

ANALYSIS OF POPULATION TRENDS IN ROMANIA. CASE STUDY - ANALYSIS OF THE RURAL POPULATION IN THE SUBURBAN AREAS OF TIMIȘOARA MUNICIPALITY

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Abstract

In this paper, the authors analyzed the demographic evolution, given that, currently, our country's population, especially the rural is in a constant decline and in an aging process. The decrease is due to the declining birth rates and to the young people external migration. Another big part comes from the massive reduction in birth rates, although any aspect of migration is not negligible either, because those who have gone probably will not return back, accelerating the effects of the decline in births. The research methodology used was based on study of resources and documents and also on analysis and synthesis of the information on population evolution in our country. At the end of the paper, the authors founded that the persistence of an aging population, due to the decrease of it, has dramatic consequences over the fewer active people, which will have to maintain more inactive ones, and is a threat for any social protection system.

Key words: population, evolution, rural, demographic

INTRODUCTION

In the last decades, most of the European countries have experienced a worrying demographic phenomenon, having the main characteristics of declining birth rates and an aging population. Romania is no exception to the trend registered in Europe, the last decades being marked by a continuous and significant population decline.

The changes that have occurred in the dynamics of the population are the direct result of the trends registered in the demographic phenomena which establish the number and the structure of the population: birth rate, mortality and migration. [5,2]

External migration is a demographic phenomenon whose evolution depends directly on the level of economic development of a country. As long as there is an economic gap between our country and developed countries, the phenomenon of emigration will not diminish. The possibilities to mitigate the negative consequences of emigration are the economic growth and creating jobs with

attractive salaries in Romania.

The economic-financial crisis reflects a strong interdependence between the change in the economic conditions and the development of unemployment among youths. [1]

Mortality is another component which has a high contribution to the population decline, although with a downward trend, remained relatively high in Romania, in comparison with developed countries, the big differences being seen especially on certain age categories (like 0-5 years) and on specific causes of death in areas where there is potential for improvement.

Birth rate, another component of population dynamics, recorded in last years a slight recovery after the decline of the '90s, although it still maintain a negative growth of the population. [8]

External migration and mortality can not contribute significantly in short and medium terms at the regression of the demographic decline in Romania, but the birth rate remains the only component that can work with

effective results, visible on short-term and with positive and lasting effects.

MATERIALS AND METHODS

For the analysis of the demographic trend were analyzed the following indicators: the total population structure by area, by age range and population movement indicators such as: birth rate, mortality and migration. The logical study route started with the study of an analysis of the population evolution in Romania, with its evolving structure by sex, age range and area of residence, followed by an analysis of human potential employed in the agriculture.

At the end of the paper it was analyzed the evolution of the rural population during 2002-2012 in rural areas of Timișoara Municipality. The analyzed data were processed using tables and charts, with the analysis program Microsoft Excel, for a quantitative analysis

RESULTS AND DISCUSSIONS

Romania recorded in the period 2002 - 2011 the most drastic population decline across the European Union.

Table 1. Evolution of the population of the EU

Crt. Nr.	Country	Population		Variation (%)
		2002	2011	
1	Romania	21,680,974	19,042,936	-12.00
2	Lithuania	3,475,586	3,244,601	-7.00
3	Bulgaria	7,891,095	7,504,868	-5.00
4	Latvia	2,345,768	2,229,641	-5.00
5	Estonia	1,361,242	1,340,194	-2.00
6	Greece	10,968,708	10,787,690	-2.00
7	Hungary	10,174,853	9,985,722	-2.00
8	Germany	82,440,309	81,751,602	-0.80
9	Poland	38,231,000	38,186,860	-0.10
10	Slovakia	5,378,951	5,379,455	0.01
11	Slovenia	1,994,026	2,011,473	0.90
12	Czech Republic	10,206,436	10,532,770	3.00
13	Finland	5,194,901	5,375,276	3.00
14	Netherlands	16,105,285	16,655,799	3.00
15	Portugal	10,329,340	10,636,979	3.00
16	Austria	8,063,640	8,404,252	4.00
17	Denmark	5,368,354	5,560,628	4.00
18	UK	59,216,138	62,435,709	5.00
19	Belgium	10,309,725	10,951,665	6.00
20	France	61,424,036	65,075,373	6.00
21	Italy	56,993,742	60,626,442	6.00
22	Malta	394,641	417,617	6.00
23	Sweden	8,909,128	9,415,570	6.00
24	Spain	40,964,244	46,152,926	13.00
25	Cyprus	705,539	804,435	14.00
26	Ireland	3,899,702	4,480,858	15.00
27	Luxembourg	444,050	511,840	15.00

Source: Own processing after Econtext
 www.old.econtext.ro

From 21,680,974 inhabitants in 2002 and up to 19,042,936 inhabitants in 2011, (namely, a decline of 12%), it was the most brutal decline in the EU. [11]

The resident population of Romania on 1 January 2013 was 20,020,074 inhabitants, of which 9.7 million men (48.8 %) and 10.2 million women (51.2 %).

The population diminishing in 2010-2013, with 226,700 people, was caused by negative values of the natural growth, combined with the balance of the external migration. (Figure 1)

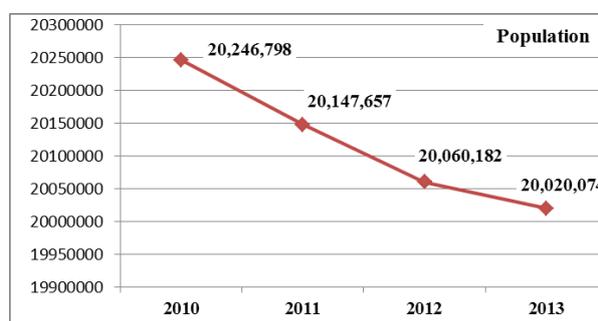


Fig. 1. Evolution of the population in Romania
 Source: Own processing after Statistical Breviary, Romania in figures 2014

During the analysis of the age structure of the population was found an accentuated aging process, marked mainly by the declining birth rates, which has reduced the absolute and relative number of young population (0-14 years) and the increase of the elderly population (60 years and over). In 2013, compared to 2010, it stands out the decrease of the share of young population (0-14 years) from 15.8 % to 15.7 % and the growth of the senior population (60 and over), from 22.3 % to 22.8 %.

The adult population (15-59 years) represents 61.5% of the total population, decreasing by 219 thousand people compared to 2010. In the adult population, it increased the share of age groups: 25-29 years, 35-39 years, 45-49 year, 55-59 years and it decreased in the age groups of 15-19 years, 20-24 years, 30-34 years, 40-45 years and 50-54 years. (Figure 2)

Romania's population has a high level of rurality [6], respectively 46.1% in 2013. (Figure 3)

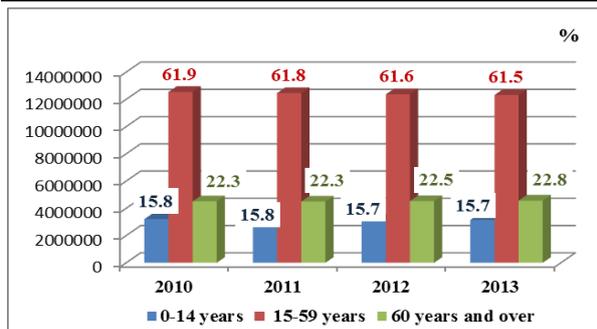


Fig . 2. Population evolution by age range

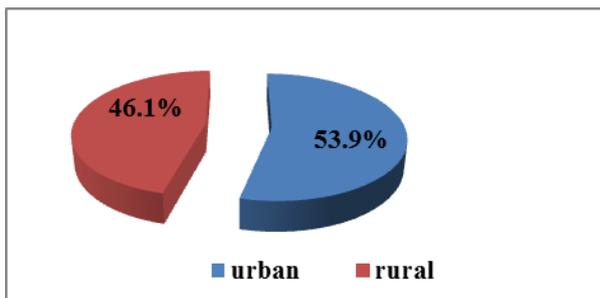


Fig . 3. Population structure by residence areas, 2013

In 2013, the number of alive newborn babies residing in Romania was of 176.0 thousand, (lower by 4.7 thousand compared to 2012). In 2013, 246.8 thousand people residing in Romania died, (with 6.9 thousand fewer individuals than in 2012). (Figure 4)

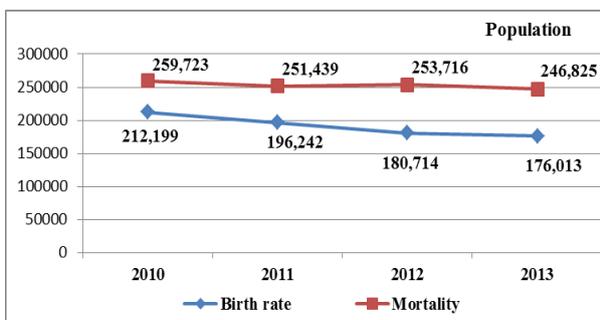


Fig . 4. Evolution of births and deaths in Romania's population

Source: Own processing after Statistical Breviary, Romania in figures 2014

In 2013, 350.6 thousand people have moved in the country. As in the previous year, urban migration flows (in rural and in urban) have the largest shares in the structure of the internal migration. (Table 2)

In 2010-2012, the number of people who established their residence abroad, increased from 7,906 in 2010 to 18,001 people in 2012. (Figure 5)

Table 2. Internal migration

Specification	2010	2011	2012	2013
Total	458,995	324,626	372,197	350,556
From rural to urban	96,201	66,784	74,470	74,023
From urban to urban	140,301	97,235	106,724	108,370
From rural in rural	89,441	635,94	72,620	65,453
From urban to rural	133,052	97,013	118,383	102,710

Source: Own processing after Statistical Breviary, Romania in figures 2014

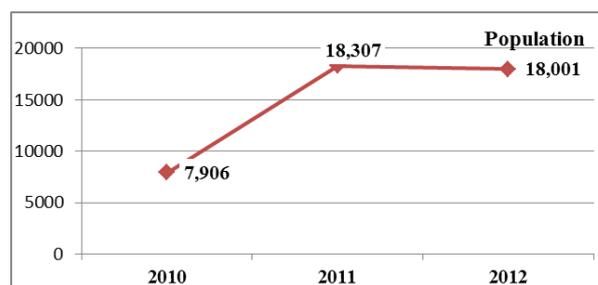


Fig. 5. Evolution of external migration

Source: Own processing after Statistical Breviary, Romania in figures 2014

At the level of 2012, the migration flows were orientated mainly to Spain (4,605 people), Israel (2,290 people), Italy (2,097 people). (Figure 6)

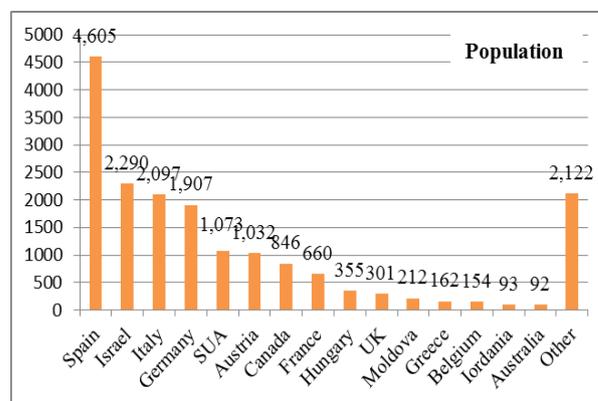


Fig. 6. The migration flows, 2012

Regarding the population structure by age groups who immigrated, it can be seen that the age group 18-40 years is the largest, respectively 9,572 people. (Figure 7)

In the context of the economic transition, the labor market in Romania has undergone significant changes in the volume and structure of the main indicators of labor. This process was characterized by the decrease of the active population and employed population, and by maintaining the

unemployment rate at relatively constant values.

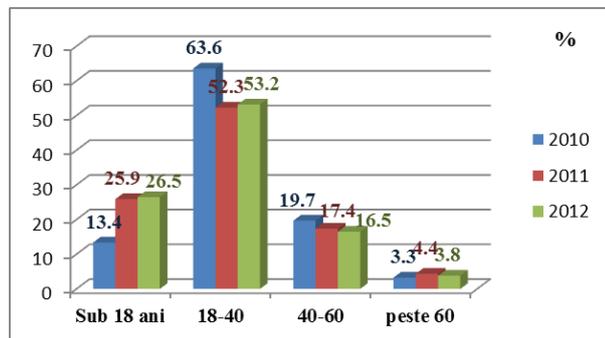


Fig. 7. The population structure by age groups who immigrated

The financial crisis, when started in the second half of 2008, had negative effects on the structure of the workforce, causing at the same time the reduction of employed population and also the growth of unemployment. If during the last half of the '90s, the active population remained at high levels (over 11 million people), the new millennium began with a significant decrease of the value indicator. Later in 2002, the employed population fluctuated around 10 million.

In 2013, the active population numbered 9.977 million people, 96.4% of which belonged to the working age group 15-64 years. [9]. (Table 3)

Table 3. The active population, employment and unemployment

Specification	2010	2011	2012	2013
Active population - total	9,965	9,868	9,964	9,977
Women	4,416	4,411	4,418	4,409
Men	5,538	5,563	5,553	5,552
Employed population - total	9,240	9,138	9,263	9,247
Women	4,128	4,112	4,137	4,119
Men	5,032	5,072	5,078	5,058
Unemployed ILO - total	725	730	701	730
Women	288	299	281	290
Men	506	491	475	494

Source: Own processing after Statistical Breviary, Romania in figures, 2014

After a continuous growth recorded in 2005-2008, from 2009 the employed population began to decline, reaching in 2011 the lowest recorded value (9,138 thousand people). In 2013, the employed population was of 9,247 thousand people, in decrease from the

previous year (9,263 thousand people). Of the employed individuals, 55.5% were men. Until 2002, the majority of the employed population was rural. Since 2003, most of the employed population resides in urban areas, respectively 54.7% in 2013. The employees category prevail among the employed population, respectively 67.8% in 2013.

In Romania, the share of the active population employed in agriculture has been quite stable until 1990, with about 3 million people employed in this area. Structural economic reforms and the deconstruction of the Agricultural Production Cooperatives of the early '90s led to a drastic increase in labor force employed in agriculture. The labor force in rural areas is occupied mainly in the agricultural sector, which is one of the major constraints of the country's economic development.

The share of the agricultural population of the total rural population has increased significantly since 1990 when it was 28.8%, to 35% in 2000, after which decreased slightly in 2002 to reach 29.7% and 28.8% in 2010. (Table 4)

Table 4. Evolution of the human potential in Romania

Year	Total population (thousand)	Employment of rural population (% of total population)	Employment in agriculture (% of rural population)	Employment in agriculture (% of total population employment)
1990	23,207	45.7	28.8	28.2
1991	23,185	45.9	29.3	28.9
1992	22,789	45.7	32.2	32.1
1993	22,755	45.5	34.2	35.2
1994	22,731	45.3	43.6	35.6
1995	22,681	45.1	31.2	33.6
1996	22,608	45.1	31.9	34.6
1997	22,546	45.0	33.4	37.5
1998	22,503	45.1	33.0	38.0
1999	22,458	45.2	34.1	41.2
2000	22,435	45.4	35.0	40.8
2001	22,408	45.4	34.4	40.4
2002	21,795	46.7	29.7	36.3
2003	21,733	46.6	28.4	39.5
2004	21,673	45.1	27.0	31.6
2005	21,624	45.1	27.4	32.1
2006	21,584	44.8	26.0	30.5
2007	21,538	44.9	25.5	29.5
2008	21,504	45.0	24.9	25.7
2009	21,469	44.9	25.0	26.1
2010	21,431	44.9	28.8	30.0
2011	21,354	45.1	27.1	28.6
2012	21,316	45.2	27.8	28.9

Source: Own processing after Statistical Breviary, Romania in figures 2013

Approximately the same evolution had also the share of population employed in agriculture from the total employed population, which increased from 28.2% (1990) to 40.8% in 2000 and decreased slightly, representing 39.5% in 2003 and 30% in 2010, and decreasing to 28.9% in 2012.

The labor force employed in agriculture follows the general trend of the countries with economies undergoing modernization, the trend of absolute and relative reduction. The phenomenon of diminishing the number of labor resources employed in agriculture, practically began after cooperativization, and knew an increasing intensity especially after 1965.

The labor force from the agricultural sector began in 1990 to have a tendency - the reverse of the normal - of growth, from 28.2 % in 1990 to 40.8% in 2000, then decreased slightly, reaching 28.9 % in 2012.

Employment growth in agriculture was determined not so much by the needs of agriculture, but mostly due to the workforce layoffs in other sectors of the economy. [8].

The share of employment in agriculture in Romania is much higher than the average in the EU 28, although the trend is downward. (Figure 8)

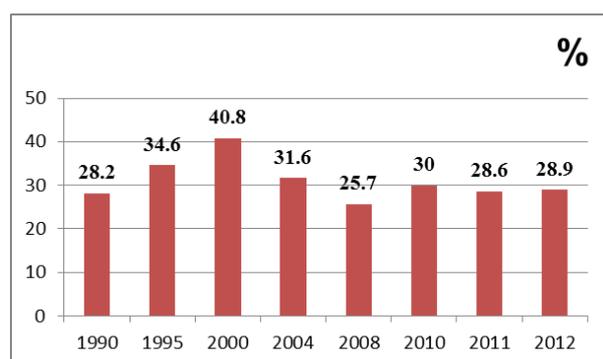


Fig. 8. The share of employment in agriculture in total employment

Case Study - Analysis of the rural population in the suburban areas of Timișoara Municipality

The population decline was also manifested in the rural population, and the process will continue at a moderate pace, according to demographic forecasts. The main factors of the decreasing population in the rural areas

are nationally the same: negative natural increase and migration. However, currently, in the suburban areas of the major cities, was recorded a growth of the population due to the migration phenomenon of urban population, and not only, to those areas.

The paper presents the trend of the rural population during 2002-2012 in suburban areas of the Timișoara Municipality.

Timișoara is a city which always represented an important pole of labor to other regions with demographic excess, particularly for counties from northern Moldova, from northwestern Transylvania and southern Oltenia (Mehedinți county). To this phenomenon, contributed, first, its economic dynamism and the fact that, traditionally, the natural demographic balance in Timiș county is negative, both in urban and in rural areas.

The internal demographic dynamics regression was this way compensated by migratory flows from the mentioned regions, attracted by the economic potential and by the civilization model offered by Banat region, and especially by the polarizing center of it, Timișoara.

Timișoara, as a growth pole, has an administrative-territorial cover, as follows: Timișoara - *an urban center* and its area of influence and *14 administrative units of rural localities*: Becicherecu Mic, Bucovăț, Dudeștii Noi, Dumbrăvița, Ghiroda, Giarmata, Giroc, Moșnița Nouă, Orțișoara, Pișchia, Remetea Mare, Săcălaz, Sînmihaiu Român, Șag. [10]

Analyzing the rural population around Timișoara, the authors discovered that urbanistic influence of the city is felt selective: stronger on villages in the immediate vicinity, such as: Dumbrăvița, Giroc, Ghiroda, then less intense on: Moșnița Nouă and Sănanđrei, and limited in the villages as: Sănmihaiu Român, Dudeștii Noi, Săcălaz or Șag.

Therefore, we can say that in the rural areas of the north, east and south-east of Timișoara is a clear dynamic pace of demographic growth and a remarkable urban renewal. In the western area, on the axes Sănnicolau Mare, Jimbolia and Moravia, the developments are slower but sustainable.

Table 5. Localities network around the Timișoara municipality. (Growth pole Timișoara)

Crt. Nr.	Localities	Population	
		2002	2012
1	Timișoara city	317,660	306,466
2	Becicherecu Mic	2,417	2,834
3	Dudeștii Noi	2,395	2,890
4	Dumbravița	2,693	5,555
5	Ghiroda	4,907	5,802
6	Giarmata	5,407	6,456
7	Giroc	4,295	7,484
8	Mosnița Nouă	4,298	5,810
9	Orțișoara	4,080	4,337
10	Pișchia	3,006	2,958
11	Remetea Mare	2,111	2,174
12	Bucovăț	1,410	3,353
13	Săcălaz	6,273	7,728
14	Șag	4,506	2,976
15	Sînmihaiu Roman	4,396	6,065

Source: Own processing after the Timiș Department of Statistics, 2002 and the Localities Sheets on the year 2012, www.cjtimis.ro

Currently, we find that in the closest rural area to major cities was recorded an increase in population, while in the distant localities of the city is met the phenomenon of population decline. In remote areas predominate the population over 60 years, while the birth rate is low and in time, their tendency will be of depopulation.

CONCLUSIONS

- Romania is facing drastic declines in the population numbers, the main reasons being decreasing the birth rates and increasing external migration.
- The persistence of a phenomenon of aging population, due to decreasing population has a dramatic consequence over the fewer active people who will have to maintain more inactive people, which is a threat to any social protection system.
- The negative effects of aging process on the development of economic and social life, and also on future demographic trends, are visible but will deteriorate even more, causing disturbances at the level of school population, of fertile population, of working age population and of elderly population.
- There is an expansion on rural areas surrounding the city.
- The economic crisis and unemployment have slowed down the migration to cities, but

increased external migration.

- Currently, half of the rural communities (the periurban) are in the process of revitalization, and the other half continue to lose population.
- The disparity continues to widen between the villages located in attraction areas of a city or those who are in the vicinity of an industrial center, and the poor rural areas where demographic and economic decline continues.

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