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Transport Infrastructure Development Performance

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Abstract

Transport infrastructure is an integral part of the transport system of any city or state. In connection with the development of society and intensification of international relations due to the globalization processes, the importance of transport as a factor for economic and social development has enhanced. Various aspects of the activities related to the development of transport infrastructure have increasingly become the objects of scientific researches. Transportation as an economic factor is a measure of economic activity and at the same time transportation is a reflection of economic activity. So, the questions about transport infrastructure performance measurement and relationship between transport infrastructure and economic growth are the subjects for discussions in both academic and non-academic circles.

This paper highlights the role of the transportation industry in economic development of Latvia, describes the concept of transport infrastructure as an important part of the state transport system, and estimates the employed international approaches to the measurement of performance of transport infrastructure development. The article focuses on the necessity for the development of the methodology of measuring the transport infrastructure performance, that should be applied systematically and that would be generally helpful to all responsible people making transportation-related decisions.

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Keywords: transport infrastructure, performance, measurement, economic growth

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1. Introduction

Latvia transport system provides an appropriate infrastructure basis for facilitating the growing trade flows between the European Union and Russia/CIS. It also serves to the needs of local export / import operators: free ports in Ventspils, Riga, and Liepaja, an extensive and functional road network, connecting both European and CIS road networks. It is also important for Latvia ports, the shortest route between the EU and the CIS, specialized, high-capacity railway corridor linking Latvian ports with Russia and the Far East, Riga International Airport, pipeline systems for transit and distribution of Russian oil/natural gas (LIAA, 2015).

Studies conducted by the reputable international institutions show rank of Latvia on several prominent international measures presenting the interest for potential investors. According to the World Bank's Doing Business Report 2015, Latvia is ranked 22th out of 189 countries in terms of ease of doing business. At the same time, Latvia is ranked 49th out 189 countries in terms "Protecting minority investors" (http://www.doingbusiness.org/rankings).

According to the Global Innovation Index (GII) 2016 Report, Latvia is ranked 35th in terms "Logistic performance index" with score 62.9 and value 3.4 (for comparison: Germany is ranked the first with score 100 and index value equal to 4.1) (https://www.globalinnovationindex.org/analysis-indicator). These factors indicate the investment attractiveness of Latvia for capital expenditure to the transport industry, designated as a priority sector in terms of strategic development of the country. Increase of the investments in transport development determines the urgency of the analysis of the investments effectiveness and enhances the requirements for the financial information disclosure.

Thus, it is necessary to study the productivity effects of transportation activity and to design the methodology of measurement of transport infrastructure performance.

The goal of the research is to examine existing approaches of performance measurement of transportation industry activity, especially for transport infrastructure, basing both on the analysis of the scientific and academic publications, and on the official publications of internationally recognized professional institutions working on the subject of the study.

To achieve the goal of the research, the following objectives have been stated:

1. To describe the role of transport infrastructure in the economy of Latvia;
2. To determine is there an appropriate methodology to measure the development performance of the transportation industry, especially transport infrastructure;
3. To identify are there any general indicators of transport infrastructure and economic growth that could be implemented systematically.

The choice of *methodology* used in this study has been determined by the logics of solving the research issues and by the necessity to achieve the research objectives. Consideration of the role of transport infrastructure in the overall transport system is important for determining the components, which form the concept of "transport infrastructure", and for defining what potential impact they could have on the transport infrastructure performance.

Analysis of the official data published by the state institutions of the Republic of Latvia and in the articles of Aldis Bulis and Roberts Skapars (2013), Klaus Schwab (2015) has proved the priority of transport sector development for the economy of Latvia. High country ratings, estimated by the reputable international institutions demonstrate the attractiveness of the sector under discussion for investment. To evaluate the results of the development of the transport infrastructure in the international aspect, the calculation methodologies of Global Competitiveness Index (GCI) and Logistics Performance Index (LPI) have been implemented.

Analysis of economic literature shows that relationship between transport and the economy is discussion question in both academic and non-academic circles. Analysis of available statistical information has been performed to confirm the relationships between economic growth and transport industry development.

The results of this study confirmed the relevance of the examined subject; further studies may be aimed at the study of the capabilities for measurement of different aspects of transport infrastructure (potential infrastructure indices) and for the development of a general indicator for measuring the contribution of transport infrastructure at the industry level, and at the entire economy level also.