Transportna infrastruktura - stub prosperiteta

Ioanna Coralia Zavera¹

¹The Bucharest University of Economic Studies, zaveraioanacoralia@yahoo.com

Apstrakt: Iako saobraćajna infrastruktura nije među devet stubova koje razmatra Legatum indeks prosperiteta, ona utiče na određene stavke, tako što doprinosi ekonomskom razvoju olakšavanjem i jačanjem ekonomske aktivnosti. U ovom radu polazi se od hipoteze da se uloga transportnog sektora u procesu stvaranja prosperiteta može proučavati iz nekoliko perspektiva. Prvi je tretiranje procesa ekonomskog rasta kao vektora povećanja potražnje za transportom (količina, vrsta, lokacija i način rada). Druga analitička perspektiva odnosi se na ulaganja u transportni sektor u vezi sa mehanizmima za utvrđivanje transportnih tarifa, koji mogu uticati na pojavu tehnološki intenzivnih klastera. U ovom članku predlaže se kako da saobraćajna infrastruktura doprinosi ekonomskom razvoju i poboljšava kvalitet života. Dok pomažemo u unapređivanju procesa „tercijarizacije“ evropske ekonomije, aplikativni deo studije imaće za cilj da ukaže povezanost između saobraćajne infrastrukture i broja turista privlačenih u zemlje članice EU.

Ključne reči: prosperitet, saobraćajna infrastruktura, kvalitet života, transportne tarife

Transport infrastructure – a pillar of prosperity

Abstract. Although transport infrastructure is not among the nine pillars considered by the Legatum Prosperity Index, it influences part of them, so it contributes to economic development by facilitating and boosting economic activity. In this paper, I start from the hypothesis that the role of the transport sector in the process of generating prosperity can be studied from several perspectives. The first one is the treatment of the economic growth process as a vector of boosting the demand for transport (quantity, type, location and mode). The second analytical perspective concerns investments in transport sector in connection with the mechanisms for setting the transport tariffs, which may influence the emergence of technological intensive clusters. In this article, I propose to highlight how transport infrastructure contributes to economic development and improves quality of life. As we assist in advancing the process of "tertiaryisation" of the European economy, the applicative part of the study will aim to capture the correlation between the transport infrastructure and the number of tourists attracted in the EU member countries.

Key words: prosperity, transport infrastructure, quality of life, transport tariffs

Introduction

Development can be defined as an increase in the well-being of a society by improving social, political and economic conditions. Expected outcomes look at qualitative and quantitative aspects both in terms of human capital (income and level of education) and physical capital, such as infrastructure (utilities, transport, and telecommunication). If so far policies and strategies had as reference physical capital, the processes and phenomena that determine the evolution of society, now an equally important note is given to human capital. Therefore, there can be no "confrontation" between physical and human capital, as there is a permanent interaction between the two for economic development to be more than a quantitative evolution of the indicators (Galor and Moav, 2004). Infrastructure can not be efficient without operations and maintenance, while economic activities can not be deployed without infrastructure. High transactional services and operations involved in transport activities highlight the relationship between its physical and human capital needs (e.g. efficient logistics means both infrastructure and managerial experience).

Thus, the transport sector, a part of an economy, is also a common tool for development, especially in a global economy where opportunities have increased with the mobility of people, goods and information. High density transport infrastructure and highly connected networks are generally associated with high

levels of development. When transport systems are effective, they provide opportunities and benefits with positive multiplier effects such as better market accessibility, employment and investment. If we are talking about a deficiency in the capacity and reliability of transport systems, there may be economic costs as a result of the reduction or disappearance of opportunities and a lower quality of life. In addition, the impact can also have unforeseen consequences.

Transport infrastructure – a pillar of prosperity

The two-way relationship between transport and economy

The impact of transport at the economic level takes various forms. The most important is the physical capacity to carry passengers and goods at the appropriate costs to support this mobility. This implies establishing routes that allow new or extensive interactions between economic entities. Equally important is the improvement of performance over time, especially reliability, but also the reduction of loss or damage, which implies a better use of transport goods so passengers and goods are carried faster and with fewer delays. Another impact concerns access to a wider market where economies of scale in production, consumption and distribution can be achieved (access to more resources and a larger market).

The economic importance of transport infrastructure can be analyzed both from a macroeconomic and microeconomic perspective. So, regarding the impact on the whole economy, transport and mobility are linked to a certain level of production, employment and income from the national economy. In many developed countries, transport accounts for between 6% and 12% of GDP. If logistics costs are included, the percentage may reach 25% of GDP. If we take into account only part of the economy, transport is closely linked to the producer, consumer and production costs. High revenue levels are associated with a higher share of transport expenditure in consumer spending, with an average cost of between 10% and 15% of household spending (Rodrigue, 2017).

Moreover, the added value and effects of transport services extend beyond what generates activity itself. For example, transport companies acquire some of the resources from local suppliers, which adds value and increases local employment. In addition, suppliers buy goods and services from other local businesses. On the other hand, households who earn from transport activity spend a share on local goods and services, which leads to additional jobs and added value locally. Thus, a circuit of the process is formed that implies a larger global impact than the original one.

At the same time, transport connects production factors into a complex network with producers and consumers relationships, resulting in a more efficient division of production, with comparative advantages and economies of scale. So, it increases space, capital and labor productivity through distribution efficiency and people's mobility.

Due to demographic pressures and urbanization, in developing economies there is a mismatch between limited supply and growing demand for transport infrastructure. While some regions know the development of transport systems, others are marginalized by a set of conditions where inappropriate transport plays an important role. Transport itself is not a sufficient condition for development, but the lack of transport infrastructure remains an impediment to economic development, through high transport costs, delays and supply chain disturbances. A low level of transport service affects the competitiveness of a region and economic activity, which has a negative impact on added value, employment and economic opportunities (Vickerman, 2012).

Transport investments and economic returns

It is assumed that investment in transport will generate economic returns, which in the long run will justify the initial commitment of capital (Banister and Berechman, 2001). Like most infrastructure projects, transport can generate an annual return of 5-20% of the capital invested, figures often advanced to promote and justify investment in transport infrastructure. In any case, investment in transport tends to reduce marginal profitability. While the initial investment tends to have a high return as it gives new mobility options, the more the system is developed, the more the additional investment will yield a lower return and at one point the marginal profitability can reach 0 or may even be negative. The error that may arise is the similar multiplying effect of the additional investment and initial investment, which results in a misallocation of capital.

Therefore, each transport infrastructure development project should be treated independently. Transport infrastructure is capital intensive fixed assets, being prone to inappropriate allocation and disinvestment, and can be associated with investment in welfare production rather than welfare consumption where services are concerned.

Many such projects are funded by public funds, so they can be the subject of lobbying, which leads to lower economic returns. Moreover, large projects, such as public transport, may have poor cost control mechanisms, thus exceeding the budget. The economic profitability of investments in transport infrastructure can be traced through the evolution of some indicators (e.g. transport prices and productivity) (Banister and Berechman, 2000).

Transport - an economic variable

Globalization and technological progress have caused economic development to be more dependent on space relations. Resources, capital, labor have led to increased mobility.

Transport gives access to market by facilitating the relationship between producers and consumers. Analysis of the importance and impact of transport on the economy focuses only on transport costs, which represent between 5% and 10% of the asset value. Transport is an economic factor for the production of goods and services, which, although it generates a small part of the input costs, are fundamental to their production. Regardless of the cost, no activity can be carried out without the intervention of the transport factor. Therefore, any magnitude of the change in cost, capacity and transport performance can trigger substantial effects on dependent economic activities (Anderson and van Wincoop, 2004).

Many positive economic changes take place with a modern transport infrastructure. Such improvements encourage geographical specialization, contributing to increased productivity and spatial interactions. Each economic entity seeks to produce with the most appropriate factors combination as long as transport modes are available to ease its activity, so regions tend to specialize where they have the greatest benefits.

Also, an efficient transport system that offers benefits of time, cost and reliability allows goods to travel long distances, thus access to larger markets, a larger scale of production and lower unit costs.

The transport efficiency also leads to the development of market potential for a particular product, thus increasing competition. More goods and services become accessible to consumers, encouraging quality and innovation.

The adjacent land to transport services is of greater value due to the utility it gives to various activities. Consumers are allowed greater access to retail goods and services, while residents can choose from more jobs, services and social networks, all reflected in the high land value (Docherty and MacKinnon, 2013).

Transport and tourism - an interdependence

Transport infrastructure and tourism growth are closely connected. Tourism is a group of activities aimed at satisfying the needs of tourists during their journey and spending time in the chosen destination, and its development has a positive impact on the whole economy and social life. A well-developed transport infrastructure is necessary for tourism development, but it is not sufficient.

Transport infrastructure is a sine qua non condition for transport development, as traffic comprises a number of personal cars, and this makes the infrastructure an integral part of travel. Transport infrastructure does not always mean the accessibility of desirable destinations as long as it depends on the availability and organization of transport.

A journey is primarily an experience of a series of impressions. The market has a major role in creating this impact on the tourist. Under the current conditions of increasing competition on the tourism market there is the possibility of dissatisfaction for tourists who can invariably lead to their refusal to use the same products or services. It is easy to see the role transport plays in today's tourism, considering that time spent in vehicles occupies a significant part of the journey. In the past, the main purpose of the transport was to reach the destination as quickly as possible, disregarding the discomfort during the journey. Today, transport has a different role, achieving the following valences: 1 - accessibility of tourist

destinations; 2 - mobility within tourist destinations; 3 - some types of transport are tourist attractions. Transport that provides accessibility for tourist destinations is connected to the main and interstate infrastructure.

An important correlation can be observed in the figure below, between infrastructure investment in education and health, and infrastructure investment in utilities, transport and telecoms, the main areas that people have access to and may bring prosperity and well being by achieving the level of satisfaction for each person.

Figure 1 Investments in infrastructure in real terms in the EU

Source: Eurostat, Ioannis Zachariadis, European Parliamentary Research Service, 2018

As can be seen, the economic crisis has affected investments in transport, telecommunications and utilities infrastructure. Although they have fluctuated globally, investments remain well below the pre-crisis level.

Talking about the tourism within the EU, it has followed a growing trend, highlighting the importance of the infrastructure in a journey.

Figure 2 EU Inbound tourism

Source: World Tourism Organisation, European Union Tourism Trends, 2018

Except for the crisis year, the tourism has followed an increasing trend and there are premises that it will be continuously increasing, taking also into account the globalisation, the evolution of technology and so the development and evolution of transport infrastructure.

Conclusions

Economic growth is closely connected to the development of transport infrastructure as well as to management activities as decisions on how to use and operate transport systems are needed in order to increase benefits and reduce costs. So hard assets have to harmonize with the soft ones (work, management, information systems).

The link between transport infrastructure and economic development is a little more sensitive, as in some situations it appears to be a catalyst for economic growth, while in others economic growth puts pressure on existing transport infrastructure and causes additional investment. Transport markets and infrastructure networks are considered to be key drivers in promoting sustainable development by improving accessibility and opportunities for less developed regions and disadvantaged social groups.

Economic development is also achieved through job creation, many of them being associated with the evolution of transport infrastructure. Economic entities make decisions about products, markets, costs, locations, prices, based on transport services, availability, reliability and capacity.

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