Determinants and Effects of Logistics Costs in Container Ports: The Transaction Cost Economics Perspective

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Contents

Abstract

Many countries seek to become a global logistics center linking major trading ports. They are competitively constructing container ports. The aggressive competition creates overcapacity situation in the container port sector. Massive investments are required to construct container ports with terminals, docks, storage areas and hinterlands. Nevertheless, it is not easy for container ports to have sufficient container cargo volumes to justify the massive investments. Therefore, container ports of individual countries are required to develop effective strategies to have enough traffic volumes. Based on country-level analysis, this study is designed to investigate empirically internal capabilities and external environments of logistics costs and traffic volumes in individual container ports. A theoretical foundation, the transaction cost economics (TCE) is applied to support and explain empirical findings.

Key Words : Logistics Cost, Container Port, Transaction Cost Economics

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I. Introduction

Individual countries are closely interrelated regarding various territories such as economy, politics, culture, technology and so on. This phenomenon is called globalization. Globalization is considered to be fundamentally changing the business paradigm. Globalization has brought many opportunities around the world. Maritime industry is closely associated with globalization. Together with the progress of globalization, faster, more reliable and cheaper maritime transport services are contributing to the expansion in the global trade.

Many countries seek to become a global logistics center linking major trading ports. Various factors are associated to be the global logistics center. Logistics cost is one of them. Moreover, logistics cost has an impact on international trade. Logistics cost is a major component of overall trade costs. A reduction in the cost may stimulate directly exports and imports. The decreased cost can make exports and imports more competitive.

Many previous studies have emphasized the impact of logistics cost on economic growth. According to them, greater logistics costs may lead to lower levels of foreign investment, a lower savings ratio, reduced exports of services, reduced access to technology and knowledge, and a decline in employment.[1] For example, Radelet and Sachs (1998) emphasize that a doubling of transportation cost may lead to a drop in the rate of economic growth of more than half a percentage point.[2] Most international trade continues to be transported by sea, and container ports are crucial nodes in global shipping networks.[3] Therefore, maritime logistics cost may play an important role to develop economies and expand trades in individual countries.

In the maritime industry, more than 90 percent of international cargo moves through seaports. Also, 80 percent of seaborne cargo moves in containers.[4] This shows that the importance of seaborne trade, in particular, trade by containers. The importance of containerized shipping in the global transportation and trade has been emphasized by many

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1) Sanchez et al.(2003), pp.199-218.
2) Radelet and Sachs(1998).
3) Wilmsmeier et al.(2006), pp.117-140.
4) Ramani(1996), pp.291-300.