

TRANSPORT AND LOGISTICS SERVICES MARKET IN ROMANIA

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ABSTRACT

In the current era, it is almost impossible for a trade company to be able to operate without the goods transport and storage services. Therefore, the transport activity can be considered "the veins" of any trade company.

The reason I chose the title "Transport and logistics services market in Romania" is that I noticed the increasing importance of transport and logistics in the last period.

The purpose of this paper is to determine the evolution of transport and storage services, and in this sense has been achieved a desk research, in which I have analyzed the statistical data for the years 2010-2014 regarding transport services in Romania.

I believe that this paper will be useful for those who want to understand the significance and the role of transport and logistics services to the economy, representing a suitable source of information in this area.

Keywords: transportation, logistics, warehousing, cargo, services.

JEL Classification – L81, L91, R41

Paper type – Research paper

Introduction

In the European Union, "shipments have progressed a lot in the last 60 years and continues to contribute significantly to European employment and prosperity.

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Currently, in this sector are working around 10 million people, representing 4.5% of the EU workforce, a rate almost equivalent to the sector's contribution to gross domestic product (GDP). Transports are vital for the EU economy and in terms of exports, the maritime transport represents 90% of external trade.” (European Commission, 2014, p.3)

Romania needs reliable transport links to boost trade and economic growth and create jobs and prosperity. Transport networks are essential for the supply chain and form the basis of the economy of any country. They facilitate the effective distribution of products and allows us to travel, to have access to certain destinations, to approach each other and to enjoy a high quality life.

The research project has as the main theme *the development and specialization of transportation and logistics services in Romania*.

I chose this topic for two reasons: first it is that working in transport and this research gives me the opportunity to prepare myself better, to give more time searching for information, which helps me to know better this area, and the second reason is that I have noticed the increasing importance of transport and storage of goods, whereas these services can be considered the "veins" of any trade business.

1. Theoretical and current trends regarding the freight transport and logistics

In this chapter I will briefly present the main theoretical aspects relating to goods transport and logistics and some information about the current trends in the market.

We use the supply chain term to provide a global logic movement of assembly flows of the company. But, expanding the scope of logistic analysis depends directly on the level of development function within the enterprise. Taking into account the sense of material flows, logistics can be divided into upstream, downstream and reverse logistics.

Reverse logistics "has become an important issue for most of the organizations due to increased flow of product returns and growing concern for the environment, legislation, and corporate social responsibility. Reverse logistics activities include product collection, inspection and sorting, disposition (reuse, repair, remanufacture or recycle), and redistribution of products. One of the important decisions is whether such activities must be outsourced partly or all must be outsourced or nothing must be outsourced.” (Saurabh, Rajesh and Qasim, 2016, pp. 41-53)

”Logistics as a sector has a key role to play in reducing greenhouse gas emissions and in reducing the dependency of our economy on non-renewable energy sources.” (Smokers and Tavasszy, 2014, pp. 1 - 30)

I agree with the statement "Nowadays, with the globalization of business operations, logistics systems are threatened by all kinds of uncertainties and disruptions. Almost every month, serious accidents in transportation and natural disasters all around the world are reported in the media. As a result, an effective and efficient risk management scheme is of a top most priority in the mind of all professionals in logistics management." (Tsan Ming Chun Hing Hung and Kai, 2016), so any company must have a quite effectively risk management system.

Vasiliu (2008, pp. 32-33) argues that the road transport has the widest expansion and use, due to its flexibility, which can be seen through the prism of variable size and capacity of vehicles, the possibility of temperature control during the transportation of goods, product handling characteristics, eliminating multiple handling of loaded goods.

In Romania are present companies from France, the Netherlands, United Kingdom, Deutschland, Italy and Denmark and among the bigger are DB Schenker, DSV Logistics, FM Logistic, Geodis, Kuehne + Nagel, Gebrüder Weiss, Cargo Partner, H.Essers and Tibbett Logistics. (Alec, 2014)

2. Research regarding the evolution of transport and storage services on the Romanian market

The applicative part of this paper is represented by chapter 2 consisting in conducting a research regarding the evolution of transport and logistics services. This chapter comprises two subchapters, the first shows the methodology underlying the research and the second focuses on the analysis and interpretation of data obtained.

2.1. Research methodology

In order to perform this research paper I made a desk research on the transport sector, in which I used statistical data for the 2010-2014 period, from the National Institute of Statistics, then I analyzed and explained them in Microsoft Office Excel 2007.

The project is based on the following *research question*: *What is the evolution of transport and logistics services in recent years in Romanian market?* I intend to answer this question through the following objectives:

- 1. Determining the development degree of transport and logistics services in Romania;*
- 2. Identifying the specialized level of transport and logistics services on the Romanian market;*
- 3. Knowing the volume of investments in transport;*

Regarding the limits of the research, I could only get data for the 2010-2014 period, because those for 2015 are not yet published.

Secondly, I could not find information about the Gross Domestic Product strictly for transportation and storage activity, the data being cumulated with those of the following activities: retail and wholesale; repair of motor vehicles and motorcycles; hotels and restaurants.

2.2. Analysis and interpretation of research results

To determine the development and specialization level of transport and storage services, I will present the analysis of the following indicators: the employed population and the number of active enterprises.

I analysed the employed population (EP) of transport and storage, calculating the absolute specialization index (ASI), according to the following formula (1).

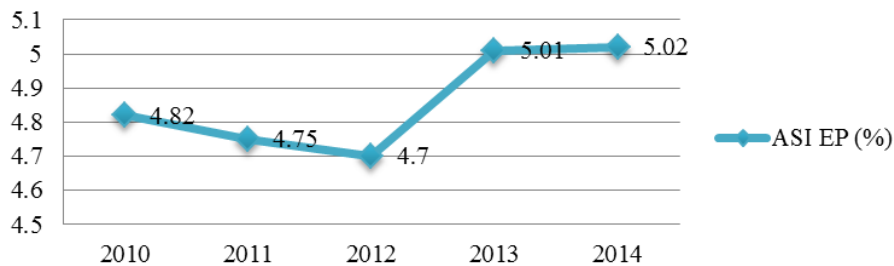
$$ASI = \frac{EP \text{ in transport and storage}}{\text{Total EP of Romania}} * 100 \quad (1)$$

Table no. 1 - The share of employed population in transport and storage

Year	Total EP of Romania (people)	EP in transport and storage (people)	EP ASI (%)
2010	8712829	419770	4.82
2011	8528149	404906	4.75
2012	8605052	404684	4.70
2013	8549132	428581	5.01
2014	8613739	432278	5.02

Source: Own processing based on data obtained from insse.ro

Figure 1. The evolution of the employed population absolute specialization index



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According to Table no. 1 and Figure 1, we can observe the evolution of the employed population absolute specialization index over five years, with decreases between 2010-2012, and an increase between 2012-2014. The highest value was recorded in 2014, 5.02% and the lowest in 2012, 4.7%.

The second analyzed indicator is the number of active enterprises (AE) in transport and storage and I calculated the absolute index specialist, according to formula (2).

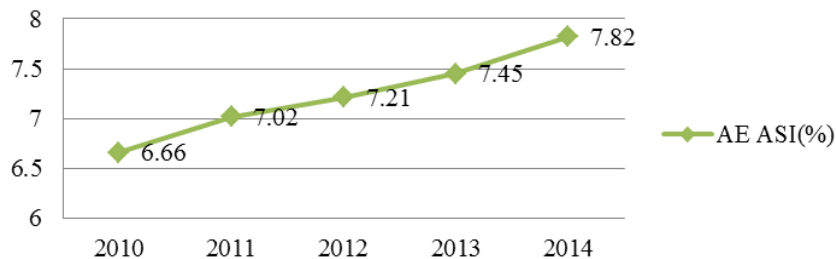
$$ASI = \frac{\text{AE in transport and storage}}{\text{Total AE of Romania}} * 100 \quad (2)$$

Table no. 2 – The share of active enterprises in transport and storage

Year	AE in Romania	AE in transport and storage	AE ASI (%)
2010	491805	32774	6.66
2011	452010	31713	7.02
2012	472187	34064	7.21
2013	485082	36127	7.45
2014	507440	39666	7.82

Source: Own processing based on data obtained from insse.ro

Figure 2. The evolution of the active enterprises absolute specialization index



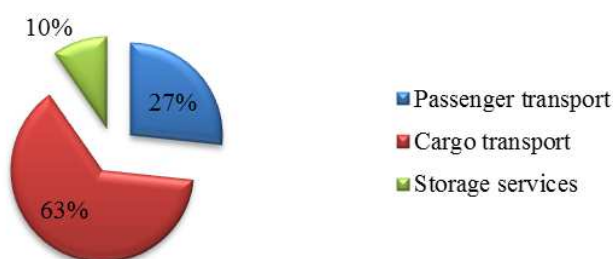
In Figure 2, I presented the evolution of the number of active enterprises in the transport and storage from 2010 to 2014, with a continuous growth, but with a not very significant difference of only 1.16%.

Table no. 3 - The structure of active enterprises in transport and storage by activity type

Activity type	Year					Average	%
	2010	2011	2012	2013	2014		
Passenger transport	8682	8394	9144	9703	10563	9297.2	26.66
Cargo transport	21085	20219	21615	22797	25128	22168.8	63.58
Storage services	3007	3100	3305	3627	3975	3402.8	9.76
Total	32774	31713	34064	36127	39666	34868.8	100

Source: Own processing based on data obtained from insse.ro

Figure 3. The share of the number of active enterprises by activity type



Regarding the Table no.3, we can see that companies in this sector are divided into companies of passenger transport, cargo transport and storage services.

In Figure 3 is evidenced the share of the number of active enterprises, 63% for cargo transport, in second place are passenger transport companies, with 27%, and the third place is occupied by storage and logistics companies, with only 10%.

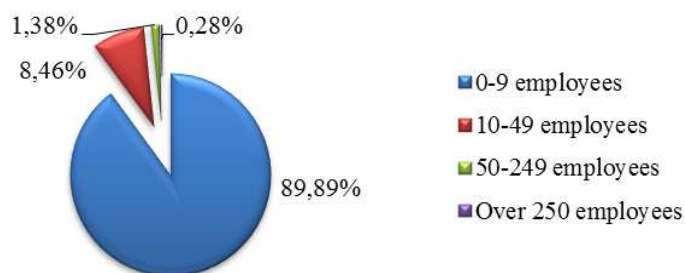
Table no. 4 - The number of transportation and storage active enterprises by the number of employees

No. of employees	Year					Average	%
	2010	2011	2012	2013	2014		
0-9 employees	29833	28333	30469	32339	35740	31342.8	89.89
10-49 employees	2448	2820	3021	3177	3277	2948.6	8.46
50-249 employees	399	464	475	516	551	481	1.38
Over 250	94	96	99	95	98	96.4	0.28

employees							
Total	32774	31713	34064	36127	39666	34869	100

Source: Own processing based on data obtained from insse.ro

Figure 4. – The share of active enterprises by the number of employees



In Table no. 4 and Figure 4, I represented the transport and storage active companies in the by the number of employees. The largest share (89.89%) is given by companies with 0-9 employees, and those with over 250 people have a share of just 0.28% of all firms in the sector.

As a conclusion, it appears that most companies are small, probably family businesses with limited operations.

After analyzing these two indicators, we can notice that there is a direct correlation between their trends, whereas the share of employed depends on the percentage of active companies in this field.

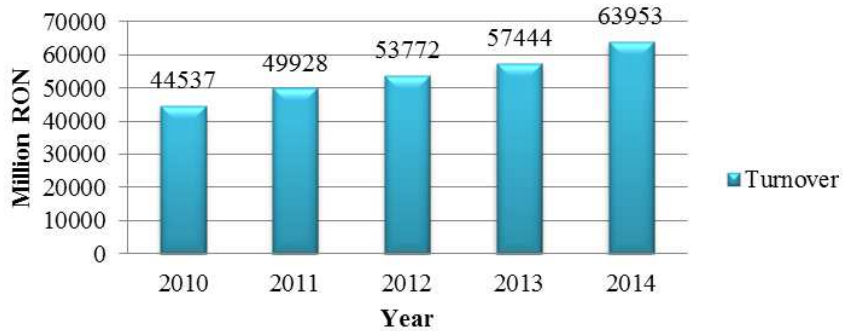
Further on, I realized an analysis of transport and storage turnover and total net investments indicators, in 2010-2014.

Table no. 5 – Turnover of transport and storage services

MACRORE GION	Year					10/14	%
	2010	2011	2012	2013	2014		
	Millions RON						
I	10389	12494	13596	15296	17191	6802	35.03
II	8046	8008	8796	10001	10919	2873	14.8
III	19675	22159	23444	24139	26833	7158	36.87
IV	6427	7267	7936	8007	9010	2583	13.3
TOTAL	44537	49928	53772	57444	63953	19416	100

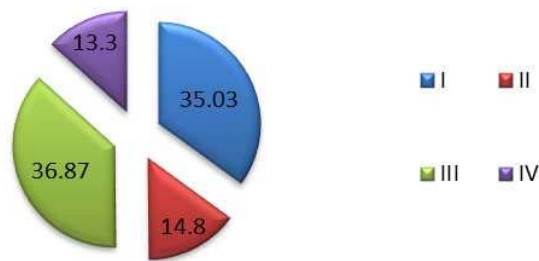
Source: Own processing based on data obtained from insse.ro

Figure 5. The evolution of transport and storage turnover (2010-2014)



As shown in Table 5 and Figure 5, we can see the transport and storage turnover in 2010-2014 period, with a slight upward trend, with an increase of 19.5 billion RON from 44.5 billion RON in the base period, to about 64 billion RON in 2014. This result can be correlated with relatively small increase of the number of enterprises in this sector.

Figure 6. Transport and storage turnover share by macro-regions in Romania



În Figure 6, I highlighted the turnover change in 2014 compared to 2010. On the first place was the share from macro-III, with 36.87%, which includes South Muntenia and Bucharest – Ilfov.

On the opposite side is macro-IV, with an increase of only 13.3% of turnover in 2014 compared to 2010, consisting of South-West Oltenia Region and West Region.

These results underline the contribution of macroregions in total transporting and storage turnover in the period 2010-2014.

Table no. 6 – Transport and storage net investments

MACROREGION	Year					10/1	%
	2010	2011	2012	2013	2014	4	
Millions RON							
I	1100	1238	1268	1343	1585	485	17.69
II	882	896	930	1351	1462	580	21.15
III	2035	3617	2545	3281	3596	1561	56.93
IV	757	685	656	776	874	117	4.27
TOTAL	4774	6436	5399	6752	7516	2742	100

Source: Own processing based on data obtained from insse.ro

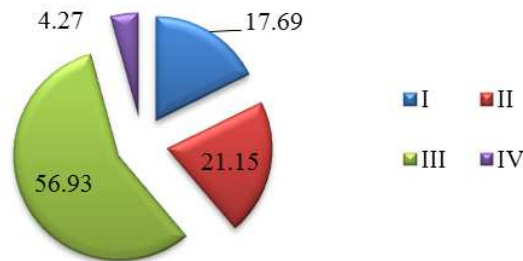
Figure 7. Transport and storage net investments evolution



According to Table no. 6 and Figure 7, we can observe the evolution of transport and storage net investments, during the last 5 years, with a slight increase in 2011 compared to 2010, to 6.4 billion RON, from 4.77 billion RON, before falling in 2012 to 5,400 million.

In the following period, net investments was growing at approximately 7,500 million, which was the highest value recorded in recent years, with 2.74 billion RON more than in 2010.

Figure 8. Transport and storage net investments share by macro-regions in Romania



În Figure 8, I represented the net investments change in 2014 compared to 2010. On the first place was the share from macro-III, which demonstrates and confirms the claims that transport services and logistics are highly developed in this area.

On the opposite side is macro-IV, with an increase of only 4.27% of net investments in 2014 compared to 2010, consisting of South-West Oltenia Region and West Region. These results underline the contribution of macroregions in total transporting and storage turnover in the period 2010-2014.

It is obvious that the two analyzed indicators (turnover and net investment) are closely connected because both are mutually reinforcing. If we have a high turnover, we can make significant investments and also if we invest, turnover will increase. Both investment and turnover from this sector had an increasing trend over the period 2010-2014.

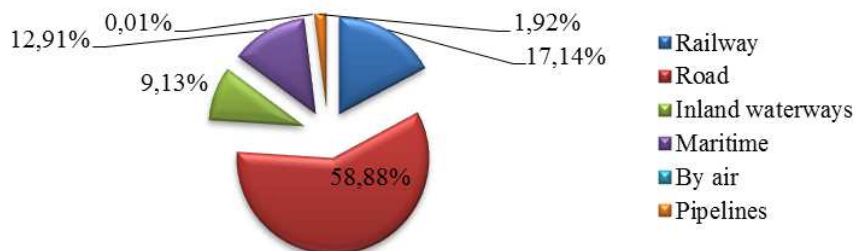
Last but not least, I will present the amount of carried goods in the period 2010-2014 according to the transport mode.

Table no. 7 - Carried goods according to the transport mode (2010-2014)

Transport mode	Year					Tonne Av.	%
	2010	2011	2012	2013	2014		
Thousands tonne							
Railway	52932	60723	55755	50348	50739	54099	17.14
Road	174551	183629	188415	191486	190932	185803	58.88
Inland waterways	32088	29396	27946	26858	27834	28824	9.13
Maritime	38118	38883	39454	43552	43707	40743	12.91
By air	26	27	29	32	32	29	0.01
Pipelines	6551	6020	5771	5625	6365	6066	1.92
Total	304266	318678	317370	317901	319609	315565	100

Source: Own processing based on data obtained from insse.ro

Figure 9. The percentage of the tone average number of goods transported



In terms of Table no. 7 and Figure 9, the largest share of the tone average number of goods transported is, as expected, in favor of road transport, with 58.88%.

On the second place is rail, with 17.14%, Maritime is in third place with 12.91%. Ranked last is the air transport, which has a low share of 0.01%. These results can be explained through the acceptable price for the first 3 types of transport, but high for air transport.

Conclusions

Transports have progressed greatly in recent years and continues to contribute significantly to employment. Regarding employment in transportation and warehousing, it has recorded a rising trend over the analyzed period.

In conclusion, the transport sector is in a continuous development, and our country needs reliable transport links to boost trade and economic growth, to create jobs and prosperity. Therefore, transport can be considered "the veins" of any company in the trade activity sphere.

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