

## THE DEMOGRAPHIC SITUATION IN THE NORTHERN ECONOMIC REGION OF THE REPUBLIC OF MOLDOVA

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**ABSTRACT** - The demographic situation within the Northern Economic Region is worse than the national average. This fact is determined by the decrease of the birth rate values, the increase of the mortality values and the negative natural and migration growth. They also lead to a change of the rate between age groups, in favour of the elderly. In order to diminish such a situation, urgent measures should be taken (policies for economic increase and income increase) at local, department and regional level, to stop the deep demographic crisis of the region.

**Key words:** birth rate, mortality, negative natural growth, demographic situation.

The transition to the market economy and the social and economic transformations which characterize it have a high impact on the demographic phenomena in the Republic of Moldova.

According to the data of the 2004 census, the population of the Northern Economic Region was 1059.6 thousand people, 135 thousands less than the population recorded at the previous census. This decrease can be conventionally divided into two stages: before and after the year 2001.

Thus, in the last decade of the 20<sup>th</sup> century, the population of the region decreases numerically to 1154.0 thousands at the beginning of the year 2001, 40 thousand inhabitants less than at the end of the 1980s. This decrease is the effect of the deep economic and social crisis of Moldova.

Since the beginning of the year 2001, the numerical decrease is even more spectacular. Therefore, on January 1, 2005, the population of the region was 1059.6 thousand inhabitants (Table 1). A decrease of about 94 thousand inhabitants is recorded, as a consequence of the continuous worsening of the living standards, which lead in their turn to the decrease of the birth rate, the increase of the death rate and the mass migration.

**Table 1.** *The dynamics of the population of the Northern Economic Region.*

Year	Population (thousands of people)			% out of the total	
	total	urban	rural	urban	rural
<b>1989</b>	1194.5	412.1	782.5	34	66
<b>2001</b>	1154.0	387.2	766.8	34	66
<b>2005*</b>	1059.6	322.1	737.5	30	70

\*census data

As one may notice, there are important differences between the evolution of the urban and rural population.

Throughout the last decade of the 20<sup>th</sup> century, the urban population of the region suffered the highest decrease, so that on January 1, 2005, it was 90 thousand inhabitants less than in 1989. The rate of the urban population decrease was lower during the last decade of the 20<sup>th</sup> century, so, until the year 2001, it decreases by approximately 25 thousand inhabitants. The decrease intensifies more than twice

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between 2001 and 2005, as the urban population of the region diminishes with another 65 thousand inhabitants during this period. This decrease is due to the lower levels of the natural growth in the urban settlements, the emigration from towns to the countryside because of the closing of several industrial factories, as well as the migration outside the Republic of Moldova, in search for work.

The city of Bălți has a high weight in the depopulation of the region. Therefore, because of the higher degree of information of the urban population during the last decade of the 20<sup>th</sup> century, the city of Bălți contributes with about 40% to the numerical decrease of the urban population of the region. Afterwards, although the number increases, the weight diminishes (to 36%) because of the increase in weight of the other urban settlements.

Between 1989 and 2001, the rural population of the region continued to decrease numerically, but with a low pace. (approximately 15 thousand people). This is due to the return to villages of a part of the urban population, and to the higher values of the natural growth in the countryside. The period after 2001 is characterized, as in the case of urban population, by an intensification of the decrease. Therefore, at the beginning of 2005, the rural population counted 30 thousand inhabitants less than in 2001, or approximately twice as much compared to 1989-2001 period.

Comparing the regional data and the national data, it is noticeable that the pace of numerical decrease in the Northern Economic Region is higher. Therefore, during the period between the two censuses, the region contributed with about 50% to the numerical decrease of the national population.

The numerical decrease of the population of the region was determined by the negative values of the natural and migration growth.

**Table 2.** *The natural population growth rates in the Northern Economic Region of the Republic of Moldova, ‰ (1989).*

Departments, cities	Birth rate	Mortality rate	Natural growth	Marriages	Divorces	Infant mortality rate
<b>Republic of Moldova</b>	<b>18.9</b>	<b>9.2</b>	<b>9.7</b>	<b>9.2</b>	<b>2.9</b>	<b>20.4</b>
<b>Northern Economic Region</b>	<b>16.8</b>	<b>10.8</b>	<b>6</b>	<b>8.3</b>	<b>2.2</b>	<b>19.9</b>
Bălți City	16.6	6.9	9.7	10.1	4.8	10.3
Briceni	15.3	11.4	3.9	7.6	1.8	18.6
Donușeni	13.6	14.3	-0.7	7.8	2	15.9
Drochia	15.6	11	4.6	8	2.4	21.0
Edineț	14.7	11.1	3.6	7.5	2	13.6
Fălești	19.5	9.3	10.2	8.4	1.7	25.0
Florești	16.9	10.8	6.1	8.6	2.3	26.9
Glodeni	17.6	10.1	7.5	7.5	1.6	21.5
Ocnița	13.5	12.7	0.8	8.2	2.7	15.2
Rezina	18.2	10.7	7.5	7.6	1.7	24.3
Râșcani	16.5	10.3	6.2	8.7	2.2	20.9
Sângerei	21.5	9	12.5	8.2	1.7	22.7
Soroca	16.8	10.2	6.6	9.5	3	20.0
Șoldănești	18.8	13.3	5.5	7.9	1.4	22.6

As it is a very sensitive indicator to the social and economic changes within the region, the birth rate suffered essential changes. Thus, comparing the birth rates of 1989 and 2004, one notices a decrease by 6‰ (Tables 2 and 3). This fact was determined by the continuous worsening of the living standards and the change in the mentality of couples regarding the number of children in the family.

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**Table 3.** *The natural population growth rates in the Northern Economic Region of the Republic of Moldova, ‰ (2004).*

Departments, cities	Birth rate	Mortality rate	Natural growth	Marriages	Divorces	Infant mortality rate
<b>Republic of Moldova</b>	<b>10.6</b>	<b>11.6</b>	<b>-1.0</b>	<b>7.0</b>	<b>4.1</b>	<b>12.2</b>
<b>North Economic Region</b>	<b>10.2</b>	<b>14.3</b>	<b>-4.1</b>	<b>6.0</b>	<b>3.4</b>	<b>12.2</b>
Bălți municipium	9.6	10.0	-0.4	6.2	4.4	18.0
Briceni	9.7	15.4	-5.7	6.2	3.4	10.7
Dondușeni	9.4	17.6	-8.2	5.6	4.5	9.0
Drochia	9.9	14.6	-4.7	6.1	3.2	19.5
Edineț	9.4	15.8	-6.4	5.8	3.3	12.6
Fălești	11.1	13.1	-2.0	6.7	2.8	9.4
Florești	10.9	15.0	-4.1	6.7	2.7	12.0
Glodeni	10.6	14.3	-3.7	6.0	3.5	6.0
Ocnîța	9.0	15.9	-6.9	5.2	3.8	18.1
Rezina	11.0	13.8	-2.8	5.9	2.6	11.8
Rîșcani	9.8	14.9	-5.1	6.4	2.9	11.3
Sîngerei	11.1	10.5	0.6	5.8	3.0	11.2
Soroca	9.4	13.5	-4.1	5.3	3.7	11.5
Șoldănești	11.3	16.1	-4.8	5.8	3.6	9.8

The worsening of the material wellness of a population, the lower level of medical assistance, and therefore the higher level of morbidity, have all determined the increase of mortality rate values. Therefore, the mortality rate in 2004 was higher by about 4‰ than it was in 1989.

The decrease of the values of the birth rate and the increase of the values of the mortality rate determined a major calitative change of the values of the natural growth. So, in 1989 the natural growth rate of the population of the region was 6‰, while in 2004 it was -4‰, therefore a decrease by 10‰.

The above-mentiuoned causes led to a change in the values of marriages and divorces. Thus, the “marriage” growth rate decreased about two times from 6.1‰ in 1989 to 2.6‰ in 2004.

The lower number of births determines a more careful attitude towards the newborn, which is reflected in the values of the infant mortality rate, which decreased during the analysed period by 7.5‰.

The comparison of the indicators regarding natural growth at regional and national level emphasizes a permanent difference in favour of the national values. Therefore, the birth rate has lower values in the region than at national level, the mortality rate has higher values, so there are lower values of the natural growth. This fact may be explained by the higher degree of instruction of the population, the more intense emigration, the higher weight of the Slavic population, etc.

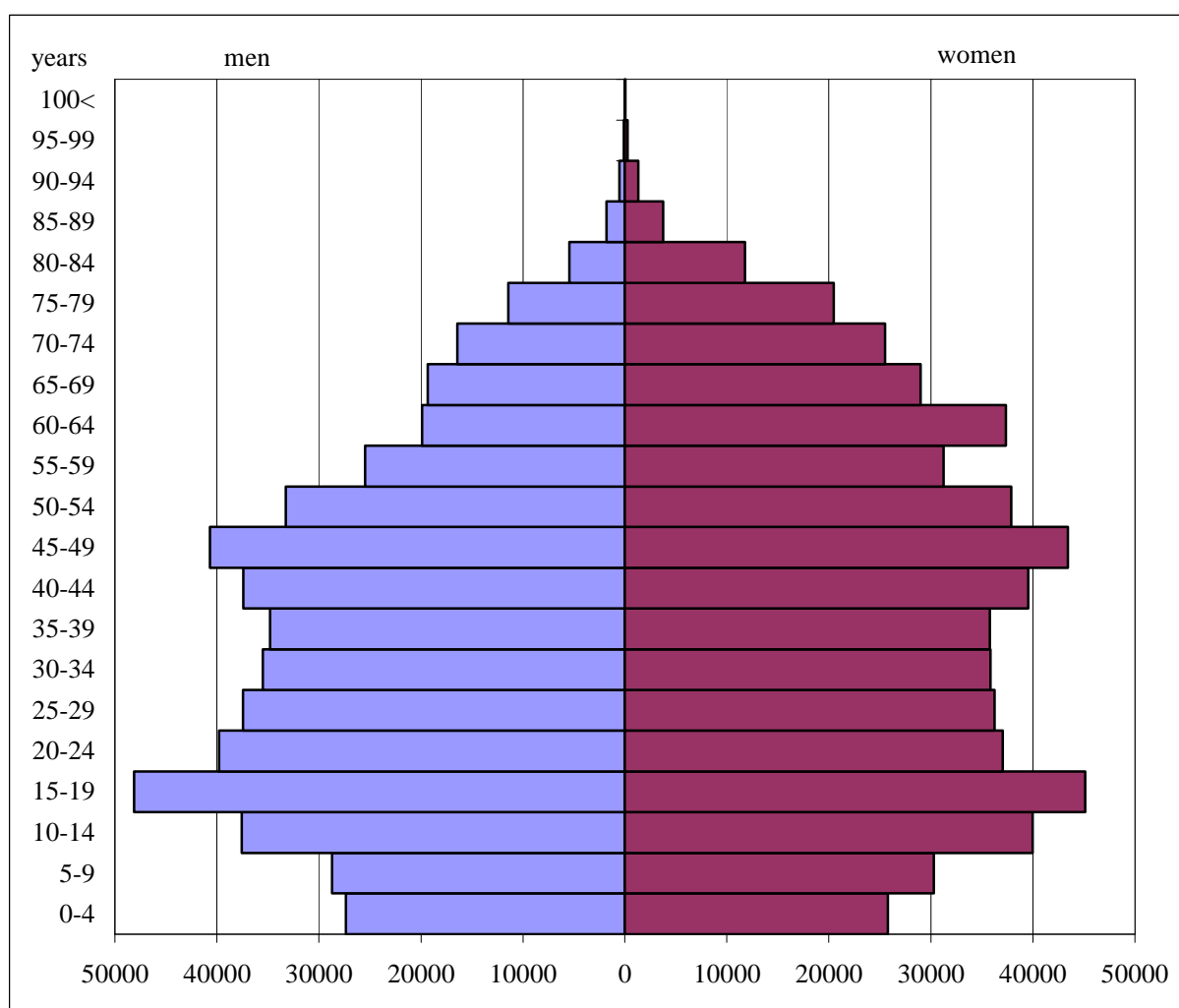
Within the region, there are certain differences regarding the values of the natural growth rate. Thus, the lowest values of the natural growth rate, starting with 1989, are recorded in the departments of Dondușeni and Ocnîța, while the highest values are recorded in the department of Sîngerei (the only department in the region that recorded positive values of the natural growth rate in 2004). The reason for this difference is the more favourable location of Sîngerei department regarding the largest urban centres of the Republic, the traditions, as well as its neighbourhood to departments of the Central Economic Region, where the values of the natural growth rate are traditionally higher.

As written in “The Territorial Demography of Romania” (1. p.33), the sex structure of a “normal” population should be 49.5% males and 50.5% females. By normal population, the authors understand a population that has not been affected for at least 100 years by wars, epidemics, or intense

migration. Within the analysed region, the sex structure in 2004 was 46.9% males and 53.1% females, as compared to 1989, when there were 47.1% males and 52.9% females.

It is a well-known fact that more males are born than females (105 to 100). However, after birth, the male population suffers from a higher mortality than the female population (V. Trebici calls this phenomenon *male* supermortality, 1. p.34). As a consequence of this fact, the male sex ratio diminishes, reaching to a certain age to have lower numbers than the females (less than 100 or 1000).

Within the Northern Economic Region, the sex ratio diminished from 89 males to 100 females in 1989 to 88 males to 100 females in 2004. According to the analysis based on the available data and the age-sex pyramid of the population of the Northern Economic Region (Figure 1), one remarks that the sex ratio decreases from the age of 30.



**Figure 1.** The age and sex pyramid of the population of the Northern Economic Region in 2004.

The situation revealed by the age-sex pyramid for the year 2004 (Figure 1) highlights certain deviations from the ideal shape. These deviations are conditioned by the variation of the birth rate and mortality rate during the second half and the end of the 20<sup>th</sup> century. Therefore, the basis of the pyramid corresponds to the years 2000-2004. The small width of the pyramid is explained by the very low values of the birth rate. The next two age categories are increasingly higher, which proves that the birth rate was decreasing between 1990 and 1999. The age category between 15 and 19 has the highest weight of the pyramid. This fact is explainable because it corresponds to the people born between

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1986 and 1990, when the values of the birth rate were high. Then, the pyramid suffers “strangulations”, which correspond to the 1970s and 1950s, well-known periods of birth rate decrease.

The wide top of the pyramid acknowledges the fact that the weight of the elderly increased a lot in the age structure of the population of the Northern Economic Region.

In demography, the population is traditionally divided into three large groups: the youth, between 0 and 14 years; the adults, between 15 and 59 years; and the elderly, aged 60 and more. The analysis of the age and sex pyramid of the population of the Northern Economic Region allows us to state that during the last decade, the weight of the elderly increases at the expense of the young population. This process is called demographic ageing. It is caused by the decrease of the birth rate, the increase of the average duration of life, and it affects all the ages, leading eventually to the increase in number of the elderly. At the same time, the decrease of the birth rate diminishes successively the generations which are added to the existing population, leading also to the increase in weight of the elderly.

**Table 4.** *Population structure by age groups in the Northern Economic Region.*

City, department	Total	Age group, years							
		0 - 15	%	16 – 61/56	%	57/62 +	%	undeclared	%
Bălți City	<b>127561</b>	23015	18.0	86823	68.1	17518	13.7	205	0.2
Briceni	<b>78027</b>	15064	19.3	44590	57.1	18252	23.4	121	0.2
Dondușeni	<b>46442</b>	8652	18.6	25879	55.7	11837	25.5	74	0.2
Drochia	<b>87092</b>	17563	20.2	50223	57.7	19285	22.1	21	0.0
Edineț	<b>81390</b>	15681	19.3	47079	57.8	18584	22.8	46	0.1
Fălești	<b>90320</b>	20546	22.7	53204	58.9	16227	18.0	343	0.4
Florești	<b>89389</b>	19248	21.5	53222	59.5	16850	18.9	69	0.1
Glodeni	<b>60975</b>	13286	21.8	36004	59.0	11643	19.1	42	0.1
Ocnita	<b>56510</b>	10073	17.8	34155	60.4	12223	21.6	59	0.1
Rezina	<b>48105</b>	11034	22.9	29396	61.1	7664	15.9	11	0.0
Rîșcani	<b>69454</b>	14223	20.5	39873	57.4	15342	22.1	16	0.0
Sîngerei	<b>87153</b>	21632	24.8	51909	59.6	13513	15.5	99	0.1
Soroca	<b>94986</b>	19167	20.2	58156	61.2	17624	18.6	39	0.0
Soldănești	<b>42227</b>	10035	23.8	24575	58.2	7607	18.0	10	0.0
Region	<b>1059631</b>	<b>219219</b>	20.7	<b>635088</b>	59.9	<b>204169</b>	19.3	<b>1155</b>	0.1
<b>Republic of Moldova</b>	<b>3383332</b>	<b>709894</b>	<b>21.0</b>	<b>2161318</b>	63.9	<b>500583</b>	14.8	<b>11537</b>	0.3

Source: National Statistics Office of the Republic of Moldova (www.statistica.md)

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The data of the 2004 census highlight a demographic crisis of the population of the Northern Economic Region. Thus, in most of the administrative units (8 out of 14), the weight of the population under 15 years is lower than the national average, in all departments the weight of the population able to work is lower than the national average and the weight of the elderly is higher than the national average. The process of demographic ageing is more intense than the national average.

The demographic ageing of the population determines an increase of the pressure exerted by the inactive population on the active population. In the absence of a clear strategy for economic development, for the increase of the national income, the demographic ageing may curb the increase of the living standards of the population (2. pp. 35-36).

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