

Activity of The Resident Population in The North-East Region at the 2021 Census

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Abstract

The present paper starts from the analysis of the first definitive data on the resident and active population, published for the population census of December 1, 2021, both at the level of the North-East Region compared to the national level, and at the component counties. The evolution of the population and the labor force was analyzed with its main component, the employed population, both dynamically compared to the previous census, and in more detail according to different criteria for the situation existing on December 1, 2021. If the NE Region lost 2.29% of its resident population between the last two censuses, the active population decreased in a higher proportion (-19.08%), compared to the dynamics of the inactive population (+12.44%). This led to a decrease of the employed population by 21.95% (-316.4 thousand people). Agriculture remains the main activity of the region's population, representing 35.24% of this activity at the national level and 28% of the total employed population at the regional level. Although it is the largest region numerically, due to the lower degree of economic development of the area, a higher level of poverty, a lower offer of well-paid jobs, a significant part of the labor force tends to migrate to other places in the country or in other states, with consequences for the entire balance.

Keywords

census, resident population, active population, employed population, activity rates

The methodology for calculating the resident population and labor force indicators in the censuses

Knowing as accurately as possible the actual resident population of a state, both in total and according to different criteria, as well as in a territorial profile, is particularly important for the future strategies of companies and the government. If we take into account the fact that man is both a producer of goods and services and a consumer, knowing the number of the population according to characteristics such as age, sex, the environment in which he lives, the occupation carried out, the activity in which he works, saddle, each strategy can to detach the component he wants and to whom he addresses himself, in order to program his activity in his field. Taking into account the great mobility of the Romanian population after the 90s, both within the country and especially outside it, knowing the resident population as real as possible was a major necessity both at the national level and at the level of counties and localities, where such data could no longer be estimated. The population census provides a rich and complex source of data from which each user can extract what interests them. Thus, for example, based on the data collected, the labor resources available to each area, the qualified workforce by fields of activity and level of training can be calculated and estimated. For the comparability of the data produced, all EU States conducted a population census 2021 (2021 round) and used a similar methodology and definitions.

In Romania, regardless of when the data were collected, they referred to the existing situation at the critical reference moment set for December 1, 2021 at "0" time, with the exception of the economic characteristics, which had as reference the week before the critical moment.

The resident population was registered, synthetically defined as all persons present or temporarily absent, regardless of whether they are Romanian or foreign citizens, provided that they have their usual residence in Romania. Persons temporarily gone for a period of less than one year, without the intention of changing their usual residence, were included in the resident population.

In the case of economic characteristics, recorded for all persons aged 15 and over, it must be taken into account that activity takes precedence over inactivity. For example, in the case of pupils, students, housewives, pensioners, who declared that they worked in the reference week at least one hour to obtain income in money or in kind, they were included in the employed population.

The employed population was registered both according to the professional status and according to the occupation carried out and the activity in the national economy, according to the classifications standardized at the EU level.

The evolution of the resident population in the NE Region at the censuses

Starting from the premise that the labor resources of each geographical area are strictly related to the evolution of the population by age groups and sexes, to demographic phenomena, we will take a synthetic look at the evolution of the population at the last eight censuses, starting from January 25, 1948 and up to the moment December 1, 2021.

The resident population of the NE Region registered a positive dynamic until the census of January 7, 1992, similar to the dynamics of all the component counties, as well as the whole country. If at the 1992 census Romania had 22,810 thousand people residing in the country, over 3,751.7 thousand of them lived in the NE Region. After this peak, periods of decline followed, due on the one hand to an ever-lower birth rate, and on the other hand to massive migration abroad in search of a better-paid job. On March 18, 2002, the population of Romania decreases compared to the previous census by 4.95% (-1129 thousand people), while the population of the NE Region decreases by 2.06% (-77.4 thousand people). The biggest decrease was observed in the Bacău (-4.19%) and Neamț (-4.13%), while the population of Iasi experienced a slight increase of 0.69%, due to both a higher birth rate in the area, as well as the development of the university environment that attracted young people from other counties. The census of October 20, 2011 came with the largest reduction of the resident population, by -7.19% (-1559.3 thousand people) at the level of the whole country, by -10.13% at the level of the NE Region (-372, 15 thousand people). This was the stage in which massive migration took place outside the country, especially after Romania's entry into the European Union. Decreases in the resident population were recorded at this stage in all the counties of the region: Neamț (-15.1%), Vaslui (-13.09%), Bacău (-12.8%), Botoșani (-8.88%), Suceava (-7.79%) and Iasi (-5.45%). 10 years away, the census of December 1, 2021 comes with a new reduction of the resident population, even if in a smaller proportion than the previous one. The population of the country decreases again by 5.31% (-1067.8 thousand inhabitants), and that of the NE Region by -2.29% (-75.78 thousand inhabitants). Within the region, only Suceava county registered an increase of 1.22% (+7.7 thousand people), and above-average decreases were observed in the following counties: Vaslui (-5.26%), Botoșani (-4.8%), Neamț (3.52%) and Bacău (-2.4%), as can also be seen from Figure 2.

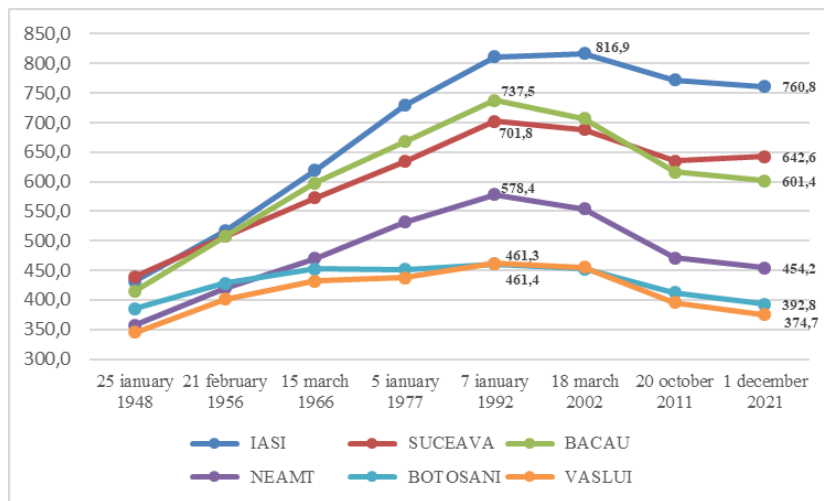


Figure 1 The number of the resident population of the counties of the NE Region, at censuses (thousands of people)
Data source: National Institute of Statistics

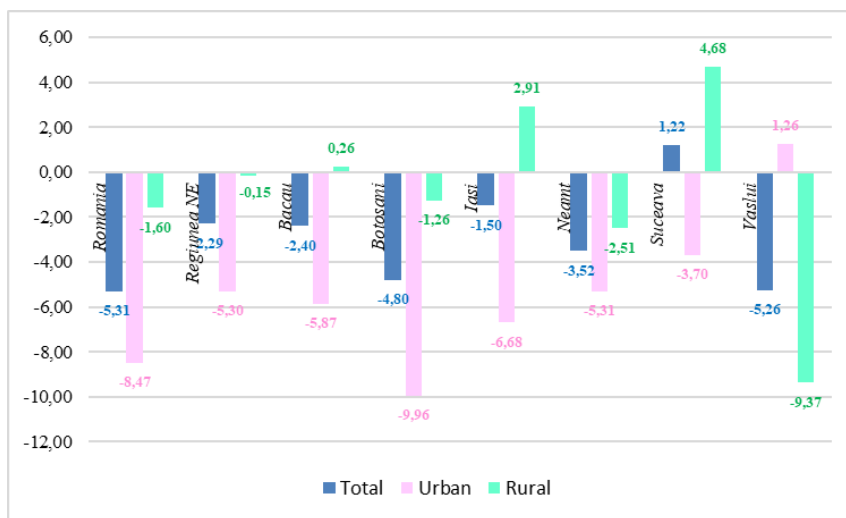


Figure 2 The relative change of the resident population on December 1, 2021 compared to the 2011 census (+/- %)
Source: own processing based on data from the National Institute of Statistics

The latest developments in the number of the resident population have also led to changes in the hierarchy of counties in the region. Thus Bacău fell to third place, and Suceava moved to second place after Iași.

The share of the population of the NE Region in the total country reached 16.93% on December 1, 2021, close to that existing in 2002. A proportion of 13.1% of Romania's urban population is represented by the NE Region and 21.11% of the rural population.

The dynamics of the population experienced different changes from one social life environment to another, at first in favor of municipalities and cities, so that in the last period it was in favor of the rural environment. At the last census, the resident population in towns and cities decreased by 3.34% at the country level and by -3.08% in the case of the NE Region, while the population in the rural areas increased by 3.92% per country and with +2.2% in the region. Thus, on December 1, 2021, 40.35% of the region's population lived in towns and cities in contrast to the country's average of 52.16%, while 59.65% of the region's population resided in rural areas. The only county in the region where the urban population increased (+6.88%) and the rural population decreased (-4.34%) was Vaslui county, although rural prevails in all counties, as can be seen in Figure 3.

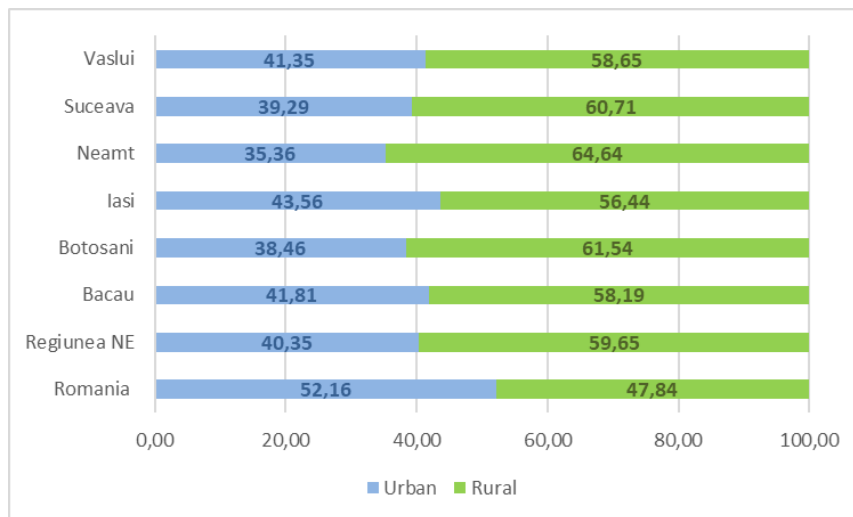


Figure 3 The structure of the resident population by average, at the population census of December 1, 2021 (%)

Source: own processing based on data from the National Institute of Statistics

As I said before, changes in the resident population, both in terms of actual and structural, have a major influence on the labor resources of each geographic area, leading to a labor shortage or surplus. Unfortunately, external migration after the 90s has occurred to the disadvantage of the highly skilled labor force, as well as generally to the disadvantage of the population segment that is part of a country's working population.

The active and inactive population at the last census and the dynamics compared to the previous census

The resident population has two main components: the active population, which corresponds to the labor force, consisting of people aged 15 and over included in the categories of employed and unemployed, as well as the inactive population (pupils, students, pensioners, housewives, dependents by the state, organizations or other persons and, who do not work). Unfortunately, the active population of the NE Region on December 1, 2021 experienced a decrease of 19.08% (-294.7 thousand people) compared to the previous census, while the inactive population increased by 12.44% (+218,7 thousand people). If by gender the decrease of the active population is balanced around the average, in the case of the inactive population it increases by 17.29% for men and by 8.88% for women. For example, among men in the age group of 45-49 years, the active population increases by only 22.77%, while the inactive population related to this age group increases by 2.33 times. Overall, the number of pupils/students who do not work increases by 13.05%, by +17.28% the number of pensioners who do not work, as well as by +29.1% of housewives. There is a 3.2-fold increase in men who declared themselves to be housewives (reaching over 47 thousand people at the last census), and in the 45-49 age group the increase was over 9.3 times.

Compared to the previous census, as can be seen from Figure 4, the active population increases very little in the 15-19 age group and slightly more in the 45-54 age group, both for women and men. The general decrease of the active population is due, on the one hand, to the decrease in the numbers of the resident population, as well as to the decrease in the share of the inactive population in the total population. For example, in all age groups between 25-44 years, the active population decreases in a greater proportion than the reduction of the resident population, in parallel with the increase of the inactive population. Within the inactive population, there is generally an increase in the number of pupils/students, especially in the age groups between 45 and 64 years. This means that regardless of age, a greater number of people wanted to continue their studies, but unfortunately at the expense of work, bearing in mind that in the census activity was the one that took precedence over inactivity. It could be concluded either that part of the population lost their job and wanted to retrain, or that part of the people who self-reviewed in the last census did not read the methodology well and registered as students, even if they also carried out a work bringing income in money or in kind.

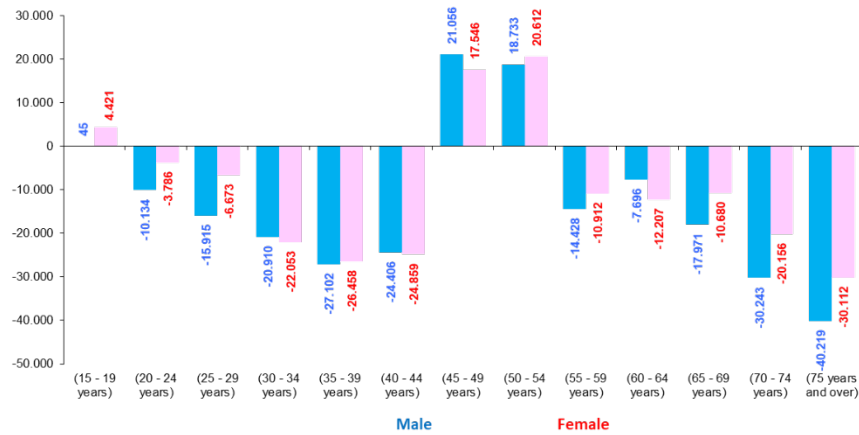


Figure 4 Change in the active population of the NE Region on December 1, 2021 compared to the previous census, by age group and gender (+/- people)
Source: own processing based on data from the National Institute of Statistics

The higher growth in the active population in the age groups between 45 and 54 was primarily due to the increase in the resident population due to the entry of baby boomers into these groups, but at the same time, there was a higher relative increase in the inactive population compared to the active one.

Analyzing the average dynamics, it can be seen from Figure 5 that the largest decrease in the active population occurred in rural areas (-23.75%, respectively -21886 people), compared to the existing situation in municipalities and cities (-12.16%, respectively -75621 people). In rural areas, the inactive population is increasing in all age groups of 15 and over.

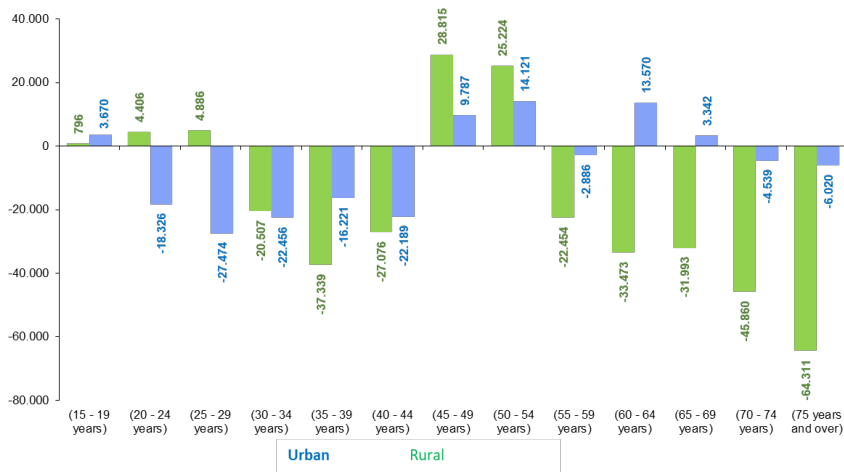


Figure 5 Change in the active population of the NE Region on December 1, 2021 compared to the previous census, by age groups and averages (+/- people)
Source: own processing based on data from the National Institute of Statistics

All these changes had effects on the **activity rate of the working-age population (15-64 years)**, which decreased in the NE Region from 64.05% on October 20, 2011, to 60.36% at the census of 1 December 2021. On the whole region, the decrease in the activity rate was felt more in the case of the male sex (from 72.11% to 67.51%) than in the case of the female sex (from 55.71% to 52.81%). In the case of the urban environment, the activity rate increases from 61.56% to 66.04% at the last census, but this increase is due to women (from 53.36% to 62.02%), in the case of men the rates are similar (70.2% at the 2011 census and 70.31% at the 2021 census).

The rural environment faces a decrease in activity rates between the two censuses, both overall (from 66.14% to 56.61%) and by sex: for men, from 73.59% to 65.83%, and for women it goes from 57.85% to 46.08%.

In the region as a whole, the age groups between 25 and 54 had activity rates of just over 70% at the last census, the maximum being 74.68% in the 35-39 age group. The age group of 20-24 years has an activity rate of 61.24%, that of 55-59 years of 57%, that in the group of 60-64 years it decreases to 28.31%, and in the group of 65- 69 years to reach only 7.97%. All age-specific activity rates decrease, except for the 15-24 and 55-59 age groups.

The situation of the resident population by age groups and gender vis-à-vis work at the last census can be seen very well in the age pyramid in Figure 6.

The graph shows the phenomenon of the aging of the population, of the numerical decrease of the young groups, of the reduction of the segment of the employed and the active population, in relation to the inactive population. This imbalance will unfortunately produce negative effects in the course of several more decades, if no concrete strategies are adopted in this direction. The size of the active population has repercussions on its main component, the employed population of a region, the population that produces and brings income to the state budget and, which practically supports the other population segments.

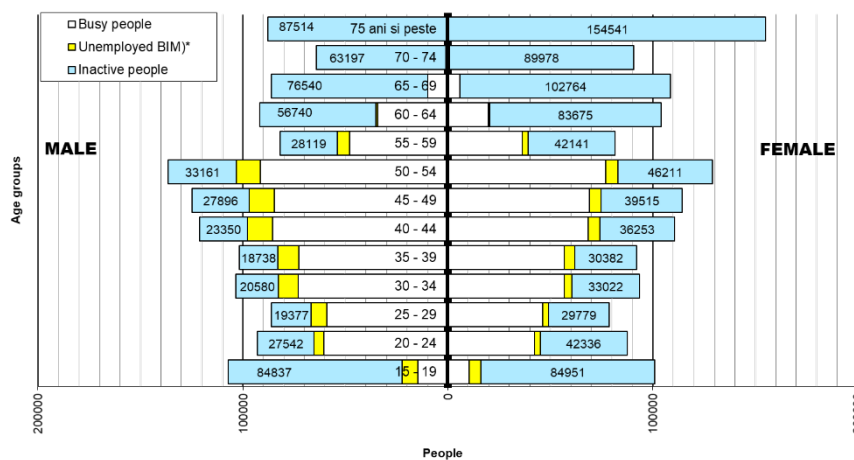


Figura 6 The distribution of the population aged 15 and over in the North-East Region, after participation in the economic situation, by age groups and sexes, at the Population Census of December 1, 2021

Source: own processing based on data from the National Institute of Statistics

The employed resident population, by activities of the national economy

The number of the employed population in the NE Region at the last census was 1124.7 thousand people, decreasing by 21.95% (-316.381 thousand people) compared to the previous census. Most people worked in agriculture, forestry and fishing, which accounted for almost 28% of the total employed population, well above the country's average of 11.6%. Unfortunately, the high degree of employment in agriculture, especially in rural areas (42.45%), is due to subsistence agriculture, most of them providing only the goods necessary for daily living, from their own household.

In Figures 8 and 9, the activities in which the population of the region work can be observed in descending order, both in total and in the two living environments.

Commerce ranks second, with 101,361 people working in towns and cities (56.87%) and 76,880 in villages (43.13%).

156,147 people work in the manufacturing industry, of which 57.07% were in urban areas and 42.93% in rural areas.

A number of 139,508 people worked in construction, of which 31.22% in urban areas, the difference of 68.78% in rural areas.

The largest share of the employed population in the total region is held by Iași (25.69%), followed by the counties: Suceava (18.86%), Bacău (18.56%), Neamț (13.81%), Botoșani (11.91%) and Vaslui (11.17%).

Figure 9 shows the county structure of the population employed in each activity of the national economy. The employed population of Iasi predominates in the region's information and

communications activity (62.96% of the region). In Iași predominates in activities such as: real estate transactions (48.23% of the region), performance, cultural and recreational activities (38.04%), health and social assistance (35.41%), education (29%). It is natural to be so, taking into account that Iasi county is the largest county in the region, with old cultural traditions, with the strongest health and education center in the historical region of Moldova.

Bacău stands out with a higher share of the population working in the extractive industry (39.27% of the region).

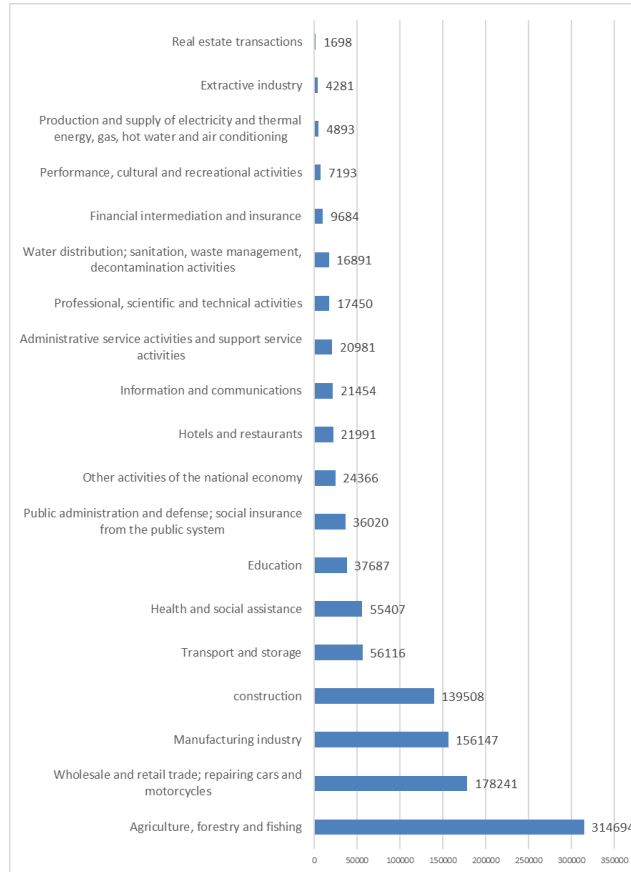


Figura 7 The employed resident population of the NE Region on December 1, 2021, by activities of the national economy

Source: own processing based on data from the National Institute of Statistics

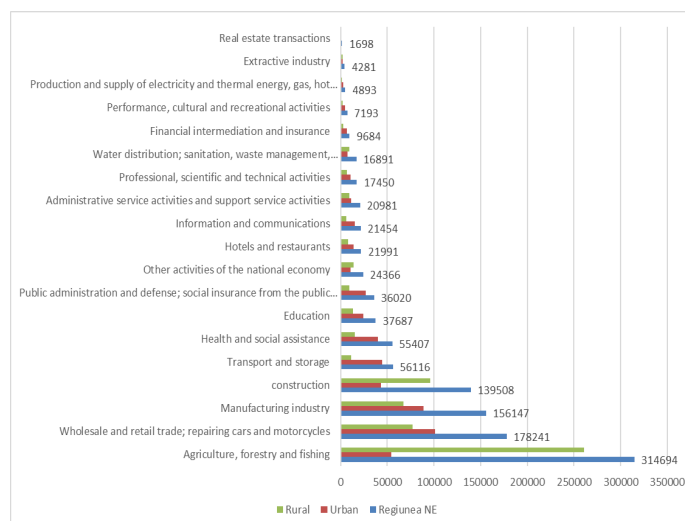


Figura 8 The employed resident population of the NE Region on December 1, 2021, by activities of the national economy and by social life environments (persons)

Source: own processing based on data from the National Institute of Statistics

The other counties have weights in each activity of the region somewhat proportional to the size of these counties, without noting a particular specific.

If we analyze the structure of activities within each county separately, in the case of Bacău county, agriculture, forestry and fishing (26.6%) predominate, followed by trade (16.2%), manufacturing industry (15.7%), construction (13%).



Figura 9 The structure of the employed population in the NE Region, by county (%)
 Source: own processing based on data from the National Institute of Statistics

The employed population of Iași county carries out its activity in agriculture, forestry and fishing in a proportion of 23.9%, followed by trade with 16.3%, the manufacturing industry with 12.8%, construction with 11.3%.

From Figure 10 it can be seen that the largest shares of the population employed in agriculture are specific to the counties of Botoșani (32.1%) and Vaslui (32.8%).

If the population of the NE Region represented on December 1, 2021 a proportion of 14.63% of the total employed population in Romania, over 10% of the region's share in the country's activity is observed in the following activities: agriculture, forestry and fishing (35.24%); constructions (18.39%); water distribution, sanitation and waste management (13.66%); trade (13.05%); health and social assistance (12.8%); hotels and restaurants (12.05%); education (11.07%); manufacturing industry (10.58%); cultural and recreational performance activities (10.54%); transport and storage (10.09%); real estate transactions (10.01%).

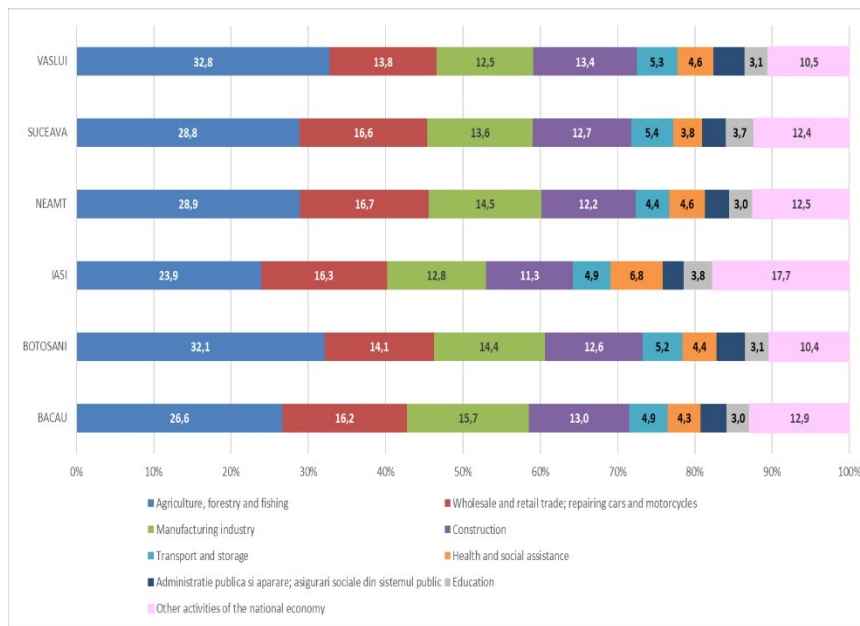


Figura 10 The structure of the employed population in the counties of the NE Region, by main activities (%)

Source: own processing based on data from the National Institute of Statistics

In conclusion, over 1/3 of the population employed in agriculture in Romania comes from the NE Region and, taking into account that we are not talking about a modern and high-performing agriculture but more about the individual households of the population, about a subsistence agriculture, one of the effects is and the highest poverty rate in the country.

Employed resident population, by major occupational groups

Analyzing the distribution of the employed population on December 1, 2021 by major groups of occupations, it is found that the lower paid and trained occupations are found in higher proportions in the NE Region than the national average: skilled and assimilated workers have a share of 19.51% in region vs. 18.23% country average; skilled workers in agriculture, forestry and fishing have a share of 18.2% in the region against the 7.61% national average; unskilled workers hold a share of 12.11% in the region compared to the 9.99% national average.

At the opposite pole, only 2.24% of the employed population of the region is represented by members of the legislative body, the executive, senior leaders of the public administration, managers and senior officials, compared to the 3.01% average of the country; only 13.57% are specialists in various fields of activity compared to the country's average of 17.39%; only 4.49% are technicians and other specialists in the technical field, compared to the 7.11% national average; only 2.72% are administrative officials compared to the 5.01% national average; only 15.49% are service workers, compared to the national average of 17.52%.

The only county in the region that has a higher share of specialists in various fields of activity than the national average is Iași county (20.77% compared to the regional average of 13.57% and the national average of 17.39%).

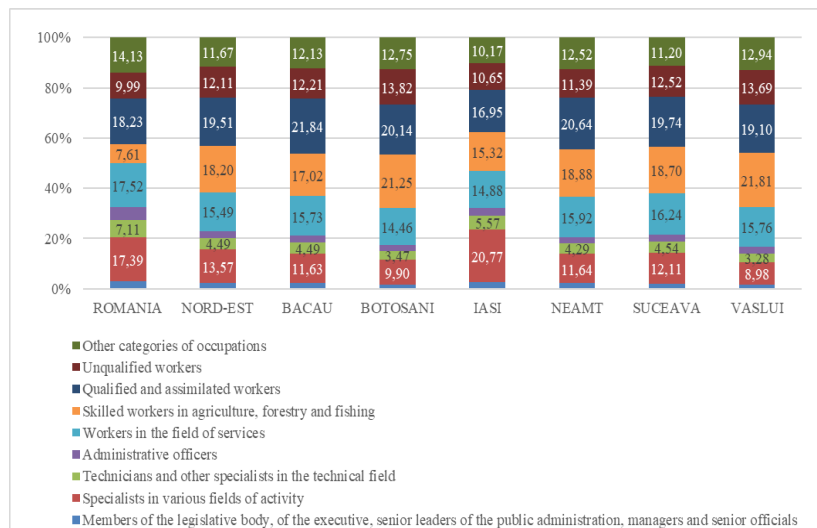


Figura 11 Structure of the employed resident population at the census of December 1, 2021, by major groups of occupations (%)

Source: own processing based on data from the National Institute of Statistics

The situation of each county compared to the average of the region and the country can be seen in Figure 11.

Employed resident population by occupational status

If 14.63% of Romania's employed population comes from the NE Region, those who had employer status from the region represented 12.73% of the country's employers, and the region's employees represented 13.65% of the country's employees. Higher proportions of the region in the total country are held by those who had the status of unpaid family worker (28.15%) and self-employed workers (18.88%).

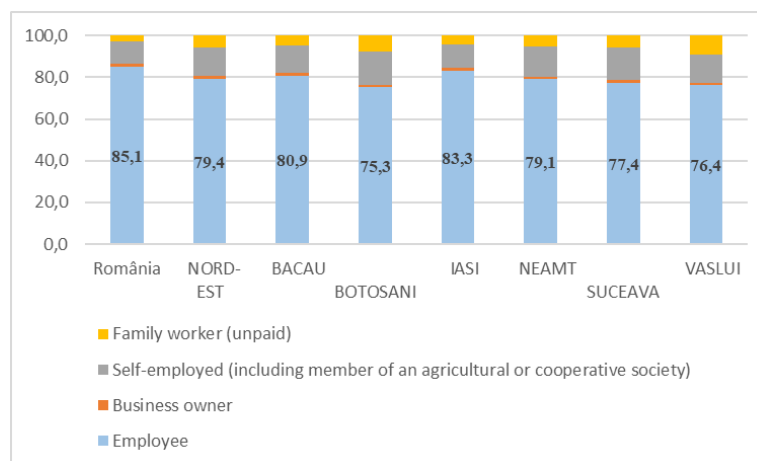


Figura 12 The structure of the employed population by professional status, at the census of December 1, 2021 (%)

Source: own processing based on data from the National Institute of Statistics

If employees in Romania represented 85.1% of the total employed population at the last census, in the NE Region they represented 79.4% of the total, the maximum being observed in Iași (83.3%) and the minimum in Vaslui (76, 4%).

Employers represented 1.3% of the employed population of the country, 1.2% in the case of the NE Region, with only Iași above the average with 1.4%.

Nationally 62.7% of employers were male, while in the NE Region 60.4% of them were male and 39.6% female. Employers from the urban environment represented 69% of employers in the region, and at the opposite pole, unpaid family workers from rural areas represented 96% of those existing

in the region, and in the case of self-employed workers from rural areas, they represented 82.7% of the total category per region.

Employed resident population by geographic location of workplace

Among the 1124.7 thousand employed people of the NE Region, 5443.5 thousand work in the review locality (69.67%). In the case of men, 66.94% work in the town of residence, and in the case of women, 75.32%.

By living environment, 86.4% of those in urban areas work in the review locality, and in the case of those in communes and villages, 55.72%.

The largest share of the employed population working in the review locality was observed in Iași county (75.58% in total and 92.04% in urban areas). At the opposite pole is Suceava county with 66.38% in total and 80.74% for municipalities and cities.

A share of 11.98% of the employed population of the region is held by people who work in another urban locality in the county where they reviewed. The maximum of 14.02% was recorded in Bacău and the minimum of 7.05% in Vaslui.

4.48% of the employed population of the region work in counties other than the one of residence, with a maximum of 6.95% in Vaslui and a minimum of 2.73% in Iasi.

The situation by county can be seen in Figure 14.

Weights twice as high as the country's average can be found among employed residents of the region who have a job in another country, respectively 8.44% (compared to the 4.08% average for Romania).

In this situation, the maximum was recorded in Botoșani (13.30%) and the minimum in Iași (4.32%).

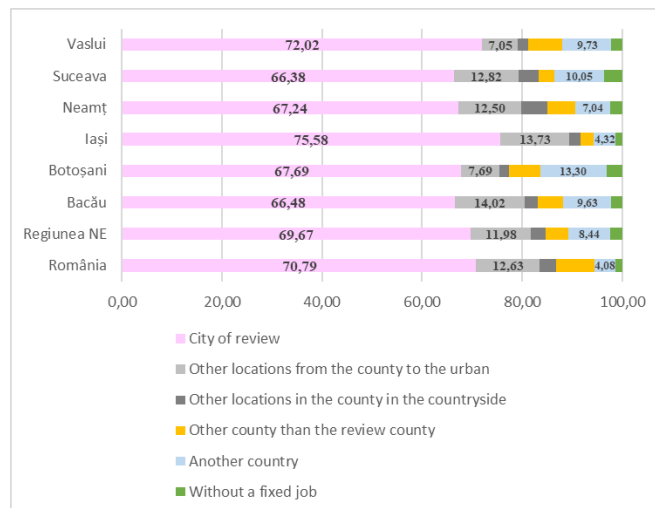


Figura 14 The structure of the employed population by geographical location of the workplace, on December 1, 2021 (%)

Source: own processing based on data from the National Institute of Statistics

For the urban environment, the share of those working in another country is lower (3.28%), compared to rural areas (12.73% in the region, with a maximum of 15.2% in Vaslui and a minimum of 6.83 % in Iasi).

By gender, 68.3% of those working in another country are men and 31.7% are women.

Unfortunately, as happened in the case of previous censuses, probably a large part of those who on December 1, 2021 were in the situation of having their residence in the country but their place of work in another country, in the following periods will be in the situation of residents of other states.

Conclusions

With a resident population of 3226.4 thousand inhabitants at the census of December 1, 2021, the North-East Region continues to be the largest region in the country from this point of view, representing 16.93% of it. However, the region's population is experiencing the same downward trend as Romania's, of a decrease in the resident population, primarily due to a negative natural

increase and still high external migration. At the last census, the NE Region lost 2.29% of people, compared to the national average of -5.31%.

If we compare with the census data of January 7, 1992, the NE Region lost 14% of its resident population, equivalent to the size of a county of 525.3 thousand people, and Romania lost 16.46% of its resident population, totaling -3756.2 thousands of inhabitants. The most population losses in the region were observed in the case of the urban environment (-21.2%), compared to the rural environment (-8.35%).

The population decline and the modification of its structure by age groups in favor of the elderly have created visible imbalances in the age pyramid, with major consequences on the active population and automatically on the employed population, consequences on the country's budget and on the pension budget.

The active population of the region consisted of 1249 thousand people, representing 38.71% of the resident population, being in turn made up of 90% employed people and almost 10% unemployed.

The active population was -19.08% compared to the previous census, so the region lost another 294.5 thousand people from its workforce. Instead, the number of inactive people increased by 12.44% (+218.7 thousand people), on the one hand due to the increase in the number of the elderly population, but also due to a larger number of people who continue their studies and professional training, as well as the increase in the number of household or dependent persons from other sources.

The gender structure of the active and employed population has changed, especially to the disadvantage of the relatively young age groups, between 20 and 44 years. The result, an activity rate of the total population of only 38.71% and an activity rate of the working age population (15-64 years) of 60.36%, with -5.76% compared to the previous census. A strong decrease in the activity rate was observed in rural areas, from 66.14% in 2011 to 56.61% in the 2021 census.

Due to the trend of the young workforce migrating to the city in search of better paying jobs, the urban employment rate increased from 61.56% in 2011 to 66.04% on December 1, 2021, an increase due to primarily women. The gap between the village and the city in terms of labor force has thus deepened even more.

The predominant activity of the employed population in the region continues to be agriculture, a subsistence agriculture given the preponderance of self-employed workers and unpaid family workers who work in their own household to ensure their minimum subsistence. Practically, the population of the NE Region employed in agriculture represents 35.24% of the employed population of Romania for this activity.

Activities with higher weights among the employed population in the region are found in: agriculture, forestry and fishing (28%); trade (15.8%); manufacturing industry (13.9%); construction (12.4%); transport and storage (5%); health and social care (4.9%); education (3.4%); public administration (3.2%).

Of the total employed population in the region, 79.4% are salaried, compared to 85.1% of the country's average, all counties being below this average. Compared to the national average, the region has a higher share of unpaid family workers (5.8%) and the self-employed, including in agriculture (13.6%).

The proportion of people resident in the region who have a job in another state is 8.44% of the total, twice higher than the country's average, with Botoșani county having a maximum share of 13.3%.

From everything presented, it follows that the North-East Region is far from the European targets regarding the workforce, the level of employment primarily in activities that effectively contribute to the country's domestic product.

If the Government will not adopt some real and effective measures to stimulate investments, employment, in the conditions of salaries at the bottom of the EU ranking, of an ever-increasing taxation, it will practically be "encouraged" to offer its strength of labor to other states, often a higher skilled workforce. In this way, Romania will lose for at least two reasons: it spent money on the education and professional training of these people and finally, it offered the workforce for free to other states, to contribute to their GDP.

References

- Ghețău, V. (2012), *Drama noastră demografică: populația României*, București, Ed. Compania
- Harja, E., (2009), *Statistică și econometrie*, Bacău, Ed. Alma Mater a Universității "Vasile Alecsandri" din Bacău
- Jemna, D.V. (2023), *Demografia României*, Ediția a doua, Ed. Universității "Al.I.Cuza", Iași

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<https://www.recensamantromania.ro/definitii-si-metodologii/>

<https://www.recensamantromania.ro/rezultate-rpl-2021/rezultate-definitive/>

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