

THE DEMOGRAPHIC DECLINE IN MARAMUREȘ REGION (ROMANIA) THROUGHOUT THE POST-COMMUNIST PERIOD

PAUL-RĂZVAN ȘERBAN*

Key-words: demographic decline, post-communist period, Maramureș, Romania.

Abstract. The demographic evolution of a region is prompted by the economic attractiveness of the region which influences the existing standard of living in the urban and rural localities belonging to the region. We used the following indicators for the analysis of demographic trends in the Maramureș Historical Region, Romania: the resident population, the population by wide age groups (0–14, 15–59, 60 and over), the settling of domicile, the departure from domicile, the net settling of domicile, the permanent emigrants, the permanent immigrants, the live-birth rate, the mortality rate, the natural balance to which we have added the economic indicator of the number of employees. We used the number of employees as proxies for the analysis of the economic. We used the following years as reference: 1992, 2002, 2011, the years of population censuses, as well as 2017 – the most recent year for which the selected data is provided. We have used the Philcarto software for map representation and as a data mining technique we have used the Hierarchical Ascending Classification. We used fixed class limits as a method of data classification for choropleth maps. The demographic indicators have undergone a radical change as a result of the transition from a centralized economy to a market economy. This meant that economic restructuring, in particular the decline of the industry, had serious consequences for the reduction in the demographic potential in Romania, in general, and Maramureș, in particular.

1. INTRODUCTION

Comparative data from several countries shows that the high degree of urbanization must be associated with a higher income per capita. A simple explanation for this positive association is that people and businesses tend to move to urban locations when it is economically advantageous to do so. There are theories and empirical evidence that support the idea that urbanization is integral to economic growth (Spence, Annez and Buckley 2009; Strange 2008). While it is more productive for people to be dispersed on fertile land for agricultural and subsistence economies, industry and services favor urban agglomeration. Urban agglomeration offers industrial enterprises and services economic opportunities for higher specialization and production on a larger scale, with lower transportation and transaction costs. In the language of urban economists, agglomeration facilitates shared use (e.g., facilities), matching demand with supply (e.g., jobs and people) and the circulation of information (e.g., more productive working methods) (Duranton and Puga, 2004). The benefits of urban locations for post-industrial production and the information economy are less tangible than for industrial economies (Krugman, 2011) and include the advantages of face-to-face contact that electronic communications have failed to replace (Storper, 2013).

The lower level of urbanization in Maramureș is due to a lacking the network of urban settlements, and it was sought to improve this situation in 2004, by converting two rural localities into cities. As a result, the number of cities increased from three to five and the share of urban population in the total population saw a faster growth, from 40.7% in 1992, to 42% in 2002, and to 47% in 2017. The process of deindustrialization, which began in 1990, played an important role in reducing the economic attractiveness of the town of Sighetu Marmăției which, during the Communist period, became

* Senior Researcher, Institute of Geography, Romanian Academy, 12 Dimitrie Racoviță Street, 023993, Bucharest, paulrazvanserban@yahoo.co.uk.

the center of development in this region. The social costs involved in the process of deindustrialization are not insurmountable if the effects are limited by stimulating the capacity to adapt to the new context. Obviously, this requires concrete measures, well thought out, within coherent strategies, strongly anchored in the local reality, consequently, the need to implant some development centers in the region in order to mitigate the excess of rurality, enhanced by the deindustrialization process. An important indicator in the coagulation of some tendencies of emergence of urban centers capable to transform themselves into development centers is the periurbanization process. In Maramureș periurbanization is manifested in the case of Borșa city, while Sighetu Marmăției is undergoing a process of economic restructuring. Recovering the urban deficit in the region becomes one of the imperatives that cannot be missing from a development strategy. The urbanization should not be stimulated by gathering the population in the existing cities, but by the transformation of the rural settlements into towns, as in 2004, thus, imposing measures to reduce the huge gap that separates them from the urban point of view. In this way the premises of a hyperactive, paradoxical, more predictable world are created, despite the complexity of the flows generated (Thrift, 1995).

The limits of the urban area should not be based on its administrative functions or on the contiguous urban settlement, but on the daily flow of people and information (Hall, 2009). It has also been noted that in some parts of the world, conventionally, “urban” practices and livelihoods are increasingly found in low density areas and small settlements. This is not only the product of the expansion and suburbanization of settlements in rich countries, but also of the kind of transition called “kotadesasi” (or rural urbanization) in Indonesia (McGee, 1989).

Urbanization is often viewed as something that occurs only in urban settlements although, by definition, it entails moving the population from rural to urban areas, transforming landscapes as well as urban and rural environments. Urbanization almost inevitably entails variations in the demographic, economic and environmental flows between rural and urban areas, although not always predictable ones. Urbanization can be driven by changing urban conditions, but also by changing rural conditions. While it is possible to separate people into urban and rural dwellers, many travel regularly between rural and urban areas, and many families fill the rural / urban gap as part of living strategies (Tacoli, 2006). The conventional picture of urbanization in the industrialized countries of the nineteenth century, replicated later on by many writers, was one of a series of migratory steps that spread from the rural areas to the neighbouring towns and then further on to larger cities. Nevertheless, the longitudinal profiles of migrants revealed that urbanization requires more complex and circulating migration patterns (Pooley and Turnbull, 2000).

Those who view urbanization as a means of economic advancement generally allow that it also tends to be associated with rising income inequalities (Kanbur and Venables, 2005; Kanbur, Venables and Wan, 2005). Part of this growing inequality involves rural / urban differences. However, intra-urban inequalities display increasing importance. Even in line with conventional income-based measures, an increasing share of global poverty pertains to urban areas (Ravallion, Chen and Sangraula, 2007), and most conventional measures fall far from the depth and breadth of urban poverty and inequality (Mitlin and Satterthwaite, 2013). Somewhat paradoxically, although urbanization is often associated with increasing inequality, measures to inhibit urbanization can amplify these inequalities.

In order to stimulate the urbanization process, a clear differentiation of the types of development poles that can be subsumed in one and the same urban center is required. Such a typology may be based on the classification made by Gabriel Wackermann (2007, p. 49):

- development poles, urban centers whose dynamics entails advantages that may lead to the development of the entire region;
- growth poles, centers for which the territorial dynamics leads to socio-spatial differentiation, generating local disparities;
- poles of competence, focused on the three-dimensional relation research – enterprise – training, relying on technological platforms (industrial districts);

- poles of excellence, focused on advanced scientific research, with good intentional visibility, a particular case may be the scientipoles, oriented mainly to the technological transfer;
- competitiveness poles, which reunite several poles of competence and excellence, in order to reduce costs by creating efficient networks for disseminating innovation.

In order to reach the status of a development pole, however, a minimum integration into the global flows is needed, which, for the moment, seems uncertain for the cities part of the analysed area (Sighetu Marmăției, Borșa, Vișeu de Sus). Reich claimed, in 1993, that integration into the global urban system involves three mandatory stages: internationalization, based on the development of export flows; transnationalization, based on the flows of investments and the implantation of its own companies abroad; globalization, founded on the formation of global networks of production and information. The starting point of the first stage is ensured primarily by the advanced specialization, which can provide a competitive advantage. The present city can only be understood as framed in the region it belongs to, with which it becomes synonymous by a coherent development subsequent to the convergence of strategic interests. Barring a cooperation climate throughout the entire region, capable of consolidating existing flows, a regional development strategy is difficult to outline. It is necessary to turn this into a real “city region”, according to the theories of functional space (Berry, 1968; Davoudi, 2009). Its chances of concentrating on the main flows of population, capital, services and values in the region are significantly higher.

The manner in which the demographic indicators have evolved between 1992–2017, and the long-term economic consequences of this evolution Maramureş Historical Region are the questions we will be addressing in this article.

2. STUDY-AREA

Long ago, the Maramureş Historical Region referred to the land on both sides of Tisza River, from its sources. Currently, the Maramureş Historical Region (Fig. 1) comprises only the Maramureş Depression along with the surrounding mountainous area (Oaș, Gutâi, Țibleș, Rodnei Mountains in the West and South and Maramureş Mountains in the East). The northern part of the region, located on the right shore of the Tisza, currently belongs to Ukraine (Zakarpattia Oblast). Also, the Maramureş Historical Region should not be confused with Maramureş County which stretches to the West over the mountain chain. The region comprises 34 Local Administrative Units (LAU) of which five are cities and towns, and 29 are rural administrative units.

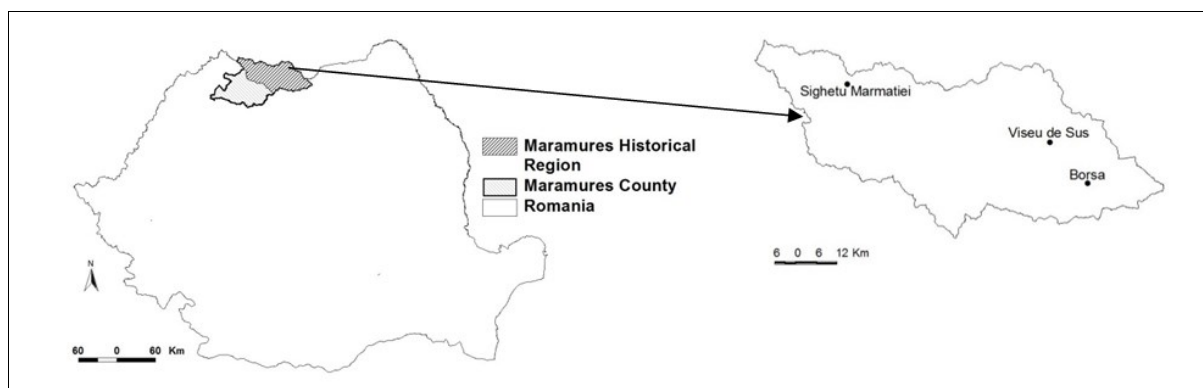


Fig. 1 – Geographical position of the Maramureş Region.

3. DATA AND METHODOLOGY

We have performed the study of the demographic evolution of the Maramureș Historical Region of Romania by using the following indicators: the resident population, the population according to large age groups (0–14, 15–59, 60 and over), the settling of domicile, the departures from domicile, the net settling of domicile, permanent emigrants, permanent immigrants, the live-birth rate, the mortality rate, the natural balance to which we added the economic indicator of the number of employees.

The above-mentioned indicators, relating to the dynamics of population change, considered the following aspects:

- a. The resident population shall constitute all persons of Romanian nationality, whether foreign or stateless who have their main residence in Romania (Maramureș);
- b. The population by large age groups (0–14, 15–59, 60 and over); the population divided in three categories: the young, the adult and the elderly;
- c. The settling of domicile showing the individuals who arrived and proved to have secured a residence in the locality in question;
- d. The departures from domicile of individuals who have left the locality and are proved to have secured a residence in another;
- e. The internal migration balance is the algebraic difference between the number of people who arrived by changing their place of residence (arrivals) and the number of individuals who left by changing their places of residence (departures);
- f. The permanent emigrants indicating the individuals (Romanian citizens) who emigrate abroad;
- g. The permanent immigrants indicating the individuals (Romanian citizens) who immigrate to Romania (Maramureș);
- h. The external migration balance is the algebraic difference between the number of individuals who emigrate abroad and the number of individuals who immigrate to Romania (Maramureș);
- i. The live-birth rate is the ratio between the number of live-births per year and the population as of the 1st of July according to the current year statistics, and measured by the number of live-births per 1000 inhabitants.
- j. The mortality rate is the ratio between the number of deaths per year and the population as of the 1st of July according to the current year statistics, and measured by the number of deaths per 1000 inhabitants.
- k. The natural balance measures the difference between the live-birth rate and the population mortality rate.
- l. The number of employees shall be comprised of all persons with an individual employment contract/agreement for a definite or indefinite term (including seasonal workers, managers or administrators) whose employment contract/agreement has not been terminated during the reference year.

Next, we correlated the above data with the economic evolution of the region (number of employees). We used as reference the years 1992, 2002, 2011, the years of population censuses, and 2017 – the most recent year for which the selected data is available, comparing data cartographically represented by Hierarchical Ascending Classification data mining technique or using fixed class limits as a method of data classification (for choropleth maps). These tools were made available by Philcarto software.

We used the Hierarchical Ascending Classification (HAC) method for clustering local administrative units based on parametric values, which helps to hierarchize LAUs in terms of demographic characteristics. Thus, all LAUs with similar parametric values selected as representative were grouped together and included in the same class in order to form a territorial typology. HAC method performs accurate hierarchization over large data sets and helps to rapidly create nested partitions in a dataset (Bruynooghe, 1977 quoted by Șerban and Tălângă, 2015; Mitrică *et al.*, 2016; Benzécri, 1982).

Several classes were obtained by applying HAC to selected variables for 1992, 2002, 2011 and 2017. These classes represent the LAUs typologies in Maramureș, reflecting territorial disparities in demographic potential and economic desirability.

4. RESULTS AND DISCUSSION

Number of employees. Borșa city is exemplified by a higher capacity for adaptation, at least if we refer to the number of employees, during the period 1992-2017. As in the case of the main competitors, Sighetu Marmăției and Vișeu de Sus, Borșa experienced a rapid decrease in the number of employees (a general phenomenon at national level, but more present in Maramureș) (Fig. 2). Ever since 2013, there has been a tendency to stabilize the number of employees, even to slightly increase said number, with Borșa taking first place among the cities listed.

In 1992 there was a gap of 1,000 employees between the two small cities (8,400 in Borșa and 7,400 in Vișeu de Sus) while Sighetu Marmăției had 20,500 employees. In 2012 the gap between the small cities was eliminated (2,500 employees in Borșa 2,500 employees in Vișeu de Sus) and the interval shortened as compared to Sighetu Marmăției (10,200 employees), according to information taken from the websites of the Department of County Statistics). In 2013, Sighetu Marmăției encountered a second wave of decline in the number of employees (reaching 8,500), while at the end of the studied period (in 2017) it recovered its number of employees (10,000). In contrast, since 2013, the two small cities have seen a rise in the number of employees, more significantly in Borșa (up to 3,800 employees), but also in Vișeu de Sus (up to 3,000 employees). In the Maramureș region, the number of employees registered a sharp decline after 1989, from 41,400 employees in 1992, their numbers reached 19,600 in 2013 and 23,600 in 2017.

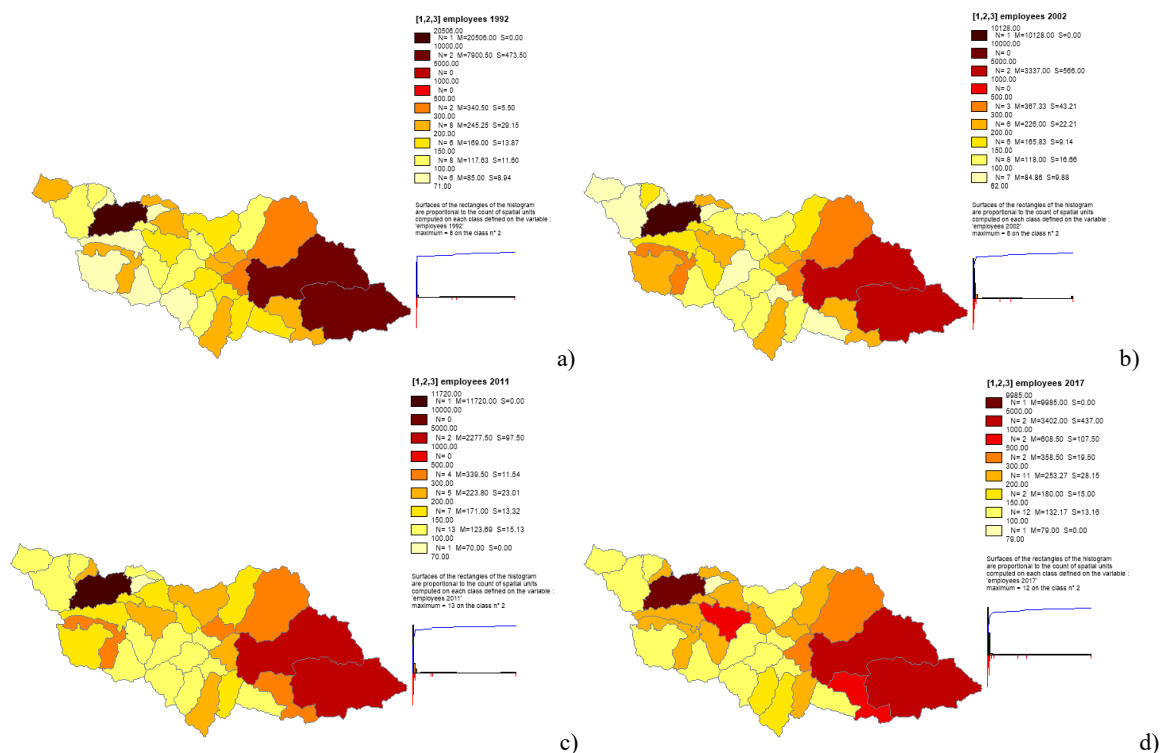


Fig. 2 – Evolution of the number of employees a) 1992, b) 2002, c) 2011, d) 2017.

Borșa was part of a predominantly mining area that was discontinued in the early 2000s, as was the case in most mono-industrial areas. This situation led to such social problems as unemployment, the migration of the working age population, as well as the slowing down of social-economic development. Since 2006, the year when mining came to a stop, the extractive industry here refers only to conservation activities (the protection of the perimeters as related to mining) (www.primariaborsamm.ro).

The wood processing industry has become the main industrial branch benefitting from a tradition in these parts. Even if this activity has managed to reroute a significant part of the available labor force from mining, the situation is not as good as it may seem, as it refers to a primary processing of wood and not to the production of finished goods with high added value.

The manufacturing industry is also present through the manufacturing of fiberglass and the bottling of mineral waters – a resource present in the vicinity of Borșa city (www.primariaborsamm.ro). The basic activities in Borșa are services (tourism, transportation, public utilities) followed by construction and trade.

For Sighetu Marmăției, the loss of the polarization area from the north of the Tisza river in 1920 and the administrative function in 1968 in favor of the city of Baia Mare, located outside the area of the Country of Maramureș, meant, in effect, a disconnection from the main investment flows. After 1990, the evolution of the economic situation in Sighetu Marmăției was related to the regression of the industrial activities within the former industrial platforms (the Wood Processing Plant, Mechanics, UPSA Maramureșeana, the Knitting Factory “Unitatea”) by losing the possibility to export. As the industry lost much of its workforce in the 1990s, services began to develop (<http://www.primaria-sighet.ro>).

At present, wood processing and furniture manufacturing sector has a share of 35% of the municipality’s turnover, and the textile and clothing industry comes next at 16%, since, in the Lohn system, the branches rely on export. The other industrial sectors weigh in at low percentages: the machinery industry - 4.5% and the food industry - 5.8% (<http://www.primaria-sighet.ro>).

Table 1

The number of employees according to main economic activities in Borșa city

Year	2011	2012	2013	2014	2015
Main economic activities	2030	2378	1852	2524	3112
Agriculture	22	20	25	105	118
Industry	278	698	282	662	669
Constructions	64	121	173	141	602
Services	1441	1334	1222	1553	1291
Trade	225	205	150	423	432

The number of employees declined significantly in the 1990s (from 40,000 to 20,000), although it remained relatively stable in the 2000s. About 50% of the total workforce in the region is owned by the municipality of Sighetu Marmăției which concentrates less than 25% of the population of the region.

Resident population. Maramureș reveals troubling trends of demographic potential degradation, losing one tenth of the total population in 25 years (1992–2017), from 235,000 to 212,000 inhabitants (Fig. 3). It is the product of the evolution of the demographic indicators that underwent drastic changes in the early 1990s, as a consequence of changes in society. The pro-natalist policies of the Communist era were abandoned and the free movement of citizens outside the country was no longer restricted (Mitrică *et al.*, 2019; Nancu, 2016; Ghețău *et al.*, 2016; Guran-Nica and Rusu, 2015; Gáková and Dijkstra, 2010).

Population by large age groups. If we refer to the architecture of this true demographic hemorrhage, the situation is even more serious, most of them being young. The share of the adult population is above the national average (64% between 15-59 years in Maramureș, compared to 61.8% in Romania) and increased by 4% compared to 1992. Such trends lead to a faster aging of the population in the area relative to the national average. For example, between 1992 and 2011, the

proportion of the elderly population in Maramureș increased faster (from 13.4 to 20.5% of the total population), compared to the national average (from 16.4% to 22.3% of the total population).

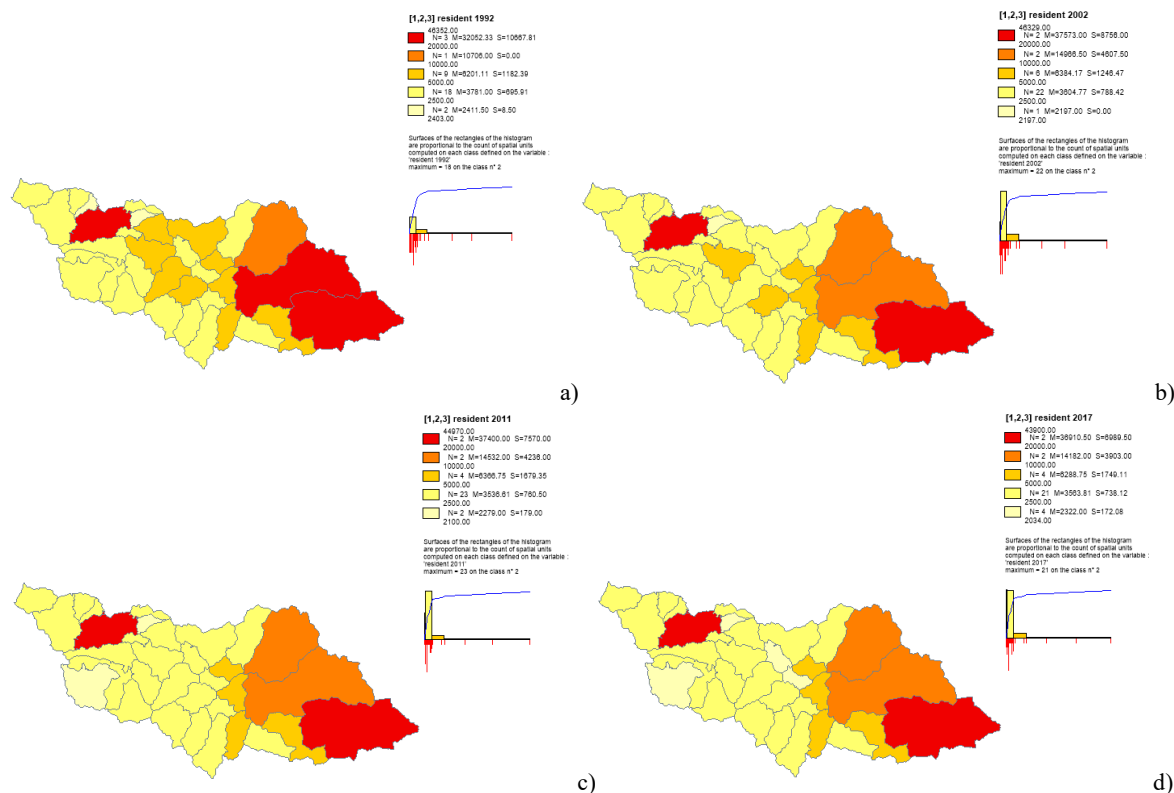


Fig. 3 – Evolution of resident population a) 1992, b) 2002, c) 2011, d) 2017.

Next we analyzed and compared the values of the demographic indicators assigned to the administrative units (LAU 2) in the region (Fig. 4):

- In 1992, among the localities that had a higher share of young population (0–14 years) than the region average (26.6%) were Repedea (38.9%), Poienile de Sub Munte (36.6%), Ruscova (34.8%), Ieud (32.4%), Borșa (31.7%), Bistra (28.6%), Remeți (28%) and in 2017 Sărăsău and Dragomirești were added to the afore mentioned list. Sighetu Marmăției, on the other hand, is set appart from the region average from 0.6 to 1.5% below the average between 1992 and 2017.
- In 1992 the share of the adult population was higher than the region average (60%) in Sighetu Marmăției (63.1%), Rona de Sus (62.6%), Vișeu de Sus (62.2%), Câmpulung la Tisa (61.4%), Desești (61.1%), Botiza (61%), Moisei (60.9%), Leordina (60.6%), Remeți (60.5%), Bocicoiu Mare (60.4%), Vișeu de Jos (60.3%). Currently, in some of these localities (Rona de Sus, Câmpulung la Tisa, Desești, Botiza, Leordina, Bocicoiu Mare, Vișeu de Jos) the share of the adult population below the region average has decreased (63.7% in 2017), while in Borșa, Sărăsău, Ruscova, Ieud, Repedea it has exceeded the region average.
- In 1992, the share of the elderly population was below the average of the region (13.4%) in Borșa (8.3%), Repedea (8.5%), Poienile de Sub Munte (8.6%), Ruscova (8.8 %), Sighetu Marmăției (11%), Remeți (11.4%), Vișeu de Sus (11.5%), Ieud (11.8%), Bistra (12.2%), Moisei (12.7%), the number of LAU 2 included here being reduced in 2017, and Sighetu Marmăției, Vișeu de Sus and Moisei leaving this category and Sărăsău joining it.

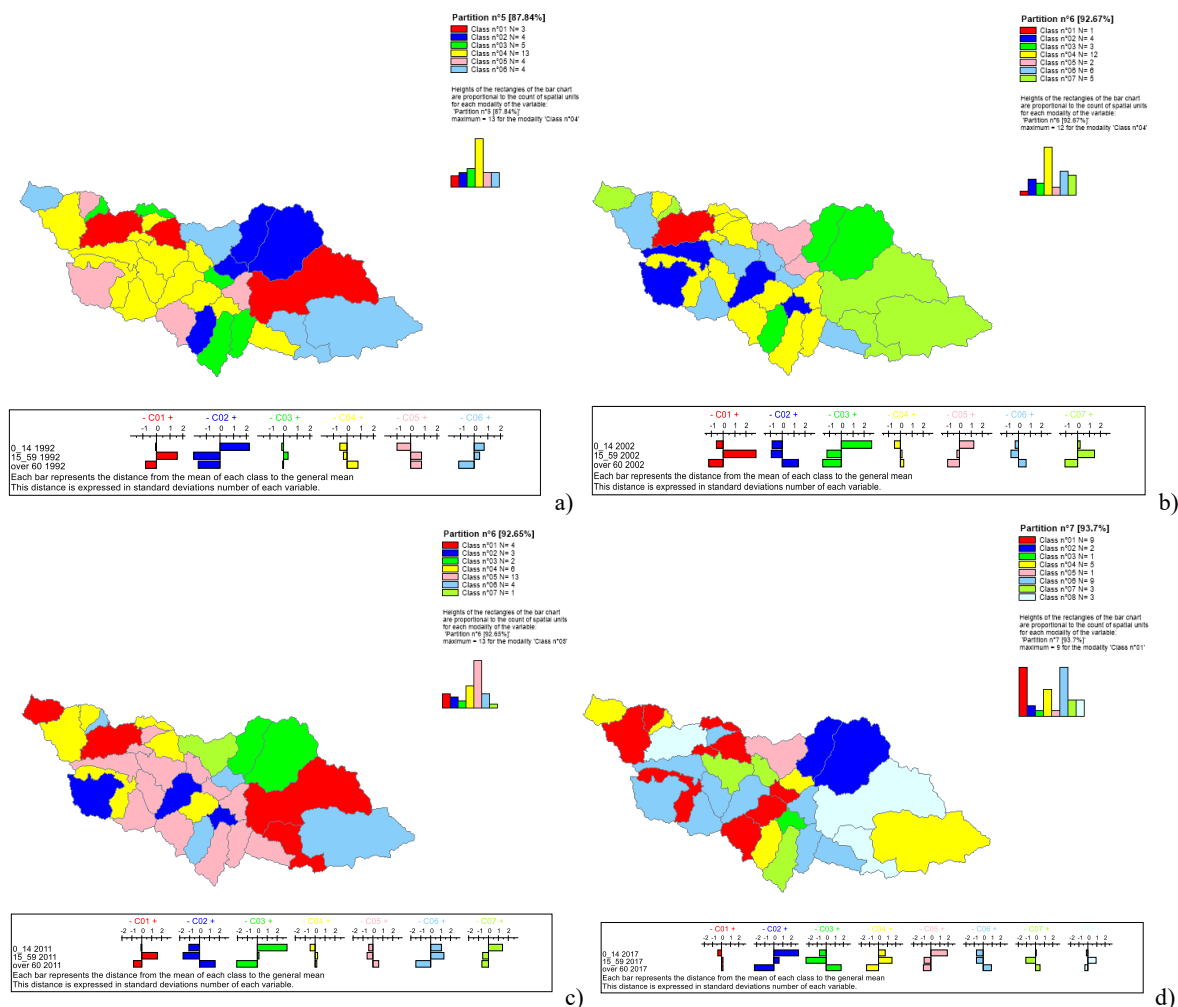


Fig. 4 – Evolution of the population by large age groups a) 1992, b) 2002, c) 2011, d) 2017.

All these arid figures demonstrate the fragility of the human potential of the regions often reminding of a past vitality. Stopping, or even reversing, migration flows could, best case scenario, positively change these trends, as is already the case in the Bucharest-Ilfov development area or in main Romanian cities. However, this strategic objective requires that social and economic policies be aimed at diversifying the job offer and increasing the quality of life.

Natural balance of population. If in the case of certain localities (Poienile de Sub Munte, Ruscova, Repedea, Bistra) the ethnic factor plays an important role in explaining the population's natural balance (the Ukrainian, which account for over 85% of the total population have a high live-birth rate, while in the case of Romanians and other ethnic minorities a rapid demographic decline is in effect) (Șerban, 2018), it is more difficult to explain the high live-birth rate in the case of Borșa and Ieud (Fig. 5). In the latter cases, external migration was significant (more than 400 people from Borșa and around 40 people from Ieud migrated abroad between 1994-2017, according to the National Institute of Statistics' (NIS) official data, but the number of migrants could, indeed, be much higher) and played an important role in improving the quality of life which was then reflected in an increased live-birth rate.

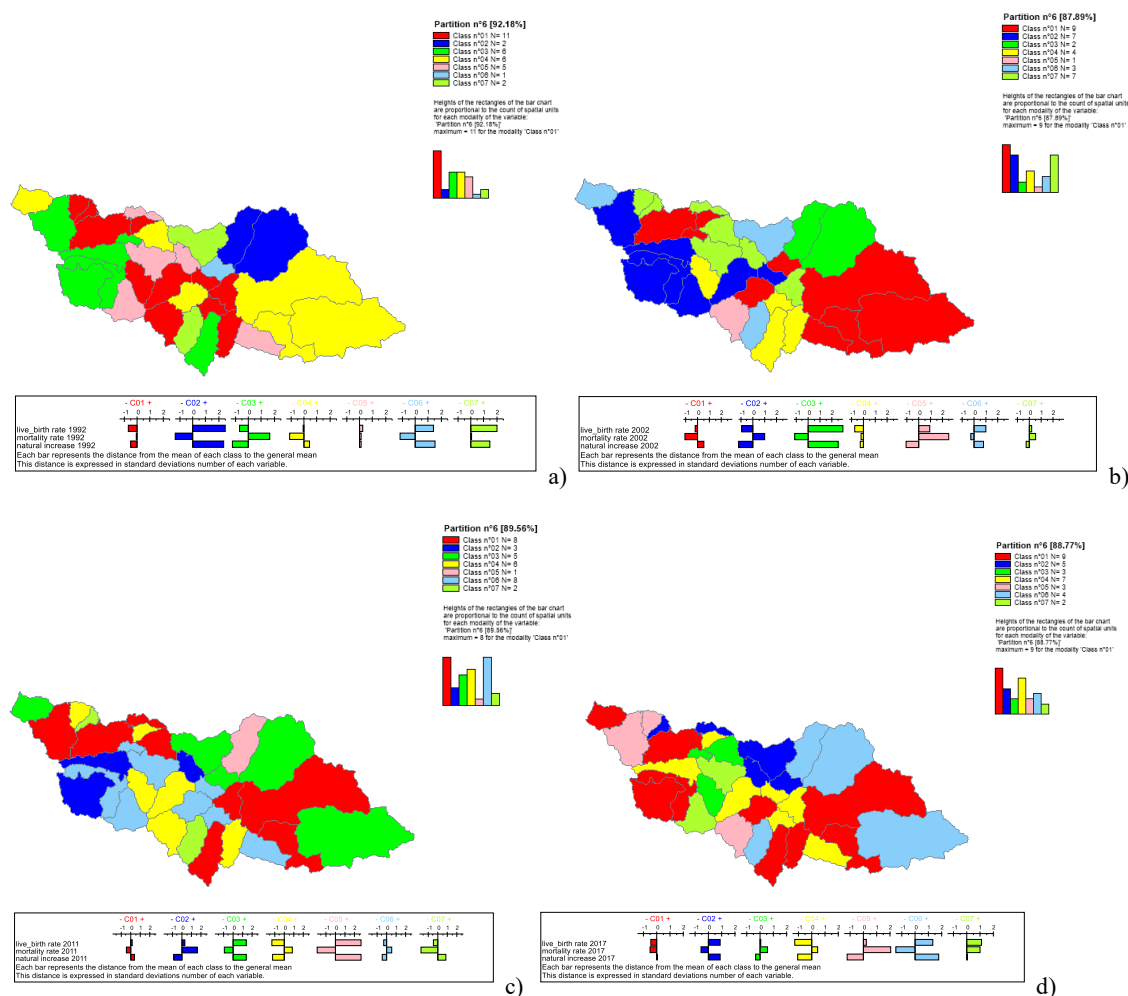


Fig. 5 – The evolution of natural balance of population
a) 1992, b) 2002, c) 2011, d) 2017.

Internal migratory balance. However, the Maramureş region is facing a negative migration balance and the people leaving are mainly, workers. During the 1990s the number of departures exceeded 3,000 people annually, and in the 2000s the migration movement slowed down, reaching 2,500 people annually. Nevertheless, the number of arrivals in the Maramureş area was less than the number of departures, around 1,500 people annually in the 1990s, and below 1900 people annually in the 2000s (Fig. 6).

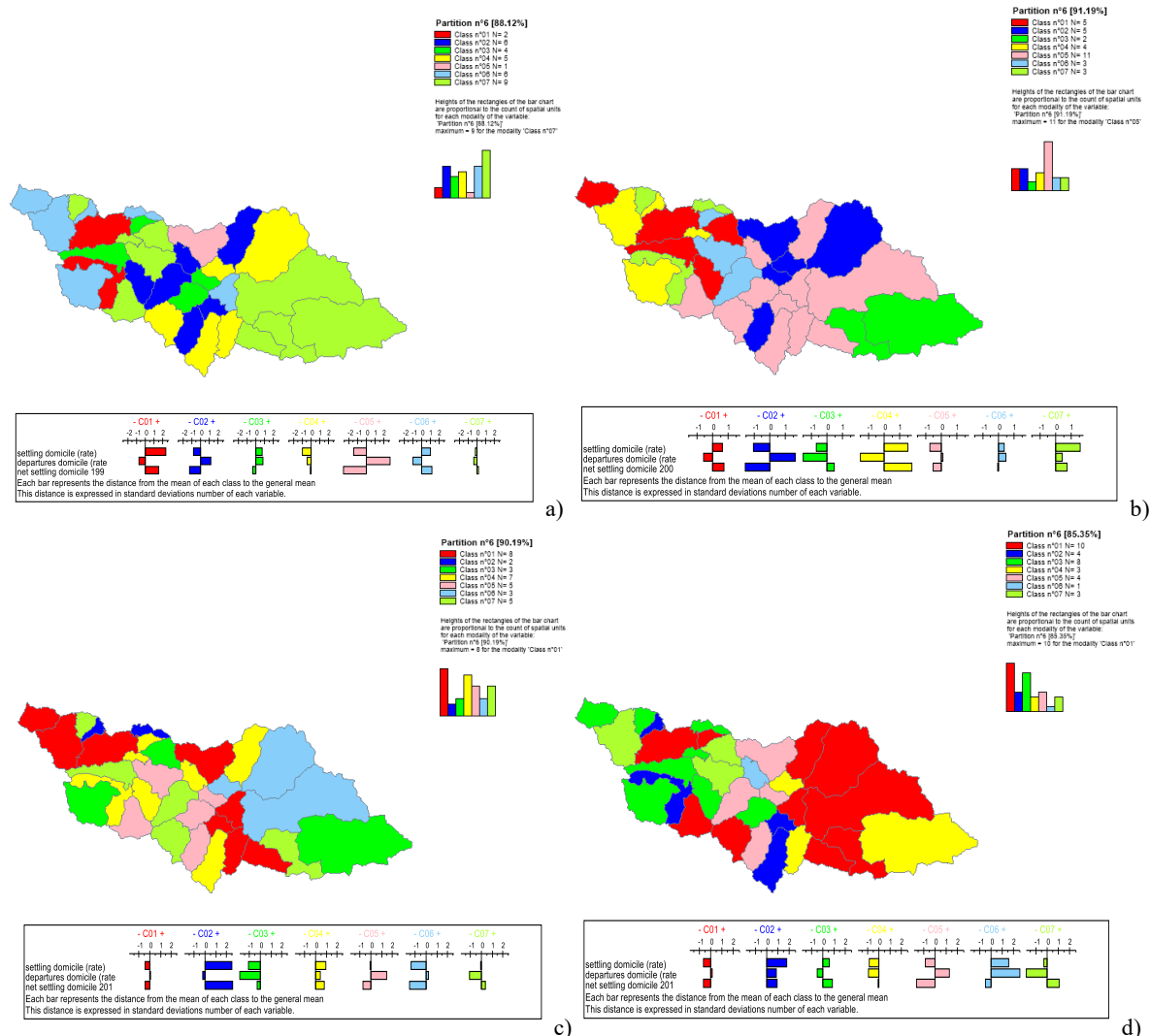


Fig. 6 – The internal migration a) 1992, b) 2002, c) 2011, d) 2017.

External migratory balance. According to the official data of NIS, the number of emigrants has been low, around 50–150 persons per annum (Fig. 7). However, the number of migrants is underestimated because there is no exact record.

Analyzing this situation from an economic perspective, we can conclude that the rural workforce has adapted to the current reality and has identified another way to cover the emerging needs. However, this change in the composition of the rural workforce has repercussions both on a local level and nationwide, stemming from a productivity decrease. The migration leads to the aging of the population in the rural area of Romania, and additionally, due to the migration of young people, it leads to the collapse of the agricultural economy by affecting the agriculture labor force. Although this workforce is oversized compared to that of other sectors, it is not proportionally distributed across the territory and is characterized, mainly, by the inappropriate use of the production factors that determine the inability to provide a source of income able to be relied on (Moraru and Munteanu, 2015).

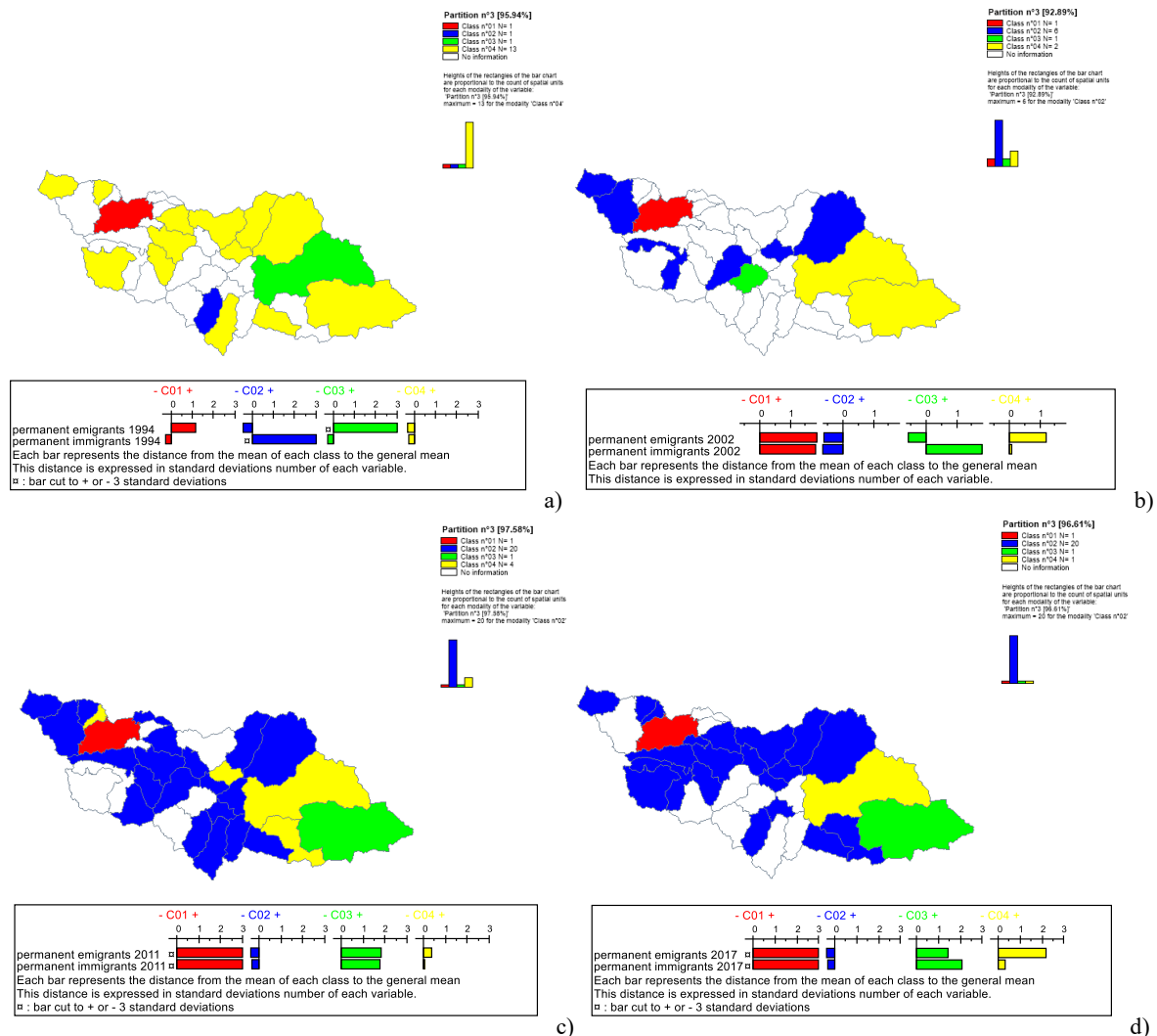


Fig. 7 – The external migration a) 1994, b) 2002, c) 2011, d) 2017.

In modern times, this type of migration occurs, invariably, from underdeveloped or developing regions to attractive or seemingly attractive economically developed regions, leading to large economic disparities (Moraru and Munteanu, 2015).

Spreading on a wider area relative to the urban region and, since it has the largest number of people working in agriculture, this feature only indicates a high level of latent unemployment and a decrease in labor productivity, with significant implications for imports. This is due to the fact that most people employed in this sector practice subsistence agriculture and, thus, it becomes a priority to supplement the little income that they obtain with funds from non-agricultural activities. An incentive for migration is the lack of qualification of those who practice agriculture, so it is very easy for them to decide to look for work elsewhere (Moraru and Munteanu, 2015).

The main factors for population decline in rural areas are the natural decline of the population, bolstered by a constantly decreasing birth rate and migration (Moraru and Munteanu, 2015).

Migrants are one of the most vulnerable groups on the labor market. They are often subject to tumultuous economic integration, marked by participation in segmented labor markets, which results

in job insecurity, lower wages, unemployment and so on (Anderson, 2010; Schierup *et al.*, 2015; Shelley, 2007). If we consider the lack of higher education (a common feature among migrants), the insecurity of migrants' work paths becomes much more problematic (Borjas, 1999). This lack of educational capital leads to a limited agency envisaged in this category of migrants. In this context, the employment trajectories of these migrants are expected to be a complex mix of regular jobs, unemployment and informal jobs (Vianello and Saccheto, 2016).

Migrants rely on informal networks (with emphasis on acquaintances) mainly for pragmatic reasons, while relationships with family and friends often include “mutual support, which is assured” (Malyutina, 2015).

Migration, however, has some positive aspects for Romania. First, it is a “safety valve” for excess workforce in some markets, which decreases the budgetary burden of unemployment incentives. Moreover, migrants move significant sums of money to Romania every year, which helps to reduce the current account deficit. It is estimated that the amount of capital inflow from emigrants is approximately \$2 billion/year, which is equal to or exceeds the annual amount of foreign investment in flowing into Romania. Another aspect is the acquisition of technology and the opportunity to set up a business in the country. Nowadays, however, the general tendency is to spend money on everyday needs (consumption and procurement of durable goods), and this fact may have an impact on inflation and the rise of foreign trade deficit due to the import of sustainable goods (Lăzăroiu *et al.*, 2003). Migration may increase people's financial autonomy and risk tolerance at the same time as increasing their reliance on partners or on state social services.

5. CONCLUSIONS

The recent evolution of population is influenced by migration flows, especially outside Romania. Even external migration is not entirely officially registered, and the effects are noticeable. The migration of the young population results in a fall in the live-birth rate and in a significant change in the natural balance of the population, the aging of the population and the shrinking of the labor force. Both the natural and the migratory balance seem to correspond, in their recent tendencies, with the evolution of the economic structures when analyzed at the same regional scale. The population has the greatest potential to stimulate the economic and social development of a country and must be one of the most important purposes in the country's development strategy. The population of a country influences the production system through the active population and determines to some extent the structure and volume of consumption. Simultaneously, the level and quality of productive activities and services influence the development trends of the population through the standard of living and the quality of life.

External migration takes place in Romania under different forms: emigration, temporary migration for work, the brain drain phenomenon and direct recruitment practiced by large foreign companies for their jobs, chain migration, supported by formal migration (especially at family level). Active persons want or are forced to leave the country, because the remuneration/salary is lower in Romania, compared to the developed countries. While this migration is good for the host countries, it leads to a decrease in population and an increase in the demographic aging of the country of origin (Romania, in this case), the most worrying aspect being the loss of human capital trained in Romania. Between 1992–2017, most of emigrants were between 18–40 years old, that is educated people, with a high work and creation potential and a “flexible” attitude with regards to finding a job. People who tend to migrate are usually young people able to work, who are looking for better jobs in a foreign country and a more attractive lifestyle. The ageing population causes the decrease of fertility and a negative natural balance.

The cause of emigration is, on the one hand, the failure of the Romanian economy to provide employment opportunities and, on the other hand, the reduced remuneration in comparison with developed countries, but also with the needs of the population, especially for young people. In this case, the restructuring of the mining activity was not achieved by finding economic activities that would determine the development of the region. Consequently, the unemployment rate increased and the population migrated to another country. The economic situation of other regions in Romania is quite similar.

Studies (Croitoru, 2018) have shown that, after returning to Romania, women tend to focus on continuing their education, while men were more eager to become entrepreneurs, so the migration experience encourages them to start a business. Also, the decision to return is presented as a complex process in which employment status, marriage and birth receive different degrees of importance according to gender.

Acknowledgements. The research for this paper was conducted under the research plan of the Institute of Geography at the Romanian Academy ('The Geographical Study on Population Dynamics in Romania' Research Project).

REFERENCES

- Anderson, Bridget (2010), *Migration, Immigration Controls, and the Fashioning of Precarious Workers*. Work, Employment and Society, **24** (2), pp. 300–317.
- Benzécri J-P. (1982), *Construction of a Hierarchical Ascendant Classification by searching in chain of reciprocal nearest neighbors*. Cahiers de l'analyse des données **7**(2), pp. 209–218
- Berry, B. J. L. (1968), *Theories of urban location*. Assn of Amer Geographers.
- Borjas, J.G. (1999), *Heaven's Door: Immigration Policy and the American Economy*. Princeton: Princeton University Press.
- Bruynooghe, M. (1977), *Novel methods for automatic classification of numerous taxonomic data*. Statistique et analyse des données, **2**(3), pp. 24–42.
- Croitoru, A. (2018), *Gendered Migratory Pathways: Exploring the Work Trajectories of Long-Term Romanian Migrants*. In Gender, Family, and Adaptation of Migrants in Europe (pp. 93–115). Palgrave Macmillan, Cham.
- Davoudi, S. (2009), *City-region*.
- Duranton, G., Puga, D. (2004), "Microfoundations of urban agglomeration economies", pp. 2063–2117 in Handbook of regional and urban economics: Volume II EDWorkIng paper 4, Cities and geography, eds. J.V. Henderson and J.F. Thisse. Amsterdam: Elsevier north Holland.
- Gáková, Z., Dijkstra, L. (2010), *Does population decline lead to economic decline in EU rural regions?*, Regional Focus, **1**, pp. 1–7. http://ec.europa.eu/regional_policy/sources/docgener/focus/2010_01_population_decline.pdf.
- Gheţău V., Damian, Nicoleta, Simion, Maria (2016), *Populaţia – dinamică şi structuri demografice*, In: Bălţeanu, D, Dumitraşcu, Monica, Geacu, S., Mitrică, Bianca, Sima, Mihaela (eds), *Romania. Natură şi Societate*, The Publishing House of the Romanian Academy, pp. 221–249.
- Guran-Nica, Liliana, Rusu, Marioara (2015), *The changing demographic profile of Romanian rural areas*. Agricultural Economics and Rural Development, New Series, **XII**(1), pp. 61–70.
- Hall, P. (2009), "Looking Backward, Looking Forward: The City region of the Mid-21 Century." Regional Studies, **43**(6), pp. 803–817.
- Kanbur, R., Venables, A. (eds.) (2005), *Spatial Inequality and Development*. Oxford: Oxford University Press.
- Kanbur, R., Venables, A.J., Wan, G. (2005), "Introduction to the Special Issue: Spatial Inequality and Development in Asia." Review of Development Economics, **9**(1), pp. 1–4.
- Krugman, P. (2011), "The new economic geography, now middle-aged", Regional Studies, **45**(1), pp. 1–7.
- Lazaroïu, S., Alexandru, M., Raduca, M., Boiciuc, N., Larionescu, A. (2003), *European Commission Project: "Sharing Experience: Migration Trends in Selected Applicant Countries and Lessons Learned from the New Countries of Immigration in the EU and Austria"*, Vol. – IV Romania, More "Out" than "In" at the Cross roads between Europe and the Balkans, International Organization for Migration.
- Malyutina, Darya (2015), *Migrant Friendships in a Super-Diverse City: Russian-Speakers and Their Social Relationships in London in the 21st Century*. Stuttgart: Ibidem-Verlag.
- McGee, T.G. (1989), "Urbanisasi or kotadesasi? Evolving patterns of urbanization in Asia", pp. 93–108, in Urbanization in Asia: Spatial dimensions and policy issues, eds. F.J. Costa, A.K. Dutt, and A.G. noble. Honolulu, HI: University of Hawaii Press.

- Mitlin, D., Satterthwaite, D. (2013), *Urban poverty in the global South: scale and nature*. New York: Routledge.
- Mitrică, Bianca, Damian, Nicoleta, Mocanu, Irena, Șerban, P., Săgeată, R. (2016), *Technical-urbanistic infrastructure in the Romanian Danube Valley. Urban vs. Rural territorial disparities*. *Geographica Pannonica*, **20**(4), pp. 242–253.
- Mitrică, Bianca, Persu, Mihaela Rodica, Mocanu Irena, Șerban, P., Grigorescu, Ines, Damian, Nicoleta (2019), *Changes in the Dynamics and Demographic Structure of the Romanian Rural Population: An Overview of the Post-communist Period*, in vol. *Three Decades of Transformation in the East-Central European Countryside* (editor Banski Jerzy), pp. 191–215, Springer, DOI: 10.1007/978-3-030-21237-7_9.
- Moraru, A., Munteanu, R. F. (2015), “*Workforce deruralization*” – a consequence of migration with implication over agriculture. *Agronomy Series of Scientific Research/Lucrări Științifice, Seria Agronomie*, **58**(2).
- Nancu, Daniela (2016), *Satul – Dezvoltare teritorială și tendințe socio-demografice*, In: Bălțeanu, D., Dumitrașcu, Monica, Geacu, Sorin, Mitrică, Bianca, Sima, Mihaela (eds), *Romania. Natură și Societate*, The Publishing House of the Romanian Academy, pp. 292–328.
- Pooley, C.G., Turnbull, J. (2000), “*Migration and urbanization in north-West England: A reassessment of the role of towns in the migration process*”, pp 186–214, in *Migration, mobility and modernization*, ed. D.J. Siddle. Liverpool: Liverpool University Press.
- Ravallion, M., Chen, S., Sangraula, P. (2007), *New evidence on the urbanization of global poverty*, World Bank Policy research Working Paper. Washington: World Bank.
- Reich, R. (1993), *L'économie mondialisée*.
- Schierup, Carl-Ulrik, Aleksandra, Alund, Branka Likic-Brboric (2015), *Migration, Precarization, and the Democratic Deficit in Global Governance*. *International Migration* **53** (3), pp. 50–63.
- Șerban, P.-R., Tălângă, C. (2015), *Is social resilience an economic structure issue or just the ability of communities to cope with external stress?*, *Journal of urban and regional analysis*, **7**(1), pp. 59–68.
- Șerban, P.-R (2018), *Ethnical structure dynamics of Maramureș Region (Romania)*, *Rev. Roum. Géogr./Rom. Journ. Geogr.*, **62**, (1), pp. 115–125, Bucharest.
- Shelley, Toby (2007), *Exploited: Migrant Labour in the New World Economy*. London: Zed Books.
- Spence, M., Annez, P.C., Buckley, R.M. (eds.) (2009), *Urbanization and Growth*. Washington: World Bank.
- Storper, M. (2013), *Keys to the city: how economics, institutions, social interactions, and politics shape development*. Princeton, NJ: Princeton University Press.
- Strange, W.C. (2008), “*Urban agglomeration*”, In *The New Palgrave Dictionary of Economics*, eds S.N. Durlauf and L.E. Blume. Basingstoke: Palgrave Macmillan.
- Tacoli, C. eds. (2006), *The Earth scan Reader in Rural Urban Linkages*. London and Sterling, VA: Earthscan.
- Tacoli, C., Mabala, R. (2010), “*Exploring mobility and migration in the context of rural-urban linkages: why gender and generation matter*”, *Environment and Urbanization*, **22**(2), pp. 389–395.
- Thrift, N.J. (1995), *A hyperactive world*.
- Vianello, Francesca Alice, Devi, Saccheto (2016), *Migrant Workers' Routes to the Informal Economy During the Economic Crisis: Structural Constraints and Subjective Motivations*. *Prakseologia*, **158**, pp. 299–321.
- <http://www.primariaborsamm.ro>, *Strategia de dezvoltare a orașului Borșa – Maramureș*, 2016.
- <http://www.primaria-sighet.ro>, *Strategia de Dezvoltare Urbană (SDU) a municipiului Sighetu Marmației*, 2017-2023.

Received January 20, 2020