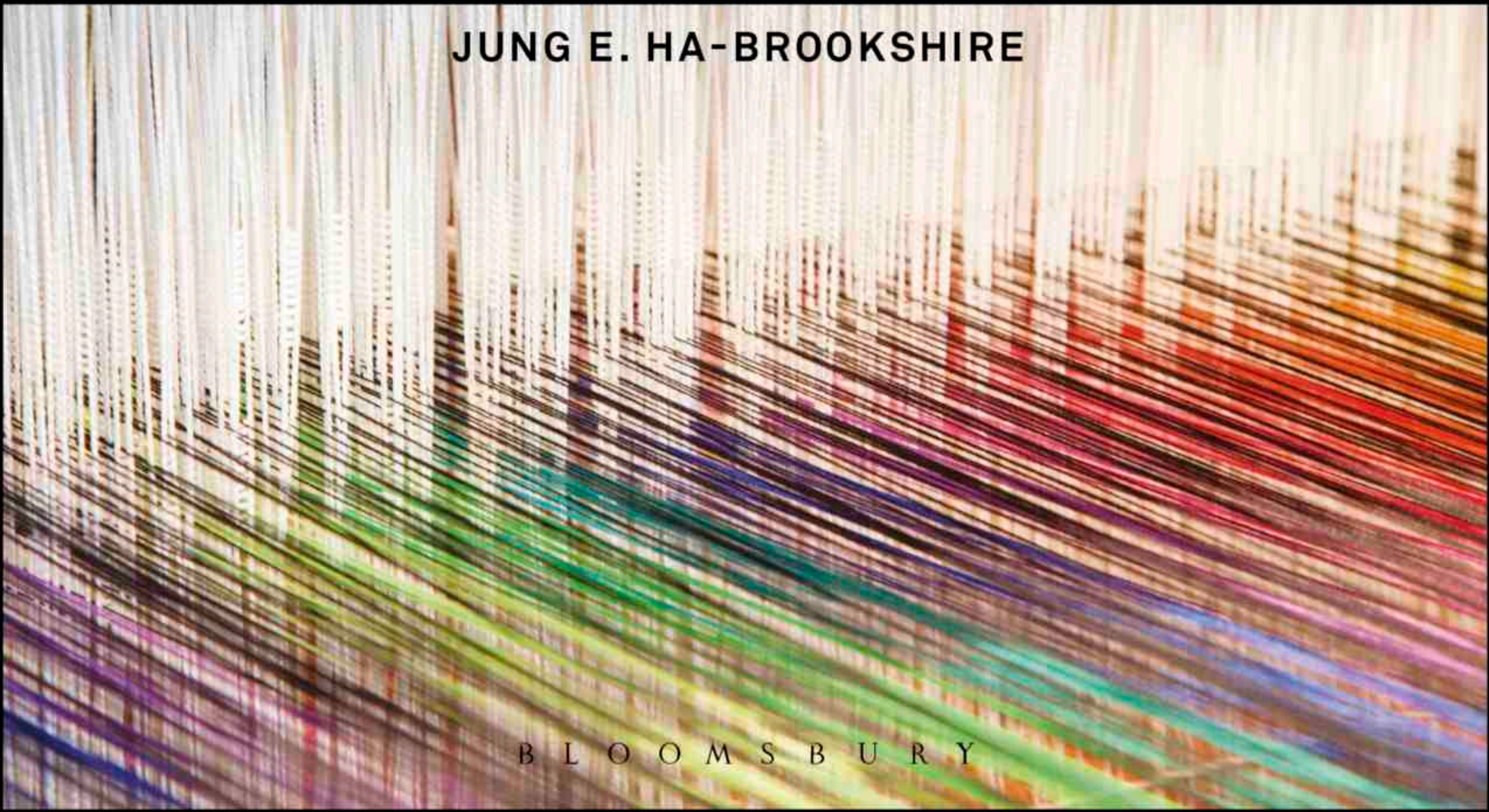
GLOBAL SOURCING
in the Textile and Apparel Industry

2nd edition

JUNG E. HA-BROOKSHIRE



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Global Sourcing in the Textile and Apparel Industry

SECOND EDITION

JUNG E. HA-BROOKSHIRE, PH.D.
UNIVERSITY OF MISSOURI

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PREFACE

U.S. textile and apparel businesses have engaged in global sourcing for more than six decades. I have been fortunate to be involved in global sourcing both directly and indirectly. I was born and raised in Daegu, South Korea. During my early childhood in the 1970s, the town of Daegu experienced rapid growth through its thriving textile mills and apparel manufacturing plants. DuPont, a U.S. textile manufacturing company, set up one of the largest textile and apparel manufacturing plants in my town. It was the first company where one of my aunts was able to get her very first job. Back then, women were less likely to have an education or career in my country. The fact that she woke up every morning, wore a uniform, went to work, and studied at the factory's after-work school programs was so novel that the whole town was concerned about my brave aunt's future. She was too modern! I loved watching her going to work and school, and every year on Children's Day, May 5 (to most of us Korean children, this national holiday celebrating children was more exciting than Christmas), she took me to the factory where I saw green grass for the first time. I thought the sewing factory the best thing to ever to happen to us and our town.

Since then I have wanted to be involved in global sourcing. At that time I had no concept of global sourcing. However, I knew what I wanted to do when I grew up. I wanted to travel all over the world, establish a factory (or find one), then throw annual Children's Day parties in lots of different countries. Twenty years later, after earning a bachelor's degree in clothing and textiles from Seoul National University, I flew to New York City looking for an opportunity to start accomplishing my childhood dream. Within a few months, I found my very first job as a production assistant at Popsicle Playwear, a division of Adjmi Apparel Group, on 33rd Street near Macy's. I was quickly promoted and became fully engaged in global sourcing. All of my company's product portfolios were sourced from foreign countries such as China, Taiwan, Hong Kong, Indonesia, Turkey, United Arab Emirates, Pakistan, and even South Korea. By 2000, my department was sourcing and importing over $100 million (at retail price) worth of goods from all over the world.

The success of my career at Adjmi Apparel Group helped me land a job at Richard Leeds International, Inc., whose specialty was sleepwear. From 2001 to 2004, I was responsible for Central American production, sourcing and importing up to $10 million at wholesale value. Sourcing from the Central American region had whole new sets of challenges and questions. I had to learn everything from the ground up by doing the job. While working at these jobs, I somehow managed to throw several birthday parties for factory workers, played with their children, and participated in their night school activities. Indeed, my childhood dream came true. People whom I worked with all over the world were extremely motivated, eager to learn, and wanting to be an active part of the global economy. The ideas for this book were conceived in 2007, when I took an assistant professor position at the University of Missouri. I wanted to produce a textbook that had real-life implications while maintaining theoretical perspectives. I searched and gathered all the reference materials and information through personal contacts, library search, and literature from governments, laws, trades, and businesses. For the first class that I taught on global sourcing in 2008, I compiled all these materials into a reference book. Then I personalized the lectures with many of my business experiences so that students could better understand the concepts in the textile and apparel industry. My students loved the class. By 2009 my lectures were translated into PowerPoint slides and by 2010 they were audio-recorded. In 2011 and 2012 I began writing this textbook—the result of years of experience working in global sourcing and researching the subject, and six years of teaching experience related to global sourcing. In 2016, I have updated this textbook with newer data, information, and more cases—the cases that I had to deal with in real-life situations.

Throughout this book I have tried to cite sources as much as possible. However, some examples, such as the rubrics on financial sourcing performance in Chapter 11, stem from my experiences while working as a global sourcer. They worked for me and my team. The hypothetical company Amazing Jeans, used throughout this textbook, is very similar to the companies for or with which I worked. Many of the questions asked and issues dealt with in the learning activities at the end of each chapter relate to questions and issues that I encountered in my work. Some of the learning activities are actual activities I asked my staff members to complete during their training.

New to this Edition

In the 2nd edition, a new theory called "moral responsibility theory of sustainable supply chain" is included in Chapter 2 to reflect the latest literature discussing theoretical aspects of global sourcing. Chapter 4 has new content on "sustainability optimization criterion." Chapter 7 has new content on "potential sources to find new suppliers" and Chapter 11 includes new content on "The Higg Index" designed to evaluate an apparel and footwear company's sustainability performance. Chapter 12 had significant updates in "the future of global sourcing" section, including technology, the UN's sustainable development goals, and on- or near-shoring trends to which future apparel sourcers may pay attention. In addition, throughout the textbook, stronger emphasis on and connections of sustainability with global sourcing has been made. All trade data are up to date with the latest available statistics. (Please note that most WTO data are about two years old by the time WTO publishes them.) Trade agreements are also updated with the latest policies. Many figures within the textbook have also been updated with the latest business activities. Students may like case studies at the end of each chapter that offer real-life scenarios that today's sourcers may have to face every day. They are short and sweet but have real-life implications. I hope the new contents generates interesting and invigorating discussion in classrooms.

Instructor's Resources

An Instructor's Guide, Test Bank with over 300 exam questions, and PowerPoint presentations for each chapter are offered with this text to aid instructors in the classroom.

ACKNOWLEDGMENTS

Throughout this process, I have received much help from many different people. I would like to thank staff members at Bloomsbury and Fairchild Books for all the help they have provided me in completing this project, as well as basic concepts of global sourcing. Since this book is written from the U.S. sourcer's perspective and is somewhat biased toward U.S. businesses that target mass- and mid-tier consumer segments, some might see this as negative. However, I believe this U.S. perspective could help many foreign suppliers better understand U.S. buyers and sourcers: By knowing the other, one could better prepare himself or herself. Similarly, by understanding mass- and mid-tier business practices, students could apply these concepts to other consumer segment businesses. Therefore, this book will be useful for careers in many different industries. First and foremost, textile and apparel educators will find this book useful to help better prepare today's college students for clothing- and textile-related careers. Students who seek jobs as product developers, designers, salespeople, and merchandisers in the United States will find this book beneficial because they will gain a more comprehensive view of the global textile and apparel industry through global sourcing. Students in other countries could also apply these concepts to better prepare for their careers either as sourcers or suppliers.

I also would like to extend my gratitude to my advisor, Dr. Barbara Dyer, who was the first person to tell me that I, too, could write a textbook. I thank my graduate research assistants and my fellow colleagues at the University of Missouri for their extremely positive support and encouragement. Without all of their help and input, this book would not have been possible. Finally, I would like to express my deepest appreciation to my husband, Richard Brookshire, for his unselfish support throughout this process.

Jung E. Ha-Brookshire
University of Missouri

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ABOUT THE AUTHOR

Jung E. Ha-Brookshire, Ph.D., is Associate Dean for Research and Graduate Studies in the College of Human Environmental Sciences, and associate professor and director of graduate studies in the Department of Textile and Apparel Management at the University of Missouri (MU), USA. Prior to her time at MU, she worked as a production assistant, production coordinator, production manager, and sourcing manager for Adjmi Apparel Group and Richard Leeds International, Inc., both located in New York City, from 1997 to 2004. During her time there she traveled extensively to various countries in Asia and Central America in textile and apparel product sourcing, product development, production coordination, and quality assurance capacity. At MU, Dr. Ha-Brookshire teaches global sourcing and the capstone for retail marketing and merchandising students. She also teaches global supply chain management and theory development and evaluation courses at the graduate level. She received several notable awards, including the Fulbright core scholar award by U.S. Department of State in 2015, the 2011 Rising Star award by the International Textile and Apparel Association, the 2010 Excellence in Education award by the MU Division of Student Affairs, and the 2009 Professor of the Year award given by the MU Student Athlete group. Dr. Ha-Brookshire has completed numerous internal and external grants totaling over $350,000. She has published over 39 manuscripts in peer review journals and presented her research more than 90 times at various international, national, and regional conferences, workshops, or meetings. She frequently consults apparel and footwear companies and organizations.

1 Introduction to Global Sourcing

The textile and apparel industry is one of the most globalized. Today's textile and apparel companies are doing business with companies from all over the world, and they are highly interdependent. This chapter discusses the historical background of global sourcing, provides a definition of global sourcing, states the goals of global sourcing, and describes the job responsibilities and requirements of sourcing personnel in today's marketplace. Upon completion of this chapter, students will be able to:

- Understand how global sourcing has developed from a historical perspective.
- Comprehend the role of global sourcing in the textile and apparel industry.
- Explain the pros and cons of global sourcing.
- Articulate differences among sourcing, outsourcing, global sourcing, and global supply chain management.
- Explain global sourcing within the global supply chain perspective.
- Understand the responsibilities of global sourcing for a sustainable future.
- Describe the main goals of global sourcing.
- Understand what job responsibilities and requirements are for sourcing personnel.

Global Sourcing

HISTORICAL BACKGROUND

In today's society, when we need something to wear, we go to stores to purchase ready-made clothing. In many cases, retailers purchase clothing from other companies and make it available to consumers in their retail spaces. Although this seems to be a natural way to satisfy our clothing needs, it is one of the profound results of technological advances and the Industrial Revolution. Prior to the Industrial Revolution, up until the late eighteenth or early nineteenth century, women were in charge of spinning fiber, weaving fabrics, and sewing clothing at home for their families' needs (Wilson, 2002). Figure 1.1 shows a traditional way to weave fabrics manually. Advances in technology fueled the Industrial Revolution during the period between 1750 and 1850. The **Industrial Revolution** began in the United Kingdom and spread throughout Western Europe, North America, and the rest of the world. A mechanism to spin cotton fibers was one of the earliest inventions contributing to the Revolution. Through this invention

FIGURE 1.1
Prior to the Industrial Revolution, textiles were produced at home by manual labor. (© Paul Furborough/EyeEm/Getty Images)

and other technological advancements, factories started making yarn, fabrics, and clothing. Women no longer needed to make everything at home; rather, they could go to the market to purchase ready-made clothing and textiles (Wilson, 2002). Industrialization moved textile and apparel production from homes to factories, creating the textile and apparel industry.

As the textile and apparel industry developed, business clusters (geographic concentrations of interconnected businesses, suppliers, and associated institutions) were also created. Factories and businesses within each cluster were sharing and supplying raw materials, know-how, technology, and skills. Geographic concentration helped save transportation costs and delivery time. Until recently, in the United States, North Carolina and Georgia comprised one of the main textile and apparel business clusters. These states were taking advantage of the abundant cotton fibers produced in their region.

Business clusters also helped companies become specialized. To be competitive, businesses concentrated on specialization to increase manufacturing efficiency and, ultimately, reduce unit costs. Thus, factories that specialized in sewing operations, fabric production, or yarn production were created within each business cluster. These factories were dependent on one another, as sewing plants needed fabric mills to produce fabrics at low cost, while fabric mills needed yarn mills for yarn production. Thus, buyer–supplier relationships were formed within the business cluster, and the buyer's sourcing of raw materials was typically limited to the firms within the cluster during the early industrial age.

As the industry developed and consumers' tastes changed, textile and apparel businesses needed new and special materials, knowledge, or skills that were not readily available within their own business clusters. These businesses then expanded their sourcing operations beyond their clusters, states, and even across national borders. For example, a sewing factory in North Carolina could now source wool fabrics from Australia or silk from Japan, as Australia is a leading wool producer and Japan is a leading silk producer. In this case, both Australia and Japan are the suppliers and a sewing factory in North Carolina is the buyer. On the other hand, a cotton fabric producer in Georgia could consider sourcing sewing operations from Mexico to produce low-cost cotton clothing. In this case, a Georgia-based cotton fabric producer is the buyer and a sewing factory in Mexico is the supplier of labor. This natural progression of industry development led to global sourcing.

As the history of the textile and apparel industry shows, sourcing is not a new phenomenon. In the early stages of the Industrial Revolution, women sourced yarns and fabrics so they could sew the garments at home for their families. Sourcing within the business cluster was natural because factories wanted to increase their production efficiency by concentrating on specialized operations. As communication and transportation technologies advanced, and the movement of products, capital, and labor across the border became easier, businesses embarked on global sourcing to seek novel, high-quality, or low-cost products.

CURRENT STATUS OF GLOBAL SOURCING

Today, global sourcing is common in many manufacturing sectors in the United States. For example, the mobile phone industry sources globally to keep up with growing demands (Stadtler & Kilger, 2008). The cosmetics and home appliance industries source globally to access emerging markets, gain high profit margins, and take advantage of the abundance of low-wage labor in developing countries (Stadtler & Kilger, 2008). The food and agriculture product industries also source globally to improve product availability (Laseter & Weiss, 2008).

Since World War II, textile and apparel businesses have been particularly motivated to save manufacturing costs to accommodate the increasing demand for low-cost clothing by newly emerged middle-class consumers. To save production labor costs, many businesses in high-wage economies (or developed countries) have moved their manufacturing facilities to or contracted manufacturing operations with businesses in low-wage economies (or developing countries) (Cook, 2007). This movement of manufacturing sites has led the textile and apparel industry to be one of the most globalized of all, and the world has become ever smaller.

Today, the United States is the single largest apparel-importing country in the world. The United States has been importing over US$90 billion worth of apparel every year in the past decade and this amount represented as much as 23 percent of the world's total apparel imports in 2010 (World Trade Organization [WTO], 2016). In addition, recent research suggests that over 95 percent of total apparel products available in the U.S. marketplace are, in fact, manufactured in and imported from other countries (Ha-Brookshire & Dyer, 2009). China, Bangladesh, Vietnam, Indonesia, India, and Mexico are some of the leading apparel exporters to the United States (WTO, 2016). These statistics suggest that U.S. apparel companies are extensively sourcing their products from all over the world. Figure 1.2 shows fabrics that are ready to be used for apparel production.

FIGURE 1.2
Fabrics are sourced and ready to be used for apparel production. (Photo courtesy of author)

PROS AND CONS OF GLOBAL SOURCING

Regardless of the various industry sectors, in general, global sourcing is known to benefit businesses and economies in several ways. First, global sourcing helps businesses reduce material or operating costs, improve quality, increase product availability, and respond quickly to changing markets (Cho & Kang, 2001; Shelton & Wachter, 2005). In other words, global sourcing helps businesses gain access to a variety of products that are otherwise difficult to obtain. Second, global sourcing allows companies in developing countries to focus on labor-intensive manufacturing activities and exports, while companies in developed economies can concentrate on high-technology, capital-intensive, and globally coordinated activities (Dickerson, 1999; Shelton & Wachter, 2005). This concentration helps increase trade between developed and developing countries. Supporters for global sourcing emphasize that not only does it improve product quality, availability, cost, and responsiveness to the market, but it also helps developing countries grow their domestic economies and learn new technology and knowledge from developed countries.

Despite its benefits, there are significant downsides to global sourcing as well. For example, some argue global sourcing leaves many factory workers unemployed and, thus, intensifies the gap between the rich and the poor within developed countries (Cho & Kang, 2001; Shelton & Wachter, 2005). On the other hand, global sourcing in developing countries could create issues related to unfair labor practices, child labor exploitation, or environmental degradation (Park & Stoel, 2005; Shelton & Wachter, 2005). Thus, opponents of global sourcing argue that businesses' considerations of global sourcing must include strategies to retrain factory workers in developed countries once factories are relocated to other countries, improve labor practices in developing countries, and monitor environmental protection practices in developing countries.

Definition of Global Sourcing

SOURCING, GLOBAL SOURCING, AND OUTSOURCING

Before we define global sourcing, we must clarify the concept of sourcing. Although sourcing is a common term in today's marketplace, the definition of sourcing has not been well conceptualized. One of the early definitions, by Dickerson (1999, p. 253), states that sourcing is "the process of determining how and where manufactured goods or components will be procured (obtained)." More often than not, the terms *outsourcing* and *sourcing* are used interchangeably by the media and the public. Although this definition provided a general concept of the term *sourcing*, sourcing involves more than simple procurement determination.

Sourcing includes all aspects of a business's activities involved in acquiring parts or full products from outside the organization. Some businesses acquire components to complete the final products. Others, such as wholesalers or retailers, might acquire fully finished products for their business purposes. Typically, decisions on sourcing are made based on a business's long-term goals rather than its short-term goals (Seshadri, 2005). For example, whether a company will focus on sewing operations with fabrics sourced from other companies or other countries is a big decision, one that any business must make using a long-term outlook. Thus, sourcing is different from procurement, which typically refers to short-term purchasing contracts (Seshadri, 2005). Considering all of these aspects involved in sourcing, the term **sourcing** can be defined as a set of business processes and activities by which businesses acquire and deliver components or fully finished products or services from outside the organization, with the objectives of finding, evaluating, and engaging suppliers of goods and services to achieve long-term competitive advantages. Thus, sourcing is a business-to-business (B2B) activity that involves both the buyer and the supplier. When these buyers and suppliers are in different countries and require international trade, sourcing becomes global. Therefore, global sourcing is sourcing in the global marketplace.

Companies can source a variety of business processes, including raw materials, labor, manufacturing equipment, technology, design skills, marketing know-how, business relationships, partially finished products, and fully finished products, domestically and globally. Sourcing involves (a) analyzing the relationship between product, price, and volume; (b) understanding the market dynamics for products and the suppliers of products; (c) developing procurement strategies; and (d) establishing working relationships with suppliers (Hilstrom & Hilstrom, 2002).

More specifically, in the textile and apparel industry, sourcing involves making decisions regarding the amount of product needed, identifying production sites capable of producing goods for retail, negotiating prices and discounts, maintaining relationships with the manufacturers during the production process, scheduling deliveries, following up to ensure on-time delivery, and maintaining quality (Granger, 2007; Muhammad & Ha-Brookshire, 2011). In short, sourcing requires various business activities such as marketing, merchandising, purchasing, accounting, designing, product development, operation management, general management, and business strategy (Seshadri, 2005). Collaboration across the functions is key to global sourcing (see Figure 1.3). Global sourcing requires all of these business processes to be considered, planned, and practiced in the global marketplace. Typically, global sourcing is initiated by companies in developed economies seeking low-cost labor and high profits in the long term.

As seen in the definition of sourcing, the term *sourcing* itself does not bear any negative connotations. However, the term *outsourcing* has been used negatively, along with certain phrases such as "domestic job loss" (Ha-Brookshire & Lu, 2010). In this light, the term *outsourcing* emphasizes the fact that jobs are shifted to outside the business cluster, state, or country, implying that workers inside the cluster, state, or country lose something that they had before. Thus, although outsourcing and sourcing fundamentally have the same meaning, the term *outsourcing* often implies a negative impact of global sourcing on the domestic economy, while *sourcing* emphasizes only businesses' strategic practices. Thus, one might need to be cautious when using these terms.

FIGURE 1.3
Collaboration is key to global sourcing. (© Hinterhaus Productions/ Getty Images)

SOURCING AND SUPPLY CHAIN

Supply chain and *supply chain management* are another set of terms we often face when it comes to sourcing. Although these terms might seem to overlap, there is a difference between them. Researchers explain a **supply chain** as a group of suppliers, suppliers' suppliers, buyers, and buyers of buyers of materials, information, and services providers organized to supply raw materials, transform products, and satisfy the demand of ultimate consumers (Chen & Paulraj, 2004). In this light, a typical supply chain includes raw material suppliers, material-purchasing departments, production teams, logistics and distribution centers, technology developers, and even end consumers. All of these members within the supply chain are closely linked with one another to achieve the goal of meeting demand by supplying and transporting the goods or services required for such demand. Without transportation, raw materials will not be delivered to manufacturing facilities. Without raw materials, manufacturing sites will not be able to produce final products. Without information technology, it would be difficult for distribution to improve efficiency. Similarly, consumers will not be able to acquire the products and services that they want if there are no suppliers. All of these supply chain members are interdependent.

Managing such supply chain members and activities is called **supply chain management (SCM)**. John Mentzer is one of the leading SCM researchers in the United States, and he explains SCM as a business function that strategically and systematically coordinates the traditional business functions within a particular company as well as across businesses within the supply chain. Through management of the supply chain, not only a firm but also its supply chain as a whole would be able to improve long-term performance (Mentzer, 2004). He suggests the overall goal of SCM is to achieve customer satisfaction, value creation, increased profitability, and strong competitive advantages. To achieve this goal, Mentzer suggests SCM must be embedded into almost all aspects of traditional business functions such as marketing, sales, research and development, forecasting, production, purchasing, logistics, information systems, finance, and customer service. Intercorporate and interfunctional coordination lead to successful SCM, and successful SCM is one of the most important business functions in today's global marketplace.

Menzter's approach to traditional business functions and the role of SCM in each of such functions is different and unique from the past perspective toward SCM. His perspective points out that traditional business functions must fall under the umbrella of the SCM framework, whereas previously it was thought SCM functions were executed to support traditional business functions. According to this perspective, SCM is a higher-level business function than traditional business functions; thus, all of the traditional functions must feed information and services to SCM under the overarching SCM framework.

In this light, the Council of Supply Chain Management Professionals (2010) came up with a specific list of supply chain activities that may be found in today's business environment. According to them, SCM professionals

- Coordinate and collaborate with channel members, such as suppliers, intermediaries, third-party service providers, and customers.
- Manage all logistics-related functions.
- Manage all manufacturing-related operations.

- Predict and satisfy supply and demand within and across companies.
- Connect major business functions and processes within and across companies into one cohesive and effective business system.
- Organize processes and activities with and across marketing, sales, product design, finance, information technology, and other core business functions.

Therefore, it can be said that global sourcing is one of the activities under the SCM framework. Global sourcing tends to concentrate on acquisition and delivery of components or fully finished products or services from outside the organization to the organization, while supply chain management includes managing demand and supply, creating a big-picture business model, and interdepartmental coordination strategies within the company.

Global Sourcing in the Textile and Apparel Supply Chain

With a clear understanding of global sourcing and supply chain, this section goes deep into global sourcing in the textile and apparel supply chain. As discussed previously, there are various members in the global textile and apparel supply chain. Figure 1.4 illustrates the interconnected relationships among various supply chain members in the global textile and apparel industry. More specifically, the ultimate suppliers in the upstream of the textile and apparel supply chain would be fiber producers, and the ultimate customers would be users of clothing and textiles.

To deliver the most desired and needed goods to ultimate users, various functions are necessary within the textile and apparel supply chain. Such functions include forecasting, researching, designing, sourcing, merchandising, and retailing. By reviewing past history, one may forecast future needs and wants. Consumer research, including socio-psychological aspects of consumers, is an extremely useful tool for carefully predicting consumers' purchase, use, and disposal behavior. Design and product development functions are necessary to engineer the finished goods in the ways people need and want them—both creatively and functionally. Global sourcing facilitates design and product development strategies. Sourcing activities are involved in global supply chain management by identifying ideal places to manufacture finished goods, inspecting finished goods, and coordinating logistics. Merchandising helps the supply chain produce the optimal amount of goods in a timely manner so producers still gain profits while consumers find the needed or wanted products. Finally, retailing—such as brick-and-mortar retailing, electronic commerce (e-commerce), and mobile commerce (m-commerce)—is responsible for creating transactions between consumers and members of the entire global supply chain.

These functions are managed through interfunctional coordination within an organization, as well as interorganizational coordination. Such management involves creative problem solving, leadership, and education. The dotted lines in Figure 1.4 symbolize that these functions are highly interdependent. Some organizations may conduct and control

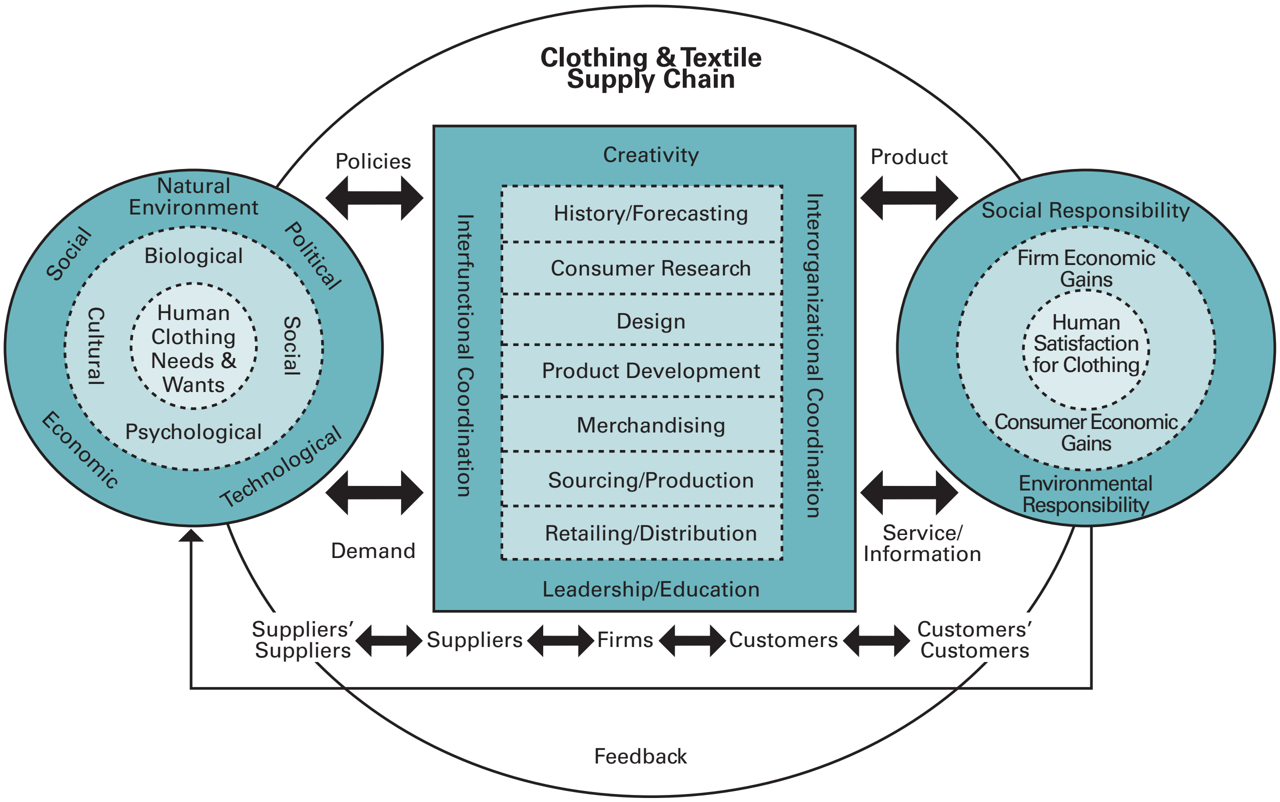

FIGURE 1.4
Global supply chain management of textiles and apparel.
Source: Ha-Brookshire and Hawley (2013)

all of these functions within the global supply chain. Others may focus on only one function, reflecting the fragmented nature of clothing and textile industries. It is not to say all clothing and textile products are produced through all of these functions. Yet, these are the core functions found within today's clothing and textile supply chain.

Figure 1.4 shows that all of these supply chain activities exist to satisfy people's clothing needs and wants, which are affected by political, economic, social, technological, and natural environments. Successful global supply chain management in the textile and apparel industry results in human satisfaction for clothing. Through these satisfaction processes, businesses gain financial profits, consumers gain by bargain-hunting, and employees working for textile and apparel businesses gain from the businesses' financial success. These economic gains, however, must not overshadow the social and environmental consequences of global supply chain processes. By responsibly meeting the current generation's needs and wants, people also gain satisfaction for a better society and environment.

Overall, people's needs and wants create demands for certain clothing and textile products, and such demands motivate supply chain members to work together. The results of global supply chain management can be actual products, services, or information. Products refer to tangible clothing and textile products, while services refer to intangible aspects of products, such as customer services, returns, repairs, or delivery. Information could be certain messages, including corporate social responsibility, brand image, or status symbol. Through these products, services, and information, people achieve satisfaction or dissatisfaction related to clothing and textiles. The post-consumption experiences are then shared with society, influencing new demands and even new policies through feedback systems. People who are dissatisfied because of poor supply chain management may demand changes in policies or new policies. These policies then affect the way supply chain members function. All of these processes take place in the global environment. Therefore, the focus of the global supply chain management of textile and apparel is not to satisfy people only in developed economies. It should also include people in developing economies as producers as well as consumers. Through this global supply chain management of textiles and apparel, global sourcing is one of the key business activities closely related to production.

Goals of Global Sourcing and Sustainability

Most people think companies source (or outsource) their products for cheap labor. Although low-cost labor helps reduce the cost of labor-intensive processes, it is not the only goal of global sourcing. As seen in Figure 1.4, through successful and responsible global sourcing, businesses gain financial benefits, and consumers gain the ability to afford a variety of high-quality products. Although these are important aspects of global sourcing, many leaders and thinkers have criticized too much focus on business profits and people's overconsumption. After long decades of growth, production, and expansion after World War II, people in developed economies started questioning the fast growth of the world population, which was expanding at an unprecedented rate, and the lack of resources available to meet future needs. To address these questions, on March 20, 1987, the Brundtland Commission of the United Nations (UN) published a document called Report of the World Commission on Environment and Development: Our Common Future. In this report, **sustainable development** is "the development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (United Nations General Assembly, 1987). Following this definition, the UN report emphasized that sustainable development must consider the needs of the world's poor and the limited resources on Earth to meet their basic needs (such as food, clothing, shelter, and jobs).

In this light, the goals of successful and responsible global sourcing must include social and environmental dimensions in addition to businesses' economic performance (Carter & Rogers, 2008). This is consistent with the UN's definition of sustainability in that organizations and businesses must consider and balance the **triple bottom lines of sustainability**—economic, environmental, and social goals—simultaneously to meet present needs without compromising the needs of future generations. Thus, the goals of global sourcing must be at the intersection of environmental, social, and economic performance. Figure 1.5 illustrates the triple bottom lines of sustainable global sourcing.

The next section discusses the main goals of global sourcing, an important part of global supply chain management, from the triple bottom line perspective. For businesses'

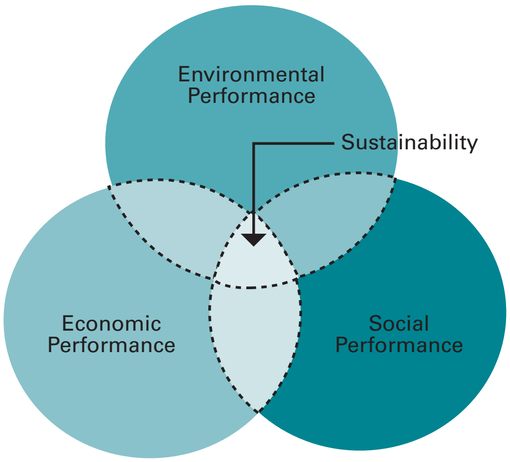

FIGURE 1.5
Triple bottom lines of sustainable global sourcing. Source: Carter and Rogers (2008)

economic performance, sourcing seeks to achieve (a) cost reduction, (b) productivity growth, (c) value acquisition, (d) quick response and flexible product supply, (e) supply assurance, (f) quality assurance, and (g) capacity management (Seshadri, 2005). Through global sourcing, consumers also achieve financial gains and clothing satisfaction. Finally, social and environmental dimensions are discussed as one of the important goals of global sourcing.

THE GOAL OF BUSINESSES' ECONOMIC IMPROVEMENT

Cost Reduction

By sourcing their components or finished goods globally, companies can reduce their costs significantly. One of the main sources of cost reduction comes from savings in labor costs (labor costs include salary and health/retirement benefits). By using low-cost labor, companies producing labor-intensive products can save a substantial amount of labor input cost. Companies also can reduce costs by avoiding paying taxes or duties imposed by one country or another. By trading products between countries with free trade agreements, companies can pay lower or no duties, which otherwise could have added expense.

In addition, if required raw materials are produced only in a certain country—for example, Japan—companies might want to find manufacturing facilities in nearby countries with low-cost labor to coordinate raw materials and produce finished products more efficiently. This sourcing strategy can save overall production and transportation costs. For example, rather than moving Japanese materials to another distant country, such as Turkey, completing production in Japan or nearby countries may be more financially sensible.

Finally, companies can save costs by reducing or removing risks that might stem from late delivery, production defects, inaccurate demand forecasting, currency fluctuation, geopolitical conflicts, or even natural disasters. Global sourcing allows the sourcer to share such unforeseen risks with suppliers. Often, the sourcer provides financial or contractual incentives for the supplier to control risks that can be managed internally. However, there are many risks that cannot be managed by either the sourcer or the supplier. In many cases, both the sourcer and supplier work to manage the risks and share the burden.

Productivity Growth

Productivity growth is another goal of global sourcing. By sourcing components or finished products from other companies that specialize in certain products, the sourcer (or the buyer) is able to quickly acquire those specialized products. Particularly if the sourcer is not familiar with and does not have expertise in producing such products, global sourcing helps the sourcer focus on core competencies while sourcing special products from others, thus improving productivity.

Value Acquisition

Global sourcing also allows companies to gain new values that otherwise would not have been available to them. Often, companies acquire new, novel, one-of-a-kind products from other companies. They also acquire from other companies human resources, skills, knowledge, or know-how that they might deem critical to enhancing their competitive advantages. When companies suffer from poor reputation or publicity, they also can source social or environmental values by partnering or collaborating with other companies proven to have excellent reputations. In this light, the goal of global sourcing is to acquire effective values that are not available to the sourcer yet critical for its competitive advantages.

Quick Response and Flexible Product Supply

As the consumers' demands and tastes quickly change in today's marketplace, most companies seek to offer the right products at the right time so they can maximize sales and profits. Global sourcing helps companies achieve quick responses to such market changes for reasons similar to global sourcing's positive effect on productivity growth. Global sourcing allows the sourcer to pay attention to and analyze market demands and identify new trends, while the supplier focuses on production. This division of business activities helps the sourcer achieve quick response as well as flexible product supply. The sourcer makes decisions regarding when to deliver what from whom as consumer demands change. Without global sourcing, it would be much more difficult to analyze a trend, come up with a product plan, manufacture the desired products, and deliver them before consumers' tastes changed. Thus, one of the key goals of sourcing managers is to have a wide network of suppliers of a variety of components and products that can satisfy market demands in a timely manner.

Supply Assurance

While quick response and flexible product supply might be important objectives to meet, this division of business activities also can hurt the sourcer without direct ownership of the components or finished goods. Sourcing contracts between the sourcer and the supplier help ensure delivery of future products. Yet, these contracts can often fail. For example, the supplier might not be able to make delivery due to the loss of finished goods as a result of a natural disaster. Or the supplier could fail to meet delivery because it does not have sufficient financial resources to hire the right amount of labor. The best way for a business to ensure future product supply is to own its own factories, rather than engage in global sourcing. Direct ownership of factories in a geographically close location might help supply assurance, but this also can create conflicts between rapid response and flexible product supply. Thus, global sourcing strategies must consider both flexibility as well as supply assurance to maximize business performance.

Quality Assurance

Recently, quality assurance has become an important sourcing objective, even more so than cost reduction (Seshadri, 2005). Cheap price is no longer a key condition for the sourcer. Rather, reliability is often more important in satisfying consumers. If the

FIGURE 1.6
Quality assurance is another goal of global sourcing. An inspector is visually evaluating fabric quality. (Photograph courtesy of author)

supplier is reliable and produces high-quality products, the sourcer will spend less time dealing with the supplier's production problems, conducting inspections, and monitoring rework. The sourcer will also have less loss due to defects, late delivery, and incorrect processes. Thus, more often than not, sourcing managers seek suppliers with quality production and quality assurance certificates, rather than suppliers with cheap cost without assurance of quality products, putting cost and quality puzzles together in the most effective way (see Figure 1.6).

Efficient Capacity Management

For any manager, dealing with highly fluctuating demand and supply is difficult. Having too much inventory at any given time can force companies to lower the retail price to promote quick and high-volume sales. Having insufficient inventory is also a problem for sourcing managers, as the lack of stock can result in the loss of potential sales. Similarly, having too many resources at a given time results in inefficient utilization of resources, while having shortages of resources can result in a shortage of product output. Thus, capacity management is another important objective of global sourcing. The objective of capacity management can be achieved by reducing the opportunity cost of capacity while keeping core competencies located internally.

Decisions on which components and resources should be sourced from outside and which business activities and processes will be kept within the company are critical for any sourcer. Sourcing managers constantly evaluate opportunity cost, the money or benefits lost when pursuing a particular course of action instead of a mutually exclusive alternative, and decide which sourcing options would maximize resource utilization and minimize the opportunity cost of resources (Seshadri, 2005). One important consideration when evaluating internal resource capacity and opportunity cost of capacity, however, is that it is unwise to source proprietary and strategic parts, knowledge, or skills that are fundamental for the sourcer's competitive advantages. Seshadri (2005, p. 57) stated that, "if a firm outsources difficult tasks and insources easier ones, it will lose its competitive advantage."

Because of the need for keeping core competencies within the company, sourcing managers will always have a set of internal suppliers as well as external suppliers. For example, if a company outsources manufacturing activities while insourcing design, a sourcing manager will need internal designers who will supply design plans as well as external suppliers who will be in charge of apparel manufacturing. Or, if a company has its own manufacturing facilities overseas (internal suppliers), it might need another manufacturing company's help to fulfill large orders before deadlines. In this case, the sourcing manager has internal and external apparel manufacturers. In both cases, the sourcing manager will have to work with both internal and external suppliers to maximize resource utilization and minimize opportunity cost.

THE GOAL OF SOCIAL RESPONSIBILITY

In addition to goals of global sourcing that most businesses seek to achieve through their successful and responsible sourcing practices, consumers should also be able to access a greater variety of high-quality and safe products at affordable prices, resulting in overall consumer satisfaction in their apparel consumption. Therefore, sourcing managers must consider consumer satisfaction when making critical decisions related to sourcing. For example, let's assume a sourcing manager is about to make a decision on the quality of colorants that will be used to dye main fabrics for infants. One choice is a pigment colorant that has a certain, yet tolerant, level of lead. Another option that a sourcing manager has is completely lead-free. Yet, this lead-free option is 30 percent more expensive than the first option. Which decision should this sourcing manager make? If the manager makes his or her decision purely based on the business's economic performance, the manager would choose the first option. However, if the manager truly cares about consumers' safety and long-term satisfaction, the manager may choose the latter option even though it is 30 percent more expensive. That is, sourcers are also responsible for balancing cost and consumer safety concerns when selecting raw materials that may contain hazardous contents.

Another social responsibility example of sourcing that managers may need to be concerned with is related to labor practices in developing countries. Today's sourcing managers cannot afford to be at the center of any type of scandals due to poor labor practices or irresponsible business practices in foreign countries. Even if a factory offers the lowest prices, most sourcing managers in today's marketplace understand that they cannot simply choose the cheapest option without checking the factory's fair labor practices.

These are not the only examples where the dimension of social improvement is important to achieve the goal of global sourcing. There are many other examples, such as the case where sourcing managers decide to produce goods from Haiti to provide economic and employment support to the Haitian communities devastated by the earthquake in 2010 that affected over 3 million people. If sourcing managers had looked at only the economic bottom line, the decision to go to Haiti for sourcing would have been difficult to make.

THE GOAL OF ENVIRONMENTAL RESPONSIBILITY

Similar to the goal of social responsibility, sourcing managers must also consider the environmental impact of any type of business decisions they make. For example, factory A provides the lowest prices on fabrics, yet it does not have the proper system to clean and dispose of chemical dyes and finishing agents. On the other hand, factory B has slightly higher prices with full water treatment systems for chemical dyes and finishing chemical substances. When under the pressure of achieving a certain margin rate, sourcing managers may be tempted to select factory A for its low cost. However, if all sourcing

FIGURE 1.7
Sourcers are responsible for working with suppliers who are socially and environmentally responsible and compliant. The photo shows an outdoor water tank where bacteria consume dyestuff used during the fabric dyeing process. Once the water has been cleaned, it will be returned to nature. (Photograph courtesy of author)

managers choose factory A, these types of harmful business practices would continue and the natural environment would suffer across the world. Therefore, it is critical for sourcing managers to evaluate all of the three bottom lines of sustainable global sourcing—economic, social, and environmental—before making any critical decisions.

Figure 1.7 shows an outdoor water tank where bacteria consume dyestuff used during the fabric dyeing process. Once the bacteria clean the water, the water will be released to nature. After all, the goals of global sourcing are to improve businesses' economic performance, to advance social conditions in the world, and to protect the natural environment.

Sourcing Job Requirements and Responsibilities

To meet the goals of global sourcing, sourcing personnel in today's textile and apparel industry are engaged in many different business activities. They may operate under various job titles and, therefore, require different characteristics and skills, yet they share core functional responsibilities. An evaluation of job requirements and responsibilities through help-wanted advertisements is a good way to understand the role of global sourcing professions (see Figure 1.8). After reviewing over 71 "Job Wanted" advertisements from 2007 to 2008 from *Women's Wear Daily*, a leading news source for the businesses of women's apparel, accessories, fibers, and textiles in the United States, Muhammad and Ha-Brookshire (2011) reported that sourcing personnel were recruited with the following job titles:

- Fabric or trim sourcing manager, assistant, coordinator, or merchandiser.
- Sourcing specialist, coordinator, manager, or director.
- Production/sourcing or sourcing/production.
- Merchandise sourcing/creative designer.

FIGURE 1.8
Evaluation of job requirements and responsibilities through job announcements is a good way to understand the roles of global sourcing professions. (© alexsl/Getty Images)

These job titles suggest that sourcing personnel could be specialized in fabric or trim sourcing, and that sourcing is closely related to production, design, and merchandising. Dual job titles, such as sourcing/design and production/sourcing, also suggest sourcing is highly interconnected with other job functions within a firm.

Muhammad and Ha-Brookshire's (2011) study further explains that the main responsibilities and daily duties of sourcing personnel are vendor management, product development, production, and internal collaborations. First, with respect to vendor management, sourcing personnel's responsibility is to identify, negotiate with, and select the most appropriate vendors for any given sourcing assignment. Second, for product development, sourcing personnel "must understand the product development process" and actively acquire new materials for product developers. Third, sourcing personnel are also responsible for production, so they need to possess the ability to achieve specific cost, delivery, quality, and legal compliance objectives. Finally, sourcing personnel work side by side with various personnel within a firm including merchandisers, sales, operations, import logistics, design, and so on.

Therefore, organizational skills, multitasking skills, and communication skills are required for successful sourcing personnel (Muhammad & Ha-Brookshire, 2011). Particularly, communication skills with foreign businesses and vendors are critical. “On-the-job” experience, willingness to travel, existing connections and relationships with foreign factories and vendors, and language skills are highly valued by employers seeking sourcing personnel (Muhammad & Ha-Brookshire, 2011).

More recently, as sustainability becomes more important, jobs related to complying and ensuring sustainability policies have become popular. Job titles, such as director of social compliance and product integrity, social compliance data analyst, or senior trade compliance specialist, are easily found. These positions require candidates to have strong relationships skills, data management skills, willingness to travel, and proven strategic thinking skills to drive the positive results. Most of these jobs however require lengthy industrial experience. Given that the majority of textile and apparel products in today’s retail markets are globally sourced, there are many employment opportunities in global sourcing—especially in sustainability compliance areas. Those who understand what the responsibilities are and what types of skill sets are required are better prepared for working in the industry.

Summary

Sourcing is not new. Even when all manufacturing was done domestically, sourcing was a common business practice among companies. Some companies focused on apparel manufacturing while others produced textiles. Textile producers and apparel manufacturers were interdependent. Thus, geographic concentrations of similar businesses, or business clusters, were created, and companies sourced raw materials, technology, skills, and know-how from one another.

Global sourcing has become important as the economy has become globalized and technology has advanced. Thanks to transportation and communication technologies, companies no longer need to source from other businesses that are geographically close to them. Companies are able to expand their sourcing destinations to anywhere in the world. Although global sourcing has allowed cost savings and transfer of knowledge from developed economies to developing economies, it also has resulted in manufacturing job losses in developed countries and unethical business practices in developing countries.

Global sourcing is one of the key business activities of global supply chain management. Global sourcing is defined as a set of business processes and activities by which businesses acquire and deliver components or fully finished products or services from outside the organization in the global marketplace, with the objectives of finding, evaluating, and engaging suppliers of goods and services to achieve long-term competitive advantages. Global supply chain management includes demand and supply forecasting, integrated business model development, and interdepartmental strategy development, in addition to global sourcing. Although the terms *outsourcing* and *global sourcing* are used interchangeably, there are subtle nuances between the two. Thus, one must be cautious when using these terms.

The main objectives of global sourcing are to improve businesses' economic performance, to advance social conditions in the world, and to protect natural environments. For businesses' economic performance, cost reduction, productivity growth, value acquisition, quick response and flexible product supply, supply assurance, and capacity management are some of the main goals of global sourcing. For social and environmental performance, sourcing managers must carefully evaluate potential consequences in society and the natural environment prior to making any significant sourcing decisions.

Finally, sourcing personnel are responsible for managing vendors, overseeing foreign production, and providing new product development ideas by working with multiple departments within the firm. Various skill sets such as communication, organization, and multitasking are desirable. Finally, hands-on experience and relationships with foreign factories and vendors are highly valued and, thus, sourcing personnel generally hold managerial positions.

Key Terms

Industrial Revolution
Sourcing
Supply chain
Supply chain management (SCM)
Sustainable development
Triple bottom lines of sustainability

Learning Activities

1. *What roles did the textile and apparel industry play in the Industrial Revolution?*
2. *How was global sourcing developed from domestic sourcing? What are the roles of global sourcing in today's textile and apparel industry?*
3. *What are some examples of news articles discussing the negative aspects of global sourcing?*
4. *What are some examples of news articles discussing the positive aspects of global sourcing?*
5. *Explain the relationship between global sourcing and global supply chain management.*
6. *What are some examples of apparel global sourcing activities that help improve social conditions in foreign countries?*
7. *What are some examples of apparel global sourcing activities that help improve environmental conditions in foreign countries?*
8. *Discuss the possibilities of how all businesses, consumers, society, and environments could benefit through successful and responsible global sourcing activities.*

9. *After researching various companies' global sourcing strategies, show examples of a company's global sourcing strategy that seeks the following objectives:*
   a. Cost reduction
   b. Productivity growth
   c. Value acquisition
   d. Flexible product supply
   e. Quality assurance
   f. Social improvement
   g. Environmental improvement

10. *Look at job postings in various newspapers, trade papers, and magazines and find out*
   a. The type of companies that are looking for sourcing and sustainability compliance personnel
   b. The location of such companies
   c. Job descriptions
   d. Experience requirements

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CASE STUDY 1: Who Designs, Markets, and Sources Ralph Lauren Products?

Who actually designs, markets, sources, and distributes designer name products? Many students say, "I would love to work for so-and-so brand or so-and-so designer." Do you really have to work for *that* brand or designer to handle such products? The answer may be no.

In today's marketplace licensees produce much of the branded products. Designer name brands, such as Ralph Lauren, often enter into licensing relationships with licensees to fulfill a variety of consumer demands. After all, Ralph Lauren would have to offer products from clothing and home goods to sunglasses and perfume. Expertise to produce such a wide range of products requires expansive knowledge and experience, and it is very difficult for one company to do it all and do it well. Therefore, when brands become popular and want to extend their lines to other product categories, they rely on licensees who are specialists in specific product categories.

In this type of business relationship, Ralph Lauren becomes the licensor, and the suppliers become the licensees who may plan, design, merchandise, source, and distribute products. The licensor gives the exclusive right to the licensee to use the licensor's trademarks and design services, such as Ralph Lauren's logos, design directions, and color trends.

The specific details of licensing agreements could be trade secrets. However, in general, the licensees earn the right to manufacture and sell certain products at the wholesale level, and, in turn, they provide the licensor royalties. The royalty rates could vary from 3 to 5 percent to even 30 to 50 percent of the wholesale price. The more powerful the licensor's brand name is, the higher the royalty rates would be because more licensee candidates would be willing to pay more to earn that exclusive right. Meanwhile, the licensor would like to control the quality of the licensee's design, products, and entire aspects of the business to ensure the brand integrity in the market. After all, when a licensee makes mistakes, it reflects poorly on the Ralph Lauren brand.

According to the 2016 annual report, the largest licensees of Ralph Lauren (2016) are Hanesbrands, Inc. (for underwear and sleepwear), Peerless Clothing International, Inc. (for Chaps, Lauren, and Ralph Tailored Clothing), L'Oreal S.A. (for fragrances, cosmetics, color, and skin care), and Luxottica Group, S.P.A. (for eyewear). The report says that over 11 different companies produce Ralph Lauren Home products. The company also has international licensees who have the right to own and operate 93 Ralph Lauren stores, 42 Ralph Lauren concession shops, and 133 Club Monaco stores and shops. That is, when you see a Ralph Lauren store in another country, chances are that the store owner is not Ralph Lauren. Rather, the owner might be a licensee who pays royalties to Ralph Lauren. With these licensees and their own wholesale operations, Ralph Lauren works with over 600 different manufacturers worldwide, and over 97 percent of its products in dollar value are being produced outside of the United States (Ralph Lauren, 2016).

Knowing this relationship, it is easily understandable that not all Ralph Lauren products are produced by Ralph Lauren. That is, one does not have to work for Ralph Lauren to be involved with Ralph Lauren products. One might be working for a licensee yet planning, designing, marketing, or sourcing for Ralph Lauren products.

Now, let's find out the names of licensees of your favorite brands. Who are the licensees of children's sleepwear for Disney®? Who is the licensee of Jessica Simpson®'s shoe lines? Who owns Calvin Klein brands and who are the licensees to produce Calvin Klein women's suits and dresses? Both brands and licensees source their products. Take a look at these brands' annual reports or websites. They will tell you who the licensees are and how they work with the brands to produce their products. What do you think the responsibilities of sourcers are in licensee companies?

2 Theoretical Perspective of Global Sourcing

Why do companies source their components or final products from other companies in foreign countries? Why wouldn't they just make everything on their own? These same questions have been raised by many people before us, and several theories have been suggested to answer them. This chapter discusses various theories and perspectives about international trade that could be useful in explaining global sourcing. Upon completion of this chapter, students will be able to:

- Understand why global sourcing takes place in the global marketplace.
- Comprehend the five international trade theories from the global sourcing perspective: the law of supply and demand, theories related to comparative advantage, Porter's competitive advantage of nations, fragmentation theory, and industry life cycle theory.
- Understand the five strategic sourcing theories, including resource-based view of the firm, resource dependence theory, strategic choice theory, sociocognitive theory, and critical theory.
- Discuss the moral responsibility of corporate sustainability for sustainable supply chain.
- Articulate the relationship between each of these theories and global sourcing.

Why do companies source in the global marketplace? When answering this question, one must remember that the term *global sourcing* has two key components—*global* and *sourcing*. Therefore, to explain why global sourcing occurs, we must understand these two different phenomena. The aspect of "global" business can be explained by several theories proposed in the area of international trade. International trade theories attempt to explain and predict why international trades occur and why companies trade globally. The "sourcing" phenomenon can be explained by several theories in the areas of strategic management and the theory of the firm. Finally, how the entire supply chain can be sustainable is explained by moral responsibility theory of corporate sustainability. These theories focus on what affects a firm's decision to make, buy, or ally with a supplier to acquire products or services from outside the organization.

International Trade Theories for Global Sourcing

The five key theories are discussed to explain international trade: (1) the law of supply and demand in international trade, (2) comparative advantage theory, (3) competitive advantage theory of nations, (4) fragmentation theory, and (5) industry life cycle theory.

LAW OF SUPPLY AND DEMAND

The **law of supply and demand** is not an actual law (see Figure 2.1). Rather, it is an economic theory that has been so well confirmed and corroborated by evidence that it is reasonable to believe that the relationship between supply and demand can be explained almost always in a certain way (Hunt, 2002). The law of supply and demand is described by the Marshallian supply–demand cross, which shows that demand and supply interact to determine the equilibrium price and the quantity that will be traded in the market (Nicholson, 2005). Four basic laws of supply and demand are explained by the Marshallian cross:

1. If there is a high demand yet supply remains unchanged, the equilibrium price of the good and the quantity of the traded goods will increase.
2. If there is a low demand yet supply remains unchanged, the equilibrium price of the good and the quantity of the traded goods will decrease.
3. If there is a high supply yet demand remains unchanged, the equilibrium price of the good and the quantity of the traded goods will decrease.
4. If there is a low supply yet demand remains unchanged, the equilibrium price of the good and the quantity of the traded goods will increase.

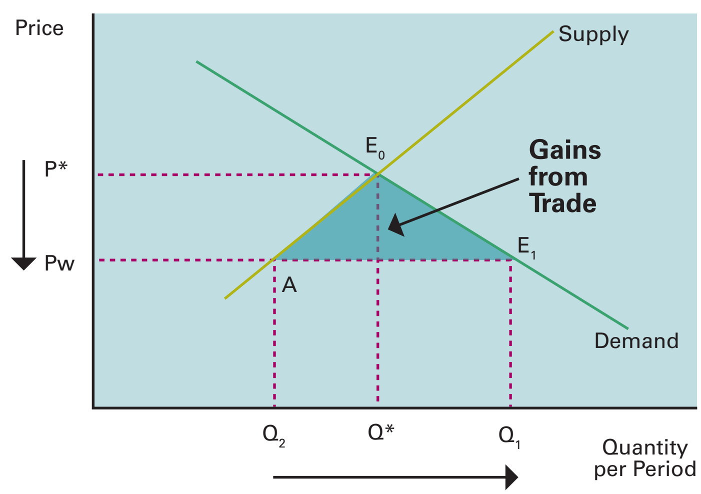

FIGURE 2.1

International trade and welfare increase.

Note: International trade will change the market equilibrium from E_0 to E_1. This lowers the price of the goods from P* to Pw, and increases the domestic demand from Q* to Q_1. This also lowers domestic supply from Q* to Q_2. The lower price from the world suppliers creates overall gain in total welfare represented by the triangular area of E_0 E_1 A.
Source: Adapted from Nicholson (2005)

This relationship of supply and demand also applies to international trade. Figure 2.1 illustrates the domestic demand and supply curves for a certain good—for example, a pair of jeans. When there is no international trade, the price of jeans in the domestic market should be set at P* (or the equilibrium price) with the quantity of Q* (or the equilibrium quantity). The equilibrium price and quantity are the results of interactions between domestic demanders and suppliers of jeans. This equilibrium would be disturbed if more goods entered into the domestic market through international trade.

In particular, if the price of jeans from other countries or in the world (P_w) is lower than the domestic price of P*, international trade will cause prices to decrease to the level of P_w. Because of the drop in price, more consumers will want to buy jeans. At the same time, fewer suppliers in the domestic market will want to produce jeans, because producing jeans is now less profitable because of cheaper goods from the world. That is, the decrease in price from P* to P_w would result in an increase in domestic demand from Q* to Q_1, and a decrease in domestic supply from Q* to Q_2. In Figure 2.1, the difference between Q_1 and Q_2 will be supplied through foreign jean producers, whereas domestic jean producers will produce jeans only up to Q_2. In other words, the domestic market will have jeans supplied by foreign producers at the world price, while domestic jean producers are discouraged to produce jeans at the world price.

The reduction of price, increase in domestic demand, and decrease in domestic supply of jeans through international trade also contributes to a total welfare increase in the domestic marketplace as the market equilibrium changes from E_0 before international trade to E_1 after international trade. The area $P^*E_0E_1P_w$ of Figure 2.1 illustrates the overall increase in consumer gain from low-priced jeans supplied by the world's producers. Consumers gain their welfare from reduction of domestic jean producers' welfare and from foreign suppliers at a low price. In Figure 2.1, domestic jean producers' welfare is represented by the area $P^*E_0\,AP_w$, while the area E_0E_1A represents a welfare gain in the domestic marketplace through international trade.

From the perspective of the law of supply and demand, international trade (or global sourcing) helps give consumers access to products at the world price, which is usually lower than the domestic price due to intense competition in the world's marketplace, and results in an overall gain in welfare. However, the low-priced products from the world threaten domestic suppliers' ability to compete with these products, and many domestic suppliers who are not prepared for world competition will have to close their businesses or move on to different product items where they still have competitive advantages.

Consumer advocates or retailers are typically supportive of international trade, or global sourcing, due to consumer welfare gain, while domestic manufacturing sectors are often against it due to the loss of their welfare, including business closing and employment loss. Thus, many producers have actively engaged in various lobbying activities to influence the government to put up barriers to international trade, such as tariffs and quotas. *Tariffs* are taxes imposed on imported goods, resulting in higher prices for consumers. *Quotas* refer to quantity limitations on imported goods to ensure there will not be too many imported goods in the marketplace, so domestic producers can still supply a sufficient quantity of the goods for the domestic demand. Both barriers essentially decrease consumer welfare while protecting domestic producers' welfare.

THEORY OF COMPARATIVE ADVANTAGE

In 1817, David Ricardo introduced the notion of *comparative advantage* (or relative advantage) to explain the nature of international trade (Ricardo, 1960). The **comparative advantage theory** explains that international trade occurs when two countries can gain from trade due to their different *relative* costs for producing the same goods. That is, if country A is relatively more efficient in producing product X than is country B, and country B is relatively more efficient in producing product Y, then each country would focus on manufacturing X or Y and then trade them. By doing so, both countries will get net benefits or gains from trade.

Tables 2.1 and 2.2 show specific examples of production and total output before and after international trade. As seen in Table 2.1, country A has absolute advantage over country B in making both knit top and jeans. That is, country A is more efficient in making knit tops and jeans than is country B, requiring 10 hours and 15 hours of labor to produce 1 unit each of knit top and jeans, respectively. Thus, with 1,000 labor hours, country A would be able to produce 50 units of knit tops and 33.3 units of jeans, totaling 83.3 units. Meanwhile, before trade, country B would be able to produce only 12.5 units of knit tops (it needs 40 hours to produce 1 unit of knit top) and 25 units of jeans (it requires 20 hours to produce 1 unit of jeans) totaling 37.5 units. Between the two countries, before trades, 62.5 units of knit tops and 58.3 units of jeans were produced with a total of 2,000 labor hours, totaling 120.8 units.

Even if country A has absolute advantages over country B for both knit tops and jeans, international trade provides gains for both countries by focusing on the products that require *relatively* less labor productivity. In this example, country A has 25 percent higher efficiency than country B for jeans, as it requires 15 hours of labor, compared with 20 hours, to produce 1 unit. Country A has an even higher, or 75 percent more, efficiency than country B for knit tops, as it requires only 10 hours, compared with 40 hours. Thus, as seen in Table 2.2, country A decides to focus on knit tops and put 70 percent of its labor toward producing tops and 30 percent of its labor toward producing jeans, where country B allocates all its labor to making jeans. This results in a total of 140 units produced by the two countries, 19.2 units higher than before trade. Overall, both countries produce more units after trade than before trade. Both countries gain net benefits of 70 units of each product, greater output than before trade.

In this light, international trade, or global sourcing, creates the international division of labor and specialization. In this example, country A would have more labor involved in knit tops and country B in jeans. Thus, the labor force is now divided between the two countries for two different products. By doing so, country A will be more specialized

TABLE 2.1 Production and Total Output before Trade

Before Trade	Country A	Country B	Total Output
Knit Tops	10 hours/unit x 50 units	40 hours/unit x 12.5 units	**62.5 units / 1,000 hours**
Jeans	15 hours/unit x 33.3 units	20 hours/unit x 25 units	**58.3 units / 1,000 hours**
Total Labor	**83.3 units / 1,000 hours**	**37.5 units / 1,000 hours**	**120.8 units / 2,000 hours**

TABLE 2.2 Production and Total Output after Trade

After Trade	Country A	Country B	Total Output
Knit Tops	10 hours/unit x 70 units	0 units	**70 units**
Jeans	15 hours/unit x 20 units	20 hours/unit x 50 units	**70 units**
Total Labor	**90 units / 1,000 hours**	**50 units / 1,000 hours**	**140 units / 2,000 hours**

in knit tops and country B in jeans. Therefore, international trade is beneficial for both exporting and importing countries, as it increases welfare in both countries.

Although the theory of comparative advantage illustrates the benefits of international trade, it also bears a few fundamental assumptions. First, the theory assumes that labor resources in the two countries are fully employed—that is, that there are no unemployed workers available in either of the two countries. Second, it assumes that both countries have the same and constant opportunity cost (the cost of any products that could have been produced if resources had been used in the best alternative way). That means that the cost or sacrifice of country A giving up part of jean production for knit tops and that of country B giving up the entire knit top production for jeans are the same, or constant. Third, only two countries and two goods are used in the example to explain the theory, which is not realistic. Fourth, the theory assumes labor freely moves with little or no cost from producing knit tops to jeans domestically; however, labor cannot move freely internationally. Fifth, the theory does not consider transportation cost. And finally, the theory is based on the fundamental assumption of perfect competition. That is, the market conditions are such that no participants are large enough to have the market power to set the price of a product. In this market, all productive resources are efficiently allocated in an idealized free market. These assumptions do not necessarily invalidate the core principles of the theory of comparative advantage. However, they do limit the magnitude of the explanatory power of the theory.

PORTER'S THEORY OF COMPETITIVE ADVANTAGE OF NATIONS

While comparative advantage theories suggest regions or nations must focus on those industries in which they have an advantage relative to others, more recently, **competitive advantage theory** has been a focus in business and research. Michael Porter, a professor at Harvard Business School and a leading researcher in the area of industry competitiveness, has published many books and articles about why firms in certain countries succeed in certain industries or industry segments. In his book *The Competitive Advantage of Nations*, Porter (1990) argues that firms in a certain country must possess a competitive advantage over other firms in other countries to enjoy competitive success. Porter states that such competitive advantage is typically developed through either lower costs or product differentiation: Lower costs are usually possible through efficiency in production, and product differentiation could command premium prices.

Thus, competitive advantage is *created* by firms within the nation, rather than simply inherited. That is, even without abundance of natural resources, some countries could be successful. Or, even with a great deal of inherited natural resources, some countries might not be successful if they fail to create competitive advantages. In addition, to

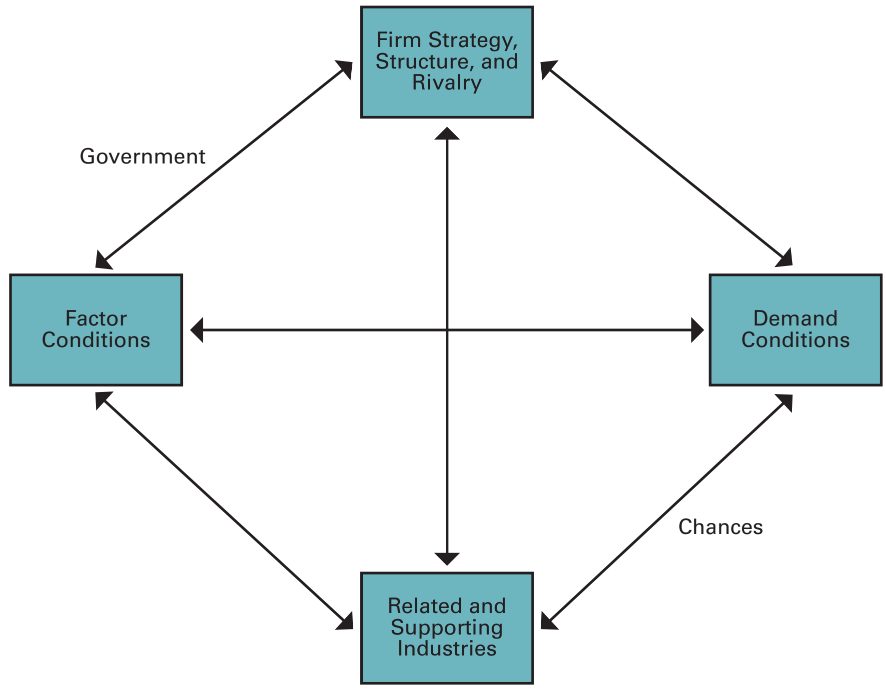

FIGURE 2.2
Porter's determinants of national advantage.
Source: Adapted from Porter (1990, p. 72)

sustain competitive advantages, firms must constantly innovate themselves to create a higher-level competitive advantage than they had in a previous period.

To explain why a certain nation achieves success in international trade in a particular industry, Porter (1990, p. 72) introduced six attributes of a nation that can shape domestic firms' competitive advantages. He called these six attributes the *determinants of national advantage* (see Figure 2.2). They are described as follows:

1. Factor Conditions

All nations have factors of production. The term *factors of production* refers to inputs necessary to compete in any industry, such as labor, land, natural resources, capital, and infrastructure. Porter argued it is important for a nation to inherit many factors or inputs that other countries do not have, because these factors would provide *comparative* advantage. However, for a nation to have a *competitive* advantage and sustain it in the long term, how these factors are efficiently and effectively deployed and utilized is more important. For example, no matter how much labor a nation has, if there is no infrastructure to efficiently and effectively utilize such labor, there will be no significant output, and thus the nation will be less likely to be competitive. Likewise, even if a nation has a great amount of water as a natural resource, if it does not have technology to convert such water into energy, the country will be less likely to gain a competitive advantage in water energy over others.

2. Demand Conditions

Porter explains that home demand conditions are another important factor for nations to gain a competitive advantage. Demand conditions of the domestic (or home) marketplace influence how domestic firms improve and innovate their products or services. In particular, Porter suggests there are three broad attributes of home demand conditions that are critical for a nation's competitive advantage—(a) the nature of domestic buyer needs, (b) the size and pattern of domestic demand growth, and (c) the mechanisms by which a nation's domestic demand is converted to foreign markets.

First, a country gains a competitive advantage in industry or industry segments if the domestic demand provides firms within the country with a clear or early understanding of what future consumers will need and want. Often, the domestic demand pressures firms within the country to improve their products and services continuously or innovate quickly. This characteristic helps firms in a certain industry or industry segment gain competitive advantage over that industry or segment in other foreign countries without such domestic demand conditions.

Second, the size and pattern of domestic demand growth also help a nation's competitive advantage. Large domestic market size helps firms achieve economies of scales and learning, and thus it is more likely for firms to make investments in large-scale facilities, technology development, and productivity improvement. This helps nations achieve and sustain a competitive advantage.

Third, the mechanisms by which a nation's domestic demand is converted into foreign markets and pushes a nation's products and services abroad also help a nation's competitive advantage. If a nation's products and services are satisfying not only domestic demand but also foreign demand, its industries are more likely to succeed in international trade. The latter two attributes are contingent on the first, and the quality of domestic demand is more important than its quantity for a nation's competitive advantage according to Porter.

3. Related and Supporting Industries

Porter also argues that industries or industry segments within a nation are more likely to be competitive if they have internally competitive supplier or related industries. Having a competitive domestic supplier industry is preferable to relying on foreign suppliers, even if they are well qualified. That is because well-established domestic supplier industries offer efficient, rapid, and early preferential access to high-quality yet low-cost inputs. Ongoing coordination between an industry and its domestic supplier industries also helps promote innovation and upgrading.

Similar to supporting industries, related industries can coordinate or share activities when sharing would help increase efficiency and effectiveness by sharing technology development, manufacturing, distribution, marketing, or services. For example, Japan has traditionally produced silk and silk fabrics, and the experience and the know-how from the silk industry helped develop long-filament synthetic textile fibers, very much like silk. Therefore, it can be said that Japan's silk industry, as a related industry to the synthetic textile fiber industry, contributed to the success of the latter.

4. Firm Strategy, Structure, and Rivalry

Industry or industry segments in a nation can gain a competitive advantage if there is "a good match" between the choices of how firms are created, organized, and managed and the sources of the competitive advantage within the industry. In other words, if the goals of firms, individuals (or employees), and a nation are all aligned, the industry in which these firms operate will be more likely to be competitive than that same industry in other nations without such a cohesive industry structure. Further, all parties' sustained commitment to the goals is critical for a nation's competitive advantage. For example, when newly industrializing countries started dominating the global textile and apparel industry, Italian family firms stayed committed to their traditional woolen fabric and apparel businesses, local communities, and the industry. By upgrading technology and innovating other production processes, the Italian textile and apparel industry still keeps a highly competitive position in the global industry. In addition, domestic rivalry creates pressure on firms to improve and innovate. This rivalry forces firms to lower costs, improve quality and service, and create new products and services. Eventually, domestic rivalry pressures firms to expand their sales to foreign countries in order to grow, affecting a nation's competitive advantage.

5. Chance and 6. Government

In addition to the four main attributes, Porter also argued that two additional factors might help shape a nation's competitive advantage: chance and government. Some examples of chance strongly influencing a nation's competitive advantage are pure inventions, major technological discontinuities, significant shifts in world financial markets, surges of world or regional demand, political changes, and wars. These shocks or major changes facilitate firms to be highly innovative and entrepreneurial to compensate for disruptions in the market.

Finally, the government also plays a significant role in a nation's competitive advantage (see Figure 2.3). Government can influence or be influenced by each of the other five determinants, either positively or negatively. For example, factory conditions could be affected by government subsidies, policies toward the capital market, or policies toward education. For instance, countries with free and public education might possess higher-quality labor than countries with no public education policies. Government could also affect demand conditions, as it could set local product standards or regulations, mandating buyer needs. For example, President Obama's normalization of the trade relationship with Cuba affects U.S. consumers' new demand for Cuban products. Similarly, government policies and regulations affect the development of supporting and related industries, as well as firm strategy, structure, and rivalry. For instance, government's control over advertising media can affect domestic firms' strategies and rivalry. Government's

FIGURE 2.3
Government also plays a significant role in a nation's competitive advantage. (© Dennis Flaherty/Getty)

ownership of transportation industries can affect the development of the logistics industry. Capital market regulation also can impact the efficiency of foreign capital transactions when industries compete in the global marketplace.

Overall, Porter suggests that nations are more likely to be competitive and succeed in industries or industry segments if national demand is most favorable. One determinant could help reinforce other determinants; advantage in one determinant can upgrade advantage in others. Therefore, Porter explains, once a nation's industry develops and sustains a certain competitive advantage, it creates a unique environment that is difficult for other foreign competitors to compete against or copy. This environment in return forces its competitive advantage even more strongly, and further stimulates international trades.

THEORY OF FRAGMENTATION

While many trade theories focus on why countries trade the end products, the **theory of fragmentation** in international trade explains why countries trade parts and components (Arndt & Kierzkowski, 2001). In recent years, the proportion of trade in parts and components has increased tremendously. For example, automobile producers in the United States import tires from Korea, while apparel designed and developed by U.S. companies is manufactured in China with materials and components produced by several other countries. These trades in parts and components have been relatively overlooked by economists in the past, and little has been discussed about why countries trade parts and components, not just end products.

A general framework for analyzing fragmentation was first introduced by Jones and Kierzkowski (1990) and further articulated by Arndt and Kierzkowski (2001). The core thesis of the fragmentation theory in international trade is that, due to advances in transportation and communication technologies, and reductions in trade and regulatory barriers, it has become easier for companies to divide production functions and share them with companies in foreign countries. Thus, companies' production systems become fragmented and dispersed into the global marketplace. Companies within the global production networks then trade parts and components with one another, creating a complex division of labor and specialization. In this light, fragmentation refers to separation of production processes by various producers of parts and components, both domestic and foreign. The fragmentation theory explains that physical proximity among production partners is no longer as important as it was before, and companies can have multiple production and trade partners across the borders.

Figure 2.4 illustrates how fragmentation of production systems can happen, and the role of the service link in fragmentation (Arndt & Kierzkowski, 2001). The first process explains a typical, traditional production process. That is, inputs, such as capital and labor, are organized and combined to produce final outputs. The production block in this model shows the production system in which inputs are organized and combined, and all production activities are performed, in one or close location.

The second production process shows the previous production block divided into two production blocks, production blocks 1 and 2, suggesting a fragmented production system. In this case, inputs are transported into two separate production blocks and processed into the final products. The possible production processes that do not need

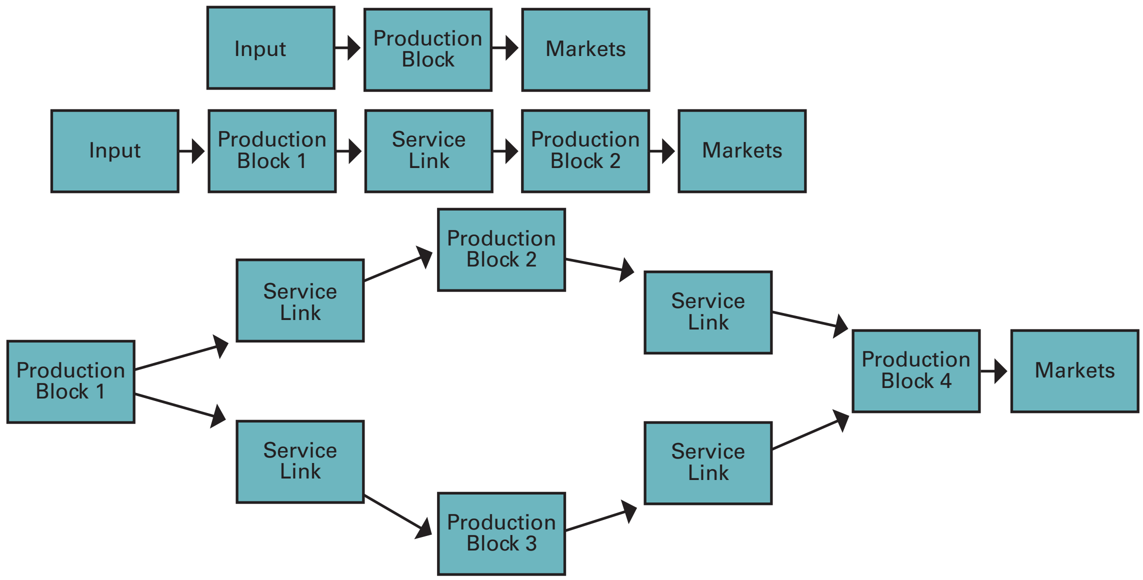

FIGURE 2.4
Fragmentation and service links.
Source: Adapted from Arndt & Kierzkowski (2001, p. 3)

to be performed together or in proximity could be separated into different locations at which specialized labor and technology exist. The third model in Figure 2.4 illustrates a more complex production process, involving multiple production blocks coordinated by multiple service links before final products are available in markets.

In both the second and third cases of production processes, one thing to note in fragmentation is that, because of the separation of production blocks, the role of service links becomes important to coordinate the entire production process. A service link could include transportation, communication, quality control, compliance audits, and management coordination to ensure that the production blocks interact in the proper way. Efficiency and speed of service links are essential for fragmentation. Therefore, various pieces of software and technologies become important to facilitate efficient activities for service links.

Fragmentation used to occur within a nation. In today's global economy, along with world governments' liberalization of trades, companies seek production blocks from all over the world so that components are produced in the best possible location. Sometimes each production block is owned by a different company, while the entire production block system in multiple countries is owned by one company (Arndt & Kierzkowski, 2001). Thus, multinational corporations and direct investment become important in global fragmentation.

The U.S. textile and apparel manufacturing industry provides many examples of fragmented production processes. For example, before fragmentation, cotton fibers grown in the Mississippi Delta region in the United States used to be harvested, ginned, spun, and knitted by companies in the surrounding area before they were processed into cotton shirts. Most of these textile and apparel manufacturing activities were performed in southern states, such as North Carolina, Georgia, and South Carolina, where most producers wanted to complete all production activities in one area.

As technologies advanced and trade barriers were removed during the 1970s and 1980s, cotton shirt producers sought cheaper labor in other countries to complete apparel manufacturing processes while keeping yarn and textile processes at home. More recently, in the past two decades or so, a greater portion of cotton yarn and textile manufacturing processes has been divided and moved into developing countries, and most cotton apparel companies in the United States are involved in product development, design, branding, marketing, and so on. Activities offered by service links have also increased to help coordinate U.S. companies' fragmented production processes. This process left the United States specialized in value-added activities, while foreign countries concentrated on manufacturing activities. From this perspective, the theory of fragmentation truly explains why global sourcing occurs in today's global marketplace.

INDUSTRY LIFE CYCLE THEORY

The **industry life cycle theory** suggests that, as most organisms do, an industry goes through certain stages throughout its life cycle. Industry life cycle theory stems from Vernon's (1966) product life cycle theory. As a product transitions from the growth phase to the mature phase in a country, domestic sales decrease or stagnate. Therefore, the company that owns the product may seek international sales, while seeking foreign manufacturing sites that could help reduce the cost of production. This concept led to the industry life cycle theory in the late 1970s (Abernathy & Utterback, 1978). The core concept of the theory is that when a new industry is born, the number of firms within the new industry grows, then declines sharply, and finally levels off (see Figure 2.5). As the number of firms changes throughout the industry life cycle, firms' output, prices, and market shares also increase and then fall, eventually leveling off (Klepper & Graddy, 1990).

More recently, Klepper (1997) distinguished and explained the three evolutionary stages for an industry. In the beginning stage, also called the embryonic stage, the market environment is quite uncertain, product design is primal, and products are produced using unspecialized equipment. In this stage, total market volume is low. In the second stage, the growth stage, the rate of product innovation declines, and then remains stable. Products are manufactured with more specialized machinery, resulting in more refined products. In this stage, the output growth is higher, while the entry of new companies is slow. Thus, a shakeout of producers can occur. In stage three, the mature stage, innovations become more important, and other business functions, such as management and marketing, advance. The mature stage often comes with a mature market, which is characterized as slow output growth, declining new entry, and stabilizing market shares. During this stage (or even during the previous stage), the industry also seeks external markets for new sales. This process creates international trade. Figure 2.6 shows a graphical interpretation of industry life cycle.

FIGURE 2.5
In a newly developed industry, the number of firms grows rapidly before sharply declining and finally leveling off. (Photograph courtesy of author)

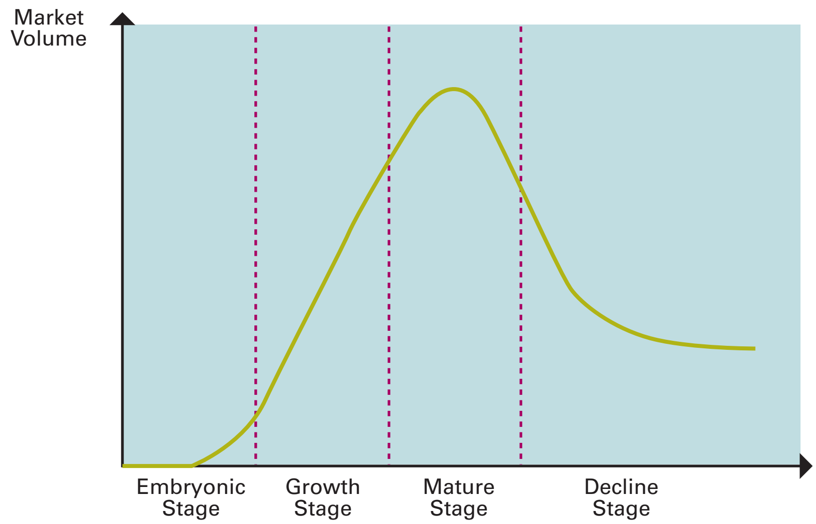

FIGURE 2.6
Industry life cycle theory explains that an industry goes through growth, mature, and decline stages.
Source: Adapted from Klepper (1997)

The history of the global textile and apparel industry offers a relevant context to examine industry life cycles. Since the birth of the industry after the Industrial Revolution, it has grown and matured, and its core economic activities have shifted from developed countries to developing countries. For example, the United Kingdom and the United States were the main countries in which the industry was born and developed. Until the mid-twentieth century, these countries were known for textile and apparel manufacturing and dominated the global industry. Later, newly industrialized countries in Asia, such as Korea and Hong Kong (then an independent country, now part of China), emerged as destinations for textile and apparel manufacturing, thanks to the abundance of labor from after World War II into the mid-twentieth century. As labor costs rose in these countries, textile and apparel manufacturing activities shifted to developing countries in other parts of Asia, such as China, Sri Lanka, Bangladesh, and Thailand (Dicken, 2007; Jin, 2004).

Some researchers believe this is partly because the locus of comparative advantages has also changed from one country to another, depending on the level of a country's economic development (Kilduff & Chi, 2006). Countries in the early stages of economic development have comparative advantages in labor-intensive sectors, such as apparel assembly, and thus the apparel manufacturing sector can start and grow. Countries in the mature stages of economic development tend to have comparative advantages in capital-intensive sectors, such as synthetic fiber production, and thus fiber and textile production can prosper. When a country's economic development level is so high, it loses comparative advantages in fiber and textile production over other countries. Firms in countries such as the United States and the United Kingdom are now more focused on value-added business activities, such as design, branding, and product development. To describe these patterns of industry evolution, Toyne and his colleagues (1984) identified six phases, from embryonic to significant decline, of the global textile and apparel industry. First, in the embryonic stage as seen in Figure 2.6, most of the products are made out of simple fabrics and natural fibers. Most textile and apparel production is for domestic market needs. Second, in the early export of apparel stage, the labor cost is still low and manufacturing equipment is not advanced. Typically, products are made for the low-end markets in developed countries. Third, in the more advanced stage of production of fabric and apparel, domestic manufacturing of the textile sector improves greatly in volume and quality, resulting in an increase in textile export. Concurrently, once a sufficient amount of textile products are produced, apparel manufacturing is also expanded and upgraded. Further, technical equipment becomes more sophisticated, and typically more investment is made into the textile and apparel industry by both domestic and foreign investors.

Fourth, in the golden age stage, manufacturing technology becomes more advanced and the volume of textile and apparel output increases. Textile and apparel products are more diversified, and become a dominant force in the international market. Furthermore, textile and apparel firms in this stage can start investing overseas. Fifth, in the full maturity stage, although total output might increase, employment starts to drop as manufacturing technology advances. In this stage, manufacturing is more capital-intensive than labor-intensive. Finally, in the declining stage, the numbers of firms and workers decrease significantly, and the industry faces large trade deficits as there are more imports than exports. Therefore, because of this industry life cycle, international trades occur.

Strategic Sourcing Theories

While previous theories explain why countries trade, this section explains theories that explain why companies source. To explain sourcing as a strategic business function, the following five theories are reviewed: (1) resource-based view of the firm, (2) resource dependence theory, (3) strategic choice theory, (4) sociocognitive theory, and (5) critical theory.

RESOURCE-BASED VIEW OF THE FIRM

The **resource-based view of the firm (RBV)** proposes that a firm is a collection of productive resources (Barney, 1991). These resources must be valuable, rare, and costly to copy so competitors are not able to easily acquire them. Therefore, in RBV, these unique resources are the key for the firm's competitive advantage and superior performance in the long run (Barney, 1991; Conner, 1991). In this light, a firm is said to have a competitive advantage when it is implementing a value-creating strategy that is not simultaneously being implemented by any current or potential competitors (Barney, 1991). Therefore, competitive advantages are composed of a firm's relative value that was produced by its resources and relative costs of resources used to produce such value (Hunt, 2002).

In RBV, firm resources refer to both tangible and intangible entities available to the firm. Physical buildings and plants would be examples of tangible resources, while knowledge and capabilities would be examples of intangible resources a firm may have (Day, 1994; Grant, 1996). Particularly, Day (1994) emphasized firm capabilities as a key resource for competitive advantage by making a specific distinction of capabilities from other asset-oriented resources. He defined firm capabilities as "complex bundles of skills and accumulated knowledge, exercised through origination processes" (p. 38). He argued that firm capabilities differ from firm assets in that capabilities cannot be easily tracked by a monetary value, while other tangible plant and equipment can. Firm capabilities are seen to be deeply embedded in the organizational routines and practices that cannot be easily traded or imitated, while other physical asset resources can.

From this perspective, human capital and knowledge are one of the key components of firm capabilities and, in return, its competitive advantage (Grant, 1996).

From a sourcing perspective, RBV helps explain why firms source a variety of business processes, as discussed in Chapter 1. For example, manufacturing equipment, raw materials, and parts seem tangible resources for a firm to source. On the other hand, firms also source technology, design skills, marketing know-how, and/or business relationships that are closely related to firm capabilities and knowledge (see Figure 2.7). In other words, firms may engage in sourcing as a means of identifying, exploring, and transferring these key resources, particularly unique capabilities and knowledge (Shook, Adams, & Ketchen, 2009). Therefore, firms are seeking other organizations that may have unique resources that they may not have internally. Sometimes, firms may establish a short- or long-term sourcer–supplier relationship agreement with an outside organization. Other times, firms may choose to build a joint venture with an outside organization to create a new business entity by taking advantage of complementary capabilities and knowledge.

FIGURE 2.7
Firms also source capabilities and knowledge, particularly if they are unique, rare, and difficult to copy, such as fashion photography. (© Caiaimage/Tom Merton/Getty)

RESOURCE DEPENDENCE THEORY

Resource dependence theory maintains the perspective of RBV in that firms that lack critical resources will seek to establish relationships with others that possess such resources. However, resource dependence theory focuses on lessening the dependency that this type of relationship may create between the sourcer and suppliers (Shook et al., 2009). Resource dependence theory argues that dependence on other firms' resources may not be helpful for a firm's competitive advantage and performance and, therefore, firms would make their sourcing decisions to minimize their dependence on other firms (Pfeffer & Slancik, 1978). In this light, questions on (a) how important the resources in need are and (b) how easily firms could acquire such resources in the market are important factors for firms' sourcing decisions (Shook et al., 2009).

For example, firms would decide to *source* certain resources from outside organizations if the resources are not important for the firms' competitive advantage (Shook et al., 2009). These resources happened to be abundant in the marketplace and there are multiple qualified suppliers. In this case, interdependence between the sourcer and supplier is not very important, as the sourcer could easily find another supplier. If the resources are not critical but could be provided by only a few suppliers, firms may decide to source from outside organizations and be less likely to cultivate the relationships with existing suppliers. However, resource dependency theory suggests that firms may want to do so carefully, in a way that would not jeopardize the relationship with the existing supplier, as there are limited suppliers that could deliver such resources (Shook et al., 2009). After all, the sourcers may still need such suppliers.

On the other hand, if the resources in need are critical for the firm and only a few suppliers could deliver them, then the firm would be more likely to decide to *make* or *buy* such resources, to possess permanent ownership of the resources (Shook et al., 2009). Both options—make or buy—would allow the firm to reduce dependence on the supplier and increase the control of those resources. Finally, if the resources in need are critical yet many suppliers could deliver them, the firm may want to form alliance or joint venture relationships with the suppliers (Shook et al., 2009). Alliance or joint venture relationships would be a less costly option than a making or buying option if the resources in need are difficult to obtain. However, alliance or joint venture relationships create more dependence of the firm on suppliers. Firms would have to know these different scenarios of sourcing options and make the best decisions for their competitive advantage and performance.

STRATEGIC CHOICE THEORY

Strategic choice theory suggests that top managers make their business decisions and choices to align their firms with the market environment (Child, 1972). Strategic choice theorists suggest that top managers typically face three types of organizational problems: (a) entrepreneurial problems, (b) engineering problems, and (c) administrative problems (Miles & Snow, 1978). The entrepreneurial problems are centered on how firms define their business scope in terms of specific goods or services and, therefore, identifying target markets and market segmentations are important business activities. The engineering problems are related to organizational systems to solve the entrepreneurial problems. That is, once specific goods and services are identified during the entrepreneurial problem-solving stage, top managers in the business of solving engineering problems are involved in creating and implementing organization-wide systems to deliver such products and services to target consumers. For example, sourcing strategies and supply chain issues are typical engineering problems. Finally, top managers who solve the administrative problem seek to rationalize and stabilize organizational flows and activities performed during the entrepreneurial and engineering problem-solving stages. Human resource management, including hiring and training, would be a good example of administrative problems.

What is important in Miles and Snow's (1978) typology of business problems is the notion that different firms make different decisions to solve these problems in different ways, resulting in four different strategic types: (a) the defender, (b) the prospector, (c) the analyzer, and (d) the reactor. These strategic types have strong implications for sourcing as a strategic business activity. First, defenders focus on efficiently producing and distributing a certain set of goods and services in a quite predictable marketing environment (Miles & Snow, 1978). Therefore, a single core resource is the key to defend their businesses in the market. In this light, defenders would not consider sourcing such key resources. For example, one of the key success factors of Walmart is its everyday low-price strategies through efficient supply chain mechanism. Therefore, as a defender in the market, it is not advisable for Walmart to consider sourcing its logistics, distribution, or other supply chain processes from outside organizations, as they are key for achieving the low cost. Rather, Walmart keeps all of these functions in house to achieve a greater degree of efficiency for low cost.

Second, prospectors are easily found in fast-changing market environments and their goal is to adapt to changes in market situations (Miles & Snow, 1978). Therefore, they are consistently and constantly looking for new products or services and new gaps in the market. Long-term commitments to a single resource or a single supplier are not desirable and, thus, prospectors are deep into sourcing various resources to deliver different products or services. Fast-fashion brands or retailers, such as H&M, face constant changes in consumers' tastes and preferences. Thus, these companies constantly look for new suppliers who could deliver different technologies and products and it makes sense for them to source their products from various suppliers to quickly respond to market changes.

Third, analyzers show both defenders' and prospectors' aspects (Miles & Snow, 1978). That is, analyzers maintain a core base of both fundamental products and services while they seek new opportunities and markets. In terms of sourcing, these firms may take a dual approach. To produce core products in fairly predictable market environments, top managers may decide to make such products internally. For fast-changing fashion products, top managers may decide to source them from outside organizations. Many of today's retailers take this analyzer's approach. They would like to maintain a balanced mix between core products (usually under private brand names) and fashion products (usually under other designer brand names) to maximize performance and market responsiveness.

Finally, reactors typically react to market changes and other firms' behavior, therefore, they lack consistency among sourcing strategies, business structures, and market environments (Miles & Snow, 1978). That is, sourcing decisions are made haphazardly without evaluation of long-term prospects. They are less likely to be successful and maintain their business operations in the long run.

SOCIOCOGNITIVE THEORY

Sociocognitive theory suggests sourcing decisions are an act of sense-making and a reflection of organizational identity (Shook et al., 2009). According to this theory, firms with well-established structures and processes around sourcing strategies will more likely continue the same strategies. For example, if Levi's currently sources its zippers from certain zipper suppliers, it would be more likely to continue sourcing zippers in the future instead of making zippers internally. For similar reasons, organizational identity also plays an important role in sourcing decisions. If a firm has a strong sense of identity as an "American manufacturer," it will be more likely to decide to make products in the United States rather than source them from foreign countries.

CRITICAL THEORY

FIGURE 2.8
Sourcing decisions can improve society; irresponsible sourcing can also be a problem. This photo shows the haze above the Shanghai skyline because of severe air pollution. (© Danny Hu/Getty)

Critical theory, in general, focuses on active improvements of society as a whole, rather than a simple understanding or explanation of a phenomenon (Frost, 1980). In this light, sourcing decisions are considered important channels to improve society, not firms (Shook et al., 2009). Therefore, critical theory suggests firms should make sourcing decisions to maximize social improvement, after comparing the benefits to society and short-term profitability (see Figure 2.8). Social improvement in critical theory includes equalities of gender, ethnicity, and race; emancipation of employees; alleviation of poverty in the world; and so on. TOMS shoes, founded by Blake Mycoskie in 2006, is one example of a business whose mission is "to create a better tomorrow by taking compassionate action today" (TOMS Shoes, 2011). TOMS promotes the One for One movement under which TOMS pledges to give a pair of new shoes to a child in need with every pair purchased. Although it is not certain whether TOMS shoes are made internally or sourced from outside organizations, this type of strategic business decision can be explained by critical theory.

MORAL RESPONSIBILITY THEORY OF SUSTAINABLE SUPPLY CHAIN

Recently, philosophers argued that, as a legal person, a corporation has a moral responsibility to be sustainable. In the United States, a corporation is regarded as a person (Hess, 2013). This legal concept is called corporate personhood and it has existed since 1819. The gist of the argument made by these philosophers is that, as a person, a corporation has the same rights and responsibilities as people do. They also argue that corporations are capable of intentional actions through their own commitments toward their goals, including morally responsible acts (Dempsey, 2013; Dubbink, 2015; Hess, 2013).

With this concept, Ha-Brookshire (2015) recently proposed two new theories: **moral responsibility theory of corporate sustainability** and **moral responsibility theory of sustainable supply chain** (see Figure 2.9). In these theories, she applied the perfect and imperfect duty concepts of the German philosopher, Immanuel Kant (1797/1991). Kant argued that as human beings, we all bear perfect and imperfect moral responsibilities. Perfect or inflexible duties, such as honesty, are universal and absolute duties, by which all beings must abide in all situations and circumstances. Imperfect or meritorious duties, such as charity, allow an individual to choose how to fulfill them. In this light, moral responsibility theory of corporate sustainability posits that for corporations to be truly sustainable, they must first regard sustainability as a perfect duty, and have clear goals and well-defined structures in place to fulfill the duty. If corporations do not regard

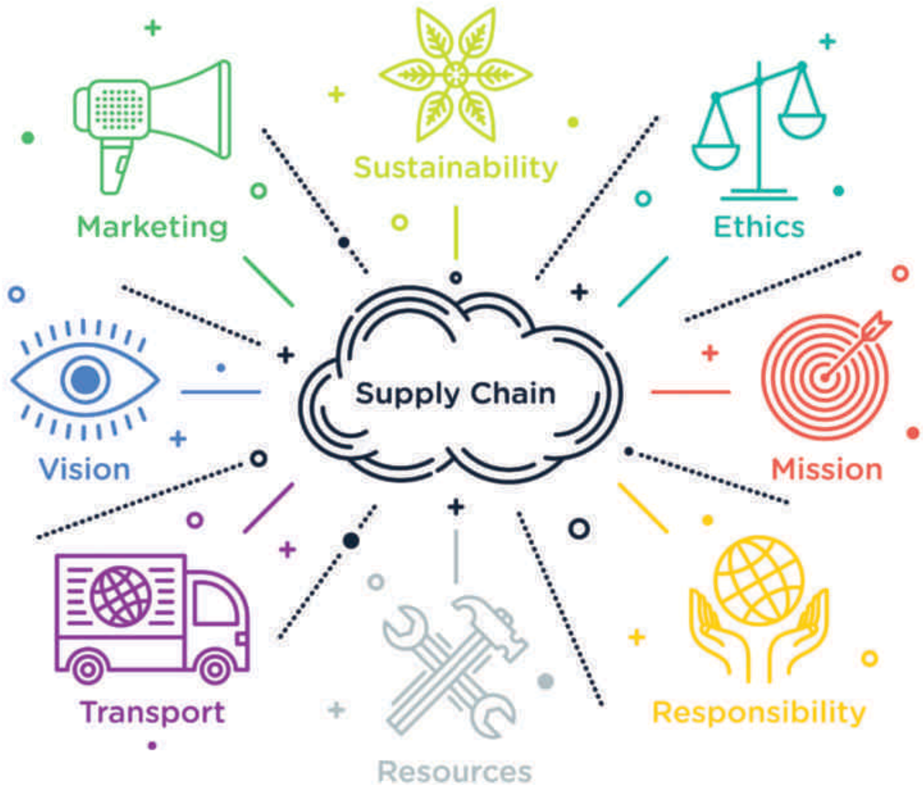

FIGURE 2.9
Moral responsibility theory of sustainable supply chain argues that all supply chain members must regard sustainability as a perfect duty to fulfill and act upon it, from marketing and transportation to mission building. (© ilyast/Getty)

sustainability as a perfect duty and do not have clear goals and well-defined structures, there would be varying degrees of corporate sustainability performance, ranging from being truly sustainable to being only occasionally sustainable.

Furthermore, for the entire supply chain to be truly sustainable, moral responsibility theory of sustainable supply chain argues that the members of an entire supply chain must view sustainability as a perfect duty. If the entire supply chain across the world is filled with truly sustainable corporations under the clear and shared goals of sustainability, then the supply chain will be truly sustainable. Yet, if the entire supply chain lacks clear and convergent goals, the sustainability efforts will be left to individual supply chain member corporations, resulting in an occasionally sustainable or unsustainable supply chain. Given that the textile and apparel industries are fragmented and spread around the globe, these theories argue that a consistent and clear understanding of sustainability as a perfect duty to fulfill might be the most important thing to have to make the entire supply chain truly sustainable.

Summary

There are many reasons why companies trade and source their products and components internationally. This chapter reviewed the five commonly discussed international trade theories: (1) law of supply and demand in international trade, (2) comparative advantage theory, (3) Porter's competitive advantage of nations theory, (4) fragmentation theory, and (5) industry life cycle theory. The chapter also discussed the five important theories explaining strategic sourcing: (1) resource-based view of the firm, (2) resource dependence theory, (3) strategic choice theory, (4) sociocognitive theory, and (5) critical theory. Additionally, the newly proposed moral responsibility theory of corporate sustainability and moral responsibility theory of sustainable supply chain were discussed.

First, the law of supply and demand suggests that international trade occurs if foreign suppliers can offer certain products at lower prices than domestic suppliers. Low cost would then increase consumers' well-being at the expense of the domestic suppliers' well-being. Industry protectionism and trade barriers often arise because of the loss of domestic suppliers' welfare. Second, the theory of comparative advantage explains that international trade occurs when two countries can gain from trade due to their different relative costs for producing the same goods. By focusing on activities that companies have advantages in, division of labor takes place between the trading countries and each country becomes specialized in certain activities, intensifying comparative advantage.

Third, Porter's theory of competitive advantage of nations suggests that companies in different countries would be able to create different competitive advantages over those in other countries due to different factors. If a country has favorable factor conditions, demand conditions, related and supporting industries, industry structure, and healthy rivalry, the companies in this country would be more likely to be competitive in the global marketplaces over countries without such attributes. Because of the differences in competitive advantage, companies trade and source products from companies in other countries that could produce products of higher quality at lower prices.

Fourth, fragmentation theory explains that production systems can be divided and spread around the world so companies can produce products at the best possible locations. Advances in communication and transportation as well as reductions in trade barriers made fragmented production systems possible. Finally, industry life cycle theory illustrates that industries go through distinctive stages of life, while core comparative advantages change along with the life cycle. In particular, at the mature or decline stage, companies are no longer competitive in the domestic market and, thus, seek international markets for new sales and sourcing, resulting in international trade.

From the strategic sourcing perspective, resource-based view of the firm explains that firms decide sourcing options to gain or maintain rare, unique, and costly to copy resources. Depending on the importance of the resources in need and the availability of such resources in the marketplace, resource dependence theory suggests that managers make sourcing decisions to minimize dependence on suppliers. Strategic choice theory suggests that firms make different sourcing decisions, depending on business problems that they would like to solve and strategic types that they like to implement to solve such problems. Sociocognitive theorists argue that sourcing decisions are sense-making activities as well as revelation of organizational identity. Finally, critical theory suggests that sourcing decisions are made to improve society as a whole. Therefore, the degree of social welfare improvement, including global poverty elimination, race equality, and working condition advancement, is important for sourcing decisions.

Finally, moral responsibility theories of corporate sustainability and sustainable supply chain argue that corporations have moral obligations to view and fulfil sustainability as a perfect duty. Without this view, corporate sustainability will be more likely to be sidelined by other key objectives, such as profits. For the entire supply chain to be truly sustainable, the theory posits that all supply chain members must view sustainability as a perfect duty and work toward fulfilling that duty.

All of these theories are relevant to global sourcing in the textile and apparel industry. No one theory explains all activities of global sourcing. However, these different perspectives of international theories collectively help us understand why and how we source globally in the textile and apparel industry.

Key Terms

Comparative advantage theory
Competitive advantage theory
Critical theory
Industry life cycle theory
Law of supply and demand
Moral responsibility theory of corporate sustainability
Moral responsibility theory of sustainable supply chain
Resource-based view of the firm (RBV)
Resource dependence theory
Sociocognitive theory
Strategic choice theory
Theory of fragmentation

Learning Activities

1. *What is the law of supply and demand? How does the lower price from the world impact domestic supply and demand?*
2. *How do tariffs and quotas impact gains from trade, consumer welfare, and supplier welfare?*
3. *What are the differences between comparative advantage and competitive advantage?*
4. *Explain the comparative advantages that the following countries may have on textile and apparel products:*
   a. Italy
   b. United States
   c. Germany
   d. Vietnam
   e. China
   f. Taiwan
   g. India
5. *Describe some of Porter's four key attributes that the following countries may have to achieve and sustain for competitive advantage on textile and apparel products:*
   a. Germany
   b. Vietnam
   c. China
   d. South Korea
   e. El Salvador
   f. France

6. *Show examples of textile and apparel products produced from fragmented production systems. For example, find products that are sewn in one country yet the materials were produced in another country, and discuss why sourcing managers decided to assemble the finished goods in one country while getting materials from another country, creating a fragmented production system.*

7. *Show examples of companies that apply service links in a fragmented production system. Search news articles about a company called Li & Fung Limited, and discuss the role that the company has historically provided to U.S. sourcers. Discuss the role of Li & Fung in terms of the role of service links.*

8. *Explain the evolutionary patterns of the textile and apparel industry for the following countries:*

a. United Kingdom
b. United States
c. Japan
d. South Korea
e. Mexico
f. China
g. Bangladesh
h. Vietnam

9. *Show examples of sourcing activities that can be explained by*

a. The resource-based view of the firms
b. Critical theory
c. Resource dependence theory
d. Sociocognitive theory
e. Strategic choice theory

10. *Search "Rana Plaza collapse" in Wikipedia. Read the article and explain what really happened in April 2013 in Dhaka, Bangladesh, using the moral responsibility theory of sustainable supply chain.*

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