

## THE ECONOMIC CENTERS IN BULGARIA - AN OPPORTUNITY TO DISCOVER ADDITIONAL POTENTIAL IN THE REGIONAL DEVELOPMENT OF RURAL TERRITORIES

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### Abstract

*In Bulgaria, according to the Institute for Market Economics, 16 economic centers have been defined, which form a large part of the national economy. The paper focuses on the economic centers located in the territory of the North Central Planning Region and the North Western Planning Region, emphasizing their role in revealing the potential for development of the rural areas within their scope. In this context, the specific features of their development have been analyzed and the possibilities for future development have been assessed in order to achieve the goals of sustainable development of the territory, to increase the living standards of the population, and to reduce the risk of poverty in rural areas. The study utilized statistical methods for analyzing dynamic trends, hypothesis testing, regression, and correlation analysis. It was found that the indicators for the municipalities within the economic centers are more favorable compared to those outside of them. The results of the analysis demonstrate that the presence of economic centers in the region has a statistically significant impact on indicators such as population, age dependency ratio, population density, average annual salary of employees under labor and service contracts, and unemployment rate.*

*Key words:* economic centers, rural territories, potential, regional development, sustainability

### INTRODUCTION

The development of rural areas, not only in Bulgaria but also in Europe and around the world, faces a variety of problems and challenges, the clarification of which provides a solid foundation for implementing measures to make them more appealing for business and living. Within the EU, rural areas represent 80% of its territory, and 30% of the population lives in them, while the agricultural sector and food production provide around 40 million jobs. Several programming periods have been directed towards improving development opportunities and living conditions in rural territories. However, despite this, the migration of the population continues due to limited employment opportunities, inadequate training, insufficient investments, and weak entrepreneurial activity.

According to [6], agriculture remains pivotal for the development of rural areas in Europe, yet with its increasing industrialization, there

is a rise in the average size of farms and utilized agricultural land, accompanied by a decline in the number of farms and employed workers. In their study, Dammers and Keiner emphasize that in rural areas in recent years, various processes are observed. On one hand, there are processes of depopulation, while on the other hand, there are also processes of resettlement. According to them, for successful sustainable and balanced development of rural areas, it is necessary to implement various programs to stimulate their development, including the development of ecological production, organic farming, rural tourism, etc.

Ahlmeyer and Volgmann conduct an analysis of trends in the development of rural areas in Europe, highlighting that structural changes are observed therein, leading to significant differentiation and the delineation of prosperous and underdeveloped regions [2]. Based on an analysis of reports on EU-funded projects, they examine the impact of economic, technological, social,

environmental, and other trends on the development of rural areas. They conclude that the major challenge for rural areas is their development in the context of transitioning to a green economy, utilizing technologies with minimal environmental impact and employing renewable energy sources, among other strategies. The strategic directions for rural development highlighted by [24] are associated with enhancing the competitiveness of the agricultural and forestry sectors, improving the environment, enhancing quality of life, as well as creating opportunities for local economic development and increasing employment. Achieving them requires not only securing funding but also the real implementation of the priorities set out in various programs.

Limited employment opportunities in rural areas and poor infrastructure and connectivity with urban centers are key issues, and to address them, a series of measures are being taken, reflected in the Common Agricultural Policy of the EU [5] as well as in other documents. With the development of information and communication technologies and the increasing digitization of processes, some of these problems can be overcome, as they provide opportunities to increase employment in rural areas through remote work, thereby reducing or eliminating the need for daily or frequent commuting to workplaces in larger cities, reducing daily labor migrations, and providing new opportunities for the development of rural areas. Infrastructure projects have a significant impact on the socio-economic conditions for rural development, as confirmed by the study conducted by [10], who empirically demonstrates the necessity of a comprehensive approach in developing strategic plans and emphasizes that improving transportation infrastructure contributes to reducing social and economic disparities.

The effects of improving public infrastructure are reflected in increased economic activity, higher investment in the region, enhanced employment, reduced unemployment, improved quality of life, and better access to education and healthcare.

According to [27], the development of rural areas contributes to varying degrees to the formation of the Gross Domestic Product (GDP) of individual countries, thus requiring incentives to enhance its efficiency and transform it into a significant factor for economic growth. In her research, she also focuses on the potential for rural areas to become centers for non-agricultural activities such as tourism, local traditions and crafts, ecological productions, etc. According to [3], the formation of regional centers encompassing rural and urban areas will contribute to stronger connections between them, potentially creating a favorable environment for expanding trade links, stimulating the local economy, reducing poverty, etc.

[28] analyzes the development of small municipalities in rural areas and the challenges faced by communities in small towns, emphasizing the importance of implementing strategies for their development in the context of intensified urbanization. In the study, based on research conducted in four small urban communities in the USA, White found that they have successful strategies for economic development, including regional cooperation, cross-sectoral connections and interactions, stimulation of local economies and entrepreneurial initiatives, and the development of a long-term vision for development. The results of the analysis indicate an increasing number of people moving to urban centers, primarily consisting of young and more educated residents. The main reasons for this trend are the greater employment opportunities and improved living conditions available in urban areas. At the same time, there is a tendency for an aging population to predominate in rural areas. Based on the research, it was found that there is poor infrastructure and connectivity between small settlements. To address these issues, [28] emphasizes the need for long-term planning, adoption of strategies for sustainable development and smart growth, programs and partnerships with educational institutions, promotion of local initiatives, regional cooperation, improvement of transportation and social infrastructure, and

creating favorable conditions for remote living and working.

[1] proposed an approach using the Delphi methodology and find that besides the economy, social well-being also significantly contributes to the development of rural areas.

The aforementioned studies by foreign authors on rural development issues indicate that most of the problems in individual countries are similar, but naturally, there may be some specificities and particularities in each country.

On the issues of rural development in Bulgaria, numerous Bulgarian scholars have conducted studies. Doitchinova, Nikolova, Stoyanova, Stanimirova analyze employment, human resources, demographic processes, sources, and the size of agricultural income in rural areas [7, 8, 17, 25].

Important aspects of the opportunities for sustainable development of rural areas and the implementation of suitable business models and diversification of activities are presented by Kopeva, Doichinova, Nikolova, Petrova, Pavlov, Linkova, and others, with a focus on the problems and perspectives [13, 14, 15].

The condition of rural areas, as well as the issues of integrated and balanced regional development, territorial balance, and the use of agricultural land, are also the subject of research, with numerous publications dedicated to them [14, 16, 21].

Some authors see new opportunities for the development of rural areas with the introduction of various technological innovations, improvement of internet coverage, digitization of processes and services, as conditions are created to increase interest in them both as places for relaxation from the hectic everyday life and as places to live with the possibility of remote work [26, 22, 29].

From the conducted review of publications on the topic, it was found that the problems and challenges facing the development of rural areas are numerous and of different nature, and in assessing their state, a comprehensive analysis of a system of indicators characterizing economic, demographic, social, and ecological phenomena and processes is necessary. A number of studies demonstrate

that rural territories are significantly integrated with nearby urban centers in terms of education, healthcare services, administrative services, and employment. This indicates that the development of rural areas is closely linked to the development of surrounding urban areas, as well as to the formation of economic centers around some of them. An in-depth study of the economic centers in the territory of Bulgaria was conducted by the Institute for Market Economics, in which 16 economic centers were defined [12].

Based on a rich information base of statistical data, the authors of the study "Economic Centers in Bulgaria - 2023" form "broad economic centers that are not limited to the administrative-territorial division of regions, planning areas".

The approach adopted by the authors consists of defining core municipalities, which are strongly developed economically, and peripheral municipalities, which are less developed but closely linked economically to the cores [12].

It was precisely the analysis conducted by the Institute for Market Economics on economic centers in Bulgaria that sparked the authors' interest in studying their significance for the development of rural areas. The purpose of this publication is to study the role of economic centers in revealing the potential of rural territories in a regional scope in two of the planning regions in Bulgaria - the North Central Planning Region and the Northwestern Planning Region.

The research focuses on several directions:

-A brief description of the economic centers in the North Central Region and North Western Region.

-Comparative analysis of indicators for the municipalities included in the composition of the economic centers and for the municipalities that are not part of them.

-Hypothesis testing regarding the difference between the mean values of indicators for the municipalities that are part of the economic centers and for the municipalities that do not fall within the scope of the economic centers.

## MATERIALS AND METHODS

The assessment of the condition and the comparative analysis between the municipalities forming the economic centers and the rest of the municipalities that meet the requirements to be defined as rural areas were carried out through an analysis of the following indicators:

- Population as of December 31
- Natural population growth
- Migration growth
- The age dependency ratio as of December 31
- Population density as of December 31
- Relative share of employed persons in the industry out of total employed persons
- Average annual salary of employed persons under labor and service relationships
- Unemployment rate as of December 31.
- Number of healthcare facilities for hospital care
- Number of schools.

The information provision of the study is based on official statistical data from the National Statistical Institute, extracted from publications such as "Districts, Regions, and Municipalities in the Republic of Bulgaria" [19] as well as from the Information System [20] and from publications of the Institute for Market Economics [11], "Economic Centers in Bulgaria - 2023" and "Regional Profiles. Development Indicators - 2023". In order to ensure compliance with requirements for comparability and consistency of data at the municipal level, time series have been formed for the period 2007-2019. For some indicators, data for the years 2020 and 2021 have also been analyzed.

Statistical methods for time series analysis, hypothesis testing, regression and correlation analysis were used.

## RESULTS AND DISCUSSIONS

In the study by the Institute for Market Economics, it is noted that 132 municipalities form 16 economic centers, but 29 municipalities can be identified as engines of regional economic development [12]. In the designated economic centers, 74% of the country's population, 78% of the economically active population, over 80% of the produced output, and over 85% of the

foreign direct investments are located. The agricultural sector in Bulgaria accounts for about 4% of the gross value added and employs over 6% of the workforce in the country, with the sector being highly export-oriented and the country maintaining a positive trade balance in agricultural goods. Agricultural land occupies 41% of Bulgaria's territory, and in 2021, rural areas represent 22% of the country's territory, with 13% of the population located in them, and the number of registered farmers is 76,372 [4].

The two poorest regions in the EU are located in Bulgaria – the North Western and North Central Regions. This is the main reason why the municipalities falling within the scope of economic centers are analyzed in the article, to determine whether they influence the development of the region.

Conducting such an analysis would be beneficial from the perspective of monitoring processes, as the results of it can become a reliable basis for determining priorities and the need for changes in regional and sectoral policies and programs at national and regional levels.

Within the North Western and North Central Regions, there are four economic centers entirely encompassed – "Kozloduy", "Pleven", "Gabrovo-Sevlievo", and "VelikoTarnovo", while the economic center "Ruse-Targovishte-Razgrad" predominantly covers the North Central Region (12 out of 15 municipalities). Three municipalities from the Northwestern Region (Teteven, Roman, and Mezdra) are included in the economic center "Sofia-Pernik-Botevgrad". As previously indicated, the principle of forming economic centers by the Institute for Market Economics is not geographical and is not aligned with the delineated statistical regions. For the purposes of this study, data on all municipalities from the North Western and North Central Regions that fall within the scope of the delineated economic centers, as well as municipalities not included in them but meeting the requirement to be considered rural areas, have been systematized. During the research period, according to the National Plan on Agriculture and Rural Development under the Rural Development Program, rural

municipalities are defined as those where there is no populated place with a population exceeding 30,000 inhabitants.

For the period 2007-2019, the average annual population decline in Bulgaria is 0.78%. However, the average annual decline for municipalities within the economic centers in the Northwestern and North Central Regions is 1.53%, while for municipalities not part of these economic centers, it is 2.27% (Figure 1). During the analyzed period, Bulgaria experiences negative natural population growth. All municipalities in the North Western and North Central Regions have a negative population growth. The migration growth is also negative – the number of people moving into the municipalities is smaller than the number of people moving out.

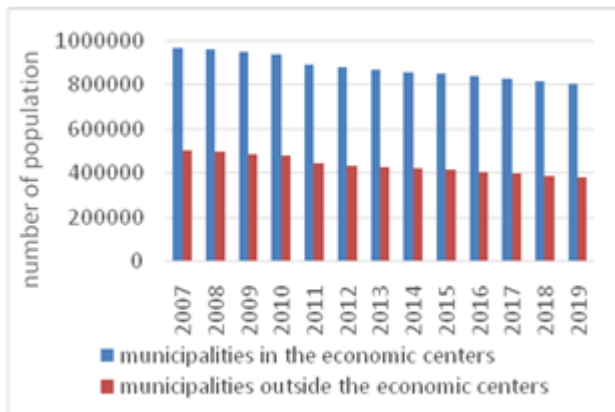


Fig. 1. Population of municipalities according to their participation in the economic centers in the North Western Region (NWR) and North Central Region (NCR).  
 Source: NSI [18].

The age dependency ratio shows the number of persons of the population in the "dependent" ages (population under 15 and population aged 65 and over) per 100 persons of the population in the "independent" ages (aged 15 to 64) and is calculated as a percentage [18]. The total age dependency ratio in Bulgaria increases from 44.3% in 2000 to 56.4% in 2019, with the increase being 1.3 times compared to 2007 [23].

For the municipalities within the economic centers in the North Western Region (NWR) and the North Central Region (NCR), the increase is from 59.4% to 69.5% (Figure 2), with an average annual growth rate of 1.3%.

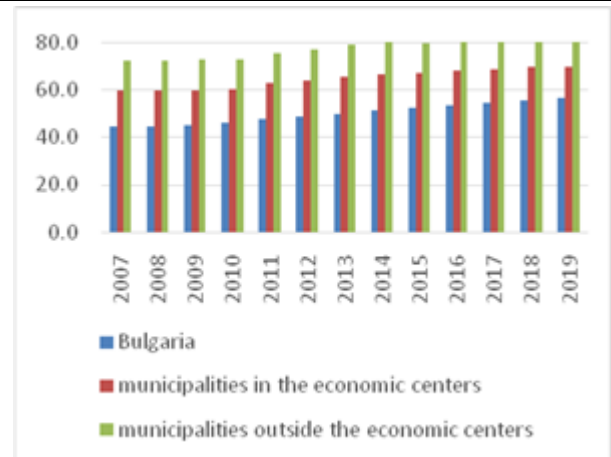


Fig. 2. The age dependency ratio for Bulgaria and for the municipalities based on their participation in the economic centers in the NWR and the NCR.  
 Source: NSI [18] and author's own calculations.

The age dependency ratio for the municipalities outside the economic centers of the NWR and the NCR ranges between 72% and 81%, indicating exceptionally high values and clearly demonstrating a sustainable trend towards population aging in these areas.

Negative demographic trends are characteristic of the entire country, but they are most pronounced in the North Western and North Central Regions, affecting both the municipalities within the economic centers and those in rural areas. Tracking the dynamics of population density provides the opportunity to identify changes in population density. Population density analysis is important as it serves as a basis for analyzing accessibility to healthcare, education, social, and administrative services, etc.(Fig. 3).

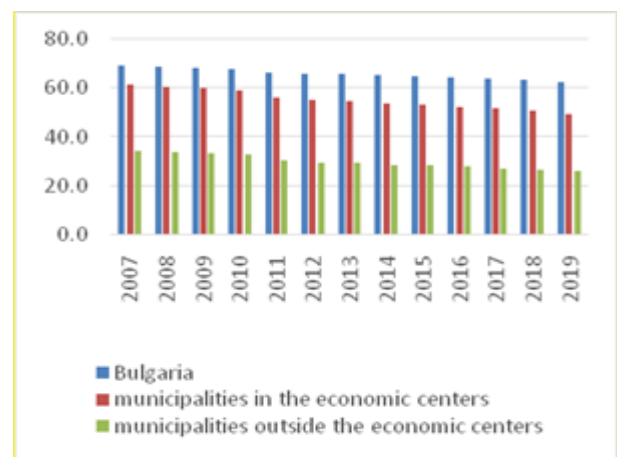


Fig. 3. Population density for Bulgaria and for the municipalities based on their participation in the economic centers in the NWR and the NCR.  
 Source: NSI [18] and author's own calculations.

Analyzing the relative share of employed individuals out of the total employed population allows for an assessment of the sectoral structure of the local economy. During the analyzed period, the indicator for Bulgaria decreased from 38.8% in 2007 to 31.9% in 2018. Values for municipalities within the economic centers are close to these, but significantly lower for municipalities not part of the economic centers – decreasing from 31.6% in 2007 to 27.4% in 2018. The average annual decrease in the indicator for municipalities within the economic centers is 1.83%, while for municipalities outside them, it is 2.38%.

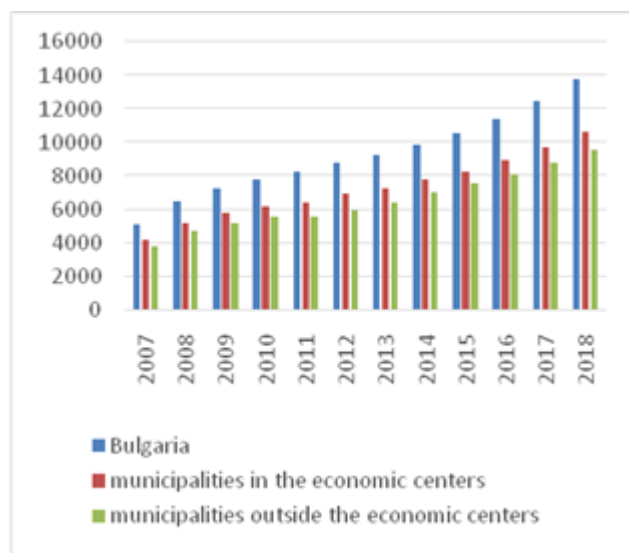


Fig. 4. Average annual salary for Bulgaria and for the municipalities based on their participation in the economic centers in the NWR and the NCR.  
 Source: NSI [19] and author's own calculations.

An assessment of the purchasing power and living standards of the population can be conducted based on an analysis of the average annual salary of employees under labor and civil service contracts. The results of the analysis show that during the analyzed period, the average annual salary for the country for 2018 was 2.7 times higher compared to 2007, increasing from 5,167 BGN (in 2007) to 13,755 BGN (in 2018). For the municipalities within the economic centers in the North Western Region (NWR) and the North Central Region (NCR), the increase in the average annual salary shows a growth of 2.54 times, with an average annual growth rate of 8.8%. For the municipalities outside the economic

centers, the increase is 2.48 times, with an average annual growth rate of 8.62%. The average annual salary in the municipalities in the NWR and the NCR lags behind the national average, with this difference being more pronounced for the municipalities outside the economic centers, which correspond to the requirement of being designated as rural municipalities (Figure 4). The unemployment rate in Bulgaria for the period 2007-2018 ranged from 6.1% in 2018 to 11.8% in 2013. The results of the analysis show that for the municipalities in the NWR and the NCR, the unemployment rate is much higher compared to the national average. The average annual increase in the unemployment rate for the municipalities within the economic centers is 0.87%, while for the municipalities outside the economic centers, it is 1.97%. It was found that the unemployment rate is higher for rural municipalities compared to the municipalities that are part of the economic centers, indicating a poorly developed local economy, low entrepreneurial activity, significant labor market disparities, etc. (Fig. 5).

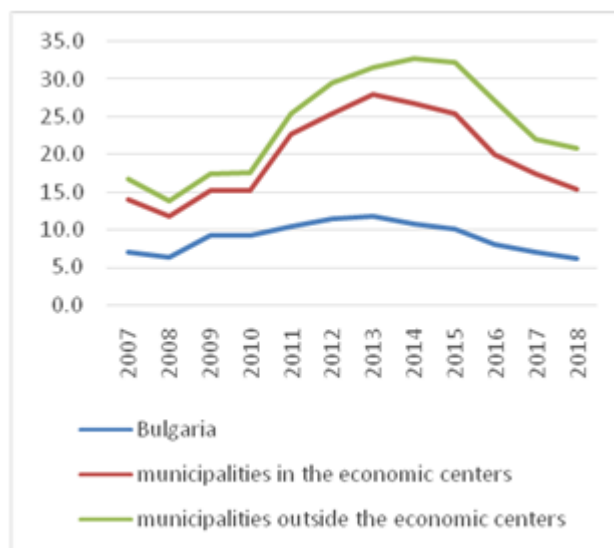


Fig. 5. Unemployment rate for Bulgaria and for the municipalities based on their participation in the economic centers in the NWR and the NCR.  
 Source: NSI [19] and author's own calculations.

The number of healthcare facilities providing hospital care decreases in both the municipalities of the NWR and the NCR – for the municipalities within the economic centers from 41 in 2008 to 37 in 2019, and for the

municipalities outside the economic centers from 32 in 2008 to 29 in 2019. The number of beds in healthcare facilities providing hospital care in the municipalities within the economic centers is almost twice as high compared to the other municipalities.

A sustainable trend towards a decrease in the number of schools was observed (Figure 6), with the reduction occurring at higher rates in rural municipalities compared to those municipalities that are part of economic centers. The results of the analysis indicate that for the period 2007-2020, the average annual decrease in the number of schools in municipalities belonging to economic centers was 2.28%, while it was 3.31% for municipalities outside of economic centers or in rural municipalities. The analysis conducted so far on key aspects of the demographic situation in rural areas provides grounds to assert that the main reasons for the decrease in the number of schools in these areas are low birth rates, migration, deteriorating age structure of the population, reflected in the decrease in the population in age groups 0 to 19 years old, and an increase in the population in older age groups. At the same time, disparities in access to education and the quality of education in rural areas are intensifying.

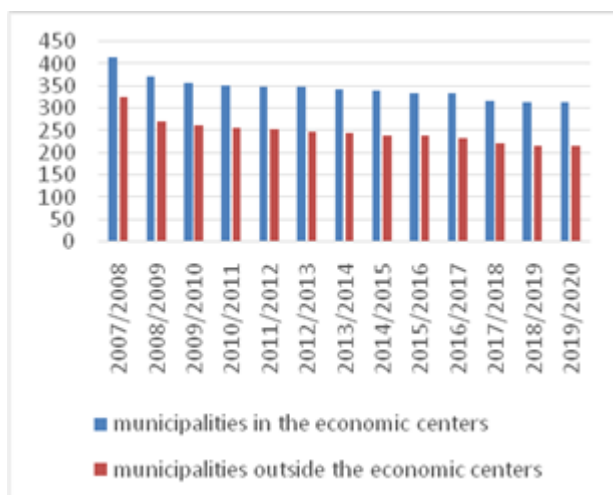


Fig. 6. Number of schools (primary, lower secondary, and upper secondary levels) for the respective school year for the municipalities based on their participation in the economic centers in the NWR and the NCR. Source: NSI [20].

In order to determine whether the difference in the mean values of the analyzed indicators for the municipalities that are part of the economic centers and the municipalities that are outside the economic centers is systematic as a result of the formation of the economic centers or is random and not dependent on this factor, a hypothesis test for the difference between means has been conducted using the Student's  $t$  - test [9]. The null hypothesis states that the difference between the mean values is random and is denoted as  $H_0 : \bar{x}_1 = \bar{x}_2$ , while the alternative hypothesis states that the difference between the two mean values is not random and is denoted as  $H_1 : \bar{x}_1 \neq \bar{x}_2$ , meaning it is statistically significant and is generated by the inclusion of municipalities in the economic centers in the territory of the NWR and the NCR. If  $t_{EM} \leq t_T$ , the null hypothesis is accepted, thus indicating that the difference in the mean values of the indicator for the two populations (samples) is random and cannot be claimed to be generated by the inclusion of municipalities in the economic centers. However, if  $t_{EM} > t_T$  the null hypothesis is rejected, and the alternative hypothesis is accepted, suggesting that there is a difference between the mean values, which is statistically significant and is generated by the action of the investigated factor on which the two populations are distinguished.

Table 1. Results from the hypothesis test regarding the difference in the mean population in the two groups of municipalities for the year 2019

t-Test: Two-Sample Assuming Equal Variances		
	Variable 1	Variable 2
Mean	23005,3429	9342,512
Variance	1142486142	69500795
Observations	35	41
Pooled Variance	562494063	
Hypothesized Mean Difference	0	
Df	74	
<b>t Stat</b>	<b>2,50323066</b>	
P(T<=t) one-tail	0,0072562	
t Critical one-tail	1,66570689	
P(T<=t) two-tail	0,0145124	
t Critical two-tail	1,9925435	

Source: NSI [18] and author's own calculations.

The results of the hypothesis test for the difference between the average population in municipalities that are part of economic centers and municipalities that are not part of

economic centers (Table 1) provide grounds to assert that there is a statistically significant difference in the mean population between them, as  $t_{stat} > t_{critical}$ . The conclusion that can be drawn is that the null hypothesis is rejected and the alternative hypothesis is accepted, indicating that economic centers have a significant impact.

The hypothesis test for the difference between the mean values of the age dependency ratio for the two groups of municipalities (Table 2) revealed a statistically significant difference, as  $t_{stat} > t_{critical}$ . Based on these results, the null hypothesis is rejected and the alternative hypothesis is accepted, indicating that economic centers have a statistically significant influence on the age dependency ratio.

Table 2. Results from the hypothesis test regarding the difference in the mean values of the age dependency ratio in the two groups of municipalities for the year 2019

t-Test: Two-Sample Assuming Equal Variances		
	Variable 1	Variable 2
Mean	67,48026	78,82218
Variance	134,8768	254,699
Observations	35	41
Pooled Variance	199,6456	
Hypothesized Mean Difference	0	
df	74	
<b>t Stat</b>	<b>-3,48799</b>	
P(T<=t) one-tail	0,000411	
t Critical one-tail	1,665707	
P(T<=t) two-tail	0,000823	
t Critical two-tail	1,992543	

Source: NSI [18] and author's own calculations.

The difference in the mean population density between the municipalities within the economic centers and the municipalities outside their scope is not random but statistically significant (Table 3). The null hypothesis is rejected, as  $t_{stat} > t_{critical}$ , and the alternative hypothesis is accepted, indicating that the presence of economic centers exerts a statistically significant influence on the population density in municipalities.

The hypothesis test for the difference between the mean values of the proportion of employees in the industry to all employed persons for the two groups of municipalities (Table 4) revealed that the difference is random and not statistically significant, as

$t_{stat} < t_{critical}$ . Therefore, the null hypothesis is accepted, and the alternative hypothesis is rejected.

Table 3. Results from the hypothesis test regarding the difference in the mean population density in the two groups of municipalities for the year 2019

t-Test: Two-Sample Assuming Equal Variances		
	Variable 1	Variable 2
Mean	47,75844	25,10279
Variance	2600,141	228,1814
Observations	35	41
Pooled Variance	1318,001	
Hypothesized Mean Difference	0	
Df	74	
<b>t Stat</b>	<b>2,711676</b>	
P(T<=t) one-tail	0,004159	
t Critical one-tail	1,665707	
P(T<=t) two-tail	0,008319	
t Critical two-tail	1,992543	

Source: NSI [18] and author's own calculations.

Table 4. Results from the hypothesis test regarding the difference in the proportion of employees in the industry to all employed persons in the two groups of municipalities for the year 2019

t-Test: Two-Sample Assuming Equal Variances		
	Variable 1	Variable 2
Mean	30,71228	26,77039
Variance	306,2824	348,3658
Observations	35	41
Pooled Variance	329,0302	
Hypothesized Mean Difference	0	
Df	74	
t Stat	0,94429	
P(T<=t) one-tail	0,174047	
t Critical one-tail	1,665707	
P(T<=t) two-tail	0,348094	
t Critical two-tail	1,992543	

Source: NSI [19] and author's own calculations.

The difference in the average annual salary of employed individuals under labor and service relationships in the municipalities within the economic centers and the municipalities outside their scope is not random but statistically significant (Table 5).

The null hypothesis is rejected, as  $t_{stat} > t_{critical}$ , and the alternative hypothesis is accepted, indicating that the presence of economic centers exerts a statistically significant influence on the average salary size in the municipalities.

The results from the hypothesis test for the difference in the unemployment rate between the two groups of municipalities (Table 6) indicate a statistically significant difference in the unemployment rate, as  $t_{stat} > t_{critical}$ . Therefore, the null hypothesis is rejected, and



the alternative hypothesis is accepted, suggesting that economic centers exert a substantial influence on the unemployment rate.

Table 5. Results from the hypothesis test regarding the difference in the average annual salary of employees under labor and service relationships in the two groups of municipalities for the year 2019

t-Test: Two-Sample Assuming Equal Variances		
	Variable 1	Variable 2
Mean	10359,23	9368,902
Variance	6621101	2484299
Observations	35	41
Pooled Variance	4384992	
Hypothesized Mean Difference	0	
df	74	
<b>t Stat</b>	<b>2,055006</b>	
P(T<=t) one-tail	0,021704	
t Critical one-tail	1,665707	
P(T<=t) two-tail	0,043409	
t Critical two-tail	1,992543	

Source: NSI [19] and author's own calculations.

Table 6. Results from the hypothesis test regarding the difference in the unemployment rate in the two groups of municipalities for the year 2019

t-Test: Two-Sample Assuming Equal Variances		
	Variable 1	Variable 2
Mean	14,85429	20,3841
Variance	100,694	157,817
Observations	35	41
Pooled Variance	131,5717	
Hypothesized Mean Difference	0	
df	74	
<b>t Stat</b>	<b>-2,09483</b>	
P(T<=t) one-tail	0,019805	
t Critical one-tail	1,665707	
P(T<=t) two-tail	0,039609	
t Critical two-tail	1,992543	

Source: NSI [19] and author's own calculations.

## CONCLUSIONS

In recent years, the dependency of rural areas on urban centers has been steadily increasing. More and more frequently, the population from rural areas has to travel to larger cities for employment or to access various administrative, educational, social, healthcare, or other services. The reasons mentioned so far are at the core of the increasing migration to cities, especially to those that have become regional economic centers. The development of rural areas faces a number of challenges that require the implementation of an adequate policy based on a thorough analysis, a complex approach and the implementation of

strategies to preserve the population and jobs in rural areas.

The results of the empirical analysis have demonstrated statistically significant differences between the indicators for the municipalities that are part of the economic centers in the Northwestern and North Central Regions and the municipalities outside of them classified as rural areas. Statistically significant influence of the economic centers is observed for the indicators: population, age dependency ratio, population density, average annual salary of employees under labor and service relationships, and unemployment rate. It was found that the indicators for the municipalities within the economic centers are more favorable compared to those outside of them. Therefore, opportunities should be sought to expand the scope of the economic centers by integrating the neighboring municipalities with the aim of sustainable development of the region and increasing the living standards of the local population in rural areas.

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