The Costs of Container Transport Flow Between Far East and Serbia Using Different Liner Shipping Services

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Abstract—Liner shipping is the most efficient mode of transport for goods. International liner shipping is a sophisticated network of regularly scheduled services that transports goods from anywhere in the world to anywhere in the world at low cost and with greater energy efficiency than any other form of international transportation. Liner shipping connects countries, markets, businesses and people, allowing them to buy and sell goods on a scale not previously possible. Today, the liner shipping industry transports goods representing approximately one-third of the total value of global trade. Ocean shipping contributes significantly to international stability and security. Considering the large and constant struggle in the market in terms of competitive pricing of products, a very important and indispensable role represents the container transport with a clear task to define the final price of the product. This paper analyzes the costs of container transport flow between Far East and Serbia, using different liner shipping services, observing the six world’s largest container operators (Maersk Line, Mediterranean Shipping Company, CMA CGM, Evergreen Line, China Ocean Shipping Company and Hapag-Lloyd) and inland (truck-rail-river) transport corridors. These corridors include distance between selected Mediterranean ports (Koper, Rijeka, Bar, Thessaloniki, Constantza) and Serbia. As a result, in this paper is considered a mathematical model that provides a comparative analysis of transportation costs on the different routes. It is observed already existing transport routes and it is also given hypothetical review to the development of new transport routes. Selection of the best route in the intermodal network is a very difficult and complex task. The costs in all modes of transport and the quality of their services are not constant parameters and changes depending on a number of conditions and characteristics. The analysis of this model within combined maritime and land-based networks would prove helpful for the study of logistics chains, the hinterland-foreland continuum, intermodal transport systems, and market competitiveness.

Key words—Costs, Container transport, Liner shipping, Mathematical model.

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