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# GLOBAL LOGISTICS AND DISTRIBUTION



## CHAPTER OVERVIEW

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Companies have to deliver products to customers both *efficiently* and *effectively*.<sup>1</sup> First of all, global logistics, also referred to as global supply chain management,<sup>2</sup> has played a critical role in the growth and development of world trade, and in the integration of business operations on a worldwide scale. Its primary objective is to develop a cost-efficient delivery mechanism. In fact, the level of world trade in goods and, to some extent, services, depends to a significant degree on the availability of economical and

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<sup>1</sup>For a philosophy of efficiency- vs. effectiveness-seeking in business orientation, see Masaaki Kotabe, "Efficiency vs. Effectiveness Orientation of Global Sourcing Strategy: A Comparison of U.S. and Japanese Multinational Companies," *Academy of Management Executive*, 12, November 1998, 107–19; and Shelby D. Hunt and Dale F. Duhan, "Competition in the Third Millennium: Efficiency or Effectiveness?" *Journal of Business Research*, 55 (February), 2002, pp. 97–102.

<sup>2</sup>Some authors (including the authors of this book) use logistics and supply chain management interchangeably, while others generally define supply chain management somewhat more broadly than logistics. Although, in this chapter, we try not to engage in this definitional debate over what functions are included in each, the Council of Logistics Management offers the following definitions. **Logistics management** typically includes inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, and inventory management of third party logistics services providers. To varying degrees, the logistics function also includes sourcing and procurement, production planning and scheduling, packaging and assembly, and customer service. **Supply chain management** is an integrating function with primary responsibility for linking major business functions and business processes within and across companies into a cohesive and high-performing business model. It includes all of the Logistics Management activities noted above, as well as manufacturing operations, and it drives coordination of processes and activities with and across marketing, sales, product design, finance, and information technology.

reliable international transportation services. Decreases in transportation costs and increases in performance reliability expand the scope of business operations and increase the associated level of international trade and competition.<sup>3</sup> Second, the use of appropriate distribution channels in international markets increases the chances of success dramatically. Its primary objective is to develop a task-effective delivery mechanism for customer satisfaction. Coca-Cola's success relies largely on its global distribution arm, Coca-Cola Enterprises, the world's largest bottler group. It helps Coca-Cola market, produce and distribute bottled and canned products all over the world. The group also purchases and distributes certain non-carbonated beverages such as isotonic teas and juice drinks in finished form from the Coca-Cola Company to satisfy the diverse needs of its consumers.<sup>4</sup>

As far back as 1954, Peter Drucker had said that logistics would remain “the darkest continent of business”<sup>5</sup>—the least well understood area of business—and his prediction proved true until well into the 21st century. It is not too difficult to demonstrate the importance of the physical handling, moving, storing, and retrieving of material. In almost every product, more than 50 percent of product cost is material related, while less than 10 percent is labor. Yet, over the years this fact has not received much attention. In 2006, the total logistics cost represented about 10 percent of the GDP, or \$1.3 trillion, in the United States. Among them, transportation costs alone accounted for \$635 billion in 2006.<sup>6</sup> As of 2006, Europe's logistics cost represented 11 percent of GDP. It was some 13 percent of GDP for India. For China, the Council of Supply Chain Management Professionals puts the figure at around 21 percent of GDP—a huge improvement since 1991, when it was around 25 percent.<sup>7</sup>

Since the 1990s, a variety of issues have been driving the increased emphasis on logistics and distribution management. It was epitomized in 1998 by General Motors' lawsuit against Volkswagen over the defection of José Ignacio Lopez, the former vice president of purchasing at General Motors and one of the most renowned logistics managers in the automobile industry.<sup>8</sup> His expertise is said to have saved General Motors several billion dollars from its purchasing and logistic operations, which would directly affect the company's bottom line. The importance of distribution channels is further evidenced by the recent mergers in the auto industry, in which giant multinationals are gobbling up smaller manufacturers with strong brand names, but inadequate global distribution, such as Ford's acquisition of Volvo.<sup>9</sup>

As firms start operating on a global basis, logistics managers need to manage the shipping of raw materials, components, and supplies among various manufacturing sites at the most economical and reliable rates. Simultaneously, these firms need to ship finished goods to customers in markets around the world at the desired place and time. The development of intermodal transportation and electronic tracking technology has caused a quantum jump in the efficiency of the logistic methods employed by firms. Intermodal transportation refers to the seamless transfer of goods from one mode of transport (e.g., aircraft or ship) to another (e.g., truck) and vice versa without the hassle of unpacking and repackaging the goods to suit the dimensions of the mode of transport being used. Tracking technology refers to the means for keeping continuous tabs on the exact location of the goods being shipped in the logistic chain—this enables quick

<sup>3</sup>John H. Dunning, “Reappraising the Eclectic Paradigm in an Age of Alliance Capitalism,” *Journal of International Business Studies*, 26 (Third Quarter 1995), pp. 461–91.

<sup>4</sup>Coca-Cola Enterprises, <http://www.cokecce.com>, Accessed on March 11, 2009.

<sup>5</sup>Peter F. Drucker, *The Practice of Management* (New York: Harper & Brothers, 1954).

<sup>6</sup>“Business logistics costs rise to 9.9 percent of GDP in 2006,” *Logistics Management*, <http://www.logisticsmgmt.com/>, June 6, 2007.

<sup>7</sup>“Cargo Cults,” *Economist*, June 17, 2006, Special Section, pp. 9–14.

<sup>8</sup>“No Ordinary Car Thief,” *U.S. News & World Report*, June 5, 2000, p. 52.

<sup>9</sup>Salama, Alzira, Wayne Holland, and Gerald Vinten, “Challenges and Opportunities in Mergers and Acquisitions: Three International Case Studies—Deutsche Bank-Bankers Trust; British Petroleum-Amoco; Ford-Volvo,” *Journal of European Industrial Training*, 27(6), 2003, pp. 313–21.

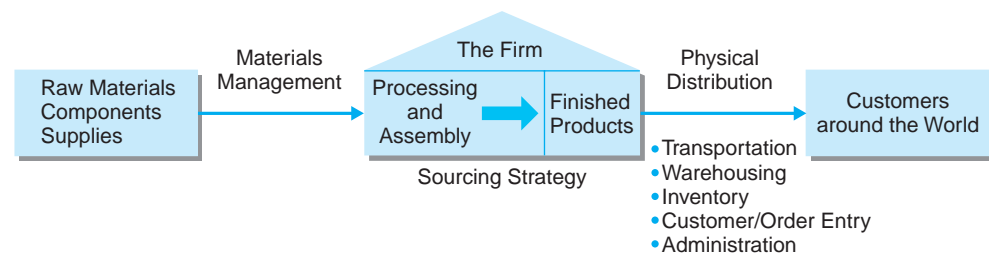
reaction to any disruption in the shipments because (a) the shipper knows exactly where the goods are in real time and (b) the alternative means can be quickly mobilized.

## ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ ◆ DEFINITION OF GLOBAL LOGISTICS

**Global logistics** is defined here as the design and management of a system that directs and controls the flows of materials into, through and out of the firm across national boundaries to achieve its corporate objectives at a minimum total cost. As shown in **Exhibit 15-1**, global logistics encompasses the entire range of operations concerned with products or components movement, including both exports and imports simultaneously. Global logistics, like domestic logistics, encompasses materials management, sourcing, and physical distribution.<sup>10</sup>

**Materials management** refers to the inflow of raw materials, parts, and supplies in and through the firm. **Physical distribution** refers to the movement of the firm's finished products to its customers, consisting of transportation, warehousing, inventory, customer service/order entry, and administration. **Sourcing strategy** refers to an operational link between materials management and physical distribution, and deals with how companies manage R&D (e.g., product development and engineering), operations (e.g., manufacturing), and marketing activities. Although the functions of physical distribution are universal, they are affected differently by the tradition, culture, economic infrastructure, laws, topography, and other conditions in each country and each region. In general, in geographically large countries, such as the United States, where products are transported over a long distance, firms tend to incur relatively more transportation and inventory costs than firms in smaller countries. On the other hand, in geographically concentrated countries, such as Japan and Britain, firms tend to incur relatively more warehousing, customer service/order entry, and general administrative costs than in geographically larger countries. This is so primarily because a wide variety of products with different features have to be stored to meet the varied needs of customers in concentrated areas. The results of a recent survey of physical distribution costs in various European countries relative to the United States are presented in **Global Perspective 15-1**. Although it is possible to attribute all cost differences to topography, customs, laws of the land, and other factors, the cost differences could also reflect how efficiently or inefficiently physical distribution is managed in various countries and regions.

**EXHIBIT 15-1**  
GLOBAL LOGISTICS



<sup>10</sup>Donald J. Bowersox, David J. Closs, and M. Bixby Cooper, *Supply Chain Logistics Management*, 3rd ed. (Boston: McGraw-Hill, 2010).



**GLOBAL PERSPECTIVE 15-1**

**REGIONAL VARIATIONS IN PHYSICAL DISTRIBUTION COSTS  
IN EUROPE AND ROOM FOR IMPROVEMENT**

The physical distribution costs consist of transportation, warehousing, inventory, customer service/order entry, and administration. Let us make a comparison in terms of these components of the distribution costs between the two continents across the Atlantic. The following table shows cost comparisons (as a percentage of revenue).

The largest disparity was in warehousing, where European costs measured 3.03 percent, almost a third of total distribution costs, compared to 1.98 percent in the United States. These expenses are the cost of both plant and field warehouses including labor, space, direct materials, etc. Similarly, a large difference was observed in customer service/order entry—the cost of people, space and materials needed to take orders and handle inquiries—with 0.83 percent in Europe, compared to 0.49 percent in the United States.

	European Union	The United States
Transportation	2.79%	3.23%
Warehousing	3.03%	1.98%
Inventory	1.73%	1.93%
Customer Service/ Order Entry	0.83%	0.49%
Administration	0.79%	0.44%
Total	9.17%	8.07%

European governments have begun to privatize transportation services. Since January 1, 1993, the European Union (EU) movement presents opportunities for reducing logistics costs and boosting efficiency. And it is not just Europeans but also foreign manufacturers, including those in North America, who are finding that political changes in Europe have created opportunities for greater efficiency and lower costs in their logistics.

However, there still are many political, legal, and technical issues to be settled before Europe truly is unified. Across the region, borders have all but disappeared with the advent of high-speed passenger trains, highways without customs posts and now a single currency. Europe's state-owned phone monopolies, electric utilities, airlines and other national franchises have all been pried open to competition. However, rail freight remains a bastion of Europe's old ways, a patchwork of protected, antiquated national

networks. No two European countries use the same signaling systems or electric current for their trains. For example, Trains in Britain and France run on the left side of dual-track lines, while those in the rest of Europe run on the right. Since Britain and France, however, use two different gauges of track, trains crossing their shared border along the Channel Tunnel must stop to let each car be lifted so that its wheels can be changed.

As a result, European industry has taken to the highways for transportation. Railways' share of goods transport with the EU has fallen to about 14 percent now from 32 percent in 1970. In the United States, railways account for 41 percent of freight traffic. The downside to the increase in truck traffic is increased traffic congestion, which hampers efficient transportation despite the unified European economy. The most conservative estimate of the cost of traffic jam is a little over 2 percent of Europe's GDP at minimum. And it could be as high as 6 percent.

Further, with the expansion of the EU in May 2004, traditional distribution hubs in western and central Europe faced tougher competition. In the process of integrating the candidate countries into all the systems and practices of the EU, the EU has to restrict access to road and rail networks in some countries for two to three years. Meanwhile, European government and the EU have developed programs and initiatives to reduce road congestion and encourage companies to move goods transport away from roads to ensure the important infrastructure development.

Thus, logistics managers must plan how to respond to changes as they occur. Here are some of the many changes reshaping European logistics strategies:

*Customs procedures.* For the most part, customs check points as a shipment crosses each nation's border have been eliminated. Duties and trade statistics now are a matter strictly between the originating and destination countries, and intermediate countries no longer are involved. Consequently, transit times and paperwork between EU countries, particularly for truck traffic, are steadily being reduced.

*Harmonized product standards.* Prior to unification, each European country had its own manufacturing, packaging, labeling, and safety standards for almost every item sold within its borders. Under the European Union, pan-European harmonized standards are being developed and replacing most of those country-by-country regulations. As a result, companies can manufacture a single version of a product for sale in all parts of the EU, rather than design and manufacture different versions of the same item for each member country. Product harmonization will allow shippers to redesign not only their distribution patterns and facilities, but also their customer-service strategies.

Sources: "Logistics Strategies for a New Europe, *Traffic Management*, 33, (August, 1994), p. 49A; "In the Unified Europe, Shipping Freight by Rail is a Journey into the Past," *Wall Street Journal*, (March 29, 1999), p. A1 and A8; "European Transport Policy," *Logistics & Transport Focus*, 4 (July/August 2002), pp. 40-41; and "Distribution Hubs Face Competition," *Logistics and Transport Focus*, May 2004, p. 6.

(continued)



## GLOBAL PERSPECTIVE 15-1

(CONTINUED)

*Transportation deregulation.* The European Commission is deregulating transportation in Europe in order to open markets in member states to competition and to eliminate conflicting regulations that impede the flow of traffic between EU countries. The deregulation promises to promote the development of efficient, cost-effective services in all modes.

*Transportation infrastructure.* As in Japan and the United States, growing demand for just-in-time deliveries increases traffic and exacerbates transportation bottlenecks (particularly, inter-regional trucking). The European Commission and individual governments are actively encouraging private development of rail and water alternatives.

## MANAGING PHYSICAL DISTRIBUTION

Physical distribution is inextricably tied with international trade, multinational manufacturing and sourcing of raw materials, components, and supplies. Physical distribution has become considerably more complex, more costly, and as a result, more important for the success of a firm. A variety of factors contribute to the increased complexity and cost of global logistics, as compared to domestic logistics.

- **Distance.** The first fundamental difference is distance. Global logistics frequently require the transportation of parts, supplies, and finished goods over much longer distances than is the norm domestically. A longer distance generally suggests higher direct costs of transportation and insurance for damages, deterioration, and pilferage in transit and higher indirect costs of warehousing and inventory.
- **Exchange Rate Fluctuation.** The second difference pertains to currency variations in international logistics. The corporation must adjust its planning to incorporate the existence of currencies and changes in exchange rates. For example, in the mid-1990s when the Japanese yen appreciated faster than the U.S. dollars against key European currencies, Honda found it much more economical to ship its Accord models to Europe from its U.S. plant in Marysville, Ohio, rather than from its plants in Japan.
- **Foreign Intermediaries.** Additional intermediaries participate in the global logistics process because of the need to negotiate border regulations of countries and deal with local government officials and distributors. Although home country export agents, brokers, and export merchants work as intermediaries providing an exporting service for manufacturing firms, those home-based intermediaries do not necessarily have sufficient knowledge about the foreign countries' market conditions or sufficient connections with local government officials and distributors. In Asian countries such as Japan, Korea, and China, personal "connections" of who knows whom frequently seem to outweigh the Western economic principle of profit maximization or cost minimization in conducting business.<sup>11</sup> Therefore, working with local distributors has proved very important in building initial connections with the local business community as well as local government regulators.
- **Regulation.** A bulk of international trade is handled by ocean shipping. Because the United States is the world's largest single trading country in both exports and imports, and most of its trading partners are located across the Pacific and the Atlantic Oceans, U.S. regulations on ocean transport services directly affect foreign exporters to the

<sup>11</sup>See, for example, Jean L. Johnson, Tomoaki Sakano, and Naoto Onzo, "Behavioral Relations in Across-Culture Distribution Systems: Influence, Control, and Conflict in U.S.–Japanese Marketing Channels," *Journal of International Business Studies*, 21 (Fourth Quarter 1990), 639–55; and Chris Rowley, John Benson, and Malcolm Warner, "Towards an Asian Model of Human Resource Management?: A Comparative Analysis of China, Japan and South Korea," *International Journal of Human Resource Management*, 15 (June/August 2004), pp. 917–33.



United States (as well as U.S. importers of foreign goods) in terms of shipping costs and delivery time. In the United States, the Merchant Marine Act of 1920 (also known as the Jones Act) forbids foreign-owned freighters from transporting passengers and merchandise from one domestic port to another by restricting foreign access to the domestic shipping market. The act requires passengers and merchandise being transported by ship in the United States to travel on U.S.-built, U.S.-owned and U.S.-staffed vessels, while allowing unilateral retaliatory action against restrictions imposed by other countries. In March 2003, more than 50 nations, including Australia, Canada, China, the European Union, and Japan, filed a joint statement with the World Trade Organization calling for the liberalization of international marine transport services during the WTO's new round of multilateral trade negotiations.<sup>12</sup> Until resolved by the WTO, the barriers imposed by this act continue to add to the costs of logistics in and around the United States.

- **Security.** Security was not an acutely serious concern until September 11, 2001, when the blatant terrorist attacks in the United States awakened the world to the importance of domestic and international security measures. Transportation costs for exporters have increased because of the extra security measures that shipping lines and terminal operators face.<sup>13</sup> However, if the government-imposed user fees or carrier surcharges are too high or come without sufficient advance notice, some exporters could even lose their overseas markets due to increased shipping costs and insurance premiums (Refer to **Terrorism and the World Economy** in Chapter 5).

The global logistics manager must understand the specific properties of the different modes of transport in order to use them optimally. The three most important factors in determining an optimal mode of transportation are the value-to-volume ratio, perishability of the product, and cost of transportation. The **value-to-volume ratio** is determined by how much value is added to the materials used in the product. **Perishability** of the product refers to the quality degradation over time and/or product obsolescence

## Modes of Transportation

<sup>12</sup>“Japan Joins Call for Opening Marine Services Market In WTO Talks,” *NikkeiNet Interactive*, <http://www.nni.nikkei.co.jp/>, March 4, 2003.

<sup>13</sup>Robert Spich and Robert Grosse, “How Does Homeland Security Affect U.S. Firms’ International Competitiveness?” *Journal of International Management*, 11 (December 2005), pp. 457–78.

along the product life cycle. The **cost of transportation** should be considered in light of the value-to-volume and perishability of the product.

**Ocean Shipping.** Ocean shipping offers three options. **Liner service** offers regularly scheduled passage on established routes; **bulk shipping** normally provides contractual service for pre-specified periods of time; and the third category is for *irregular runs*. Container ships carry standardized containers that greatly facilitate the loading and unloading of cargo and intermodal transfer of cargo. Ocean shipping is used extensively for the transport of heavy, bulky, or nonperishable products, including crude oil, steel, and automobiles. Over the years, shipping rates have been falling as a result of a price war among shipping lines. For example, an average rate for shipping a 20-foot container from Asia to the United States fell from \$4,000 in 1992 to as low as \$1,680 by 2009.<sup>14</sup> Although most manufacturers rely on existing international ocean carriers, some large exporting companies, such as Honda and Hyundai, have their own fleets of cargo ships. For example, Honda, a Japanese automobile manufacturer, owns its own fleet of cargo ships not only to export its Japan-made cars to North America on its eastbound journey but also to ship U.S.-grown soybeans back to Japan on its westbound journey. This strategy is designed to increase the vessels' capacity utilization.<sup>15</sup> Indeed, Honda even owns a number of highly successful specialty tofu restaurants in Tokyo frequented by young trendsetters in Japan.<sup>16</sup>

**Air Freight.** Shipping goods by air has rapidly grown over the last thirty years. Although the total volume of international trade using air shipping remains quite small—it still constitutes less than 2 percent of international trade in goods—it represents more than 20 percent of the value of goods shipped in international commerce. High-value



NewsCom

Hong Kong is the busiest container port in the world and a hub of global distribution.

<sup>14</sup>Drewry Independent Maritime Advisor, <http://www.drewry.co.uk/>, accessed on September 1, 2009.

<sup>15</sup>“Engineers Rule,” *Forbes*, September 4, 2006, pp. 112–16.

<sup>16</sup>The first author’s personal knowledge; also visit Honda’s Soybean Division, <http://www.hondatrading-jp.com/english/business/soybeen.shtml>.

goods are more likely to be shipped by air, especially if they have a high value-to-volume ratio. Typical examples are semiconductor chips, LCD screens, and diamonds. Perishable products such as produce and flowers also tend to be air freighted. Changes in aircraft design have now enabled air transshipment of relatively bulky products. Three decades ago, a large propeller aircraft could hold only 10 tons of cargo. Today's jumbo cargo jets carry more than 30 tons, and medium- to long-haul transport planes (e.g., the C-130 and the AN-32) can carry more than 80 tons of cargo. These super-size transport planes have facilitated the growth of global courier services, such as FedEx, UPS, and DHL. Of all world regions, the entire Asia-Pacific is the most popular airfreight market today, with double-digit, year-on-year growth. Asia has become the world's factory floor to outsource the manufacture of goods and services. The top five commodities moving from the Asia Pacific area to the United States include office machines and computers, apparel, telecom equipment, electrical machinery and miscellaneous manufactured products. The westbound (from the United States to Asia/Pacific) commodities mainly include documents and small packages, electrical machinery, and fruits and vegetables. In the next 20 years, westbound and eastbound air cargo traffic will grow at roughly the same pace, an estimated 7 percent.<sup>17</sup>

**Intermodal Transportation.** More than one mode of transportation is usually employed. Naturally, when shipments travel across the ocean, surface or air shipping is the initial transportation mode crossing national borders. Once on land, they can be further shipped by truck, barge, railroad, or air. Even if countries are contiguous, such as Canada, the United States, and Mexico, for example, various domestic regulations prohibit the unrestricted use of the same trucks between and across the national boundaries. When different modes of transportation are involved, or even when shipments are transferred from one truck to another at the national border, it is important to make sure that cargo space is utilized at full load so that the per-unit transportation cost is minimized.

Managing shipments so that they arrive in time at the desired destination is critical in modern-day logistics management. Due to low transit times, greater ease of unloading and distribution, and higher predictability, many firms use airfreight, either on a regular basis or as a backup to fill in when the regular shipment by an ocean vessel is delayed. For footwear firms Reebok and Nike and fashion firms such as Pierre Cardin, the use of airfreight is becoming almost a required way of doing business, as firms jostle to get their products first into the U.S. market from their production centers in Asia and Europe. The customer in a retail store often buys a product that could have been air freighted in from the opposite end of the world the previous day or even the same day. Thus, the face of retailing is also changing as a result of advances in global logistics.

Distance between the transacting parties increases transportation costs and requires longer-term commitment to forecasts and longer lead times. Differing legal environments, liability regimes, and pricing regulations affect transportation costs and distribution costs in a way not seen in the domestic market. Trade barriers, customs problems, and paperwork tend to slow the cycle times in logistics across national boundaries. Although this is true, the recent formation of regional trading blocs, such as the European Union, the NAFTA (North American Free Trade Agreement), and the MERCOSUR (The Southern Cone Free Trade Area), is also encouraging the integration and consolidation of logistics in the region for improved economic efficiency and competition.

A firm's international strategy for logistics management depends, in part, on the government policy and on the infrastructure and logistic services environment. The traditional logistics strategy involves anticipatory demand management based on forecasting and inventory speculation.<sup>18</sup> With this strategy, a multinational firm

## Warehousing and Inventory Management

<sup>17</sup>Roger Morton, "Something in the Air," *Logistics Today*, 46 (July 2005), pp. 23–26.

<sup>18</sup>Louis P. Bucklin, "Postponement, Speculation, and the Structure of Distribution Channels," *Journal of Marketing Research*, 2 (February 1965), pp. 26–31.



estimates the requirements for supplies as well as the demand from its customers and then attempts to manage the flow of raw materials and components in its worldwide manufacturing system and the flow of finished products to its customers in such a manner as to minimize holding inventory without jeopardizing manufacturing runs and without losing sales due to stockouts.

In the past, the mechanics and reliability of transportation and tracking of the flow of goods was a major problem. With the increasing use of information technology, electronic data interchange and intermodal transportation, the production, scheduling and delivery of goods across national borders is also becoming a matter of just-in-time delivery although some structural problems still remain. For instance, current restrictions on U.S.–Canada air freight services and U.S.–Mexico cross border trucking restrain the speed of goods flow, add to the lead times, and are examples of government restrictions which need to be changed to facilitate faster movement of goods across borders.

Despite those restrictions, forward-looking multinational companies can still employ nearly just-in-time inventory management. For example, Sony's assembly plant in Nuevo Laredo, Mexico, just across the Texas border, imports components from its U.S. sister plants in the United States. While cross-border transportation across the U.S.–Mexico international bridges experiences traffic congestion and occasionally causes delays in shipment, Sony has been able to manage just-in-time inventory management with a minimum of safety stock in its warehouse.

***Hedging against Inflation and Exchange Rate Fluctuations.*** Multinational corporations can also use inventory as a strategic tool to deal with currency fluctuations and to hedge against inflation. By increasing inventories before imminent depreciation of a currency instead of holding cash, a firm can reduce its exposure to currency depreciation losses. High inventories also provide a hedge against inflation, because the value of the goods/parts held in inventory remains the same compared to the buying power of a local currency, which falls with devaluation. In such cases the international logistics manager must coordinate operations with that of the rest of the firm so that the cost of maintaining an increased level of inventories is more than offset by the gains from hedging against inflation and currency fluctuations. Many countries, for instance, charge a property tax on stored goods. If the increase in the cost of carrying the increased inventory along with the taxes exceeds the saving from hedging, increased inventory could not be a good idea.

***Benefiting from Tax Differences.*** Costs can be written off before taxes in creative ways so that internal transit arrangements can actually make a profit. This implies that what and how much a firm transfers within its global manufacturing system is a function of the tax systems in various countries to and from which the transfers are being made. When the transfer of a component A from country B to country C is tax-deductible in country B (as an export) and gets credit in country C for being part of a locally assembled good D, the transfer makes a profit for the multinational firm. Access to and use of such knowledge is the forte of logistics firms that sell these services to the multinational firm interested in optimizing its global logistics.

***Logistical Integration and Rationalization.*** **Logistical integration** refers to coordinating production and distribution across geographic boundaries—a radical departure from the traditional country-by-country based structure consisting of separate sales, production, warehousing, and distribution organizations in each country. **Rationalization**, on the other hand, refers to reducing resources to achieve more efficient and cost-effective operations. Although conceptually separate, most companies' strategies include both aspects of the logistics strategy.

For example, DuPont expects to save millions annually by centralizing logistics management and consolidating its logistics spending to get better pricing and service from its providers. The company currently uses a wide range of freight carriers, logistics providers, and freight forwarders to handle its shipments. By centralizing its logistical activities, DuPont can optimize its shipments and combine small shipments into larger ones

(integration). The company has replaced the disconnected legacy mainframe logistics system used by 70 percent of its individual strategic business units, subsidiaries, joint ventures, and affiliates with Global Logistics Technologies Inc.'s G3 Web-based transportation and logistics-management software (rationalization). Since 2001, the company has been able to manage almost all of its operations using the software, including shipments for U.S. domestic, Europe domestic, and some intra-Asia areas. DuPont's logistic management has not only enhanced its product delivery time but also ensured security of shipments, a significant factor because more than 40 percent of what the company ships are classified as hazardous materials. Furthermore, the company has benefited from shortened inventory through improved visibility and standardization of data.<sup>19</sup>

As presented earlier in Global Perspective 15-1, dramatic economic integration is taking place in the enlarged European Union. However, a word of caution is in order. Remember that although the laws of the European Union point toward further economic integration, there still are and will continue to be political, cultural, and legal differences among countries as well. Similarly, as shown in **Global Perspective 15-2**, the North American Free Trade Agreement is not free of arcane regulations, either. Consequently,

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## GLOBAL PERSPECTIVE 15-2



### CABOTAGE RULES IN THE NORTH AMERICAN FREE TRADE AGREEMENT

Cabotage refers to the right of a trucker to be able to carry goods in an assigned territory. Traditionally, countries have restricted cabotage rights of foreign truckers. If a U.S. trucking company has a scheduled load to the United States from Toronto, then the truck may carry the load but the driver must be Canadian. Similarly, a U.S. trucker, after delivering goods in Toronto, cannot pick up another load and deliver it in Ottawa—that is a violation of current cabotage rules. Even under the North American Free Trade Agreement (NAFTA), Canada, the United States, and Mexico have varying degrees of—even sometimes confusing—regulations on cabotage rights. In theory, the NAFTA should have worked out truly free mobility of goods by allowing the cabotage rights of truckers from Canada, the United States, and Mexico. But the reality is still far from it, although it is improving.

The U.S. government refused to allow Mexican truckers to have full access to the United States until recently. Safety concerns were cited in keeping Mexican trucks from operating throughout the country, although those fears may not be supported by facts. Similarly, the Mexican trucking association, Camara Nacional del Autotransporte de Carga, continues to oppose opening up cabotage to allow point-to-point coverage in Mexico by U.S. trucking companies.

*Source:* “U.S. Transportation Department Implements NAFTA Provisions for Mexican Trucks, Buses,” FDCH Regulatory Intelligence Database, November 27, 2002; “DOT Eyes Truck Inspection Harmony for All of North America,” *Occupational Health & Safety*, December 2002, p. 10; and John C. Taylor, Douglas R. Robideaux, George C. Jackson, “U.S.-Canada Transportation and Logistics: Border Impacts and Costs, Causes, and Possible Solutions,” *Transportation Journal*, 43 (Fall 2004), pp. 5–21.

In March 2002, President Bush finally modified the moratorium on granting operating authority to Mexican motor carriers. This action means that the United States has fulfilled its obligations under the North American Free Trade Agreement and that Mexican truck and regular-route bus service into the U.S. interior can begin. As a practical matter, this service will begin only after the U.S. Department of Transportation's Federal Motor Carrier Safety Administration (FMCSA) reviews Mexican carrier applications and grants provisional operating authority to qualified Mexican truck and bus companies seeking this authority.

The United States does not have a coherent cabotage regulation with Canada. The U.S. Immigration and Naturalization Service is going after Canadian drivers who have “violated” cabotage rules by moving trailers within the United States even though U.S. Customs permits such movements. A number of Canadian drivers have had their trucks seized, have been fined, and then kicked out of the United States. Under an agreement engineered by the Canadian and U.S. trucking associations, Canadian officials have been allowing U.S. drivers to perform cabotage movements in Canada. Now the Canadian government is thinking about retaliating against the United States by mounting a crackdown on U.S. truck drivers entering Canada to parallel the aggressive treatment Canadian drivers are facing from the U.S. Immigration and Naturalization Service.

Despite these arcane regulations still in place in the NAFTA countries, the U.S. Department of Commerce hopes to establish conformity among Canada, Mexico and the U.S. in cargo securement regulations in compliance with the North American Cargo Securement Standard Model Regulations.

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<sup>19</sup>“DuPont Streamlines Logistics and IT Costs with Centralized, Web-Based System,” *Manufacturing Systems*, April 2004, p. 52.

despite the promised benefit of logistics integration and rationalization, international marketers as well as corporate planners have to have specialized local knowledge to ensure smooth operations. Customer service strategies particularly need to be differentiated, depending on the expectations of local consumers. For example, German buyers of personal computers may be willing to accept Dell Computer's mail-order service or its Web site ordering service, but French and Spanish customers could assume that a delivery person will deliver and install the products for them.

***E-Commerce and Logistics.*** Another profound change in the last decade is the proliferation of the internet and electronic commerce ("e-commerce"). The internet opened the gates for companies to sell easily directly to consumers across national boundaries. We stated in Chapter 1 that manufacturers that traditionally sell through the retail channel *can* benefit the most from e-commerce. Furthermore, customer information no longer is held hostage by the retail channel.

We emphasize "can" because *in reality, logistics cannot go global as easily as e-commerce.* This revolutionary way of marketing products around the world is epitomized by Dell Computer, which put pressure on the industry's traditional players with a simple concept: sell personal computers directly on the internet to customers with no complicated channels. Michael Dell successfully introduced a new way for PC companies to compete—not by technology alone, but by recognizing customers' needs and emphasizing Dell's ability to satisfy and serve them quickly and efficiently, above and beyond the traditional national boundary. Now, major PC companies are compressing the supply chain via such concepts as "build to order" rather than "build to forecast." However, order taking can take place globally, but shipping of PCs needs to be rather local or regional for various reasons.

You may ask why most e-businesses do not ship overseas if the Web makes any company instantly global. Also, why do more companies not make their internet-powered supply chains globally accessible? The answer is that it remains very difficult to manage the complex logistics, financial, linguistic, and regulatory requirements of global trade. E-businesses operating from one central location could not also address logistical problems associated with local competition and exchange rate fluctuations. For example, in Australia, OzBooks.com sells 1.2 million books and Dymocks, Australia's largest bookseller, offers just over 100,000 books online. These Australian companies are no comparison in size to Amazon.com with some 5 million books available online. These smaller Australian online booksellers have a competitive advantage over Amazon.com, however. They have a comprehensive offering of books published in Australia while Amazon.com does not. Furthermore, competing on price for international sales without local distribution is tricky as exchange rates fluctuate. When the Australian dollar depreciated during the Asian financial crisis, buying from Amazon.com and other U.S. Web retailers became more expensive in Australia. Australian consumers log on to local alternatives such as OzBooks.com instead. As a result, leading e-commerce sites now offer regional Web sites to handle sales in various parts of the world. For example, Amazon.com now has eight regional websites around the world to cater to these regional and local differences.

Another example is Compaq Computer in Latin America. The company has been extremely successful in selling computers over the internet throughout Latin America since October 1999. The company guarantees delivery within 72 hours of placing orders online. Latin Americans shopping online can buy the computers in local currency and do not have to bring the computers through customs. This requires local assembly of Compaq computers. Compaq has assembly plants in Mexico, Ecuador, Argentina, Brazil, Venezuela, Chile, Puerto Rico, Colombia, and Peru.<sup>20</sup>

The Web may have dispensed with physical stores, but local adaptation of product offerings and setting-up of local distribution centers remain as crucial as ever. The local

<sup>20</sup> "IT Watch," *Business Latin America*, September 13, 1999, p. 7; and "Latin American PC Market Continues to Grow," *World IT Report*, February 19, 2002, p. N.

competition has forced Amazon.com and other American e-commerce companies to reassess what it means to operate globally on the internet.

Good logistics can make all the difference in a company's ability to serve its customers. The crucial factor is not just what the company makes or how the product is made. It is also how quickly the company can get the parts together or shift finished products from its factories to markets. Despite the immense competitive advantage that logistics can generate for the organization, manufacturers often find that logistics operations are usually faster and less expensive if they are outsourced and organized by specialists and professionals who have competence in integrated logistics management and the ability to service multiple clients and products. According to management consultants at McKinsey, tracking the logistics outsourcing industry, U.S. companies currently spend around \$100 billion a year on **third-party logistics (3PL) services**. This 3PL market is growing rapidly in the United States.<sup>21</sup> Although no new data are currently available, the European 3PL market was worth around \$147 billion in 2001, and is growing at a similar rate as in the United States.<sup>22</sup> The largest 3PL sector is the value-added warehousing and distribution industry. Survey statistics show two important factors: (1) the 3PL industry has a tremendous untapped opportunity for growth with the Fortune 500 companies, and (2) the mid-sized companies are making the best use of savings and service advantages that outsourcing can offer.<sup>23</sup>

To stay with the trend, Ford established a contract with TPG, a Dutch logistics company, to service its Toronto factory. This plant produces 1,500 Windstar minivans a day. To keep it running virtually round the clock, TPG organizes 800 deliveries a day from 300 different parts manufacturers. Its software must be tied into Ford's computerized production system. Shipments have to arrive at 12 different points along the assembly lines without ever being more than 10 minutes late. Parts must be loaded into trucks in a pre-arranged sequence to speed unloading at the assembly line. This upstream procurement capability is extremely important when it comes to addressing the ever-changing needs of consumers in the downstream marketing activities. Another example is an arrangement between Maxtor, a maker of computer disk drives, and Exel, the world's leading logistics firm. Exel, formed from a merger of a shipping line and a trucking company, now owns no ships or trucks, focusing instead on logistics contracts. The Maxtor deal requires it to shift computer drives from factories in Asia to companies such as Dell, Compaq and HP in Asia and the United States, all within 48 hours.<sup>24</sup>

Multinational companies also benefit from 3PL arrangements particularly in culturally and/or geographically diverse markets, such as India and China. For example, in India, Whirlpool Corporation, a leading U.S. manufacturer of major household appliances, works with Quality Express, whose national delivery network serves over 10,000 retailers and 50,000 construction sites scattered all over India. The result was ERX Logistics, a joint venture that provides Whirlpool with full logistics service for its finished products from warehousing to final delivery. Whirlpool has been able to lower its minimum order quantity from about one-third of a truckload to five or six pieces.<sup>25</sup>

Interestingly, with more companies resorting to 3PL, the range of logistics businesses the express operators are moving into is broadened. In the United States, one service offered by UPS's local branches is a drop-off facility for broken Toshiba laptops. Most laptop owners think that when they have told Toshiba about their problem and put their laptop into a UPS box, it is sent to the Japanese company to be repaired and

## Third-Party Logistics (3PL) Management

<sup>21</sup>"Travel Infrastructure Logistics: Executive Insight," *McKinsey.com*, accessed September 30, 2008.

<sup>22</sup>Bernard L. Bot and Carl-Stefan Neumann, "Growing Pains for Logistics Outsourcers," *McKinsey Quarterly*, no. 2, 2003.

<sup>23</sup>"1999 Annual Report—Third-Party Logistics: No End to the Good News," *Logistics Management and Distribution Report*, 38 (July 1999), pp. 73–74.

<sup>24</sup>"A Moving Story," *Economist*, December 7, 2002, pp. 65–66.

<sup>25</sup>"India: Logistics Gives the Competitive Edge," *Businessline*, November 5, 2001.

then returned by UPS. But what really happens is that when the laptop arrives at UPS's Louisville hub, it is taken to a vast estate of warehouses near the airport and mended in a repair shop owned and run not by Toshiba but by UPS. The UPS technicians are trained by Toshiba and the warehouse holds Toshiba spare parts. Even the people in the Toshiba call center that deals with inquiries work for UPS. The delivery company has been contracted to provide a complete repair and customer-service operation. And having done this for one company, UPS could capitalize on its investment by providing a similar service for others.

### Logistical Revolution with the Internet

The trend toward third-party logistics is a result of the internet and the Intranet (a specialized secure internet channel established between the companies) as well as concentrating on core competencies. The internet and the Intranet facilitate on-time inventory and distribution coordination without constraint of geographical boundaries. Core competencies refer to the mix of skills and resources that a firm possesses that enable it to produce one set of goods and/or services in a much more effective manner than another firm. Also, competent logistics firms can save money for a multinational firm shipping components between its facilities in different countries, because shipping costs paid internally can vary according to the fluctuation of foreign currencies.

We illustrate how some major companies take advantage of the internet and the Intranet for streamlining their logistics. At Dell Computer, the international logistics manager makes certain that the third-party logistics provider has state-of-the-art logistics and keeps it involved in Dell's strategic planning. Dell buys monitors finished and packaged, ready to deliver directly to the customer the world over. It does not add any value to the monitor itself, so Dell tries to avoid handling the monitor, preferring instead to have the logistic provider warehouse it and move it to Dell when the information system link with Dell drops an order into the warehouse computer. This saves Dell inventorying costs and gives it more operational flexibility.<sup>26</sup>

Pharmaceutical giant, Eli Lilly, has gradually outsourced more of its global logistics to Swiss-based Danzas AEI Intercontinental. This e-logistics company's famed "MarketLink" system manages seamless logistics services driven by the real-time flow of data between the company and its customers. Danzas AEI was recently put in charge of handling customs and the delivery of Eli Lilly's airborne and ocean imports. Based in the pharmaceutical hub of Basel, Switzerland, Danzas AEI Intercontinental has increasingly specialized in pharmaceutical products, working also with SmithKline Beecham and Hoffman-La Roche.<sup>27</sup>

As the market for third-party logistics has increased substantially since the 1990s, many traditional shippers, such as UPS, Federal Express, DPWN, and TNT, have developed large business units solely devoted to integrated logistics. Many logistic companies are now moving to provide tailored logistic solutions in international markets for their clients. One major player is UPS Logistics Group, a subsidiary of United Parcel Service, founded in 1995. UPS Logistics offers a full spectrum of supply chain services and logistics expertise throughout the world. Now its operations in North America, Europe, Asia, and Latin America include over 500 distribution facilities and strategic stocking locations. The subsidiary is composed of industrial engineers, software systems integrators and developers, facility designers, operations managers, high-tech repair technicians, logisticians, and transportation, financial, e-commerce, and international trade experts.<sup>28</sup>

Even online companies, such as Amazon.com, rely increasingly on 3PL services in foreign markets. Amazon.com launched its Canadian website ([www.amazon.ca](http://www.amazon.ca)) in July 2002, but logistics is handled by Canada Post Corp. In 2001, more than 250 thousand Canadians ordered products from Amazon's U.S. site, and Canada represents Amazon's largest export market. Now Amazon.ca features bilingual Canadian

<sup>26</sup>Silvia Ascarelli, "Dell Finds U.S. Strategy Works in Europe," *Wall Street Journal* (February 3, 1997), p. A8.

<sup>27</sup>Robert Koenig, "Danzas Expands Pharmaceutical Logistics Business with Eli Lilly," *Journal of Commerce* (December 7, 1998), p. 14A; and "Danzas AEI Intercontinental," *Journal of Commerce*, November 25, 2002, p. 32.

<sup>28</sup>UPS Logistics Group, <http://www.upslogistics.com>, accessed January 20, 2006.

content and 1.5 million items, and Canada Post handles domestic deliveries. Canada Post's subsidiary, Assured Logistics, handles supply chain services such as warehousing, inventory management, and online fulfillment. This has proved to be mutually beneficial arrangement. Canada Post is establishing itself as a competent player in the online world, and as a result, its business is picking up with about 300 Canadian companies now using its online logistical services. On the other hand, Amazon spent US\$200 million a year on technology to keep its U.S. operation running, but does not incur that cost in its Canadian operation through Amazon.ca. Furthermore, this arrangement permits Amazon to better cater to the local market needs in Canada.<sup>29</sup>

Some distribution companies even find that the best way to be successful is to create a distribution alliance, and pool their logistics resources together. An example is the global distribution alliance between three international electronics distribution companies: the U.S. company Pioneer-Standard, the British company Eurodis, and Taiwan's World Peace Industrial. The alliance's ability to cover almost the entire globe has enabled it to obtain worldwide exclusive distribution contracts from electronics manufacturers such as Philips Semiconductors.<sup>30</sup> Similarly, six European logistics companies have joined forces to launch Eunique Logistics, a new pan-European alliance that provides customers a single point of contact for a range of distribution and logistics services throughout Europe.<sup>31</sup>

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## MANAGING SOURCING STRATEGY



International logistics covers both the movement of raw materials and components into a manufacturing plant and the movement of finished products from the plant to the firm's customers around the world. Of these aspects of global logistics, it has become imperative for many companies to develop an efficient international sourcing strategy as they attempt to exploit their capabilities in R&D, operations, and marketing globally.

The design of international sourcing strategy is based on the interplay between a company's competitive advantages and the comparative advantages of various countries. **Competitive advantage** influences the decision regarding what activities and technologies a company should concentrate its investment and managerial resources in, relative to its competitors in the industry. **Comparative advantage** affects the company's decision on where to source and market, based on the lower cost of labor and other resources in one country relative to another.<sup>32</sup>

Over the last 30 years or so, gradual yet significant changes have taken place in international sourcing strategy. The cost-saving justification for international procurement in the 1970s and 1980s was gradually supplanted by quality and reliability concerns in the 1990s. Most of the changes have been in the way business executives think of the scope of international sourcing for their companies and exploit various resultant opportunities as a source of competitive advantage. Naturally, many companies that have a limited scope of global sourcing are at a disadvantage over those that exploit it to their fullest extent in a globally competitive marketplace. Six reasons are identified as to why companies adopt an international sourcing strategy.<sup>33</sup> These are:

- Intense international competition
- Pressure to reduce costs
- The need for manufacturing flexibility

<sup>29</sup>"Amazon Lands in Canada, Outsources Logistics," *Computing Canada*, (July 5, 2002) p. 6.

<sup>30</sup>"Arrow Hooks US Components Division," *Electronics Weekly*, January 22, 2003, p. 3.

<sup>31</sup>"New European Alliance," *Logistics and Transport Focus*, June 2002, p. 13.

<sup>32</sup>Bruce Kogut, "Designing Global Strategies: Comparative and Competitive Value-Added Chains," *Sloan Management Review*, 26 (Summer 1985), pp. 15–28.

<sup>33</sup>Joseph R. Carter and Ram Narasimhan, "Purchasing in the International Marketplace," *Journal of Purchasing and Materials Management*, 26 (Summer 1990), pp. 2–11.

- Shorter product development cycles
- Stringent quality standards
- Continually changing technology

Toyota's global sourcing operations illustrate one such world-class case. The Japanese carmaker is equipping its operations in the United States, Europe, and Southeast Asia with integrated capabilities for creating and marketing automobiles. The company gives the managers at those operations ample authority to accommodate local circumstances and values without diluting the benefit of integrated global operations. Thus, in the United States, Calt Design Research, a Toyota subsidiary in California, designs the bodies and interiors of new Toyota models, including Lexus and Solara. Toyota has technical centers in the United States and in Brussels to adapt engine and vehicle specifications to local needs.<sup>34</sup> Toyota operations that make automobiles in Southeast Asia supply each other with key components to foster increased economies of scale and standardization in those components—gasoline engines in Indonesia, steering components in Malaysia, transmissions in the Philippines, and diesel engines in Thailand. Toyota has also started developing vehicles in Australia and Thailand since 2003. These new bases develop passenger cars and trucks for production and sale only in the Asia-Pacific region. The Australian base is engaged mainly in designing cars, whereas the Thailand facility is responsible for testing them.<sup>35</sup>

### Procurement: Types of Sourcing Strategy

Sourcing strategy includes a number of basic choices that companies make in deciding how to serve foreign markets. One choice relates to the use of imports, assembly, or production within the country to serve a foreign market. Another decision involves the use of internal or external supplies of components or finished goods.

Sourcing decision-making is multifaceted and entails both contractual and locational implications. From a contractual point of view, the sourcing of major components and products by multinational companies takes place in two ways: (1) from the parents or their foreign subsidiaries on an “intra-firm” basis and (2) from independent suppliers on a “contractual” basis. The first type of sourcing is known as **intra-firm sourcing**. The second type of sourcing is commonly referred to as **outsourcing**. Similarly, from a locational point of view, multinational companies can procure components and products either (1) domestically (i.e., *domestic sourcing*) or (2) from abroad (i.e., *offshore sourcing*). Therefore, as shown in **Exhibit 15-2**, four possible types of sourcing strategy can be identified.

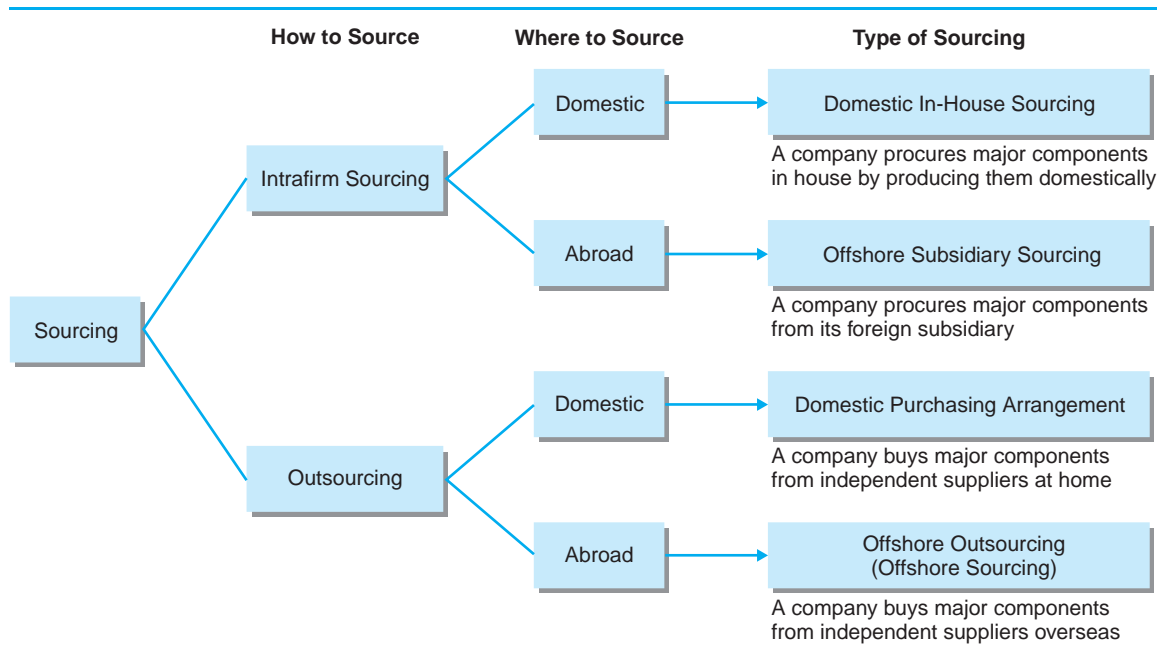
In developing viable sourcing strategies on a global scale, companies must consider not only the costs of manufacturing and various resources as well as exchange rate fluctuations but also the availability of infrastructure (including transportation, communications, and energy), industrial and cultural environments, ease of working with foreign host governments, and so on. Furthermore, the complex nature of sourcing strategy on a global scale spawns many barriers to its successful execution. In particular, logistics, inventory management, distance, nationalism, and lack of working knowledge about foreign business practices, among others, are major operational problems identified by both U.S. and foreign multinational companies engaging in international sourcing.

Many studies have shown, however, that despite, or perhaps as a result of, those operational problems, *where* to source major components seems much less important than *how* to source them. Thus, when examining the relationship between sourcing and competitiveness of multinational companies, it is crucial to distinguish between sourcing on a “contractual” basis and sourcing on an “intra-firm” basis, for these two types of sourcing will have a different impact on the firm's long-run competitiveness.

<sup>34</sup>Fumiko Kurosawa and John F. Odgers, “Global Strategy of Design and Development by Japanese Car Makers—From the Perspective of the Resource-Based View,” *Association of Japanese Business Studies 1997 Annual Meeting Proceedings*, June 13-15, 1997, pp. 144-46.

<sup>35</sup>“Toyota Design Breaks from Clay and Foam,” *Automotive News Europe*, April 4, 2005, p. 38.

**EXHIBIT 15-2**  
TYPES OF SOURCING STRATEGY



**Intra-Firm Sourcing.** Multinational companies can procure their components in-house within their corporate system around the world. They produce major components at their respective home base and/or at their affiliates overseas to be incorporated in their products marketed in various parts of the world. Thus, trade takes place between a parent company and its subsidiaries abroad, and also between foreign subsidiaries across national boundaries. This is often referred to as **intra-firm sourcing**. If such in-house component procurement takes place at home, it is essentially **domestic in-house sourcing**. If it takes place at a company’s foreign subsidiary, it is called **offshore subsidiary sourcing**. Intra-firm sourcing makes trade statistics more complex to interpret, since part of the international flow of products and components is taking place between affiliated companies within the same multinational corporate system, which transcends national boundaries. About 30 percent of U.S. exports is attributed to U.S. parent companies transferring products and components to their affiliates overseas, and about 40 percent of U.S. imports is accounted for by foreign affiliates exporting to their U.S. parent companies. For both Japan and Britain, intra-firm transactions account for approximately 30 percent of their total trade flows (exports and imports combined), respectively.<sup>36</sup> Although statistics on intra-firm trade between foreign affiliates are limited to U.S. firms, the share of exports to other foreign affiliates in intra-firm exports of foreign affiliates rose from 37 percent in 1977 to 60 percent in 1993, and has been stable since then. This also suggests the increased role of foreign affiliates of U.S. multinational firms outside the United States.<sup>37</sup>

**Outsourcing (Contract Manufacturing).** In the 1970s, foreign competitors gradually caught up in a productivity race with U.S. companies, which had once commanded a dominant position in international trade. It coincided with U.S. corporate

<sup>36</sup>United Nations Center on Transnational Corporations, *Transnational Corporations in World Development: Trends and Perspectives* (New York: United Nations, 1988).

<sup>37</sup>*World Investment Report 1996*, pp. 13–14; and *World Investment Report 1998* (New York: United Nations, 1996 and 1998, respectively).



strategic emphasis drifting from manufacturing to finance and marketing. As a result, manufacturing management gradually lost its organizational influence. Production managers' decision-making authority was reduced so that R & D personnel prepared specifications with which production complied and then marketing personnel imposed delivery, inventory, and quality conditions. In a sense, production managers gradually took on the role of outside suppliers within their own companies.<sup>38</sup>

Production managers' reduced influence in the organization further led to a belief that manufacturing functions could, and should, be transferred easily to independent contract manufacturers, depending on the cost differential between in-house and contracted-out production. A company's reliance on domestic suppliers for major components and/or products<sup>39</sup> is basically a **domestic purchase arrangement**. Furthermore, in order to lower production costs under competitive pressure, U.S. companies turned increasingly to outsourcing components and finished products from abroad, particularly from newly industrialized countries including Singapore, South Korea, Taiwan, Hong Kong, Brazil, and Mexico. Initially, subsidiaries were set up for production purposes (i.e., offshore subsidiary sourcing), but gradually, independent foreign contract manufacturers took over component production for U.S. companies. This latter phenomenon is known by many terms, usually called **offshore outsourcing** (or more casually, **outsourcing**). For example, Apple, Dell, and Gateway outsource 100 percent of their laptop computers from Quanta Computer Inc., a Taiwanese company and the world's largest maker of laptop computers. Dell Computer alone accounts for half of Quanta's sales.<sup>40</sup>

In recent years, an increasing number of companies have used the internet to develop efficient B2B procurement (outsourcing) systems on a global scale. On February 25, 2000, General Motors, Ford, and DaimlerChrysler made history by jointly forming Covisint ([www.covisint.com](http://www.covisint.com)), which is probably the largest global online B2B procurement system dedicated to the auto industry. The Big Three have been joined by partners Nissan Motor, Renault, Commerce One, Inc., and Oracle Corp. in an effort to provide procurement, supply-chain, and product-development services to the auto industry on a global scale. The auto industry was an early adopter of the B2B procurement business model for a number of marketing-related reasons. First, automakers could develop products with a relatively short life cycle. Second, they would require a fast response time to market. Third, automakers were early adopters of outsourcing, one primary reason for which is the auto industry's drive for change from a push model to a pull model—their desire to achieve customized make-to-order marketing feasible.<sup>41</sup> However, by 2004, it was clear that Covisint had not been able to build a trust relationship between the participating automakers and their suppliers as it had on paper, and was eventually sold to Compuware Corp. as a messaging data service and portal.<sup>42</sup> Covisint's failure illustrates how difficult it is to manage outsourcing relationships.<sup>43</sup> The near-term benefits of outsourcing are clear. Among the most important reasons for outsourcing, according to a recent survey (see **Exhibit 15-3**), are cost reduction, focus on core competencies, access to special expertise, improved financial performance, delivery speed, reduction of resource constraints, and access to new technologies.

<sup>38</sup>Stephen S. Cohen and John Zysman, "Why Manufacturing Matters: The Myth of the Post-Industrial Economy," *California Management Review*, 29 (Spring 1987), pp. 9–26.

<sup>39</sup>Rodney Ho, "Small Product-Development Firms Show Solid Growth," *Wall Street Journal* (April 22, 1997), p. 32: This article shows that entrepreneurial companies have begun to fill a void of new product development role as large companies trim their internal R & D staff and expenditures in the United States. Although it makes financial sense, at least in the short term, those outsourcing companies will face the same long-term concern as explained in this chapter.

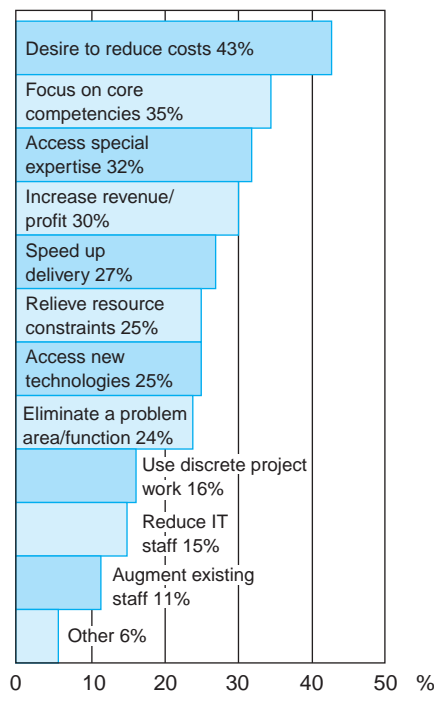
<sup>40</sup>"Quanta's Quantum Leap," *Business Week*, November 5, 2001, pp. 79–81; and "The Laptop Trail," *Wall Street Journal*, June 9, 2005, p. B1, B8.

<sup>41</sup>Beverly Beckert, "Engines of Auto Innovation," *Computer-Aided Engineering*, 20 (May 2001), pp. S18–S20.

<sup>42</sup>"Rule of the Road Still Apply to Covisint," *InformationWeek*, February 9, 2004, p. 32.

<sup>43</sup>Martina Gerst and Raluca Bunduchi, "Shaping IT Standardization in the Automotive Industry—The Role of Power in Driving Portal Standardization," *Electronic Markets*, 15 (December 2005), pp. 335–43.

**EXHIBIT 15-3**  
**MAJOR REASONS FOR**  
**OUTSOURCING**



Source: Survey results reported in “Outsourcing: Directions and Decisions for 2003,” *2003 Outsourcing Trends*, CIO, <http://www.cio.com>, accessed February 16, 2006.

However, cultural differences are one of the biggest reasons why offshore outsourcing deals fail or run into problems in the long run.<sup>44</sup>

The short-term benefits of outsourcing are clear. Lower production costs, better strategic focus and flexibility, avoiding bureaucratic costs, and access to world-class capabilities are among the most important reasons for outsourcing. Long-term implications are not so clear, however. In particular, procurement from independent foreign suppliers (i.e., offshore outsourcing) has received quite a bit of attention, for it not only affects domestic employment and economic structure but sometimes also raises ethical issues (See **Global Perspective 15-3**). Companies using such a strategy have been described pejoratively as **hollow corporations**.<sup>45</sup> It is occasionally argued that those companies are increasingly adopting a “designer role” in global competition by offering innovations in product design without investing in manufacturing and process technology. Re-visit some caveats for contract manufacturing discussed in Chapter 9.

Even Covisint, the global B2B procurement business founded by the Big Three automakers discussed earlier, was not able to generate results that the companies had initially expected. Typical B2B procurement systems, including Covisint, have tended to rely on auctions that emphasize the lowest bids on a global basis. This internet-era emphasis on low cost could border on the cost emphasis of the 1960s and 1970s that ignored the importance of quality, technological superiority, delivery, and other non-cost aspects of competitive advantage. In fact, for superior product development when working jointly with external suppliers, automakers need to emphasize the importance

<sup>44</sup>“Culture Clashes Harm Offshoring,” *BusinessWeek.com*, July 17, 2006.

<sup>45</sup>“Special Report: The Hollow Corporation,” *Business Week* (March 3, 1986), pp. 56–59; and Robert Heller, “The Dangers of Deconstruction,” *Management Today*, (February 1993), pp. 14, 17.



## GLOBAL PERSPECTIVE 15-3

### OFFSHORE SOURCING AND SWEATSHOPS OVERSEAS: AN ETHICAL ISSUE

At least 80 people died and another 100 were seriously injured when a garment factory collapsed in Dhaka, Bangladesh in 2004. The factory made sweaters for European retailers Carrefour and Zara. These people were working in unsafe conditions to produce goods for consumers in the West. It is part of what corporate critics invariably call a “race to the bottom.” Multinational companies seek places where labor is cheap, and safety, health, and environmental laws are lax.

The rapid globalization linking manufacturing companies, investors, and consumers around the world has touched off some ethical questions in recent years. Offshore sourcing is the practice of companies manufacturing or contracting out all or parts of their products abroad. Outsourcing makes it possible for those companies to procure products and components much more cheaply than manufacturing them in their home country. In many cases, labor cost savings are a strong motive for companies to engage in offshore sourcing. For example, Nike, the leading U.S. footwear company, has subcontractors in Taiwan, South Korea, and Indonesia, which collectively run twelve factories in Indonesia, producing 70 million pairs of Nike sneakers a year. Today, Nike’s contractor network involves some 800,000 workers. Like any other footwear factories everywhere in Asia, work conditions are tough, with mandatory overtime work and constant exhaustion. Although these factories may be modern, they are drab and utilitarian, with vast sheds housing row upon row of mostly young women working many hours. The basic daily wage in Indonesia for

these workers is a mere \$2–3 a day. There a pair of Pegasus running shoes costs about \$18 to put together, and retails for \$75 once shipped to the United States. The condition is similar in Vietnam, where 35,000 workers producing Nike shoes at five plants put in 12 hours a day to earn \$1.60—less than the \$2 or so it costs to buy three meals a day.

Although working conditions at these subcontractors’ factories have improved over time at Nike’s initiation, the company has a long way to go before it lives up to its stated goal of providing a fair working environment for all its workers. In Indonesia, police and factory managers have a not-so-subtle cozy relationship whereby police help keep workers under control. Despite its strong political clout, Nike has not challenged the Indonesian government’s control over labor. Nike’s code of conduct seems to remain vague, despite its intentions.

The linking of a firm’s private interests with the larger public good has been referred to as corporate citizenship. Multinational companies cannot claim ignorance about the workers who produce the products they buy or the conditions in which they work. Large companies have the resources to investigate those with whom they do business. Ethically speaking, they should set standards that their contractors have to meet to continue their contracts. Indeed, in recent years, socially responsible investing (SRI) has increasingly become the practice of making investment decisions on the basis of both financial and social performance. The SRI movement has grown into a \$1.185 trillion business, accounting for about 1 in 10 U.S. invested dollars.

A new, exhaustive academic review of 167 studies over the past 35 years concludes that there is in fact a positive link between companies’ social and financial performance—but only a weak one. But this does not mean that it is not worth the effort because companies will benefit a lot in building a better brand reputation, making decisions that are better for business in the long term, being more attractive to potential and existing employees, etc.

*Sources:* R. Bruce Hutton, Louis D’Antonio, and Tommi Johnsen, “Socially Responsible Investing: Growing Issues and New Opportunities,” *Business and Society*, 37 (September 1998), pp. 281–305; “Labor Standards Clash with Global Reality,” *New York Times*, April 24, 2001; “Cops of the Global Village,” *Fortune*, June 27, 2005, pp. 158–66; “The Next Question,” *Economist*, January 19, 2008, Special Section, pp. 8–10; and “A Stitch in Time,” *Economist*, January 19 2008, Special Section, pp. 12–14.

of technical collaborations, such as product design, as well as building trust in supplier-buyer relationships.<sup>46</sup>

This widespread offshore outsourcing practice could have a deleterious impact on companies’ ability to maintain their initial competitive advantage based on product innovations.<sup>47</sup> Indeed, keeping abreast of emerging technology through continual improvement in operations and process seems to be essential for the company’s

<sup>46</sup>Kotabe, Masaaki, Xavier Martin, and Hiroshi Domoto, “Gaining from Vertical Relationships: Knowledge Transfer, Relationship Duration, and Supplier Performance Improvement in the U.S. and Japanese Automobile Industries,” *Strategic Management Journal*, 24 (March 2003), pp. 293–316.

<sup>47</sup>Constantinos Markides and Norman Berg, “Manufacturing Offshore is Bad Business,” *Harvard Business Review*, 66 (September–October 1988), pp. 113–20; and Masaaki Kotabe, Michael J. Mol, and Janet Y. Murray, “Outsourcing, Performance, and the Role of E-Commerce: A Dynamic Perspective,” *Industrial Marketing Management*, 37(1), 2008, pp. 37–45.

continued competitiveness. This may explain why Sharp, one of the world's largest liquid-crystal-display (LCD) panel manufacturers, is building a \$9 billion factory to make LCD panels and solar panels in Japan instead of moving factories offshore to places like China, where products could be made more cheaply. Actually, while Apple Inc. is leading a trend in the electronics industry to outsource hardware manufacturing and focus on design and software, Sharp is making a huge bet that keeping manufacturing of LCD and solar panels in-house will give it a big competitive advantage. If Sharp continues to be successful, the focused-manufacturing strategy could be a model for other Japanese electronics makers, which find Apple's outsourcing model a turnoff and are still trying to figure out a way to remain a manufacturer while growing its profit in an industry that is rapidly commoditizing<sup>48</sup> (See **Global Perspective 15-4** for other potential hazards of relying on outsourcing).

## GLOBAL PERSPECTIVE 15-4

### BEING TOO LEAN IS A DANGEROUS THING



There are two types of risk in a supply chain, external and internal. For the external, there is never a scarcity of examples, such as a dock strike in California, a typhoon in Taiwan, a tsunami in Asia, and a hurricane in New Orleans. More recently a huge explosion at the Buncefield oil storage terminal in Britain's Hertfordshire caused widespread problems for businesses not just locally but across a large part of England.

Sometimes even a political wrangle in Brussels will bring a supply chain to a shuddering halt. In the fall of 2005, some 80 million items of clothing were impounded at European ports and borders because they exceeded the annual import limits that the European Union and China had agreed on only months earlier. Retailers had ordered their autumn stock well before that agreement was signed, and many were left scrambling to find alternative suppliers. The negative impact was large although a compromise was reached eventually.

Besides the external ones, most supply-chain disruptions often have internal causes as well. Undoubtedly, it is great when companies run supply chains "lean." However, too much leanness and meanness can severely hurt companies. The cost of such disruptions is huge. Typically a company's share price drops by around 8 percent in the first day or two after companies announce supply-chain problems, according to a research by Vinod Singhal, a professor of operations management at the Georgia Institute of Technology. This is worse than the average stock market reaction to other corporate bad news, such as a delay in the launch of a new product (which triggers an average fall of 5 percent), untoward financial events (an average drop of 3-5 percent) or IT problems

(2 percent). And the effects can be long-lasting: operating income, return on sales and return on assets are all significantly down in the first and second year after a disruption.

If leanness is not controlled appropriately, it can cause a calamity when external risk happens. A striking example involves Philips. It began on a stormy evening in New Mexico in March 2000 when a bolt of lightning hit a power line. The temporary loss of electrical power knocked out the cooling fans in a furnace at a Philips semiconductor plant in Albuquerque. A fire started, but was put out by staff within minutes. By the time the fire brigade arrived, there was nothing for them to do but inspect the building and fill out a report. The damage seemed to be minor: eight trays of wafers containing the miniature circuitry to make several thousand chips for mobile phones had been destroyed. After a good cleanup, the company expected to resume production within a week.

That is what the plant told its two largest customers, Sweden's Ericsson and Finland's Nokia, which were vying for leadership in the booming mobile-handset market. Nokia's supply-chain managers had realized within two days that there was a problem when their computer systems showed some shipments were being held up. Delays of a few days are not uncommon in manufacturing and a limited number of back-up components are usually held to cope with such eventualities. But whereas Ericsson was content to let the delay take its course, Nokia immediately put the Philips plant on a watch list to be closely monitored in case things got worse.

They did. Semiconductor fabrication plants have to be kept spotlessly clean, but on the night of the fire, when staff were rushing around and firemen were tramping in and out, smoke and soot had contaminated a much larger area of the plant than had first been thought. Production could be halted for

(continued)

Source: "When the Chain Breaks," *Economist*, June 17, 2006, Special Section, pp.18-20.

<sup>48</sup>Yukari Iwatani Kane, "Sharp Focuses on Manufacturing; A \$9 Billion Plant In Japan Will Make LCD, Solar Panels," *Wall Street Journal*, July 9, 2008. p. B1.



## GLOBAL PERSPECTIVE 15-4

(CONTINUED)

months. By the time the full extent of the disruption became clear, Nokia had already started locking up all the alternative sources for the chips.

That left Ericsson with a serious parts shortage. The company, having decided some time earlier to simplify its supply chain by single-sourcing some of its components, including the Philips chips, had no plan B. This severely limited its ability to launch a new generation of handsets, which in turn contributed to huge losses in the Swedish company's mobile-phone division. In 2001 Ericsson decided to quit making handsets on its own. Instead, it put that part of its business into a joint venture with Sony.

This example has become a classic case study for supply-chain experts and risk consultants. Unfortunately, such disruptions in supply chains seem to be happening more often. In order to avoid such disruptions, some people suggest that supply chains should be regulated, a bit like public utilities, because countries have become so highly dependent on private-sector production infrastructure. Barry Lynn, author of a book on this subject, *End of the Line*, thinks that perhaps companies should be required to limit their outsourcing and use more than one supplier of essential items. In his book, he argues that globalization and outsourcing provide only a temporary benefit to consumers because the companies that form part of supply chains will buy each other up in pursuit of ever greater efficiency, and thus lose most of their flexibility.

There are signs that some companies are already alert to these concerns and may be planning to reorganize their supply chains to

make them safer. That process could speed up if disruptions become more common. A critical way to achieve a resilient supply chain is to create flexibility--and that flexible companies are best placed to compete in the marketplace. For larger firms, that could mean adopting so-called the "continental strategy": having a spread of suppliers in different continents for added flexibility, as Dell and Cisco do. Smaller firms may not be able to achieve a geographical spread. But in any case, companies do not want to go back to carrying lots of inventory in different locations. They need to do something in-between, carrying a little more cost than an absolutely lean model so as to get protection.

Nowadays, more and more multinationals go to Asia, in particular to China and India, for leanness. However, there are very legitimate, very good business reasons not necessarily to complete and ship from Asia to avoid supply chain disruptions. Companies may consider other options in other parts of the world although these may look more expensive. A higher cost structure can make supply chain more robust and reliable.

All in all, there will always be natural disasters, as well as corporate mistakes. In order to insulate themselves from the consequences, companies will have to spread their risks more widely. That does not necessarily mean fewer aircrafts will be queuing up to land at Louisville and Memphis, or that fewer container ships will set sail from Asia's bustling ports. But it does mean that in the future, companies may spend rather more to maintain a number of different supply chains, and some of those may be closer to home.

### Outsourcing of Service Activities

In 2007, the United States was ranked the largest exporter and importer of services, providing \$454 billion of services to the rest of the world and receiving \$440 billion worth of services from abroad. Furthermore, according to a recent government estimate, approximately 16 percent of the total value of U.S. exports and imports of services were conducted across national boundaries on an intra-firm basis (i.e., between parent companies and their subsidiaries). Increasingly, U.S. companies have expanded their service procurement activities on a global basis in the same way they procure components and finished products. Spending on offshore services is three times higher in North America than in Western Europe but the gap is closing, with Indian providers becoming more popular in 2007, growing 40 percent in the United States and 60 percent in Europe annually.<sup>49</sup>

As discussed, firms have the ability and opportunity to procure components/finished goods that have proprietary technology on a global basis. This logic also applies equally to service activities. The technological revolution in data processing and telecommunications (trans-border data flow, telematics, etc.) either makes the global tradability of some services possible or facilitates the transactions economically. Furthermore, because the production and consumption of some services do not

<sup>49</sup>"Global Outsourcing to Grow 8% in 2008," *BusinessWeek.com*, January 10, 2008.

need to take place at the same location or at the same time, global sourcing could be a viable strategy.

Thanks to the development of the internet and e-commerce, certain service activities are increasingly outsourced from independent service suppliers. The internet will also accelerate growth in the number of e-workers. This net-savvy and highly flexible corps will be able to perform much or all of their work at home, or in small groups close to home, regardless of their locations. International e-workers can also operate in locations far from corporate headquarters. They will be part of the growth in *intellectual outsourcing*. Already such e-workers can write software in India for a phone company in Finland, provide architectural services in Ireland for a building in Spain, and do accounting work in Hong Kong for an insurance company in Vancouver. Globalization of services through the internet is likely to expand considerably in the future.<sup>50</sup>

Bangalore, India should particularly be noted. The region is described as the Silicon Valley of that country. Bangalore has rapidly evolved to become the center of offshore programming activities. Many U.S. companies have started outsourcing an increasing portion of software development to companies in Bangalore. Established software vendors, including IBM, Microsoft, Oracle, and SAP, already employ Indian talent no longer just to write software code but also to help design and develop commercial offerings that are higher up in the software design food chain. Increasingly, Indian software entrepreneurs want to put their own companies' brand names on products, at home and abroad, by capitalizing on their country's highly educated and low-cost workforce to build and sell software for everything from back-office programs to customer-facing applications.<sup>51</sup> According to Indian tech industry body, National Association of Software and Services Companies (NASSCOM), services and software exports contributed around \$41 billion in 2008. The Indian tech industry is aiming to hit total revenues for software and services of US\$75 billion by 2010.<sup>52</sup> NASSCOM is recognized to represent an alternative to the government in shaping the industry landscape in India.<sup>53</sup> Similarly, China is catching up in this role. Microsoft has four research laboratories located around the globe: Redmond, Washington; Cambridge, UK; Beijing, China and San Francisco, California, with the goal to invent Microsoft's future, by focusing on technologies and technology trends in the next 5–10-year time frame. For example, Microsoft Research (MSR) Asia, founded in 1998 in Beijing, has already produced many research results that have been transferred to Microsoft products, including Office XP, Office System 2003, Windows XP, and Longhorn — the next major release of Windows.<sup>54</sup>

Outsourcing of service activities has been widely quoted in the popular press as a means to reduce costs and improve the corporate focus; that is concentrating on the core activities of the firm. However, outsourcing may also serve (a) as a means of reducing time to implement internal processes, (b) as a means of sharing risk in an increasingly uncertain business environment, (c) to improve customer service, (d) to get access to better expertise not available in-house, (e) for headcount reduction, and (f) as a means of instilling a sense of competition, especially when departments within firms develop a perceptible level of inertia.<sup>55</sup>

In the case of service companies, the distinction between core and supplementary services is necessary in strategy development. **Core services** are the necessary outputs of an organization that consumers are looking for, while **supplementary services** are

<sup>50</sup>Robert D Hormats, "High Velocity," *Harvard International Review*, 21 (Summer 1999), pp. 36–41.

<sup>51</sup>"India's Next Step," *InformationWeek*, August 8, 2005, pp. 34–39.

<sup>52</sup>"Indian Tech Industry Looking at 33% Growth," *BusinessWeek.com*, February 14, 2008.

<sup>53</sup>Nir Kshetri and Nikhilesh Dholakia, "Professional and Trade Associations in a Nascent and Formative Sector of a Developing Economy: A Case Study of the NASSCOM Effect on the Indian Offshoring Industry," *Journal of International Management*, 15(2), 2009.

<sup>54</sup>"Labs: Asia," Microsoft Research, <http://research.microsoft.com/aboutmsr/labs/asia/>, accessed February 20, 2006.

<sup>55</sup>Maneesh Chandra, "Global Sourcing of Services: A Theory Development and Empirical Investigation," a Ph.D. dissertation, The University of Texas at Austin, 1999.



**EXHIBIT 15-4****BENEFITS OF USING A FOREIGN TRADE ZONE (FTZ) IN THE UNITED STATES**

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1. *Duty deferral and elimination.* Duty will be deferred until products are sold in the United States. If products are exported elsewhere, no import tariff will be imposed.
  2. *Lower tariff rates.* Tariff rates are almost always lower for materials and components than for finished products. If materials and components are shipped to an FTZ for further processing and finished products are sold in the United States, a U.S. import tariff will be assessed on the value of the materials and components, rather than on the value of the finished products.
  3. *Lower tariff incidence.* Imported materials and components that through storage or processing undergo a loss or shrinkage may benefit from FTZ status as tariff is assessed only on the value of materials and components that actually found their way into the product.
  4. *Exchange rate hedging.* Currency fluctuations can be hedged against by requesting customs assessment at any time.
  5. *Import quota not applicable.* Import quotas are not generally applicable to goods stored in an FTZ.
  6. *“Made in U.S.A.” designation.* If foreign components are substantially transformed within an FTZ located in the United States, the finished product may be designated as “Made in U.S.A.”
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money, improving cash flow, and increasing logistical efficiency.<sup>59</sup> Legally, goods in the zone remain in international commerce as long as they are held within the zone or are exported. In other words, those goods (including materials, components, and finished products) shipped into an FTZ in the United States from abroad are legally considered not having landed in the customs territory of the United States and thus are not subject to U.S. import tariffs, as long as they are not sold outside the FTZ in the United States (See **Exhibit 15-4**).

An FTZ provides many cash flow and operating advantages as well as marketing advantages to zone users. Even when these goods enter the United States, customs duties can be levied on the lesser of the value of the finished product or its imported components.

Operationally, an FTZ provides an opportunity for every business engaged in international commerce to take advantage of a variety of efficiencies and economies in the manufacture and marketing of their products. Merchandise within the zone can be unpacked and repacked; sorted and relabeled; inspected and tested; repaired or discarded; reprocessed, fabricated, assembled, or otherwise manipulated. It can be combined with other imported or domestic materials; stored or exhibited; transported in bond to another FTZ; sold or exported. Foreign goods can be modified within the zone to meet U.S. import standards and processed using U.S. labor.

Aging imported wine is an interesting way to take advantage of an FTZ. A U.S. wine importer purchases what is essentially newly fermented grape juice from French vineyards and ships it to an FTZ in the United States for aging. After several years, the now-aged French wine can be shipped throughout the United States when an appropriate U.S. import tariff will be assessed on the original value of the grape juice instead of on the market value of the aged wine. If tariff rates are sufficiently high, the cost savings from using an FTZ can be enormous.

Another effective use of an FTZ is illustrated by companies such as Ford and Dell Computer. These companies rely heavily on imported components such as auto parts and computer chips, respectively. In such a case, the companies can have part of their manufacturing facilities designated as subzones of an FTZ. This way, they can use their facilities as they ordinarily do, yet enjoy all of the benefits accruing from an FTZ. Furthermore, if foreign components are substantially transformed within an FTZ located in the United States, the finished product may be designated as “Made in

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<sup>59</sup>“US Foreign-Trade Zones Boost Employment, Exports,” *Journal of Commerce*, September 5, 2005, p. 24.



the U.S.A.” To the extent customers have a favorable attitude toward the “Made in the U.S.A.” country-of-origin, such labeling has additional marketing advantage.

At the macro-level, all parties to the arrangement benefit from the operation of trade zones. The government maintaining the trade zone achieves increased investment and employment. The firm using the trade zone obtains a beachhead in the foreign market without incurring all costs normally associated with such an activity. As a result, goods can be reassembled, and large shipments can be broken down into smaller units. Duties could be due only on the imported materials and the component parts rather than on the labor that is used to finish the product.

In addition to free trade zones, various governments have also established export processing zones and special economic areas. Japan, which has had a large trade surplus over the years, has developed a unique trade zone program specifically designed to increase imports rather than exports (see **Global Perspective 15-5**). The common dimensions of all of these zones are that special rules apply to them, when compared with other regions of the country, and that the purpose of these rules is the desire of governments to stimulate the economy—especially the export side of international trade. Export processing zones usually provide tax- and duty-free treatment of production facilities whose output is destined for foreign markets. The *maquiladoras* of Mexico is one example. (For those interested in Mexico’s *maquiladoras*, see Appendix to this chapter.)

For the logistician, the decision of whether to use such zones is framed by the overall benefit for the logistics system. Clearly, transport and re-transport are often



## **GLOBAL PERSPECTIVE 15-5**

### **JAPAN'S FOREIGN ACCESS ZONE TO INCREASE IMPORTS AND INWARD DIRECT INVESTMENT RATHER THAN EXPORTS**

Japan has made some of its major trading partner countries turn protectionist because it has run a huge trade surplus over the years. To increase imports into Japan rather than to encourage exports from Japan, the Japanese government announced a basic plan for the expansion of imports in 1993. It is a \$20 billion program that created a national network of 31 import promotion areas scattered across the country, or as the Japanese call them “foreign access zones,” where importers and foreign investors get special tax breaks and other advantages. The foreign access zones provide a major opportunity for U.S. and other foreign businesses setting up beachhead in Japan.

Operations based in the access zones also get around most, if not all, of the existing impediments to foreign investment in Japan. The zones provide inexpensive warehousing and storage, free or low-cost translation and marketing assistance, access to less expensive regional labor, and most important of all, local marketing opportunities that bypass the large

trading companies and their traditional keiretsu distribution channels.

Kyushu, Japan’s southernmost island, has been one such testing ground for this open approach. It is being promoted as the “crossroads of Asia” (it is closer to Shanghai and Seoul than it is to Tokyo). Also known as “Silicon Island,” Kyushu hosts a clutch of US high-tech manufacturers (including Texas Instruments which employs 1,000 people at its Hiji plant). The island’s two main cities, Fukuoka and Kitakyushu have fully espoused the Japanese government’s foreign access zone concept. Across Kyushu, cities and prefectures are competing with one another to offer the best incentives to incoming business.

In late 1990s, Kitakyushu raised its cash incentives for building new factories and software houses from \$1.8 million to \$4.5 million. Other incentives include discounted office space in a newly-constructed Asian trade center, a land leasing program at 8 percent of evaluated cost, and joint venture opportunities with local companies boasting private electricity supplies.

Kitakyushu’s port, Hibikinada, is being deepened and a new \$1.5 billion international airport is being constructed on reclaimed land nearby. Kyushu is committed to a future role as an Asian production base—but for the moment it is more likely to be used as an entry point for the Japanese market.

*Source:* Ronald A. Morse, Alan Kitchin, “Japan: A Place in the Sun,” *Director*, 51 (September 1997), pp. 77–80; “Kitakyushu: Transportation and Distribution,” <http://www.city.kitakyushu.jp/page/english/02transport/index.html>, accessed August 3, 2006; and “Measures to Promote Imports,” the Ministry of Economic, Trade, and Industry’s website, <http://www.meti.go.jp/english/report/data/cFDI071e.html>, accessed September 1, 2009.

required, warehousing facilities need to be constructed, and material handling frequency increases. However, the costs could well be balanced by the preferential government treatment or by lower labor costs.

## INTERNATIONAL DISTRIBUTION CHANNEL

Both consumer and industrial products go through some form of distribution process in all countries and markets. International distribution channels are the link between a firm and its customers in markets around the world. For a firm to realize its marketing objectives, it must be able to make its product accessible to its target market at an affordable price. A firm cannot do this if its distribution structures are inflexible, inefficient, and burdensome. Creating a reliable and efficient international distribution channel can be one of the most critical and challenging tasks that an international marketing manager can face.

In essence, companies have two options when it comes to configuring their international distribution systems:

1. A firm may decide to sell direct to its customers in a foreign market by using its own local sales force or through the internet.
2. A firm may decide to use the resources of independent intermediaries, most often at the local level.

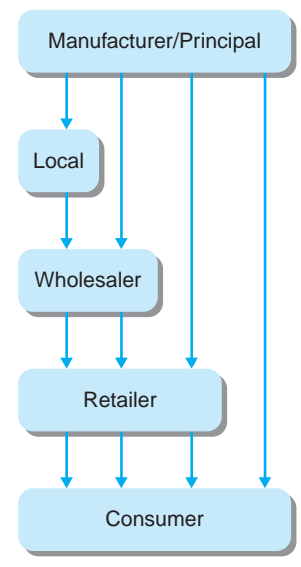
An Australian company, ResMed, a manufacturer of medical respiratory devices, is an example of a firm that uses the first option. Most of ResMed's foreign sales are generated by its own sales staff operation from its own sales offices in the United States, the United Kingdom, and throughout Europe and South-East Asia. Although this direct distribution channel may appear to be the most effective, it is only successful if customers are geographically homogeneous, have similar consumption patterns and are relatively few.<sup>60</sup> Dell and Hewlett-Packard are two examples of multinational companies in the same personal computer industry with different distribution systems. Dell distributes its PCs directly from its assembly factories to end-users anywhere in the world, while Hewlett-Packard uses international agents and retailers. Dell customers may have to wait several days or weeks to get a PC, whereas Hewlett-Packard customers can walk away from a retailer with a PC immediately. In deciding which distribution channels to adopt, a firm needs to consider the cost of meeting customer needs. Therefore, a firm needs to evaluate the impact on customer service and cost as it compares different international distribution options.

Distribution channels that use intermediaries, agents, or merchants positioned between the manufacturer and customers in a distribution channel, can often have several levels and employ several intermediaries, each with its own specific purpose within the distribution channel. The use of intermediaries can be a relatively easy, quick and low-cost entry strategy into a new foreign market, therefore their frequent use by many companies, particularly small-to-medium companies that do not have the resources to operate their own marketing and distribution system in a foreign market. **Exhibit 15-5** shows some of the distribution channel configurations.

Within a distribution channel, a firm can elect to go through one or more agent or merchant intermediaries. The basic difference between agent and merchant intermediaries is the legal ownership of goods. An *agent intermediary* does not take title (ownership) to the goods. Rather, it distributes them on behalf of the principal company in exchange for a percentage of the sale price. *Merchant intermediaries* hold title to the goods they exchange and operate in their own right as independent

## Channel Configurations

**EXHIBIT 15-5**  
INTERNATIONAL  
DISTRIBUTION  
CHANNEL  
ALTERNATIVES



<sup>60</sup>Bruce Seifert and John Ford, "Export Distribution Channels," *Columbia Journal of World Business*, 24(2), 1989, pp. 15-22.

businesses. The names given to intermediaries can vary from country to country and from industry to industry in the same country.

Apart from meeting customer needs and costs, several other factors influence the choice of distribution channel configuration used by a firm to gain access to its international markets, including the characteristics of the company's customers; the range and choice of intermediaries; competitors; marketing environment; and the strengths and weaknesses of the company itself.<sup>61</sup> However, these factors stand out as being particularly important in selecting a proper distribution channel in terms of market coverage, control and cost.

Coverage refers to the market segments or geographic area a firm's products are represented in. Although full market coverage may be the company's objective, it is not always possible in a foreign market; nor may it be desirable. In some countries, such as China and Brazil, three or four major cities contain the country's most affluent and viable market segments for foreign products. If a firm wishes to attempt full market coverage, it may have to use several intermediaries.

The more intermediaries in the distribution channel, the more likely the firm loses control over all aspects the marketing of its products. If a firm wishes to have complete control over such aspects of its marketing as establishing prices, the types of outlets its products should be available in, inventory levels and promotion, it has little choice but to develop its own company-controlled distribution system.

Although direct distribution by a firm may allow it to have complete control over all aspects of the marketing of its products, it brings significant cost issues. This is particularly true if the sale base is relatively small. Channel costs include the margins, markups or commissions payable to the various intermediaries. Although these costs may inflate a product's price in a foreign market, companies may be disappointed in believing that they can reduce channel costs by using a direct distribution strategy. Local costs associated with maintaining a salesforce, inventory, providing credit and advertising may offset any cost savings.

In reality, most often, no one factor is more important than another in configuring an international distribution channel. A channel with optimum coverage and control at a minimum cost is the preferred choice but, in practice, a balance has to be struck.

## Channel Management

Use of an indirect distribution channel always results in loss of some control over a company's marketing operations. This loss of control can be greater in international distribution channels than in domestic ones because the company has no permanent presence in the foreign market and must rely heavily on the actions of its foreign intermediaries. Differences in expectations and goals between the company and its foreign intermediaries can lead to channel conflict. To deal with this, companies must actively manage the relationship between themselves and their intermediaries, and often among intermediaries themselves, in an effort to create a harmonious relationship characterized by loyalty, trust, cooperation, and open communication.<sup>62</sup>

The selection of intermediaries becomes crucial to the process of maintaining harmonious channel relationships for a company that wishes to achieve its foreign sales and other marketing objectives. Some guidelines for selecting and dealing with foreign intermediaries include:<sup>63</sup>

- Search for intermediaries capable of developing markets, not just those with good contacts.
- Regard intermediaries as long-term partners, not as a temporary means of market entry.

<sup>61</sup>Bert Rosenbloom and Trina L. Larsen, "International Channels of Distribution and the Role of Comparative Marketing Analysis," *Journal of Global Marketing*, 4(4), 1991, pp. 39–54.

<sup>62</sup>Leonidas C. Leonidou, Constantine S. Katsikeas, and John Hadjimarcou, "Building Successful Export Business Relationships: A Behavioral Perspective," *Journal of International Marketing*, 10(3), 2002, pp. 96–115.

<sup>63</sup>David Arnold, "Seven Rules of International Distribution," *Harvard Business Review*, 78 (November/December), 2000, pp. 131–37.

- Actively search for and select intermediaries; do not let them select you.
- Support your intermediaries by committing resources such as marketing ideas, funds and know-how.
- Ensure intermediaries provide the information you need, including up-to-date market information and detailed sales performance data.
- Attempt to maintain as much control as possible over the marketing strategy.
- Try to make links with national intermediaries as soon as possible after entering a foreign market.

In addition, the company should always maintain a genuine interest in both the intermediary and the foreign market, be prepared to adapt to the local competitive conditions, and attempt to minimize disagreements with an intermediary as quickly as possible.

## INTERNATIONAL RETAILING



The face of distribution that consumers interact with is the retail store at which they shop. In developed parts of the world, retailing employs between 7 percent and 12 percent of the workforce and wields enormous power over manufacturers and consumers. **International retailing** is any retailing activity that transcends national borders. Over the last two decades, retailers have grown into some of the world's largest companies, rivaling or exceeding manufacturers in terms of global reach. They have been growing much faster abroad than in their domestic markets. The world's top 10 retailers' international operations are summarized in **Exhibit 15-6**.

In search of new opportunities, retailers have not only diversified across geographical market boundaries but also across product boundaries. First, most leading retailers have developed their own private-label product lines as well as sell the products of leading national- and international-brand manufacturers. Second, retailers have increasingly adopted the discount format. As a result, more consumers are getting used to their streamlined, no-frills retail format. Third, retailers have also increasingly embraced the virtual store (e-commerce) format.<sup>64</sup>

Take a look at the world's largest discount store chain, Wal-Mart of the United States. Wal-Mart has become the largest company in the United States and the world's

### EXHIBIT 15-6

#### INTERNATIONAL OPERATIONS OF THE WORLD'S TOP 10 RETAILERS

<i>Rank</i>	<i>Retail Company</i>	<i>Country of Origin</i>	<i>Total Sales (in \$ billion)</i>	<i>Foreign Sales (%)</i>	<i>Number of Foreign Markets</i>
1	Wal-Mart	United States	376.4	22	14
2	Carrefour	France	122.2	53	37
3	Metro Group	Germany	87.4	55	32
4	Tesco	Britain	86.8	25	13
5	Seven & I	Japan	79.1	34	8
6	Ahold	Netherlands	77.5	82	8
7	Kroger	United States	69.5	0	0
8	Sears	United States	64.8	12	2
9	Costco	United States	64.7	20	8
10	Target	United States	62.6	0	0

Source: Global Retail Intelligence, [www.planetretail.net](http://www.planetretail.net), and *Fortune*, 2006.

<sup>64</sup>Katrijn Gielens and Marnik G. Dekimpe, "Global Trends in Grocery Retailing," in Masaaki Kotabe and Kristiaan Helsen, ed., *The SAGE Handbook of International Marketing*, London: SAGE Publications, 2009, pp. 413–28.

largest retailer with annual revenues of about \$376.4 billion in 2006. As of September 2008, the company had 914 Wal-Mart stores, 2,576 Supercenters, 594 SAM'S Clubs, and 143 Neighborhood Markets in the United States. Internationally, the Company operated units in Argentina (24), Brazil (315), Canada (305), Central America (461), China (206), Japan (392), Mexico (1,045), Puerto Rico (54), and the United Kingdom (344). Despite its aggressive foreign expansion, however, Wal-Mart experienced continued difficulties in such markets as Argentina and Puerto Rico, pulling out of Germany and South Korea, as well as declining sales in Japan.

Wal-Mart is Procter & Gamble's single largest customer, buying as much as the household product giant sells to Japan. Wal-Mart is extremely successful in the NAFTA region, but not necessarily the most global retailer. Actually only 10 percent of its sales are generated outside its core NAFTA market, compared to Carrefour, which generates more than 20 percent of sales outside Europe. Wal-Mart's success lies in low tariffs in the NAFTA zone, cheap labor and low-cost logistics, with savings passed on to consumers.<sup>65</sup> In other foreign markets, however, Wal-Mart's performance has been lackluster, primarily due to its unwillingness to adapt to local market conditions (See, for example, the case study on Wal-Mart operations in Brazil, included in the textbook).

Retailing involves very locally entrenched activities, including stocking of an assortment of products that local consumers prefer, catering to local shopping pattern (e.g., shopping frequency, time of shopping, and traffic jam), and seasonal promotion as well as meeting local competition on a daily basis. International retailers that are willing to adapt their strategy to local ways of doing things while taking advantage of their managerial and information technology capabilities seem to be more successful than those that try to extend their ways of doing things abroad. In general, European retailers tend to be more willing to customize their marketing and procurement strategies to various local market peculiarities than are U.S. or Japanese retailers.<sup>66</sup> Wal-Mart, which tended to extend its U.S.-based procurement and product assortment strategies in its earlier foreign expansion, resulting in a huge market adjustment problem, is now moving slowly to convert the stores it has acquired in Europe into retailers unlike anything Americans would recognize as Wal-Marts.<sup>67</sup>

Wal-Mart also began its entry into the difficult Japanese retail market in mid-2002. It increased its equity stake in Seiyu, Japan's fourth-largest supermarket group, paving the way for a low-cost strategy in Japan. However, Wal-Mart is expected to have an upward battle in Japan as quality-conscious Japanese consumers associate its emphasis on "Everyday Low Price" with poor quality, or "yasu-karou, waru-karou," which is a Japanese phrase used to express the feeling that "you get what you pay for" or conversely, the more you pay, the better quality you must be getting. Take organic food as one example. Japanese consumers tend to be less tolerant of skin blemishes and lack of size and shape uniformity in organic produce.<sup>68</sup> Consequently, Wal-Mart in Japan suffered continued declining sales and increasing losses in 2007.<sup>69</sup>

On the other hand, Carrefour, as a typical European retailer willing to be more accommodating to local needs and culture, approaches foreign markets differently. With some 10 years of experience in the Chinese market and a good understanding of the Chinese consumer, the French retailer understands that Chinese consumers are eager to learn about Western products and has incorporated numerous signs providing detailed product information in its supermarkets in China. For example, in the bakery department, Carrefour provides detailed explanation regarding the different flours used and their associated benefits. To promote French wine to consumers, Carrefour

<sup>65</sup>"How NAFTA Helped Wal-Mart Reshape the Mexican Market," *Wall Street Journal*, August 31, 2001, p. A1.

<sup>66</sup>Brenda Sternquist, *International Retailing, 2nd ed.*, New York: Fairchild Publications, 2007.

<sup>67</sup>Ernest Beck and Emily Nelson, "As Wal-Mart Invades Europe, Rivals Rush to Match Its Formula," *Wall Street Journal Interactive Edition*, <http://interactive.wsj.com/>, October 6, 1999.

<sup>68</sup>Hatakeyama Noboru, "Highly Demanding Japanese Consumers," *Japan Spotlight Bimonthly*, 23 (September/October 2004), pp. 2-5; and "Wal-Mart to Make Seiyu A Group Company," *NikkeiNet Interactive*, <http://www.nni.nikkei.co.jp/>, November 2, 2005.

<sup>69</sup>"Wal-Mart Expects Bigger 2007 Loss in Japan," *Wall Street Journal*, February 13, 2008, p. B14.

**EXHIBIT 15-7****SWOT ANALYSIS OF CARREFOUR'S OPERATIONS IN CHINA AND WORLDWIDE****Strengths (in the Chinese market)**

- 10 years of experience in China
- Good understanding of the Chinese consumer
- Clear leader in the Shanghai market
- First mover advantage in many of the primary and secondary cities
- Chinese managers have been trained in its own in-house training center
- Corner on the expatriate and high-end market in primary cities
- Good competition on price, putting pressure on both international and domestic retailers
- Dia format expansion plans to enable Carrefour to compete in growing convenience market

**Weakness (in the Chinese market)**

- Tailored hypermarkets to the upper end of the market, which could be a problem when penetrating less affluent cities
- Received negative media coverage regarding its relationship with the government, local supplier management, and store opening strategy impact on local retailers

**Opportunities (in the global market)**

- Dominant “enlarged home market” position
- Unrivalled international presence and experience of emerging markets
- Multi-format strategy
- Global vision and organization
- World-class merchandising
- Customer knowledge

**Threats (in the global market)**

- Key gaps in international presence (i.e. United States, United Kingdom, and Germany)
- Relatively small turnover in comparison with Wal-Mart
- Slow pace of expansion in some emerging markets
- Lack of scale in Central European markets

Source: “Carrefour 2005,” Retail Analysis, iReport series, <http://www.igd.com/analysis/>, accessed February 20, 2006.

had a French wine specialist provide advice and offer wine tasting to passing shoppers. The company was a clear market leader in Shanghai and other primary and secondary cities (See **Exhibit 15-7** for Carrefour’s SWOT analysis of its China and global operations). After all, it is crucial for retailers to understand that there is no such a thing as a homogenous consumer market. For example, each Asia Pacific market is different and presents a different level of opportunity. Because each consumer has his or her own purchasing habits, there is no one winning Asian retail formula for both retailers and suppliers.<sup>70</sup>

Retailers increasingly rely on **private-label brands (store brands)** to appeal to price-conscious customers as well as to broaden their product offerings. Worldwide, the share of private labels as a percentage of all consumer packaged goods has grown from 14 to 18 percent.<sup>71</sup> For example, European retail chains such as Tesco sell goods under their own name made by a manufacturer called McBride, based near Manchester, England. McBride is not a household name although European consumers nearly spend \$1 billion on household cleaners and personal care goods made by the company.<sup>72</sup> Private labels come under various guises. At one extreme are the generic products that are packaged very simply and sold at bottom prices. At the other extreme are premium store brands that deliver quality sometimes superior to national brands. Private labels

### Private-Label Branding (Store Brands)

<sup>70</sup>“Carrefour 2005,” Retail Analysis, iReport series, <http://www.igd.com/analysis/>, accessed February 20, 2006.

<sup>71</sup>Nirmalya Kumar and Jan-Benedict Steenkamp, *Private Label Revolution* (Cambridge, MA: Harvard Business School Press, 2006).

<sup>72</sup>“The Big Brands Go Begging,” *Business Week* (March 21, 2005): 24–25.

have made big inroads in several European countries. In Japan and most other Asian countries, on the other hand, store brands are still marginal players. Consumers in this region tend to be extremely brand loyal.<sup>73</sup>

As a branding strategy, private labeling is especially attractive to MNCs that face well-entrenched incumbent brands in the markets they plan to enter. Under such circumstances, launching the product as a store brand enables the firm to get the shelf space access that it would otherwise be denied. In Japan, manufacturers that do not have the resources to set up a distribution channel network have tied up with local retailers to penetrate the market. Agfa-Gevaert, the German/Belgian photographic filmmaker agreed to supply a store brand film to Daiei, a major Japanese supermarket chain.<sup>74</sup> Eastman Kodak also decided to offer private-label film in Japan. Most of the distribution system is locked up by the local competitors, Fuji and Konica. Kodak hoped to grab a larger share of the Japanese film market by making a private-label film for the Japanese Cooperative Union, a group of 2,500 retail stores.<sup>75</sup>

### “Push” versus “Pull”

At the heart of this retailing revolution is the fundamental change in the way goods and services reach the consumer. Previously, the manufacturer or the wholesaler controlled the distribution chain across the world. The retailer’s main competitive advantage lay in the merchandising skills of choosing the assortment of goods to sell in the store. The retailer’s second advantage—closeness to the customer—was used to beat the rival retailer across the street. The manufacturer decided what goods were available and, in most countries, at what price they could be sold to the public.

That distribution system of earlier times has been turned upside down. The traditional supply chain powered by the manufacturing *push* is becoming a demand chain driven by consumer *pull*—especially in the developed countries where the supply and variety of goods is far above base-level requirements of goods and services. In most industrialized countries, resale price maintenance—which allows the supplier to fix the price at which goods can be sold to the final customer—has either been abolished or bypassed. The shift in power in the distribution channel is fundamentally a product of the application of information technology to store management.

Many multinational companies from industrialized countries are now entering markets and developing their distribution channels in developing countries. A study by New York University’s Tish Robinson showed that companies from Western countries seem to have difficulty competing with Japanese companies in fast-growing Southeast Asian markets and attributed this to different styles in managing distribution channels. In just three decades, for example, the consumer electronics distribution systems in Malaysia and Thailand have come to be characterized by a striking presence of exclusive dealerships with Japanese multinational manufacturers such as Panasonic, Sanyo, and Hitachi.

For example, Panasonic practices a push strategy with 220 exclusive dealerships in Malaysia and 120 in Thailand. In Malaysia, these exclusive dealerships represent 65 percent of total Panasonic sales, although these numbers represent only 30 percent of the retailers selling Panasonic products. On the other hand, General Electric and Philips use a pull strategy, relying on the multivendor distribution system without firm control of the distribution channel as practiced in Western countries. Competitors from the United States and Europe are feeling locked out of Japanese companies’ tightly controlled distribution channels in Southeast Asia.<sup>76</sup> This information suggests that a push strategy is more effective than a pull strategy in emerging markets.

<sup>73</sup>“No global private label quake—yet,” *Advertising Age International*, January 16, 1995, p. I-26.

<sup>74</sup>“Japan’s brands feel the pinch, too,” *Financial Times*, April 28, 1994, p. 9.

<sup>75</sup>“Kodak pursues a greater market share in Japan with new private-label film,” *Wall Street Journal*, March 7, 1995, p. B-4.

<sup>76</sup>Patricia Robinson, “The Role of Historical and Institutional Context in Transferring Distribution Practices Abroad: Matsushita’s Monopolization of Market Share in Malaysia,” *The American Marketing Association and the Japan Marketing Association Conference on the Japanese Distribution Strategy*, November 22–24, 1998.

## On-Time Retail Information Management

Cutting down on stocks in inventory is a tempting thing to do to achieve cost savings. The chief reason for holding stocks is to smooth out bumps in the supply chain. However one of the biggest sources of inefficiency in logistics occurs exactly because distribution channel members just do so independently of each other. It is known as the “**bullwhip effect**”—after the way the amplitude of a whiplash increases down the length of the whip when it is cracked. Procter & Gamble discovered this effect more than a decade ago. The company noticed an odd thing about the shipment of Pampers, its well-known brand of disposable diapers. Although the number of babies and the demand for diapers remained relatively stable, orders for Pampers fluctuated dramatically. This was because information about consumer demand can become increasingly distorted as it moves along the supply chain. For instance, when a retailer sees a slight increase in demand for diapers, it orders more from a wholesaler. The wholesaler then boosts its own sales forecast, causing the manufacturer to scale up production. But when the increase in demand turns out to be short-lived, the distribution channel is left with too much stock and orders are cut back.<sup>77</sup>

Computer systems can now tell a retailer instantly what it is selling in hundreds of stores across the world, how much money it is making on each sale, and increasingly, who its customers are. This information technology has had two consequences.

**Reduced Inventory.** First, a well-managed retailer no longer has to keep large amounts of inventory—the stock burden has been passed upstream to the manufacturer. In addition, the retailer has a lower chance of running out of items. For a company such as Wal-Mart, with more than 60,000 suppliers in the United States alone, keeping everyone informed is critical. The company does this through its Retail Link system, which suppliers can tap into over a secure internet connection. They can check stock levels and sales down to the level of individual stores. Wal-Mart may have a brutal reputation for driving down costs, but its investment in information systems has played a large part in building one of the world’s most efficient supply chains, capable of handling more than \$300 billion of annual sales.<sup>78</sup> Another good examples involves 7-Eleven stores in Japan. The moment a 7-Eleven store customer in Japan buys a soft drink or a can of beer, the information goes directly to the bottler or the brewery and immediately goes into the production schedule and the delivery schedule, actually specifying the hour at which the new supply must be delivered and to which of the 4,300 stores. In effect, therefore, 7-Eleven controls the product mix, the manufacturing schedule and the delivery schedule of major suppliers such as Coca-Cola or Kirin Breweries. The British retailer Sainsbury’s supply chain is geared to provide inputs on demand from the stores with a scheduled truck service to its 350 stores. The stores’ ordering cycle is also set to match the loading and arrival of the trucks, which run almost according to a bus schedule.

Further attempts to reduce inventory can also be made jointly by retail chains for their mutual benefit. For example, in February 2000, Sears, Roebuck & Co., and Carrefour, joining the rush to the business-to-business electronic-commerce arena, announced a joint venture to form an online purchasing site where the retailers will buy about \$80 billion in combined purchases. The venture, called GlobalNetXchange (GNX), creates the industry’s largest supply exchange on the internet. GNX is an e-business solution and service provider for the global retail industry. Now suppliers can monitor retailers’ sales, reduce inventory levels to a minimum, and better plan manufacturing of products on a hosted platform. It makes money by charging fees to suppliers or retailers using the exchange and is set up as a separate entity with its own management, employees and financing.<sup>79</sup>

**Market Information at the Retail Level.** Second, the retailer is the one that has real-time knowledge of what items are selling and how fast. This knowledge is used to

<sup>77</sup>“Shining examples,” *Economist*, June 17, 2006, Special Section, pp. 4–6.

<sup>78</sup>Ibid.

<sup>79</sup>“Leading Trading Exchanges Link Together,” *Food Logistics*, June 2005, p. 8.



extract better terms from the manufacturers. This trend in the transfer of power to the retailer in the developed countries has coincided with the lowering of trade barriers around the world and the spread of free-market economies in Asia and Latin America. As a result, retailers such as the United States' Toys 'R' Us, Tower Records, and Wal-Mart; Britain's Marks & Spencer and J. Sainsbury; Holland's Mark; Sweden's IKEA; France's Carrefour; and Japan's 7-Eleven Stores are being transformed into global businesses.

A firm can use strong logistics capabilities an offensive weapon to help gain competitive advantage in the marketplace by improving customer service and consumer choice, and by lowering the cost of global sourcing and finished goods distribution.<sup>80</sup> These capabilities become increasingly important as the level of global integration increases, and as competitors move to supplement low-cost manufacturing strategies in distant markets with effective logistic management strategies. This point is well illustrated by Ito-Yokado's takeover in 1991 of the Southland Corporation, which had introduced 7-Eleven's convenience store concept in the United States and subsequently around the world. Seven & I (formerly, Ito-Yokado) of Japan licensed the 7-Eleven store concept from Southland in the 1970s and invented just-in-time inventory management and revolutionized its physical distribution system in Japan. The key to Ito-Yokado's success with 7-Eleven Japan has been the use of its inventory and physical distribution management systems to accomplish lower on-hand inventory, faster inventory turnover, and most importantly, accurate information on customer buying habits. 7-Eleven Japan now implements its just-in-time physical distribution system in 7-Eleven stores in the United States.<sup>81</sup>

Thus, distribution is increasingly becoming concentrated; manufacturing, by contrast, is splintering. Thirty-five years ago, the Big Three automakers shared the U.S. auto market. Today the market is split among 10—Detroit's Big Three, five Japanese carmakers, and two German carmakers. Thirty-five years ago, 85 percent of all retail car sales occurred in single-site dealerships; even three dealership chains were uncommon. Today, a fairly small number of large-chain dealers account for 40 percent of the retail sales of cars.

Given the increased bargaining power of distributors, monitoring their performance has become an important management issue for many multinational companies. Although information technology has improved immensely, monitoring channel members' performance still remains humanistic. In general, if companies are less experienced in international operations, they tend to invest more resources in monitoring their channel members' activities.<sup>82</sup> As they gain in experience, they may increasingly build trust relationships with their channel members and depend more on formal performance-based control.<sup>83</sup>

### Retailing Differences across the World

The density of retail and wholesale establishments in different countries varies greatly. As a general rule, industrialized countries tend to have a lower distribution outlet density than the emerging markets. Part of the reason for this difference stems from the need in emerging markets to purchase in very small lots and more frequently because of low income and the lack of facilities in homes to keep and preserve purchased items. At the same time, the advanced facilities available in the developed world allow a much higher square footage of retail space per resident, due to the large size of the retail outlets.

<sup>80</sup>Roy D. Shapiro, "Get Leverage from Logistics," *Harvard Business Review*, 62 (May–June 1984), pp. 119–26.

<sup>81</sup>Masaaki Kotabe, "The Return of 7-Eleven . . . from Japan: The Vanguard Program," *Columbia Journal of World Business*, 30 (Winter 1995), pp. 70–81.

<sup>82</sup>Esra F. Gencturk and Preet S. Aulakh, "The Use of Process and Output Controls in Foreign Markets," *Journal of International Business Studies*, 26 (Fourth Quarter, 1995), pp. 755–86.

<sup>83</sup>Preet S. Aulakh, Masaaki Kotabe, and Arvind Sahay, "Trust and Performance in Cross Border Marketing Partnerships: A Behavioral Approach," *Journal of International Business Studies*, 27 (Special Issue 1996), pp. 1005–1032.

Japan's retail industry has a number of features that distinguish it from retailing in western countries. The major ones are a history of tight regulation—albeit being increasingly deregulated—less use of cars for shopping, and the importance of department stores in the lives of most people. For more than forty years until recently, the Large-Scale Retail Store Law<sup>84</sup> in Japan helped to protect and maintain small retail stores (12 retail stores per 1,000 residents in Japan vs. 6 retail stores per 1,000 residents in the United States in 1994) and, partly in consequence, a multilayered distribution system. Consequently, Japan has experienced relatively poor proliferation of mega-stores and large-scale shopping centers. Since Japan's urban areas are crowded, roads are congested and parking is expensive or non-existent, many people use public transport to shop. Consequently, shopping is usually within a rather small radius of the home or workplace and products, especially food, generally are bought in small quantities. Shopping, therefore, is more frequent. This situation is further encouraged by Japanese cooking's requirement for fresh ingredients. Retail stores that not only stay open 24 hours a day throughout the week but also practice just-in-time delivery of fresh perishable foods, such as 7-Eleven and Lawson, are extremely popular in Japan. Discount stores have also gained in popularity among recession-weary, now price-conscious Japanese consumers. Similarly, department stores are crucial in everyday Japanese life. The variety of goods and services offered by the average department store ranges well beyond that in most retail outlets abroad. Large department stores stock everything from fresh food and prepared dishes, to discount and boutique clothing, and household and garden goods. Many have children's playgrounds and pet centers—some with displays resembling a miniature zoo. Museum-level art and craft exhibitions often are housed on upper floors, and both family and exquisite restaurants usually on the top floor. It is a very different—and often difficult—market for foreign retailers to enter. See **Global Perspective 15-6** for information on international retailers entering the Japanese market.

In Germany, store hours are limited. Stores may not open on Sundays and generally close on weekdays by 6 p.m. They can be open one Saturday in a month until 2:30 p.m. The IFO Economic Research Institute in a German government-commissioned report has recommended that stores be allowed to remain open from 6 a.m. to 10 p.m. on weekdays and until 6 p.m. on Saturdays; however, stores are still expected to be closed on Sundays.<sup>85</sup> Hence, although these laws are now being reviewed, the proposed changes contrast with the situation in the United States, where retail stores may remain open seven days a week, 24 hours a day. Keeping stores open in this manner requires very strong logistics management on the part of retailers and the manufacturing firms supplying the retailers. The sending organization, the receiving organization, and the logistics provider (if applicable) have to work very closely together.

In China, basket shopping is still considered the norm for most consumers, and they spend on average \$5 per visit. Retailers adjust their store layouts to cope with a large number of basket shoppers. Wal-Mart, for instance, has set up basket-only checkouts in its Supercenters to enable faster checkout. Because low price is the most competitive advantage, retailers spread a strong price message throughout most of the stores, in both Chinese and English that promote both everyday low prices and promotional items throughout food and non-food departments. As a result, high volumes of goods are heavily merchandised by large promotions in bins and in bulk floor stacks. In general, a store flyer is a major marketing tool and is designed to drive foot traffic by presenting discounts for household commodities. Recent research analysts summarized the following key differences between hypermarkets in China and those in the West. In China:

<sup>84</sup>Jack G. Kaikati, "The Large-Scale Retail Store Law: One of the Thorny Issues in the Kodak-Fuji Case," *The American Marketing Association and the Japan Marketing Association Conference on the Japanese Distribution Strategy*, November 22–24, 1998.

<sup>85</sup>Marco Grünhagen, Robert A. Mittelstaedt, and Ronald D. Hampton, "The Effect of the Relaxation of 'Blue Laws' on the Structure of the Retailing Industry in the Federal Republic of Germany," presented at 1997 AMA Summer Educators' Conference, August 2–5, 1997.



## GLOBAL PERSPECTIVE 15-6

### FOREIGN RETAILERS AND DIRECT MARKETERS ENTERING INTO JAPAN EN MASSE

In Japan, until early 1990s, the Large-Scale Retail Store Law gave small retailers and wholesalers disproportionate influence over the Japanese market by requiring firms planning to open a large store to submit their business plan to the local business regulation council, the local chamber of commerce (made up of those small retailers and wholesalers to be affected), and the Ministry of Economy, Trade and Industry (METI). As a result of this “Catch-22” requirement, the process would take between 12 and 18 months, and was seen by foreign retailers as an almost insurmountable entry barrier.

Under U.S. government pressure, the Large-Scale Retail Store Law was relaxed in 1992 and in 1994. Under the amendments, the task of examining applications for new stores was transferred from the local business regulation council to the Large-Scale Retail Store Council, a government advisory board under the METI. Consequently, the maximum time required for various applications and approvals is now set at 12 months. These two revisions of the Large-Scale Retail Store Law have contributed to the increase in the number of applications requesting approval to establish a large retail store. According to the Japan Council of Shopping Centers estimate, shopping centers have opened at the rate of more than 100 per year since 1992.

Toys ‘R’ Us exploited this opportunity and was ultimately successful in cracking the Japanese market. It boasted a total of 37 stores in 1996, and planned to open an average of 10 more per year across the country. Following the success of Toys ‘R’ Us, other foreign-based retailers have begun to crack the Japanese market. Nearly a dozen other such foreign retailers have opened their stores in Japan in the last decade. Foreign firms face more difficulties when opening a general merchandise store than one for a niche product because the large Japanese general merchandise stores, such as Daiei and Ito-Yokado are well entrenched and dominate the market. Despite such difficulties, Wal-Mart (U.S.) with a partial acquisition of Japan’s struggling Seiyu, Carrefour (France), and Metro (Germany) entered the Japanese market. As attested by Carrefour’s early departure, whether they can take root there is too early to tell, however.

On the other hand, foreign niche retailers, including Toys ‘R’ Us, which face few competitors, have been fairly successful. For example, U.S.-based Tower Records, U.K.-based HMV, and Virgin Megastores have opened comparably large stores,

selling both imported and domestic music tapes and CDs at competitive prices. Specialty retailers of outdoor goods and clothes are other retailers to pour into the Japanese market in the last ten years. Among them, U.S.-based L.L. Bean and Eddie Bauer are the market leaders.

While Toys ‘R’ Us and Tower Records have a wholly owned subsidiary in Japan, L.L. Bean and Eddie Bauer teamed up with a well-known Japanese company. L.L. Bean Japan is a Japanese franchise 70 percent owned by Japan’s largest retailing group, Seibu, and 30 percent by Panasonic. Eddie Bauer Japan is a joint venture of Otto-Sumitomo, a Sumitomo Group mail-order retailer, and Eddie Bauer USA. In general, forming a joint venture or a franchise allows new entrants to start faster, although they could lose control of the company’s operation in Japan. Future would-be entrants should bear in mind that Japan is not an easy place to do business because, in addition to regulations, land and labor costs are extremely high.

On the other hand, direct marketing—another form of retailing—has blossomed into a \$20-billion industry despite Japan’s continued recession. Ten percent of this market belongs to foreign companies including Lands’ End, an outdoor clothing maker, and Intimate Brands, which distributes Victoria’s Secret catalogs. “For those companies and individuals who say that Japan is a closed market, I really can’t think of an example of an easier market entry than catalog sales,” says Cynthia Miyashita, president of mail-order consultant Hemisphere Marketing Inc. in Japan. In high-context cultures like Japan, however, less direct, low-key approaches in which a mood or image is built in an attempt to build a relationship with the audience is considered more appropriate in approaching prospect customers than in low-context cultures such as the United States.

Foreign mail-order companies sidestep Japan’s notoriously complex regulations, multilevel distribution networks and even import duties. Here are a few cases in point:

- Japan’s post offices are unequipped to impose taxes on the hundreds of thousands of mail-order goods that flood the postal system, making direct marketing products virtually duty-free. Local competitors who import products in bulk have to pay duties, forcing up their prices.
- Many products, such as vitamins and cosmetics, are subject to strict testing regulations in Japan, but those rules do not apply if the products are sold through mail order for personal consumption. That gives direct-mail customers in Japan access to a wide array of otherwise unavailable products.
- Mail costs in the United States are so low that it is more economical to send a package from New York to Tokyo than from Tokyo to Osaka, which reduces overhead costs for direct-mail products.
- Although Japanese companies are not allowed to mail goods from foreign post offices for sale at home, foreign companies face no such restrictions.

*Sources:* Joji Sakurai, “Firms Challenge Image of Japan’s Closed Markets,” *Marketing News*, (July 20, 1998), p. 2; Jack G. Kaikati, “The Large-Scale Retail Store Law: One of the Thorny Issues in the Kodak-Fuji Case,” in Michael R. Czinkota and Masaaki Kotabe, *Japanese Distribution Strategy* (London: Business Press, 2000), pp. 154–63; and “Attitudes toward Direct Marketing and Its Regulation: A Comparison of the United States and Japan,” *Journal of Public Policy & Marketing*, 19 (Fall2000), pp. 228–37; and “Wal-Mart to Make Seiyu A Group Company,” *NikkeiNet Interactive*, <http://www.nni.nikkei.co.jp/>, November 2, 2005.

- The majority of hypermarkets are located on two floors, normally with non-food items located on the upper floor and food on the lower.
- Many hypermarkets are located inside shopping centers in the heart of the city.
- They have high staffing levels due to the presence of suppliers' staff working as in-store "merchandisers."
- Retailers provide courtesy buses to bring customers from residential areas into the center city because China has a low car ownership.<sup>86</sup>

***E-Commerce and Retailing.*** Despite those cultural differences and regulations in retailing still in place, countries such as Japan and Germany have warmed up to the same electronic commerce revolution as the United States has already experienced. In Japan, for example, Rakuten Ichiba Internet Mall (<http://www.rakuten.co.jp>) has achieved stellar growth since its launch with a mere \$500,000 in capital and just 13 stores in May 1997. The mall had increased to over 22,400 stores by the end of 2007, and generated total sales revenue of \$1.77 billion with net profits of \$304 million in 2007.<sup>87</sup> In Germany, SAP already dominates the market for so-called enterprise software (i.e., enterprise resource planning and customer relationship software). Some 82,000 of the world's largest organizations in more than 120 countries now automate everything from accounting and manufacturing to customer and supplier relations using SAP software, making it by far the leading source of large corporate programs with a record revenue of \$11.3 billion and operating profits of more than \$3.4 billion in 2007.<sup>88</sup>

E-commerce is not limited to developed countries. China is already the fastest growing internet market in Asia. The internet community in China increased by more than 260 times within the ten years from 1997 to 2007, soaring from just 620,000 users in 1997 to 253 million by the second quarter of 2008, far beyond the United States' 215 million as of the same period.<sup>89</sup> As a result of the unfortunate outbreak of the severe acute respiratory syndrome (SARS) in China in 2003, the Chinese government began to take advantage of the internet to encourage business transactions without unnecessary human contacts. This government effort further helped build the internet market in China.<sup>90</sup> In Brazil, the number of people using the internet grew rapidly from 14 million in 2002 to 42.6 million by December 2007, making it South America's most wired nation, and accounting for 46.3 percent of the region's internet users.<sup>91</sup> A similar growth in entrepreneurial e-commerce operators is expected with the growing internet access.

As explained earlier in this chapter, despite the rapid increase in internet users and e-commerce participants around the world, the need for the local or regional distribution of products remains as important as it was before the internet revolution.

<sup>86</sup>"Retailing in China," Retail Analysis, iReports, [www.igd.com/analysis](http://www.igd.com/analysis), accessed January 10, 2006.

<sup>87</sup>Rakuten Ichiba, <http://www.rakuten.co.jp/>, 2007 Annual Report.

<sup>88</sup>SAP, <http://www.sap.com/about/investor/inbrief/index.epx>, accessed March 20, 2009.

<sup>89</sup>Internet Word Stats, <http://www.internetworldstats.com/>, accessed September 30, 2008.

<sup>90</sup>"China has World's 2nd Largest Number of Netizens," *XINHUA*, January 16, 2003; and "China takes Steps to Ensure SARS Does Not Hinder Construction Plans," *XINHUA*, May 23, 2003.

<sup>91</sup>Internet Word Stats.

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## SUMMARY

Logistics, or supply chain management, has traditionally been local issues and related to getting goods to the final customer in a local market. However, while the intent of serving the customer remains, retailers have been transformed into global organizations that buy and sell products from and to many parts of the

world. At the same time, with the increase in the globalization of manufacturing, many firms are optimizing their worldwide production by sourcing components and raw materials from around the world. Both of these trends have increased the importance of global logistic management for firms.

The relevance of global logistics is likely to increase in the coming years because international distribution often accounts for between 10 percent and 25 percent of the total landed cost to obtain an international order. The international logistics manager has to deal with multiple issues, including transport, warehousing, inventorying, and the connection of these activities to the firm’s corporate strategy. Inflation, currency exchange, and tax rates that differ across national boundaries complicate these logistics issues, but international logistics managers can exploit those differences to their advantage, which are not available to domestic firms.

Logistics management is closely linked to manufacturing activities, even though logistics management is increasingly being outsourced to third-party logistics specialists. Many companies, particularly those in the European Union, are trying to develop a consolidated production location so that they can reduce the number of distribution centers and market their products from one or a few locations throughout Europe. Firms such as Federal Express, Airborne Express, and TNT have evolved from document shippers to providers of complete logistics functions; indeed, all of these firms now have a business logistics division whose function is to handle the outsourced logistics functions of corporate clients.

Various governments, including the United States, have developed free trade zones, export processing zones, and other special economic zones designed chiefly to increase domestic employment and exports from the zone. Various tax and other cost

benefits available in the zones attract both domestic and foreign firms to set up warehousing and manufacturing operations.

In the area of international distribution, marketing managers need to make careful decisions on the configuration of their distribution channel. Issues such as cost, coverage, and control determine how many intermediaries there should be and where. The ongoing management of the distribution channel can be a challenge, with channel conflict being an ever-present issue for many international marketing managers.

Retailing has long been considered a fairly localized activity subject to different customer needs and different national laws regulating domestic commerce. Nevertheless, some significant change is taking place in the retail sector. Information technology makes it increasingly possible for large retailers to know what they are selling in hundreds of stores around the world. Given this intimate knowledge of customers around the world, those retailers have begun to overtake the channel leadership role from manufacturers. The United States’ Wal-Mart and Toys ‘R’ Us, Japan’s 7-Eleven, and Britain’s Tesco are some of the major global retailers changing the logistics of inventory and retail management on a global basis.

Finally, e-commerce is increasingly dispensing with physical stores. However, local adaptation of product offerings and setting-up of local distribution centers remain as important as it was before the internet revolution. Furthermore, complex international shipping requirements and exchange rate fluctuations hamper smooth distribution of products around the world.

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## KEY TERMS

Agent intermediary	Global logistics	Materials management	Rationalization
Air freight (Airfreight)	Intermodal transportation	Merchant intermediary	Third-party logistics (3PL) services
Bulk shipping	Liner service	Ocean shipping	Value-to-volume ratio
Bullwhip effect	Logistic integration	Perishability	
Free trade zone (FTZ)	Maquiladora operation	Physical distribution	

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## REVIEW QUESTIONS

1. Define the term global logistics. Enumerate and describe the various operations encompassed by it.
2. What factors contribute to the increased complexity and cost of global logistics as compared to domestic logistics?
3. What role do third-party logistics companies play in international trade? What are the advantages of using these companies over internalizing the logistics activities?
4. Describe the role of free trade zones (FTZs) in global logistics.
5. What are the reasons for the dramatic increase in cross-border trade between the United States and Mexico?
6. How is information technology affecting global retailing?
7. The United States and Japan have similar income and purchasing-power levels, yet, the retail structures between the two countries have significant differences. Describe some reasons for these differences.

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## DISCUSSION QUESTIONS

1. Some economists have brought attention to the importance of the role of geography in international trade. One example of this is the dramatic rise in trade between the United States and Mexico. This increase is attributed primarily to wage differences between the two countries and the proximity, with both countries sharing a joint border over 2,000 miles in length. Geographic proximity allows for the relative cheap movement of goods by train from the heart of Mexico to any

corner of the United States within three to four days. On the other hand, advocates of globalization claim that the role of geography in international trade is limited and is reducing constantly. They contend that direct transportation costs as a percentage of the total value of the goods for most goods is low and is declining. Furthermore, it is not actual transportation costs, but the coordination of managerial resources and information that is the key to savings through global logistics. This reduces the role of geography in international trade to a minimal level. Comment on the two views.

2. Beginning in 2000 with the announcement by the Big Three automakers of plans for a single online supplier exchange Newco, major manufacturers in at least a half-dozen industries have followed suit. In the wake of the Big Three's announcement, other corporations have come together—on customer-facing and supplier-facing initiatives—to create online joint ventures. Among the most prominent are liaisons between: DuPont, Cargill and Cenex Harvest States Cooperative; Sears and Carrefour, and Kraft, H. J. Heinz Co., and Grocery Manufacturers of America with other major food companies. This represents an enormous shift in online business strategy, and raises major challenges for marketers and market makers. The question is, will these e-marketplaces be the kind founded by consortia of manufacturers, by independent, third-party companies, or by a combination of both? At least in the auto industry, there is no question that both material management (supply chains) and distributions (dealerships) are more concentrated, while manufacturing is splintering. What does this implicate for other manufacturing industries and what does this mean in terms of international marketing strategies?
3. The world is moving closer to an era of free trade and global economic interdependence. The worldwide reduction in tariff and non-tariff barriers and the increasing levels of world trade are testimony to this fact. These reductions in trade barriers will in the very near future make free trade zones an anachronistic concept. Hence, if you were making an investment decision, on behalf of your company, to establish a manufacturing facility in a developing country, placing too much emphasis on investing in free trade zones may be a short-term workable proposition, but a long-term mistake. Do you agree or disagree with this statement? Give reasons for your answer.
4. We learned from the text that with the expansion of the European Union in May 2004, traditional distribution hubs in western and central Europe faced tougher competition. For instance, despite integration of all the candidate countries into the systems and practices of the EU, it would take two to three years for those countries to open their road and rail networks under the transition arrangements. Even though governments

and EU have developed programs and initiatives to reduce road congestion and advised the use of other transport networks as alternatives to roads, companies that operate in Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Poland, and Slovakia, are still concerned about the costs and benefits of transporting goods from roads and the viability of alternative modes of transport. What opportunities and threats does the new EU body offer to transporters, freight-forwarders, and exporters?

5. Reduced trade barriers and saturation of domestic markets are two market forces that are encouraging large retail chains to move overseas. Large retail chains in the United States, Japan, and Europe are aggressively making forays into international markets, although there is a significant regional bias in these efforts. U.S. retail chains such as Wal-Mart have primarily focused on Canada and have now turned their focus to Mexico. Japanese retail chains such as JUSCO and Daimaru have made significant inroads into Southeast Asia, while Western European chains such as Julius Meinl (Austria), Promodes (France), Ahold (The Netherlands), and TESCO (U.K) are diversifying into Eastern Europe and other countries within Europe. Industry analysts point out that this internationalization of retail business will significantly alter the nature of competition. Significant rationalization through acquisitions of retail businesses is bound to take place. The verdict on the expected effects of this rationalization and increased competition on specialty chains is still unclear. What would you predict the retail business to look like ten years from now? What would be the role of specialty stores and specialty chains?
6. The concept of “one-stop-shopping” for global logistics is fast catching on. There are now more than thirty large logistic companies, called “mega-carriers,” who can provide truly global and integrated logistic services. What are the opportunities and threats that these trends offer to small and large transporters, freight-forwarders, and shippers (exporters)?
7. As presented in Global Perspective 15-4, in order to avoid supply chain disruptions, some people suggest that supply chains should be regulated, a bit like public utilities, because countries have become so highly dependent on private-sector production infrastructure. Do you agree with it? Why or why not? Also, it states that there are very legitimate, very good business reasons not necessarily to complete and ship from Asia to avoid supply chain disruptions. Companies may consider other options in other parts of the world even though these may look more expensive. A higher cost structure can make supply chain more robust and reliable. Besides the reason provided there, are there any other possible reasons? What are they? Please discuss and give some examples.

## SHORT CASES



### ASE 15-1

#### DELL: SURVIVING A LOGISTICAL NIGHTMARE

Well-known U.S.-based computer maker Dell seems to have perfected the art of making just-in-time computers and supplying them to its consumers. The company is known to keep costs under control by directly reaching the consumer without the additional expense on intermediaries. Dell owns no warehouses but manages to assemble over 75,000 computers a day and its build-to-order business model is a case study in itself. Add to that an effective after sales service and Dell has itself a competitive advantage that has been almost unbeatable. But maintaining this position takes work, especially when you have a company that sources its computer parts from numerous suppliers all over the world.

Companies such as Dell usually ship computer parts to various U.S. and international ports from their suppliers. So, what happens when dockworker unions on the west coast of the United States go on strike for days at a stretch? Well, most companies lose millions due to this kind of unexpected disruption in the supply chain. But, not Dell! Dell faced this situation in the recent past. While many U.S. firms faced adversity, Dell managed to get by with the fewest scratches. This is how.

When the strike prevented parts sourced internationally from reaching Dell's plants in the United States, the company was faced with the probability that as the strike continued, its U.S. factories would run out of parts. Dell would soon be unable to put together its computers without the necessary parts and the company would then be left idling like so many others.

However, unlike a hurricane or a tsunami that is hard to predict, most U.S. firms were aware of the impending dockworkers strike a few months in advance. So, Dell started getting itself ready by having a plan in place in case its supply chain did get disrupted. One important move was up-to-the-hour communication with the concerned parties, such as its international suppliers, most of them from Asia, the port authorities and the sea transport companies that it relied on to ship the products.

At the time, the dockworkers formally announced the strike Dell was able to put its plan into action. The measures Dell took were no different from those taken by other firms. Obviously, most firms use sea transport for shipping their parts and products from overseas because it is the cheapest form of transport. However, when that route got eliminated temporarily due to a dock strike,

*Source:* Bill Breen, and Michael Aneiro, "Living in Dell Time," *Fast Company Magazine*, November 2004, pp. 86–96.

most firms sought the expensive but fastest air transport. Thus, most U.S. firms started booking airlines to transport their much-needed parts from abroad. Consequently, there were high costs of flying in parts with several firms vying for flights from logistics firms such as UPS and FedEx and other major airlines as well. Dell had already accounted for the use of air travel well in advance and as a result it was able to charter planes to ship its foreign parts to the United States at almost half the cost of other companies. Furthermore, up to minute communication with its suppliers ensured that parts were always ready and waiting to be shipped to the United States so the aircraft that shipped those parts did not have to wait in the hangars until the parts were there.

Next came the part when the strike was over and the tens of ships arrived with Dell-destined parts. The company had planned for this as well. It calculated the unloading cycle so that company associates could collect the company's containers as they arrived rather than waiting to sort through the backup and waste time later on. During the week and a half that the dock closings lasted, Dell was on time to deliver every single computer. Consumers thus had no reason to even doubt that the company was right in the middle of a logistical crisis.

Global firms with their global operations are able to reap the benefits of low cost sourcing, etc. but what comes with the territory is a constant threat to operations and having contingency plans in place plays an important role in successfully combating such hard times. The dockworkers' strike and the terrorist attacks on the United States in 2001 brought home to some global firms the need to either maintain warehouses and spare inventory, or keep their suppliers close by or then be prepared to face these situations the way Dell did.

#### DISCUSSION QUESTIONS

1. Would it be a good strategy for Dell to own some warehouses in case of unforeseen events? How would that affect their business model?
2. What were the important elements of their contingency plan that made it successful?
3. Dell spent a considerable amount of time and money planning in advance in case of a disruption in its supply chain. What should the company do to avoid the additional expenditure in case of future disruptions?

### ASE 15-2

#### FRENCH RETAILER CARREFOUR: LOSES IN JAPAN BUT WINS IN CHINA?



For Western firms in general and more recently, global retailers in particular, succeeding in the Japanese market has always

been challenging and international business history abounds with stories of their struggles. Noted examples of global

retailers that have faced difficulties in Japan include Wal-Mart affiliate, Seiyu and Germany's Metro Group whereas U.K.'s Boots and France's Sephora exited Japan just two years after entering it, which made the retailing industry, sit up and take notice. The latest casualty of the hard to please Japanese market is France's Carrefour, the largest retailer in Europe and the second largest in the world (after U.S.-based giant Wal-Mart) with worldwide sales of over 82.1 billion euros (2007). Carrefour operates around 11,000 stores in 30 different countries. As of 2007, 45.8 percent of its sales come from its home country France, 37.5 percent from operations in other European countries, 10 percent from Latin America, and 6.7 percent in Asian economies.

To start at the very beginning, Western retailers started eyeing the Japanese market in the 1990s when the Japanese government finally revoked its Large-Scale Stores Law that prevented foreign entry by retailers and when real estate prices in Japan started falling. At the dawn of the 21st century, several global retailers set up shop in Japan. These firms include Boots, Sephora, Wal-Mart, and finally U.K.'s Tesco in 2003. Carrefour made its entry into Japan in the year 2000 and initially opened four stores in cities such as Tokyo, Osaka, Saitama and Hyogo, followed by four more in Kansai. At the time of its entry, it planned to have a total of around 15 stores by the end of the year 2003. But not only was it unable to reach that number, by the beginning of 2005, the company had started denying rumors that it was going to quit Japan only to exit the Japanese market a few months later. Industry experts claim that the low price focus of firms like Carrefour and Wal-Mart do not meet the expectations of discerning Japanese consumers who prefer better quality over lower price. Also, the establishment of specialized retailers and changes in the consumption patterns has exacerbated the situation for foreign retailers.

Carrefour, which engages in all types of retailing with a focus on food retailing at competitive, low prices, runs stores in three main formats in foreign markets, namely "hypermarkets," "supermarkets," and "hard discounters" with hypermarkets being the largest in terms of floor area and stock and hard discounters being the smallest of the three formats. When Carrefour's first few stores opened up in Japan, there were large spaces filled with piles of products that did not allow consumers to easily find an item they needed. Furthermore, according to some, Japanese consumers saw Carrefour as a French retailer and expected to see more French-style clothing and products. Tapping into this perception of their stores, Carrefour revamped its stores in Japan and brought in more French-made products but even then, it failed to carve a niche for itself in the mature Japanese market. On the supply side,

Carrefour originally planned to source its products directly from manufacturers but with inadequate purchase orders, it was unable to secure purchase contracts directly from producers. Thus, it was forced to approach wholesalers for products. However, it was unable to break through the tight-knit network between local suppliers and the homegrown Japanese supermarkets and therefore could not offer a wide range of products to its Japanese clients. Finally, motivated by a drop in worldwide revenues and unprofitable stores in Japan and four years after its entry into the market, Carrefour made the decision to sell off all its stores in Japan. Contenders for the acquisition included many but ultimately Carrefour sold its stores to Japan's largest retailer Aeon Co. Ltd. Now Carrefour Japan is run by **Aeon Marché Co.**

On the other hand, Carrefour's experience in Mainland China has been very different and it is now one of the top five retailers in the country. Carrefour entered China in 1995 with a store in Beijing and by the year 2000, it had over 25 stores in 15 major cities in Mainland China. Since then, Carrefour has developed rapidly in this country. By August 2008, Carrefour has opened 116 stores on the mainland with a total floor area of nearly 1 million square meters and is employing almost 50,000 people. The company's sales in China amounted to 30 billion yuan in 2007, accounting for about 5 percent of total group revenue. In China, Carrefour's formula of low prices, huge stores and a high degree of localization seemed to have worked out so much so that it has now gone down in global management books as Carrefour's Chinese success story. Moreover, Carrefour has decentralized store operation in China and also established the Carrefour China Institute for employee training.

The company's success in China in spite of periodical run-ins with protective Chinese regulatory authorities has come as both a surprise and an important lesson to global firms. China, like Japan, has not been an easy market for foreign firms to conduct business in, given its varying cultures within the same country, the stark differences between lifestyles in urban cities as compared to that in provinces and its political set up. With China's entry into the World Trade Organization (WTO) and spurred by Carrefour's accomplishments in China, the company's ambitious plans for the market include opening a store a month and investing more than \$750 million in its stores in China. So, the company still has something to smile about!

## DISCUSSION QUESTIONS

1. Do you think it was the right decision for Carrefour to leave Japan? Could it instead have adopted other strategies that perhaps would have led to a different outcome?
2. Carrefour, being the second largest retailer in the world, what are implications of its pull-out from Japan for other global retailers such as Wal-Mart which is struggling to survive?
3. Why did Carrefour exit Japan but succeed in China?

*Sources:* Carrefour.com home page; "Carrefour at the Crossroads," *Economist*, October 22, 2005, p. 71; "Carrefour's Expansion in China," *China Daily*, August 12, 2008, and various other sources.





## WHICH DISTRIBUTOR TO CHOOSE IN COSTA RICA?

Not long ago, TransMotors (a disguised name), an American export management company that had a joint venture in China manufacturing motorcycles began to search for new distributors in Central America. During previous years, TransMotors had been highly successful in South America and Africa locating distributors for its line of basic transportation motorcycles. Using Honda technology, the Chinese motorcycles were proven to be of high quality and reliability. Most important, they sold for less than a third of the cost of the competing Japanese models.

The first stop in Central America was Costa Rica, the most prosperous country in the region. A growing economy and political stability provided the kind of market conditions that were optimal for successful sales: a rising lower middle class that could now afford a dependable motorcycle for its transportation needs. Such a formula had worked very well in Colombia, Ethiopia, Venezuela, Burkina Faso, Argentina, South Africa, Brazil, Nigeria, Peru, and Cameroon. For TransMotors, like most others seeking to gain entry into high-growth, emerging markets, the key to success was selecting and recruiting the right kind of distributors for its products.

Robert Grosse, the executive in charge of developing entry strategy for TransMotors, was able to locate two possible distributors in Costa Rica. Full of pride because of success in the above-mentioned markets and others, Grosse believed himself invincible when it came to identifying who would be the best representative for his company's products.

Harvey Arbelaez, the first candidate for the Costa Rican distributor, was a young, upstart entrepreneur who had cut his teeth in the agriculture business—importing farm implements and fertilizers. Arbelaez had built a nice network that covered the entire market in Costa Rica and was interested in the Chinese motorcycles because he felt they would complement his existing product lines.

Jaime Alonso Gomez, the other candidate appeared to be the better fit. Gomez was one of the richest individuals in the country and had made his fortune as the exclusive distributor of Honda cars, Scania trucks, and Komatsu heavy equipment. He had sold some Honda motorcycles in the past and was interested in getting back into the low-end transportation business. To the U.S. executive, this appeared to be the logical choice.

When it came time to travel to San Jose to interview the two prospects, Grosse had as his goal the sale of 250 motorcycles a year for each of the first three years. According to his research, the annual sale of motorcycles for the entire country was approximately 2,700 units and growing nicely at a rate of 10 percent per year. The sale of 250 units annually would establish a foundation that could be leveraged down the road to build market share to ultimately 20-25 percent.

*Source:* This case was provided by Professor Timothy J. Wilkinson of Montana State University based on Andrew R. Thomas and Timothy J. Wilkinson, "It's the Distribution, Stupid!" *Business Horizons*, 48 (2005), 125–34.

The first stop on the trip was at Arbelaez's office. On a personal level, the two did not hit it off; although, it was clear to Grosse that Arbelaez was wildly enthusiastic about the opportunity to offer the Chinese motorcycles throughout his network. Any positive feelings on the American executive's part soon evaporated, however, when the young man showed projections that the annual sale would be no more than 100 units for the first couple of years. Arbelaez said it would take a long while for the marketplace to adjust to a Chinese-branded product, but once it did, the potential would be tremendous. At this point, Grosse ended the conversation and told his counterpart, "I will take your plan under advisement." Twenty minutes later, the American executive was dropped off by a taxi in front of the sparkling offices of the Honda/Scania/Komatsu distributor, Jaime Alonso Gomez.

Within an hour of their meeting, Grosse and Gomez agreed that the dealer would become the exclusive distributor for the Chinese motorcycles. It was clear that there existed the sales staff, service capability, financial resources, and knowledge of distribution to handle the motorcycles. And, if that wasn't enough, the first order was to be 1,000 units—four times what the American executive thought it would be! Dinner that night was a celebration of the new relationship at San Jose's most prestigious private club. All that was needed was an exclusive distribution agreement giving the Costa Rican sole rights for the Chinese motorcycles for five years. Then, once the agreement was in place, a revolving Letter of Credit would be opened to begin shipping the motorcycles in 125 unit increments over the first year.

After the exclusive agreement was consularized and notarized, the first 125 units were shipped from China to Costa Rica without incident. The Letter of Credit went smoothly and communication between the two firms was regular and efficient. However, everything changed when it came time to ship the next 125 units. To re-initiate the revolving Letter of Credit a document was required from the distributor to the confirming bank. For more than a month the U.S. firm called, e-mailed, and faxed its exclusive distributor. The only individuals the Americans could get in touch with were administrative assistants, who generated the same, pat answers. "He's away on a trip . . . in a meeting . . . away from his desk." With the second lot of motorcycles languishing at the dock in Shanghai and the other 700 units ready for production, pressure was building.

Unannounced, Grosse grabbed a plane and flew to San Jose to see what was going on. He took a taxi at the airport and went right to his new distributor's office. Not surprising, his new distributor was "in meetings all day and unavailable." Nor were any of the motorcycles or promotional material anywhere to be found on the showroom floor.

Distraught, the American executive took a cab to his hotel. During the 30-minute trip, he was startled to see so many small motorcycles on the streets of San Jose—something that was not the case during his last visit a few months earlier. Many of them were the models of one of his leading competitors from Taiwan.

After a couple of stiff drinks at the hotel bar, Grosse swallowed his pride and called Harvey Arbalaez, the young entrepreneur whom he had rejected earlier as the exclusive distributor. Half-expecting to be hung up on, the American executive was shocked when the young man agreed to join him for dinner to discuss what was happening with the motorcycles. Not gloating too much, the young Costa Rican showed pictures of TransMotors' motorcycles still sitting in a bonded warehouse at the port. He further showed photos of a brand new motorcycle distribution company located in the heart of San Jose that was importing small motorcycles from Taiwan. Because of no competition, newspaper articles stated that sales of

the Taiwanese products might exceed 500 units that year. In scanning the articles, Grosse recognized the last name of the distributor. The name was Gomez—turns out, he was the brother of the Honda guy.

### DISCUSSION QUESTIONS

1. What mistakes did Robert Grosse make in selecting a distributor?
2. What steps should Robert Grosse have taken that could have helped in doing a better job in distributor selection?

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## APPENDIX: MAQUILADORA OPERATION

The maquiladora industry, also known as the in-bond or twin-plant program, is essentially a special Mexican version of a free trade zone. Mexico allows duty-free imports of machinery and equipment for manufacturing as well as components for further processing and assembly, as long as at least 80 percent of the plant's output is exported. Mexico permits 100 percent foreign ownership of the maquiladora plants in designated maquiladora zones.

Mexico's Border Industrialization Program developed in 1965 set the basis for maquiladora operations in Mexico. It was originally intended to attract foreign manufacturing

investment and increase job opportunities in areas of Mexico suffering from chronic high unemployment. Most of them are located along the U.S.–Mexico border, such as Tijuana across from San Diego, Ciudad Juarez across from El Paso, and Nuevo Laredo across from Laredo. Over the years, however, Mexico has expanded the maquiladora programs to industrialized major cities such as Monterrey, Mexico City, and Guadalajara, where more skilled workers can be found. This duty-free export assembly program has helped transform Mexico, once a closed economy, into the world's 9th largest

exporter.<sup>92</sup> Automobile and electronics product assembly makes up the bulk of maquiladora industries.

The competitive pressures of the world economy forced many large manufacturing companies to abandon their assembly plants in the United States and move to Mexican maquiladoras. Furthermore, to meet local content requirements imposed by NAFTA, foreign firms, too, expanded manufacturing operations in maquiladoras. Particularly, Asian companies, such as Panasonic, Sanyo, Sony, Samsung, and Daewoo, have invited some of their traditional components suppliers to join them in maquiladoras to increase local procurement.

Mexico had long been an attractive location for labor-intensive assembly because its hourly labor cost declined in dollar terms from \$2.96 in 1980 to \$1.20 in 1990 and to about \$0.50 in 1999. This decline resulted from a series of peso depreciations beginning in 1976, including the devastating depreciation that shook the Mexican economy in late 1994 and 1995. However, since 1999, the Mexican economy has grown rapidly and the Mexican peso has started appreciating against the U.S. dollar, driving up the costs of maquiladora operations over time. In addition, rising wages are also making maquiladora operations less attractive. Furthermore, as part of the NAFTA agreement, which took effect in 1994, maquiladoras have also been stripped of many of the tax and tariff exemptions.<sup>93</sup> By 2002, the average labor cost in Mexico had

risen to \$2.45 per hour, losing cost competitiveness to China, where the average labor cost was 68 cents in the interior region and 88 cents in the eastern coastal region. As recently as 2000, 90 percent of all maquiladora inputs in Mexico came from the United States, 9 percent came from Asia, and China contributed only 1 percent of the total. By 2003, however, the U.S. share of maquiladora inputs had declined to 69 percent, while Asia's share had increased to 28 percent, including 8 percent from China. In other words, instead of manufacturing materials in Mexico's maquiladoras, U.S.-based suppliers (both domestic and foreign companies operating in the United States) are increasingly having their materials partially or completely manufactured in Asia to take advantage of cheaper labor and then sending them to Mexican maquiladoras for final assembly for eventual export to the United States.<sup>94</sup> Although maquiladora exports had continued to grow from \$14 billion in 1990 to nearly \$105 in 2005, the role of the maquiladora as a cheap manufacturing location is ending. As a result, the only companies that are still operating successfully on the U.S.-Mexican border are high-tech plants. Mexico should become more capital-intensive with efforts toward more value-added production by attracting and retaining high-tech plants tailored to high-end customers, and offering just-in-time delivery.<sup>95</sup>

<sup>92</sup>*World Trade Report 2005: Exploring the Link between Trade, Standards, and the WTO*, Geneva, World Trade Organization, 2005.

<sup>93</sup>The dramatic growth of maquiladoras in Mexico is not entirely attributed to Mexico's Border Industrialization Program and inexpensive labor cost. Special U.S. tariff provisions have also encouraged U.S.-based companies to export U.S.-made components and other in-process materials to foreign countries for further processing and/or assembly and subsequently to re-import finished products back into the United States. U.S. imports under these tariff provisions are officially called **U.S. imports under Items 9802.00.60 and 9802.00.80 of the U.S. Harmonized Tariff Schedule** (the 9802 tariff provisions for short).

The 9802 tariff provisions permit the duty-free importation by U.S.-based companies of their materials previously sent abroad for further processing or assembly (i.e., tariffs are assessed only on the foreign value-added portion of the imported products). More specifically, item 9802.00.60 applies to re-importation for further processing in the United States of any metal initially processed or manufactured in the United States that was shipped abroad for processing. Item 9802.00.80 permits re-importation for sale in the United States of finished products assembled abroad in whole or in part made up of U.S.-made components. Therefore,

the higher the U.S. import tariff rates, the more beneficial it is for U.S.-based companies to be able to declare U.S. imports under the 9802 tariff provisions. Consequently, many U.S.-based companies have taken full advantage of both the 9802 tariff provisions of the United States and the maquiladora laws of Mexico in pursuit of cost competitiveness.

Under the provisions of NAFTA, however, U.S. import tariffs on products originating from Canada and Mexico continue to be reduced over the next decade or so. As a result, the tariff advantage for products re-imported from Mexico into the United States under the 9802 tariff provisions will eventually diminish over time. However, as many items still have five-, ten-, and some fifteen-year phase-in periods before elimination of tariffs, the 9802 tariff provisions will remain useful even within the NAFTA for the foreseeable future. Keep in mind that these tariff provisions still benefit U.S.-based companies manufacturing *outside of the NAFTA region* as long as U.S.-made materials and components are used in production.

<sup>94</sup>"No Rest for the Weary," *Journal of Commerce*, February 21, 2005, pp. 20–22.

<sup>95</sup>"NAFTA Helps Mexico Compete Globally," *Expansion Management*, October 2005, p. 20.