



Comparative study on the dynamics and structure of the number of enterprises in Poland, Romania and Hungary

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Abstract: *The number of enterprises, respectively their structure by fields of activity, influences the level of the national economy, so it is extremely important to know the "map" of economic agents in terms of evolution and level of competition by areas of activity. The purpose of this paper is to present in a descriptive way the evolution of the number and structure of active enterprises in Romania (by legal form and field of activity), as well as a comparative presentation of the situation of enterprises in Hungary and Poland. In all three countries, the total number of enterprises shows a continuous growth trend, but with significant differences in the growth rate, analyzed by areas of activity.*

Keywords: *enterprises, fields of activity, dynamics, structure, Poland, Romania, Hungary*

JEL Classification: L26, O11

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1. INTRODUCTION

Economic agents, regardless of their legal form or form of ownership, are the engine of national economies. The evolution of the number, as well as their structure is determined and influenced directly or indirectly by the economic and fiscal policy of the national economies. Some events, such as the transition from a centralized economy to a market economy (which happened in the 1990s in Romania), economic/financial crises (eg the financial crisis of 2008-2010) or some measures to stimulate some activities/entrepreneurship, can cause major changes in the evolution of the number and structure of economic agents, which operate in a national economy. The economic and social environment, but also the political one can create favorable or even unfavorable conditions regarding the increase or decrease of the number of enterprises in an economy.

According to Kuczi (2000) there are at least four determining factors in the evolution of the number of enterprises, such as: recessionary pressure, increasing demand, technological changes and the fragmentation effect. Csata (2015) analyzes the effects of these factors on the Romanian economy since the 1990s, showing that recessionary pressure was the most important cause of the increase in the number of enterprises. An analysis of the evolution of enterprises in Poland in the period 1997-2009 was made by Ptak - Chmielewska (2011), on the dynamics and importance of the number of newly established companies, respectively closed by fields of activity.

Abdesselam, Bonnet and Renou-Maissant (2017) made a complex analysis of the demographics of enterprises in the European Union. The 28 Member States of the European Union were divided into homogeneous groups, using cluster analysis and several variables (start-ups, closed enterprises, number of active enterprises, growth rate of enterprises, etc.). Thus, the authors worked with 5 homogeneous groups (Hungary and Poland being part of the same group, along with Bulgaria, Ireland, Lithuania, Malta and the United Kingdom; Romania being with Belgium, Cyprus, the Czech Republic and Italy in a another group). The group to which Romania has been a part, was characterized as the group that has the most individual entrepreneurs and has a relatively low growth rate of new enterprises (compared to other countries). On the other hand, the group of which Hungary and Poland were also part, was characterized by a significantly high rate of the number of start-ups (2014).

The purpose of this paper is to present descriptively the evolution of the number and structure of enterprises in Romania (for 2010 – 2018), making a comparison with enterprises in Hungary and Poland. The two chosen countries for the comparative study, are located in the central-eastern part of Europe, being neighboring countries with Romania, different in terms of size of population, but with about the same level of gross domestic product per capita. (Table no. 1). The data were taken from the databases of the National Statistical Institutions of the three countries.

Table no. 1 – Evolution and level of Gross Domestic Product – GDP per capita (expressed in current prices, million euro):

Year	2015	2016	2017	2018	2019
Hungary	11.450	11.830	12.960	13.910	14.950
Poland	11.190	11.110	12.170	12.960	13.870
Romania	8.080	8.630	9.580	10.500	11.530

Source: Eurostat database

(https://ec.europa.eu/eurostat/databrowser/view/nama_10_pc/default/table?lang=en) access 17.11.2020



2. EVOLUTION OF THE NUMBER AND STRUCTURE OF ENTERPRISES

This chapter presents the evolution and structure of Romanian enterprises, by legal forms and by fields of activity, and the second part of the chapter will present the situation of Polish and Hungarian enterprises according to the same criteria.

2.1. Dynamics and structure of Romanian enterprises in 2008-2018

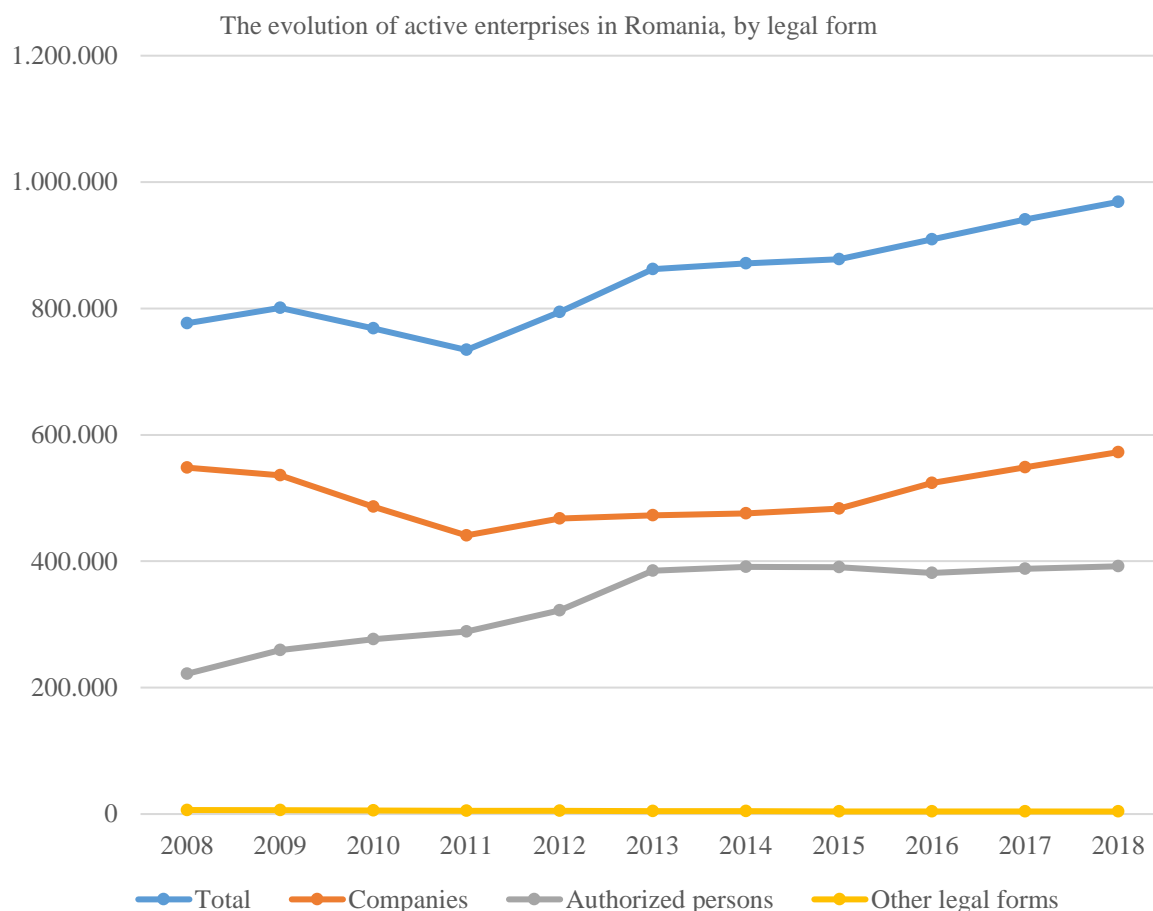
The processed data, which are presented below, were taken from the database of the National Institute of Statistics of Romania, a database that includes all active enterprises in the national economy, structured by legal form in companies, authorized persons and other legal forms. According to the definition of the National Institute of Statistics, the active enterprise represents “the entity that, from an economic point of view, is active during the observation period, respectively realizes goods or services, records expenses and prepares the balance sheet. Normally an entity, is considered active when it has started to produce and collect revenue. From a statistical point of view, however, the entities that, even if they have no income, have already started an investment and record costs are also of interest. Therefore, any unit that employs labor and records costs, including investment expenses related to productive activity, is considered active”(National Institute of Statistics, Tempo online database).

Analyzing the evolution of the number of enterprises in Romania in the period 2008-2018, there is a trend of continuous increase in the total number of enterprises, except for 2010 and 2011, when the financial crisis (2008-2011) left its mark on the evolution of the total number of Romanian enterprises: in 2010 and 2011 there was a slight decrease in the total number of enterprises, especially of companies (a decrease of about 10% in both 2010 and 2011, compared to the previous year). Instead, the number of authorized persons also increases in the years of financial crisis. Thus, Table no. 2 contains the total number, respectively the number of companies, authorized persons and other legal forms for the period 2008 - 2018.

Table no. 2 – Number of active enterprises in Romania in the period 2008-2018, according to the legal form

Legal form	Years										
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
	M.U: Number										
Total	776.606	801.011	768.371	734.330	794.514	862.202	871.264	877.788	909.546	940.563	968.659
Companies	548.357	535.758	486.504	440.899	467.512	472.722	475.482	483.122	523.691	548.605	572.678
Authorized persons	221.902	259.341	276.420	288.575	322.142	384.809	391.346	390.370	381.654	387.891	392.014
Other legal forms	6.347	5.912	5.447	4.856	4.860	4.671	4.436	4.296	4.201	4.067	3.967

Source: database of National Institute of Statistics from Romania (<http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>), access: 20.11.2020

Figure no. 1 – The evolution of active enterprises in Romania, according to the legal form

Source: made by the author, based on the data from National Institute of Statistics database

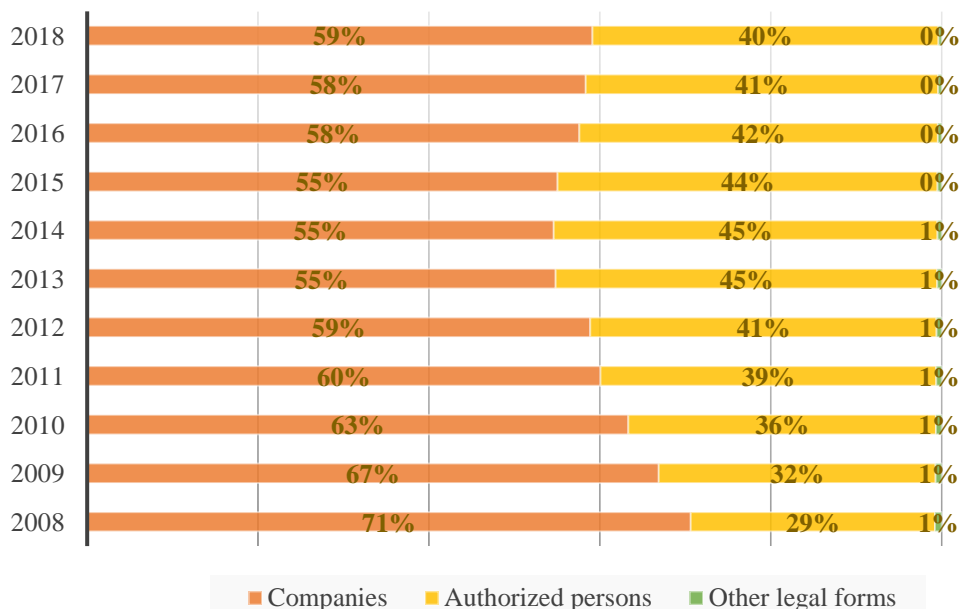
Within 10 years (2008-2018), the total number of enterprises increased from 776.606 in 2008 to 968.659 in 2018, which is almost exclusively due to the increase in the number of authorized persons (by over 170.000). This increase in the number of authorized persons in the total number of active enterprises, also influenced the change in the structure of enterprises by legal forms (Fig. no. 2.).

Until, in 2008, the share of companies in the total number of enterprises was 71% and of authorized persons only 29%, this percentage reaches 59% in 2018 in the case of companies, significantly increasing the share of authorized persons to 40%. The economic environment and the fiscal policy in Romania, in 2013-2015, favored and encouraged this form of entrepreneurship.

It is interesting to analyze the structure of these enterprises by areas of activity, some areas registering a relatively large number of enterprises, and others (belonging to certain areas of national interest or with significant investment needs) with a smaller number. The dynamics of the number of enterprises in different fields (more accentuated in the field of services) shows the change of the structure of the national economy.

Figure no. 2 –The structure of active enterprises in Romania, according to the legal form

The structure of active enterprises in Romania, according to the legal form



Source: made by the author, based on the data from National Institute of Statistics database

The total number and structure of active enterprises in Romania in 2018, by fields of activity (according to the NACE – Statistical classification of economic activities in the European Communities) is presented in the following table (Table no. 3). The total number of active economic agents in Romania in 2018, reaches almost 1.000.000 economic agents, which compared to 1.000 inhabitants means 49,6 enterprises per 1.000 inhabitants.

These data clearly show that most enterprises have as their main field of activity trade and repair of motor vehicles (271.459), followed by agriculture, forestry and fishing (122.657). The fewest companies operate in the field of extractive industry (1.074), production and supply of electricity and heat (1.259), respectively water supply, sewerage, waste management (3.590). Businesses in these areas operate in key sectors of the national economy, where businesses need major investment and significant sources of funding.

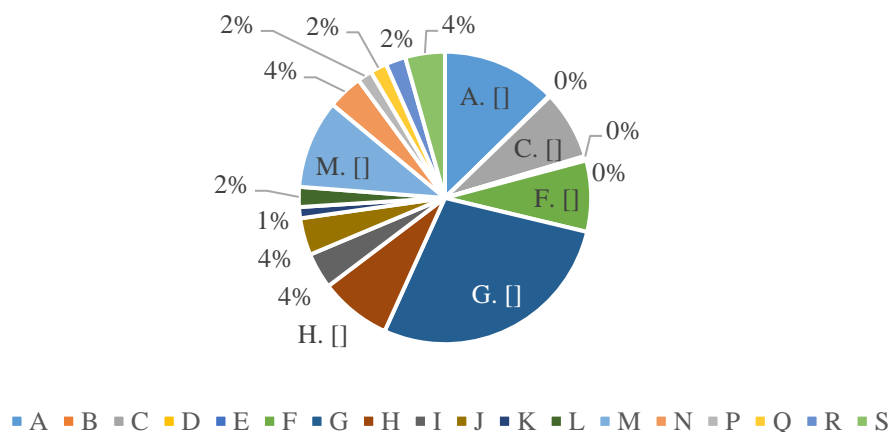
According to the nomenclature, the field of activity S - Other activities and services, includes the following activities: activities of economic, employer, professional organizations, trade unions, other organizations, politics, computer repair, personal items, and household, other service activities.

Figure no. 3 shows the share of enterprises in the fields of activity presented above: the field of activity G – Whole sale and retail trade, repair of vehicles has the highest share (28%), followed by A - Agriculture, forestry and fishing (13%), as well as M - Professional, scientific and technical activities (10%). The areas with the lowest shares in terms of number of active enterprises are: B - Extractive industry (0,11%), D - Production and supply of electricity and heat, gas, hot water and air conditioning (0,13%), as well as E - Water distribution, sanitation, waste management, decontamination activities (0,37%).

Table no. 3 – Number of active enterprises in Romania, by fields of activity

NACE Rev 2. (activities of the national economy - sections)	2018 Number
TOTAL	968.659
A Agriculture, forestry and fishing	122.657
B Extractive industry	1.074
C Manufacturing	73.580
D Electricity, gas, steam and air conditioning supply	1.259
E Water supply, sewerage, waste management and remediation activities	3.590
F Construction	76.247
G Wholesale and retail trade; repair of motor vehicles and motorcycles	271.459
H Transportation and storage	76.837
I Accommodation and food service activities	38.473
J Information and communication	39.679
K Financial and insurance activities	12.009
L Real estate activities	21.405
M Professional, scientific and technical activities	95.082
N Administrative and support services activities	37.715
P Education	15.734
Q Human health and social work activities	17.899
R Arts, entertainment and recreation	21.505
S Other service activities	42.455

Source: National Institute of Statistics database

Figure no. 3 – The structure of active enterprises in Romania, by fields of activity**The structure of active enterprises in Romania, by fields of activity in 2018**

Source: made by the author, based on the National Institute of Statistics database

Depending on the field of activity and the legal form of Romanian enterprises in 2018, there are major differences in the number of companies or authorized persons, in the following areas (Fig. no. 4.): in areas of national interest, which require a very large invested capital, the number of authorized persons is almost insignificant (B, D, E, Q). In area A - Agriculture, forestry and fishing, the number of authorized persons significantly exceeds the number of companies.

Figure no. 4 – The structure of Romanian active enterprises, by legal forms and field of activity in 2018

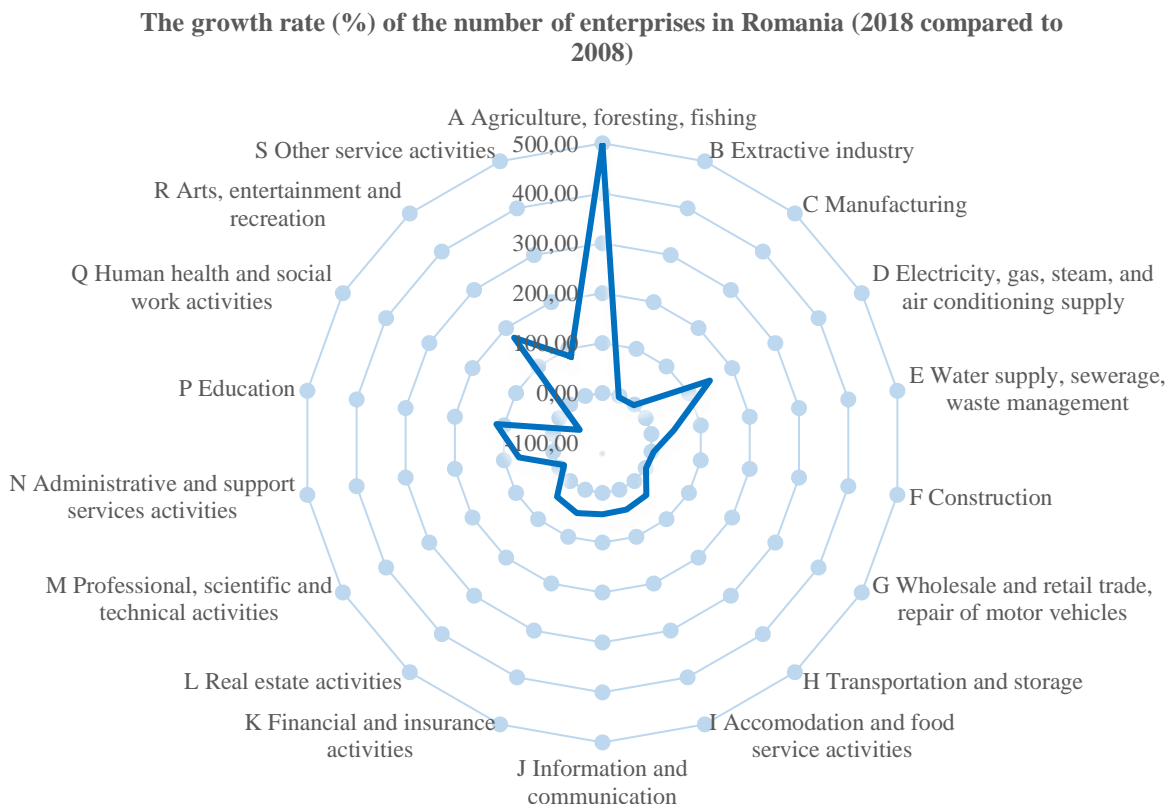


Source: made by the author, based on the National Institute of Statistics database

2.2. The growth rate of the number of enterprises in Romania, Hungary (2018 compared to 2008) and Poland (2018 compared to 2010) by field of activity

In terms of dynamics, growth rate of active enterprises in Romania, in 2018 compared to 2008 (Figure no. 5), in some areas there is a significant increase in the number of enterprises, such as in A - Agriculture, forestry and fishing (with a growth rate of almost 600%), followed by the field R - Entertainment, cultural and recreational activities with a growth rate of approximately 275%. An increase of over 200% is also observed in areas D. Production and supply of electricity and heat, gas, hot water and air conditioning, and P. Education. A negative and quite significant rhythm is registered in the number of enterprises in the field of Q. Health and social assistance (52,47%).

Figure no. 5 – The growth rate of enterprises in Romania (2018 compared to 2008), by field of activity

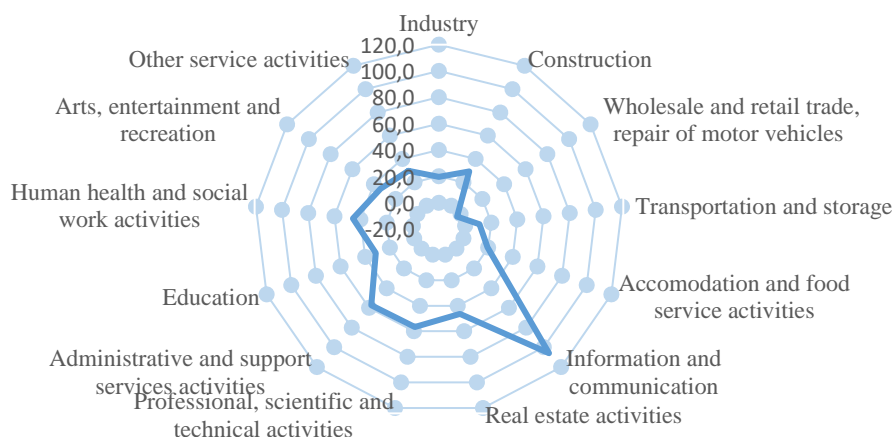


Source: made by the author, based on the National Institute of Statistics database

Compared to this dynamic of enterprises in Romania, in Poland in the period 2010 - 2018, it is not possible to observe such spectacular increases or decreases, the most dynamic areas were (Figure no. 6): J. Information and communications (an increase of 106%), M. Professional, scientific and technical activities (an increase of 56.7%) and N. Administrative and support service activities, an increase of 57,5%. So, in the case of Poland there is a strong development in the field of services, a small decrease in the number of enterprises is observed in the field of G. Wholesale and retail trade, repair of motor vehicles and motorcycles (-3,4%), although that the share of this field continues to have the largest share of the total number of enterprises, structured by activities of the national economy.

Figure no. 6 – The growth rate of the enterprises in Poland (2018 – 2010), by most important field of activity

The growth rate (%) of the number of enterprises in Poland (2018 compared to 2010)



Sources: National Institute of Statistics in Poland: <https://bdl.stat.gov.pl/BDL/start>

In the following table (Table no. 4), the data shows those areas of activity where a major difference can be observed between the three countries, as a share of the number of enterprises, structured by areas of activity according to NACE:

Table no. 4 – The share of active enterprises in Poland, Romania and Hungary, by fields of activity (2018)

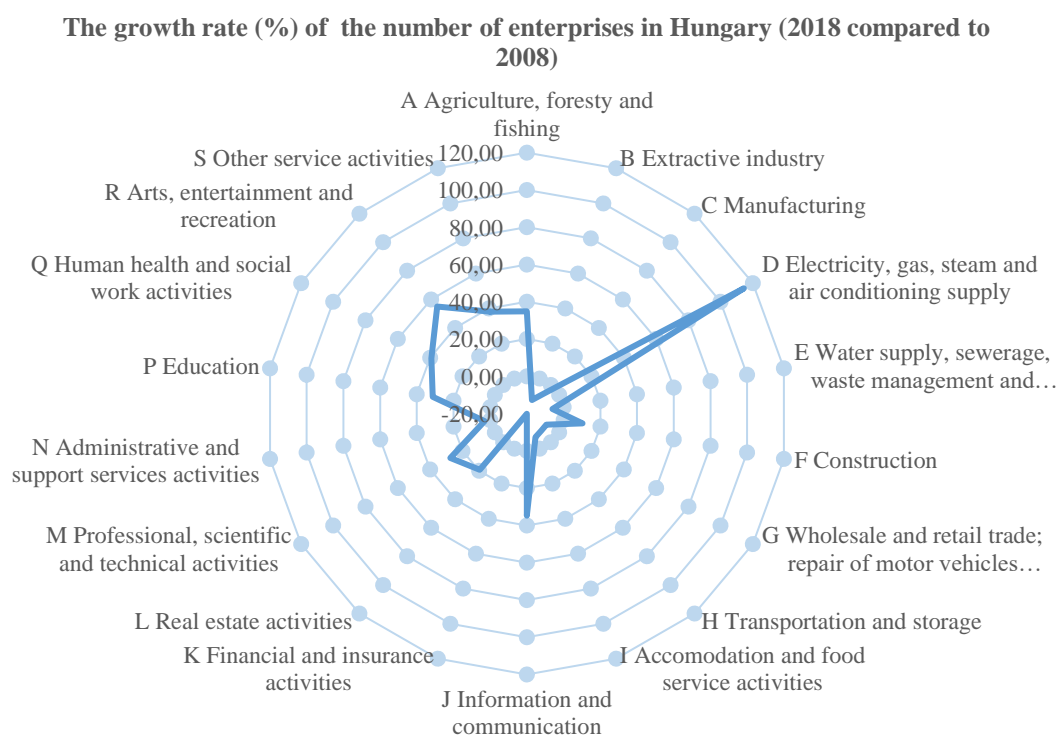
NACE Rev.2 (national economy activities - sections)	Number of active enterprises in 2018			Structure of enterprises in 2018		
	RO	HU	PL	%RO	% HU	% PL
Total	968.659	779.749	2.150.288	100,00%	100,00%	100,00%
C. Manufacturing	73.580	51.743	222.559	7,60%	6,64%	10,35%
F. Construction	76.247	78.168	301.786	7,87%	10,02%	14,03%
G. Wholesale and retail trade, repair of motor vehicles	271.459	132.382	506.942	28,02%	16,98%	23,58%
M. Professional, scientific and technical activities	95.082	132.714	291.708	9,82%	17,02%	13,57%
P. Education	15.734	33.153	55.389	1,62%	4,25%	2,58%
Q. Human health and social work activities	17.899	35.473	187.643	1,85%	4,55%	8,73%

Source: made by the author, based on data provided by the National Statistical Institutions of Poland, Romania and Hungary

In Hungary (Fig. no. 7), in the field of D - Production and supply of electricity the number of enterprises increased by 114%, followed by activities in the field of R - Entertainment, cultural and recreational activities (54,97%), Q - Health and social assistance (39,25%) and S - Other

service activities (38,12%). Compared to Romania and Poland, where in almost all areas of activity there was an increase in the number of enterprises in the period 2008-2018, in Hungary a decrease in the number of enterprises is observed in several areas: K - Financial intermediation and insurance (- 19,89%), B - Extractive industries (-12,33%), G - Trade, repair of motor vehicles (- 8,08%), H - Transport and storage (-8,06%), I - Hotels and restaurants (-6,61%), E - Sanitary water distribution, waste management (-6,07%) and C - Extractive industry (-5,94%). Of course, in total, the number of enterprises increased in Hungary by 11,17% (from 701.408 in 2008 to 779.749 in 2018).

Figure no. 7 – The growth rate of enterprises in Hungary (2018 – 2008), by most important field of activity



Source: Database of the Hungarian National Institute of Statistics

It can be seen that in certain areas of activity, such as manufacturing, construction, trade, professional, scientific and technical activities, as well as health and social assistance, there are significant differences in the share of enterprises in the three national economies, respectively in other areas, the share of enterprises is approximately the same. In Romania most companies operate in the field of G. Wholesale and retail trade, repair of motor vehicles and motorcycles with a share of 28,02%, similar to Poland, where companies in this field have a share of 23,58%, but different from Hungary, where companies have a much lower share in this field, of only 16,98%. There is a very significant share of the number of enterprises in Hungary in the field of M. Professional, scientific and technical activities (17,02%), even exceeding the share of enterprises in the field of G. Wholesale and retail trade, repair of motor vehicles and motorcycles (16,98%). Also in Hungary, in the field of P. Education, there are much more enterprises (in relative sizes) than in Poland or Romania. In contrast, in Poland, a fairly significant share of enterprises is observed in the field of health (8.73%).



3. CONCLUSIONS

The number and structure of active enterprises in national economies may characterize the dynamics and some characteristics of national economies. In Romania there is a “chaotic” growth rate of the number of enterprises in certain fields of activity, respectively significant differences in the number of enterprises in different fields of the national economy. The majority of authorized persons operates in the field of A - Agriculture, forestry and fishing, unfortunately, this field being an increasingly weak branch and without secure gains / incomes, which can ensure the possibility of investments and long-term sustainability. Trade, where Romania has the most enterprises, and which has the largest share of all fields of activity, seems to be an attractive field for enterprises, but during the analyzed period, there is a stagnation of the number of enterprises, on next to a very low profitability rate (Fenyves et al., 2020).

Comparing the structure of enterprises in Romania, Poland and Hungary, there are interesting differences in the distribution of enterprises by fields of activity: first, the share of enterprises in different fields of activity is more balanced in Poland and Hungary than in Romania; there are no such significant differences, respectively in most areas of activity there is an acceptable level of competition. There is a rather high share of the number of enterprises in Poland in the field of construction (14,03%), in the manufacturing industry (10,35%) and health and social assistance (8,73%). In contrast, in Hungary an interesting / high share has the enterprises in the field of education (4,25%).

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