumitomo Electric Industries, Sumitomo Heavy Industries, Mazda Motor Corporation, and numerous others. Like the keiretsu, networks are neither formal organizations with clearly defined hierarchical structures nor impersonal, decentralized markets.

The International Marketing and Purchasing (IMP) research consortium in Europe ([www.impgroup.org](http://www.impgroup.org)) has driven much of the theory development on networks.<sup>24</sup> Network theory was proposed to compensate for the inability of traditional organizational theories to account for much that goes on in business markets.<sup>25</sup> In networks, buyers and sellers become bound to one another through continuous exchanges and linkages of products, services, finance, technology, and knowledge. Continued interaction among the partners results in stable relationships based on cooperation and creates value and competitive advantage even among competitors. Network linkages represent a key route by which many companies expand their business abroad, develop new markets, and develop new products. In international business, mutually beneficial and enduring strategic relationships provide real advantages to partners and reduce uncertainty and transaction costs.

The online retailer Amazon has skillfully used network connections to enter various countries. Amazon generates about 40 percent of its sales internationally. The firm entered India, a complex market, through various local connections and a partnership with a local online shopping service, Junglee. Amazon also partnered with the Indian government to facilitate Internet sales, and with digital lender Capital Float to provide loans to online sellers in India. Amazon entered China by developing a relationship with Joyo.com, a local firm highly experienced in online retailing. Amazon collaborated with Beijing Sinnet Technology, an Internet service provider in China. Amazon also partnered with Alibaba, China's largest online retailer, to sell food, kitchenware, wine, shoes and other goods.<sup>26</sup>

Samsung Corporation has many network connections that provide substantial benefits. The firm produces cell phones and telecommunications equipment with various partners in China. It is also well connected in the Korean financial sector. Network relationships with the Korean Industrial Bank and Korea Commercial Bank have provided Samsung with much of the financing it needs to conduct R&D and perform other key value-chain activities. In short, Samsung's network and relational assets have been critical to its success.

As we'll see later in this book, in the contemporary global economy, many firms have shied away from making permanent, direct investments in host countries. Instead, many firms now opt for more flexible collaborative ventures or other relationships with independent business partners abroad.

## CLOSING CASE

### Unilever's Comparative and Competitive Advantages

Unilever is a multinational enterprise in the fast-moving consumer goods (FMCG) industry, with headquarters in Rotterdam, Netherlands. Unilever has 170,000 employees worldwide and generated revenue in 2017 of more than 50 billion euros (about \$60 billion). Top competitors include Nestlé and Procter & Gamble. Unilever emerged in 1929 through the merger of Dutch food company Margarine Unie and British soapmaker Lever Brothers.

Today, Unilever's products fall into four main categories: personal care, food, beverages, and cleaning agents. Personal care accounts for about 38 percent of total sales and includes such products as deodorants, cosmetics, lotions, toothpaste, soap, and shampoo. Unilever's food group contributes 24 percent to total sales and comprises snacks, soups, margarines, mayonnaise, and salad dressings. Beverages and cleaning agents each contribute 18 percent to total sales. The firm's 400 brands include Ben & Jerry's, Best Foods, Dove, Flora, Knorr, Lipton, Lux, Magnum, Noxzema, Pepsodent, Vaseline, and many others.

Unilever has research and production operations in more than 100 countries. It sells products in almost 200 countries. Emerging markets—especially Brazil, China, India, Mexico, and Russia—account for more than half of total sales.

#### Comparative and Competitive Advantages

Unilever's headquarters in the Netherlands, and its longstanding connection to the United Kingdom (UK), provide numerous compar-

ative advantages to the firm. For example, the UK market is highly developed, sophisticated, and diversified. The Netherlands is well located to serve the world and is a key entry market for continental Europe. The Netherlands and the UK are leading platforms in new technology development, with a high concentration of knowledge workers who drive innovation in product development and operations. The UK is one of the world's leading banking centers, with an active stock market, which provides a ready supply of capital. Rotterdam is Europe's largest port. The Netherlands has leveraged its location to establish advanced infrastructure for transporting goods, people, and electronic data. Strong and stable economies in both the Netherlands and the UK ensure steady demand for Unilever products. The wide range of countries where Unilever operates provides numerous other comparative advantages.

Unilever possesses many *competitive advantages*, including thousands of patents, superior R&D capability, high-quality products, innovative technologies, economies of scale, cross-business synergies, deep distribution channels, excellent marketing capabilities, well-known brand names, customer loyalty, and access to lower-cost and superior labor through factories worldwide. Several of these strengths also provide Unilever with *monopolistic advantages*, capabilities that few other firms have. Such advantages give Unilever a degree of monopoly power over local firms in international markets.

Consistent with the Porter Diamond Model, the Netherlands and the UK are strong locations for R&D due to the presence

of highly demanding consumers; superior production factors, especially in capital and labor; and numerous strong competitors that pressure Unilever to innovate. For example, Europeans are demanding consumers and push Unilever to produce high-quality products. Related and supporting industries in Europe—especially suppliers of key ingredients for food, personal care, and beauty products—provide additional advantages. Intense rivalry in the FMCG industry constantly pressures Unilever to launch new products and improve existing ones. Europe is home to numerous *industrial clusters* in the FMCG industry. Consistent with *new trade theory*, Unilever obtains massive economies of scale by selling its products throughout the world.

### Internationalization and FDI Advantages

Unilever long has pushed *internationalization* throughout its value chains, including R&D, procurement, manufacturing, distribution, and marketing and sales. The firm utilizes a full range of foreign market entry strategies, including exporting and foreign direct investment (FDI). The firm has used FDI to establish factories and marketing subsidiaries around the world. FDI allows Unilever to control international operations and reduce the risk of dealing with outside partners. For example, the firm spent \$2.7 billion to acquire South Korean skin-care brand Carver Korea to extend its presence in Asia. In Colombia, Unilever acquired Quala to better target personal and home care products to Latin America. Major factories are located in Brazil, Canada, China, Indonesia, Mexico, Ireland, and Turkey. Unilever's R&D centers—in India, China, the Netherlands, the United States, and the UK—employ 6,000 scientists, engineers, and technicians. Unilever has entered many collaborative ventures to strengthen R&D, design, manufacturing, and other activities. International collaborations give the firm access to foreign partners' expertise, capital, distribution channels, marketing capabilities, and other assets.

### AACSB and CKR Intangible Soft Skills to improve employability and success in the workplace: Written and Oral Communication, Analytical Thinking, Reflective Thinking, Application of Knowledge

#### Case Questions

- 5-4.** Unilever has used FDI extensively to internationalize its activities around the world. What advantages does FDI provide the firm? What steps can Unilever take to ensure its FDI ventures succeed?
- 5-5.** What are the roles of comparative and competitive advantages in Unilever's success? Provide specific examples of natural and acquired advantages that Unilever uses to succeed in the global FMCG industry.
- 5-6.** Discuss Unilever and its position in the FMCG industry in terms of the determinants of national competitiveness. What are the roles of demand conditions; firm strategy, structure, and rivalry; factor conditions; and related and supporting industries in Unilever's international success?
- 5-7.** In terms of Dunning's eclectic paradigm, describe the ownership-specific advantages, location-specific advantages, and internalization advantages that Unilever holds. Which of these advantages do you believe has been most instrumental to the firm's success? Justify your answer.

*Sources:* Christopher Bartlett, "Unilever's New Global Strategy: Competing Through Sustainability," Harvard Business School case, August 24, 2016, [www.hbsp.harvard.edu](http://www.hbsp.harvard.edu); Richard Benson-Armier, Steve Noble, and Alexander

Strategically locating R&D, production, and sales in appropriate countries provides enormous *location-specific advantages*, including access to superior labor and the ability to sell in top markets. For example, Unilever's plant in Durban, South Africa, benefits from top advantages in natural resources, physical infrastructure, and low-cost, high-quality labor. Unilever uses palm oil in the production of margarine, ice cream, soap, and shampoo. The firm's palm oil plantations in Malaysia benefit from good climate, abundant palm trees, and low-cost labor. Unilever's R&D centers in the UK leverage the country's abundant scientists and knowledge workers as well as capital needed to fund innovation.

*Factor proportions* refer to the relative concentration in countries of labor, capital, and other production factors. Unilever's plant in Hefei, China, makes personal care products under the Pond's, Dove, and Vaseline brands. China is a top manufacturing location because of plentiful low-cost, high-quality labor. The country's abundant land helps keep rents and other property-related costs low. China is also home to major stock markets and half of the world's largest 10 banks, which provide capital for Unilever's many activities there.

#### Recent Events

The FMCG industry is thriving due to rapid population and income growth in emerging markets. Unilever faces many challenges, including evolving demand, complex supply chains, and uncertainty in the natural environment. Consumers increasingly shop online. Many are "going green" and demand superior value. In advanced economies, more consumers are demanding products tailored to specific and fragmented needs. Such changes erode scale advantages and provide new opportunities to small players. On the supply side, natural resource shortages are affecting the costs of chemicals, food ingredients, and other key inputs. Trade protectionism is on the rise in several top markets. Unilever's numerous comparative and competitive advantages are providing big benefits that will help the firm navigate threats and opportunities.

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## END-OF-CHAPTER REVIEW

### MyLab Management

Go to [www.pearson.com/mylab/management](http://www.pearson.com/mylab/management) to complete the problems marked with this icon .

### Key Terms

absolute advantage principle 157  
comparative advantage 154  
comparative advantage principle 158

competitive advantage 155  
free trade 154  
industrial cluster 164

internalization theory 170  
mercantilism 156  
national industrial policy 164

### Summary

In this chapter, you learned about:

- **Why nations trade**

Each nation specializes in producing certain goods and services and then trades with other nations to acquire those goods and services in which it is not specialized. Classic explanations of international trade began with mercantilism, which argued that nations should seek to maximize their wealth by exporting more than they import. The absolute advantage principle argues that a country benefits by producing only those products in which it has absolute advantage or can produce using fewer resources than another country. The principle of comparative advantage contends that countries should specialize and export those goods in which they have a relative advantage compared to other countries. Comparative advantage is based on *natural advantages* and *acquired advantages*. Competitive advantage derives from distinctive assets or competencies of a firm, such as cost, size, or innovation strengths, which are difficult for competitors to replicate or imitate. *Factor proportions theory* holds that nations specialize in the production of goods and services whose factors of production they hold in abundance. *International product life cycle theory* describes how a product can be invented in one country and eventually mass-produced in other countries, with the innovating country losing its initial competitive advantage.

- **How nations enhance their competitive advantage**

A major recent contribution to trade theory is Porter's determinants of national competitive advantage, which specify the four conditions in each nation that give rise to national competitive advantages: *demand conditions*; *firm strategy, structure, and rivalry*; *factor conditions*; and *related and supporting industries*. An industrial cluster is a concentration of companies in the same industry in a given location that

interact closely with one another, gaining mutual competitive advantage. Competitive advantage of nations describes how nations acquire international trade advantages by developing specific skills, technologies, and industries. National industrial policy refers to governments' efforts to direct national resources to developing expertise in specific industries.

- **Why and how firms internationalize**

The *internationalization process model* describes how companies expand into international business gradually, usually progressing from simple exporting to the most committed stage, FDI. Born global firms internationalize at or near their founding and are part of the emergent field of international entrepreneurship.

- **How internationalizing firms can gain and sustain competitive advantage**

MNEs have value chains that span geographic locations worldwide. Foreign direct investment means that firms invest at various locations to establish factories, marketing subsidiaries, or regional headquarters. *Monopolistic advantage theory* describes how companies succeed internationally by developing resources and capabilities that few other firms possess. Internalization is the process of acquiring and maintaining one or more value-chain activities inside the firm to minimize the disadvantages of subcontracting these activities to external firms. Internalization theory explains the tendency of MNEs to internalize value-chain stages when it is to their advantage. The *eclectic paradigm* specifies that the international firm should possess certain internal competitive advantages, called *ownership-specific advantages*, *location-specific advantages*, and *internalization advantages*. Many companies engage in international *collaborative ventures*, inter-firm partnerships that give them access to assets and other advantages foreign partners hold.

## Test Your Comprehension

### AACSB: Written and Oral Communication, Analytical Thinking, Reflective Thinking, Application of Knowledge

- 5-8. Describe the classic theories of international trade. Which theories do you believe are relevant today?
- 5-9. What is the difference between the concepts of absolute advantage and comparative advantage?
- 5-10. Summarize factor proportions theory. What factors are most abundant in China, Japan, Germany, Saudi Arabia, and the United States? Visit globalEDGE™ for helpful information.
- 5-11. How does factor proportions theory compare to international product life cycle theory?
- 5-12. Do you believe your country should adopt a national industrial policy? Why or why not?
- 5-13. There is a tendency for organizations to move from simple exporting operations to FDI over a period of time. Why is this often the case? What might slow or stop the process?
- 5-14. Industrial clusters can be valuable tools for a country's economy. Identify three global examples and describe their development. Do not choose your own country.
- 5-15. Are collaborative ventures the best option when a business has little knowledge of the market?

## Apply Your Understanding

### AACSB: Written and Oral Communication, Ethical Understanding and Reasoning, Analytical Thinking, Reflective Thinking, Application of Knowledge

- 5-16. According to the Observatory of Economic Complexity (OEC), Australia exports 152 products that display the characteristics of comparative advantage. The OEC defines this in slightly different terms than the generally accepted definition. They suggest that a comparative advantage is revealed by a country having a larger share of global exports than would normally be expected considering the overall size of its export economy and the actual size of the products' global market. In 2016, Australia had exports of just under \$200 billion. Among the products in the comparative advantage category were items as diverse as animal hides, arts and antiques, glass, and vegetables.

Examine the report on Australia's comparative advantage, which can be accessed at the website of the Australian Council of Learned Academies (<https://acola.org.au/wp/reports-library>). The report provides a comprehensive appraisal of the comparative advantage products and sectors; it also suggests how the country can move to secure its position in the future. What are the key steps that Australia should take? Apply this approach to your own country. Identify any comparative advantages and then suggest ways in which these can be protected and developed into the future.

- 5-17. Economist Lester Thurow once posed the question "If you were the president of your own country and could specialize in one of two industries, computer chips or potato chips, which would you choose?" When faced with this question, many people choose potato chips because "everybody can use potato chips, but not everybody can use computer chips." However, the answer is much more complex. Whether to choose computer chips or potato chips depends on such factors as the relationship

between national wealth and the amount of value added in manufacturing products, the possibility that the country can benefit from monopoly power (few countries can make computer chips), and the likelihood of spin-off industries (computer chip technology gives rise to other technologies, such as computers). In light of these and other possible considerations, which would you choose, computer chips or potato chips? Justify your answer.

- 5-18. *Ethical Dilemma:* To reduce poverty in Africa, government officials want to increase African exports to Europe. Africa's top exports include agricultural products, such as meat, coffee, peanuts, and fruit, and many Africans depend on food exports for their livelihood. However, the European Union (EU) imposes high trade barriers on the import of agricultural products. Among various reasons, Europeans are concerned about food quality, and the EU has adopted rigorous agricultural safety standards. However, the tough regulations hurt African countries, which have experienced problems with food toxins and bovine diseases in the past. In addition, the agricultural lobby in Europe is powerful, and the EU subsidizes farmers heavily. Many European politicians do not want to risk angering Europe's farm lobby by supporting free international trade in agricultural products. Suppose you are part of an EU government task force investigating trade barriers on African agricultural imports. Using the ethical framework in Chapter 4, analyze the arguments for and against agricultural trade with Africa. What should the EU do? Justify your answer.



## INTERNET EXERCISES

Access globalEDGE™ at [www.globalEDGE.msu.edu](http://www.globalEDGE.msu.edu)

### AACSB: Written and Oral Communication, Ethical Understanding and Reasoning, Information Technology, Analytical Thinking, Reflective Thinking, Application of Knowledge

- 5-19. Suppose your company is interested in importing wines from Argentina. In analyzing this opportunity, you want to identify the strengths and weaknesses of the Argentine wine industry. What are the conditions that make Argentina a favorable location for wine cultivation? Provide a short description of the status of Argentina's wine exports and a list of the top importing countries of Argentine wines. In addition to globalEDGE™, some useful websites for this research include [www.winesofargentina.org](http://www.winesofargentina.org) and [www.ita.doc.gov](http://www.ita.doc.gov).
- 5-20. Volvo ([www.volvo.com](http://www.volvo.com)) and Pilkington ([www.pilkington.com](http://www.pilkington.com)) are major multinational firms with operations that span the globe. Investigate these firms by visiting their websites as well as [www.hoovers.com](http://www.hoovers.com) (a site that provides specific company information) and globalEDGE™. For each company, describe its ownership-specific advantages, location-specific advantages, and internalization advantages.
- 5-21. The World Bank works to alleviate world poverty and provides information about conditions in developing countries, which it uses to measure progress in economic and social development. World Development Indicators ([www.worldbank.org/data](http://www.worldbank.org/data)) is the Bank's premier source for data on international development. The Bank measures more than 800 indicators of national conditions regarding people, environment, and economy. Consult the website, click World Development Indicators or Indicators, and answer the following questions: (a) In countries with developing economies, what indicators are most associated with poverty? (b) What types of industries are most typically found in poor countries? (c) Based on comparing development indicators in poor and affluent countries, speculate on what types of actions governments in developing countries can take to help spur economic development and alleviate poverty.

### CKR Tangible Process Tools™

#### What is a CKR Tangible Process Tool Exercise?

CKR Tangible Process Tools consist of practical exercises and work processes designed to familiarize you with key managerial challenges and decisions that professionals typically encounter in international business. Completing CKR Tangible Process Tool exercises in this text enables you to acquire practical, real-world work processes that will improve employability and success in the workplace. Each exercise presents a managerial challenge in a real-world scenario, the skills you will acquire in solving the exercise, and a methodology and the resources to use in solving it. The second half of the exercise is provided at the Pearson MyLab Management website ([www.pearson.com/mylab/management](http://www.pearson.com/mylab/management)).

#### Exercise: Porter's Diamond Model and Manufacturing

The principle of comparative advantage suggests that every country possesses distinctive resources that give it advantages in the production of specific products. Michael Porter's Diamond Model, in his book, *Competitive Advantage of Nations*, argues that nations become adept at certain industries due to the presence of certain resources and four conditions: demand conditions; firm strategy, structure, and rivalry; factor conditions; and related and supporting industries. Firms establish production facilities in those countries where they can obtain the most favorable resources and advantages.

When locating value-chain activities abroad, management should try to ascertain the best location for each activity. A good approach is to (i) identify the factors that most influence company success (which tends to vary by industry) and then (ii) conduct research to find countries that offer the best combination of these factors.

In this exercise, you will gain an understanding of the factors to consider when locating company operations, learn how these factors relate to maximizing the firm's competitive advantage, and gain research skills for acquiring knowledge for planning company operations.

## Background

Choosing the best foreign location for manufacturing provides numerous advantages, including the ability to minimize manufacturing costs, maximize the quality of produced goods, and access the best factors of production and technological resources. For example, Hoya Company, which makes eyeglass lenses, established its main factory in the Netherlands to be close to Europe's superior technology in the lens-making industry. Intel established an R&D center in Taiwan to access Taiwan's engineers and other superior knowledge in the microprocessor industry.

In this exercise, you will use the elements in Porter's Diamond Model to conduct research online to identify the best countries to establish a manufacturing plant in each of the following industries: dress shoes, flat-screen televisions, and pharmaceutical drugs. The Diamond Model states that competitive advantage results from the existence and quality in a country of four major elements.

- *Demand conditions* refer to the nature of home-market demand for specific products and services. The presence of highly demanding buyers pressures firms to innovate faster and produce better products. For example, U.S. consumers have strong spending power and suffer from various health conditions. This situation has led the United States to become one of the leading producers of patent medications and medical technology. Canadians have much experience driving in the snow in rugged conditions, which makes them demanding consumers of four-wheel-drive trucks and sport utility vehicles. Hence, Canada is a superior location for producing such products.
- *Firm strategy, structure, and rivalry* refer to the nature of domestic rivalry and conditions in a nation that govern how companies are created, organized, and managed. Here the focus is on the presence of strong competitors in the nation. When a country has numerous competitors in the same industry, the level of technology, resources, and factors of production in the nation will be relatively advanced. For example, Japan is home to some of the world's leading firms in the air conditioning industry. Constant competitive rivalry continuously pressures these firms to innovate and improve. The firms in Japan's air conditioning industry compete for managerial talent, technical leadership, and superior product quality, factors that have reached a high level in the industry in Japan.
- *Factor conditions* describe the nation's position in factors of production, such as labor, capital, infrastructure, science, and IT. Every country has more of certain factor endowments and less of others, a situation that determines the nature of national competitive advantages. For example, Germany's numerous workers with strong engineering skills have propelled the country to leadership in the global scientific instruments industry. Mexico's millions of low-wage workers have allowed the country to develop competitive advantage in the manufacture of labor-intensive industrial products, such as car parts.
- *Related and supporting industries* reflect the presence in the nation of clusters of suppliers, competitors, and complementary firms that excel in particular industries. The resulting business environment is highly supportive for the founding of particular types of firms. Operating within a mass of related and supporting industries provides advantages through information and knowledge synergies, economies of scale and scope, and access to appropriate or superior inputs. For example, Silicon Valley in California is home to hundreds of successful software companies, which collectively create synergies that make for a strong base in the industry. Southeast China is a good place to locate a factory to manufacture office furniture because of the presence there of thousands of very knowledgeable firms and workers in that industry. One city in the region is a leading capital of chair manufacturing with more than 100,000 chair workers. The firms in this industry exchange much useful knowledge about furniture manufacturing that accelerates new product development and innovations.

To complete this exercise in your MyLab, go to MyLab Management ([www.pearson.com/mylab/management](http://www.pearson.com/mylab/management)) and click on **Career Toolbox**.

*Note:* Some material in this exercise is based on Michael Porter, *The Competitive Advantage of Nations* (New York: Free Press, 1990).

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# Chapter 6

# Political and Legal Systems in National Environments

**Learning Objectives** *After studying this chapter, you should be able to:*

- 6.1** Describe political and legal environments in international business.
- 6.2** Understand political systems.
- 6.3** Understand legal systems.
- 6.4** Describe the participants in political and legal systems.
- 6.5** Identify the types of country risk produced by political systems.
- 6.6** Identify the types of country risk produced by legal systems.
- 6.7** Know about managing country risk.

## Galileo: Regional Disintegration and Its Consequences

**A** lot has been written about Brexit since the referendum in June 2016 in terms of both the threats and the opportunities it may entail, but there are a few points that are inarguable. The challenges it poses to transnational businesses and initiatives is one major point, and in no other case this is more evident than in the case of Galileo.

Galileo is the all-European satellite navigation system that, once fully operational in mid 2020s, will surpass any existing geo-localization in terms of accuracy and precision, GPS included. But it is Galileo's sophistication that creates issues in light of Brexit. Galileo's Public Regulated Service (PRS), a feature designed to serve as a secure, encrypted navigation system, is considered by the European Union as a back-up system vital for both civil and military purposes—and due to EU laws, it is available only to EU member states.

The United Kingdom has been involved since day one in the design and the construction of Galileo through the UK-based Surrey Satellite Technology Ltd., a subsidiary of both Germany's OHB and France's Airbus. This company manufactures a critical piece for Galileo's satellites: its "brain," or payload.

However, once the United Kingdom leaves the European Union, it may also find itself outside the Galileo project due to the restrictions mentioned above. Endless disputes around Galileo's membership and manufacturing contracts have been raging since January 2018, when the supplier contracts for Galileo had to be renewed and the renewal bidding procedure started.

Threatened with exclusion, the United Kingdom might decide to withdraw from the project and build a system on its own for which it has the technical capabilities. It could even go to the extent of stopping British companies from manufacturing components for Galileo's systems. Moreover, the