



Ryszard Rolbiecki^{a)}, Dorota Książkiewicz^{b)}

a) Transportation Policy Chair, Faculty of Economics, University of Gdańsk, Poland

b) Transportation Policy Chair, Faculty of Economics, University of Gdańsk, Poland

PERFORMANCE OF POLISH ROAD CARRIERS IN RELATION TO REGULATIONS ACCORDING TO THE REMUNERATION OF SECONDED WORKERS

Abstract

In Poland, the major share of operational costs of a road carrier constitute of fuel costs, costs of outsourced services and remunerations. The mentioned cost groups together contribute to over 80% of the prime costs. As a result, these costs have a major influence on the performance of Polish road carriers. As research results show, the financial situation of the road carriers in Poland is poor. On average, the return on sales in road transport services reaches the level of 1.5–3.0%, and in case of international road transport services it amounts to 5%. In terms of acknowledged standard sit is merely a sufficient level of return. Unfortunately it is possible for the performance to deteriorate due to the implementation of minimum wage rates for drivers in some EU countries and due to the implementation of new regulations proposed on May 31st 2017 in the EU's Mobility Package, concerning seconded workers.

Keywords: road transport, costs of activity, profitability, minimum wage, seconded workers

Introduction

In 2015 there were 129.5 thousand carriers operating in road transport sector in Poland, including 83.4 thousand carriers operating on cargo haulage market and 46.1 thousand in passenger transport (European Commission, 2017). Accession of Poland to EU resulted in a significant increase of possibilities for Polish carriers to offer international transport services. As estimated, in Poland there are over 33 thousand road carriers in Poland, that operate on international cargo haulage market (the number is more than 3 times bigger than it had been before Poland's

accession to the EU). These carriers use over 200 thousand cargo trucks and produce a total annual revenue of about 15 billion EUR (Przybylski, 2017). Currently, Poland is a leader on international cargo haulage market. In 2016, the share of the market represented by Polish carriers in terms of haulage in tonnes amounted to 21.1%, and in terms of tonnes per kilometre amounted to 27.5% (Eurostat, 2018a).

However, in recent years there have been accusations coming from some of the EU countries directed to Eastern European Countries, which are said to apply a politics of social dumping in relation to road carriers, resulting in lower haulage prices and finally unfair competition. Therefore some EU countries started to implement measures to protect their markets against the competition of foreign carriers. On EU level, these measures were included in the proposal of the Mobility Package published on May 31st 2017, which significantly changes the international road haulage market conditions in EU.

There is a risk, that the implementation of some of the measures proposed in Mobility Package will lead to the rise of activity costs of Polish road carriers and will result in the deterioration of their financial condition and in consequence, will cause bankruptcies. It can be assumed that Polish road carriers operate on the verge of profitability in current market conditions. Thus the aim of the article is to assess the financial condition of the road carriers in Poland, on the base of the classic method of indicative analysis. The basic research goal is to identify and analyse the influence of EU regulations regarding the rules of posting of workers on the profitability of road carriers in Poland.

1. The structure and volume of revenues of road carriers

A financial condition of a company is determined mainly by its ability to generate sales revenues. In 2016, road haulage sales revenues (in enterprises employing more than 9 persons) amounted to 128.9 billion PLN, which constitutes a rise of 5.4% from 2015 (Table 1). The figure for 2016 is not final, however the dynamics of sales revenues rise was significantly slower than it was in previous years.

Table 1. Nominal and real changes in sales revenues (in commercial road transport enterprises employing more than 9 persons and in enterprises with transport on own account)

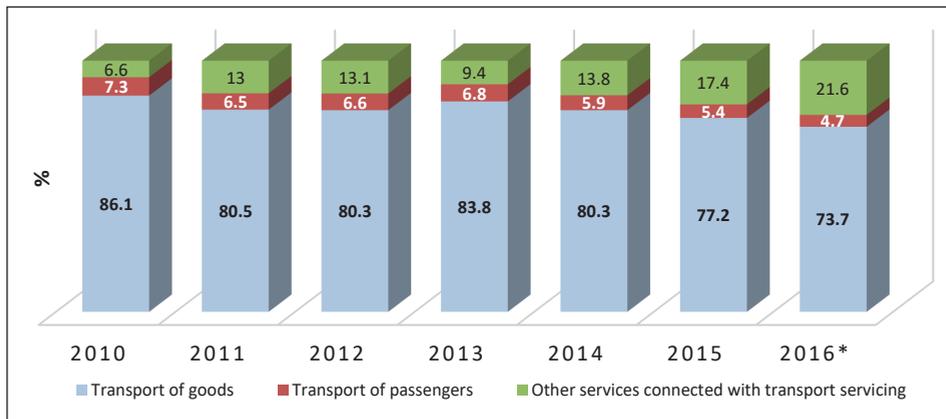
Specification		2010	2011	2012	2013	2014	2015	2016*
Revenues from the sale of products and services (billion PLN)		69.5	80.4	86.9	99.9	109.1	122.3	128.9
Dynamics %	Previous year = 100	–	115.7	108.1	114.9	109.2	112.1	105.4
	Average in years 2010–2016							
Prices in transportation and warehousing in % (previous year = 100)		–	103.2	103.8	103.7	102.3	103.3	101.9
Real changes in sales revenues in %	Previous year = 100	–	112.1	104.1	110.8	106.7	108.5	103.4
	Average in years 2010–2016							

* Preliminary data

Source: (own elaboration; GUS, 2017a, 2017b)

The average annual nominal sales revenues in years 2010–2016 were rising by 10.8%, and in terms of real sales revenues – by 7.5%. The change in nominal sales revenues is a result of both the change of service prices and the volume of services. The change in the level of real sales revenue is solely determined by the volume of provided services.

The structure of revenues of road transport carriers is dominated by revenues coming from cargo haulage (Figure 1). In 2016, the revenues amounted to 95.0 billion PLN, which was a share of 73.7% of total revenues. However, the highest dynamics of growth is observed in reloading, forwarding, storage and warehousing services together with other cargo-related services.



* Preliminary data

Figure 1. The structure of revenues from the sale of products and services in road transport in years 2010–2016 (in enterprises employing more than 9 persons and in enterprises with transport on own account)

Source: (GUS, 2017b)

In years 2010–2016 the share of other cargo-related services increased from 6.6% to 21.6%, reaching a level of 27.8 billion PLN (GUS, 2017b).

2. Operational costs of road transport carriers

Costs are an important element in the process of assessing the effectiveness of the company's operations. An analysis of the available results of road transport companies, which relate to companies employing more than 49 people, shows that in 2015 prime cost of products and services sold amounted to 37.7 billion PLN and it was 7.3% higher than in 2014 (Table 2). However, nominal changes in costs do not reflect the real efficiency of business management. Therefore, formula (1) can be used to determine the real (relative) changes in costs, i.e. assuming a comparable scale of activity and comparable prices. Thus, while in 2015 in the group of the surveyed enterprises the costs of goods and services sold in nominal terms

increased, as mentioned, by 7.3% as compared to the previous year, in real terms these costs were lower by 0.8%. Also in the years 2010–2015, in real terms, own costs of sales in the analysed road transport companies decreased on average by 0.1%.

$$\text{change of costs in real terms} = \frac{\text{index of cost change (nominal change)}}{\text{index of sales value change}} \quad (1)$$

Table 2. Nominal and real changes in costs of products and services sold in road transport companies (entities employing more than 49 persons)

Specification	2010	2011	2012	2013	2014	2015
Prime cost of products and services sold (in billion PLN)	25 677.5	29 463.3	31 869.1	31 617.3	35 178.4	37 751.1
Index of cost change (nominal change) %	–	114.7	108.2	99.2	111.3	107.3
Average annual rate of changes in costs (nominal changes) %						108.0
Index of sales revenue change %	–	115.8	106.0	99.8	111.3	108.2
Index of cost change (real change) %	–	99.1	102.0	99.4	100.0	99.2
Average annual change of costs %						99.9

Source: (GUS, 2017c)

In assessing the ability of the carrier to control its costs, cost level indicator from total activity is used, calculated by the following formula: (2).

$$\text{Cost level indicator from total activity} = \frac{\text{costs of obtaining revenue from total activity}}{\text{revenues from total activity}} \quad (2)$$

According to the financial standards, this ratio should not exceed 90%. Exceeding this level signals serious difficulties in meeting operating costs. The analysis of data covering the period 2010–2016 shows that road transport companies with more than 49 employees have problems with meeting their operating costs (Figure 2). In these enterprises, similarly to enterprises in the whole industry marked as transport and warehouse management (of a similar level of employment), this indicator is significantly higher than 90%. In 2015, the total cost ratio of road transport companies was 96.0%, a level slightly higher than that of the entire transport and warehouse management industry (95.8%).

The costs incurred by road carriers are mainly influenced by three cost groups:

- energy and material consumption (fuels, oils, lubricants, spare parts);
- third party services (services outsourced from other operators);
- gross wages and salaries including employee benefits.

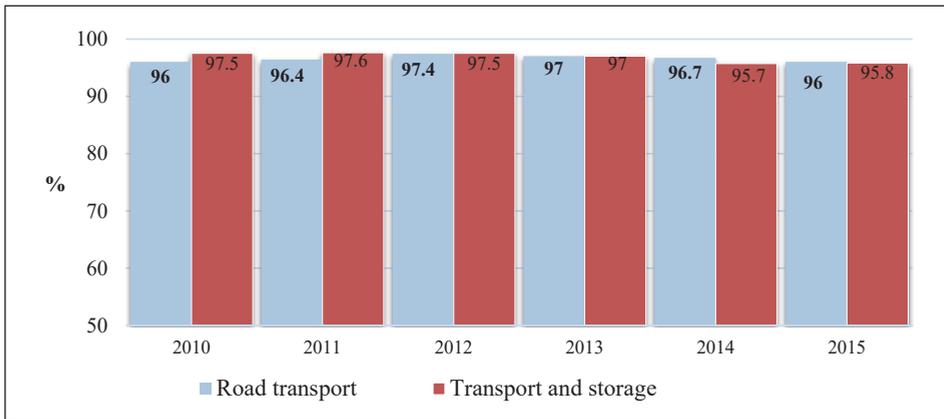


Figure 2. Cost level indicator from total activity in road transport companies in the years 2010–2016 (entities employing more than 49 persons)

Source: (GUS, 2017c)

In total, in 2015 road transport companies employing more than 49 persons, mentioned groups of costs accounted for 82.7% of the total operational costs (Table 3). A particularly characteristic feature of these enterprises is the high share of costs of external services, which accounted for almost 40% of own costs in 2015. Such a high share of the costs of external services in the company's own costs is a result of the outsourcing of activities not directly related to the operating activity of transport companies.

Table 3. Costs by type in percent (entities employing more than 49 persons)

Specification	2010	2011	2012	2013	2014	2015
Energy and material consumption	24.6	26.6	27.3	26.6	24.5	21.4
Third party services	36.8	37.0	36.5	36.1	38.2	39.8
Depreciation	6.8	6.2	6.3	6.6	6.7	7.0
Taxes and fees	2.8	2.8	2.9	3.1	3.3	3.5
Gross wages and salaries including employee benefits	23.4	21.4	20.9	21.0	20.7	21.5
Other costs	5.6	6.0	6.1	6.6	6.6	6.8

Source: (GUS, 2017c)

However, when considering the overall population of road carriers, the main cost element of their operations is their fuel expenditure. It can be estimated that these costs account for almost 40% of the total costs. Fuel costs and infrastructure charges are the main financial burdens for the largest group of carriers on the market, those with one or a few vehicles at their disposal. Therefore, optimisation of fuel consumption costs is one of the important factors determining the level of total costs and, as a result, the level of profitability of the enterprise.

There are various ways to reduce fuel costs, such as:

- route optimisation;
- reduction of less than truck load haulage;

– eco-driving, a driving technique that allows for fuel consumption reduction.

Appropriate planning of the transport route by means of telematic systems usage allows to avoid unnecessary stops caused by congestion or accidents. Virtual freight exchange platforms play an important role in reducing the operating costs of road carriers. Using the potential of freight exchanges, transport planning can be made more efficient, thus reducing the number of empty runs. It is estimated that in Europe, road transport's empty runs account for 20% of total freight transport, while in Poland it is 25% (Eurostat, 2018b). Reducing empty mileage means, as a result, a reduction not only in the operating costs of vehicles, including fuel, but also in road infrastructure charges and drivers' salaries.

Significant benefits in terms of reducing fuel costs can be achieved through eco-driving, i.e. the use of appropriate driving techniques to reduce fuel consumption. These solutions include the rational use of air conditioning and heating in the cabin, the use of engine braking technology and the maintenance of adequate tyre pressure. According to a study by the German Technical Inspection Association, if the tyre pressure is 0.2 bar lower than the recommended pressure, the fuel consumption increases by 1%. The pressure lower by 0.6 bar, increases fuel consumption by as much as 4%.

It is estimated that the use of appropriate IT systems, as well as freight exchange platforms and the application of more rational techniques for the use of motor vehicles may contribute to the reduction of the costs of road hauliers' operations by as much as 30–40%. (Bednarkiewicz, 2017). The use of these solutions is particularly important in order to maintain the temporary cost advantage of road hauliers on the international market. Serious concerns arise due to the fact, that the operating costs of international carriers are expected to increase significantly in the future. These concerns are derived from the proposals contained in the May 2017 Road Package.

3. Profitability of road hauliers in relation to developments in driver remuneration

The ability to generate revenues and control the costs incurred, in effect, determines the level of profitability of the company. Due to limited access to the balance sheet results of road hauliers, the profitability analysis was based on sales profitability ratios (3), gross turnover (4) and net turnover profitability rates (5). It has been assumed that these indicators indicate a strong development basis if they are at the level higher than 10% (Czajkowska, 2013).

$$\text{Return on sales} = \frac{\text{Financial result on the sale of products and services}}{\text{revenues from the sale of products and services}} \quad (3)$$

$$\text{Gross turnover profitability indicator} = \frac{\text{Gross financial result}}{\text{revenues from total activity}} \quad (4)$$

$$\text{Cost level indicator from total activity} = \frac{\text{Net financial result}}{\text{revenues from total activity}} \quad (5)$$

According to research results (Table 3), in road transport companies, the profitability of sales revenues in 2015 amounted to 2.3%, while the profitability of gross and net turnover amounted to respectively: 4.0% and 3.3%.

Table 3. Profitability ratios of road transport companies in comparison to entities in the transport and warehouse management sector in Poland (entities employing more than 49 persons)

Years	Profitability indicator (%)					
	Revenues from sale		Gross turnover		Net turnover	
	transport and storage	road transport	transport and storage	road transport	transport and storage	road transport
2010	1.2	1.9	2.5	4.0	1.6	3.5
2011	2.3	2.8	2.4	3.6	1.7	3.0
2012	0.6	0.8	2.5	2.6	1.7	2.0
2013	1.4	1.4	3.0	3.0	2.3	2.4
2014	2.2	1.4	3.0	3.3	2.2	2.7
2015	3.3	2.3	4.3	4.0	3.4	3.3
2016	3.3	–	4.2	–	3.6	–

Source: (GUS, 2017c, 2018)

Compared to 2014, profitability ratios in road transport companies employing more than 49 persons improved. Nevertheless, these ratios were lower in car transport companies than in the comparable group of companies operating in the transport and warehouse management sector.

Current reports on the financial situation of the whole sector of road transport companies show that the average profitability ranges from 1.5% to 3.0% (Banasiak, 2016). In the case of road carriers operating on the international market, the profitability of transport is slightly higher and amounts to as much as 5% (ZMPD, 2017). In relation to further development of a company's operations, this level can be considered merely as sufficient, however there are concerns that the situation may deteriorate significantly, especially in terms of companies operating on the international market.

The profitability of road transport companies in Poland will be adversely affected by remuneration costs. The increase in these costs will be due to the need to improve the attractiveness of the driver's profession, as well as to the introduction of new regulations with regard to minimum wages and rest periods for drivers. The need to make the profession of driver more attractive by increasing salaries is due to the shortage of truck drivers that has been observed on the market. It is estimated that in Poland the shortage of drivers has reached the number of 100 thousand, and as much as 20% of road carriers have already suffered from the consequences of this situation. Furthermore 40% of drivers currently employed by Polish carriers are 65 or older, and 25 000 drivers leave the profession every year (PGT, 2018). Filling this gap is even more difficult as the courses are time-consuming

and the costs of obtaining the appropriate certificates is significant. The cost of courses and examinations is estimated at PLN 9.8–12.3 thousand, i.e. 2–3 times higher than the average driver's salary (Bołtryk, 2016). There are therefore concerns that the number of missing drivers could rise to as many as 300 000 over the next 10 years (PGT, 2018).

Regulations proposed in May 2017 for all EU countries, as part of The Mobility Package, are regarded to represent a serious threat to the future of Polish road transport sector. First of all, the rules on the posting of workers are unfavourable from the point of view of Polish carriers. These rules are in particular linked to the fact that drivers engaged in international transport are subject to the minimum wage imposed by the country on the territory of which the haulage is undertaken. These rates are to be applied when a driver's stay in a Member State is exceeded beyond a certain number of days in a month. Currently, the costs delegation for drivers from Poland working within the EU are almost six times higher than the costs for drivers working within the national market. In Poland, the amount of average foreign delegation is €60 and the national delegation €10.6 (OCRK, 2017).

Some countries have already introduced restrictions on the introduction of minimum wage rates (e.g. Germany, France, Italy, Austria, the Netherlands). The minimum wage rates in these countries are not only much higher than those in Poland, but they have been rising over time. For example, in Germany, the minimum wage was 8.5 EUR/h in January 2015 and it rose to the level of 8.84 EUR/h in January 2017. This rate remained unchanged in 2018 (Wawryszuk, 2017; PSPD, 2018). France is one of the countries with the highest minimum wage rates. The minimum wage in this country starts at the level of EUR 9.76 (Wawryszuk, 2017). This problem is important as Polish drivers most frequently carry out transport to Germany (29% of the total number of posted drivers) and to France (14% of the total number of posted drivers). On the other hand, drivers spend most of their working time abroad in France (approximately 49 hours on average per month) and in Germany (approximately 44 hours per month on average). The application of minimum wage rates requires additional expenditure related to the implementation of a corresponding IT infrastructure and the employment of qualified staff, to properly account for the remuneration of drivers for their work in individual EU countries. Both drivers and owners of transport companies are liable to fines if they fail to comply with the applicable legislation. At present, the greatest bureaucratic hindrance to the application of minimum wage rates for drivers is found in Austria (drivers are supposed to collect all the documents relating to the minimum wage on board of the vehicle). In Austria, penalties amount to EUR 5000 per worker, or in the event of repeated non-compliance during checks, up to EUR 10 000. Similar rules apply in France, however, there are no fines for lack of complete documentation. In Germany, on the other hand, there is a more liberal policy on the application of minimum wages, despite the introduction of the rules (OCRK, 2017).

The introduction of bans on taking a regular weekly break in the driver's cab also has a negative impact on the level of drivers' salary costs. Such bans have been implemented since 25th May 2017 in Belgium, France and Germany. In 2017, these bans were also introduced in the UK. According to these rules, the driver should only

rest in a place that is professionally suited for this purpose. This results in another element of the costs' raise. As a result of EU regulations on the minimum wage for drivers and the ban on weekly rest for drivers in the cabin of a vehicle, the operating costs of Polish transport companies performing international transport are expected to increase by as much as 30% (PSPD, 2018), thus reducing the profitability of road hauliers in Poland, which is on a low level already.

Conclusions

Road hauliers in Poland hold a leading position on the international road haulage market in the EU. Nevertheless, the financial situation of road hauliers in Poland is weak. The level of profitability achieved by the carriers can merely be assessed as sufficient. There are serious concerns that the new EU regulations, as well as the general situation on the drivers' labour market, will contribute to a significant increase in operating costs and thus to the deterioration of the financial condition of road hauliers in Poland.

References

- Banasiak, C. (2016), Niemiecka płaca minimalna a prawo unijne, *Polska Gazeta Transportowa*, 5.
- Bednarkiewicz, F. (2017), 3 sposoby na optymalizację transportu, czyli jak zwiększyć rentowność ładunków. Available from <https://40ton.net/3-sposoby-optimalizacje-transportu-czyli-zwiekszyc-rentownosc-ladunkow/> [Accessed 6 March 2018].
- Bołtryk, M. (2016), Potrzeba 100 tys. szoferów, *Puls Biznesu*, 215.
- Czajkowska, A. (2013), *Kredytowanie przedsiębiorstw indywidualnych. Specyfika, procesy polityka*, Wydawnictwo Uniwersytetu Łódzkiego, Łódź.
- European Commission (2018), *EU transport in figures*, Luxembourg.
- Eurostat (2018a), International annual road freight transport by country of loading and unloading with breakdown by reporting country (1000 t, Mio Tkm). Available from http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=road_go_ia_rc&lang=en [Accessed 6 March 2018].
- Eurostat (2018b), Summary of annual road freight transport by type of operation and type of transport (1000 t, Mio Tkm, Mio Veh-km). Available from http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=road_go_ta_tott&lang=en [Accessed 11 March 2018].
- GUS (2017a), *Ceny w gospodarce narodowej w 2016 roku*, Warszawa.
- GUS (2017b), *Rocznik Statystyczny Rzeczypospolitej Polskiej*, Warszawa.
- GUS (2017c), *Transport drogowy w Polsce w latach 2014 i 2015*, Warszawa.
- GUS (2018), *Bank Danych Lokalnych, Finanse przedsiębiorstw*. Available from <https://bdl.stat.gov.pl/BDL/dane/podgrup/wymiary> [Accessed 11 March 2018].
- OCRK (2017), *Raport „Transport na drogach Europy”*, Ogólnopolskie Centrum Rozliczania Kierowców. Available from <https://www.ocrk.pl/wp-content/uploads/2017/07/OCRK-Raport-Transport-na-drogach-Europy-05.2017.pdf> [Accessed 11 March 2018].
- PGT (2018), Trudny rok w transporcie, *Polska Gazeta Transportowa*, 1–3.
- Przybylski, R. (2017), *Rewolucja w transporcie międzynarodowym*. Available from <http://www.rp.pl/Biznes/303199940-Rewolucja-w-transporcie-miedzynarodowym.html> [Accessed 6 March 2018].

- PSPD (2018), *NIEMCY – płaca minimalna MiLoG – aktualizacja 28.12.*, Pomorskie Stowarzyszenie Przewoźników Drogowych. Available from <http://www.pspdgdynia.pl/?q=node/177> [Accessed 10 March 2018].
- Wawryszuk, B. (2017), *Płaca minimalna w Europie. Jak sobie z nią radzą polscy przewoźnicy w praktyce?* Available from <https://trans.info/placa-minimalna-w-europie-jak-sobie-z-nia-radza-polscy-przewoznicy-w-praktyce-59633e1bbc04fa70668b46df-20162> [Accessed 15 March 2018].
- ZMPD (2017), *Media: Pakiet Mobilności zniszczy polski transport.* Available from https://zmpd.pl/aktualnosc.php?akt_id=1240 [Accessed 10 March 2018].

Corresponding authors

Ryszard Rolbiecki can be contacted at: ryszard.rolbiecki@ug.edu.pl

Dorota Książkiewicz can be contacted at: d.ksiazkiewicz@ug.edu.pl