### STATISTICAL STUDY ON BUSINESS DEMOGRAPHY IN ROMANIA, 2008-2022

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**Summary:** An enterprise is an organizational entity for the production of goods, commercial services, or services of social interest. Both the results of an economy (Gross Domestic Product, Net Domestic Product, etc.) and the wellbeing of people depend on the number and quality of enterprises. In this article, we proposed the study of the main indicators specific to the demography of enterprises in Romania, in the period 2008-2022, namely: the number of active enterprises, the number of newly created enterprises and the number of discontinued enterprises.

JEL classification: C82, O11

## Keywords: enterprise, demography, active enterprise, discontinued enterprise, enterprise size

#### **1. INTRODUCTION**

The source of the data specific to the indicators subject to this study is the National Institute of Statistics. Here are also their definitions (economic operator, social operator, legal unit, enterprise, active enterprise, dormant enterprise, size of enterprise), which we will reproduce below.

*The economic operator* is defined as "the organization, which can be a natural/legal person, created to carry out activities defined on the basis of Law no. 15/1990, of Law no. 31/1990 with subsequent amendments and of the Government Emergency Ordinance no. 44/2008."

*The social operator* is "the organization with legal personality, created to carry out an activity dedicated to the social interest."

*The legal unit* refers to "any economic or social operator who has his own assets, can conclude contracts with third parties in his own name and defend his interests in court - has legal personality. Legal establishments are either authorised natural persons, sole proprietorships, family businesses or legal persons."

**The enterprise** is described as "a grouping of legal units that is constituted as an organizational entity for the production of goods, commercial services or services of social interest, which benefits from a decision-making autonomy, especially to ensure its current resources. An enterprise carries out one or more activities, in one or more places (premises). Conventionally, authorized natural persons, sole proprietorships and family businesses carrying out economic activities on the basis of free initiative in accordance with the law, public institutions and non-governmental organizations shall be treated in the same way as enterprises."

*The active enterprise* is described as "the entity that, from an economic point of view, is economically active during the observation period, i.e. produces goods or services, records expenses and prepares an accounting balance", while *the dormant enterprise* represents "the entity that legally exists, but is economically inactive, from an economic point of view, during the observation period."

The classification of enterprises is carried out according to various criteria, as follows:

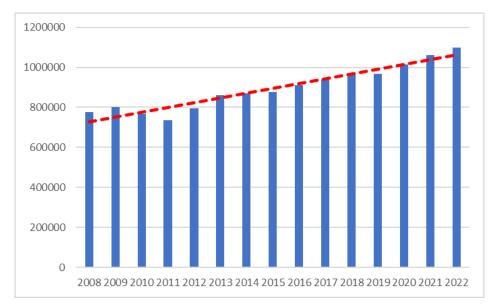
- According to the main characteristics of their economic behaviour, enterprises may be: "(a) enterprises with non-financial economic activity (agricultural enterprises; enterprises in industry, construction, commerce and other services); b) financial, banking and insurance companies; c) institutions of the central and local public administration and institutions in the field of social security";
- According to the legal forms of organization, the enterprises can be: "a) autonomous administrations and national institutes; b) commercial companies; c) agricultural companies; d) cooperative societies; e) other institutions of the central and local public administration established by decrees, laws; f) budgetary institutions; g) private entrepreneurs; h) non-governmental organizations".

*"The size of the enterprise* is assessed according to the criterion of the average number of employees, in the reference period, in accordance with the criteria issued by Eurostat. The following ranges are used: micro enterprises (0-9 employees); small enterprises (10-49 employees); medium-sized enterprises (50-249 employees); large enterprises (250 employees and above)."

### 2. EVOLUTION OF THE MAIN INDICATORS SPECIFIC TO THE DEMOGRAPHY OF ENTERPRISES IN ROMANIA, IN THE PERIOD 2008-2022

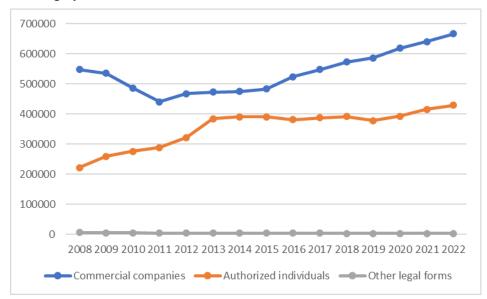
For this study, the assessment of the demography of enterprises in Romania, we decided to limit the number of indicators to the most important ones, namely: active enterprises, newly created enterprises and discontinued enterprises.

In Figure 1. the evolution of the number of active enterprises in Romania in the period 2008-2022 is graphically represented (data are taken from Annex 1). As can be easily seen, the trend is increasing, despite the existence of some years in which this number is reduced (in 2010 and 2011). We consider this to be a favourable situation.





The evolution of the number of active enterprises, by legal form, is shown in Figure 2. (data are also taken from Annex 1). Of the many legal forms, by far, the most numerous are "Commercial companies" and "Authorized natural persons", while the category "Other legal forms" presents very low values (additionally registering a downward trend). The evolution of the first two categories is ascending, but the shape of the graphs, almost mirrored, allows us to appreciate that such an evolution would be justified by the "transfer" of some companies from one category to the other.



# Figure 2. Evolution of the number of active enterprises, by legal forms, in Romania, in the period 2008-2022

In Figure 3. we present the evolution of the number of active enterprises, by size classes by number of employees (data are taken from Annex 2). The most consistent categories

are "0 employees" and "1-4 employees", the other two being placed at a significant distance from the former. At the same time, we also point out the opposite trend of their evolution: increasing for the categories "0 employees" and "1-4 employees", respectively, decreasing for the categories "5-9 employees" and "10 employees and over". It should be noted that for 2013 we have resorted to two corrections: in the category "0 employees" the initial value of "118416" was adjusted additionally to "418416", while in the category "1-4 employees" the initial value of "624256" was adjusted downwards to "324256". We resorted to this because, from the existing data for the neighboring years (2012 and 2014), we deduced that a mistake had crept into the table from the INS.

The evolution of the number of active enterprises, by activities of the national economy, is shown in Figure 4. (the data are taken from Annex 3). The variation in the number of active enterprises from one year to another is very different across the 18 activities assessed. However, with the exception of the "Health and social assistance" branch, all the others show higher values in 2022 compared to 2008. The highest levels are found for "Wholesale and retail trade; repair of motor vehicles and motorcycles" (annual average was 263,198 enterprises), followed by "Professional, scientific and technical activities" (annual average was 101,034 enterprises) and "Agriculture, forestry and fisheries" (annual average was 88,473 enterprises). On the last two places are the branches "Extractive industry" (the annual average was 1,115 enterprises) and "Production and supply of electricity and heat, gas, hot water and air conditioning" (the annual average was 1,098 enterprises). In Figure 5. The structure of the number of active enterprises, by activities of the national economy, in 2008 is presented, and Figure 6 shows it. structure for 2022 (for both graphs, the data are taken from Annex 3). In 2008, the podium was occupied by the activities: "Wholesale and retail trade; repair of motor vehicles and motorcycles' (with 268,050 enterprises), 'Professional, scientific and technical activities' (with 107,317 enterprises) and 'Manufacturing industry' (with 74,978 enterprises). In 2022, the podium changed as follows: "Wholesale and retail trade; repair of motor vehicles and motorcycles' (with 268,399 enterprises), 'Agriculture, forestry and fisheries' (with 124,685 enterprises), 'Professional, scientific and technical activities' (with 112,027 enterprises).

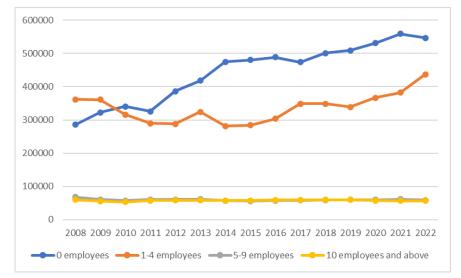


Figure 3. Evolution of the number of active enterprises, by size classes by number of employees, in Romania, in the period 2008-2022

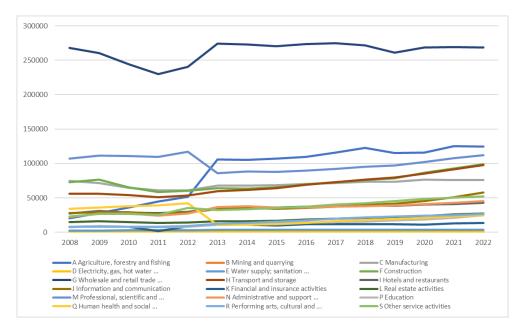


Figure 4. Evolution of the number of active enterprises, by activities of the national economy, in Romania, in the period 2008-2022

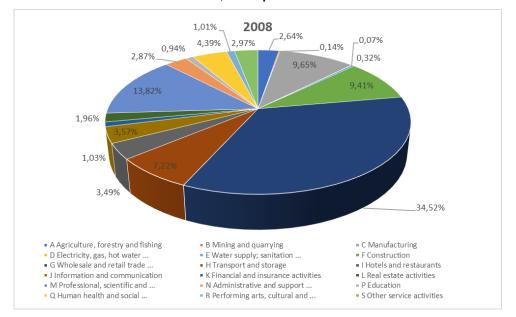


Figure 5. Structure of the number of active enterprises, by activities of the national economy, in Romania, in 2008

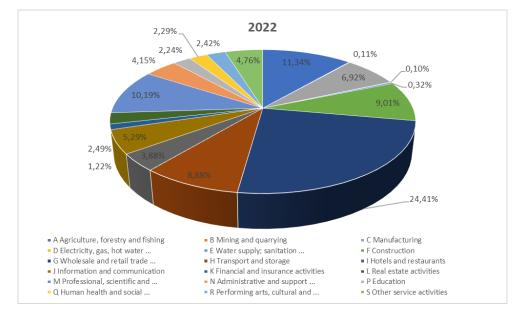


Figure 6. Structure of the number of active enterprises, by activities of the national economy, in Romania, in 2022

In Figure 7. we find the evolution of the number of newly created enterprises (data are taken from Annex 4). Although the trend is upward, we notice a rather different variation in the number of active companies, registering significant increases and decreases from one year to the next. The point to highlight in this graph is that the maximum value of the number of newly created enterprises occurs in 2013, followed by the minimum value in 2014. By legal forms, the evolution of the number of newly created enterprises is shown in Figure 8., where we can see that, as in the case of active enterprises, the most numerous are "Commercial companies" and "Authorized natural persons", while the category "Other legal forms" presents very low values. For "Companies" we observe an increasing trend, especially after 2010. For "Authorized Individuals", after the explosion in 2013, the collapse in 2014 followed, and in the last eight years there has been a flattening of the trend. For the "Other legal forms" category, after an almost linear evolution in the period 2008-2020, we see an explosion in the last two years.

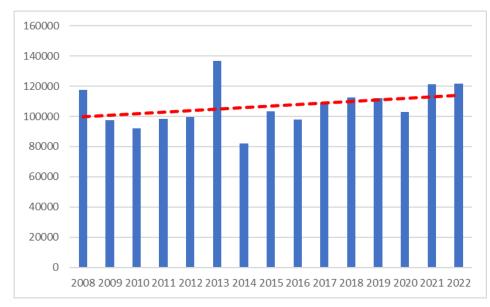


Figure 7. Evolution of the number of newly created enterprises in Romania, in the period 2008-2022

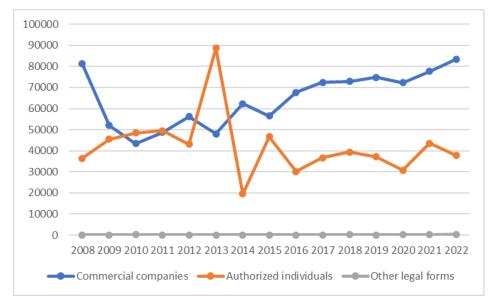


Figure 8. Evolution of the number of newly created enterprises, by legal forms, in Romania, in the period 2008-2022

Figure 9. presents the evolution of the number of newly created enterprises by size classes by number of employees (data are taken from Annex 5). As in the case of active enterprises, the largest categories are "0 employees" and "1-4 employees", the other two being placed at a significant distance from the former – a normal aspect, by the way. Although it is not as obvious as in active enterprises, we also point out the opposite trend of their evolution: slightly increasing for the categories "0 employees" and "1-4 employees", respectively, decreasing for the categories "5-9 employees" and "10 employees and over".

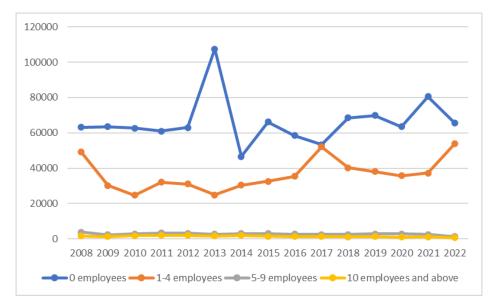


Figure 9. Evolution of the number of newly created enterprises, by size classes by number of employees, in Romania, in the period 2008-2022

The evolution of the number of newly created enterprises by activities of the national economy is graphically represented in Figure 10. (the data are taken from Annex 6). The variation in the number of newly created enterprises is also very different across the 18 activities assessed. In the case of all of them, we note that, during the 15 years (2008-2022), increases were frequently followed by decreases. The highest levels can be found for "Wholesale and retail trade; repair of motor vehicles and motorcycles" (annual average was 27,019 enterprises), followed by "Professional, scientific and technical activities" (annual average was 12,260 enterprises) and "Construction" (annual average was 10,645 enterprises). On the last two places are the branches "Extractive industry" (the annual average was 114 enterprises) and "Production and supply of electricity and heat, gas, hot water and air conditioning" (the annual average was 180 enterprises). Taking into account the structure of the number of newly created enterprises by activities of the national economy in 2008, the ranking was dominated by the following activities: "Wholesale and retail trade; repair of motor vehicles and motorcycles" (27.16% - 31,972 enterprises), "Professional, scientific and technical activities" (15.56% - 18,317 enterprises) and "Construction" (15.16% - 17,845 enterprises). In 2022, the ranking changed as follows: "Wholesale and retail trade; repair of motor vehicles and motorcycles" (18.16% - 22,087 enterprises), "Construction" (11.74% -14,273 enterprises), "Transport and storage" (11.48% - 13,956 enterprises).

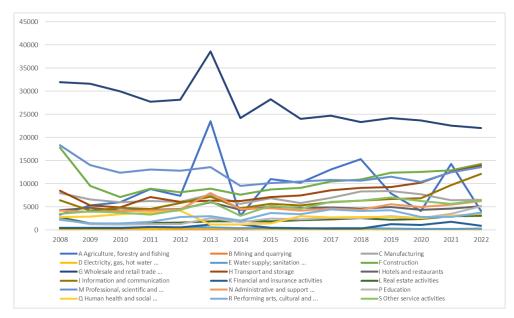
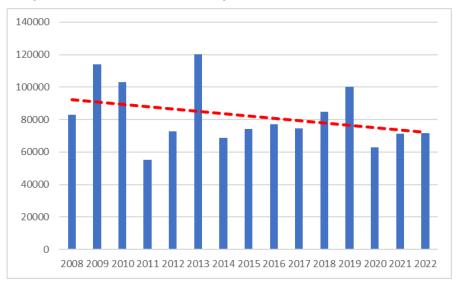


Figure 10. Evolution of the number of newly created enterprises, by activities of the national economy, in Romania, in the period 2008-2022

In Figure 11. we have the evolution of the number of companies closed (the data are taken from Annex 7). Although the trend is downward, we notice a rather different variation in the number of active enterprises, registering significant increases and decreases from one year to another. And this time (as in the case of newly created enterprises), the maximum value appears in 2013. By legal forms, the evolution of the number of closed enterprises is shown in Figure 12., where we can see that, as in the case of active and newly created enterprises, the most numerous are "Commercial companies" and "Authorized natural persons", while the category "Other legal forms" presents very low values. For "Companies" we see a decreasing trend, for "Authorized individuals" the trend is slightly increasing, and for "Other legal forms" the trend is decreasing.



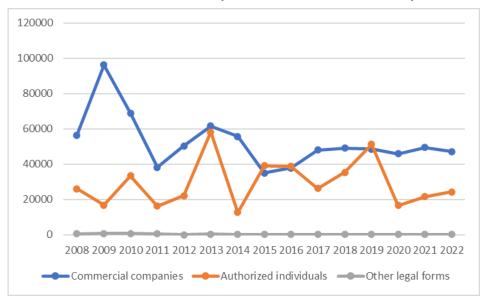


Figure 11. Evolution of the number of companies closed in Romania, in the period 2008-2022



In Figure 13. we find the evolution of the number of companies dissolved by size classes by the number of employees (data are taken from Annex 8). Predictably, as in the previous cases, the largest categories are "0 employees" and "1-4 employees", the other two being at a significant distance from the former. The evolution trend is decreasing for all the categories analyzed.

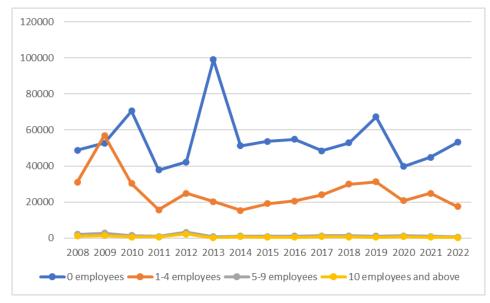


Figure 13. Evolution of the number of companies closed, by size classes by number of employees, in Romania, in the period 2008-2022

The evolution of the number of enterprises abolished by activities of the national economy is graphically represented in Figure 14. (the data are taken from Annex 9). The variation in the number of disbanded enterprises is also very different across the 18 activities assessed. In the case of all of them, we note that, during the 15 years (2008-2022), increases were frequently followed by decreases. The highest levels can be found for "Wholesale and retail trade; repair of motor vehicles and motorcycles" (annual average was 24,549 enterprises), followed by "Professional, scientific and technical activities" (annual average was 10.691 enterprises) and "Construction" (annual average was 7,769 enterprises). On the last two places are the branches "Extractive industry" (annual average was 98 enterprises) and "Production and supply of electricity and heat, gas, hot water and air conditioning" (annual average was 118 enterprises). Starting from the structure of the number of enterprises abolished by activities of the national economy in 2008, the ranking was occupied by the activities: "Wholesale and retail trade; repair of motor vehicles and motorcycles" (35.84% -29,751 enterprises), "Construction" (11.48% - 9,531 enterprises) and "Manufacturing industry" (10.20% - 8,468 enterprises). In 2022, the ranking changed as follows: "Wholesale and retail trade; repair of motor vehicles and motorcycles" (25.70% - 18,393 enterprises), "Professional, scientific and technical activities" (10.35% - 7,405 enterprises), "Construction" (9.20% - 6,586 enterprises).

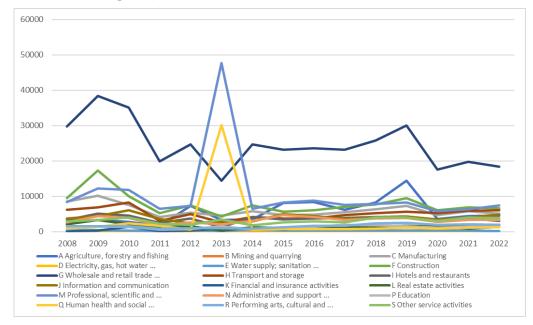


Figure 14. Evolution of the number of enterprises dissolved, by activities of the national economy, in Romania, in the period 2008-2022

#### **3. CONCLUSIONS**

For the study of the demography of enterprises in Romania, in the period 2008-2022, we decided to evaluate the indicators: active enterprises, newly created enterprises and discontinued enterprises.

The evolution of the number of active enterprises shows an increasing trend, which is a favourable situation. The evolution of the number of active enterprises, by legal forms, highlights the fact that the most numerous are "Commercial companies" and "Authorized

natural persons" (registering an upward trend), while the category "Other legal forms" presents very low values (registering a downward trend). Regarding the evolution of the number of active enterprises by size classes by number of employees, we noticed that the most consistent categories are "0 employees" and "1-4 employees", the other two being at a significant distance from the former. The evolution of the number of enterprises active by activities of the national economy is very different on the set of the 18 activities evaluated. The highest levels are found for "Wholesale and retail trade; repair of motor vehicles and motorcycles", followed by "Professional, scientific and technical activities", respectively "Agriculture, forestry and fisheries". On the last two places are the branches "Extractive industry" and "Production and supply of electricity and heat, gas, hot water and air conditioning". The structure of the number of enterprises active by activities of the national economy, in 2008, shows that the largest share is held by: "Wholesale and retail trade; repair of motor vehicles and motorcycles', 'Professional, scientific and technical activities' and 'Manufacturing industry'. In 2022, the first three activities were: "Wholesale and retail trade; repair of motor vehicles and motorcycles", "Agriculture, forestry and fisheries", "Professional, scientific and technical activities".

The evolution of the number of newly created companies shows an upward trend. By legal forms, we notice that the most numerous are "Commercial companies" and "Authorized individuals", while the category "Other legal forms" has very low values. Regarding the evolution of the number of newly created enterprises by size classes, we note that the largest categories are "0 employees" and "1-4 employees". The variation in the number of newly created enterprises is very different across the 18 activities assessed, noting that increases were frequently followed by decreases. The highest levels can be found for "Wholesale and retail trade; repair of motor vehicles and motorcycles", followed by "Professional, scientific and technical activities", respectively "Construction". On the last two places are the branches "Extractive industry" and "Production and supply of electricity and heat, gas, hot water and air conditioning". The structure of the number of newly created enterprises by activities of the national economy, in 2008, shows that the largest share was held by the following activities: "Wholesale and retail trade; repair of motor vehicles and motorcycles", "Professional, scientific and technical activities" and "Construction". In 2022, the following changes appeared at the top of the ranking: "Wholesale and retail trade; repair of motor vehicles and motorcycles", "Construction", "Transport and storage".

The evolution of the number of companies closed shows a downward trend. By legal forms, we notice that the most numerous are "Companies" and "Authorized individuals". By size classes, the largest categories are "0 employees" and "1-4 employees". The evolution trend is decreasing for all the categories analyzed. The variation in the number of companies closed is also very different on all the 18 activities evaluated, in the case of all of them, noting that the increases were frequently followed by decreases. The highest levels can be found for "Wholesale and retail trade; repair of motor vehicles and motorcycles", followed by "Professional, scientific and technical activities" and "Constructions", and on the last places are the branches "Extractive industry" and "Production and supply of electricity and heat, gas, hot water and air conditioning". Structure of the number of enterprises abolished by activities: "Wholesale and retail trade; repair of motor vehicles and motorcycles", "Construction" and "Manufacturing industry". In 2022, the ranking changed as follows: "Wholesale and retail trade; repair of motor vehicles and motorcycles", "Construction" and activities;", "Construction".

As the number of active enterprises shows an increasing trend, the number of newly created enterprises shows an upward trend, and the number of closed enterprises shows a downward trend, from the perspective of the demography of the enterprises we can appreciate that the main indicators studied highlight a positive / favorable situation of the economic environment.

### BIBLIOGRAPHY

- 1. Ciurlău, C., Enea-Smarandache, I., Murărița, I., Ciurlău, C.F., Ciobanu, A.M.,
- 2. Ciurlău, C., Enea-Smarandache, I., Murărița, I., Ciurlău, C.F., Ciobanu, A.M.,
- 3. Enea-Smarandache, I., Ciurlău, C., Murărița, I., Ciurlău, C.F., Ciobanu, A.M.,
- 4. Murărița, I.,
- 5. Murărița, I., Radu, C., Ionașcu, C.M.,
- 6. Radu, C., Ionașcu, C.M., Murărița, I.,
- 7. \*\*\*

ECONOMIC FORECAST. Theory. Grid tests. Applications, Editura Universitaria, Craiova, 2008 MICROECONOMIC FORECASTING, University Publishing House, Craiova, 2011

*ECONOMIC FORECAST. Methods and Techniques*, Universitaria Publishing House, Craiova, 2009

Statistical Software Packages, PIM Publishing House, Iaşi, 2018

STATISTICS. Theory and Solved Applications in Excel, PIM Publishing House, Iaşi, 2014

*THEORETICAL STATISTICS*, Second Edition, Universitaria Publishing House, Craiova, 2009 www.insse.ro