KWANGBAE LEE
Sunchon National University, South Korea

THE THROUGHPUT SHIFT OF THE GLOBAL CONTAINER PORTS

Abstract:

In terms of logistics, ports are important hubs as they handle more than 80% of the world's international transportation by ships. This study analyzes the changes in the volume of the world's top 20 container ports to provide implications that can be used in efficient port policy direction and corporate logistics decision-making by revealing what competitiveness factors have increased or decreased the cargo volume of individual ports. In this study, a dynamic shift-share analysis was conducted using data on the volume of goods for the last five years of the world's top 20 container ports, and shift and share effects were derived between ports. In addition, three competitive factors were derived for the change in the volume of major container ports: global, country, and port itself. As a result of the analysis, Qingdao Port showed the largest shift effect, and Shanghai Port showed the largest share effect, consistent with the ranking of cargo volume. In terms of absolute volume growth, Chinese ports ranked 1st to 5th, which are Ningbo Zhoushan, Qingdao, Shanghai, Tianjin, and Shenzhen ports. Second, it was analyzed that the throughput of 12 ports increased thanks to the global growth effect, and 9 ports have decreased their throughput due to a lack of national growth effects. Third, 4 ports were found to have increased their throughput thanks to the port's own competitiveness effect, which are Qingdao Port, Tianjin Port, Tanjung Pelepas Port, and New York New Jersey Port. This study differs from existing studies in that it analyzes the volume of container ports using the shift share analysis, but it is necessary to improve the research by expanding the number of ports and period for analysis.

Keywords:

Global Supply Chain, Container Ports, Dynamic Shift-Share Analysis, Competitiveness Effect

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