CHANGES IN ROMANIA'S POPULATION DISTRIBUTION ON LOCALITIES IN 1990-2007 PERIOD

Harja Eugenia

University from Bacău, The Faculty of Economic Sciences, home address: Decebal street, building 21, A entrance, apt. 8, Bacău, zip code 600283, e-mail: eugenia_harja@yahoo.fr, phone 0744593260

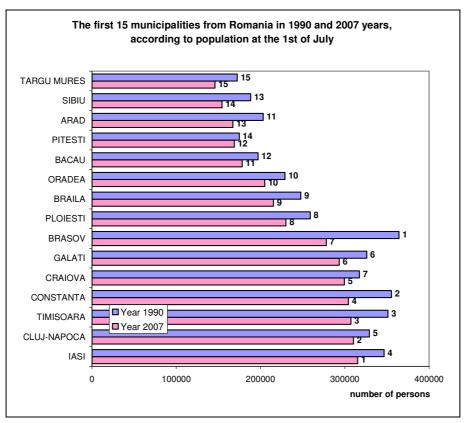
The analysis presents synthetically the results of a study concerning population distribution on territorialadministrative units from Romania during the last 17 years. Enforcing statistical methods, such as: central tendencies of medium indexes, variation analysis, concentration, on data basis concerning the 3175 territorial - administrative units, the main changes in time were highlighted: on one side the emphasized decrease of population effective, and on the other side the appearance of new localities by crumbing the already existing ones, rank's change for the main municipalities from the country, the establishing of new urban localities even though in many cases not even the old ones fulfilled the quantitative and qualitative criteria for receiving this status. By using relevant diagrams, comparative for the two extreme years, both last period changes and population concentration phenomenon were emphasized.

Key words: Established population, Territorial- administrative units, Concentration index

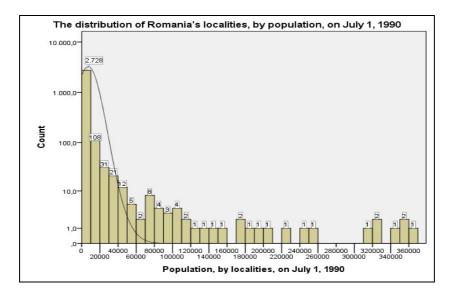
Making a summing up of the last 17 years, both Romania's population number's evolution and territorialadministrative units registered essential modifications. For the present study we started from the official statistic data published for Romania's population established in municipalities, towns and communes at the 1st of July 1990, and respectively 2007. We chose the year 1990 as comparison basis because it was the winding point in Romania's demographic behavior change on one side and population's mentalities and lifestyle's change on the other side. Therefore, Romania's population registered a decrease with almost 1,7 million persons (-7,2%), being influenced in proportion of 75% by negative migrant amount and in proportion of approximately 25% by population's natural decrease. Romania confronts to a natural decrease starting with the year 1992, reaching a maximum in the 2002 year.

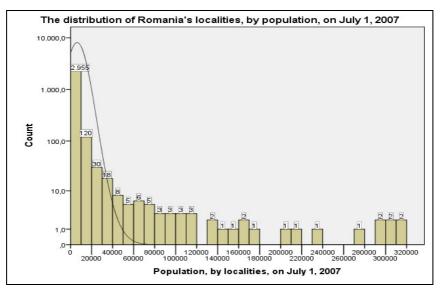
On the other side, even though population decreased constantly during the last years, an opposite phenomenon was registered, of territorial-administrative units' number's increase, by fragmenting the existing ones. Romania's Constitution establishes that the territory is organized by administrative aspect in communes, towns and counties and that according to legislation some towns are declared municipalities. According to national territory arrangement plan approved by Romania's Parliament the national localities network was established, formed of urban and rural localities. Localities hierarchy is made on ranks, hereby: rank 0 – Bucharest municipality, being considered of European importance, rank 1 – municipalities with national importance with potential influence to European level, rank 2 - municipalities with intercounty, county importance or with a balance purpose in localities network, rank 3 - towns, rank 4 villages that represent communes' residence, and rank 5 - villages components of communes or included in municipalities and towns. Localities' crossing from one rank to another is made by law, to local councils' suggestion, after prior consulting of population by referendum, but also under the conditions of fulfilling some minimal qualitative and quantitative indexes. There should be known that there exist municipalities and towns that even though have received anterior this status, do not fulfill these minimal criteria concerning socio-economic development. In what new communes organization is concerned, it is made by law, at local councils' suggestion, after prior consulting of population by local referendum from territorialadministrative units from where the respective rural localities are taken over and on the basis of documentation that testifies the fulfillment of minimal conditions of endowment and number of population. Especially after the year 2000 in Romania a real explosion of new established communes was registered, and also of crossing from the status of commune to the one of town, respective from town to municipality. Therefore, during the last 17 years a number of 166 new communes was established, 60 new towns, and 47 towns were arisen to municipality rank, even though, as mentioned, the total amount of population decreased a lot, and the developing conditions of many of communes were not rising to urban localities requires' level. The biggest part lost the population' effective held before.

This aspect may be noticed from the following graphic, all municipalities placed on the first 15 places population registering a decrease.



If in 1990 the biggest urban locality after Bucharest municipality was Brasov municipality, in 2007 it descended on the 7th rank, losing almost a quarter of population. The first rank is overtaken by Iasi municipality, whose population decreases, but in a lower extent (-9%). The population's number decrease is enough generalized phenomenon at the country level, with bigger intensities in certain areas.





Comparing localities distribution by population's number in the two extreme years, it is noticed that the most territorial-administrative units lose from their size, in 2007 having a bigger agglomeration in groups of smaller dimensions. Population of the 217 towns decreases in total with 4,9%. Among these, at a number of 146 population decreases, the biggest reduction is registered at: Bălan town – Harghita (-47%, from 14. 904 inhabitants at 7.899) and Solca town – Suceava (-45,1%, from 4.814 inhabitants to 2.644)

At a number of 71 towns population registers increases, Bărăgan town – Ilfov being noticed (+78,6%, from 4.821 inhabitants to 8.610), Rovinari town – Gorj (+58,4%, from 8.308 1 inhabitants to 13.164) and Otopeni town (+50,2%, from 7.025 inhabitants to 10.552). If the United Nations Program for population's global census for Europe foresees the enclosure in urban population only for the localities with over 10.000 inhabitants, in our country 120 towns (55% from the total amount) had a population under this threshold.

To 102 existing municipalities in 2007 (without Bucharest municipality) population decreases with 10,6% (-910 thousand inhabitants), and the capital's population decreases with -9,2% (195,4 thousand). The biggest decreases were noticed with municipalities: Mediaş – Sibiu (-26,7%), Braşov (-23,7%) and Reşiţa – Caraş Severin (-23,4%).

Calculating the medium indexes of central tendency and variation's synthetic indicators for the last two extreme years the mutations produced in those 17 years can be noticed quite well.

		Population, by localities, on July 1, 1990	Population, by localities, on July 1, 2007
N	Valid	2948	3177
	Missing	229	0
Mean		7872,02	6779,21
Median		3770,00	3187,00
Mode		3093ª	3145
Std. Deviation		44860,725	39066,639
Variance		2012484675,149	1526202297,425
Sum		23206720	21537563
Percentil	es 25	2647,50	2183,50
	50	3770,00	3187,00
75		5503,50	4887,50

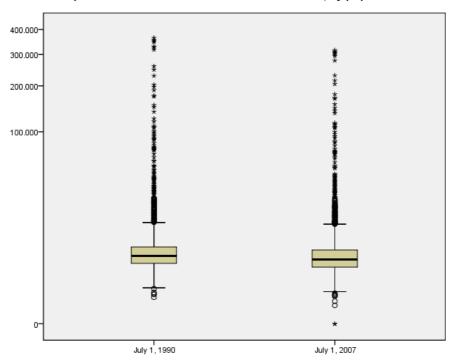
Statistics

a. Multiple modes exist. The smallest value is shown

If during the 1990 population average calculated on a locality (excluding Bucharest municipality) was of 7.872 inhabitants, it decreased in 2007 to 6.779 inhabitants, both averages being unrepresentative due to big variation degree. To average diminishing contributed on one side population's decrease and on the

other hand the localities number increase. All percentiles register decreases. If during the 1990 the first quarter of localities number had a population up to 2.647 inhabitants, in the year 2007 it had a population up to 2.183 inhabitants. Half of country's localities had in 1990 a population up to 3.770 inhabitants, and in 2007 up to 3.187. In all cases the numeric decrease of territorial-administrative units population is decreasing, the majority having an average population of 3.145 inhabitants in 2007 (global value).

Territorial units agglomeration towards small units, as well as population's number decrease may be noticed well enough in the boxplot diagram for the two analyzed extreme years.

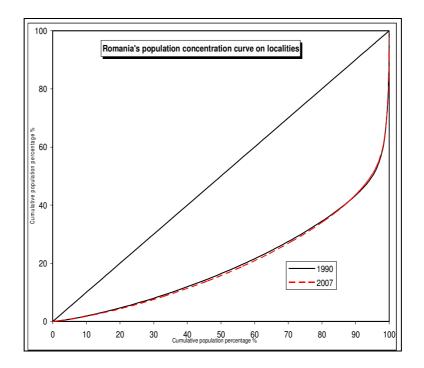




Another analyzed aspect applying the statistic methods is concentration phenomenon. Applying the triangles procedure a Gini concentration index of 0, 5983 resulted for the year 1990 and 0,6045 for 2007, indicating a small increase of concentration degree of population on localities. Both from concentration graphic bellow presented and from Gini index value, an increased degree of concentration of population on localities results. If we apply on graphic ABC method, of tracking qualitative distinct types, the following three categories may be identified:

- 1. approximately 76% from the existing localities gathered together only 31% of Romania's population (excluding Bucharest municipality, which is an extreme value that influences the results); it may be considered the most inclusive group, of the most localities, but with a population slightly numerous;
- 2. the average group, 15% from the localities gathered altogether 14% from country's population;
- 3. the smallest group, of big urban localities, respective 9% from these gathering altogether 55% from country's population.

If in the year 1990 the average Romania's population density was 97,3 inhabitants/square km, in 2007 it is reduced to 90,5 inhabitants/ square km.



During the last years both natural population decrease and new localities establishment phenomena were stabilized, the attention being turned toward socio-economic development of the already existing localities. Our country's adhesion to European Union creates on one side a series of opportunities in what the financing programs existent for infrastructure's modernization are concerned but also it forces the local authorities to a better administration of the existing funds and resources on the other hand.

At the present stage a modernization is needed both of rural localities and of small urban localities, which does not rise to state's level.

The maintenance and valorization of natural and cultural patrimony in a rural attractive and representative space may constitute an important trump of Romania in the frame of European Union, as well as the development of some urban localities is worthy of this rank.

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