The role of the labor resources in the economic growth for sustainable development

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ABSTRACT

The article presents in its content a series of theoretical, statistical and econometric concepts regarding the situation on the labor market in Romania. This article starts from the premise that in order to achieve the sustainable development defined by Agenda 2023 and the document A sustainable future of Europe, it is necessary for the management of human resources to be performed in order to ensure economic growth. After the presentation of the theoretical concepts, we expanded the analysis on the situation of the labor market in Romania, with the help of statistical tools, presenting evolutions, graphically and in table form, of the labor resources, of the employed population by gender, residential areas and activities of the national economy, developments in the unemployment rate and others. Also, the distribution of the labor force on the territory of Romania was analyzed and the regions with the highest activation, employment and unemployment rates were highlighted.

Keywords: *active population, unemployment rate, employed population, indicator, jobs*

JEL Classification: *E24, J21, J64*

INTRODUCTION

In this article, the authors focused on the analysis of the human resources, which are the users or manipulators of the capital and resources necessary for economic activity, economic growth and sustainable development.

The way human resources are managed, which represents one of the sources of the labor force, largely depends on employment, materialized in the

increase of labor productivity. It is true that until the concept of productivity and its increase is reached, the volume of human resources required, which are the conditions in which the employees carry out their work, the level of training, education, respectively the structure in which they will operate within the national economy, is addressed.

Employee performance also plays an important role, being the variable through which human resources contribute to economic growth.

The article is mainly based on the management of human resources at the macroeconomic level and how the transition from economic growth to sustainable development is achieved.

The data used are extracted from the databases of the National Institute of Statistics of Romania, Eurostat and other institutions, which ensure the comparability and harmonization of results in the process of obtaining management activity in sustainable development and human resources.

What is the role of the workforce in sustainable development and economic growth is a priority at the macroeconomic level.

In addition to the existence of the problem of performance dependence, which is subjectively perceived by employees, with the main aspects related to the requirements of the labor market, there are also a number of indicators that can refer to the workload, the size of lost time and the productivity of work. They have the role of highlighting the quantitative and qualitative results of human resource management in sustainable development.

One cannot ignore the latest events that have marked the world economy. Thus, the crisis caused by the COVID-19 pandemic, which later turned into an economic-financial crisis, puts in difficulty the states wishing for harmonious development and sustainable developments. More recently, with the outbreak of the Russian-Ukrainian conflict, the difficulties that have stood in front of sustainable developments are the energy and food crises.

Sustainable economic growth is that which has the main purpose of ensuring a decent living for all citizens and that which encourages and delimits itself from the negative impact on the environment or society.

One of the essential conditions in the effective management of labor resources is that it ensures some salary values high enough to ensure a decent living. Labor users need to break away from the idea of low income to maximize short-term profits. There are not only two pure categories in society (producers and consumers), each of the two categories is constantly in the role of the other (producers are also consumers in their turn).

LITERATURE REVIEW

Biea, D'Adamo, Hartley and Hesse (2019) analyzed what the salary dynamics were in Romania, while Chéron, Hairault and Langot (2013) carried out a life cycle analysis, analyzing the places of job vacancies, unemployment and focused on identifying a balance point between the indicators. Pulignano (2009) addressed the theme of international cooperation, transnational restructuring and virtual networks in Europe, while Schneider and Häge (2007) had previously addressed a somewhat bolder theme of withdrawing the authority of nation states and making way for Europeanization. Maestas, Mullen and Powell (2016) analyzed the effects of population aging on economic growth and the correlation between labor resources and productivity. Südekum (2003) talks about the macroeconomic theories and models used by the European Union, making a brief review of the economic doctrines that address the problem of unemployment. Kroft, Lange and Notowidigdo (2013) analyzed what employer behavior is and how it influences the labor market. Klein and Ventura (2009) analyzed productivity differences and how they influence labor relocation. Anghelache, Avram, Burea and Mirea (2019) emphasize the importance of access to financing from European capitals, there being a dependency between them and Romania's economic development. Crouch (2014) addresses the theme of labor market insecurity in times of crisis, what is the role of the state in these times and makes a grouping of states into areas, taking into account how labor market governance is achieved. Adda, Monti, Pellizzari, Schivardi and Trigari (2017) analyzed unemployment developments in Italy through the lens of the lack of correlation between employees' professional skills and the labor market. Moxon, Bacalso and Şerban (2021) made an analysis on how the life of young people is influenced by the Covid-19 pandemic. Hili, Lahmandi-Ayed and Lasram (2016) write a paper on how the labor market differentiates itself in the context of globalization. Lengyel, Borbála and Lilla (2017) study the labor market at the level of the European Union, after the economic crisis of 2008, focusing on long-term unemployment. Dorsett and Luccino (2018) describe the labor market as being in transition and talk about the role played by early experience in the employment decision of young people. Radu (2022) makes a synthesis of the existing situation on the labor market at the level of the European Union, emphasizing how young people have been affected by the effects of the Covid-19 crisis.

METHODOLOGY

The analysis is based on the use of the main indicators established at the time of the realization of the national strategy for the sustainable development of Romania. Strategy with a time horizon of 2030.

The statistical indicators were synthesized in order to highlight the basic elements in establishing the scientific framework for data processing. We can list some of these indicators that we have considered (employed population, labor force, unemployment, labor productivity, population waiting for a job and others).

Romania, being a member state of the UN and the European Union, has chosen to align itself with the sustainable development embodied in the 2023 Agenda, adopted by the UN during the September 2015 Summit.

Later, in 2017, the Council of the European Union adopts the document A sustainable future of Europe, which represents the European Union's response to the 2030 Agenda for sustainable development.

Within the states of the European Union and the states in the accession process, sustainable development represents the means by which national strategies are adjusted so as to achieve the extension and consolidation of the sustainability of a state.

Romania's strategy is based on three important pillars, economic, social and the state of the environment, and is based on the interest of the citizen, it focuses on innovation, optimism, resilience and confidence that through the set objectives, citizens will be ensured living conditions in a clean environment and a adequate standard of living, the way to achieve these desired (in a balanced, fair and efficient way).

The main objective of the Romanian sustainable development agenda is based on sustained economic growth, sustainable and open to all, on the full and productive employment of the labor force and the provision of decent jobs for employees.

The motto of the European Union, which wants to be implemented, is "No one is left behind!". The problem that arises is that no one is left behind in the European Union if they have an adequate management of human resources, if they increase their efficiency, embodied in productivity and if they have the possibility to use the available labor force.

Until 2030, the sustainable development strategy has as its first target the maintenance of the growth rate of the gross domestic product, if possible even above the average achieved in the European Union. Cooperation plays a role in the efficient use of capital resources, but also of labor, and the application of the principles of sustainable development and the constant improvement of the population's standard of living must represent a permanent objective, at

least in the framework of human resources management throughout the next period.

DATA, RESULTS AND DISCUSSION

After analyzing the data obtained from Eurostat and the National Institute of Statistics, the following situation can be identified on the labor market in Romania: At the beginning of 2023, the population over the age of 15 numbered 15,957.4 thousand people, 51.7% being the share majority owned by women. Employed population numbered 7,806.4 thousand people, representing approximately 48.9% of the population with the right to work and the majority share was owned by men (57.6%).

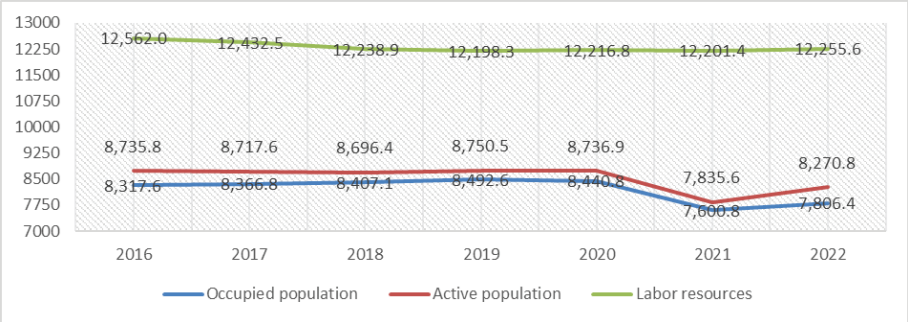
The inactive population over the age of 15 exceeded the number of the active population, at the end of 2022, being 7,686.5 thousand people, 62% of the majority being owned by women.

The total number of unemployed was 464.4 thousand people, 37.9% representing the share of women, 33% were found in the urban environment, and the share among young people between the ages of 15-25 was 25.5%.

Labor resources represent 63% of the total population, representing 12,255.6 thousand people, 3.8% are unemployed and 32.2% inactive people.

The evolution of labor resources, the active population and the employed population at the end of 2022

- thousands of people -



Data source: National Institute of Statistics. Data processed by the authors

Interpreting the data presented in figure number 1, it can be seen that on January 1, 2023, the employed population was 7,806.4 thousand people. Making the proportion of employed people in labor resources we observe that we obtain an employment rate of approximately 63.7%.

We notice that after the crisis generated by the Covid-19 pandemic, the population is starting to become active again on the labor market, the number increasing from 7,835.6 thousand people to 8,270.8 thousand people. This growth is not maintained when we look at the employed population, although we have an increase from 7,600.8 thousand people to 7,806.4 thousand people, the difference between the employed and the active population is increasing, which leads us to think that the labor market still does not have a sufficient offer for all job seekers.

The employed population by gender, residence and activities of the national economy

Table no. 1

Economic activities	Occupied population					in % of the total		
	Total	*Men*	*Women*	*Urban*	*Rural*	*Total*	*Men*	*Women*
TOTAL	***7.806.452***	***4.492.654***	***3.313.799***	***4.623.522***	***3.182.931***	***100%***	***100%***	***100%***
Agriculture, forestry and fishing	*878.389*	*591.171*	*287.218*	*83.687*	*794.703*	*11,25%*	*13,16%*	*8,67%*
Total industry	*1.797.700*	*1.090.704*	*706.995*	*1.091.829*	*705.870*	*23,03%*	*24,28%*	*21,33%*
Extractive industry	*56.192*	*48.870*	*7.322*	*29.200*	*26.992*	*0,72%*	*1,09%*	*0,22%*
Manufacturing industry	*1.541.083*	*888.758*	*652.325*	*933.971*	*607.112*	*19,74%*	*19,78%*	*19,69%*
Production and supply of electricity and thermal energy, gas, hot water and air conditioning	*82.542*	*66.101*	*16.441*	*64.176*	*18.365*	*1,06%*	*1,47%*	*0,50%*
Water distribution; sanitation, waste management, decontamination activities	*117.883*	*86.975*	*30.907*	*64.482*	*53.401*	*1,51%*	*1,94%*	*0,93%*
construction	*765.179*	*715.583*	*49.596*	*369.565*	*395.614*	*9,80%*	*15,93%*	*1,50%*
Wholesale and retail trade; repair of motor vehicles and motorcycles	*1.382.299*	*612.023*	*770.276*	*941.770*	*440.529*	*17,71%*	*13,62%*	*23,24%*
Transport and storage	*555.470*	*480.821*	*74.649*	*337.747*	*217.723*	*7,12%*	*10,70%*	*2,25%*
Hotels and restaurants	*191.440*	*73.554*	*117.886*	*135.501*	*55.939*	*2,45%*	*1,64%*	*3,56%*
Information and communications	*201.830*	*134.264*	*67.566*	*178.190*	*23.640*	*2,59%*	*2,99%*	*2,04%*
Financial intermediation and insurance	*115.102*	*39.651*	*75.450*	*95.013*	*20.089*	*1,47%*	*0,88%*	*2,28%*
Real estate transactions	*25.232*	*12.645*	*12.588*	*17.726*	*7.506*	*0,32%*	*0,28%*	*0,38%*
Professional, scientific and technical activities	*220.824*	*92.541*	*128.283*	*191.492*	*29.331*	*2,83%*	*2,06%*	*3,87%*
Administrative service activities and support service activities	*214.125*	*153.403*	*60.722*	*129.185*	*84.941*	*2,74%*	*3,41%*	*1,83%*

Economic activities	Occupied population					in % of the total		
Public administration and defense; social insurance from the public system	*422.081*	*253.480*	*168.600*	*293.208*	*128.872*	*5,41%*	*5,64%*	*5,09%*
Education	*370.401*	*84.846*	*285.555*	*274.525*	*95.876*	*4,74%*	*1,89%*	*8,62%*
Health and social assistance	*449.097*	*75.584*	*373.513*	*334.277*	*114.820*	*5,75%*	*1,68%*	*11,27%*
Performing, cultural and recreational activities	*67.180*	*31.434*	*35.746*	*54.597*	*12.583*	*0,86%*	*0,70%*	*1,08%*
Other activities of the national economy	*150.104*	*50.948*	*99.156*	*95.211*	*54.893*	*1,92%*	*1,13%*	*2,99%*

Data source: National Institute of Statistics. Data processed by the authors

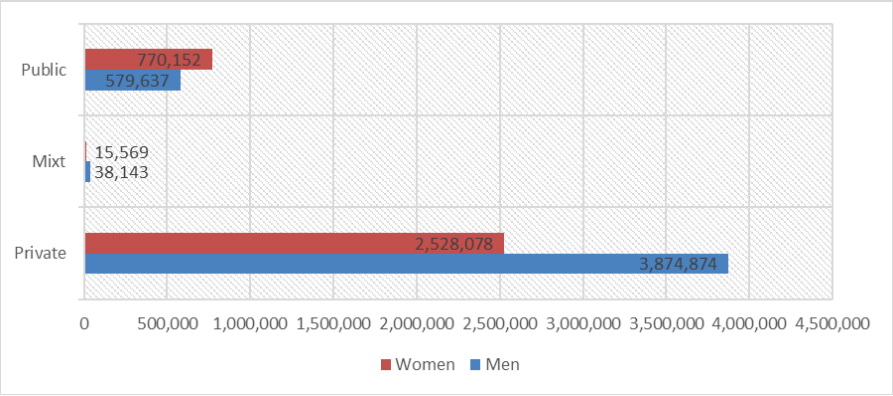
From table no. 1 we notice that the distribution of the employed population by fields suggests that the weight of non-agricultural activities has a weight of 88.75%. Industry has a weight of 23.03% and trade has a weight of 17.71% of the total employed population.

At the same time, we observe a pronounced degree of feminization of certain economic activities, Health and social assistance (83.17%), Education (77.09%), Financial intermediation and insurance (65.55%), respectively Hotels and restaurants (61.58 %).

On the other hand, men have higher employment rates in the following economic activities, Construction (93.52%), Extractive Industry (86.97%), Transport and storage (86.56%) but also in Public Administration and Defense; social insurance from the public system (60.05%).

The employed population according to the form of owners by gender on December 31, 2022

Figure no. 2



Data source: National Institute of Statistics. Data processed by the authors

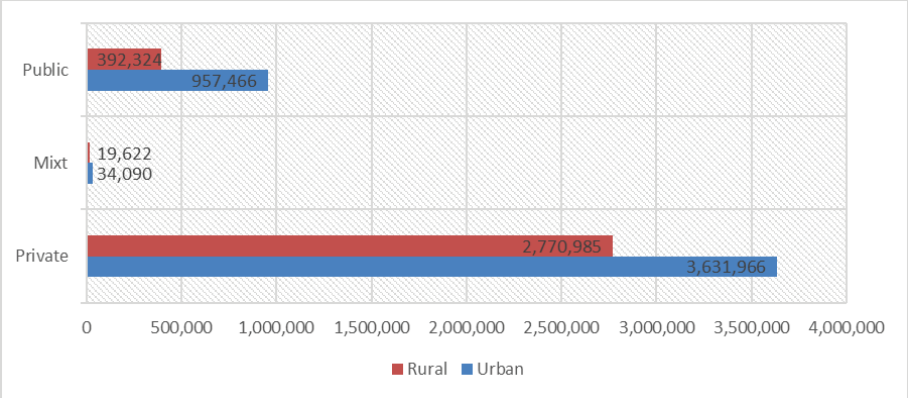
From the previous figure we see that the form of ownership of employers plays a role in attracting employees of a certain gender. Employers with public capital tend to employ female employees, a proportion of 57.06% female employees can be observed, compared to 42.94% male employees.

Things change in the opposite direction when we observe the private environment and employers with mixed capital, in the private environment, 60.52% represent male employees and only 39.48% represent female employees. Where the forms of ownership intersect, we observe an employment rate of male employees of (71.01%) compared to the employment rate of female employees (28.99%).

The total employment rate among men, regardless of the form of ownership, is 57.55% and among women is 42.45%. We can say that companies with public capital ensure a balance in the labor market, ensuring jobs to a greater extent for women, compared to companies with private or mixed capital, which predominantly employ men.

Employed population by type of owners, by residence environments on December 31, 2022

Figure no. 3



Data source: National Institute of Statistics. Data processed by the authors

After analyzing the situation of the employed population structured by gender, we studied the role of the residence environment on the labor market. Thus, we find that 59.23% of the employed population is found in urban areas, while 40.77% is found in rural areas.

We practically observe that discrimination by residence environment is approximately 1.68 percentage points higher than by gender.

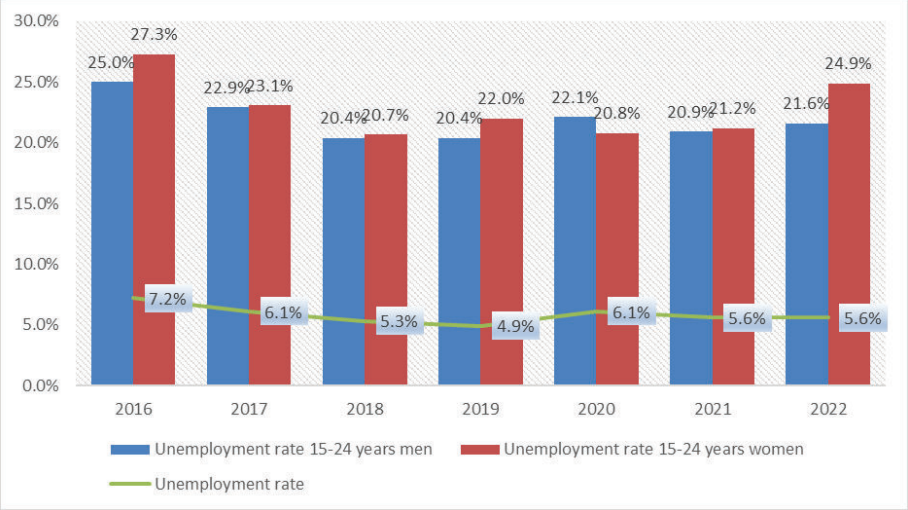
The employed population among employers with private capital comes predominantly from the urban environment (70.93%) compared to the rural environment (29.07%). The form of mixed ownership presents an imbalance of 63.47% compared to 43.28%, between the urban and rural environment.

This time, we see from figure no. 3, that the form of ownership of the private workplace comes closest to equilibrium, offering jobs in proportion to 56.72% in the urban environment and 43.28% in the rural environment.

The unemployment rate in 2022 remained at the level of the previous year, being 5.6%. By gender, a difference of 1 percentage point can be observed (6% unemployment rate for men, respectively 5% for women). The area of residence shows a difference of 5.7 percentage points (unemployment registered in the urban area is 3.2% compared to 8.9% in the rural area).

The evolution of the unemployment rate and unemployment among young people, by sex

Figure no. 4



Data source: National Institute of Statistics. Data processed by the authors

From figure no. 4 it can be observed that the highest level of unemployment among young people between the ages of 15-24 was recorded, 22.8% being the highest in the last 5 years.

The structure of active and inactive people, the activity rate (R.A.), the employment rate (R.O.) and the unemployment rate (R.Ș.) by macro-regions, regions and age groups, as of December 31, 2022

Table no. 2

Macroregions **Regions** **Age groups**	**Total popuation**	**Active people** *- persons -*			**Inactive people**	R.A.	R.O.	R.Ș.
		Total	occupied	unemployed		*percentages*		
TOTAL								
working age population (15-64 years)	12.255.585	8.191.120	7.728.335	462.785	4.064.466	66,8%	63,1%	5,6%
1. MACROREGION 1								
working age population (15-64 years)	3.108.705	2.090.249	2.003.105	87.144	1.018.456	67,2%	64,4%	4,2%
1.1. NORTHWEST								
working age population (15-64 years)	1.647.767	1.133.846	1.098.492	35.354	513.921	68,8%	66,7%	3,1%
1.2. CENTER								
working age population (15-64 years)	1.460.938	956.403	904.612	51.790	504.535	65,5%	61,9%	5,4%
2. MACROREGION 2								
working age population (15-64 years)	3.439.856	2.252.851	2.097.169	155.681	1.187.005	65,5%	61,0%	6,9%
2.1. NORTH EAST								
working age population (15-64 years)	1.974.831	1.333.388	1.245.029	88.359	641.443	67,5%	63,0%	6,6%
2.2. SOUTH EAST								
working age population (15-64 years)	1.465.024	919.462	852.140	67.323	545.562	62,8%	58,2%	7,3%
3. MACROREGION 3								
working age population (15-64 years)	3.368.326	2.381.498	2.255.224	126.274	986.828	70,7%	67,0%	5,3%
3.1. SOUTH MUNTENIA								
working age population (15-64 years)	1.789.655	1.176.635	1.083.260	93.375	613.020	65,7%	60,5%	7,9%
3.2. BUCHAREST-ILFOV								
working age population (15-64 years)	1.578.670	1.204.862	1.171.964	32.899	373.808	76,3%	74,2%	2,7%
4. MACROREGION 4								
working age population (15-64 years)	2.338.699	1.466.522	1.372.837	93.685	872.177	62,7%	58,7%	6,4%
4.1. SOUTH-WEST OLTENIA								
working age population (15-64 years)	1.196.915	750.130	683.102	67.028	446.785	62,7%	57,1%	8,9%
4.2. WEST								
working age population (15-64 years)	1.141.784	716.392	689.735	26.657	425.392	62,7%	60,4%	3,7%

Data source: National Institute of Statistics. Data processed by the authors

From table no. 2 we note that the third macroregion, which includes the Bucharest-Ilfov Region, has the largest number of people of working age, has the largest number of active persons, the largest number of employed persons but loses the largest number of unemployed, in the detrimeter of Macroregion two.

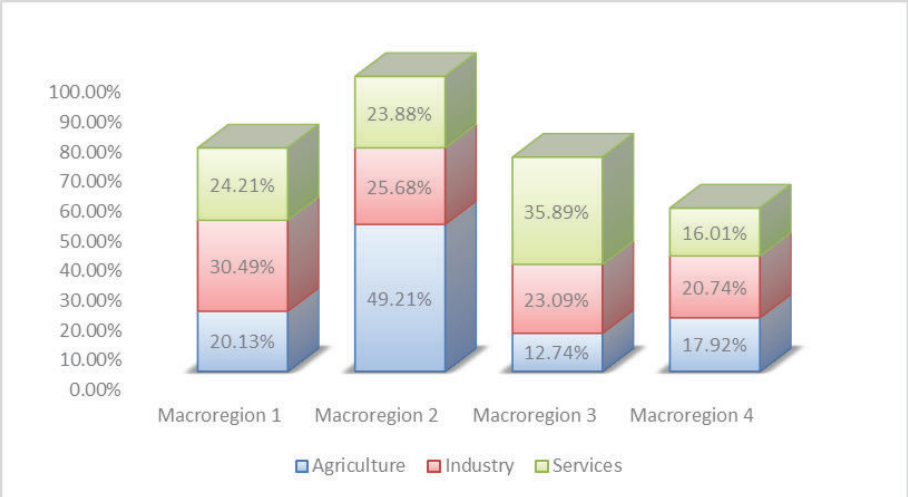
We note that the lowest unemployment rates are recorded in the Bucharest-Ilfov region (2.7%), the North-West region (3.1%) and the West region (3.7%), below the national unemployment rate of 5 .6%.

The highest activity rate is found in the Bucharest-Ilfov region (76.3%), the North-West region (68.8%) and the North-East region (67.5%). The highest occupancy rate is also recorded in the Bucharest-Ilfov region (74.2%), followed by the North-West region (66.7%) and the North-East region (63%).

We also observe a configuration of four macro-regions that group two regions of the country each, in order to analyze which sectors of the national economy they emphasize for attracting human resources.

The structure of the employed population in the four macro-regions (grouped by two regions each), by sector of the national economy

Figure no. 5



Data source: National Institute of Statistics. Data processed by the authors

From figure no. 5 we note that Macroregion 2 is mainly occupied in agriculture (49.21%) while the other three macroregions register shares of employment in agriculture of 20% or less. The top of the most industrialized macroregions is the following Macroregion 1 (30.49%), Macroregion 2 (25.68%) and Macroregion 3 (23.09%).

Services are highly developed in Macroregion 3 (35.89%), Macroregion 1 (24.21%) and Macroregion 2 (23.88%).

It can be observed that Macroregion 4 has the lowest weights among the four macroregions, the only category that does not occupy the last position is agriculture, with 17.92%. Of course, one explanation for these results is the share of the employed population in this macro-region. Macroregion 3 holds 29.08% of the total employed population, while Macroregion 2 holds 27.32% of the employed population, Macroregion 1 holds 25.81% of the total employed population, while Macroregion 4 holds only 17.78% of employed population.

Under these conditions, the result from the industry activity sector is a significant one, with 20.74% of the population employed in industry, being only 2.35 percentage points less than Macroregion 3.

CONCLUSIONS

The research and development is one of the important pillars of sustainable development, it is necessary to pay more attention, it also requires optimal funding, so as to ensure the contribution of experts to the fulfillment of the sustainable development strategy. If until the emergence of the covid-19 pandemic crisis, Romania had managed to take steps towards reducing the gaps with other countries, we notice that, post-crisis, it fails to fully use the labor resources at its disposal, employment requiring investments in industry, in developing a strategy for digitization, robotization and increasing the professional capacity of employees.

The financial-material resource also plays an important role in sustainable development, through the macroeconomic correlations that are established. Although the capitalization is sufficient, a restructuring and a consolidation of the banking sector is necessary. Because by maintaining only two banks with majority Romanian capital, the rest being territorial branches of European banks, registered in Romania, cooperation in the development of large-scale Romanian projects is not guaranteed or achieved.

Romania must make better use of the tourism potential, by supporting commercial companies with a tourism profile (HORECA), in such a way that the increase in tourism capacities can ensure the absorption of unoccupied human resources or of the population reconverted after giving up a series of economic sectors unfriendly to the environment.

Also, an important problem is aging in the field of agriculture, by practicing agritourism, human resources could be identified that could choose to move, voluntarily, to the countryside and start practicing agro-industrial activities, the infusion with the young generation could ensure the development

of rural personnel. In this way, the possibility of implementing advanced production methods (irrigation, fertilization or advanced agrotechnical methods) is created, which can supply the markets with products and services for the Romanian consumer.

The sustainable development requires ensuring a harmonious framework for the employment of human resources in order to be able to use financial and capital resources efficiently.

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