

DEMOGRAPHIC ANALYSIS OF THE BUCHAREST-ILFOV REGION

Ruxandra Florina TEODORESCU, Valentina Constanța TUDOR

University of Agricultural Sciences and Veterinary Medicine, Bucharest, Romania, Faculty of Management, Economic Engineering in Agriculture and Rural Development, Management and Marketing Department, 59 Marasti Boulevard, 011464, District 1, Bucharest, Romania, Phone: 021 318 2888, Emails: ruxandra.teodorescunndkp.ro, valentina_tudor@yahoo.com

Corresponding author: valentina_tudor@yahoo.com

Abstract

Demographic studies are key programs and development strategies needed for economic and social development. The purpose of the present paper is to carry out a study of research, based on analysis and of interpretation of statistical data provided mainly by the Romanian National Institute of Statistics, corroborated of course with theoretical aspects that allowed the evaluation of regional information on population structure in Bucharest-Ilfov. The population of the Bucharest-Ilfov region totaling a number of 2,301,255 inhabitants in 2018 is distributed inversely proportional to the size of the two administrative entities namely Bucharest, which is the capital of Romania and Ilfov County. Bucharest is the largest urban agglomeration in Romania, and has a population of 1,827,810 inhabitants, which represents about 80% of the region's population, the equivalent of more than 17.4% of the country's urban population, or about 12% of the total population of Romania, having a density of approximately 7,679.87 people / km².

Key words: Bucharest-Ilfov region, population, demographic study, demographic projection

INTRODUCTION

As in other areas of statistics, in the field of population statistics have made changes and transformations, both in terms of the system and the content of indicators used in practice [11].

Making demographic studies represents key programs and development strategies needed for economic and social development. Such a regional study is used to define and develop sectoral options and programs in the economic, social, educational, health, transport, tourism, etc.

The pronounced decline of the population due to its aging, the decrease in fertility and the presence of migration are demographic phenomena registered in all developed countries. According to statistics, these phenomena will intensify in the coming period and will generate multiple effects on society.

In order to substantiate economic and social development programs it is necessary to know the evolution of labor resources and labor force analysis is very important because is impacting these phenomena and at the same

time they must be brought to the attention of policy makers in order to prevent the negative effects of these demographic processes.

The purpose of the draw up of this paper is, based on data provided by the National Institute of Statistics, the regional evaluation of the population information in the Bucharest-Ilfov region.

MATERIALS AND METHODS

The data was collected through public institutions, including the National Institute of Statistics and Statistics of Ilfov County.

The study was of research, analysis and interpretation of statistical data. This, combined with extracts from theoretical literature, allowed the evaluation of regional information on population structure in Bucharest-Ilfov.

RESULTS AND DISCUSSIONS

Composed from Bucharest - the capital of Romania - and Ilfov County, the Bucharest-Ilfov region is located in the south, in the central part of the Romanian Plain, about 100

km south of the Carpathian Mountains, 200 km from the sea and 60 km away from the Danube [5]. This region is atypical to the other 7 regions of Romania, Bucharest being surrounded by Ilfov County, [2] and the two parts of this region (Bucharest, Ilfov County) have very different characteristics.

With a total area of 1,821 square kilometers, of which Bucharest occupies 13.1%, and Ilfov County 86.9%, the Bucharest-Ilfov

development region borders the South-Muntenia region, being surrounded by this region in all the cardinal points. [1] Bucharest and Ilfov County are the smallest territorial administrative units in Romania in terms of area [9].

In the Bucharest-Ilfov region there is a landscape where the valleys of rivers crossing the region intersect the numerous natural and artificial lakes [6].

Table 1. Overview of the population and area of the Bucharest-Ilfov region

	Bucharest-Ilfov region	Bucharest	Ilfov County
Surface (km ²)	1,821	238	1,583
Population	2,301,255	1,827,810	473,445
Population density	1,263.73	7,679.87	299.08
Urban population (%)	88.66	100	44.88
Rural population (%)	11.34	0	55.12
Population by gender and urban-rural environment			
Male	1,080,888	849,227	231,661
Female	1,220,367	978,583	241,784
Both sexes - Urban	2,040,308	1,827,810	212,498
Male	952,104	849,227	102,877
Female	1,088,204	109,621	978,583
Both sexes - Rural	260,947	0	260,947
Men	128,784	0	128,784
Female	132,163	0	132,163

Source: National Institute of Statistics - TEMPO-Online, Accessed on 04.2019 [8].

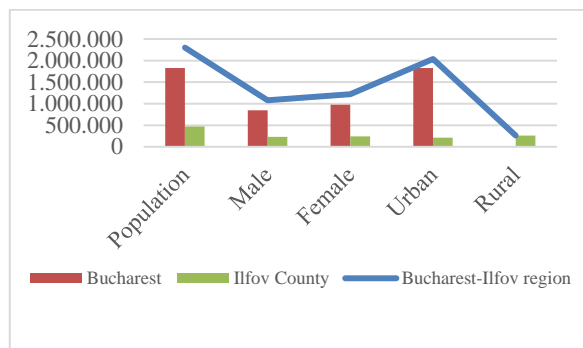


Fig. 1. Distribution of population in the region by number, gender and residence area

Source: National Institute of Statistics - TEMPO-Online, Accessed on 04.2019 [8].

The Bucharest-Ilfov region had a population equal to 2,301,255 people in 2017, which were distributed inversely proportional to the surfaces of the two administrative entities, [3] because although the Bucharest Municipality has a smaller area than Ilfov County, it is the largest urban agglomeration in Romania, its population being 1,827. 810 inhabitants (representing 79.42% of the total population of the Bucharest-Ilfov region, 17.4% of the

urban population of Romania and over 12% of the country's total population) having a density of over 7,679.87 inhabitants / km².

The population of Ilfov County equals 467,080 inhabitants (20% from the Bucharest-Ilfov region), and the county's density is 295 inhabitants per km².

Table 2 provides information on population trends over the period 2013-2018 in population distribution by age group.

It can be noticed that, during the analysed period, the number of the population registered increases, especially between 2013-2016, the year 2017 being distinguished by the fact that the number of the population registered decreases.

Regarding the distribution of the population by age groups, both at the level of the group 0-14 years and at the level of the group over 60 years, there have been increases, while at the level of the group 15-59 years, starting with the reference year, respectively the year 2013 saw continuous decreases.

Table 2. Population by age group, in Bucharest-Ilfov Region, year 2018

Years	Number of people	Age groups		
		0-14 years	15-59 years	Over 60 years
2013	2,282,244	305,828	1,512,012	464,404
2014	2,283,413	310,140	1,496,772	476,501
2015	2,284,443	317,316	1,477,802	489,325
2016	2,288,203	323,948	1,461,591	502,664
2017	2,287,347	331,784	1,443,687	511,876
2018	2,301,255	340,857	1,437,015	523,383

Source: National Institute of Statistics - TEMPO-Online, Accessed on 04.2019, [8].

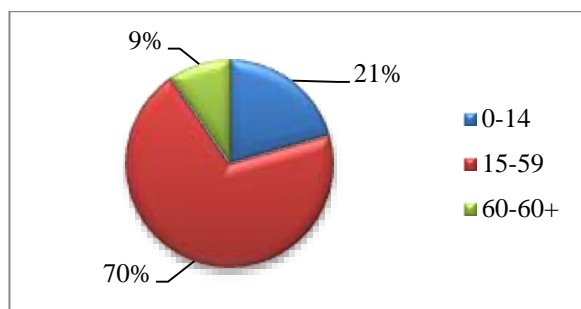


Fig 2. Distribution of population by age group in the Bucharest-Ilfov region in 2018

Source: National Institute of Statistics - TEMPO-Online, Accessed on 04.2019 [8].

Although the population of Romania is in continuous numerical decline, [12] a process that has been installed after 1990, as a result of the change in the demographic policy existing at that time and the population growth rate, characterized by a continuous

decrease after the 1977 census, the population registering more and more negative values from 1992 [11], in the period 2013-2018, with respect to the population of the Bucharest-Ilfov region, classified by age group, we can observe that, contrary to the general trend of decrease of the population in the rest of the country, there is an increase of 0.8% in the Bucharest-Ilfov Region.

Even if it shows an upward trend, the population of the Bucharest-Ilfov region rising in each of the six years analyzed, the fact that the population aged 60 years and over is the largest, increasing in 2018 compared to 2013 with over 12.7%, leads to the aging phenomenon of the population, [4] present both at national level and at the level of the whole European Union.

Table 3. Movement of internal migration with the change of residence in Bucharest-Ilfov Region

	2012	2013	2014	2015	2016	2017
Bucharest-Ilfov region						
Arrivals	69,790	66,322	71,763	69,430	75,720	87,299
Departures	65,852	67,013	63,695	57,499	62,283	61,143
Balance of internal migration	3,938	-691	8,068	11,931	13,437	26,156
Bucharest						
Arrivals	52,383	49,539	52,271	49,463	52,979	64,645
Departures	60,900	62,198	57,745	51,074	55,060	53,172
Balance of internal migration	-8,517	-12,659	-5,474	-1,611	-2,081	11,473
Ilfov County						
Arrivals	17,407	16,783	19,492	19,967	22,741	22,654
Departures	4,952	4,815	5,950	6,425	7,223	7,971
Balance of internal migration	12,455	11,968	13,542	13,542	15,518	14,683

Source: National Institute of Statistics - TEMPO-Online, Accessed on 04.2019 [8].

The number of people aged 0 to 14 also increases by more than 11.45%, but the total number of people aged 15-59 is less than 5% lower. Due to these fluctuations in the number of registered persons over the analyzed period, we can say that, although the population has a positive trend, the aging of the population is more significant than the increase in the birth rate and the segment of

young people, [7] so that all will lead to a demographic decline.

The phenomena emerging from the analysis of the data in Table 2, respectively the aging of population through increased life expectancy and the decrease in the birth rate, are two different processes.

These cumulate with the decrease of the sector of people paying contributions to the

state lead slowly but surely to the migration of the population to other states.

Romania continues to be a country of emigration, the phenomenon of emigration being the second main cause of the country's population decline. The balance of international migration in 2017 was negative, the number of migrants exceeding the number of immigrants with over 53 thousand people.

[8]

Regarding the demography of the Bucharest-Ilfov region, migration plays a very important role, both internal and external migration. During the analyzed period, according to the data included in Table 3, a positive balance of population migration was registered over the period 2012-2017, and this is due to the increase in the number of people who have settled their residence within the region by 25% and the drop in the number of people who left the region by almost 8%. In Bucharest, in the first years of the period analyzed, the migratory balance was a negative one, but in 2017, the last one taken into account, the balance of internal migration

is positive, but although the indicator analyzed was positive, the total analyzed period remains negative, as in the first 5 years of the reference period. This negative balance of internal migration registered in Bucharest may be due to the fact that, in an attempt to avoid the largest urban agglomeration in the country, the families change their domicile with one of the counties surrounding the city. In contrast to Bucharest, in Ilfov County, it can be observed that in each analyzed year, as well as in the total analyzed period, the balance of internal migration is positive and increased in 2017 as compared to 2012 by almost 18 percent, despite the fact that the number of people leaving the county is higher every year, increasing by over 61%. The situation resulting in the Bucharest-Ilfov region is due to the fact that, as I mentioned, a large proportion of people living in Bucharest migrate to Ilfov County for a more peaceful and less polluted living, and the inhabitants of Ilfov County migrate to Bucharest for the realization of higher incomes, but most often leave the country for a more decent life.

Table 4. Changes in residence per development region in the period 2007-2017 - rate per 1,000 inhabitants

	Year 2007		Year 2010		Year 2013		Year 2017	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
North-West Region	42.1	41.3	51.5	49.0	39.2	37.0	44.6	41.4
Central Region	40.6	40.7	45.6	45.9	34.5	34.4	39.2	37.8
North-East Region	58.6	65.2	70.8	76.6	63.0	59.6	60.8	65.2
South-East Region	48.1	49.5	52.5	56.0	39.6	42.8	42.2	48.7
South-Muntenia Region	57.4	56.9	62.9	65.7	45.8	49.1	47.0	54.5
Bucharest-Ilfov Region	45.0	39.5	84.1	73.7	63.3	60.9	73.9	57.1
South-West Region	43.4	46.3	47.4	51.4	32.5	35.9	33.5	39.0
West Region	39.1	34.7	44.2	40.8	32.7	30.9	39.0	36.4

Source: National Institute of Statistics - TEMPO-Online, Accessed on 04.2019 [8].

By comparing with the rest of the development regions in the country, in the rest of the years apart from 2017, the migratory flows of the Bucharest-Ilfov region are the most pronounced. This is due to the fact that Bucharest, being the capital of Romania, attracts a large number of people who choose to live there in order to earn higher income or to continue their studies after graduation, leading to an increased number of arrivals. However, there is also the opposite side of the coin because, in the same way that there is a

large number of arrivals, the Bucharest-Ilfov region also has a large number of departures, largely due to people migrating to other states in search of a living more decent or those who, when finalizing their studies, return to their native regions.

It is worrying that, according to the Territorial Development Strategy of Romania, in the above-mentioned conditions have in 2050 18.5 million inhabitants. Whatever the predicted value, there is a common denominator: a sharp drop in population [10].

Birth rate has not been so low since 1967, the year following the decree given by Nicolae Ceausescu, which decreed abortions and contraceptive methods. According to data from the Romanian Academy and from the National Institute of Statistics, every year between 1970 and 1989, 360 thousand children were born, on average. Since 1990 the birth rate has dropped almost continuously.

CONCLUSIONS

Demographics and demographic statistics are currently based on modern scientific methods and are useful in explaining complex socio-economic phenomena at both macro and micro-social levels.

During the analyzed period, in the Bucharest-Ilfov region are present the same phenomena are encountered at national level as well as at the European level, respectively the tendency of population aging, which is materialized by lowering the natality rate, ie the decrease of the number of people with ages between 0 and 14 and the increase in the total number of people aged 60 and over, and this demographic aging has important consequences over time such as the increase in the number of retirees and the decrease in the number of active persons that support the state by paying contributions which lead to major imbalances in the labor market.

However, taking into account the major role that internal and external migration has in the demographic analysis, the population of the Bucharest-Ilfov region has a slightly upward trend.

REFERENCES

- [1]Constantin, D.L., 2014, Bucharest Metropolitan Area and its Regional Hinterland Case Study Report, Bucharest University of Economic Studies, WP 6, Task 6.
- [2]Constantin, D.L., 2019, Bucharest_ilfov Region of Romania as a Rising Star in Regional Competition. Some Insights in the Context of Globalisation, Romanian Journal of Regional Science, Special Issue, Vol. 7, p. 48-68.
- [3]European Commission, 2019, <https://ec.europa.eu/growth/tools-databases/regional-innovation-monitor/base-profile/bucharest-ilfov>, Accessed on March 15, 2019
- [4]European Commission, 2014, Population ageing in European, Facts, implications and policies.
- [5]European Commission, 2011, Statistical Office of the European Communities, Portrait of the region, Vol. 11.
- [6]European Neighbourhood Instrument, 2015, Hungary-Slovakia-Romania-Ukraine Cross-border Cooperation Programme 2014-2020.
- [7]Eurostat, 2019, Population structure and ageing, https://ec.europa.eu/eurostat/statistics-explained/index.php/Population_structure_and_ageing, Accessed on March 15, 2019.
- [8]National Institute of Statistics, 2015, The Demographic Yearbook of Romania.
- [9]Săgeată R., 2015, A Proposal for Romania's Administrative Organization Based on Functional Relations in the Territory, Transylvanian Review of Administrative Sciences, no. 46, p. 178-196.
- [10]Stoicescu, A., Alecu, I. N., Tudor, V., 2013, Demographic Analysis of Bucharest-Ilfov Region, 20th International Economic Conference of Sibiu - Post Crisis Economy - Challenges and Opportunities (IECS), Book Series: Procedia Economics and Finance, Volume: 6, p. 392-398.
- [11]Territorial Development Strategy of Romania, Fundamental Studies, 2014.
- [12]World Population Review, <http://worldpopulationreview.com/countries/romania-population/>, 2019.

