

Simulation Analysis for Demonstrating the Economic Competitiveness of Busan Port

Qian Ru Shen

*Department of Logistics Information Technology,
Graduate School, Pusan National University*

Abstract

As the global economy grows impressively, container traffic between Busan and Japan is continuously increasing. Owing to the special geographic location and economical container handling cost, Busan has great potential to be considered as a transit port for container export/import in Japan instead of Japanese domestic transit ports. This paper tries to demonstrate the economic competitiveness of Busan for transshipment. It describes models for analyzing the container transportation time and cost by transshipment mode, specifically, transferring via the ports of Japan vs. via Busan. A simulation programming method is first used to build the models. A case study which considers twenty Japanese regional cities has been presented. After the case study, analysis of the comparison of simulation results and sensitivity analysis, the paper concludes with a discussion and suggestions for the container transportation transshipment network design of Japan.