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A Competitive Strategic Position Analysis of Major Container Ports in Southeast Asia

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ABSTRACT

The importance of planning strategies to achieve higher competitiveness has become more apparent in the context of seaports since seaports have been encountering quickly changing and highly competitive business environments. Therefore, the strategic competitive position of seaports needs to be investigated using strategic positioning methods. The purpose of this study was to analyze the competitive positions of the top 20 container ports of five countries in the Association of Southeast Asian Nations (ASEAN-5) in six years from 2009 to 2014 using dynamic portfolio analysis. This study aims to fill the gap in research on the competitive strategic position and analysis of Southeast Asian container ports in order to allow seaport operators to visualize the position and progress of selected ports as well as to predict the future development possibilities of seaports. The findings revealed effective operations at the following ports that retained their dominant positions during the duration of the study: Port Klang, Tanjung Pelepas (Malaysia), Manila (the Philippines), Laem Chabang (Thailand), and Tan Cang Sai Gon (Vietnam). However, findings revealed a common deterioration at other ports studied.

1. Introduction

Seaports have had critical roles in national economic development as well as in international trade (Hu and Zhu, 2009) since the majority of goods in transit between countries have been being transported via ocean vessels. However, seaports have also faced intense competition, which is evidenced by the increasing number of acquisitions and mergers in the seaport industry (Panayides, 2003). Intensified competition has been mainly driven by such factors as increases in globalization trends, containerisation, market integration, and global reallocation of capital and labor forces. As the result, these trends have profoundly changed the tactic seaports, particularly container ports, are governed, operated and compete.

Many Southeast Asian ports are situated in strategic geographical positions for international shipping routes and are being influenced by business penetration of global shipping lines. Along with global competition trends, Southeast Asian ports are also encountering intra-region rivalry. In order to retain and improve a port's competitiveness, port operators need to plan proper strategies and be able to identify their current competitive position as well as the factors influencing their business environment.

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This study focuses on the major container ports *of* five countries in the Association of Southeast Asian Nations (ASEAN): Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. These five ASEAN countries (ASEAN-5) are a subset of the 11 countries situated in Southeast Asia that comprise ASEAN. The ASEAN-5 countries represent the major economies in Southeast Asia and include the principal seaports in the region. Singapore, however, was not included in this study. Singapore is considered a developed country, and it does not share the overall characteristics of other ASEAN countries that are considered developing countries. In recent years, the ASEAN-5 port systems have been of special concern and various national infrastructure enhancements have been examined for raising the competitiveness of these seaport systems.

Many researchers have studied competition of port systems in Southeast Asia (Han, 2002; Yap et al., 2006; Lam and Yap, 2007; Notteboom and Yap, 2012; Rimmer, 2014). However, most of these studies focused on competition among main ports of nations along the Strait of Malacca (i.e., Indonesia, Malaysia, and Singapore) and lacked a Southeast Asian dimension. In addition, there is an apparent gap in research on the strategic positioning of Southeast Asian container ports. Such research would help port authority managers to grasp the changes taking place in the regional port industry and allow them to implement appropriate tactics to improve the competitive strategic position of their ports. Therefore, this study aims to analyze the strategic competitive positions of the top 20 container ports of ASEAN-5 countries by applying BCG matrix and dynamic portfolio analysis based on data concerning the actual throughput of the selected ports in order to make quantitative comparisons at the micro-level in regard to ports' growth rates and market shares during the observational period of 2009 to 2014.

The paper is structured as follows: Section 2 presents a literature review of former studies related to the competitiveness of seaports followed by a case study in section 3 with an overview of ASEAN-5 port systems. Section 4 discusses methodology, and Section 5 presents the data analysis. Conclusions of the study are delineated in the final section 6.

2. Literature Review

The competitive position of an organization is defined in a study by Fleisher and Bensoussan (2007) as the position of an organization compared to its competitors in the same market or industry. Knowledge of competitive positions allows enterprises to make tactical plans to maintain or improve their current positions or possibly withdraw from the market. Therefore, the knowledge of the competitive position of an organization and its rivals is critical. Since rivals are defined as organizations that are able to obstruct a company's market goals, and important moderators of a company's performance (Day, 1984). They are thus considered the most influential elements in competitive strategies (Porter, 1985).

With respect to seaports, the intense competition among seaports may be placed within the context of trade globalization and the international economy, obligating seaports to restructure their operations and management in order to increase their competitiveness as well as their market share. The importance of strategies for gaining competitive advantages and improving performance in comparison with rivals have therefore become increasingly apparent in this context (Panayides, 2003; Cullinane, Teng and Wang, 2005; Parola and Musso, 2007). However, Basta and Morchio (2008) pointed out that the measurement of port competitiveness relies heavily on the port objectives as well as on the quality and the availability of data. In addition, seaport performance is affected by the need to maximize profits for stockholders while addressing intense competition pressures stemming from the contextual environment (Cruz, 2012). Van de Voorde and Winkelmans, (2002) indicated that the involvement of stakeholders makes port competitiveness even more complicated, particularly in containerized cargo. Additionally, when planning strategies, port-related policymakers must theoretically understand and analyze their strategic positioning and the dynamics of international seaport competition (Haezendonck et al., 2006). Hence, in order to apply strategies for retaining or enhancing the competitiveness of a seaport, port authorities need to understand their current competitive position and the factors that influence their business environment (Scaramelli, 2010). There have been a number of methods deployed to measure and identify the competitive position of seaports.

The Profitability Impact of Marketing Strategies (PIMS) model, the Strengths, Weaknesses, Opportunities, and Threat analysis (SWOT), and the Boston Consulting Group (BCG) matrix are analytical methods that are often used (Dyson, 1990). The BCG matrix seems to be more preferred than others. It was utilized by Haezndock (2001) for strategic positioning assessment in the seaport industry. Han (2002) applied the BCG matrix and Total Shift analysis on 21 container ports situated in Asia to determine the dynamic shift of these ports' competitive positions during 20 years. The BCG matrix was also used and developed by many other seaport-researching authors in various regions (Haezendonck et al., 2006; Jie, 2006; Park, 2006; Cruz et al., 2012; and Shevchenko, 2013).

The BCG matrix has been considered flawed due to its simplicity and growth rate determinations that may be deficient for appraising the attractiveness of an industry (Porter, 1980). However, the BCG matrix method is also one of the most prevalent instruments for planners (Terwiesch and Ulrich, 2008) because it allows enterprises to easily map their market positions via measurements of business growth rate and relative market share. Additionally, it utilizes a visual technique for illustrating cash flow and investment features of diverse types of enterprises for optimizing the performance of corporate portfolios and long-term strategic positioning (David, 2009).

There have been a limited number of studies using the BCG matrix for strategic positioning of Southeast Asian seaports, particularly for the five port-owning nations (ASEAN-5) selected for this study. Therefore, this study deploys the BCG matrix as a strategic tool for analyzing and evaluating the strategic positioning of 20 top ports located in ASEAN-5 countries.

3. Methodology

This Southeast Asia region has been regarded as a strategic geographical position for both regional and global maritime industry. It includes important straits and four of sixteen strategic seaborne routes in the world (Lombok, Malacca, Ombai-Wetar, and Sunda). In particular, the Malacca Strait is the second busiest in the world (after the Strait of Hormuz). Every day, approximately 200 vessels traverse this maritime zone; approximately 50% of these vessels are over 5,000 tons and more than 10% are vessels at least 30,000 tons. Additionally, there are approximately 536 ports in Southeast Asia. Nine of the world's top 50 container ports were located in Southeast Asia in 2014, such as Haiphong, Ho Chi Minh, Klang, Laem Chabang, Manila, Singapore, Tanjung Pelepas, Tanjung Perak, and Tanjung Priok. Most of these ports are able to deal with various types of cargoes and have received the considerable attention from governments regarding their potential for expansionary