

THE EFFICIENCY OF TRANSPORT COMPANIES FROM URBAN AND RURAL AREAS OF GIURGIU COUNTY, ROMANIA

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Abstract

The aim of the present work was to analyse the economic efficiency of transport companies in Giurgiu, a county in the south of Romania. Giurgiu County, while having one of the lowest road networks in Romania, has demonstrated significant economic potential, with remarkable growth in the number of transport companies, employees, and financial performance over the past decade. This study examines the business environment of road freight transport in Giurgiu County, focusing on companies active in 2021. An initial dataset of over 600 companies with CAEN code 4941 was refined by excluding those in insolvency, bankruptcy, or with incomplete financial records, resulting in a final sample of 447 firms. By analysing financial data and sectoral dynamics, this research provides insights into the economic contributions, challenges, and opportunities within the county's transport sector. The findings provide significant insights into the sector's resiliency and prospective expansion not with standing economic and logistical obstacles. In summary, the road transport sector is pivotal in the examined region, facilitating the movement of goods in a district that is both predominantly agricultural and a significant transport hub in the southern part of the country.

Key words: transport, efficiency, turnover, net profit margin

INTRODUCTION

The transport sector is essential for the economic development of a country [8], having a high capacity or adaptation at the level of supply chains [1] [7]. However, in recent years, inflation, energy and fuel prices, and, last but not least, the reduction in purchasing power have had a direct impact on the transport sector [13]. Added to these were the problems created by the pandemic, such as: the shortage of semiconductors in Europe; embargoes and customs restrictions; the lack of specialized labor force post-pandemic (from 2021 and 2022); the low level of wages compared to other sectors, etc.

In Romania, the contribution of the road freight transport sector to GDP was 2.57% in 2022, an increase of 0.08 percentage points compared to 2018 [12]. Road freight transport has a market value of approximately 16 billion Euros, an export value of 7.3 billion Euros and accounts for over 70% of total goods transported.

In summary, we can say that we hold "6th place in the European Union in road freight transport (in terms of market value)"; "3rd place in bilateral international road transport"; "3rd place in cabotage transport operated between two loading/unloading locations within another EU country"; and "4% of the EU road freight transport market" [11].

In 2022, it was stated that there is a shortage of drivers in the sector of over 70,000 people [12], while other sources reported that an approximate number of 173 thousand drivers will be used in the system in 2023 and a maximum of 188 thousand drivers in 2026 [10].

The estimations differ. A decline in the goods transport market is anticipated due to the driver issue, as well as other concerns including migration, environmental and mobility constraints, and rising costs or carbon footprints. Conversely, a projected increase of 0.8% in tonne-km volume and 8.3% in the value of the road freight sector is anticipated by 2030.

At present, however, road transport remains the most developed freight transport sector in Romania [3], being in continuous development even in conditions where road tolls, maintenance and repair costs, taxes, fuel prices, etc. have increased.

According to the National Institute of Statistics (NIS), in 2022 there were 37,214 active enterprises (mostly in the road transport sector), and about 87% of them had 0-9 employees [9]. The counties with the most active activity in road transport are Bucharest, Arges, Bihor, and Cluj. However, Giurgiu County presents a high development potential for the transport sector [4], with both the number of companies and the number of employees tripling in the sector in the last decade, which is why we chose it to analyze the potential of road freight transport in this area.

Giurgiu County has 1,188 km of roads, ranking last among the counties in this respect. However, it has almost 85% of moderated roads and a fleet of 3,034 freight vehicles (it is in the middle of the county ranking), of which 72.8% are trucks with a capacity of over 12 tons. The county is characterized by a fairly high dynamic in terms of economic results, showing: a 186% increase in the number of companies and a 140% increase in the number of employees (673 companies and almost 2000 employees); a 278% increase in the county-level turnover (876.3 million lei) and a 388.5% increase in net profit (about 700 million lei); labor productivity increased by 57% (about 440 thousand lei per employee).

The agriculture of Giurgiu County is well developed, being focused both on vegetal and animal production, contributing to food security of the local population, but also of the capital of Romania, Bucharest [2].

Agriculture becomes more and more extended from the rural area to the peri-urban area and even in the urban area. The connections between localities regarding the supply with raw materials and finished products are assured by the companies profiled on transport services which need a good endowment with adequate vehicles of various

types and capacities and also with experienced drivers [6].

Seeds, fruits, vegetables, wines, milk, meat, eggs and other agro-food products require a large park of means of transportation of a corresponding capacity and equipped with refrigeration installations and not only to preserve the quality of products which are highly perishable.

A part of the transport companies have in their fleet even specialized machinery destined to support the farmers to carry out agricultural works of high quality and on time (tractors, combines etc).

In this context, the purpose of the paper is the analysis of the transport companies in Giurgiu County, regarding their dispersion by locality in the territory, and their financial performance in terms of turnover, profit, marginal profit, solvency and profitability.

MATERIALS AND METHODS

The paper analyzes the business environment in the road freight transport sector in Giurgiu County in the year 2021.

Table 1. Distribution of transport companies by locality

Localities	No. of companies	Localities	No. of companies
ROATA DE JOS	77	HERASTI	5
GIURGIU (city)	68	FRATESTI	5
VANATORII MICI	28	VARASTI	4
JOITA	27	CALUGARENI	4
BOLINTIN-VALE (city)	22	BANEASA	4
MIHAILESTI (city)	16	ISVOARELE	3
ULMI	15	GREACA	3
SABARENI	14	BULBUCATA	3
BUTURUGENI	14	BUCSANI	3
BOLINTIN-DEAL	14	SLOBOZIA	2
FLORESTI-STOENESTI	13	DAIA	2
OGREZENI	11	VALEA DRAGULUI	1
GRADINARI	11	STOENESTI	1
ADUNATII-COPACENI	11	PUTINEIU	1
HOTARELE	9	OINACU	1
CREVEDIA MARE	9	MIHAI BRAVU	1
GAISENI	8	MALU	1
COSOBA	8	IZVOARELE	1
PRUNDU	7	IEPURESTI	1
COMANA	7	GHIMPATI	1
SINGURENI	5	CLEJANI	1
MARSA	5		
TOTAL		447	

Source: Own calculation on the basis of data from listafirme.ro [5].

Initially, over 600 companies with the CAEN code 4941 Road freight transport were selected. For these, the data recorded on the basis of the balance sheet at the Ministry of Finance were verified, and companies in insolvency, bankruptcy, or that did not submit financial statements were eliminated, as well as those established in 2021, which did not have full activity in the respective fiscal year. The final analysis was carried out for 447 companies whose distribution by locality is shown in Table 1.

RESULTS AND DISCUSSIONS

The analysis carried out on 447 companies in could be analyzed based on various criteria.

The number of transport companies by localities in Giurgiu county is shown in Fig. From this figure we may identify that the most companies in Giurgiu County are found in the localities of Roata de Jos (77) and Giurgiu (68), these being followed by those in the localities of: Vanatorii Mici, Joita and Bolintin Vale with about 20-30 companies; Mihailesti, Ulmi, Sabareni, Buturugeni, Bolintin-Deal, Floresti-Stoenesti, Ogrezeni, Gradinari and Adunatii-Copaceni with about 7-9 companies. The rest of the localities have under 5 companies per locality with the CAEN code 4941.

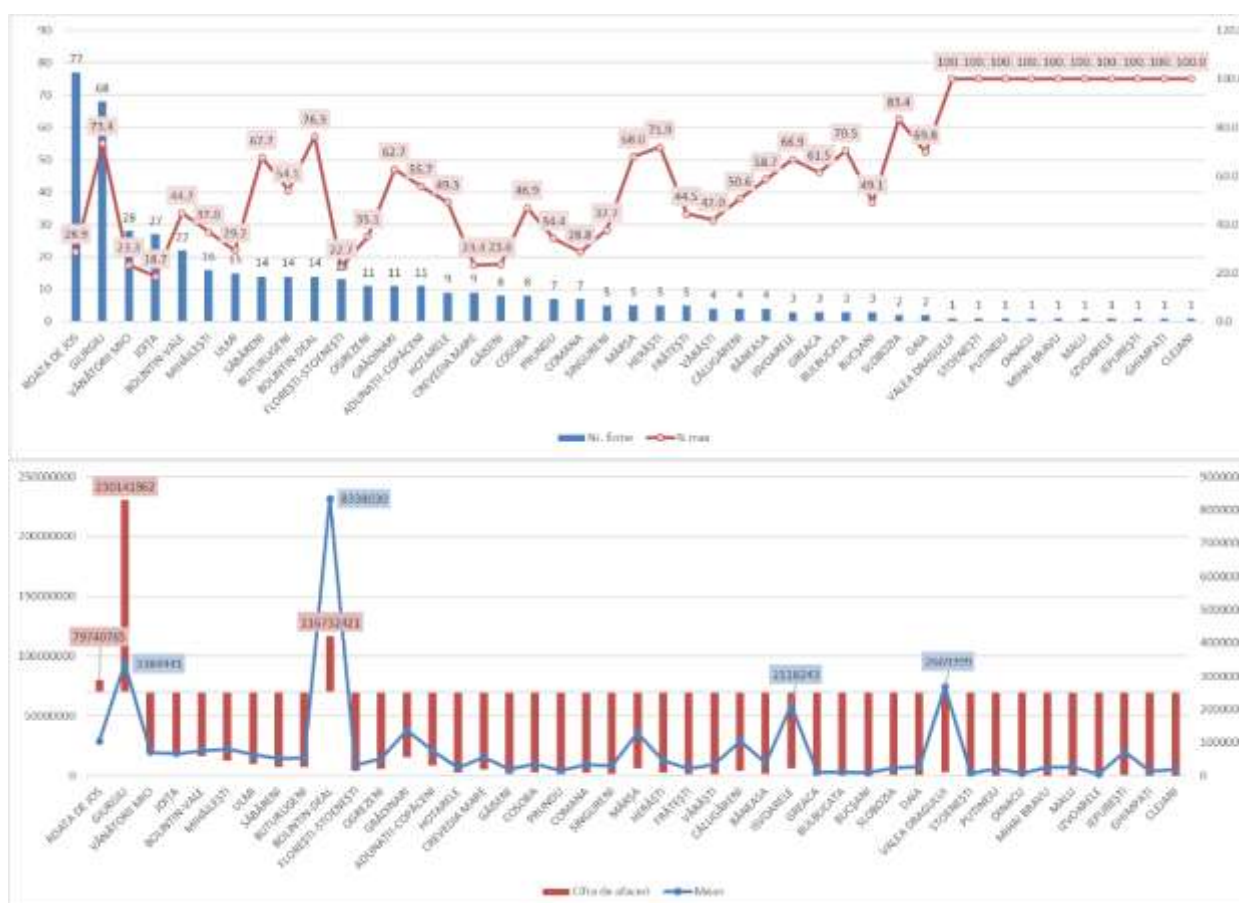


Fig.1. Number of companies, turnover and average turnover per locality
Source: Own calculation on the basis of data from listafirme.ro [5].

-Most companies are developed in localities near the city of Bucharest and on the border with Bulgaria;
-The highest turnover was recorded in the cities of Giurgiu and Bolintin-Vale and in the locality of Roata de Jos. These are distinguished by very high values compared

to the other localities, respectively 2.3 billion lei, 116 million lei and 79.7 million lei. The next locality, Vanatorii Mici, has a turnover of only 2 million lei.
-A number of 117 companies out of the 447 had losses in 2021 (a total of 5.65 million lei);

the other 330 companies obtained a total profit of 61.5 million lei.

-Also, within the first localities there are companies that contribute over 50% to the local turnover of the sector. This is the case of the localities of Giurgiu (73.4%; one company out of 68 with a turnover of 168.9 million lei - BOLINTIS AGRO SRL), Bolintin-Deal (76.3%; one company out of 14 with a turnover of 89 million lei - KLG TRUCKING SRL), Sabareni (67.7%; one company out of 14 with a turnover of 4.8 million lei) or Gradinari (62.7%; one company out of 11 with a turnover of 9.5 million lei). However, although BOLINTIS AGRO SRL is in first place, it is not a company specialized in transport like KLG TRUCKING SRL which

is in 49th place nationally with a fleet of almost 200 vehicles in 2023.

-The companies with the highest profit values were: from the localities of Bolintin-Deal (KLG TRUCKING SRL with 7.2 million lei), Roata de Jos (LAUR EURO DREAM S.R.L. with 5.8 million lei; STROMIH TRANS COM S.R.L. with 1.3 million lei), Giurgiu (DIRECT TRANSPORT RENT SRL with 4.5 million lei; CERONY SRL with 2.6 million lei), Gradinari (PREDI TRANS S.R.L. with 3.7 million lei) and Mihailesti (DOREL TRANS SRL with 1.7 million lei). As can be seen from the following graph, most companies have a profit below 260 thousand lei (406 companies), but about 34 companies with a profit between 260 thousand lei and 1.3 million lei can also be identified.

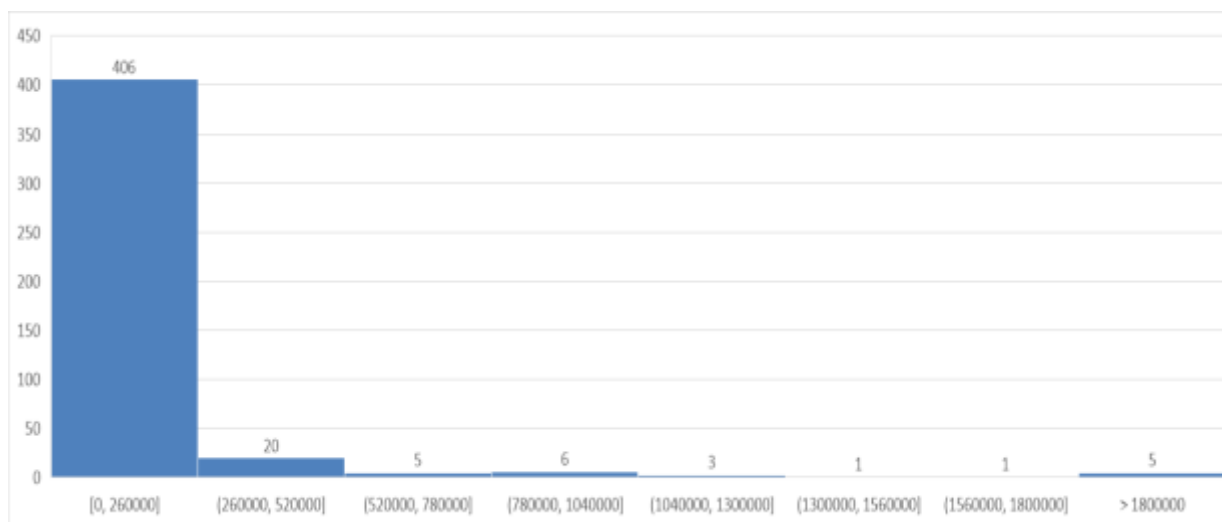


Fig. 2. Distribution of transport companies from Giurgiu County by profit value

Source: Own calculation on the basis of data from listafirme.ro [5].

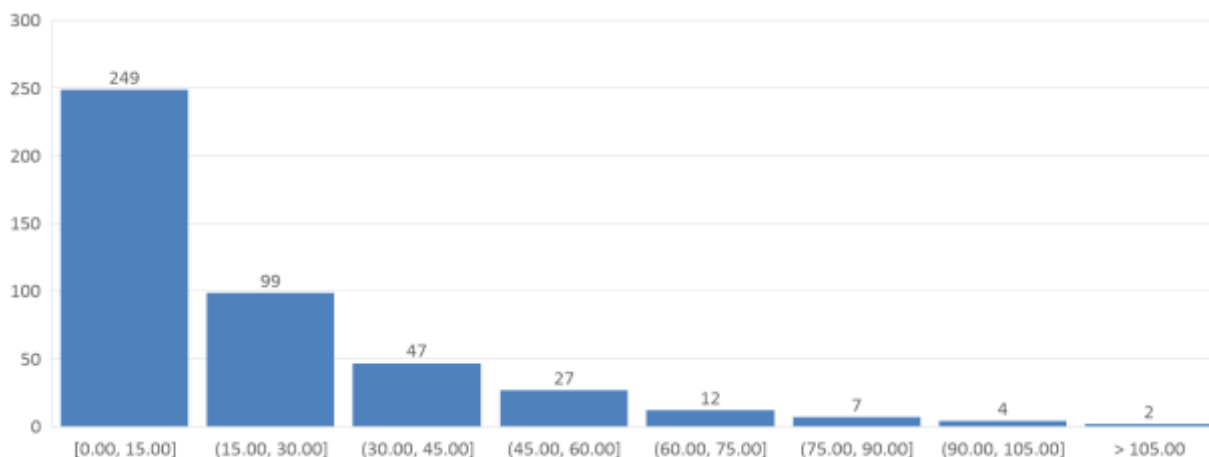


Fig. 3. Distribution of companies from Giurgiu County by profit margin

Source: Own calculation on the basis of data from listafirme.ro [5].

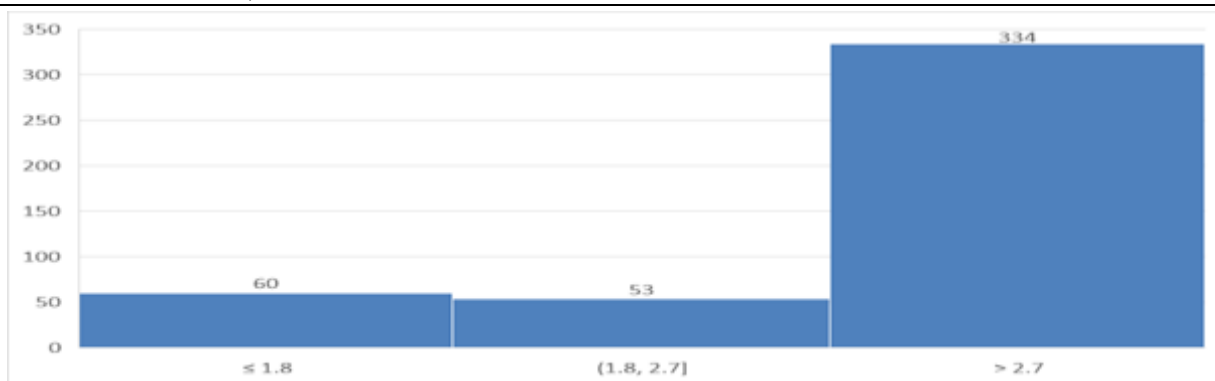


Fig. 4. Solvency of transport companies from Giurgiu County

Note: -Altman Z-Score meaning: High risk $Z < 1.8$, Medium risk $1.8 < Z < 2.7$, No risk $Z > 2.7$

Source: Own calculation on the basis of data from listafirme.ro [5].

-If we analyze the profit margin, we notice a higher discrepancy between companies, about 249 having a profit margin below 15% (they have high operational costs, low prices or low efficiencies) and about 99 between 5% and 30%. However, 13 companies with profit margins above 75% are also identified (due to cost efficiency or advantageous prices).

Of course, there are more exceptions. For example, the two companies in the first places have a high profit margin due to undistributed profit, and other companies that have over 90% margin have very low expenses compared to revenue, which highlights that probably not all expenses are recorded in accounting.

-A number of 334 companies are not at risk of insolvency and 53 are at medium risk. About 60 companies have an unstable financial situation, and of these, over 25 have a negative score (high risk of bankruptcy) and 50 have recorded losses.

In terms of profitability, we identified two companies that stand out from the others with profit rate values exceeding 300-400% (PEDRO LOGISTIC TRANSPORT S.R.L. from Herasti and HOT TRANS ADIVAL S.R.L. from Varasti). In 2021, 116 companies did not record a profit, 2% have very high profitability (over 80%), and about 39% have a profit rate below 20%.

-If we compare urban with rural localities, we observe the following: in rural areas, a turnover of approximately 337.9 million lei was obtained, with an average per company of 990.8 thousand lei; in urban areas, a turnover of approximately 259.2 million lei was

obtained, with an average per company of 2.5 million lei; in rural areas, a turnover of approximately 47.4 million lei was obtained, with an average per company of 139.1 thousand lei; in urban areas, a turnover of approximately 20.3 million lei was obtained, with an average per company of 191.5 thousand lei.

Table 2. Number of transport companies by profitability rank

	No	Percent
0	116	26.0
Under 20%	172	38.5
20-40%	98	21.9
40-60%	36	8.1
60-80%	14	3.1
80-100%	11	2.5
Total	447	100.0

Source: Own calculation on the basis of data from listafirme.ro [5].

Table 3. Descriptive statistics

	Turnover (Lei)		Profit (Lei)	
	Rural	Urban	Rural	Urban
No	341	106	341	106
Minimum	390	1,345	0	0
Maximum	89,022,079	168,954,737	8,383,084	4,588,609
Sum	337,872,069	259,195,217	47,433,029	20,300,757
Mean	990,827	2,445,237	139,099	191,516

Source: Own calculation on the basis of data from listafirme.ro [5].

Table 4. Profitability ranges by residence

	Urban		Rural	
	No	Percent	No	Percent
0	35	33.0	81	23.8
Under 20%	41	38.7	131	38.4
20-40%	21	19.8	77	22.6
40-60%	5	4.7	31	9.1
60-80%	3	2.8	11	3.2
80-100%	1	0.9	10	2.9
Total	106	100.0	341	100.0

Source: Own calculation on the basis of data from listafirme.ro [5].

There are no major differences by area of residence in terms of profitability, about 38-39% of companies have a profit rate below 20%. However, we can see that there are more companies in rural areas with a profit rate of over 60%.

CONCLUSIONS

The analysis of the business environment in the road freight transport industry, conducted among 447 enterprises in Giurgiu County, revealed the following findings: Presently, 85% of the roads are regulated, and there exists a fleet of 3,034 goods vehicles, positioning it approximately in the median of the county rankings; 32% of enterprises are concentrated in the localities of Roata de Jos and Giurgiu; from 2016 to 2022, the sector's value has doubled in workforce and tripled in turnover and profit. The results demonstrate that over 86% of the road transport sector in Giurgiu County is economically stable, although merely 73% are profitable. It is crucial to acknowledge that the existence of multiple firms in specific areas does not ensure their supremacy in regional revenue rankings. The road transportation sector in Giurgiu county, like in other counties of Romania is facing with various problems related to the insufficient capacity, higher and higher diesel price, high taxes and insurances, the need of more drivers and the reduction of pollution. The road transport sector is crucial in the examined region, facilitating the movement of goods in a county that is both predominantly agricultural and a significant transport centre in the southern part of the country.

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