Chapter 54
The Impacts of Liner Shipping Connectivity and Economic Growth on International Trade Case of European Countries and Turkey

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ABSTRACT

Sea transportation and maritime transport networks have commonly been used with the development of international trade. Maritime transportation is more widely used for the transportation of high-volume cargoes in international trade particularly, since sea transportation is cheaper and safer than road and railway transportation. This chapter investigates the relationship among exports, liner shipping connectivity index, and economic growth in European countries and Turkey. Analysis found that liner shipping connectivity index and economic growth have a positive effect on the exports in European countries and Turkey. It is revealed that 1% increase in liner shipping connectivity index provides the increment 0.21% in the exports. In addition, 1% increment in gross domestic product ensures the increase 1.05% in the exports.

INTRODUCTION

Continents and lands are all around the world surrounded by seas and oceans. In this regard, international trade between countries rely mostly on sea transportation nowadays. Advancements in international trade has led maritime transportation usage to rise. Countries attach particular importance to maritime transportation since more carriage can be transported cheaper and safer against other types of transportation (Saban & Güğercin, 2009).

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Having more advantages than disadvantages, maritime transportation is the most preferred among transportation types. Maritime transportation has an important place in countries international trade not only by transportable hauling capacities but also by availability of international trade transactions at the ports, and by appearing safe transportation way (Tunalı & Arakçay, 2018: 112). Ports are significant in maritime transportation by knitting the continents together. Maritime transportation went through some structural changes by distributing bigger ships into fewer intermediate ports hence changing maritime transportation network (Kang & Woo, 2017: 274).

Maritime transportation mainly occurs in two ways. These two ways can be classified as overseas and coastal regional transportations. While countries use coastal regional transportation in regional and national trades, overseas transportation is used in international trade (Korkmaz, 2012: 100). Another classification of maritime transportation takes regularity of maritime transportation into account by dividing them into being regular and irregular. Ships of maritime transportations following fixed schedules can be described as liner shipping whereas tramp shipping does not have a fixed schedule (Yenal, 2011: 2).

Global production procedures, international trade and international finance transactions, companies, and countries to connect can be enabled by maritime transportation. Considering the growing internationalization level in international economy, maritime transportation becomes more significant. Maritime transportation and logistics performance are deterministic for international trade considering geographical distances. Advanced liner shipping connectivity can help reducing trade costs and positively related to trade volumes (Lun & Hoffmann, 2016: 3). Therefore, most of the developing countries prefers maritime transportation in international trade. This situation can be verified by various researches on international trade, port and maritime network.

BACKGROUND

Manufactured products mostly transported by liner container transportation. Container ships follows a fixed schedule and visits few ports on transportation. Different carriers' goods loaded, transferred and unloaded on each port. Liner transportation services are preferred due to country interconnectivity, and reachability to oversee export markets by consulting in ship schedules and liner cargo network.

Liner Shipping Connectivity Index is established by UNCTAD in 2004 in order to compare and analyze countries' position on global maritime transportation. Liner shipping connectivity index aims to reveal a country's integration level to current maritime transportation network by measuring its maritime connections. Generated by international container transportation data, the index is consistent of five components. These components can be described as follows: each countries' deployment levels of ships at ports, container carriage capacities of these ships, number of companies providing regular services, number of services and the size of the biggest ship (Bartholdi et al., 2016: 235).

Having a high value on liner shipping connectivity index represents better access to port and hinterland facilities and requires necessary frequent connection between ports. Liner shipping connectivity index indicates both level of network connectivity in transportation and level of ease on international trade. Connecting to transportation network allows achieving higher market shares as well as strategical goals to reach wider geographical regions. After all, countries with high liner shipping connectivity index score deal with international trade actively (Varbanova, 2017: 193).

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