

CHANGES IN THE STRUCTURE OF SMALL AGE AND SEX  
GROUPS OF THE FULL-AGED POPULATION IN GALATI  
DURING THE CONTEMPORARY PERIOD

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**Abstract**

*The full-aged population is the most important age group within a human collectivity. Its weight is directly proportional to the work resources of a country, region, county, city, and village; to the population's capacity of reproduction if referring to the feminine fertile age population, as to the level of productivity.*

*The major political and economical changes that affected our country in the 1990, generated important mutations on the population's demography, with direct effects on the full-aged population, whose increase, generated by the drastic reduction of birth rate and implicitly of young population, determines an accelerate ageing of population.*

**I. THE FULL-AGED POPULATION-THEORETICAL ASPECTS**

Within human collectivities, delimited on time and space, we can distinguish certain sub-collectivities in terms of certain characteristics of grouping: **demographical, socio-economical, cultural, regional**, etc. Thus, in terms of sex, we notice two subpopulations, the male and the feminine one; in terms of social environment, there are: the rural population and the urban one; concerning the civil status, there are: the unmarried, married, divorced and widow populations; referring to the big age groups, we can distinguish the **young population (0-14 years old)** from the **full-aged one (15-59)**, respectively the **old one (60-∞ years old)**.

The structure on age group is one of the most important demographical parameters of a population. **The weight of the working population (15-59)** depends on the proportion between the age groups and this weight determines the work resources of a country, of a region, county, city, village, etc.

The structure on age groups influences directly the capacity of reproduction of a certain population, especially, through the weight of the feminine population from 15 to 49 years old, which determines the birth rate

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and indirectly, the natural balance. The information about the age groups structure is indispensable to any economical planning of the territory, and in terms of this aspect, certain social endowments or the production of any goods and services specific to certain ages are necessary. (Muntele, 2006).

The data on the age groups structure is indispensable for the evaluation of the social endowments (educational institutions, medical, entertaining, etc), but especially for the types of the demographical politics that are adopted by the Government, starting with the effectives of the population, more precisely, the variables of the structure of the population at a certain moment.

## II.THE ANALYSIS OF THE FULL-AGED POPULATION IN GALATI DISTRICT

### II.1. THE NUMERICAL EVOLUTION AT THE MAIN CENSUS

As we showed in the previous chapter, *the full-aged population* represents the population between 15-59 years old, being influenced by the dynamics of the other two age groups: *the young population* (0-14 years old) and *the old one* (60 and over).

The analysis of the full-aged population in our county, Galati, at the census in 1966, 1977, 1992, 2002, 2007, proves a continuous increase from 285577 people in 1966, to 408169 in 2002 and in 2007, the number of persons rises to 409775.

The most spectacular increase of the population is registered in the period 1966-1977, when the population rises from 285577 to 345649 persons.

Still, from the analysis of the data, we can notice that from 1992 to the present, the full-aged population has not increased as much as in the former period, a phenomenon reflected by the values of the annual average development profit (S15-59) which continuously descend. The estimation of the specific demographical indicators – *the specific weight of the full-aged population*<sup>11</sup>( g15-59), respectively *the annual average development profit*<sup>12</sup> of the *full-aged population* (S15-59) denotes this ascending evolution of the full-aged population. Thus, g15-59 shows an increase from 60% in 1966, to 65% in 2002, respectively 66.6% in 2007, and S15-59 reveals that the full-aged population scored the most spectacular increase, to 5461 persons, between 1966-1977, so that in the next period the number reduces to approximately 321 persons between 2002-2007.

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<sup>11</sup>  $g_x = P_x / P_0 \times 100$  ( $P_x$  - population of x years old;  $P_0$  - total population)

<sup>12</sup>  $S = (P_1 - P_0) / (n - 1)$  ( $P_1$  - the effective of population at the moment of analysis;  $P_0$  - the effectives of population at the moment of reference;  $n - 1$  - the number of years which separates the two moments)

## II.2.THE FULL-AGED POPULATION CLASSIFICATION ON SMALL AGE AND SEX GROUPS

The values of *the specific weight of small age groups* within the full-aged population reveal, *at the level of the full-aged young people* (g15-19, g20-24, g25-29 years old), a diminution with 3.5%, 5.5%, respectively 1% during the period 1966-2007; and in the same time, the superior age groups (g50-54; g55-59) increase with 3%, respectively 6%. This evolution determines an “ageing of the full-aged population”, respectively an increase of the middle age.

In terms of *sexes*, according to the industrial specific feature of our county, all the censuses show that males dominate. Still, the *specific weight* of both sexes reveals that, though it is dominant, the male full-aged population has decreased from 51.5% in 1966, to 50.6% in 2007, while the feminine full-aged population has been increasing from 48.5% in 1966 to 49.4% in 2007.

## III. CAUSES AND EFFECTS OF THE FULL-AGED POPULATION VARIATIONS IN GALATI DISTRICT

The structure of the full-aged population is influenced firstly by the components of *the natural movements (birth rate, death rate, natural balance)* as well as by the *population's instability – migratory balance, demographical politics* adopted by the Government.

On their turn, these are influenced by a series of natural and anthropic factors, applicable to our county.

Thus, one of the most important anthropic factors which influences the general birth rate level, respectively that of the death rate and particularly that of infantile death rate, was the continuous *increase of the material and cultural standard of living* supported by a demographical politics for *the medical services' improvement*, through the assignment of some financial funds and the maintaining of some qualified medical attendants. (Brezeanu, 1980)

During the 1966-1990s, even if the birth rate continuously decreases, it registers high values, which determine an afflux of young population, respectively young full-aged. The highest value, 21‰, is registered in 1978.

After the 1990, a background of the *decrease of standard of living in the county*, due to the economical changes, the birth rate reduces a lot, reaching 9.5‰ in 2007. This birth rate's decrease determines an implicit increase of the full-aged population being 15-19, 20-24, 25-29 years old.

*The general and infantile death rate*, complementary to the birth rate, also contributed to the fluctuation registered by the full-aged population at the main census. Thus, the general death rate recorded values under 10‰ until 1994, and 10.4‰ in the present-day, and the infantile death rate decreased from approximately 55‰ in 1966 to 15.4‰ in 2007.

These values were reflected, as we have shown, at the level of the full-aged population of the district, population which increased with approximately 7% during 1966-2007, and this increase continuously “provides” the superior age groups and respectively the old population.

The values of the *natural balance*, directly influenced by the general birth rate and death rate argue that the increase of the full-aged population and it records values over 10‰ at the census from 1966 and 1977, and at last census, it hardly touched 2.7‰, being transformed into a natural deficit, respectively -1.6‰ in 2002 and -0.9‰ in 2007.

As far as *population's instability*, respectively the *migratory balance*, is concerned, before 1990, they generated a continuous afflux of the full-aged population towards the district and the town, due to the *construction of the steel works* in 1965.

The need for manpower in steel works generated important migrations of those able to work towards the district and the town, the number of immigrants being over 2000 persons before 1977.

The economical changes after 1990 in the country, also affected our district, when the steel works became private, because many people were released temporarily from duty, so the *rate of unemployment* became one of the biggest in the country. Thus, *the decrease of standard of living* determined a continuous increase of the number of emigrants able to work, especially the men, our district still confronting a migratory deficit.

*The effects of the full-aged population's increase*, influenced by all factors already mentioned, have direct implications on the next age group, respectively on the old population.

The increase of the full-aged population determines *the rise of the specific weight of old people* and our district, as our country, being an ageing district from the demographical point of view.

The economical implications particularly come from the big number of the pensioners which can modify negatively the *dependence index* but also from the increase of the middle age active population, with major effects on *labour productivity* or on *wage expenses* ( the most experienced and length of service attendants are usually better payed).

*The social implications* come from the combination with the feminization and pauperization processes to which could be added the *increase of the medical service budget*.

*The psycho-social implications* rather represent a risk, difficult to measure, visible especially in “*the ageing of mentalities*”.

#### IV. TENDANCES OF FULL-AGED POPULATION'S EVOLUTION IN GALATI DISTRICT

As a result of the maintaining of demographical trends appeared after 1990 ( the decrease of the population's birth rate, the big number of national and international migrations generated by some unfavourable economical evolution, the world-wide economical crisis), according to INS, the population might decrease with approximately 4.1% between 2007-2013 in Galati. INS also shows that in 2013 the full-aged population and the old one will register an increase of approximately 5%, increase determined by the decrease of the young population with approximately 10%.

In these circumstances we will see how long the ascendant trend of the full-aged population and of the old one will last, how much the population's middle age and especially full-aged one will increase, how much the masculine specific weight will decrease in the context of the world-wide economical crisis and of higher number of emigrations of manpower and particularly how efficient the politics adopted by the Government after 1990 will be.

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Fig.1. The Evolution of Full-Aged Population in Galati District Between 1966-2007

(source: DJS Galați)

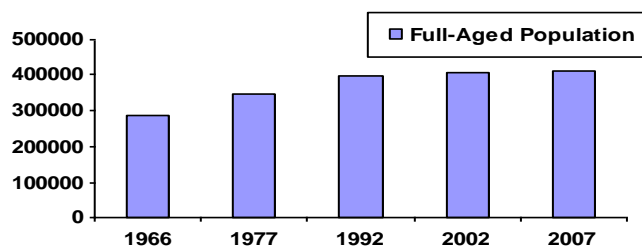


Fig.2. The Evolution of the Specific Weight of Full-Aged Population in Galati District Between 1966-2007

(source: DJS Galați)

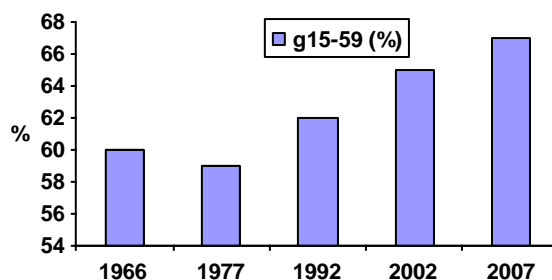


Fig.3. The Evolution of Annual Average Development Profit of the Full-Aged Population in Galati District Between 1966-2007

(source: DJS Galați)

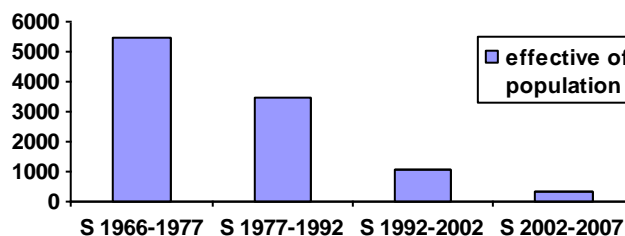


Fig.4. The Evolution of the Specific Weight of Small Age Groups Within the Full-Aged Population in Galati District Between 1966-2007  
 (source: DJS Galați)

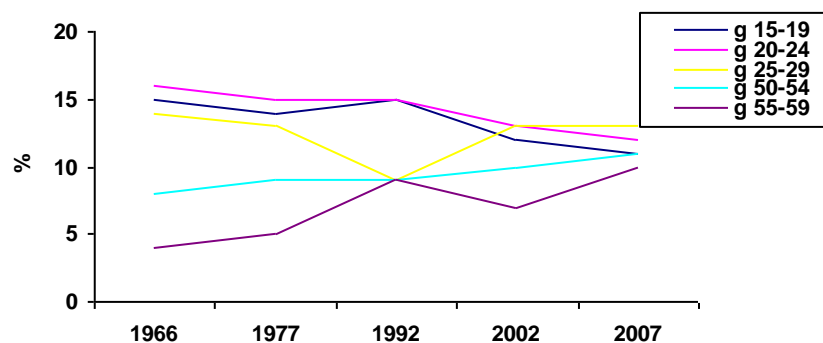


Fig.5. The Birth's Rate Evolution in Galati District Between 1966-2007  
 (source: DJS Galati)

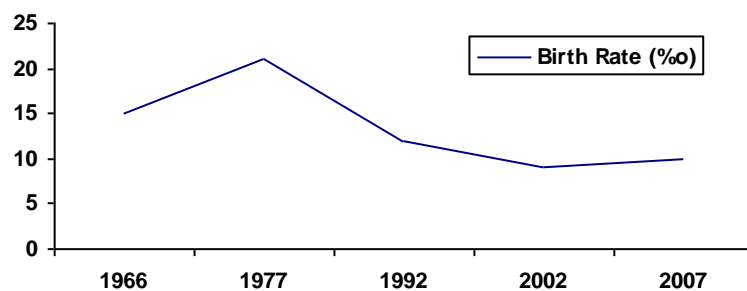


Fig.6. The Evolution of the General and Infantile Death Rates in Galati District Between 1966-2007  
(source: DJS Galati)

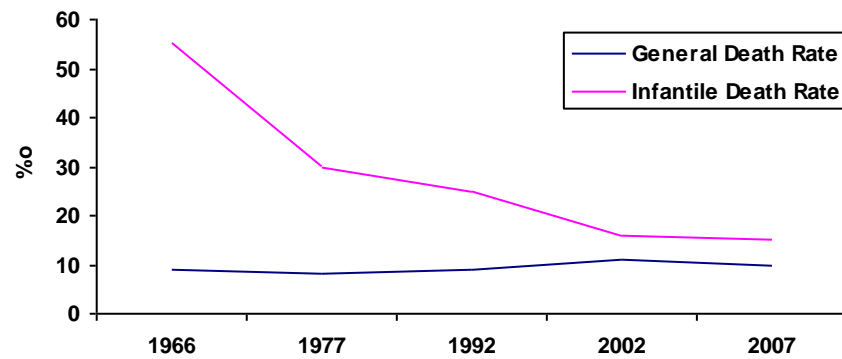
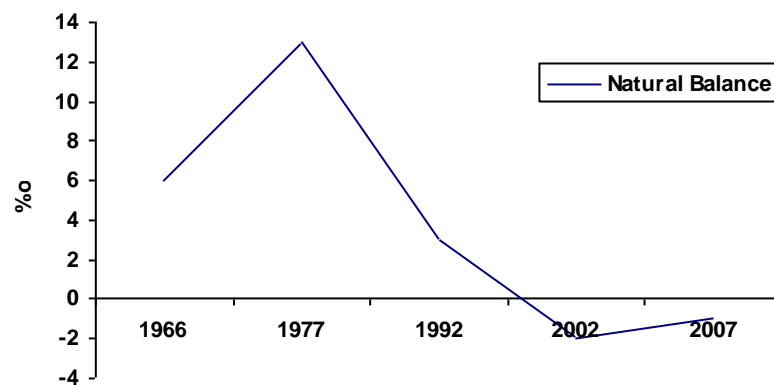
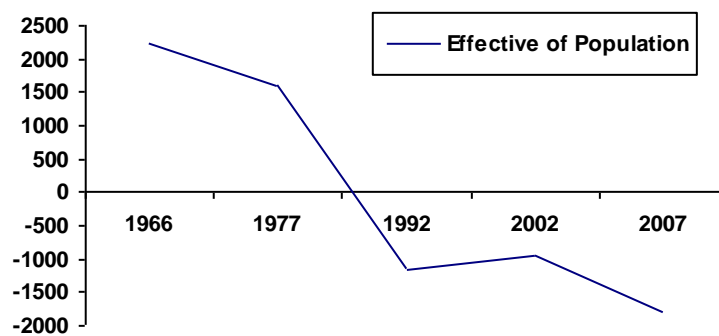


Fig.7. The Evolution of the Natural Balance in Galati District Between 1966-2007  
(source: DJS Galați)

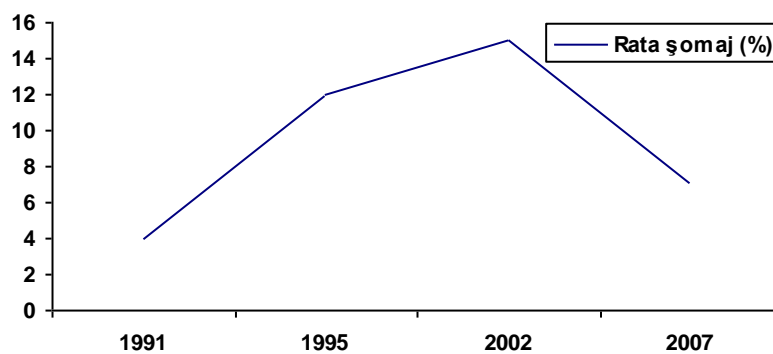




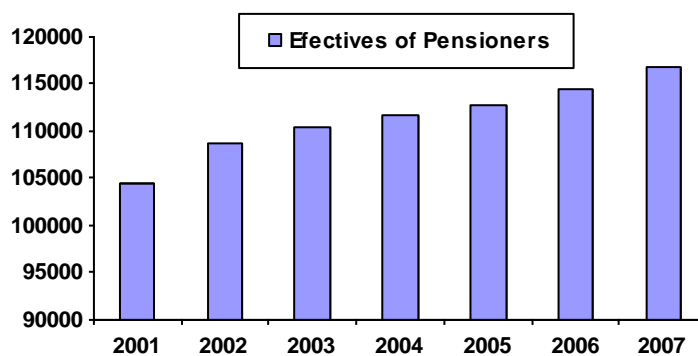
**Fig.8. The Evolution of the Migratory Balance in Galati District Between 1966-2007**  
(source: DJS Galati)



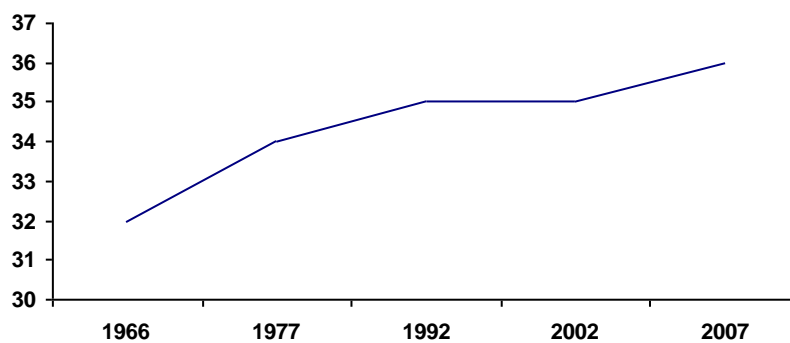
**Fig. 9. The Evolution of the Unemployment Rate in Galați District between 1991-2007**  
(source: DJS Galati)



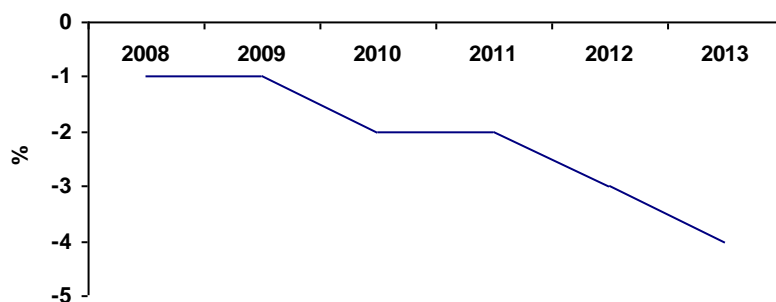
**Fig.10.The Effectives of the Pensioners in Galati District Between 2001-2007**  
(source: DJS Galati)



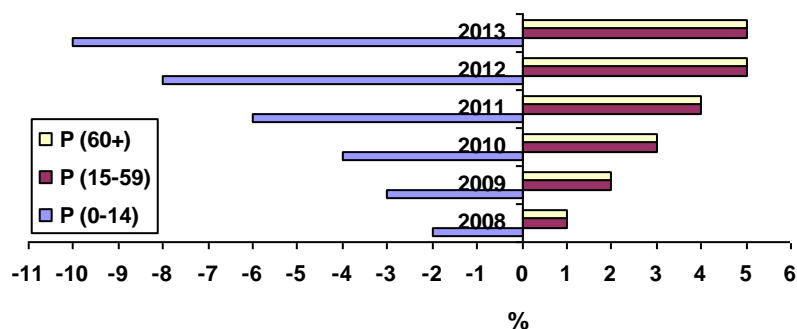
**Fig.11.The Evolution of the Middle Age within Full-Aged Population in Galati District between 1966-2007**  
(source: DJS Galati)



**Fig.12.The Prognosis of the Evolution of Population in Galati District  
between 2007-2013  
( source: INS)**



**Fig.13.The Prognosis of the Big Age Groups Evolution of Population in  
Galati District between 2007-2013  
(source:INS)**



**Table 1. The Evolution of Feminine and Masculine Specific Weights  
within Full-Aged Population in Galati District between 1966-2007  
(source: DJS Galați)**

GALATI DISTRICT		
CENSUS/YEAR	$g_m$ 15-59 (%)	$g_f$ 15-59 (%)
1966	51,5	48,5
1977	51,2	48,8
1992	51,1	48,9
2002	50,7	49,3
2007	50,6	49,4

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<b>GALATI DISTRICT</b>				
<b>CENSUS/YEAR</b>	<b>YOUNG POPULATION (0-14 ani) %</b>	<b>FULL-AGED POPULATION (15-59 ani) %</b>	<b>OLD POPULATION (+60 ani) %</b>	<b>AGE DEPENDENCE RATIO (RDV)</b>
1966	29,5	60	10,5	0,66
1977	28,7	59,4	11,8	0,68
1992	24	62	14	0,61
2002	18,1	65	16,9	0,53
2007	15,6	67	17,4	0,49

**Table 2. RDV and Big Ages Specific Weights Evolution in Galati District between 1966-2007**  
(source: DJS Galați)

**Table 3. RDE and Active/Inactive Specific Weights Evolution in Galati District between 1966-2007**  
(source: DJS Galați)

<b>GALATI DISTRICT</b>			
<b>CENSUS/YEAR</b>	<b>ACTIVE POPULATION (%)</b>	<b>INACTIVE POPULATION (%)</b>	<b>ECONOMIC DEPENDENCE RATIO (RDE)</b>
1966	38,9	61,1	1,54
1977	47,1	52,9	1,12
1992	34,5	65,5	1,89
2002	44,6	55,4	1,33
2007	35,4	64,6	1,82