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PRINCIPLES OF INTERNATIONAL LOGISTICS



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Opportunities and challenges in international logistics

CHAPTER OBJECTIVES

After reading this chapter, you will be able to:

1. Understand the salient characteristics of international logistics and clearly distinguish between international and traditional logistics.
2. Differentiate the various modes of international logistics operations.
3. Understand the significance of international logistics to economic development.
4. Identify and appreciate the economic benefits and risks of international logistics.
5. Identify the major trends in the global environment that have shaped or are likely to shape the nature of international logistics.

International logistics encompasses all interrelated activities required for the movement of raw materials, final products and information from the point of origin to the point of destination covering two or more countries. International logistics management is required for an effective and efficient movement of goods sold or purchased across international borders separated by land or seas. This international nature of logistics offers significant economic opportunities for shippers and logistics service providers, but is also fraught with major challenges and risks. This chapter examines these economic benefits as well as risks associated with international logistics. It also looks into major trends in the global trading environment which have shaped or are likely to shape the nature of international logistics. Before delving into the opportunities and challenges in international logistics, this chapter will first discuss briefly the concept, scope, and basic principles of international logistics and its economic significance.

1.1 CONCEPT AND SCOPE OF INTERNATIONAL LOGISTICS

International logistics has a broader scope, which goes beyond the physical and international movement of freight. International logistics comprises a wide range of transnational activities (e.g., transportation services, warehousing and inventory management, distribution services, port management services, etc.) for the efficient management of movement of materials, finished products and information from the point of production to the point of consumption. The overall goal of these activities is to bring the materials and finished products to the final point of consumption across national borders, at the right time, at the right place, in the right conditions and at the lowest possible cost.

International logistics can be viewed to have two possible key components: the international materials management component (international sources of supply) and the international distribution component (meeting foreign demand), as can be seen in Figure 1.1. But in each component almost the same sets of activities are involved. The largest activity in this international logistics chain in terms of cost is transportation. There are four major transportation modes involved in international logistics: maritime transportation, rail, road and air transportation. Of these four modes, maritime transportation is the most commonly used mode of transportation since the largest proportion of international trade in volume terms is carried by sea.



Source: Author.

Figure 1.1 Possible key components of international logistics

The broad scope of international logistics can be further appreciated by looking at the checklist recommended by the WTO in their current effort towards the liberalization of logistics services. This list is drawn from the United Nations (UN) Provisional Central Product Classification (CPC) system and is used to facilitate the effort of securing liberalization through negotiations. As can be seen in Table 1.1, international logistics consists of three major categories: (1) core freight logistics services, (2) related freight logistics services, and (3) non-core freight logistics services.

The core freight logistics services consist of the basic logistics operations in terms of cargo handling, storage and warehousing, transport agency services and other auxiliary services. The related freight logistics services consist of freight transport services and other related logistics services, such as technical testing, commission agents, courier services, wholesale trade and

Table 1.1 Scope for international logistics

Categories	Codes
I. Core Freight Logistics Services	
Cargo-handling services	CPC 741
Container-handling services	CPC 7411
Other cargo handling	CPC 7419
Storage and warehousing services	CPC 742
Transport agency services	CPC 748
Other auxiliary services	CPC 749
II. Related Freight Logistics Services	
<i>(1) Freight transport services</i>	
Maritime Transport Services	CPC 7212
Internal Waterways Transport Services	CPC 7222
Air Transport Services	
Air freight transport	CPC 732
Rental of aircraft with crew	CPC 734
Rail Transport Services	
Freight transport	CPC 7112
Road Transport Services	
Freight transport	CPC 7123
Rental of commercial vehicles with operator	CPC 7124
– without operator	CPC 83102
<i>(2) Other related logistics services</i>	
Technical testing and analysis services	CPC 8676
Courier Services	CPC 7512
Commission Agents' Services	CPC 621
Wholesale Trade Services	CPC 622
Retailing Services	
Food retailing services	CPC 631
Non-food retailing services	CPC 632
Sale of motor vehicles	CPC 6111
Sale of parts and accessories of motor vehicles	CPC 6113
Sales of motorcycles and snow mobiles & related parts & accessories	CPC 6121
Other supporting services not covered (CPC 743, 7113, 744 excluding 7441, and 746).	

Categories	Codes
III. Non-core Freight Logistics Services	
Packaging services	CPC 876
Leasing or rental services concerning vessels without crew	CPC 83103
Leasing or rental services concerning aircraft without operator	CPC 83104
Computer and related services	
Data processing services	CPC 843
Database services	CPC 844
Management consulting and related services	CPC 865

Notes: CPC 743: Supporting services for railway transport; CPC 7113: Pushing or towing services; CPC 744: Supporting services for road transport; CPC 7442: Highway, bridge & tunnel operation services; CPC 7443: Parking services; CPC 7449: Other supporting services for road transport; CPC 7441: Bus station services; CPC 746: Supporting services for air transport.

retailing, and the non-core logistics services comprise packaging services, leasing services, computer-related services and management consulting.

Under this definition, international distribution, which focuses on the delivery of freight to final global customers, is part of international logistics, which is concerned with the efficiency and cost-effectiveness of the overall international logistics chain, which includes, among others, cargo handling, transport, inventory and distribution. Thus, distribution covers such areas as commission agencies, wholesaling and retailing, and other ways of bringing the freight to final customers, and forms the channels of delivery of final products to final consumers.

1.2 TYPES OF LOGISTICS SERVICE PROVIDERS AND IMPORTANCE OF SUPPLY CHAIN ORIENTATION

1.2.1 Types of logistics service providers

Firms providing transport management services and other value-added logistics services on behalf of other companies are called ‘third-party LSPs’ or ‘3PLs’ and may own fully or partially their fleet and other equipment used (asset-based), or may lease them from other companies (non-asset-based). They are differentiated from first-party LSPs, which are part of a manufacturing establishment and thus provide in-house logistics functions, and second-party LSPs, which provide storage and transport services (i.e., carriers and storage operators). There are also LSPs (fourth-party and fifth-party LSPs) that focus on supply chain consulting, such as global network design and distribution strategies, inventory forecasting and planning, product design strategies, information technology (IT) needs assessment, and vendor identification and management. Such LSPs are more IT-intensive and less asset-intensive. Both transport management and supply chain consulting services are key services for the logistics sector and are categorized as Tier 1 logistics service activities.

1.2.2 The importance of supply chain orientation

Since there are various activities and stakeholders in international logistics, supply chain orientation in international logistics is crucial to the attainment of providing a seamless and efficient movement of freight and information from the point of production to the point of consumption. Hence, there is a need to adopt an integrated (holistic) view of logistics rather than just considering them as separate and independent entities in the supply chain.

As Figure 1.1 shows, if you are an exporter, your concern is to make your product available to the importer (customer) in the form that the importer wants, at the time they want it, at the price they want and at the place they want it. If you are an importer, your concern is to get the product required in the form you want, at a time and price you want, and at the place you want that makes the transaction worthwhile. Under the traditional view of international logistics, the materials management and international distribution components of international logistics are carried out separately and the exporter and importer each is trying to achieve their objectives independently. The materials management component, which is concerned with purchasing and arranging for the delivery of the raw materials and other inputs required for the production of the final goods, and the international distribution component, which is mainly concerned with the distribution and delivery of the final goods to the final customers, are conducted separately. Thus, the supplier only aims to satisfy the exporter, who in turn aims to satisfy the importers without taking into account their impact on the final customer satisfaction. But under the supply chain-oriented (integrated) view of logistics, the end goal for every link of the supply chain is how to satisfy the final customers. Thus, in meeting the demand from its exporters, the supplier must also take into account how it can satisfy the final customers, although the direct customer for this supplier is the exporter. In the same manner, the exporter must also look into how they can meet the needs of the final customers in the most effective and efficient way.

What is supply chain orientation? It is defined in the literature as the recognition by an organization of the systemic strategic implications of the tactical activities involved in managing the various flows in a supply chain (Mentzer et al., 2001). This orientation therefore means that separate parties must work together in a cooperative manner to arrive at a mutually acceptable outcome in an integrated view of logistics.

Supply chain orientation requires collaboration and sharing of information among the members of the same supply chain, especially in relation to projected demand and production planning. If you are an exporter, you need to know what drives the buyer's buying decisions. You need to work proactively to solve problems faced by your customers. If you are an importer, you need to know your supplier's (exporter's) constraints and capabilities. You need to transmit to your supplier your requirements and goals. This means collaboration and information-sharing for a successful business. In the context of international logistics management, the focus of cooperation is always on cost and service, the latter determined by the availability of goods and timeliness of delivery. One example of collaboration is demand collaboration, which refers to the whole process through which retailers share their customer demand information earlier with the manufacturer. In return, the manufacturer promises each retailer a certain amount of product (allocation). Sharing information among supply

chain partners can reduce information distortion in the supply chain. The benefits of demand collaboration come from the ability of supply chain partners to take advantage of information specific to each of them. The purpose of demand collaboration, from a manufacturer's or distributor's perspective, is to take advantage of retailers' market-specific private information so as to improve forecasting performance and the efficiency of supply chain planning. The process is built upon the sharing of market-specific information and forecasts, generated on the basis of sales data, and takes full advantage of retailers' business insights and judgement. The demand collaboration has been adopted by a number of major companies in various industries, including HP, IBM, 3M, and General Mills. Supply chain orientation is, however, difficult to achieve in practice. There are many reasons for this: lack of understanding of the substantial benefits of supply chain integration and coordination, inconsistent and sometimes contradictory policies and regulations, lack of an integrated regulatory framework, inadequate and/or poor institutional quality, and inadequate infrastructure.

The job of an international logistics manager is therefore complex and fairly challenging, and the complexity of this job will become even more so if logistics management covers two or more countries, i.e., the sources and movement of the required materials and final outputs, and other related activities are undertaken in two or more countries. If the raw materials are, for example, produced in one country and moved to another country so that they can be used together with other inputs produced in another country to produce the final product, which is then shipped overseas through wholesalers and retailers, then the task of controlling costs and ensuring that the inputs and outputs are delivered on time and at the lowest cost possible is a real challenge. This is what logistics managers do in dealing with international logistics.

1.2.3 Increasing internationalization of logistics

Virtually all logistics nowadays are international or global. The management of the required activities associated with logistics encompasses two countries or more. And there has been an increasing trend towards internationalization or globalization of logistics due to the following factors:

- acceleration of production and distribution driven by high growth of product and technology development;
- acceleration of outsourcing, not only of raw materials but also of IT and other shared services such as HR and finance;
- growth of SMEs, which leads to more demand for the services of 3PLs.

In fact, according to the Global Supply Chain Trends: 2008–2010 (6th Annual Survey of PRTM Consultants), companies have been globalizing their functions in the recent past and will continue to globalize their functions in the future. Table 1.2 illustrates this trend.

1.2.4 Rationale and economic drivers for globalization

A number of factors are responsible for this trend towards globalization of logistics. Firms go global to reduce costs and improve efficiency to enhance their international competitiveness.

Table 1.2 Globalized functions: past and future

Functions	% managed outside home country		
	2008	2010	% growth
Manufacturing	42	51	21
Final assembly	38	47	23
Warehouse/transportation	37	46	24
Procurement	34	43	26
Returns and customer service	34	43	26
Supply chain planning	26	34	30
IT and shared services	25	35	40
Innovation and technology development	24	36	50
Product development	19	39	105

Source: PRTM Consultants (2008).

In the past, the focus was on material and labour cost reduction. However, there is now an increasing need to reduce supply chain cost, and efficiency is at the top of the management agenda. Hence, warehousing, supply chain planning, innovation and technology, and other supply chain-related functions are now increasingly outsourced. Second, firms go global to gain more market access, especially in those markets where the potential demand is growing strongly. Hence, China and other Asian markets, particularly India and Southeast Asian countries, have been the main targets of globalization, although investments in the US and Western Europe have remained strong.

Other economic drivers of globalization include gaining benefits from local incentives, tax structures and tariffs, access to technology and technical resources, countermeasures against increasing competition at home, and prolonging products' market saturation at home.

1.3 DIFFERENT MODES OF INTERNATIONAL LOGISTICS OPERATIONS

In the previous section, we discussed the different types of logistics service providers: first-party, second-party, third-party, fourth-party and fifth-party LSPs. In terms of first-party LSPs, they can globalize their logistics operations in several modes: by engaging in international distribution, sourcing their raw materials or final products from international suppliers (international supply mode), conducting offshore manufacturing and/or operating as fully integrated global supply chains. International distribution requires their products to be exported overseas, although they may be manufactured domestically. International supply mode implies that the manufacturers are engaged in importing their raw materials, components and/or final products for distribution in the domestic market where the manufacturer is based. Offshoring manufacturing requires production of final products in foreign countries which can be imported back into the home country for domestic consumption. An integrated global chain involves both importing the raw materials/components for production in another

foreign country, of which the final products are also exported to other countries. This mode requires a more complex set of inbound and outbound logistics networks.

The other types of LSP (second-party, third-party, fourth-party and fifth-party logistics service providers) provide logistics services on behalf of other companies. Using the World Trade Organization (WTO) framework for services, we can classify different types of global logistics operations into the following modes: Mode 1 refers to the export/import of logistics services across borders. For example, an Indonesian freight forwarder transports cargoes on behalf of an Indonesian exporter/importer. Mode 2 refers to consumption abroad. For example, a Singaporean-registered shipping company uses an Indonesian stevedoring company to handle its cargoes at Indonesian ports. In this case, Indonesia exports logistics services to Singapore. On the other hand, if a Singaporean stevedoring company handles cargoes shipped by an Indonesian vessel at the Singapore port, Singapore exports logistics services to Indonesia. Mode 3 refers to commercial presence. For example, a Malaysian logistics provider establishes a branch in another country and vice versa. Mode 4 refers to the temporary movement of natural persons across borders. For example, an Uzbek crane operator is contracted to operate a crane at a Malaysian port. In this case, the Uzbek national is governed by the immigration laws and foreign employment regulations in Malaysia.¹

1.4 INTERNATIONAL LOGISTICS AND ECONOMIC DEVELOPMENT

International logistics plays a critical role in every country's international trade and economic development (Anderson and Banomyong, 2010; Fink et al., 2000; Frankel and Romer, 1999; Hummels, 2000; Limão and Venables, 2001; Wilson et al., 2003).

In particular, access to foreign markets does not only depend on the level of tariffs and non-tariff barriers faced by exporters, but also on the cost and efficiency of the international logistics chain, which could facilitate or impede the flow of international trade. Similarly, the efficiency or lack of efficiency in the logistics chain can also facilitate or impede the flow of essential imports, which could have a beneficial or detrimental impact on a country's growth potential and national development.

International logistics costs account for a significant portion of landed costs and, therefore, any reduction in these costs and/or improvement in international logistics efficiency will largely contribute to a country's international trade performance by lowering the cost of exporting and importing and cutting down the time required for delivering the goods to the final consumers, as well as for delivering the raw materials and inputs required for the production of final products. As such, a more efficient and well-functioning international logistics system is likely to reduce the cost of doing international business, and promote a more efficient resource allocation, lower consumer prices and enhanced international competitiveness, resulting in economy-wide development impacts.

There are several studies in the literature which provide substantial evidence of a direct link between efficiency in international logistics, trade performance and economic growth (for example, Radelet and Sachs, 1998; Hummels, 2000) as well as a link between market

access improvement and efficiency in international logistics (for example, Fink et al., 2000; De Souza and Findlay, 2008; Hollweg and Wong, 2009; Anderson and Banomyong, 2010; Tongzon, 2011, 2012). Radelet and Sachs (1998) highlighted the importance of shipping costs to a country's trade performance and economic growth when they found, among a sample of 92 developing countries, that countries with lower shipping costs enjoyed faster manufactured export growth and overall economic growth over the past three decades than those with higher shipping costs. Hummels (2000) later confirmed this with his findings, showing that exporters with 1 per cent lower shipping costs experienced 5 to 8 per cent higher market shares in the export of manufactured products. Fink et al. (2000) further attributed the differences in shipping costs mainly to countries' restrictive trade policies and anti-competitive practices by liner shipping conferences. They therefore concluded that deregulation of trade measures, particularly in the provision of port services and break-up of anti-competitive shipping alliances, could lower shipping costs substantially. Hollweg and Wong (2009) found strong evidence for a negative relationship between logistics regulatory restrictiveness and logistics performance based on the World Bank's Logistics Performance Index. An efficient international logistics contributes further to economic development by lowering international transaction costs and creating more customer value and thus providing firms with opportunities to increase their earnings (Banomyong et al., 2008; Anderson and Banomyong, 2010). The World Bank (2016) has consistently shown that economies that have less efficient logistics systems tend to have lower international competitiveness and economic growth.

In terms of country case studies, De Souza and Findlay (2008) showed that the deregulation of the logistics sector in Australia resulted in greater economic gains in terms of lower freight rates and better quality of service due to greater competition within the logistics industry and contributed to Australia's improved international competitiveness. They also raised the importance of privatization, competition, and supportive government measures in undertaking the deregulation of the logistics sector and the need for proper consultation with all the stakeholders affected by the logistics services deregulation. Tongzon (2012) analysed the likely implications of logistics services deregulation for Indonesia's logistics industry and, using the concept of competitive advantage supplemented with industry survey, concluded that Indonesia could benefit in those sub-sectors where Indonesia has a competitive advantage while losing in those sub-sectors where she has a competitive disadvantage. However, economic benefits would be substantial in the long run if appropriate policies and measures can be adopted and implemented to facilitate the transfer of technology and address other factors that can enhance their capacity and international competitiveness. Tongzon et al. (2017) have demonstrated based on empirical evidence that deregulation and liberalization reforms undertaken by Australia for its logistics sector have brought about substantial economic benefits in terms of improved productivity, innovation, better quality of service and overall higher economic growth and employment, although in some sub-sectors there were short-term adjustment costs.

1.5 RISKS AND CHALLENGES FACING INTERNATIONAL LOGISTICS

Although there are enormous economic opportunities and benefits from globalizing logistics, there are also enormous risks and challenges. These risks and challenges can be classified into the following types:

- geography-related risks:
 - distance and reliability;
 - lead time;
- infrastructure-related risks:
 - logistics costs;
 - efficiency and reliability;
- regulatory and institutional risks:
 - logistics costs;
 - efficiency and reliability;
 - international competitiveness;
- political uncertainty and disruption;
- currency risks;
- cultural factors.

1.5.1 Geography-related risks

The longer the distance between the point of origin and the point of destination, the more chances there are that the shipments will be delayed, damaged or lost before reaching their destination. The longer the distance, the longer the transit time, which could mean higher transportation and inventory costs, which can be passed onto the final customers via higher prices.

The tyranny of distance can be illustrated in the case of Australia. Australia's distance from its neighbouring and large markets (Blainey, 2001), great distances between states, coupled with a relatively small population and limited domestic market, have led to a relative lack of economies of scale, relative to more densely populated countries, which makes it difficult to operate international logistics services as efficiently as some other countries (Dyster and Meredith, 2012). Because of its low population density, the demand for more investment in transport and logistics infrastructure cannot be justified unless the contribution to demand from other factors is significant (Rietveld and Boonstra, 1995). As an indicator of how cost-inefficient Australia's logistics sector is among developed countries, it is estimated that its logistics cost accounts for about 9 per cent of its GDP, which is relatively higher than that of Japan and the US, its major developed trading partners (Australian Industry Group, 2006).

Lack of accessibility to markets due to a country's geographical conditions can also be a great challenge for international logistics. Double-landlocked countries are countries that suffer from a severe lack of market accessibility as they have to pass through at least two other countries before reaching their final destination markets and/or in sourcing their imports.

Without direct access to maritime transport and long geographical distance from large and booming markets, international logistics management poses a great challenge in terms of not only reducing its high international logistics costs, but also in terms of cutting down the total transit time.

A good example is the importation of fresh bananas from Ecuador into Uzbekistan, a double-landlocked country in Central Asia. Fresh bananas imported from Ecuador are brought into Tashkent, the capital of Uzbekistan, by passing through at least two countries' borders using a combination of shipping, rail and road transportation. Further, its significant geographical distance from the fast-growing economies of Asia, such as China and other parts of Asia, has meant its reliance on rail transport for the long-haul part of the transportation – which is most suitable for long-distance low-valued exports and imports. Railway transportation makes approximately 88 per cent of international carriage of goods and 66 per cent of freight turnover. In terms of volume, the railroad has the biggest share of export and import. The annual volume of carriage of goods makes around 65 million tonnes and freight turnover makes 20 billion tonnes/km. Because Uzbekistan heavily relies on railroad transport for its cost-effectiveness and reliability, it is the best solution, especially when transported goods are not time-sensitive. However, its rail infrastructure needs further maintenance work and investments to improve its network and capacity (Abdurakhmonov and Maksumov, 2018). Apart from the long distance involved, different border authorities also impose different customs and other logistics-related regulations, which slows down the movement and flow of freight across the different borders, resulting in longer lead times and higher logistics costs.

1.5.2 Infrastructure-related risks

Another major risk that international logistics managers would face as they globalize their logistics operations is the availability and quality of infrastructure in those markets where they operate. Two types of infrastructure interact directly with international logistics: transportation infrastructure and information technology (IT).

It is essential to acknowledge the benefits of high-quality transportation infrastructure. It affects logistics managers' ability to create time and place utility in goods, and helps to achieve the well-known seven Rs – the right product in the right quantity and the right condition, at the right place, at the right time, for the right customer at the right cost. Some countries that realize their importance to logistics provide investment incentives for the private sector and develop special policies to encourage public–private partnership in the provision of high-quality infrastructure. The study by Jacoby and Hodge (2008) showed that investment in freight transportation infrastructure has the ability to reduce direct transportation costs by 10 per cent and results in supply chain improvements that can help companies reduce their operating costs by 1 per cent. Other benefits for international logistics include lower sourcing costs, reduced fleet, warehousing and inventory costs, and increased revenue.

World-class logistics systems in the form of adequate infrastructure can confer substantial regional advantage by lowering transport costs, which in a just-in-time economy include transport time and reliability (Keil and Young, 2008). Lack of adequate road and air transport networks has been found to be one of the major factors contributing to high logistics costs in

Indonesia and constraining the flow of international cargoes throughout the logistics chain (CARANA Corporation, 2004). Other countries, however, either ignore the benefits or fail to attract the right people by not setting up investment-friendly policies. Jacoby and Hodge (2008) stated that recent research and analysis have shown that governments and policymakers typically do not account for the economic stimulus provided by supply chain benefits when they evaluate large-scale infrastructure investments.

The first group of countries that realize the importance of infrastructure to logistics efficiency can be illustrated in the case of Dubai. Despite the fact that 50 years ago Dubai was only a fishing and pearling settlement around a creek, it has managed to grow considerably to become a global logistics hub (Ziadah, 2018). This country is credited for its excellent seaports and airports, an efficient telecommunication network and wide-ranging IT capabilities, as well as a skilled and disciplined workforce (Sundarakani, 2017). In Dubai, developing states are increasingly encouraged to privatize infrastructure as a means to secure funding for port expansion and integration into larger port networks. Moreover, with the assistance of international development organizations, such as the Organisation for Economic Co-operation and Development, the World Bank, and the International Monetary Fund, private-public partnership in the transportation industry is highly promoted (Ziadah, 2018).

This is in contrast to the case of India. Since this country's road transportation infrastructure is not well developed, it constantly experiences slow transportation, a high rate of road accidents, high inventory costs for the industry, and an inability to perform just-in-time (JIT) logistics services. In addition, poor transportation infrastructure in India has resulted in low-quality maritime and air services. Regarding this situation, Vijayaraghavan (2007) stated that if there had not been a lack of integrated thinking within the government, the mentioned problems would not have occurred in the first place. Further, it turns out that in India, roughly 30–40 per cent of revenue generated from road tolls and taxes are reinvested in infrastructure development. This is small compared with other countries like the US, Switzerland, and Japan, which dedicate all of their revenues to infrastructure development (Vijayaraghavan, 2007). While it is difficult to understand why infrastructure development benefits are ignored by some countries, Jacoby and Hodge (2008) attributed this to the growing size of both the constructions and the funds needed, as well as to the very complicated decision-making process involved.

1.5.3 Regulatory and institutional risks

In addition to these factors, the regulatory and institutional framework can also influence the quality of international logistics performance (OECD, 2016). Government restrictions in the form of laws and regulations can adversely affect the price, reliability and quality of international logistics services, especially if they discriminate between providers of these services and if these laws and regulations are administered or implemented less efficiently and inconsistently. The time, as much as the cost, of complying with all the laws and regulations can add up to higher operating costs for shippers and international logistics service providers.

Laws and regulations can be discriminatory or non-discriminatory against foreign logistics service providers. Discriminatory laws and regulations apply only to foreign providers and

treat foreign logistics services suppliers less favourably than domestic logistics service providers. For example, in the Philippines, the laws and regulations are highly restrictive and protective against foreign transport service providers in the form of foreign equity ownership, which is restricted only up to 40 per cent under the public utility concept based on the Philippines constitution and as mandated under the Public Service Act (CA 146 s. 1936). Other countries in Southeast Asia (i.e., ASEAN countries) have also set some foreign equity limits, although not as low as in the Philippines. In the case of auxiliary shipping services, Indonesia's foreign equity share is limited to 49 per cent of the total equity, with the exception of stevedoring and international shipping, where up to 60 per cent of the equity can be held by ASEAN-based companies. In the case of Malaysia, although it has no restrictions for foreign participation in international shipping under Malaysia's International Ship Registry, there are restrictions for foreign investors in the area of maritime cargo handling, towing, port and waterway operation services, pilotage and berthing, and navigation aid services. Thailand allows up to 49 per cent foreign equity limit for foreign nationally registered ships, while foreign investment in port ownership is also subject to a 49 per cent limit under its Foreign Business Act B.E. 2542. This limitation extends to other auxiliary shipping services, such as freight forwarding, shipping agency, shipping brokerage, stevedoring and storage, with the exemption extended to US multimodal transport operators under the Thailand-US Friendship Agreement, where 100 per cent foreign equity ownership is allowed.

Under their ASEAN Economic Community Blueprint, it is envisioned to reduce these foreign equity limits for ASEAN-based transport service providers due to the enormous potential economic benefits from a more liberalized market for transport services. Introducing more foreign competition into this sector and improving user access to the most efficient transport and logistics service providers is crucial to the success of their economic integration effort. Moreover, trade of transport services is also an important component of all ASEAN members' international trade objective, with significant benefits in terms of sustained economic growth. This can be realized through measures aimed at encouraging joint ventures between local and more established foreign transport service providers and through foreign firms' sub-contracting arrangements with local counterparts. In this way, foreign transport service providers bring not only capital but also technology and management know-how for the domestic transport and other logistics-related industries.

Non-discriminatory laws and regulations are regulatory processes that apply to both domestic and foreign providers, but can still restrict activity. Regulatory barriers can act to reduce competition in the international logistics sector and thus reduce market efficiency. Although competition-reducing regulatory barriers are at times necessary to deal with market failures or strategic and political objectives, they can still restrict trade and investment in this sector, which can lead to inefficiencies.

The nature of policies and regulations is not the only important issue that can restrict the flow of logistics services domestically and internationally. Another important issue is how these policies and regulations are enacted and implemented. The policies and regulations may not be discriminatory or may be enhancing market competition, but if not implemented coherently, consistently or transparently, these policies and regulations may not provide a predictable and efficient environment for international logistics services providers and shippers.