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Transport infrastructure in the Baltic States post-EU succession

Gyöngyi Kovács *, Karen M. Spens

HANKEN (Swedish School of Economics and Business Administration), Department of Marketing, Supply Chain Management and Corporate Geography, P.O. Box 479, FI-00101 Helsinki, Finland

Abstract

Developments in freight transport and transport infrastructure have a strong influence on economic growth. The Baltic States have recently undergone a transformation from planned economies to market orientation. The interest in the Baltic States originates from their importance as new markets within the European Union, and their transit function for trade with Russia. Rising trade volumes and increasing freight transport are forecasted in the near term for the region. This study aims at developing an understanding of the regulatory, structural and developmental conditions and trends affecting the transport infrastructure in a region in economic transition, namely the Baltic States, in the light of its current economic development. Comparisons are made with Buchhofer's [Buchhofer, E., 1995. Transport infrastructure in the Baltic States during the transformation to market economies. Journal of Transport Geography 3(1), 69–75] assessment of transport infrastructure in the Baltic States in the early years of transformation to market economies.

Keywords: Baltic States; Transport infrastructure; Freight transport; Regional development

1. Introduction

The demand for freight transport can be derived from a demand for the goods that are transported (Hesse and Rodrigue, 2004). Therefore, an increase in freight transport volumes is linked to the economic development of a region (Goh and Ang, 2000; van de Vooren, 2004). Special attention is paid to the transport infrastructure of economies in transition (Buchhofer, 1995) for fostering regional development. Some economies in transition have become increasingly important to international companies due to their geopolitical status, low labour cost and the potential growth in their markets (Ülengin and Uray, 1999).

The Baltic States (Estonia, Latvia and Lithuania) have faced dramatic geopolitical changes in recent years from breaking away from the Soviet Union in the early 1990s to recently joining the European Union (EU). Economically, this has meant a re-orientation from a planned to a market economy. The political history of the Baltic States as well as their geographic proximity to countries of the Former Soviet Union (FSU) also explains some special problems related to their transport infrastructure. Current road and rail networks still emphasise an East–West connection to major Russian cities (Economist, 2003b; Jauernig and Roe, 2001), while the North–South connections – that would serve as a link between the three Baltic capitals, Tallinn, Riga and Vilnius – are largely neglected. Another challenge is posed by the use of FSU railway track gauges and electrification systems. These are technical impediments for connecting Baltic railways (Ojala et al., 2004) to the nearest neighbour in the European Union, namely Poland.

This study aims at developing an understanding of the regulatory, structural and developmental conditions and trends affecting the transport infrastructure in a region in economic transition, namely the Baltic States, in the light of its economic development. Thus the study describes the current state of the transport infrastructure in the Baltic States, serving as an update of Buchhofer (1995) (pre-EU succession) review. The focus is then on external and internal

* Corresponding author. Tel.: +358 9 431 33241; fax: +358 9 431 33287.
E-mail address: kovacs@hanken.fi (G. Kovács).

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factors affecting the state of the transport infrastructure in the region, and on discussing the role of transport infrastructure as enhancing or impeding regional economic growth in economies in transition. The focus of the paper is on freight transport, which is a largely neglected topic in transport geography (Hesse and Rodrigue, 2004).

The paper is structured as follows: First, it discusses the proposed link between the state of transport infrastructure and regional economic development. Then, the current transport infrastructure in the Baltic States is reviewed in the light of their economic transition. The impact of internal and external factors, such as geopolitical developments and the direction of freight movements, on the development of the transport infrastructure and on economic growth in the Baltic States is discussed next. Finally, conclusions are presented followed by suggestions for further research.

2. Transport infrastructure and economies in transition

Before any review of the state of the transport infrastructure in the Baltic States can be undertaken, it is important to establish how this factor would relate to regional economic development. Logistics and transport geography literature traditionally claim a direct link between regional economic growth and an increase in freight transport (Banister and Berechman, 2001; Goh and Ang, 2000; Hesse and Rodrigue, 2004). Van de Vooren (2004) distinguishes between different types of models linking the demand for transport to economic development: (1) traffic models in which exogenous economic factors influence the demand for transport, and (2) production function, location and general equilibrium models, in which transport influences the economy. Yet, these two types of models with opposite causal directions do not need to contradict each other, as the relationship between economic growth and investments into transport infrastructure can also be portrayed in a circular manner (Talley, 1996). Generally, a solid transport infrastructure is related to the competitiveness of a region (Pedersen, 2001; Priemus and Zonneveld, 2003) in terms of attracting foreign direct investment (Goh and Ang, 2000). Thus, the state of an economy can also be depicted through a description of its transport infrastructure. Economies in transition are characterised by a transport infrastructure under development, variable supplier operating standards, unavailable information and communication systems support and variably available human resources (Simchi-Levi et al., 2003).

Significant differences between developed and developing countries can also be seen in the quality and productivity of materials handling operations, the quality of transport infrastructure, the modal split as well as the problems and challenges confronted (Pedersen, 2001; Persson and Bäckman, 1993; Ülengin and Uray, 1999). However, many so-called "developed" countries struggle with similar problems related to their transport infrastructure (Bookbinder and Tan, 2003), and a solid transport infrastructure cannot be seen as the only prerequisite for economic growth (Banister and Berechman, 2001). Having said this, the fulfilment function of freight transportation remains a very important factor in economic development, and the state of the transport infrastructure of a country its main facilitator (cf. Hesse and Rodrigue, 2004). Taking an EU perspective, the connectivity of a country or region is seen as enhancing its economic development (Priemus and Zonneveld, 2003). In fact the EU estimates that its investments into transport infrastructure will generate a GDP growth between 0.14% and 0.30% and additionally, time savings in international traffic assessed with a monetary value of €8 billion per year (EU, 2004a).

On the other hand, comparisons between the transport infrastructure of developed and developing regions are difficult due to regional technical impediments such as differences in railway track gauges and signalling systems (Lewis et al., 2001; Sankaran, 2000). This renders benchmarking logistics practices in economies in transition to developed countries problematic, as the specialties of a region can lead to innovative solutions unthinkable in other regions (Sankaran, 2000). Therefore, alongside drawing parallels between the transport infrastructure of different regions (Carranza et al., 2002), countries and/or regions are usually described as unique cases in logistics, and transport geography literature (see, e.g., Buchhofer, 1995; Rydzkowski, 1993). In this respect, transport infrastructure literature answers Hesse and Rodrigue (2004) call for more attention to the spatial character of logistics.

The direct link between GDP growth and an increase in freight transport volumes also remains disputed. The white paper on European transport in 2001 advocates a decoupling of these two developments in the hope that economic growth could also be stimulated through other means than increasing freight loads (European Commission, 2001; see also Banister and Berechman, 2001). This decoupling has in fact taken place since the mid-1980s, and freight transport grows by a larger (though not as wished, lower) extent than GDP in the EU (McKinnon, 2004). Production fragmentation and the increase in the number of nodes to be connected account for this growth in freight transport (Hesse and Rodrigue, 2004). Even without taking the ten new EU member states into consideration, freight transport on EU roads is predicted to grow by 60 billion ton-kilometres per year (European Commission, 2001). The demand for transport in the Baltic States is growing at a rate four times faster than GDP, which is high even for economies in transition that typically have a freight transport growth rate of 1.5 to two times GDP growth (Ojala et al., 2004). This increase in freight transport demand puts considerable pressure on the development of a functioning transport infrastructure in the Baltic States. For logistics development in economies in transition, the key challenge is infrastructure-related (Goh and Ang, 2000; Pedersen, 2001), as the physical environment of the transport infrastructure in a region sets the main constraints for freight movement (Hesse and Rodrigue, 2004).