
CONTRIBUTION OF TRANSPORT SERVICES TO BULGARIA'S ECONOMIC DEVELOPMENT

Galina ZaharievaD. A. Tsenov Academy of Economics Svishtov, Bulgaria, g.zaharieva@uni-svishtov.bg**Karina Sarkisyan-Dikova**D. A. Tsenov Academy of Economics Svishtov, Bulgaria, k.sarkisyan@uni-svishtov.bg**Zdravko Lyubenov**D. A. Tsenov Academy of Economics Svishtov, Bulgaria, z.lyubenov@uni-svishtov.bg

Abstract: Transport is considered one of the key sectors in terms of economic development. The quality of transport services and transport infrastructure is essential for the growth of the economy, the regular production operations in other sectors of the economy, and the satisfaction of people's needs. As a full member of the European Union (EU), Bulgaria is committed to adopt and implement all of its internal policies and regulations, including those in the field of transport. Over the last two decades, the Community's efforts have been directed at building a well-functioning single European transport area, a transport system that is competitive and at the same time satisfies the contemporary social and environmental requirements. Therefore, a number of legislative changes concerning all modes of transport (rail, air, road and water) have been made. They all have a certain effect for the sector on a pan-European and national scale as well as for its contribution to economic development.

The main objective of this paper is to analyze the contribution of transport services to the economic development of Bulgaria. The analysis is based on statistical data from various sources, such as the World Trade Organization (WTO), the World Bank, Eurostat and the National Statistical Institute of Bulgaria. These statistics include the number of persons employed in the sector, the national GDP level, and the volumes of export and import of goods and services. The analysis covers the period 2005-2017, which includes years from Bulgaria's pre-accession and post-accession period.

The results from the analysis show that transport services are a substantial part of the services sector in the country. During the investigated period the actual volumes of both exports and imports of transport services are increasing, while in relative terms the trend is different. A substantial part of the employed persons in Bulgaria are engaged in the sector of transport services – in 2017 they were 210.6 thousand, or 6.7% of all employed persons. Comparatively, according to data from Eurostat, this sector in the European Union provided employment for about 11 million people in 2016, which is more than 5% of the total employment in the Union. The paper also discusses the European regulations concerning the transport sector and the benefits from its development.

Keywords: transport services, export of services, import of services.

1. INTRODUCTION

Transport is considered one of the key sectors in terms of economic development. The quality of transport services and transport infrastructure is essential for the growth of the economy, the regular production operations in other sectors of the economy, and the satisfaction of people's needs. At the same time, the transport sector faces many challenges posed by current EU policies and strategies. Over the last two decades, the Community's efforts have been directed at building a well-functioning single European transport area, a transport system that is competitive and at the same time satisfies the contemporary social and environmental requirements. Therefore, a number of legislative changes concerning all modes of transport (rail, air, road and water) have been made. They all have a certain effect for the sector on a pan-European and national scale as well as for its contribution to economic development.

2. LEGISLATIVE FRAMEWORK OF THE TRANSPORT POLICY AND SERVICES OF THE EUROPEAN UNION

Transport policies of the European Union emphasize on the all types of transport services, e.g. air, road, rail and maritime transport. It is one of the common policies of the EU developed for more than 30 years. The purpose of the policy is to build a Trans-European Transport Network and a "sustainable mobility" model taking into account the constant rise of the greenhouse gas emissions from the transport sector for the last decades.

The idea of establishing a common transport policy begins with the Treaty of Rome therefore this policy is considered to be one of the first common one. The policy's objectives were to create one common transport market, freedom to provide services and opening the transport markets (Factsheets to the EU: Transport, 2018).

During the previous years of the functioning of the European Community and European Union many legislative regulations, directives and decisions have been established for regulation and creating a safety and effective transport network all across the European Union (Tabl. 1).

Table 1. Key legislative documents of the EU in the field of transport

Document	Short description
Aviation	
Regulation (EC) No 1008/2008 of the European Parliament (EP) and of the Council of 24 September 2008 establishing common rules for the operation of air services in the Community (Recast).	Common rules for the operation of air services
Council Directive 96/67/EC of 15 October 1996 on access to the groundhandling market at Community airports.	Ground-handling.
Council Regulation (EEC) No 95/93 of 18 January 1993 on common rules for the allocation of slots at Community airports	Slots
Regulation (EC) No 868/2004 of the EP and of the Council of 21 April 2004 concerning protection against subsidisation and unfair pricing practices causing injury to Community air carriers in the supply of air services from countries not members of the European Community	State aid for airlines.
Reg (EC) No 216/2008 of the EP and of the Council of 20 February 2008 on common rules in the field of civil aviation and establishing a European Aviation Safety Agency	Safety
Directive 2003/42/EC of the EP and of the Council of 13 June 2003 on occurrence reporting in civil aviation.	
REGULATION (EU) No 996/2010 OF THE EP AND OF THE COUNCIL of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation and repealing Directive 94/56/EC	
Regulation (EC) 549/2004 – Framework for the creation of the single European sky (<i>the Framework Regulation</i>)	Airspace
Regulation (EC) 551/2004 – Organisation and use of airspace in the single European sky (the Airspace Regulation)	
Regulation (EC) 552/2004 – Interoperability of the European Air Traffic Management network (the Interoperability Regulation)	
Regulation (EC) No 2027/97 as amended by Regulation (EC) No 889/2002 of the EP and of the Council of 13 May 2002 on air carrier liability in respect of the carriage of passengers and their baggage by air	Passenger rights
Directive 2003/87/EC of the EP and of the Council establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC	Establishes Emissions trading scheme
Council Regulation (EC) No 71/2008 of 18 December 2007 setting up the Clean Sky Joint Undertaking.	Environment - Establishes a private/public research partnership to develop clean, innovative and competitive air transport solutions
Maritime	
Council Regulation (EC) 718/1999	The purpose of this Regulation, on a Community-fleet capacity policy, is to promote inland waterway transport

Council Directive 91/672/EEC	This Directive is to institute the reciprocal recognition of national boatmasters' certificates for inland waterway navigation between the Member States.
Council Regulation (EEC) 3921/91	The purpose of this regulation is to lay down the conditions under which non-resident carriers may have freedom to operate inland waterway transport services in a Member State.
Directive 96/50/EC	The aim of this Directive is to harmonise the conditions for obtaining national boat masters' certificates for inland waterway navigation between Member States in order to combat distortions of competition between carriers and to increase the safety of inland waterway navigation.
Council Regulation (EC) 1356/96	The aim of this Regulation, on common rules applicable to the transport of goods or passengers by inland waterway between Member States.
Rail	
The “First Railway Package” of 3 directives: Directive 2001/12 of the European Parliament and of the Council on the development of the Community’s railways, amending Directive 91/440	Opens the international rail freight market.
Regulation 913/2010 of the European Parliament and of the Council concerning a European railway network for competitive freight	Sets out the legislative framework for the establishment of international, market-oriented rail freight corridors
Directive 2007/59/EC of the European Parliament and of the Council on the certification of train drivers operating locomotives and trains on the rail network in the EU (the “Train Driver Directive”, part of the “Third Railway Package”)	Sets minimum standards on skills, fitness and training and harmonises the licensing system for train drivers across the EU to make it easier for cross-border rail services to operate
Commission Regulation 36/2010 on Community modals for train driving licences, complementary certificates, certified copies of complementary certificates and application forms for train driving licenses under the Train Driver Directive	Sets out the content, physical characteristics and format of the documents and registers associated with train driver licences
Regulation 1371/2007 of the European Parliament and of the Council on rail passengers’ rights and obligations (part of the “Third Rail Package”)	Ensures minimum rights for passengers, for example, on compensation for delays, cancellations or lost/damaged baggage, the provision of information by railway undertakings, ticketing, complaints handling, minimum insurance and rights for disabled passengers and passengers with reduced mobility
Roads	
First Council Directive 80/1263 EEC of 4 December 1980 on the introduction of a Community driving licence. (First driving licence directive)	This sets standards across the EU and allows mutual recognition of driving licences
Directive 1999/37/EC – the harmonisation of registration documents for vehicles	This legislation aims to harmonise the documentation underpinning the vehicle registration system across the EU.
Regulation (EC) No 1072/2009 of the EP and of the Council of 21 October 2009 on common rules for access to the international road haulage market.	Common rules on the access to the road haulage market
Directive 83/182/EEC on vehicle registration and licensing	Provides tax exemptions within the EU for certain means of transport temporarily imported into one

	Member State from another.
Drivers' hours – Regulation (EC) No 561/2006 on harmonisation of social legislation relating to road transport (drivers' hours)	Prescribes maximum limits on driving time and minimum requirements for breaks and rest periods on a daily and weekly basis for drivers of vehicles over 3.5 tonnes
Directive 2010/40/EU of the EP and the Council of 7 July 2010 on the framework for the deployment of Intelligent Transport Systems (ITS) in the field of road transport and for interfaces with other modes of transport.	To coordinate and accelerate harmonised deployment of ITS across Europe.
Directive 2004/52/EC on the interoperability of electronic road toll systems	The legislation sets out a framework for a European Electronic Toll Service (EETS) with the aim of achieving interoperability between electronic toll systems across the European Union

Source: Government's Review of the Balance of Competences in the transport field, Department of Transport, 2018

All the legislative documents aim to help the European countries to develop a Trans-European transport network (TEN-T network). According to the Regulation N0 1316/2013 of the EU Parliament (EU-Lex, 2019) the EU provided guidelines for transport investments. The main purpose of this regulations is the obligation settled in it for the European countries to develop the "core" and "comprehensive" TEN-T networks.

Implementing the various number of regulations and other legislative documents, the EU demonstrate its efforts to improve the transport sector and services to face the challenges such as digitalization, innovation and social benefits in order to build a new, modern and effective transport area for EU- members and their citizens and trade partners.

3. ROLE OF THE TRANSPORT FOR THE NATIONAL ECONOMIC DEVELOPMENT

The legislative changes in the transport sector at the European level have influence on the national transport policy and national strategic documents. Therefore, they are starting point for the evaluation of the transport services contribution to the development of the national economy. In the Integrated transport strategy of Bulgaria for the period till 2030 the mission of the transport sector is defined : „to contribute to the national economic and social development by: providing efficient (maximum benefits), efficient (minimal costst) and sustainable (minimal external influences) transport; supports balanced regional development and contributes to the full integration of the country into the European structures, taking into account the cross-border situation of Bulgaria and its transit potential (Integrated transport strategy 2030, 23 June,2017). The transport sector generates growth through trade facilitation of various products. The investments in the transport sector at macroeconomic level lead to the raise of the level of transport services by increasing the return on private investment. At the microeconomic level, the improvement of transport services contributes to reducing resource costs and thus to reducing production costs, increasing the access to different markets, and indirectly assisting in the national development. (Nikolova, Hr., 2013).

The evaluation of the transport services for the national economic development has the following peculiarities: (Bakalova, W., 2009):

- ✓ In the transport sector there is no production of new goods with specific characteristics, nor the objects receive a new material form. The production of transport is not substantial and is measured in tonne-kilometers in freight transport, respectively. passenger-kilometers in passenger traffic. The immaterial nature of the production offered on the transport market is a prerequisite for the use in practice of the term "transport service" (Zhelyazkov, Em. & Todorova, D., 2010, pp. 46).
- ✓ The transport is essential part of the industrial process. The provision of transport within the enterprise, between the sectors of the economy, between the regions of the country and with the other countries has a significant impact on the rates and scale of production. Meanwhile the transport is one of the key sectors of the industry the purpose of which is to achieve the interconnections between producers and consumers.
- ✓ Transport is necessary to carry out transport both inside the enterprise and between enterprises. The production process can be considered complete and the product ready for consumption only after it has finished moving to the consumer. In many industries, almost all of the production process is confined to a transport process, respectively. to spatial displacement of the products concerned. The transport is a complex dynamic system. It is functioning for all other branches of the economy and not vice versa

The chracterists of the transport, the legislative and strategic framework for its functioning create prerequisites for the use of numerous indicators in the analysis of its role in the national economic development.

During the research the indicators which a related to the industry, trade with transport services, environmental taxes and investments in the sector will be used.

4. TRANSPORT SERVICES IN THE BULGARIAN ECONOMY

The importance of all services, and, above all, of transportation, for the economic development of the country was growing over the last two decades and especially after Bulgaria's accession to the EU. According to the statistical data published by the NSI regarding the number of companies in the sector of transportation and storage, the relative growth of turnover and value added at factor cost in this sector is higher compared to all other sectors except the sector of financial services. For the period 2008-2017 the share of enterprises increased from 6.1 to 6.8%, turnover from 4.9% to 5.7% and value added at factor cost from 8.1% to 8.5%. Similar is the trend in the number of employees in non-financial enterprises, whose share increases from 7.8% to 8.6%. In 2017, 210,600 people work in the Transport, warehousing and postal sector, 169,000 men and 41,600 women. According to data from Eurostat, this sector in the European Union provided employment for about 11 million people in 2016, which is more than 5% of total employment in the Union. The number of vehicles increases and according to Eurostat the number of Lorries and road tractors increases from 39125 in 2013 to 50396 in 2017. From 2008 to 2017, the relative number of enterprises in this sector increased from 6.1 to 6.8%, the relative share of their turnover grew from 4.9% to 5.7%, and the share of their value added at factor cost rose from 8.1% to 8.5%. A similar trend is observed for the number of people employed in non-financial enterprises, with a relative increase from 7.8% to 8.6%. In 2017, the number of persons employed in transportation and storage was 210,600, of whom 169,000 men and 41,600 women. Comparatively, according to data from Eurostat, this sector in the European Union provided employment for about 11 million people in 2016, which is more than 5% of the total employment in the Union. The number of vehicles is increasing as well and, according to Eurostat, the number of lorries and road tractors increased from 39125 in 2013 to 50396 in 2017.

An upward trend is observed with regard to the international trade of transport services as well. According to data from WTO, the total export of transport services rose from about \$ 1.2 billion in 2005 to \$ 2.1 billion in 2017. The trend regarding the import is similar, with an increase from about \$ 1.1 billion in 2005 to \$ 2 billion in 2017. These figures are even more impressive when we consider the fact that during the same period the relative share of exports of transport services in total exports of services decreased from 23% to 19%, while the relative share of the imports kept growing and increased by 6% over the period (from 25% to 31%). (Fig. 1)

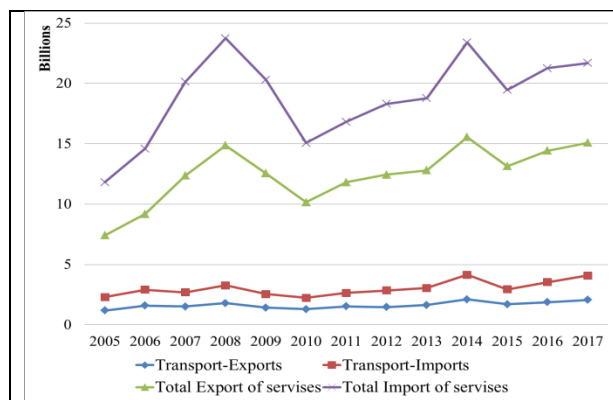


Fig. 1. Trade in services (bln. USD)

Source: WTO

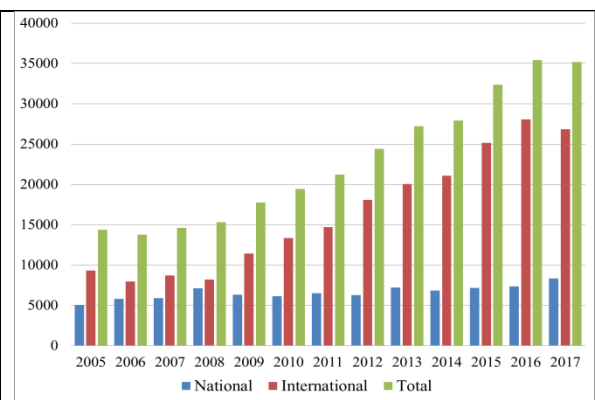


Fig. 2. Goods carried by RFT (mln. tkm)

Source: NSI

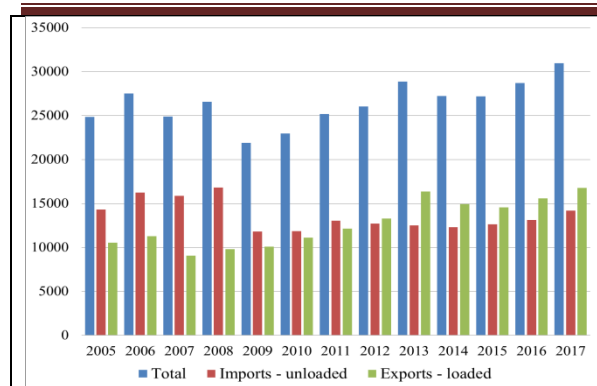


Fig. 3. Loaded and unloaded goods in sea harbours (thousand tons)

Source: NSI

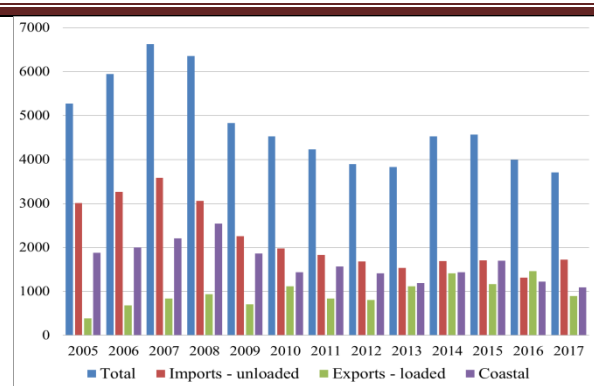


Fig. 4. Loaded and unloaded goods in river harbours (thousand tons)

Source: NSI

Although from 2005 to 2017 the total volume of goods carried by RFT increased from 353865.6 to 576671 mln. tkm., the relative increase of international transport services is much higher than that of national transportation (Fig. 2). The trend in railway transportation is quite different, with a market decrease after 2007 and a slight increase during the last three years of the period to levels far below the level in 2005. The volume of goods loaded and unloaded in sea harbours (Fig. 3) increased while those loaded and unloaded in river harbours (Fig. 4) decreased over the period. The volume of air transport services increased as well to reach 11.4 mln. passengers and 34 837 t. of cargo in 2017 from 6.2 mln. passengers and 18 831 mln. t. of cargo in 2017.

An important factor for the development of the sector, its efficiency, and the quality of the services rendered are the investments in infrastructural development and acquisition of new fleets. Although our national statistics does not provide sufficient information regarding the amount of investments in the sector, it can be inferred from the cost of acquisition of tangible fixed assets reported by the enterprises in the sectors of wholesale and retail trade, transport, accommodation and food service activities for the period 2008-2017, which decreased to reach BGN 4571993 thousand in 2017. Foreign direct investments in the sector of transportation and storage increased from EUR 175253.6 thousand to BGN 479828 thousand over the period.

The mitigation of the negative effect of transportation on the environment requires additional financial resources. Such funds can be raised by imposing environmental taxes. The data collected in accordance with EU Regulation 691/2011 shows that the volume of environmental taxes paid by the companies in the sector of transportation and storage increased from BGN 456.41 million in 2010 to about BGN 683 million in 2016. The largest relative share of these taxes comes the energy tax due to the trend of increasing energy consumption in the sector of transport services.

5. CONCLUSION

As a conclusion it is found that the importance of the transport sector for the national development is increasing after the accession to the EU. The number of the enterprises in the sector has increased as much as the transport means and the relative share of the employed in the mentioned sector and the turnover and added value.

The volume of goods and passengers transported increases, but there are different trends in the different modes of transport. The European legislation has a significant impact on the transport sector

BILIOGRAPHY

Бакалова В. (2009). *Организация на транспортната дейност в отраслите на икономиката*. София: Университетско издателство "Стопанство".

Желязов, Ем. & Тодорова, Д. (2010). *Ръководство по ценообразуване на транспортната услуга*. София: ВТУ "Т. Каблешков".

Интегрираната транспортна стратегия в периода до 2030 г. (23.06.2017). Извлечено от https://www.mtitc.government.bg/sites/default/files/integrated_transport_strategy_2030_bg.pdf

Николова Хр. (2010). *Транспортният пазар в България*. София: Университетско издателство "Стопанство".

Николова, Хр. (2013). *Устойчиво развитие на транспорта в България – анализ и оценка на ключови индикатори*. София: Издателски комплекс – УНСС.

Полякова, В. (2005). *Мировая экономика и международный бизнес*. Москва: изд. КНОРУС.

Славова-Ночева М. (2012). *Конкуренция, конкурентоспособност, транспортен пазар*. София: Изд. ВТУ "Тодор Каблешков", ВТУ ПРИНТ.

EU-Lex (2019); <https://eur-lex.europa.eu/homepage.html?locale=bg>

Factsheets to the EU: Transport (2018) ; <http://www.europarl.europa.eu/factsheets/en/sheet/123/common-transport-policy-overview>

Rainey, H. G. (2009). *Understanding and managing public organizations*. John Wiley & Sons.