

grown in many countries, such as law changes in some U.S. states that hinder activities of undocumented aliens, the deportation by France of ethnic Roma (gypsies), the backlash against accepting refugees in several countries, and new import restrictions in China and the United States on each other's products. In Brazil and South Africa, the governments have authorized domestic companies to copy pharmaceuticals under global patent protection. Bolivia and Venezuela have nationalized some foreign investments, and Canada prevented the Malaysian state energy firm, Petronas, from buying Progress Energy, a natural gas producer. The sparring between pro- and anti-globalists is one reason why the globalization process has progressed in fits and starts.

Other uncertainties may hamper globalization. First is the question of oil prices, which affect international transportation because they can constitute more than 75 percent of operating costs on large ships.⁶¹ Not only have global oil prices fluctuated widely, but technology for fracking and shale oil conversion has altered production locations when prices are high. Further, continuing political disturbances in the Middle East disrupt the global energy market. Many U.S. companies, such as furniture manufacturers, have responded by reshoring rather than facing

transport cost and trade restriction uncertainty. Second, safety concerns—property confiscation, terrorism, piracy of ships, and outright lawlessness—may inhibit companies from venturing abroad as much.

Finally, one view holds that for globalization to succeed, efficient organizations with clear-cut mandates are necessary; however, there is concern that neither the organizations nor the people working in them can adequately handle the complexities of an interconnected world.⁶²

Going Forward

Only time will tell, but one thing seems certain: If a company wants to capitalize on international opportunities, it can't wait too long to see what happens on political and economic fronts. Investments in research, equipment, plants, and personnel training can take years to pan out. Forecasting foreign opportunities and risks is always challenging. Yet, by examining different ways in which the future may evolve, a company's management has a better chance of avoiding unpleasant surprises. That's why each chapter of this book includes a feature that shows how certain chapter topics can become subjects for looking into the future of IB.

CASE

Transportation and Logistics: Dubai Ports World⁶³

—Hamed Shamma

The world economy and global trade has grown gradually since the recession of 2008–2009. This growth has occurred in Europe and Japan, where trade has been stronger than expected; in China and India, which have continually recorded high growth rates, as well as in the less-developed countries where trade is primarily based on petroleum and basic commodities. However, the COVID-19 pandemic dealt a strong blow to this steady growth, with the WTO forecasting a 9.2 percent decline in the volume of world trade for 2020, improving to 7.2 percent in 2021.

One of the most important contributors to the expansion of trade, an awareness of the global transportation and logistics industry is essential to understanding how this industry operates and what its trends are. Several factors have led to growth in the transportation and logistics industry: the separation of raw materials, labor, and production, decline in tariffs, import restrictions, and exchange rate controls. These factors have resulted in an increased demand for the transport of raw materials, unfinished goods, and finished goods in the global economy. According to Statista, containers handled by ports around the world in

2020 have been estimated at more than 829 million TEUs (twenty-foot equivalent units).

Trends in the Transportation and Logistics Industry

The geographic fragmentation of production has been an important driver of global trade. Tariffs, import restrictions, and exchange rate controls have also undergone a gradual decline. Many countries had instituted trade restrictions to help companies in the domestic market, but this in fact hindered their growth in global markets. The rise in global logistics and supply chains also means that governments today have less reason to impose trade barriers than in the past.

Competition and rivalry entail a constant need for change and improvement. In response to the growing volume of world trade, the number of high-capacity container ships has increased over the past few years, and so has the vessel size. Both require new port infrastructure.

Ports clearly play an important role in the international logistics chain, but to stay competitive, they need to use advanced technologies and skilled labor. The World Bank has developed a Logistics Performance Indicator (LPI) that allows comparisons to be made across 160 countries. The LPI measures dimensions of supply chain performance such as customs clearance procedures, quality

of trade-related infrastructure, quality of transport services, timeliness of delivery, and the ability to track and trace consignments. The World Bank has also highlighted the importance that government policies have on logistics performance; countries that attempt to develop policies to improve supply chain activities score higher on the LPI than those that do not.

Transportation and Logistics Industry

In the past, logistics focused on reducing barriers to trade and the procedures to be followed by governments to get clearance for goods at customs. While these are important, so too are policies that integrate all the elements of the supply chain so that the various players can easily manage their business. The transportation and logistics industry has been lacking in this aspect. An approach that brings together all the components of the logistics chain, such as cargo handling, storage, warehousing, freight services, and courier services, will have a major impact on the productivity and efficiency of logistics businesses.

Developing Logistics Clusters

Governments around the world are investing significant resources in developing logistics clusters, which are also often referred to as logistics parks, transport centers, logistics platforms, or logistics centers. This involves investment in seaports, airports, railroads, and highways. Examples of leading logistics clusters include Singapore, the Netherlands, Los Angeles, Dubai, and Sao Paulo.

The advantages of logistics clusters include **economies of scope, economies of scale, economies of density**, superior service, and price stability. These benefits create a positive feedback loop that attract more companies to the cluster, resulting in further cost reduction and improved efficiency.

Doing Business in Different Countries

Local or domestic policies may affect the logistics operations in various markets. Some of these policies may increase costs, reduce efficiency, provide preferential treatment for local or public-owned corporations, result in domination by a single supplier, or impose limitations on investment in certain activities. These policies can significantly impact the supply chain, which may increase a firm's costs and affect business activity.

Countries where processing of goods is more efficient and economic may introduce restrictive policies such as lower tariff rates for import of raw material and higher tariffs for labor-intensive processed products. Other restrictions include bilateral agreements that distort competition, embargoes, business visa restrictions, and security requirements.

Dubai Ports (DP) World

Headquartered in Dubai, in the United Arab Emirates, Dubai Ports (DP) World is among the top three global terminal operators. It is considered a relatively new player in the global market, but it has an aggressive growth and acquisition strategy. Founded in 2005 as a result of the merger between the Dubai Ports Authority and Dubai Ports International, DP World's first project was in Jeddah, Saudi Arabia, and it has expanded its operations to many other countries including Djibouti, India, and Romania. A large portion of its business comes from the emerging markets in South America and Africa. With a team of over 50,000 employees from 103 countries, DP World operates in 78 marine and inland terminals across 40 countries.

In 2017, DP World handled around 70 million TEUs across their portfolio. In 2019, Dubai Ports ranked among the top 10 global ports in container traffic (Shanghai led the list). As DP World's capacity is estimated to have risen to more than 100 million TEUs by 2020, it continues to invest in its people and technology to provide better customer service quality to its customers across the world. This customer-oriented approach has resulted in strong relationships with customers and superior customer service levels. DP World's Jebel Ali facility was voted as the "Best Seaport in the Middle East" for 24 years up to 2018.

In 2006, DP World acquired the Peninsular & Oriental (P&O) Steam Navigation company and expanded its global network and market position in Asia, Africa, Australia, Europe, and the Americas. However, in the same year, it faced some controversy after its purchase of several ports in the United States fueled a debate on national security. To defuse the situation, DP World later agreed to drop the deal.

The Overseas Environment

Operating in various markets offers opportunities as well as challenges. The opportunities include access to new markets, resources, and technology, leading to innovation and an expansion of business. The industry remains dynamic and profitable, and emerging markets are experiencing significant growth in business.

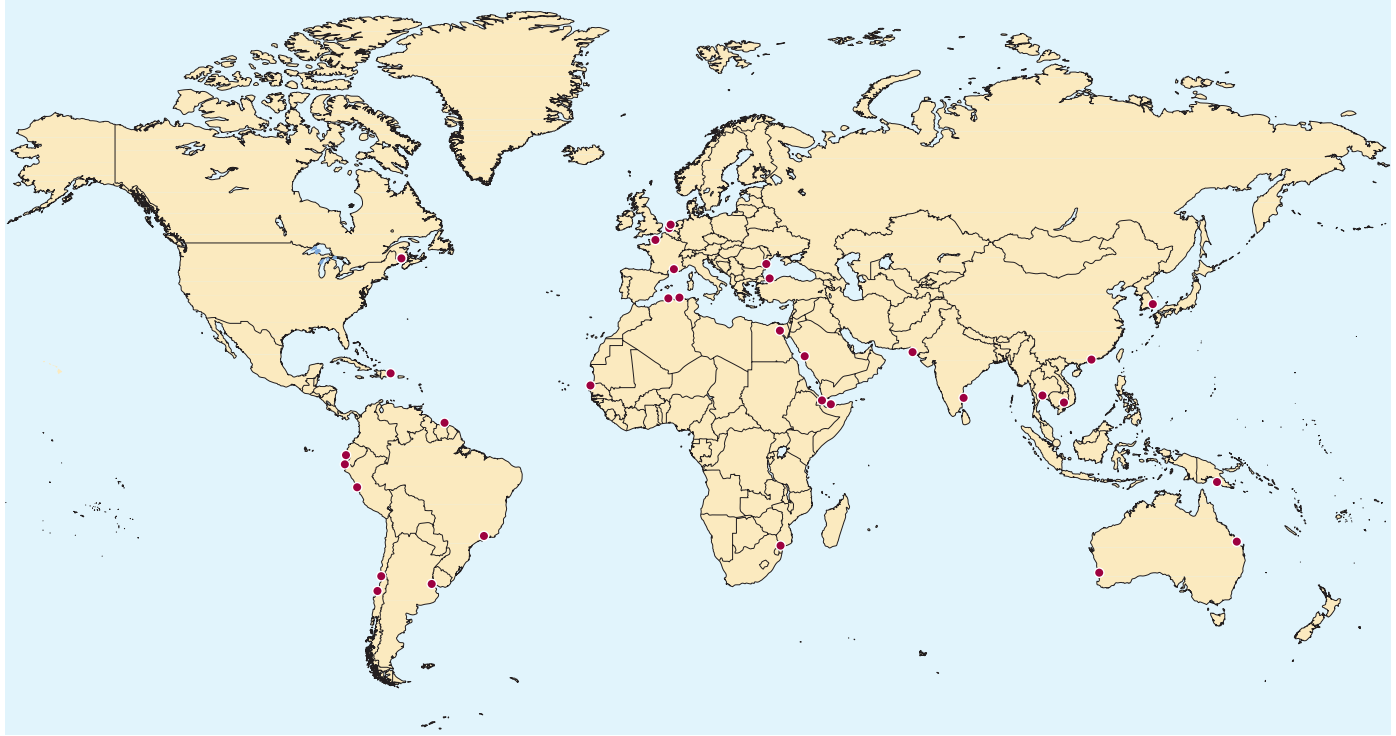
Governments are usually eager to open their ports to logistics companies. Logistics brings economic growth and jobs. The companies create opportunities for blue-collar and white-collar jobs as well as for new businesses. Logistics companies also offer value-added services on products, and many manufacturers prefer to be located close to logistics companies because of the support offered to a variety of industries.

The challenges include the complexity of operating in certain territories such as Africa, where the supply chain is expensive and time-consuming. Transportation costs comprise up to 75 percent of the retail price in markets such as Malawi, Rwanda, and Uganda. For example,

MAP 1.2 Dubai Ports World

Dubai Ports World operates in more than 70 terminals across 40 countries, some of which have been indicated in the map.

Source: Data from "Our Locations," <https://www.dpworld.com/about-us/our-locations>, accessed April 15, 2021.



transporting a car in a 20-foot container from Japan to Uganda can cost \$3,000.

Finding the Right Skills

The logistics industry is primarily a people-intensive business. Around 25 percent of the costs of logistics are labor-based. Thus, it is essential to attract, train, and motivate qualified people at all levels. Most companies find it difficult to recruit people with the right set of skills, especially when they operate in foreign countries. In addition to a usually limited supply of qualified candidates, the low wages, a low profile of the industry among many people, and poor working conditions have also hindered the industry in recruiting the right people.

Risks

In May 2020, during the COVID-19 pandemic, the Trump administration in the United States began the process of shifting global supply chain reliance from China to other countries. Addressing risks in supply chains is becoming a priority for businesses. Such risks can be caused by various disruptions—disease outbreaks or natural disasters; geopolitical tensions such as terrorism and threats of attack; economic turmoil such as currency fluctuations, demand shocks, and supplier failings; and technological failures such as outages in IT and telecommunication

systems. Risks may be mitigated by conducting scenario analyses, collaborating with the different players by sharing information, identifying vulnerabilities, and synchronizing backup plans.

Technology in Business

DP World has been keen to use advanced information technology tools to facilitate its business. It has been using mobile technology to make life easier for customers, saving them time and money. They also use mobile technology for their employees. Labor deployment, vessel arrival, and gate appointments can all be accessed on mobile devices. These are linked to the human resources department, which assigns labor to points of work, resulting in increased efficiency. This technology has enabled container shipping lines to access bay and stowage and has reduced port call time.

In keeping with the ongoing trend of digital transformation, DP World is increasingly utilizing blockchain and IoT capabilities in its operations. In 2020, DP World founded the Digital Freight Alliance, an online network where leading logistics providers from more than 150 countries gain access to new tools, services, and routes to expand their business. BOXBAY is a joint venture between DP World and the SMS Group that offers High Bay Storage (HBS) systems to improve storing and handling at container terminals.

Environmental Considerations

There is always a tradeoff between the economic benefits of logistics operations and the hazards of its effect on the environment and the health of the surrounding community. The physical presence of logistics companies may result in the deterioration of air quality and increase in health hazards around those clusters. “Green innovations” in logistics operations and processes are striving to minimize the negative effects of logistics operations on the environment.

DP World became the first international marine and inland trade services provider to join the Carbon Disclosure Project, which helps companies to disclose their environmental impact. Under the Solar Power Program, DP World has installed solar panels on the roofs of its facilities in the UAE, the Dominican Republic, and India. It has also launched the UAE’s first green warehouse facilities and has undertaken the reforestation of mangroves in Ecuador.

Future of Logistics

The logistics industry is a very promising industry with high prospects for growth. To realize this growth, comprehensive logistics policies are needed to bring together the various components of logistics—land transportation, rail, shipping, commerce, and finance—and promote coordination among them. Also crucial are investments in logistics infrastructure such as roads, rail, and shipping to ease traffic congestion and to reduce costs and air pollution.

QUESTIONS

- 1-3 What are the factors that have contributed to the growth of the transportation and logistics industry, and how?
- 1-4 What steps has DP World taken to benefit from global economic changes?
- 1-5 What economic factors influence the success of the international transportation and logistics industry?