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Development of the international freight transport sector in Poland against the background of the EU market

Development of Polish international road transport of goods after Poland's accession to the EU. Haulage work carried out between 2005 and 2015. International transport in the context of haulage carried out by the remaining EU transport. Transport arranged by types of haulage in 2005 and in 2015. Development of the number of Polish enterprises and their transport potential measured by the numerousness of the car fleet. Changing structure of the trucks fleet according to the pollutants emission standards in the years 2010–2015. Shaping of the average efficiency of the haulage work by the statistical vehicle. Factors influencing the future demand for international transport performed by Polish carriers. Trends for introducing high-volume lorries to run on the EU roads. Prospects for the development of Polish international freight transport until 2030.

Key words: road transport, international transport

1. Introduction

Growing competitiveness of the Polish international road hauliers as well as the competitiveness of companies from other Central and Eastern Europe as well as Southern European countries has become one of the reasons for some countries from so called "old Union" to try to circumvent the fundamental principle of European Union economic law, that is regarding the internal market as an "area without internal frontiers, where free movement of goods, persons, services and capital is ensured" (Article 26 (2) of the Treaty on European Union) [10]. Such EU countries as Germany, France, Austria, the Netherlands, and Italy are trying to defend their markets against competition from road transport companies from Central and Eastern as well as Southern Europe using the slogans on the need to protect the social rights of all European workers [7]. We are witnessing protectionist actions which are an attempt to restrict access to national markets for the carriers from other EU countries [6]. This is reflected, for example, by the facts of subjective law creation under the Minimum Wage Act, set in Germany in 2015 (MiLoG) and in France (Loi Macron) in 2016. These phenomena are a threat, among the others, to the significant position attained by the Polish carriers in the international market in the recent years [3]. The article presents measurable results of development after 2004 of the Polish international freight transport operating on the competitive transport market.

2. International transport haulage in the context of total haulage of the road transport and other modes of transport

The road transport has for many years been dominating the transport structure in Poland. Its share in volume of the freight transported by land transport in 2015 was about 84%, and its share in haulage work was about 79% [5]. The dynamics haulage by this branch of transport is high. In the years 2005–2015, with an increase in transport by land transport by about 177%, the dynamics of haulage work by the freight transport was 228%.

Following Poland's accession to the EU, obtaining the Community license gave the Polish road haulers more opportunity to operate on the markets of the member states. This was one of the driving factors of the dynamic development of the international transport sector. Other important factors contributing to the development of the sector were, among the others. [9]:

- dynamic development of Polish foreign trade,
- globalization of the market,
- generally good (despite the crisis since 2008), economic climate in Europe,
- easy access to the transport means,
- lower own costs of the Polish carriers compared to the Western carriers' costs,
- expansiveness of the Polish carriers supported by the skills of acquiring and operating on new shipping markets.

Since 2005, the transport conducted by the fleet of Polish-registered international freight transport companies has increased almost four times (204.7 million Mg in 2015) and the haulage work has tripled to 156 billion tkm in 2015 (Fig. 1)

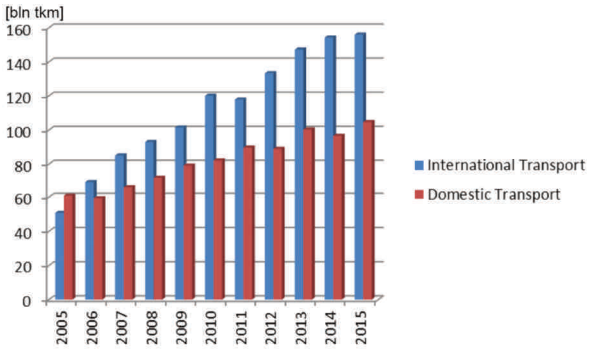

Fig. 1. Haulage work of the Polish freight road transport carried out in the years 2005–2015 by the vehicles exceeding 3.5 Mg GVW [bln tkm] (diagram based on CSO data [5])

Between 2005 and 2015, the average distance travelled by 1 ton of cargo in international freight transport fell from 968 km to 762 km. This decrease was related both to transport from Poland and to Poland and to transport between foreign countries. The average transport distance by 1 ton in cabotage has increased.

In the structure of types of carriage of goods by international road transport in recent years, exports and imports of bulk cargo to Poland has increased almost threefold in the recent years. On the other hand, the haulage carried out by Polish companies between foreign countries increased significantly (six times according to the tonnage transported) and cabotage (less than 11 times) (Table 1).

Table 1. Carriage and haulage work of the Polish international road transport in 2005 and in 2015 by the types of carriage [5]

	2005		2015	
	[thou. t]	[thou. tkm]	[thou. t]	[thou. tkm]
International Transport including:	52551	50886000	204660	156034000
export	21286	20570000	61075	53594000
import	19531	19018000	55756	48864000
Transp. between foreign countries	9314	106450000	56981	44386000
cabotage	2420	653000	26055	8634000

Out of the cabotage transport carried out in 2010 by the Polish companies, ¾ of the shipment was carried out in Germany and France [8].

Polish carriers have dominated the EU's international transport market (Fig. 2). Their market share in 2014 (calculated with respect to haulage work) has already exceeded 25% (Fig. 3) (in 2005 – 8.2%).

For example, the share of German carriers was less than 8%, and French carriers was slightly above 2% (Fig. 3). This fact demonstrates high competitiveness of the Polish road carriers on the international market.

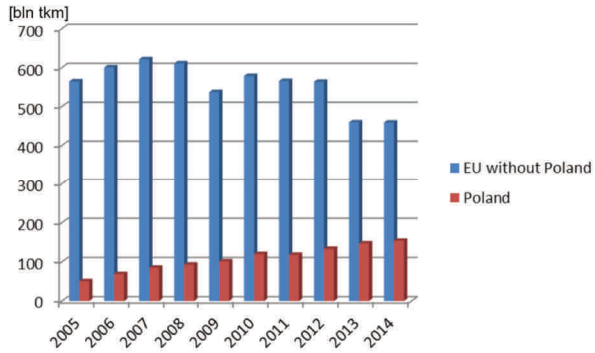

Fig. 2. Haulage work performed by the Polish international freight road transport against the background of international transport haulage work in other EU countries [bln tkm] (diagram based on CSO data [5])

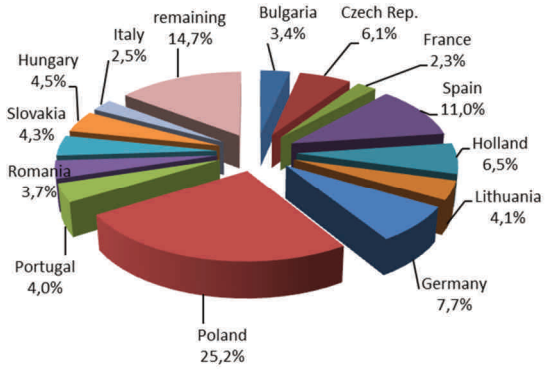

Fig. 3. Structure of international freight transport's haulage work of the EU countries in 2014 (diagram based on CSO data [5])

The goods that are transported mainly by the Polish road transport are (according to the share of haulage work): food, beverages and tobacco products (13.6%), chemicals, chemical products, synthetic fibres, rubber and plastic products (12.6%), metals, metal products (excluding machinery and equipment) (11.9%), wood, wood and cork products (without furniture), straw products, paper and paper products, printing products and sound recordings (10.3%) [5].

3. Structure of the Polish international road transport market

Particularly after 2004, the number of enterprises authorized to conduct international transport of goods, increased. As of the end of 2015 in Poland there were 29 thousand companies holding valid licenses, i.e. operating trucks for profit [4] (Fig. 4).

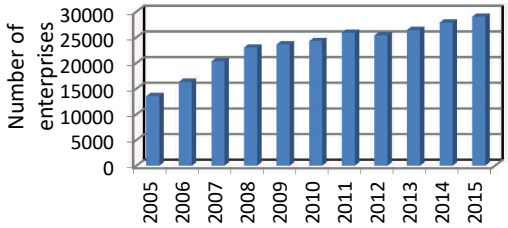

Fig. 4. Number of enterprises authorized to perform international road transport of goods (with valid licenses) between 2005 and 2015 (as of 31 December) (diagram based on GITD data [4])

Between 2005 and 2015, the number of trucks at the companies in question increased 2.5 fold and reached 185.4 thousand at the end of 2015 [4] (Fig. 5).

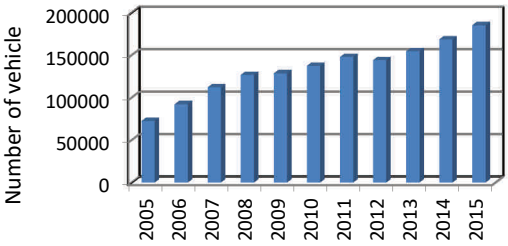

Fig. 5. Number of license excerpts (number of vehicles) of the international freight transport enterprises in the years 2005–2015 (as at 31 December) (diagram based on GITD data [4])

Small, often family-owned businesses dominate the structure of Polish international road freight transport. Companies with up to 4 vehicles account for 2/3 of the total number of companies (Table 2). There is an increase in the size of the statistical enterprise measured by the average number of trucks.

By the end of 2015, the average number of heavy goods vehicles in the international transport company was 6.2 (in 2005 statistically 5.4 in the past years, significant changes in the quality of the car fleet operated by international transport companies have occurred. The vehicles that meet Euro 5 and Euro 6 pollutants emission standards accounted for about 60% of the total fleet at these companies in 2015 (Fig. 6).

Table 2. Number of enterprises and trucks in the international transport in Poland arranged by the size of enterprises (as at the end of 2015) [4]

Number of vehicle at the enterprises	Number of enterprises	Number of vehicle	Avarage number vehicles in the enterprise
1	7038	7038	1
2 to 4	12531	34724	2,8
5 to 10	6618	44776	6,8
11 to 20	2219	31501	14,2
21 to 50	1051	32097	30,5
51 to 100	239	16444	68,8
Above 100	107	18820	175,9
Total	29803	185400	6,2

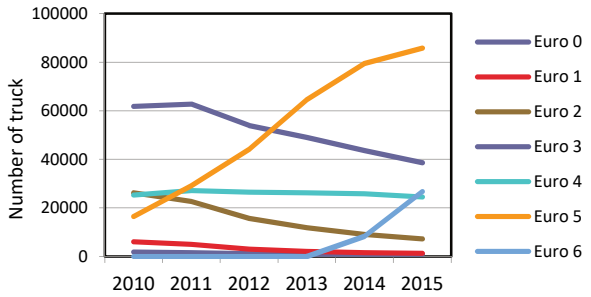

Fig. 6. Number of trucks at the international transport companies according to the pollutants emission standards in 2010 and in 2015 in Poland [4]

At the same time, the share of heavy goods vehicles meeting the requirements of Euro 2 and earlier standards is significantly decreasing.

4. Use of the fleet in the international transport

Since 2005 the international traffic has been witnessing an increase in the average annual productivity of the haulage work of a heavy goods vehicle. In 2005 it amounted to about 701 thousand tkm/vehicle and in 2015 it amounted to about 841 thousand tkm/vehicle (Fig. 7).

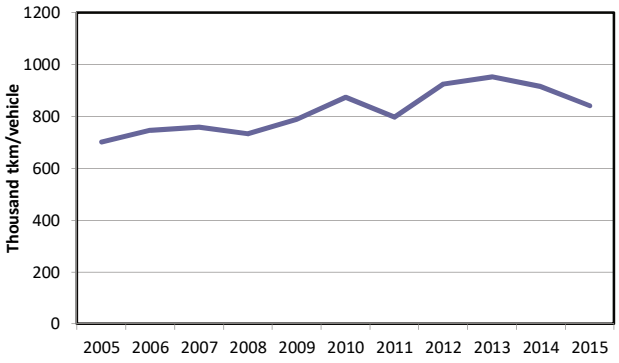

Fig. 7. Average efficiency of haulage work by the statistical vehicle at the Polish international freight transport in the years 2005–2015 [thousand tkm/vehicle] (diagram based on [4] and [5] data)

In 2006–2013 this increase was mainly due to the dynamic development of demand for transport because of the development of international goods exchange, increasing competitiveness of the Polish carriers on the international transport market (cabotage and third country transport). Some decrease in the average annual productivity of the haulage work by the statistical truck after 2013 is due to the growing competition on the international road haulage market caused by strong expansion of carriers of such countries as: Lithuania, Estonia and Slovakia. The competitiveness of road transport from these countries has influenced the decrease in rates for transport services on the European market, observed in the last two years and has led to a decrease in freight rates of Polish carriers, resulting in a decrease in their profitability.

For example, according to the ITS studies [9], average profitability of the Polish international freight transport companies operating usually along the routes to the markets of other EU countries amounted to around 6% in 2015.

In addition, the deterioration in profitability of the international freight transport in the years to come, as compared to 2013, could have been due to the situation on the market following the Russian embargo on some cargoes. This resulted in a temporary surplus of the market capacity supply in the international freight transport, which in turn has led to a decrease in freight rates on the competitive market.

5. Prospects for the international road transport market

The volume of demand for future international road haulage by Polish companies will generally be affected by two groups of factors, including:

- factors that characterize the overall volume of demand including e.g.:
  - Poland's economic potential
  - consumption potential of the society
  - international commodity cooperation
- factors affecting the service supply side by the Polish international road carriers dependent on:
  - services supply potential of the international freight transport in Poland
  - competitiveness of the international freight transport of other countries
  - Polish government policy towards its own road hauliers
  - other countries' policies towards competitiveness of their own international carriers
- effectiveness of the EU policy towards liberalization of the competitiveness rules of the international road hauliers
- effectiveness of the EU policies in terms of shaping changes in modal structure of shipments.

According to some forecasts, the demand for transport services in Europe will double by the 2050, and transport logistics will be covered by the European Union regulations [8]. Expectations on the development of intermodal transport should be expected, both at medium and long distances. In the longer term, the importance of rail transport is likely to increase as a substitute for road transport, although the practice of recent years has led to different trends.

At the same time as regards freight transport, the topic is discussed of allowing to operate, on the roads between the EU countries, the road sets of total weight of up to 44 Mg (instead of 40 Mg). Additionally, after permitting to operate on the roads of Sweden and Finland of the 25.25 m long road trains instead of the currently standardized 18.85 m (semi-trailer with a tractor) [8], the European politicians will have to consider this option, which would have an

impact on the haulage efficiency of the trucks fleet and a decrease in freight rates.

According to one of the latest forecasts prepared by Polish experts [2], the haulage work performed by trucks of Polish international carriers in the year 2030 will amount to 211–231 billion tkm (increase from 169% to 186% in the years 2010–2030).

During the forecast period the dominance of haulage work performed by heavy trucks fleet will be maintained. These are optimistic forecasts for the Polish carriers, signifying great development potential of the international road transport market.

It is predicted that in 2030 about 95% of the haulage work of the entire Polish freight road transport will be carried out with a fleet of above 3.5 Mg GVW.

6. Conclusion

Haulage work of the Polish freight road transport carried out in the years 2005–2015 by the vehicles exceeding 3.5 Mg GVW for international transport is greater than domestic transport.

Haulage work performed by the Polish international freight road transport against the background of international transport haulage work in other EU countries is relatively very large.

Number of enterprises authorized to perform international road transport of goods (with valid licenses) between 2005 and 2015 has increased significantly. Also number of license excerpts (number of vehicles) of the international freight transport enterprises in the years 2005–2015 has increased significantly too.

The numbers of vehicles meeting the requirements of Euro V and Euro VI is also increasing.

The Government of the Republic of Poland takes an unambiguously critical stance on the EC decisions such as the Posting of Workers Directive and on the attempts to regulate national markets through a very broad interpretation of EU regulations by governments of different EU countries (e.g. MiLoG, Loi Macron). These decisions may turn out to be unfavourable for the current significant market position of the Polish international road haulers. The Government of the Republic of Poland argues that "in the face of" emerging changes in the international geo-economic setting that creates a global threat..." the present EU's response should not be practices "... monopolizing markets and regulating isolation under the banner of harmonization, but political and economic consensus". It is emphasized that "reconciling various contradictions of the EU Member States is a necessary condition. The nature of these economic contradictions is rooted in another purchasing power parity as well as the competitive position of the states"[8].

Similar position to that of Poland's also represent governments, among the others of such countries as the Czech Republic, Slovakia, Hungary, Lithuania, Latvia, Estonia, Bulgaria, Romania.

The work on these issues related to the so-called "road package" that is to promote market harmonization whose one of the pillars are "social rules", is continuing in the EC.

Nomenclature

CSO	Central Statistical Office
EU	European Union
GITD	Main Inspectorate of Road Transport
GVW	gross vehicle weight
ITS	Motor Transport Institute
MiLoG	Minimum Wage Act

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